

# INVESTIGATION OF ACCIDENT TO THE STEAMER "EASTLAND"

CHICAGO, ILL.

JULY 24 TO AUGUST 5, 1915

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COPY OF TESTIMONY AND REPORT OF BOARD  
OF INQUIRY MADE TO THE SECRETARY OF COM-  
MERCE, WITH LETTERS FROM THE SECRETARY  
OF COMMERCE TO THE PRESIDENT AND TO  
THE SPEAKER OF THE HOUSE OF REPRESENTA-  
TIVES, IN RELATION THERETO

ALSO

COPY OF PRELIMINARY REPORT OF THE COMMITTEE OF  
SUPERVISING INSPECTORS OF THE STEAMBOAT-INSPEC-  
TION SERVICE, WITH LETTER FROM THE SECRE-  
TARY OF COMMERCE, IN RELATION THERETO

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Committee on the Merchant Marine and Fisheries  
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COMMITTEE ON THE MERCHANT MARINE AND FISHERIES.

HOUSE OF REPRESENTATIVES.

SIXTY-FOURTH CONGRESS, FIRST SESSION.

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LETTER OF TRANSMITTAL.

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DEPARTMENT OF COMMERCE,  
OFFICE OF THE SECRETARY,  
*Washington, November 29, 1915.*

SIR: I beg respectfully to transmit to you the following documents concerning the inquiry made by the officers of this department into the facts surrounding the disaster to the steamer *Eastland*:

1. Transcript of the testimony taken in the case.
2. Copy of the statement made by the board of inquiry at adjournment.
3. Copy of my communication to the President of the United States in respect to the matter, dated August 10, 1915.

Yours, very truly,

WILLIAM C. REDFIELD,  
*Secretary.*

The SPEAKER OF THE HOUSE OF REPRESENTATIVES,  
*Washington, D. C.*

## LETTER FROM THE SECRETARY OF COMMERCE.

PITTSFIELD, MASS., August 10, 1915.

The PRESIDENT,  
*The White House, Washington, D. C.*

SIR: The news of the disaster to the steamship *Eastland* reached me at Syracuse, N. Y., on the afternoon of Saturday, July 24. Hon. Edwin F. Sweet was in charge of the department in Washington. George Uhler, Supervising Inspector General of the Steamboat-Inspection Service, had gone to the Pacific coast, and Mr. D. N. Hoover, jr., deputy supervising inspector general, was in charge of the service. Mr. Sweet left Washington for Syracuse Saturday evening and conferred with me on Sunday, 25th. Mr. Hoover was immediately ordered to Chicago and arrived there Monday morning, 26th. Mr. Sweet returned to Washington Sunday night, 25th, and on the 26th sent Mr. A. L. Thurman, solicitor of the department, to Chicago, whither I proceeded myself on the 26th, both arriving on the morning of Tuesday, 27th. You were advised by telegram of my departure. I think it proper to make it a portion of this record that the above action was taken of my own initiative and without direction or instruction of any kind.

The Revised Statutes of the United States require that every steamboat accident causing loss of life or property shall be investigated by a local board of inspectors and gives to such local board the powers of a United States court for summoning witnesses and administering oaths. This is a procedure which takes place automatically under the law; no one calls for the investigation; no one orders it. It is a procedure which is taking place frequently all over the country. In this case, because of the gravity of the occasion, I deemed it proper that it should be conducted under the supervision of the solicitor of the department and myself. I may add for the sake of the record that the solicitor is an officer of the Department of Justice, assigned as legal adviser of the Department of Commerce.

On arrival at Chicago we found that the vessel had been officially inspected and reinspected by the local board at Grand Haven, Mich., and that examination had been several times made of her life-saving equipment during the current year by the local inspectors at Chicago. Under these circumstances, it seemed wise to call upon the local board at Milwaukee to conduct the inquiry required by law, since they had had no part in any inspection of the vessel of any nature. In order that the inquiry might be distinguished as far as practicable under the law from a purely departmental proceeding, I ventured to ask the assistance of Mr. Marvin B. Pool, a

well-known merchant of Chicago, and of Mr. Harry A. Wheeler, a banker of that city, to act as unofficial members of a board of inquiry. To them I desired to add a well-known labor leader, but was embarrassed in securing such by the fact that some, if not most, of those immediately concerned had expressed their views publicly in advance of the hearing. I did not think it fit to call as an unofficial member of the board of inquiry anyone whose opinion had been expressed beforehand. Receiving a suggestion from Lieut. Gov. Barratt O'Hara respecting the desirability of the presence on the board of inquiry of some representative of organized labor, in which I fully concurred, I asked the lieutenant governor himself to accept, which he very kindly did, and continued to act throughout the inquiry save for one day's absence on official business, on which occasion he sent his father to take his place. Mr. Philip B. Fouke, from St. Louis, chairman of the committee on the steamboat-inspection service of the Chamber of Commerce of the United States, also kindly accepted an invitation to be present and act as one of the unofficial members of the board. On Wednesday, the 28th instant, Supervising Inspector General George Uhler arrived in Chicago from San Francisco, and Mr. Hoover returned to Washington to take charge of the service there. At a later period of the inquiry Naval Constructor James L. Ackerson, United States Navy, was kindly sent by Secretary Daniels to assist me, and also acted as an unofficial member of the board of inquiry, as did Mr. E. C. Gillette, superintendent of marine construction, United States Lighthouse Service, who came to Chicago at my request. The professional knowledge of both was of great service in the inquiry, and both were present during the consideration of the final statement made by the board.

The first hearing of the board of inquiry took place upon Thursday, July 29, in the court room of Judge Kohlsaat, which was kindly put at our disposal. At its very outset an invitation was extended to all who had any knowledge that would throw light upon the subject of the inquiry to make such facts known to the board. No one accepted this invitation. The proceedings of the board were public, and the State's attorney, the office of the corporation counsel, the public administrator, the Congressman from the district chiefly concerned, Judge Sabath, and others were invited to take part in the questioning of witnesses, and availed themselves freely of this privilege. As a matter of fact, therefore, the witnesses were examined not only by representatives of the Department of Commerce and the Department of Justice, but by officers representing the State of Illinois, and the city of Chicago, and Cook County, as well as by Congressman Sabath and others. This may be illustrated by the case of Inspector Reid, the only one of the inspectors conducting the official inspection of the vessel who came before us. He was examined first by myself, then by Mr. Thurman. He was then cross-examined by Mr. Sullivan, assistant State's attorney; by Judge O'Hara, who for that day took the place of his son, the lieutenant governor; by Congressman Sabath; by Mr. Stebbins, representing the corporation counsel; and by Mr. James L. Bishop, the public administrator. He was, in addition, questioned by others upon the board of inquiry. The record will show, therefore, that this inspector was examined by an officer of the Department of Commerce, one of the Department of Justice,

and was cross-examined searchingly by five persons and questioned to some extent by others.

It is proper to state that only the most cordial relations existed from beginning to end between Mr. Thurman and myself upon the one hand and the State's attorney, Mr. Hoyne; the Federal district attorney, Mr. Clyne; his honor, Judge Landis, of the Federal district court; the office of the corporation counsel; of the public administrator; and all other State, county, city, and Federal officers. In particular, the collector of the port was most courteous and helpful throughout, and our consultation with the officers of the Department of Justice in the office of the Federal district attorney was constant and pleasant.

A complete stenographic record of the proceedings was kept on behalf of the board of inquiry itself, and another was taken on behalf of the office of the State's attorney. I appeared with Mr. Thurman and Supervising Inspector General Uhler before the coroner's jury, and Gen. Uhler and myself appeared before the State grand jury.

On my arrival at Chicago I announced through the press that the officers of the Department of Commerce would aid in every possible way to throw light upon the cause of the disaster and upon its own service, and that it would welcome the assistance of others and would cooperate with any authorized authority to a like end. For this purpose Local Inspectors Reid and Eckliff, who this year made the official inspection of the *Eastland*, were by my order summoned from Grand Haven, Mich., to Chicago. They were, upon their arrival, promptly arrested by the local authorities, who, however, extended to them all possible consideration until they were released on a writ of habeas corpus by Justice Landis. It is proper, however, to add that on one occasion, being called for as witnesses, they were brought in irons into our public hearing, a proceeding which seemed unnecessarily harsh with officers of the United States who had as yet been granted no hearing, against whom no indictment existed, and over whose acts, performed in another State and upon a vessel navigating the navigable waters of the United States, the jurisdiction of the officers of the State of Illinois was open to question.

At my direction, the supervising inspector located at Cleveland, Ohio, Capt. Nils B. Nelson, was ordered to Chicago, because he had had the *Eastland* under his supervision for six years. He appeared before the board of inquiry and was summoned as a witness before the Federal grand jury also.

Upon the issuance by Justice Landis of the order directing that witnesses subpoenaed to appear before the Federal grand jury should not be examined in any other proceeding, and upon the issuance of subpoenas to a very large number of witnesses, including the captain, chief engineer, and other officers of the *Eastland*, it became evident that it would be impracticable for the board of inquiry to determine finally the question of the conduct of the licensed officers of the vessel or the inspectors of the department until after the grand jury should have concluded its labors, and that the result would be necessarily affected by whatever the action of the grand jury might be. It seemed, however, important that the board of inquiry should continue its study as far as was practicable in order that it might, if

possible, suggest such remedial changes in the law as would tend to prevent a recurrence of similar accidents hereafter. With this in view, and with the concurrence of Justice Landis, the hearing was continued until August 5, upon which date the board unanimously concurred in the statement which has already been furnished to you and of which the original is on file in the Department of Commerce. A copy of same is attached.

It is proper to add that the following-named persons assisted in preparing this statement and unanimously concurred therein, but their names for obvious reasons were not signed thereto:

James L. Ackerson, naval constructor, United States Navy.

George Uhler, Supervising Inspector General Steamboat-Inspection Service.

A. L. Thurman, solicitor Department of Commerce.

James F. Bishop, public administrator, Cook County.

E. C. Gillette, superintendent marine construction, United States Lighthouse Service.

William C. Redfield, Secretary of Commerce.

A copy of the testimony taken at the inquiry, together with the statement of the board, will be transmitted to each House of Congress at the opening of the coming session, and the substance of this report to you and of the statement of the board of inquiry will be made a portion of my forthcoming annual report, although occurring after the close of the fiscal year to which that report refers. I propose also to include in my estimate for the forthcoming fiscal year an amount sufficient to provide for the functions which the statement recommends should be exercised by the Department of Commerce. Instructions were given on the 6th instant to the Steamboat-Inspection Service to take the necessary steps to carry into effect the additional rules and regulations suggested by the board of inquiry. Instructions have also been given to the Steamboat-Inspection Service to call together a special committee consisting of supervising inspectors selected from the Atlantic, Pacific, and Gulf coasts, who shall, with the supervising inspectors upon the Lakes, promptly consider what can be done within the present lawful scope of the Steamboat-Inspection Service to improve its effectiveness.

I have given assurance that as soon as practicable in the fall a searching inquiry will be made into the whole administration of the Steamboat-Inspection Service under the supervision of representatives of the Navy Department and of the public, so that there shall be no question of its impartial character. Steps to this end have already been taken, and I shall in due time confer with you as to the membership of a board to be selected for that purpose.

I beg to remain, yours, very truly,

WILLIAM C. REDFIELD,  
Secretary.

## INVESTIGATION OF ACCIDENT TO THE STEAMER "EASTLAND."

Transcript of proceedings had and evidence adduced in the matter of the inquisition into the accident to the steamer *Eastland* at Chicago, Ill., July 24, 1915, before Mr. Frank W. Van Patten and Mr. William A. Collins, with the Hon. William C. Redfield, Albert Thurman, George Uhler, Harry A. Wheeler, and Marvin D. Pool acting as an advisory board, and Hon. Barrett O'Hara, lieutenant governor of Illinois, and Mr. P. B. Fouke, of St. Louis, chairman of committee on steamboat-inspection service of United States Chamber of Commerce, sitting unofficially with the advisory board.

Hearing held in room 603, Federal Building, Chicago, Ill., commencing at 10 o'clock a. m., Thursday, July 29, 1915, and continuing as noted in this record.

CHICAGO, ILL., July 29, 1915—10 a. m.

The hearing was called to order by Secretary Redfield, and the following proceedings were had:

Secretary REDFIELD. This hearing is one preliminary to the hearing required by section 4450 of the Revised Statutes of the United States, which I will read as a portion of the record:

The local boards of inspectors shall investigate all acts of incompetency or misconduct committed by any licensed officer while acting under the authority of his license, and shall have power to summon before them any witnesses within their respective districts, and compel their attendance by a similar process as in the United States circuit or district courts; and they may administer all necessary oaths to any witnesses thus summoned before them; and after reasonable notice in writing, given to the alleged delinquent, of the time and place of such investigation such witnesses shall be examined, under oath, touching the performance of his duties by any such licensed officer; and if the board shall be satisfied that such licensed officer is incompetent, or has been guilty of misbehavior, negligence, or unskillfulness, or has endangered life, or willfully violated any provision of this title, they shall immediately suspend or revoke his license.

Under this clause the proceedings may include as licensed officers those officers of the Steamboat-Inspection Service itself who have had to do with the subject under review.

The hearing will be strictly confined to the conduct of such licensed officers, including those of the service itself, and will not include any other matters whatever. By that I mean the conduct of the said officers exclusively in relation to the accident to the steamer *Eastland*.

This inquiry has not been ordered by anybody; it has not been instituted at anybody's request; it takes place automatically under the provision of the United States law; it takes place on this occasion not otherwise than as it does in the case of other accidents of less moment. But for the reason of the gravity of the occasion, through

the courtesy of the local board in whose hands this power is put by law, the solicitor of the department, Mr. A. L. Thurman, has been asked by me to be present, and I have come myself. For the same reason and that we may have the benefit of all possible advice in the matter there are present at my request, as individuals and unofficially and without any definite appointment, my honored friend, Lieut. Gov. O'Hara, of the State of Illinois; my friend Mr. Marvin B. Pool, of Chicago; my friend Mr. Harry A. Wheeler, of Chicago; and Mr. P. B. Fouke, of St. Louis, the chairman of the committee of the Chamber of Commerce of the United States of America upon the Steamboat-Inspection Service.

I have wired to the Secretary of the Navy stating that I should be glad, if it were possible, for him to detail for my assistance in this inquiry another friend, Admiral D. W. Taylor, the Chief Constructor of the United States Navy. I have also wired the chief marine constructor of the United States Lighthouse Service, Mr. Gillette, saying that his presence is desired also.

I now invite all persons present, or all to whom notice of this inquiry shall come, without regard to situation or occupation, and wherever they may be located, who have definite knowledge of actual facts bearing upon the accident to the steamer *Eastland* or bearing directly upon the conduct of the licensed officers of that vessel or of the officers of the United States Steamboat-Inspection Service in connection therewith, to inform me, or to inform any other gentleman present and interested, of these facts, that they may be heard. I desire that that shall be interpreted as broadly as possible, but that they be facts and not opinions in advance of facts; that they be definite and not vague and uncertain. This inquiry will take no account of sweeping generalizations in the absence of definite facts upon which the same are based. It will take account of all facts submitted to it within the scope of its inquiry. And, again, I desire that that be interpreted as broadly as possible.

ROBERT H. McCREARY, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Secretary REDFIELD. I am going to ask, Mr. McCreary, that you speak as clearly as possible, in order that all of the gentlemen of the press may hear, and the stenographers, of course, will hear also.

I should add, in further statement: This is an inquiry and not a trial, and is informal in its procedure, not bound by the legal rules of evidence, but seeking information wherever it may be found, and altering its program, if necessary to do so.

Q. Mr. McCreary, state your name, age, and occupation.—A. Robert H. McCreary, age 47, residence Chicago, Ill.; occupation, deputy collector of customs in charge of the marine department and the navigation inspector.

Q. Who are the navigation inspectors, and what do they do?—A. Do you want the names of all of them?

Q. No; I mean what are they?—A. There are six navigation inspectors in the Department of Commerce and detailed to the collector of customs and placed in my charge, and I have charge of all the marine business, and their business is to count the passengers on

all excursion boats in Chicago; that includes what we call the cross-the-lake boats, like the Goodrich Line, the Graham & Morton, South Haven, Eastland, Michigan City, and others that occasionally take excursion parties; and also at Lincoln Park, Jackson Park, Randolph Street, Van Buren Street, and boats such as the United Shores, running between the parks; we keep a man on them when necessary; and other places, wherever it happens to be necessary. Their business is to enforce the motor-boat regulations and see that the motor boats carry their proper equipment and do not overload.

Q. Under what bureau of the Department of Commerce do the navigation inspectors serve?—A. The Commissioner of Navigation—Navigation Bureau.

Q. They are not part of the Steamboat-Inspection Service?—A. No, sir; they have no connection with that that I know of.

Q. Is the Steamboat-Inspection Service empowered, to your knowledge, to give any instructions to the navigation inspectors?—A. They give no instruction to navigation inspectors, but they assist me whenever necessary; I mean I call on them for whatever assistance I may need; in case I have need for an extra man, in emergency, I call upon them, which I have done.

Q. Is or is not the work of the navigation inspector entirely separate service from the work of the Steamboat-Inspection Service?—A. Absolutely.

Q. Will you state, as briefly and yet as fully as you can, what instructions you gave to the navigation inspectors respecting the counting of passengers upon the steamer *Eastland* on the morning of July 24, if any?—A. Well, to begin at the beginning, they have been here at the docks all the time, and they are instructed to keep in touch with the steamboat lines and find out if the schedule is at any time changed, or any unusually large crowds are expected, or any excursions; when they get a charter they get more than they usually carry, and the inspector informed me two weeks ahead that this line would carry the Western Electric.

Q. What inspector informed you?—A. Mr. Lay; Mr. Robert Lay.

Q. When you say "inspector" do you mean navigation inspector?—A. I mean the navigation inspector; yes, sir. I will make it that way. And as I am at the dock every day, Mr. Greenebaum also informed me that on the 24th he would carry the Western Electric.

Mr. THURMAN. Who is Mr. Greenebaum?

A. Mr. Walter K. Greenebaum is manager of the Michigan City Line, which is the Indiana Transportation Co., and I get a schedule from him as to the time and the names of the boats, and also the name of the boats that will use two gangplanks, so that if there was a congestion they could use two gangplanks. The *Eastland* was one that was going to use two gangplanks, and the *Roosevelt* was the other. The *Eastland* was the first boat to leave; she was to be followed by the *Petoskey*—followed by the *Petoskey* on that side of the river; and the *Roosevelt* would be the next boat to leave, and she was to be followed by the *Racine*, and there was also the *Rochester*. I detailed men, four men, to count these passengers.

Q. Who were they?—A. Mr. Oakley—let's see; I will get the right name here. L. A. Lobdell and H. G. Oakley, and the other two

were R. A. Lay and R. A. Bray; I don't know whether that "A." is right or not.

Secretary REDFIELD. Were these men assigned to any particular vessel?

A. Yes. Mr. Lobdell and Mr. Oakley were to count the passengers on the *Eastland*.

Q. Yes; that is the important point; we are only concerned with the *Eastland*. What did you instruct Mr. Lobdell and Mr. Oakley to do?—A. To count the passengers going on board the steamer *Eastland*, and the boat was supposed to sail—to commence loading at 7 o'clock, and I instructed them to be there at half past 6 so that there would be no doubt about being on time.

Q. What did you do yourself?—A. Do you want me to state about the night before or anything of the kind?

Q. You just answer my question. What did you do yourself?—A. At that time, before the boat loaded?

Q. Yes, sir.—A. I did not do anything except instruct them—the men I had on the boat.

Q. Then what was the next thing that you did relating to the *Eastland*?—A. Why, I was at the *Eastland* on Friday morning when she was about to take her morning trip out to St. Joe, and Mr. Lobdell asked me if it was all right for him to sleep on board; he lives pretty far out and he would not have to get up so early, and he had the moonlight excursion that night; he was detailed to take the moonlight excursion, and there was something over 1,100 passengers on that. And I spoke to the purser and I said I did not want to ask any favors of him, and I do not want to ask you to put yourself to any expense or trouble, but if you have got a bunk that is not working I would like to have Mr. Lobdell sleep aboard so he would be here in the morning to count your passengers.

Q. Sleep on board the *Eastland*?—A. To sleep on board the *Eastland*. He said he had no staterooms on the boat, but he thought possibly he could put him in with some of the crew; sometimes they were changing and being fired, and so Mr. Lobdell slept on board.

Q. Now, what did you do on Saturday morning?—A. On Saturday morning I got up before 6 and dressed, and without having any breakfast went to the boat, to the *Eastland*, and was there about a quarter to 7.

Q. Just a moment, Mr. McCreary. Are you an officer of the Department of Commerce?—A. No, sir; I am deputy collector of customs, and they made me an officer, a navigation inspector, just recently.

Q. By what department is your salary paid?—A. Paid by the Treasury Department.

Q. Then you go on. I think I have been guilty of an unconscious discourtesy. I ought to have said in my preliminary statement that this investigation is being carried on by the Milwaukee Board of Local Inspectors, whose members, Mr. Collins, Capt. Collins, and Capt. Van Patten, are here and actually in charge, and by whose courtesy I am asking these questions.

Q. Now, will you proceed and say what took place on Saturday morning as you saw it yourself?—A. Well, when I got to the boat I found the inspectors, both of them on duty and both counting with the counting machines.

Q. What is the counting machines?

(Witness produced counting machine and hands it to Secretary Redfield.)

Q. You have handed me one. Is that a sample of what they use?—A. Let me have one of those. This is one that was just sent on. We will get a facsimile.

Q. Is this one?—A. This is identically the same.

Q. Is this the one that was actually used?—A. No, sir; the one that was used is sealed up.

Q. Did you see Mr. Oakley and Mr. Lobdell using these machines?—A. I did.

Q. Did you take any part in the counting yourself?—A. I stood there with them watching count and getting it every few minutes, and I notified them that when we got up toward 2,000 I would look at the count, and then I notified them when we got to 2,400 to let me know, and they did; I said let me know at 2,450, and at 2,450 Mr. Oakley notified me and we all moved up the gangplank and we commenced to shut the crowd off, because sometimes it is hard to shut them off just at that time, and we all moved up the gangplank.

Mr. THURMAN. Which way, you mean toward the deck?

The WITNESS. Yes; toward the dock; they were standing on the boat, by the gangplank, counting. And we moved up the gangplank, the three of us, which practically closed the gangplank, so they came in closer, and Mr. Greenebaum called to me and said, "I am going to send this crowd over to the *Petoskey* just as soon as you shut them off. Can you get a man over there to count the passengers on the *Petoskey*?" And a little later I notified Mr. Oakley.

Mr. THURMAN. Mr. Greenebaum was there, was he?

The WITNESS. Mr. Greenebaum was there.

Q. Do you know how long he had been there?—A. He had been there several times keeping tab on the count, and asking me the count.

Q. Do you know whether he was on the boat?—A. I don't think he was on the boat, he came to the head of the gangway and would speak to me there.

Mr. WHEELER. How is this counting done? Do they have one machine or two?

The WITNESS. Each man had his own machine.

Q. Two machines at each gangplank?—A. Two machines at each gangplank.

Q. Two at each gangplank?—A. Yes, sir; we sent them there to use two gangplanks, but they did not; they used only one gangplank, and there was not a gangplank, not any other gangplank, open; I looked at the gangway myself; they were closed up; that is, the lower part, the top part was open.

Secretary REDFIELD. There was no access to the vessel except this one?

The WITNESS. Absolutely none; I looked at it and watched it so that nobody could even have climbed over.

Q. You are quite certain that nobody got on board that vessel by any other way than through that entrance?—A. I am, I watched it carefully, and watched when the gangplank was ordered pulled in. I watched the other gangway to see that nobody tried to get on there, and nobody got on.

Q. Now, you have testified as to what took place when there was 2,450 on board, as I understand it.—A. Yes, sir.

Q. What took place then?—A. Why, a little later Mr. Greenebaum told me that he would send the people to the *Petoskey*, which was lying just astern of this vessel; you have to go up the stairway, across the street, and down to the *Petoskey*, and he wanted an inspector there to count them. In order to have an inspector there when the crowd came I sent Mr. Oakley, and I told him I would take his count, and I counted one, two, three, four, five, and then Mr. Lobdell told me, according to the usual instructions. I always tell them to give me the count before they get 25, and we would shut down, practically shut down, so there would be no mistake; and he said 25 more, Mr. McCreary. Then Mr. Lobdell, with his checker, counted the 25 more, and the ticket checker counted them out loud until we got the last five, and Mr. Lobdell says, "that is all." Then he says, "There is just five more," and there were two women and a little girl about that high [indicating].

Secretary REDFIELD. Indicating a child.

The WITNESS. Yes, sir; I was afraid that maybe she was back of this woman and Mr. Lobdell had not seen her, and I said, "Mr. Lobdell, is this little girl counted?" and he said "Yes, Mr. McCreary; she is counted." That made the 2,500. Then I ordered the gangplank pulled in.

Q. Did you see it pulled in?—A. Yes, sir; I saw it pulled in and stood there until it was pulled in, and Mr. Lobdell was standing in the gangway.

Q. Are you personally certain, Mr. McCreary, that nobody got on that boat through that gangway or from that side after the 2,500 was counted?—A. Absolutely; I never was as certain of anything in my life.

Mr. THURMAN. In making this count, Mr. McCreary, how did you count children and babes?

The WITNESS. Why, we counted them as we always count them; we have for years.

Secretary REDFIELD. How is that?

The WITNESS. That is, we count children and babes in arms—

Q. As what?—A. A baby two weeks old will count just as much as the Secretary.

Q. You mean every baby and infant child is counted as one person?—A. As one.

Mr. THURMAN. And that is done in conformity with the regulation issued to the inspectors by the Department of Commerce?

The WITNESS. It is done in conformity to that regulation; I have a copy of it here in my pocket.

Secretary REDFIELD. Will you hand me that copy?

The WITNESS. That is the first thing I was instructed to do, count everybody, including children in arms. There is the one under which we are working, that is the simplest.

Secretary REDFIELD. I read into the record from a circular letter dated April 29, 1913. I will put the entire circular into the record, but for the purpose of the particular point at which we now stand I will read the portion that relates thereto; the heading is:

To United States supervising and local inspectors, Steamboat-Inspection Service, masters, owners, and agents of passenger steamers, and others interested.

Then the entire circular follows. It goes into the record. The portion we are concerned with at the moment is this:

The attention of all concerned is called to the fact that every person on board, other than the crew, whether adult or child in arms, shall be considered as a passenger in the count.

Then signed by George Uhler, Supervising Inspector General.  
(The circular from which the above is quoted in full is as follows:)

[Circular letter. 57323.]

DEPARTMENT OF COMMERCE,  
STEAMBOAT-INSPECTION SERVICE,  
Washington, April 29, 1913.

United States supervising and local inspectors, Steamboat-Inspection Service, master, owners, or agents of passenger steamers, and others interested.

GENTLEMEN: As the season approaches when large numbers of people will probably be carried on passenger and excursion steamers, inspectors of this service are advised that it will be necessary to supervise very carefully the embarking of passengers where large numbers may be expected, particularly upon Saturdays, Sundays, and holidays, and accurately check the number of passengers going on board, in order that the steamer's allowance may not be exceeded, and overcrowding and possible disaster be avoided.

Upon steamers where the number of passengers on special occasions may be unusually large the count will be taken simultaneously by two officers of the Government detailed for this duty by the Customs Service and the Steamboat-Inspection Service, or by either where the force permits, in order that there may be no doubt as to the accuracy of the count if it is contested by any party in interest. To insure the accuracy of this count, the checking must be done by two officers at the same point, that is to say, over the same gangway, and in such cases only one gangway must be used for loading passengers. Where it may become necessary to verify a count inspectors may require that passengers shall be disembarked or landed over one gangway.

The attention of all concerned is called to the fact that every person on board other than the crew, whether adult or child in arms, shall be considered as a passenger in the count.

Local inspectors will see that a copy of this circular is personally delivered to the master, owner, or agent of every steamer within their district carrying passengers, and where such personal service is not possible, receipt by mail service must be acknowledged by such master, owner, or agent.

Local inspectors will, therefore, consult as usual with the chief officer of the customs at their respective ports, and arrange as formerly for such detail of inspectors as will most effectually fulfill and accomplish the purpose of this circular.

Respectfully,

GEO. UHLER,  
Supervising Inspector General.

Secretary REDFIELD. I also read from a circular dated September 1, 1910, which is signed by D. N. Hoover, jr., Acting Supervising Inspector General, and addressed:

United States supervising, local, and assistant inspectors, Steamboat-Inspection Service.

GENTLEMEN: The following are copies and excerpts from letters written by this office during the month of August, 1910, wherein rulings have been handed down, relative to the interpretation of certain of the Revised Statutes, and also sections of the rules and regulations relating to this service, all of which are submitted for your information and guidance.

The matter of the authority of local inspectors to specify the distance that must exist between the back and ends of boilers and the bulkheads on towing steamers having been under consideration, it may be stated that the last paragraph of section 29, Rule II, General Rules and Regulations, provides that "All boilers shall have a clear space at back and ends. When located in close prox-

imity to wooden bulkheads the space between boiler or boilers and bulkheads shall be not less than 2 feet; with iron or steel bulkheads, not less than 16 inches."

This rule was made for the purpose of providing sufficient space for a person to pass between the boiler and bulkhead, and has nothing whatever to do with section 4490, Revised Statutes, or section 34, Rule III, General Rules and Regulations, relating to bulkheads on steamers carrying passengers. While towing steamers are not required to have bulkheads, if they do have them the bulkhead next to the back and end of the boiler must be so located as to comply with the requirements of the last paragraph of section 29, Rule II, General Rules and Regulations.

The matter of whether the operator of a motor boat is required to be a citizen of the United States having been under consideration, this office has held that "no person unless a native or a fully naturalized citizen of the United States can hold a marine license of any kind."

The question having arisen as to the jurisdiction of local inspectors over licensed officers acting under licenses not covering the waters of their district, you are advised that in a letter dated August 22, 1910, to the supervising inspector of the second district, New York, N. Y., this office stated "that the local inspectors of a district have jurisdiction over a licensed officer when acting under his license in their district, whether said licensed officer holds a license covering the waters of their district or not."

The matter of whether infants in arms or small children are passengers within the meaning of the act of Congress approved June 9, 1910, having been under consideration, this office stated in a letter dated August 27, 1910, to the United States local inspectors at Philadelphia, Pa., "that on all motor boats carrying passengers for hire one life preserver of the sort prescribed by the Board of Supervising Inspectors must be provided for every passenger carried, and that infants in arms or small children are considered as passengers."

The supervising inspector of the eighth district having requested a ruling as to whether the examination referred to in department decision No. 8755, March 29, 1888, page 32, Manual 1899, relating to renewal of officers' licenses that are not presented within 12 months of the date of expiration, should be written or oral, or either, in the discretion of the inspectors, this office stated in a letter dated August 27, 1910, that it "is of the opinion that in order that there may be a complete record of all transactions of this kind the examination should be in writing."

The supervising inspector of the second district, New York, N. Y., having requested instructions as to the proper procedure in cases where persons holding masters' or first or second class pilots' licenses or chief or assistant engineers' licenses, apply for operators' licenses, this office stated in a letter dated August 29, 1910, "that the law requires that no motor boat while carrying passengers for hire shall be operated or navigated except in charge of a person duly licensed for such service by the local board of inspectors."

"In order to obtain the operator's license referred to, for which no examination is required, it would not be proper or fair to require a person holding a master's or first or second class pilot's license or chief or assistant engineer's license to surrender the same, but the practicable way out of the situation would be to issue an operator's license to such persons, permitting them to retain their master's, or first or second class pilot's license, or chief or assistant engineer's license."

"Of course, if the owner of a motor boat wishes to have a licensed engineer in charge of the engine, this service has no objection, but inspectors can not require more than the licensed operator referred to in the law."

A definition having been requested of the word "passenger" within the meaning of section 4465, Revised Statutes, and with particular reference as to whether or not a child of, say, 1 year old, is a passenger within the meaning of said section, the department, under date of August 25, 1910, addressed the following letter to the collector of customs at Grand Haven, Mich.:

COLLECTOR OF CUSTOMS,  
Grand Haven, Mich.

SIR: The department is in receipt of your letters of the 9th and 11th instants, requesting definition of the word "passengers" within the meaning of section 4465, Revised Statutes, and with particular reference as to whether or not a child of, say, 1 year old, is a passenger within the meaning of said section.

AUGUST 25, 1910.

In reply, you are advised that every person who pays a stipulated sum for his passage or is on board, even free of charge, and has neither interest in the cargo nor belongs to the ship's crew, is a passenger within the meaning of section 4465, Revised Statutes, from which it follows that every person is counted boarding a vessel as passenger, whether it be an adult or a babe in arms.

Respectfully,

BENJ. S. CABLE,  
Acting Secretary.

On August 6, 1910, Mr. Michael Harris took oath and assumed duty as clerk to the United States local inspectors of steam vessels at Providence, R. I., and on August 27, 1910, Mr. Henry Lindsay took oath and assumed duty as clerk to the United States local inspectors of steam vessels at Pittsburgh, Pa.

Respectfully,

D. N. HOOVER, Jr.,  
Acting Supervising Inspector General.

Secretary REDFIELD. Now proceed, Mr. McCreary. I want to ask you now, as I understand it, you have reached the point where the gangways were closed and you stopped further access to the vessel.

The WITNESS. Yes, sir.

Q. Now, did you have trouble in keeping anyone off of that vessel after the limit was reached?—A. Why, yes; there was several hundred on the dock there, and they tried to get on, and I just pushed them away from the gangway and told them the vessel had all the law allowed her, and several people said their family was on there, and their friends, and they would like to get on, and I said, "You can not do it." One man was very persistent; he says, "Oh, be a good fellow and let me on, all my people are on there; one more is not going to hurt." I said, "If you get on, I will hold that boat and won't let her go out."

Q. What did he do?—A. He kept begging, and I didn't pay any more attention to him.

Q. Now, as a matter of fact, didn't you let him on?—A. Absolutely not a person went over that gangplank over the 2,500, and not a single person went over that gangplank who was not counted, except one woman.

Q. Why did she go on?—A. She is a member of the crew, works in the toilet room, and is known personally to our inspectors. None of the crew went on or anybody.

Q. Do you want us to understand now that you are personally certain that you let nobody on that boat after the limit was reached?—A. Absolutely certain there was no one went on that boat after she reached the 2,500. I stood right there, and was very careful to see there was nobody taken on after that.

Q. Now, Mr. McCreary, haven't you seen a statement that there were 4,000 people on board that boat?—A. I think so. I have heard all kinds of statements since I have been connected with the marine department.

Q. Did anybody other than the officers of the vessel ask you how many persons there were on board at that time?—A. Well, it was not long, of course, before some of the newspaper men asked about it.

Q. That was after the accident?—A. After the accident; yes.

Q. I mean at the time that we have been speaking of, before the accident, did anybody, no matter whom, inquire of you, before anything happened, how many people there were on that boat other than the officers of the boat?—A. No, sir.

Q. Well, now, who was it that knew how many people there were on that boat? How many persons knew how many was on it?—A. Why, there was none who knew except one or two men, and they were the two ticket checkers. Mr. Greenebaum knew; he asked me, and I gave him the count several times.

Q. Mr. Greenebaum knew how many there were?—A. Yes, sir.

Q. Did Mr. Floto?—A. One of the checkers was right near him and Mr. Lobdell was between me and the checker.

Q. He knew?—A. Yes, sir.

Q. And you knew?—A. Yes, sir.

Q. And Mr. Lobdell knew?—A. Yes, sir.

Q. And Mr. Oakley had gone when the thing was over?—A. When the thing was over; yes, sir.

Q. He went before the accident?—A. Yes, sir.

Q. So that there were four persons who knew how many people there were on that boat?—A. Yes, sir.

Q. Two of the boat officers and yourself and Mr. Lobdell?—A. Mr. Lobdell and the men who were checking tickets, I mean.

Q. How many is that?—A. That is four.

Q. Four persons, anyhow?—A. Yes, sir.

Q. Were you there all the time until the accident happened after the count closed?—A. No; when the count closed and the gangplank was pulled in and I saw Mr. Lobdell at the gangway so that nobody else could get on, then I went over to the *Petoskey* to see that my man was there and on duty and counting passengers, and I found him on duty and came immediately back.

Q. Came back?—A. Yes, sir.

Q. Well, had anything happened while you were gone?—A. Nothing at all. The boat was getting underway.

Q. Now, one moment. After the gangways were closed you left Mr. Lobdell?—A. Yes, sir.

Q. In charge?—A. Yes, sir.

Q. And, if I understand you correctly, went to *Petoskey*?—A. *Petoskey*.

Q. To *Petoskey* and saw how matters were going there, Mr. Oakley being there?—A. Yes, sir.

Q. And returned to the *Eastland*?—A. Yes, sir.

Q. Is that so?—A. Yes, sir.

Q. How long did that take you?—A. Oh, not over two or three minutes.

Q. And the *Petoskey* was immediately alongside?—A. Just at the stern, across the street.

Q. When you got back to the *Eastland* had there been as yet any sign of the accident?—A. She was listing badly.

Q. Which way?—A. To port.

Q. To port?—A. Away from the dock.

Q. When you got back you found her in that condition?—A. Yes, sir.

Q. Did you see Mr. Lobdell at that time?—A. Mr. Lobdell was standing in the gangway.

Q. On the vessel?—A. On the vessel.

Q. Did you speak to him?—A. Well, I talked to him and I told him I decided to send Oakley to Michigan City with him to count

the passengers. He would go over on the *Petoskey* on the return trip.

Q. Were your instructions to Mr. Lobdell to take the trip on the *Eastland*?—A. In order to count the passengers. He was going over there on official duty to count the passengers on the return trip. We have two men over there, but I was sending an extra man; at the last moment I decided to send an extra man, and that was Mr. Oakley.

Q. So it was your instructions that he should take the trip on the *Eastland*?—A. It was.

Q. And he was on board there for that purpose?—A. Yes, sir.

Q. What was the next thing you know?—A. Why, I said good-bye to Lobdell and saw the boat list badly, but I thought she would right every minute. I thought she would come up, and I walked then toward the other end—the farther end of the boat—the forward end of the boat, I should say—and when I got to the gangway there was some fellows there throwing their suit cases over, getting ready to jump off, and I started to say something to them, and just as I started to say something to them the boat commenced to go so fast that I knew she was gone.

Q. A that time—do I get the impression correctly of what you saw that it was, at first, as you saw it, it was a gradual process?—A. Yes, sir.

Q. And later became accelerated?—A. Yes.

Q. That is your best recollection?—A. Yes, sir. She was listing gradually at first, but with a continual list, and toward the end she commenced to go and went very fast.

Mr. THURMAN. At this time, this continual list, this gradual list to port, did you notice at any moment any movement of the passengers on the deck of that vessel to either side there?

The WITNESS. I noticed none whatever. I don't think there was, because when I was talking to Lobdell at the gangway, the gangway on the starboard side toward the deck, it was crowded—

Q. Yes.—A. And so was the deck above on that side, and when I got to the forward gangway of the same side it was crowded, and they were coming out over there.

Q. Was there at any time as far as you know a rush of the passengers or a movement of the passengers toward the port side of that boat?—A. Not that I know of, and I don't believe it is possible that they could all get over there. If you had 1,000 people on, it would be possible.

Q. As far as you know, Mr. McCreary, how were these passengers distributed over the decks of that vessel before she began to list?—A. Well, I just took a casual glance at them there on the deck.

Q. I only want what you saw.—A. Oh, I could see they were distributed as they usually are aboard a boat. Of course, the main deck was full, and they were trying to get them off the main deck up on the other decks so that they could check the baggage, etc.

Q. How were they?—A. On the upper decks there was plenty of people, on the upper decks and on the starboard side.

Q. Were they not practically equally distributed between the two sides of the vessels?—A. I should say they were.

Secretary REDFIELD. Let me ask you, Mr. McCreary, whether I understand you correctly as saying that there were a considerable

number of people—I don't know how many, and I take it you do not—on the lower deck of that boat, and than an effort was being made to get them to ascend higher?

The WITNESS. Yes.

Q. You saw that?—A. Yes.

Q. Do you want me to understand from that that the upper deck was not at that time full?—A. No; simply that they could not get on the boat. If they all stayed down there by the gangway they could not get on the boat.

Q. So that you don't want us to draw the inference as to the number on the upper deck that way from what you have said?—A. Oh, no. No; simply to allow the people to get on the boat and check their baggage, etc.

Q. All you wish us to understand is—tell me if I am right—that there still were many people on the lower deck at this time?—A. At the time the boat went over?

Q. At the time you are speaking of, when you saw the effort made?—A. Oh, yes. Yes.

Q. Was the lower deck fairly full at that time?—A. I should say so; because at the gangway there were many people, many people at the gangway, which, under ordinary circumstances, could not get there. From the dock I could not judge all of it.

Q. Now, both that deck to which the passengers were at that time ascending and the one above—was there still another deck on which the boats and the rafts were placed, another deck above?—A. Well, there is the main deck and the cabin deck and an open deck and then the boats are on the other deck.

Q. Up above?—A. Yes.

Q. The boats were on the top deck above everything else?—A. They were on the top deck; yes.

Q. Were there any passengers up there?—A. I couldn't say. I didn't see any.

Q. Do you know, as a matter of fact, whether there is access to that topmost deck for passengers?—A. No. I couldn't state that.

Q. You don't know that?—A. No. That is required by the boat, and the steamboat inspectors; they require that.

Q. Now, what did you do, if anything, at this time in connection with life preservers on the boat?

Mr. THURMAN. Let me ask him something here which comes to my mind.

Secretary REDFIELD. Go ahead.

Mr. THURMAN. Mr. McCreary, at any time this morning did you have any conversation—on the morning in question, did you have any conversation with the captain or engineer or any of the officers of the *Eastland*?

The WITNESS. I didn't see any of them at all.

Q. You didn't see any of them at all?—A. Before the accident.

Q. That is all.—A. I may have passed them, but I had no conversation with them.

Q. You had no conversation with any of the officers in charge of the vessel?—A. None whatever, except Mr. Greenebaum. He is connected with the company.

Secretary REDFIELD. What, if anything, did you do respecting life preservers that morning?

The WITNESS. Why, I took a walk around the boat on the second deck—that is, the cabin deck—and at that time I found the life preservers well distributed. They were hanging overhead and in the cabins, the main cabin, that is, the one big cabin; they have a seat running around like this, running around the cabin, and I looked for the life preservers there. These seats were marked "Life preservers." In plain view, so there would be no trouble finding out where the life preservers were. I looked there; I took these different seats and opened them, because I have found sometimes on a boat, even though they are careful, if they are put into a place like that, the wood will swell on account of the dampness, and I raised them up, and I opened up a number of them, and they opened very easily. Then I went aft and I saw that the life preservers there were distributed well overhead, and there seemed to be as many as was possible to put there. The fire hose was connected up. I saw several axes, etc.

Q. What did you do all that for?—A. Well, I have been connected with boats so long that whenever I go around I look at these things, and then I have charge, you might say exclusive charge, of enforcing the motor-boat regulation, and I always do that when I go on a motor boat; I see that the life preservers are distributed.

Q. Now, Mr. McCreary, isn't it a fact that you thought there was some special danger there and that because of that reason you did all this?—A. Not at all. I never dreamed of any special danger. I always do it when I am on official duty; when I go out to take a boat every time I don't fail to go over the boat to look for it.

Q. Is it your duty to look after the life preservers?—A. It is not; not on the steamers. They have a certificate of inspection.

Mr. THURMAN. Mr. McCreary, in the distribution of these life preservers, there were a number attached to the roof?

The WITNESS. Yes.

Q. Above the deck, were they not?—A. Yes.

Q. How were they fastened?—A. By strings running across.

Q. That is, strips of wood?—A. Yes. I didn't examine all of them, but I saw some that were loose, and there were strings holding them up. I saw nothing to make me think they were not properly fastened.

Q. Could any of them get on the deck?—A. Oh, yes, they could get on the deck.

Q. They were not on the deck?—A. Oh, yes; they were on the deck.

Q. When you were on the deck did you have any conversation with any other person?—A. I was in conversation with Mr. Greenebaum in regard to the number of passengers on the boat. He was busy, and I was, too, but I just saw him as he was on the deck. I gave him the count. That was all.

Q. Did you see the boat list; did you see him at that time?—A. I saw him at that time. I saw the passengers back.

Q. The only conversation I had with him was in regard to the number of people that were on the boat. The number of people on board the boat was given to the *Petoskey* to take care of the return trip.

Q. Nothing in regard to the condition of the boat?—A. No. The condition of the boat and the boat itself was not mentioned.

Mr. POOL. Mr. McCreary, do passengers leave the boat while they are going on?

A. No. No; they do not.

Q. Very little traffic the other way?—A. None whatever. There was not a man came off the boat.

Q. How do you check them?—A. My men are instructed to count these people that get off. If they insist on letting these people off, if any man wants to go ashore for something or other, he is counted. Of course, in an emergency where the men know a man and can see him about the dock, and he comes back, he would make an exception, but the men have explicit instructions that people getting off these boats that way are to be counted. There is nothing else done, and when they come back they are counted again.

Mr. CARROLL. I would like to ask one question, please.

Secretary REDFIELD. All right.

Mr. CARROLL. How long have you been supervising the loading of boats out of Chicago?

The WITNESS. Well, I have only had exclusive charge of it this year.

Q. Well, how long have you been connected with it; that is, down aboard the boats, seeing them go out and counting the passengers?—

A. Well, I have been aboard the boats enforcing navigation regulations, motor-boat regulations, and steamboat-inspection regulations, etc., for over 20 years, but the counting of the passengers has been done in previous years with one or two exceptions by what we call the inspectors' division of the customhouse, under the Treasury Department, and they were under Mr. Griffin, the deputy collector or inspector. When I would have charge of the marine department, of course, when I went down there, they were courteous to me, but I had to look after other things, and I was not in charge, and I didn't look after the counting, and I made no reports on any of that.

Q. I would like to ask you, how do you navigation inspectors know how many passengers the different boats are allowed; how do they arrive at that figure?—A. They are instructed to go by the certificate of inspection aboard the vessel on the special permit which is granted and which hangs alongside of the certificate of inspection, and we all carry in our pockets at all times the number of passengers allowed under the certificate of inspection, and as soon as there is a change in the permit it is reported, and we make a change on our memorandum, but in addition to that, to be extra careful, we go by the certificate of inspection and the special permit on the boat, and in the case of the *Eastland* it was working on this permit—the men worked by that—and that was hanging to your right, just aft of the port gangway. I looked at it every morning when I go down, and our inspectors looked at it.

Q. How many passengers was the *Eastland* allowed?—A. Two thousand five hundred at the time of the disaster.

Q. Is it customary here in Chicago for the steamboat companies to take any measures to count the passengers, to know how many they have aboard?—A. Well, I believe that they go by the check of the Government inspector.

Q. Did you ever see them have any of their own men there?—A. No; I have not. I have heard some time that they did, but I have not paid any attention to that. They get a count after the boat goes, of course. When the boat gets under way they get a count from the tickets, etc., and they keep a record.

Q. Do you know how your inspectors' count correspond, how it tallies with the steamboat count after the purser has checked up?—

A. No; I do not.

Q. Did the man who sells the tickets—how does that count correspond with the count of the man who sells the tickets?—A. No; I do not know.

Q. How close do you think a person could come to making an estimate of a crowd aboard a boat at that time?—A. There is no man on earth that could make any estimate at all. I have been at it for 20 years and the steamboat inspectors have been here a great many years, and our men at the barge office see every boat that goes out of the river, they stand at the door and see that, and they have not the slightest idea how many are aboard. I had one the other day when I got the count on the *Roosevelt* and also on another Morton boat when I asked our men how many they thought were there. They didn't know. They didn't come within 35 or 40 per cent of the right number. I have complaints of men who have come up to this office and who say that boats were overcrowded and they didn't have two-thirds of their capacity. Sometimes when they had one-half there were complaints. Of course it is a well-known fact that when the boats go out of the river, if all the passengers are out on deck, you would naturally say they are overloaded, "isn't she crowded," and there would not be a soul in the cabins.

Q. Do you know of any other means or any other persons by which the number of people aboard the boats would be known other than the count of your navigation inspectors or the Government inspectors that count the passengers?—A. None whatever. I don't know what the tickets would indicate.

Q. But I mean any office or any other place where there?—A. Oh, no; nobody knows anything.

Mr. CARROLL. The Secretary REDFIELD, during the 20 years' experience, single permit boat carrying more than the permit!

A. No, sir. will allow to see from that a boat gets a

Mr. FOUKNER. Secretary REDFIELD, an investigation

A. If I could just one

Mr. FOUKNER. moment, determine whether or not the

A. Nothing

Q. It is not

A. No, sir.

Secretary REDFIELD. a different They have no jurisdiction. to that.

Q. I would like to Mr. McCreary—

General UHLER. Yes, sir.

Secretary REDFIELD: I would like to have General Uhler take the oath at this point.

Mr. O'HARA. Mr. McCreary, that count of the passengers is made with this instrument?

A. Yes, sir.

Q. After the accident happened, were the instruments given you—there were two in use when the passengers were being loaded on the *Eastland* last Saturday morning?—A. Two in use.

Q. Each inspector had an instrument?—A. Yes, sir.

Q. And these checkers, have you the checkers with the counts as they stood at that time?—A. No; not as they stood at that time; no. They were usually—the other man took his over to the *Petoskey* and used it on 120 passengers over there, and the other man used his on another one.

Q. Now, Mr. McCreary, when a passenger goes on the boat how does he know that he has been clocked?—A. How does the passenger know it?

Q. Yes, sir; how does the passenger know it?—A. He does not know anything about it—

Q. Is it possible to make an instrument that will have a bell attached to it similar to the instrument you see in street cars? For instance, by checking that way, pressing a button, a bell will ring?—

A. I should say that—of course, that is only my opinion, but I should say it is possible to make such an instrument; yes.

Q. Now, Mr. McCreary, is it possible—I am asking you this, not intimating anything, but merely for information—but is it possible for an inspector or a checker to partially push the button, as I am pushing it now, and there is no check, there is no register there?—

A. Oh, yes.

Q. That is possible to do that?—A. Why, if you don't push it you don't get a check. If you do push it you do.

Q. There is no check on the checker?—A. If you push it you get a check.

Q. If you push it you get a check?—A. If you push it you get a check. When two men are counting together the machines do not make the same mistake at the same time.

Q. There are two checkers?—A. There are two checkers. If one checker there makes a mistake the other would catch it. I might say there is a possibility of every man making a mistake, but two men do not make it at the same time, and two checkers do not make the same mistake at the same time.

Q. Was it your duty, part of your duty, to inspect these checkers that are inspecting or counting?—A. Oh, yes; yes, indeed. We go over them carefully.

Q. You go over the checkers, the little instruments, that is what I mean?—A. Oh, yes, indeed. We go over them carefully and see that they are all right. There were eight of them sent to the department this year to be repaired, and they were put in good condition and sent back here. The best ones were given to our navigation inspectors, the newest ones, the ones that seemed to look the newest and the best. We picked out those. They were all good, and all perfect, so far as I know. These men took them and used them, but as soon as they felt any catch or anything wrong, anything of that kind, they turned them in and got another one. I also have several extra

ones over at what they call the barge office. That is the most central point we have, and we have those extra ones there so that they can run over and get one if they have trouble with the one they have. Also, every man is instructed to carry a piece of paper and pencil in his pocket at the same time so that if anything happens to these things they can keep the count with pencil and paper.

Mr. O'HARA. Thank you, sir.

Secretary REDFIELD. Now, we will ask General Uhler a question. (Witness excused temporarily.)

General GEORGE UHLER, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Do the records of the Steamboat-Inspection Service show any case that is proven of a vessel being loaded beyond the legal limit?—A. They do not, sir, to any great extent. We sometimes get, in the consideration of a fine case, where there is a discrepancy between the count of the checker and that of the ship's officers, perhaps 4 or 5 people—a difference of that much; maybe 10. The count of the Government inspectors is always sustained, and the collector of customs has no discretion in the matter except to report the vessel to the department for the violation of her capacity.

Q. What is the penalty for overcrowding?—A. \$500—

Q. I mean, for loading beyond the legal limit?—A. \$500 flat fine in the first place for violation of the provisions of her certificate and forfeiture of the passenger money and \$10 for each passenger carried beyond the limit allowed by her certificate.

Q. Upon whom is the fine imposed?—A. Upon the vessel.

Q. Who is the responsible officer of the vessel for permitting loading beyond the legal limit?—A. The master, always, sir.

Q. Is it or is it not a fact, within the experience of the service, that there are occasions on which there are strong demands made to overload the vessels beyond the legal limit?—A. Quite frequently.

Q. Do you remember my giving an order prior to the 30th day of May, 1914, respecting the possible crowding of vessels beyond the legal limit on that day?—A. I have a recollection of the order. I don't just remember the date, but it is—

Q. Can you say how many persons were turned away from vessels pursuant to that order on the following holiday in the city of Detroit?—A. I think in the neighborhood of 5,000, if my memory serves me right.

Q. Can you say how many were turned away on the same day in the city of Baltimore?—A. As I remember, about 1,500 were reported as having been turned away.

Secretary REDFIELD. Thank you. That is all for the moment, General.

(Witness excused.)

ROBERT H. MCCREARY, recalled as a witness, and testified as follows:

Examined by Secretary REDFIELD:

Q. Now, Mr. McCreary, I want to ask you if the system of counting passengers which you have described is a new system?—A. You mean with checkers?

Q. I mean by the navigation inspectors with the conical counters?—A. No. The only thing new about it is that we have men, special navigation inspectors, who do this work, and we do it not only Saturdays, Sundays, and holidays, but every day and night, etc.

Q. In other words, it is new in this respect, is it not, that the force which does it is a new force, and that the doing of it every day in the week, instead of on Saturdays, Sundays, and holidays, is new?—A. Yes.

Q. That is true, is it not?—A. Yes.

Q. So it is a fact, is it not, that the Bureau of Navigation is now for the first time using its own force of navigation inspectors?—A. Yes.

Q. That is true, is it not?—A. Yes.

Q. And they never had them before?—A. Well, they had—no; they never had navigation inspectors before. We put these on, and they were to go on, first, on Decoration Day, and the appointment was supposed to run until Labor Day. There was a special appropriation by Congress, a special appropriation for that purpose.

Q. A new appropriation?—A. Yes, sir.

Q. So that this force was a new force?—A. Yes.

Q. And you never had a force to work with until this year?—A. Yes.

Q. This force?—A. Yes. There was an examination held in March and there were over 50 as good men as I ever saw take an examination took it, and I looked at them—

Q. Mr. McCreary, I want you to answer my question, please. I will try to cover that part. If I don't, somebody will prompt me in it. Did you ever have navigation inspectors such as you had in the present year?—A. In 1913 we had 6 men appointed, but who they were paid by I don't know; but they were called navigation inspectors, and it was their duty to do this work. In 1914 we had the same thing, but the appropriation did not pass Congress and we didn't put them on until August. Now, whether you would call these men navigation inspectors or not, I don't know.

Q. Do you know how these men—by whom were they appointed?—A. The whole thing was handled by the commission on navigation under the Secretary of Commerce.

Q. Do you know whether they are civil-service appointees or not?—A. I do know that they are civil-service appointees.

Q. Do they or do they not pass an examination for this particular work?—A. They pass the hardest examination that we hold.

Q. Were you asked by anyone other than the people on the dock to overload the vessel or to permit her to be overloaded?—A. Nobody asked me that.

Q. Were you asked by anybody, on the dock or on the boat, to overload that vessel?—A. No such thing was spoken of.

Q. Either the owner, or the charterer, their agent or representative, or any officer of the vessel—did any of them ask you to permit more passengers than the limit?—A. Never at any time. The question was never brought up.

General UHLER. Mr. Secretary, in order to make things perfectly clear, I would like to ask Mr. McCreary a question regarding the appointment of inspectors for this purpose, and I will put my question in this way:

Q. Is it not a fact, Mr. McCreary, that for several years previous to the appointment of the navigation inspectors that additional customs inspectors were appointed for temporary service and detailed to the counting of passengers?—A. Additional customs inspectors were used for that purpose.

Q. That is what I want to get at.—A. Yes.

Secretary REDFIELD. That is a matter of record and is very easily gotten at. Anything else?

Mr. SULLIVAN. May I ask a question, Mr. Secretary?

Secretary REDFIELD. Yes.

Mr. SULLIVAN. At what time, Mr. McCreary, that morning did the passengers begin to go aboard?

The WITNESS. Well, the man that was counting could answer that question more accurately than I can; but I will state that I got there at a quarter to 7 and there were only a very small number on board at that time.

Q. There were some on board when you got there?—A. I understand from him that they commenced—what time did I say?

Q. 6.40.—A. 6.40 that morning he was instructed to be there to count passengers, and to get there at 6.30—

Q. Well, what time was it when the last passengers were aboard?

A. It was, as near as I can judge, about—I don't know; but it was about half past 7. It may have been 7.30 or 7.20, or something like that. She went over at 7.35, the way we estimate it.

Q. What time was that?—A. Well, that was after 7 o'clock—

Q. What time was it when you first saw Mr. Greenebaum at or about that boat?—A. The first time I saw him I gave him the count as 1,600.

Q. What time was that?—A. That was after 7.

Q. That is your best recollection. You can not give us a fixed time. That is your best recollection?—A. Oh, yes; yes.

Q. When did you next see him?—A. The next time he asked me it was—I think he asked me at 2,000, and I am sure he asked me at about 2,400. I gave him the count from the gangway there. He was at the head of the gangway and I was at the bottom, and I stepped up to about midway and I gave him the count at 2,400.

Q. You say you didn't talk with any of the officers, but did you talk with any of the crew about the crowd or about the listing of the boat?—A. No. No; I didn't talk with anybody or anything like that. I was very busy.

Q. Do you know, or did you ask any of the crew, why the boat remained at the dock so long after the gangplank was pulled up?—A. Well, I don't think that she did remain at the dock so very long. She was getting underway, and sometimes it takes a little time—

Secretary REDFIELD. Wait a minute, Mr. McCreary. Your answer is not quite responsive to Mr. Sullivan's question. Strike his answer out, please. He asked you a question which could be answered by yes or no, as I understand it.

The WITNESS. No.

Mr. SULLIVAN. You say you didn't ask anybody?

The WITNESS. No.

Q. Have you fixed any time, the length of time she did remain—no—

Secretary REDFIELD. Strike that question out. Do you want that question struck out, Mr. Sullivan?

Mr. SULLIVAN. Yes; and I will put this question:

Q. Can you give us the time, the number of minutes, that elapsed between the pulling in of the gangplank and the tipping over of the boat?—A. No, sir; not exactly.

Secretary REDFIELD. Excuse me, Mr. Sullivan, but do you mean when she had fully tipped or when she began to tip?

Mr. SULLIVAN. When she had fully tipped.

The WITNESS. I would say between 5 and 10 minutes.

Q. Do you know how many children in arms, about how many children in arms, you saw go aboard?—A. No; but I know this, there were very few.

Q. Do you know about how many children between the ages of 5 and 12 years that went aboard?—A. There were very few children.

Mr. SULLIVAN. That is all.

(Witness excused.)

LUMAN A. LOBDELL, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Give your name, address, and occupation to the stenographer.—A. Luman A. Lobdell, jr., 545 West Sixty-sixth Street, navigation inspector, Department of Commerce.

Q. Under what service are you employed in the Department of Commerce?—A. Under the Bureau of Navigation.

Q. Who is chief of that bureau?—A. I don't know. Mr. McCreary has charge of that.

Q. Are you under the instructions of the Steamboat Inspection Service?—A. No, sir.

Q. Did you sleep on board the *Eastland* the night before the accident?—A. Yes, sir.

Q. Why?—A. Why, I wanted to be there at 6.30 in case they started to load at that time. They were to—the previous night they had told me that they might commence loading anywhere between 6.30 and 7 a. m., and I wanted to be there and be on the job, so I slept on the boat.

Q. Had you been on the boat at work the previous evening?—A. Yes, sir.

Q. What was the occasion?—A. An excursion given by the East Gate Lodge, A. F. and A. M.

Q. What time did you get up that Saturday morning?—A. Approximately at 6 o'clock. They called me at 6 o'clock.

Q. Now, state what you did as fully and yet as briefly as you can.—A. After 6 a. m.?

Q. Yes.—A. I got up and the steward told me to go into the dining room and get something to eat. I went in there and I didn't feel much like eating, so I had a cup of coffee. I then went down to the main gangplank at 6.30. Mr. Flato and Mr. Munger on the boat were there.

Q. What is Mr. Flato's position on the boat?—A. He is not on the boat. He is connected with the steamship company.

Q. He is not an officer of the vessel?—A. No, sir.

Q. He is a representative of the owner?—A. He is a representative of the owner.

Q. Who is Mr. —. What did you say his name was?—A. Mr. Munger.

Q. Who is he?—A. He was the purser.

Q. He was the purser?—A. Yes, sir.

Q. Now, you spoke to both these men?—A. I greeted them both, of course, and then I spoke to Mr. Flato and asked him if they would load both gangways and he told me they would load but one. At that time, 20 minutes of 7, they started loading the gangway.

Q. How do you know that time so accurately?—A. Why, it just happens that I took out my watch and looked at it, and it was exactly 20 minutes to 7.

Q. The first passenger came aboard at 20 minutes to 7?—A. Twenty minutes to 7; yes, sir.

Q. Who was there representing the Bureau of Navigation besides yourself?—A. Inspector Oakley—Inspector of Navigation Oakley.

Q. So that you both were there?—A. Yes.

Q. Mr. Thurman asks what was the position that you and Mr. Oakley took. Did you let these passengers, as they came aboard, pass between you?—A. No, sir; we both stayed on the same side.

Q. Close together?—A. Yes, sir.

Q. How wide is the gangplank?—A. The gangplank, I should say, approximately, is 5 feet.

Q. Where did you stand—at the end or on the plank?—A. At the end, upon the boat.

Q. At the end upon the boat?—A. Yes, sir.

Q. Now, state what you did after 6.40.—A. Well, I counted all the passengers. At 7 o'clock I looked at my watch and also at my counter, and I noticed there were 1,026 people on board.

Q. Speak up louder. At 7 o'clock, you say, there were 1,026 persons on board?—A. At 7 o'clock there were 1,026 persons on board.

Q. And you spoke to Mr. Oakley at that time?—A. And I spoke to Mr. Oakley at that time.

Q. Now, go on.—A. And I mentioned the fact that they were coming over 50 a minute. Just previous to that Mr. McCreary had been there and stated when they arrived at 2,400 to notify him.

At 2,400 I walked up the gangplank where Mr. McCreary was standing and told him that there were 2,400 on the boat. I also had instructions to notify him at 2,450 and 2,475, which I did. At 2,475 I walked up on top of the gangplank and stood there, and Mr. Flato counted the passengers over out loud, one at a time.

Mr. THURMAN. When you saw the count had reached that far, and you speak of going to the top of the gangplank, do you mean the end toward the dock?

The WITNESS. Yes.

Secretary REDFIELD. Just a minute there. That word "top" interests me. Why do you call it the top?

The WITNESS. Well, because the gangplank slanted.

Q. Which way was the slant?—A. Why, the slant was down.

Q. From the top?—A. From the top; yes, sir.

Q. The top of the vessel on which you stood was below the dock?—A. That was below the dock.

Q. It was below the level of the dock?—A. Yes, sir; the gang plank was.

Mr. POOL. About how many feet below?

Secretary REDFIELD. Mr. Pool asks about how many feet below.

The WITNESS. Well, I couldn't say exactly just how many feet.

Q. Approximately?—A. Well, about a foot and a half.

Q. About a foot and a half?—A. Yes, sir.

Q. Now, proceed.—A. At 2,495; that is all. I held my arms out and says, "That is all." Then I told Mr. Flato I would allow five more passengers to come aboard, making the total 2,500.

Q. Did you see the gangway closed when the 2,500 were on board?—A. The gangways were not closed; the gangplank was drawn in.

Q. Did you see anybody get on board after that 2,500?—A. No, sir.

Q. Are you able to say, of your own knowledge, whether anybody else got on board or not?—A. Not on the gangplank where I was standing.

Q. Who was with you at the time the count closed?—A. Why, I was on the boat by myself. Mr. McCreary was at the top of the gangplank on the dock.

Q. On the dock?—A. Yes.

Q. He was at one end of the gangplank on the dock and you were at the other end/on the boat?—A. I was at the same end when they finished the count, but I walked down as far as that at the end of the boat.

Q. Why did you go down on the boat?—A. I was going to Michigan City.

Q. Why did you do that?—A. I was to count the passengers, to load them on when they were coming back, to see that they didn't overload.

Q. What political influence got you your position with the department?—A. No political influence.

Q. How did you get your job?—A. Through civil-service examination.

Q. How many took that examination?—A. I should judge there were about 40.

Q. Here in Chicago?—A. Yes, sir.

Q. How many were appointed out of those that took it?—A. There were six appointed.

Q. Do you know where you stood on the list?—A. I stood sixth.

Q. When did this examination take place?—A. March 29, this year.

Q. When did you receive your appointment?—A. I don't exactly remember.

Q. Well, about when?—A. About the 30th of May.

Q. You stated that you went back on the boat. Now, what happened at that time? Tell us just as clearly as you can; give us your best description of what happened.—A. I noticed that the boat was listing and I stood there watching that list. I hadn't paid any attention to it for several reasons—

Q. Just a moment. You noticed the boat was listing?—A. Yes, sir.

Q. Which way?—A. To port.

Q. To port?—A. Yes, sir.

Q. Away from the dock?—A. Away from the dock.

Q. Had you seen her at any time list toward the dock?—A. At a quarter after 7 the gangway—the boat—no—let me see—I can not express that properly, but the gangplank moved up so high that the people could not get on the boat. The boat was listed to starboard. We had to keep them from coming on—about a quarter after 7.

Q. Do I understand you correctly that about a quarter after 7 the boat listed so far to starboard, toward the dock—A. Yes, sir.

Q. That the people could not get on board because of the lack of space between the deck and overhead?—A. There was about 3 feet of space between the gangplank and the top of the gangway.

Q. What was done?—A. Why, they kept them off until the boat righted itself.

Mr. THURMAN. How many people were on the boat at that time—at that particular moment?

The WITNESS. I couldn't say. They were coming on at the rate of 50 every minute. That is the way they were coming on until 2,500 got on.

Secretary REDFIELD. Can you say how many were on; any figure at all; 100 or 500 or —

The WITNESS. About 1,700.

Q. Then you want us to understand that at the time the boat listed to starboard, or toward the dock—A. Yes, sir.

Q. She had on board 1,700 persons?—A. Yes, sir.

Q. Now, give us a few more details. Where were these people?—A. I do not know. I was counting the passengers and I didn't see where they went after they went inside.

Q. Well, can you say from your own knowledge whether any of them were on that lower deck?—A. They were. They were moving up stairs as fast as they could go up.

Q. What understanding would you like us to have of the exact fact at that moment when she was listing toward the dock and there were about 1,700 passengers on board as to the condition of the lower deck, whether there were many or few persons there?—A. There were quite a few.

Q. Was there an effort being made to your knowledge to have them go up on the upper deck?—A. Why, not to my knowledge; no, sir.

Q. Now, think carefully about that a moment and tell me whether the list of the vessel to starboard was slow or rapid; a slow or rapid movement?—A. It was a slow movement.

Q. And the recovery from that list, was that slow or rapid?—A. Slow, just about the same time to turn one way as to turn back; it took just about the same time both ways.

Q. And do I understand you to say that they stopped loading passengers at that moment and waited until the vessel had swung back again?—A. Yes, sir.

Q. Now, then, what occurred?—A. They kept on loading them then until the boat was full.

Q. Now, when she was full I understand you to say the gangplank was drawn in and you remained on the boat. Now, state what happened.—A. Well, then I noticed the boat was listing to port.

Mr. THURMAN. Q. Now, Mr. Lobdell, I want to ask you right there—after that gangplank was drawn in, hauled in—did that boat list to starboard before she went to port?

The WITNESS. No, sir; not to my knowledge. I didn't see it at all. I didn't notice it at all.

Q. She didn't swing to starboard?—A. No, sir.

Q. Go over to the dock and then swing back?—A. No, sir; not to my knowledge. I don't believe it did. Mr. Flato was standing on the dock there at the breast line after the gangplank was taken in. The boat was listing then, and he says, "Take in the breast line," and he had them take in the breast line, and as soon as that was done it didn't take long for the boat to go over.

Secretary REDFIELD. Now, describe in your own way the motion of the vessel in turning to port. I mean, tell us as to whether it was slow or fast or jerky or even; tell us all about it.

The WITNESS. Well, I was on the boat until it was about at an angle of 45°. Of course, up until then I didn't believe it was going to turn over. It had just been a slow movement, very gradually done, and then I jumped in the water, and the next I saw of the boat it was laying on its side.

Q. You jumped into the water from the starboard side?—A. From the starboard side; yes, sir.

Mr. POOL. I was going to ask if any thought came into your mind at the time the boat listed to starboard as to the occasion of the listing or the reason for the listing. Did you have anything in your mind as to why that was?

A. No, sir; nothing whatever.

Q. Was that a customary thing, for the listing of the boat while loading?—A. Why, I have noticed many of the boats do that. The reason of it is, when another boat is passing it makes it do that. I could not say whether there was another boat passing or not.

Q. It is a common occurrence during the loading to have the boats list either way?—A. Yes, sir.

Secretary REDFIELD. Tell us what you know, or do you know anything about the number of lines that were holding the vessel to the dock?

The WITNESS. To my knowledge—before or after the gangplank was drawn up?

Mr. THURMAN. Both.

Secretary REDFIELD. At any time; tell us the whole of it.

The WITNESS. Well, they had three lines out at first, but I didn't notice when they were taken in, except the breast line. That was taken in at the last. That was just before the boat moved away from the dock.

Q. Did you hear the engine bells sounded to start the engines?—A. No, sir.

Q. Were all the lines off when she finally turned over?—A. To my knowledge they were.

Q. Did you see any line from the vessel to the dock?—A. No, sir.

Q. Can you say whether the vessel settled in the water, to your knowledge, as the passengers came aboard?—A. Not to my knowledge; no, sir.

Q. Will you tell us, if you can, whether when the first passenger came aboard the slant of the gangplank was the same as it was at

the end, when they were all on?—A. Why, there couldn't have been much difference. It was just about the same.

Mr. O'HARA. Mr. Lobdell, you use an instrument similar to this? The WITNESS. Yes, sir.

Q. In counting?—A. Yes, sir.

Q. When the *Eastland* had turned over and you had jumped into the water, what did you do with your counter?—A. Why, I left it in my pocket.

Q. And when you reached land did you turn the counter over to some one?—A. Why, I counted another boat between then and the time I turned my counter over.

Q. When you first looked at your counter after getting out of the water what was the register?—A. Nothing.

Q. Why?—A. I moved it back as soon as the passengers had got aboard the boat.

Q. Now, before moving the counter back, or the register back, did you show the counter with the register to a superior officer or a superior inspector?—A. No, sir; it is not necessary.

Q. You looked at it yourself and turned it back?—A. Yes.

Q. Now, during the time you are counting does any one other than yourself see the register?—A. Only those connected with the boat.

Q. The owners?—A. The officers and the owners.

Q. The owners of the boat?—A. Yes, sir.

Q. And no other person?—A. Unless it would be some Government inspector of steamboats.

Q. But that does not often happen?—A. No; that does not often happen.

Q. Now, Mr. Lobdell, if you desired, you could—to a certain extent, you could—to any extent, permit the count to go over 2,500 or under 2,500, the legal limit?—A. I could permit it to go over or back.

Q. You would be the only person who would know that?—A. Unless I had shown it to somebody else.

Q. And you say the register is only shown to the officers or the owners of the boat?—A. Yes.

Secretary REDFIELD. Is there not another inspector there?

A. There was at this time.

Q. Are there not usually two?—A. No, sir.

Q. Not usually two?—A. No, sir; usually one.

Q. But on this occasion there were two present?—A. There were two; yes, sir.

Q. Do you know, as a matter of fact, whether your register agreed with the other?—A. At 2,400, Mr. Oakley's register was 7 ahead of mine. I moved mine up 7 and continued counting.

Mr. THURMAN. Mr. Lobdell, you and the other inspectors take an oath to conscientiously perform your duty, do you not?

A. Yes, sir.

Secretary REDFIELD. And you were acting under your oath as an officer of the Government at this moment?

A. Yes.

Mr. O'HARA. You secured your position, Mr. Lobdell, through a civil-service examination?

A. Yes, sir.

Q. You had not been interested in politics prior to that time?—  
A. No, sir.

Q. Not to any extent except as a voter?—A. Well, I had been doing a little work sending out literature and something like that.

Q. But as far as you know political influence was not in any degree responsible for your appointment?—A. No, sir.

Q. Before taking this examination in what line of occupation were you engaged?—A. In the drug business.

Q. In the drug business?—A. Yes, sir.

Q. Under the civil-service requirement were you required to submit some kind of proof as to your character for a number of years, or for a period of time before the time of examination?—A. I had to, I believe. I believe there was three witnesses I had to have to swear to certain vouchers.

Q. Those vouchers were given to whom?—A. Were sent to Washington.

Q. To the Civil Service Commission?—A. Yes, sir.

Mr. O'HARA. Mr. Secretary, may I be permitted to make this explanation, that in none of these questions do I desire to reflect on Mr. Lobdell in the slightest degree.

The SECRETARY. You want the truth.

Mr. O'HARA. It would seem to me that if the count of these passengers largely is reposed in one inspector, and that inspector is not vouched for by anyone specifically, certainly by no political position, that it would seem well within the scope of this inquiry to have those vouchers sent here by the civil-service committee, in order that this committee may find out the procedure gone through with with the inspectors to whom largely the count is given.

The SECRETARY. No objection in the world. The procedure is that provided by the United States statute for civil-service employees from the highest to the lowest, which is that required by law.

Mr. O'HARA. Mr. Secretary, if this young man had been appointed through political pull, the cry would be made that the politicians were responsible. Now, Mr. Secretary, if the politicians would be suspected, may not the Civil Service Commission be submitted to at least a reasonable inquiry?

The SECRETARY. There is no objection in the world. Take this upon the record. At the request of Lieut. Gov. O'Hara the Civil Service Commission will be requested to place upon the record the civil-service examination vouchers required by law of Mr. Lobdell and Mr. Oakley.

Mr. CARROLL. I would like to ask Mr. Lobdell that if any disinterested party on the dock had come to you and asked you how many people had you got aboard would you show them the ticker?

The WITNESS. No.

Q. You would not?—A. No, sir.

The SECRETARY. Why not?

The WITNESS. The information, as we understand, is for the owners of vessels only, so no men from the other boats may come over and find out how many passengers are being carried.

The SECRETARY. Did you see or have any talk with the captain of the vessel before the accident?

The WITNESS. No, sir.

Q. Did you have any talk with any officer of the vessel itself, and, if so, what?—A. Only what I have stated before. I was speaking to Mr. Flatow in regard to the floating of one or two of the gangplanks.

Q. Now, Mr. Lobdell, were the passengers chiefly men or women?—A. There were more men than there were women; not a great majority.

Q. You think there were rather more men than women?—A. Rather more men than women.

Q. Did you hear the testimony of Mr. McCreary to the effect that there were but few infants?—A. I did.

Q. Is that so?—A. Well, I judge there were about 15—about 15, approximately, in arms.

Q. Can you say about how many children, say, from 5 years to 12 there were?—A. No; I could not; I did not pay much attention to how many children there were, although I knew there were less than they generally carry on excursions.

Q. Now, Mr. Lobdell, have you told all that you know of this whole matter?—A. I believe I have; yes, sir.

Mr. CARROLL. I would like to ask you, Mr. Lobdell, did you say that you stood in the gangway?

The WITNESS. Yes, sir.

Q. As these people were going aboard?—A. Yes, sir.

Q. Naturally, in the course of your duties, you looked across the ship and noticed how the gangways were on the port side?—A. I was standing, looking up at the side of the boat until I heard some screaming inside. I turned around and assured them that everything was all right. A girl hollered back "The water is coming in." I could not see on account of the people between myself and the other gangway, I could not see through there.

Q. Do you know if the gangway was open on the opposite side?—A. I stepped on the starboard gangway and brought myself up so I could see over the heads and the port gangway was open and the water was coming in about 2 feet.

Q. Do you know how this gangway is; is it one whole gangway, or is it in halves?—A. It is in four sections.

Q. Four sections?—A. Four doors.

Q. They were open, all of them?—A. All of them.

Q. All four?—A. Yes, sir.

Q. Was there a wire screen over the lower portion?—A. Why, I do not recollect of them having any wire screen at all?

The SECRETARY. Now, why did you stand up in order to look over the heads of the people there; why did you not look between the people?

A. They were too crowded.

Q. Do you want us to get the impression, then, that at the time she was turning over so that she was taking water from the port side gangway, that there was such a crowd on the lower deck that you could only see the other side of the ship by looking over their heads?—A. Yes, sir.

Q. Now, think very carefully, Mr. Lobdell, about that, because it has an important bearing as to where the weights on that ship were.—A. Well, that was when the boat was listed. I believe myself the people were afraid to go up; that is what I think.

Q. And you want us to understand, and to judge of the conditions by the fact, that when she was thus listed to port, so that, as you describe it, about two feet of water was coming through the port gangway, there were so many people on the lower deck that the only way you could see across was by looking over their heads?—A. Yes, sir.

Q. That is a fact, is it?—A. That is a fact.

Q. And how long after that was it before you jumped into the water?—A. Well, I turned right around; they were all jumping in and I jumped.

Q. You heard Mr. Sullivan's question, I presume, to Mr. McCreary as to the length of time, as I take it, that this turning over to the port from the time she started until she, so to speak, plunged, what is your impression of that?—A. From the time the last breast line was thrown off until the boat was on its side, I believe it to be five minutes.

Q. Five minutes?—A. Yes, sir.

Mr. CARROLL. I would like to ask you what your custom was in regard to counting children, did you allow two children or babies in arms for one person?

The WITNESS. No, sir.

Q. Or did you count them as an individual passenger?—A. Every infant or child was counted as an individual passenger.

Q. How did you come by that, how did you come to count them that way?—A. Those were our instructions.

Q. Who gave you those instructions?—A. Mr. McCreary.

Mr. POOL. Mr. Lobdell, how many times have you checked the *Eastland* out?

The WITNESS. I had the *Eastland* every morning for between two and three weeks; I don't just remember how many days it was.

Q. Were there any large loads approaching the one of last Saturday?—A. No, sir; the largest load I had was the night previous, when they had 1,123 on board.

Q. Did you ever observe any of these peculiar listing conditions existing on previous loads?—A. I had—well, I had noticed a slight listing, but not listing as much as it did Saturday morning.

Q. That is not to the extent of tipping over?—A. No, sir.

Q. When you left Grand Haven the day before, did you notice any listing?—A. I did not ride on the boat; I was at the dock; I checked them on, then reported to the Federal Building in the morning.

Mr. WHEELER. May I ask, Mr. Secretary, if in his checking of the *Eastland* he always checked from the same dock; that is, if the company had the boat checked always from that same berth?

A. No, sir; I had always checked it from Rush Street—the Rush Street Dock, the same as Saturday morning.

Q. And never before from this particular dock?—A. No, sir.

Capt. VAN PATTEN. How did your account stand when you had 2,000 passengers aboard to the total counters registered?

A. I do not remember; we had tallied them at 2,400 and Mr. Oakley was 7 ahead of me and I ran mine up to equal his.

Q. Did you compare registers once in a while?—A. Yes, sir. As a rule we only have one man counting on board.

Q. You had two here?—A. When Mr. Oakley came on I asked to take the count so we could verify it.

Q. How many decks has the *Eastland*?—A. They have three proper decks and one deck for the boats for life-saving apparatus.

Q. Were there any passengers on the boat deck?—A. I would not be able to say, although there was space for passengers.

The SECRETARY. Mr. Sullivan, any questions?

Mr. SULLIVAN. Yes, sir.

Q. You say the lines were cast off this boat—all of them?—A. All of them—to my knowledge they were.

Q. You say to your knowledge; you say that because the fact is that you want us to understand—A. I saw them cast off one—one breast line.

Q. And by breast line you mean a line about midships?—A. No; the one nearest to midships.

Q. That is the only one you saw cast off?—A. Yes, sir; the others had been cast off before that.

Q. Then you know of your own knowledge that every line holding that boat to the dock was cast off?—A. I would not say as to the stern line.

Q. But every line from the bow down to the center of the boat?—A. Yes, sir.

Q. How many lines were aft of the center of the boat originally?—A. They had three lines.

Q. You do not know whether any of those were cast off?—A. What time?

Q. At the time in question that you say you observed the lines; at the time the lines on the other part of the boat were cast off.—A. There was only one there when I noticed it; that was after the gangplank pulled in.

Q. To make it clear, after the gangplank was pulled in you observed the lines and there was but one holding the boat to the docks?—A. Yes, sir.

Q. And that was a line about in the center of the boat?—A. Yes, sir.

Q. When you say you had on about 1,700 passengers, the boat listed toward the dock?—A. Yes, sir.

Q. So much so that passengers could not enter the gangway?—A. There was only about 3 feet of space between the top of the gangplank—the gangplank and the top of the gangway.

Q. And how long did you have to suspend taking on passengers?—A. Why, I should say about 15 seconds.

Q. And then she righted herself; is that right?—A. Yes, sir.

Q. When you first began to take on passengers, what time was it?—A. 6.40.

Q. And when you finished, what time?—A. 7.30.

Q. And except for the incident you have mentioned passengers came on steadily all that time?—A. Yes, sir.

Q. Did you see Mr. Greenebaum around there; if so, how many times?—A. I did not.

Q. Do you know him?—A. I do.

Q. How long have you known him?—A. Since I have been working for the Government.

Q. You did not see him there at all that morning?—A. I did not.

Q. Did you talk with the chief engineer or captain?—A. No, sir.

Q. When the boat listed to the dock to the extent you have mentioned, did you talk to any of the crew about it?—A. No, sir.

Q. Have you ever seen her list to that extent before?—A. Well, this was a different dock; I could not say whether I had or not.

Q. At any dock?—A. I could not tell; I went by the listing of the gangplank; if the dock would be higher or lower, there would be a difference in the list.

Q. Did you receive notice at any time before Saturday morning that this was to be a record-breaking number of passengers?—A. I understood there were to be about 7,000 to go across in all on the five boats about a week before.

Q. When you first began to take on passengers, was the gangplank on an incline toward the boat?—A. A slight incline.

Q. Just a slight incline?—A. Yes, sir.

Q. And as the passengers went on that incline increased?—A. No; the incline did not increase.

Q. Remained about stationary until she listed?—A. Remained about stationary; yes sir; until about a quarter after 7 it became a little more even.

The SECRETARY. Mr. Lobdell, have you been arrested?

A. Sir?

Q. Have you been arrested?—A. No, sir.

Q. Any charge been made against you for any misdoing of any kind?—A. Not that I know of.

The SECRETARY. Strike that out; that is a mistake.

Q. Any questions, gentlemen?

(No response.)

The SECRETARY. Thank you, Mr. Lobdell.

CURTIS J. OAKLEY, a witness, having been first duly sworn by the Secretary of Commerce, testified as follows:

Examination by the SECRETARY OF COMMERCE:

Q. Give your full name and address to the stenographer.—A. Curtis J. Oakley.

Q. State your age.—A. Twenty. 6326 Woodlawn Avenue.

Q. That is Chicago?—A. Chicago; yes, sir.

Q. What is your occupation, Mr. Oakley?—A. Navigation inspector.

Q. When did you become a navigation inspector?—A. June 26.

Q. June 26?—A. Yes, sir.

Q. This year?—A. This year.

Q. Are you a student at the North-Western University?—A. Yes, sir.

Q. In what class?—A. I will be a junior next year; I was sophomore last year.

Q. You are in your junior year at the North-Western University?—A. Yes, sir.

Q. How did you obtain the appointment as navigation inspector?—A. By taking a competitive civil-service examination on March 27.

Q. Where did you take that?—A. In this building.

Q. In this building?—A. On the third floor.

The SECRETARY. Mr. Fleming, I wish you would ask the Civil Service Commission, at your earliest convenience, if they happen

to have here the records of the voucher of these two gentlemen, if you please.

Q. Did you furnish the three vouchers required by law as to your character?—A. Yes, sir.

Q. Now, state in your own language as clearly as you can what took place, as far as you personally knew it, in connection with the steamer *Eastland* on the morning of July 24.—A. I arrived at the dock about 6.30.

Q. Speak louder.—A. It was 6.30 when I arrived at the docks Saturday morning and I found Mr. Lobdell already there. He was at the aft gangway; I had been detailed to count the forward gangway; they only used the one gangway—the rear gangway, and I took my stand beside Mr. Lobdell and 26 people had come on board by his counter, and I started counting with him. I set my counter to 26 and counted along with him, and from time to time we compared our counters. I noticed I usually ran a little ahead of him—a little ahead of him. Mr. McCreary arrived there about a quarter to 7—

Q. Speak a little louder.—A. Mr. McCreary got down there about a quarter to 7, and stood beside us and left us and came back in a very little while, and when I reached 2,400 I was 7 ahead of Mr. Lobdell—that is, my counter was—he told him we had taken my count. Mr. McCreary asked me to tell him when I reached 2,450 and I did so. A few minutes after he told me to go and count the steamer *Petoskey*; she was ready to load and the *Eastland* almost had her capacity. At 2,470 I left the *Eastland*. I saw Mr. Greenebaum standing on the dock, there, and he asked me if I was ready to count the passengers on the *Petoskey*. I said "Yes." He said "I will send them right over." I went down there and got on the gangway board, the port side; stood at the end of the gangway of the boat and took on about 120 and the people slackened up and I stepped out to the end of the gangway to see what the reason was and I noticed the *Eastland* listing over, and I slipped down toward the bow of the *Petoskey* to get a better view. Her list increased. She got maybe 30 or 40 degrees; then she started to go; her speed accelerated—

Q. Until she finally—A. Until she finally rested on the bottom on her side.

Q. Now, let us get the situation as clearly as we can. You left the *Eastland*, if I understand you correctly—A. Yes, sir.

Q. Before she listed, or had she begun to list prior to your leaving her?—A. I had noticed that list, Mr. Lobdell spoke about it.

Q. You noticed the list toward the starboard side?—A. Yes, sir.

Q. How would you describe yourself the extent of that list?—A. Well, she went down until the water was about a foot and one-half from that entrance of the gangway, the gangplank had risen due to the boat tipping over to the side until the people could not get on, maybe 4 feet between the top of the gangplank, the gangplank.

Q. Now, describe that list.—A. It was slow, it went over slow, righted herself slowly; two or three minutes I should say.

Q. Do I understand that you left her and went to the *Petoskey* before she began to list to port?—A. I had not noticed the list.

Q. Now, the *Petoskey* was immediately in the rear, on the same side of the river, is that right?—A. Yes, sir.

Q. And I understood you to say that as soon as your attention was called to the condition of affairs on the *Eastland* you went to the bow of the *Petoskey*.—A. I stepped down 20 to 25 feet from the gangway, about midship of the *Petoskey* at the dock when she went over.

Q. Did you stand there upon the bow of the *Petoskey* and observe the *Eastland* go over?—A. On the dock.

Q. You were on the dock near the bow, is that it?—A. About midship of the *Petoskey* when I saw her go over.

Q. Did you have a clear unobstructed view of her?—A. I should say that I had.

Q. Was there nothing between you and the *Eastland* to conceal what happened from you?—A. No, sir.

Q. What courses do you take in college?—A. I have been taking liberal arts.

Q. What are your courses of the last year?—A. I have physics.

Q. Physics?—A. And trigonometry and analytical geometry.

Q. Trigonometry, analytical geometry, go on.—A. And French.

Q. Yes.—A. And history.

Q. What branch of physics have you studied?—A. General physics, physics A.

Q. Was it your mathematical training that made you state a few minutes ago of the number of degrees to which the ship listed?—A. I do not know, it may have been.

Q. I ask that simply to know—what I am trying to find out, is the reliance that you may place as the result of your education upon your observation, that is all.—A. It was about thirty or forty degrees, I should say.

Q. Now, describe in your own way the motion with which the *Eastland* turned over.—A. When I saw her she was listed just about that much [indicating]; she started slow.

Q. (Indicating.) How would you say in degrees?—A. About 10° when I first saw her.

Q. It is your judgment she was listed to port about 10° when you first saw her?—A. Yes, sir.

Q. Now describe it in your own way.—A. She went slowly up to about 40°; by that time I saw people scramble over the side and slide down in the water; when she reached 45° she went with a rush; I should say it took about three or four minutes from the time I first saw her.

Q. Inasmuch as you had an unobstructed view, tell us if you saw any such movement on the part of the passengers of the *Eastland* as would account for the sudden acceleration in her movements which you have described.—A. I do not know any; in the start I could see the passengers to the stern and along the starboard side; that is all I could see.

Q. Could you see the topmost or boat deck on the *Eastland*?—A. Yes, sir.

Q. Were there passengers on that?—A. There were several to the stern, on the rear part.

Q. Several?—A. The lifeboats on the side; none outside the lifeboats; there may have been some inside next to the funnel; I did not see them; it was impossible to see them from my position.

Q. Were there any passengers on the lower deck of the *Eastland*?—A. Do you mean the main deck—the deck they boarded?

Q. Yes.—A. I presume there were.

Q. But did you see—A. The gangway was crowded, and that is all I could see—the gangway.

Q. The gangway of the main deck was crowded?—A. That is inclosed in the hull—the main deck.

Q. Let us see if we get your observation right. Do the local board understand you as meaning that on the main deck there were some people—the gangway, as you describe it, being crowded?—A. Yes, sir.

Q. That on the deck above that there were still other people?—A. Yes, sir.

Q. And on the deck above that, or the boat deck, there were a few people?—A. Yes, sir; on the stern; that is all I seen.

Q. Now, you are studying to be a naval architect, are you not?—A. Yes, sir.

Q. Now tell us what you saw as to the distribution of weights at that time?—A. Well, I should say it was pretty evenly distributed.

Q. Do you mean by that—A. I couldn't see the outer side of the boat at all; I couldn't see how many were on there.

Q. We understand you are speaking now only of the rear part of the vessel, the stern.—A. Yes, sir.

Q. And on that do I understand you correctly to say that you think the weights were pretty evenly distributed between the three decks?—A. Yes, sir.

Q. Well, now, would I understand you correctly?—A. Well, I should say there were more people underneath the boat deck and the deck immediately below the boat deck than there were on the top deck, considerably more.

Q. And do you still wish us to understand that there were also some people on the lower or main deck?—A. I imagine there were. I couldn't see over the gangway into the hull, and that was crowded.

Q. You could only see the gangway?—A. Yes.

Q. And that was crowded on the lower deck?—A. Yes, sir.

Q. So that it would be an incorrect statement of what you saw to say that the weight was in any one place, would it?—A. I think it would.

Q. Now, have you made in the course of your studies any calculations as to the distribution of weights on board ships?—A. I have not so far. I haven't reached that stage.

Q. Have you made for your own use any estimate of what 2,500 passengers would weigh?—A. No, sir.

Q. I beg your pardon?—A. No, sir.

Q. You have not. Had you ever been though the *Eastland* yourself to examine her?—A. I have never been below the main deck. I have walked over, and I have never been on the boat deck.

Secretary REDFIELD. Any questions?

Mr. SULLIVAN. Did you make a record in writing of the number of passengers that went aboard, say, every 15 minutes, or 10 minutes, or 20 minutes?

The WITNESS. No, sir.

Q. The only record you have is what is recorded on this machine?—A. Yes, sir.

Q. Do you recall now how many went aboard the first 15 minutes, we will say, or any given time?—A. There was 1,026 by 7 o'clock.

Q. You were then taking on passengers about 20 minutes?—A. Yes, sir.

Q. Then, by 7.15 I am told there were 1,700 on board?—A. I didn't notice my counter then.

Q. You don't know that?—A. I couldn't swear how many there were.

Q. And at 7.20 you don't know how many there were on board?—A. No, sir.

Q. Do you recall the condition of the lines of this boat, as to whether they were off or on at any particular time?—A. I noted one line when she was keeling over, and that was attached to the stern. It is called the—

Q. Keep your voice up.—A. It is a line attached to the stern and it comes up toward amidships. That is the only line I noted on the boat. That is called the breast line.

Q. That is the only one you noted?—A. Yes, sir.

Q. You and Mr. Lobdell have talked over that question about the lines, have you, yourselves, before now?—A. Yes, sir.

Q. You both agreed that there was just one line on the boat?—A. Yes, sir.

Q. How long have you known Mr. Greenebaum?—A. Since June 26.

Q. When did he first appear on the dock?—A. Do you mean Saturday morning?

Q. Yes.—A. Well, I couldn't say as to that; the first time I—

Q. How?—A. I couldn't say what time.

Q. What time did you see him, about?—A. About 7.30, when I left the boat to count on the *Petoskey*.

Q. Did you talk to him about the number of people aboard?—A. No, sir.

Q. Did you know before this morning that this was to be the largest crowd the boat could carry?—A. We had had word from Mr. Greenebaum about two weeks previous.

Q. What did he say to you?—A. The information came through Mr. Lahey—Inspector Lahey—that he was to carry a crowd of Western Electric people to Michigan City in five boats.

Q. Did he say how many, how large a crowd?—A. Somewhere in the neighborhood of six or seven thousand.

Q. Did you make any note mentally of the probable number of children under 12 years of age?—A. I should say there were somewhere around 90.

Q. Did anybody ask you to make any note of that?—A. No, sir.

Q. Then, why did you make that estimate?—A. Because of the fact that there were 2,408 tickets counted by Mr. Greenebaum, and then, from 2,500, that would leave 92 children under the age of 12.

Q. You don't know the number of tickets counted until some time after the accident?—A. No, sir.

Q. You have learned that since, and since then you make that estimate?—A. Yes, sir.

Q. Two children under 12 were admitted for one adult ticket; is that right?—A. No, sir.

Q. Is that right?—A. No, sir.

Q. How do you know?—A. We count one child as—

Mr. THURMAN. You are confused between the tickets and his counter.

Mr. SULLIVAN. I mean the regular boat ticket sold in the ticket office.

Secretary REDFIELD. Did you know that, Mr. Oakley? Have you any knowledge of what the rules were as regards the number of tickets?

The WITNESS. I do not, not only what I have heard that two children between—

Q. Well, do you know of your own knowledge whether two children were counted as one adult, as regards the tickets or not?—

A. Between the ages of 5 and 12 they have to pay half fare.

Q. You know that?—A. Yes, sir.

Q. But you didn't count them as—A. No, sir.

Q. As others and separate persons, did you?—A. Separate persons.

Secretary REDFIELD. All right.

Mr. SULLIVAN. You say you know there were ninety-two, because there were 2,408 regular tickets?

A. There must have been—I don't know—there must have been.

Q. There must have been?—A. I know there were 2,500 on board.

Q. Your reason there were 2,500 on board solely from the number of passenger tickets, or from your own record?—A. From my own count.

Q. From what?—A. From Mr. Lobdell's count. I counted 2,470 when I left.

Q. Did you talk to Mr. Greenebaum and his concern about this event—your testimony?—A. No, sir; I have talked to Mr. Loftis, who is connected with them, with him, you know.

Q. In the employ of these people?—A. The Indiana Transportation Co.

Q. You went over your testimony with him?—A. No, sir; he told me about there being 2,408 tickets, of the counted tickets.

Q. So from his say so you estimate the number of children under 12?—A. Yes, sir.

Secretary REDFIELD. No, sir; excuse me, that is an assertion, and not a question. Alter your question.

Mr. SULLIVAN. Is that a fact, Mr. Witness?

A. What is it?

Q. That you estimate the number of children on board from what you were told by Mr. Loftis?—A. I estimate my statement from the fact that I knew from Mr. Loftis that they counted 2,408 tickets, the tickets taken at the gangway of the *Eastland*, and I knew that there were 2,500 on board. It is a mere subtraction, will give you 92.

Q. A little mental arithmetic?—A. Yes, sir.

Q. And from that you figure the number of children?—A. Yes; there didn't appear to be many getting aboard; I noticed that.

Mr. THURMAN. When did you have this conversation with Mr. Loftis?

A. It was yesterday morning, I think. I believe Mr. McCreary sent me down to find out about the tickets.

Q. Mr. McCreary sent you to Mr. Loftis to find out about the tickets?—A. He sent me down to the Indiana Transportation Co. to see Mr. Greenebaum, but Mr. Greenebaum wasn't in.

Q. What specific instructions did Mr. McCreary give you?—A. He told me to find out if all the tickets sold were good on any boat. I found out that they were.

Q. Did you ask for this information in regard to the number of adult tickets sold? Did you ask Mr. Loftis that or did he volunteer that?—A. I asked him for the number of tickets taken on the *Eastland* gangway.

Q. And he told you how many?—A. 2,408.

Q. Did you have any specific conversation with him in regard to babies or children?—A. No, sir.

Secretary REDFIELD. Mr. McCreary?

Mr. McCREARY. Yes, sir.

Secretary REDFIELD. Why did you send Mr. Oakley to see Mr. Loftis?

Mr. McCREARY. To see who?

Secretary REDFIELD. Mr. Loftis, wasn't it?

The WITNESS. He sent me, sir.

Mr. McCREARY. Why, I saw these statements in the paper about the State attorney, Mr. Hoyne, finding a lot of tickets, and the newspaper asked me where he got them, and I called up—I asked Oakley if those tickets were used on the *Petoskey*, and if the same tickets were used on the *Petoskey* that were good on the *Eastland*, and he told me that they were, and I saw the crowd going over to the *Petoskey*, and I knew myself that they were passed right along, and that those tickets were good on the *Petoskey*, and he said he understood that they were good on any boat, so I said, "You go down and ask about those tickets and see if those tickets that were used and issued for the *Eastland* could be used on any boat," as there were several thousand of them sold.

Secretary REDFIELD. Is that a correct statement, Mr. Oakley?

The WITNESS. Yes.

Secretary REDFIELD. Any further questions?

Mr. SULLIVAN. Mr. Loftis told you there were 2,408 tickets sold?

The WITNESS. Yes, sir; he didn't say they were sold, he said there were 2,408 tickets at the gangway of the *Eastland*.

Secretary REDFIELD. Mr. Sabath, do you wish to ask any questions?

Mr. SABATH. What is your age?

The WITNESS. Twenty.

Q. Sir?—A. Twenty years.

Q. Twenty years?—A. Twenty; yes.

Q. When did you take this examination?—A. March 27.

Q. This year?—A. This year.

Q. Who called your attention to the fact that an examination would be held for that position?—A. Why, no one. I noticed an examination poster in University Hall. That is one of the buildings at Northwestern University.

Secretary REDFIELD. I will tell you, Mr. Sabath. I am very glad you asked the question, though if any objection is made, I won't put it in, because I am not yet under oath myself; but we caused to be circulated among all the universities of the United States special notice of this new force of inspectors about to be appointed, because we desired to get university-trained men, and we were fortunate in getting one-third of the entire force in that way.

Mr. SABATH. I asked that question in view of some other questions that have been asked.

Q. Were you obliged to make report each and every day as to the number of passengers carried on each and every boat?—A. Yes, sir.

Q. To whom did you make that report?—A. Do you mean the *Eastland* report?

Q. Sir?—A. The report of the passengers carried on the *Eastland*?

Q. The number of passengers carried on the boat to which you were assigned?—A. I made the report out on a card. I had a special card on which a report is made, and it is turned in to Mr. McCreary in this building.

Q. Is it signed by you?—A. And signed by myself.

Secretary REDFIELD. We keep, Mr. Sabath, a complete record of every trip of every boat, and we will be very glad at any time to inform you or others just how many passengers each vessel had on each trip.

Mr. SABATH. Mr. Secretary, why I asked that question is because I had made the request in 1914 for the report of the number of passengers of all the lake steamers, and I have received such report; but I have not received the report on this vessel.

Secretary REDFIELD. We will be very glad to furnish anything you wish.

Mr. SABATH. Yes; and I wanted to know how these reports are compiled, and by whom, because I noticed in some of the reports that these reports are made by the navigation companies that reached me, and I wanted to know whether the department keeps the record.

Q. Have you made a report of the number of people on this unfortunate vessel last Saturday?—A. Yes, sir; I have turned it in to Mr. McCreary.

Q. How soon would you make that report and send the report in—every day or—A. Every day we go up to the office on the fourth floor, after the morning boat, and make out these reports. It is usually about half past 10 that we get there.

Q. What are your duties there; merely to check the number of passengers?—A. Principally; yes.

Q. Any other duties?—A. I don't believe there are. I couldn't say that there are any other duties. I don't know of any.

Q. You belong to that department only?—A. Yes, sir.

Q. You are sent down there to keep—A. Check on the passengers.

Q. To keep check on the number of passengers boarding a boat?—A. Yes, sir.

Secretary REDFIELD. Now, Mr. McCreary, please tell us for the record what your custom is as to keeping a record of the number of passengers carried on the trips of vessels, how you do it, where it is, and all about it.

Mr. McCREARY. The Department of Commerce furnishes us with cards which contain the number of passengers, the name of the boat, and date and time, etc., number of passengers allowed, whether counted on or off the dock, and when our inspectors make the count they fill out these cards, and they are made out—the department instructs them, through me, to make them out in duplicate. They are sent to the commissioner of navigation in duplicate, but the in-

spectors are instructed to make them out in triplicate, to keep one in my office and send two to the commissioner of navigation; that is, of the vessels whose number of passengers is regulated by a certificate of inspection.

Secretary REDFIELD. So that you have a complete record of every trip?

Mr. McCREARY. Absolutely.

Secretary REDFIELD. I will state upon the record that it is my personal habit in visiting different waters to conduct surprise tests of overcrowded vessels, those which seem to be crowded, by calling unexpectedly for the record of that trip, in different parts of the country at different times. On the Delaware River recently I observed a vessel of the Wilmington Line, which seemed to be overcrowded. Upon calling immediately for the record of that trip, which at the time I observed it was incomplete—I mean the trip was incomplete—I found that my observation was so poor that I was something like 600 off—the vessel was something like 600 inside of her limit.

Any further questions of Mr. Oakley?

Mr. O'HARA. How many on your register or your counter; how many did you actually register last Saturday on the *Eastland*?

A. Twenty-four hundred and seventy; that is, when I left.

Q. Twenty-four hundred and seventy?—A. That is, when I left.

Q. And then you left?—A. To count the passengers going on the *Petoskey*.

Q. Then you left the *Eastland* before the boat had been fully and completely loaded?—A. Yes, sir.

Q. When you left did you turn your register or counter over to some one else; some other inspector?—A. No, sir; I kept the counter.

Q. What inspector did you leave behind?—A. Inspector L. A. Lobdell.

Q. Then, after you had counted twenty-four hundred and seventy, Mr. Lobdell was the only inspector there, so far as you know?—A. And Mr. McCreary was there.

Q. Did Mr. McCreary have a register or a counter?—A. I couldn't swear as to that.

Q. I beg your pardon?—A. I couldn't swear as to that.

Secretary REDFIELD. That is in the testimony.

Mr. O'HARA. That he was there?

Secretary REDFIELD. Yes; it is in the record that he was right there. You had one, didn't you? [Addressing Mr. McCreary.]

Mr. McCREARY. I always carry one.

Mr. O'HARA. What did you do with your counter when you left the boat? You took it with you to the *Petoskey*?

A. I took it with me; yes, sir.

Q. Now your counter is similar to this? [Indicating.]—A. Yes, sir.

Q. It has no register for the thousands?—A. It goes up to nine hundred and ninety-nine, and then turns to zero, all of the numbers.

Q. And the thousands you keep?—A. Track of.

Q. Mental arithmetic of?—A. Yes, sir.

Q. Then if you, being a sole counter of a boat, were to forget a thousand or two, that number of extra passengers could get on the

boat?—A. It would be possible, but it is not likely that anyone would forget.

Q. But it would be possible? You took the civil-service examination?—A. Yes, sir.

Q. As far as you know, no political influence was used in getting your appointment?—A. No, sir. As far as I know, no political influence was used.

Q. What is the age requirement under the civil-service rules?—A. Well, I believe it is from 20 to 40 for this particular examination.

Q. From 20 to 40. Now do you recall what examination is given by the Civil Service Commission under the head of experience?—A. None at all.

Q. Do you recall—I presume you do—do you recall what weight was given by the Civil Service Commissioners to your college education?—A. I don't believe that any weight was given to it.

Q. Now, as a matter of fact, may I ask, did you find this summer in this position that your college education aided you?—A. I don't believe that it really has.

Q. Did your duty consist of any other than checking just as the passengers passed by you? Did you have any other duties?—A. Well, we have the supervising of the motor boats over 65 feet. We have to board them and see that they have everything required by special motor-boat law. The steamboat inspectors have control of the boats greater than 65 feet.

Q. But the question that I would like to ask you is this: Have you found in this position that any other requirements were necessary other than honesty and common sense?—A. I don't believe that I have.

Mr. O'HARA. Thank you, sir. That is all.

Secretary REDFIELD. That is all, Mr. Oakley.

(Witness excused.)

Roy L. PECK, called as a witness herein, having been first duly sworn, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you give your full name and address?—A. Roy L. Peck. My residence is 324 North Cuyler Avenue, Oak Park.

Q. Mr. Peck, what is your present occupation?—A. Chief mechanical engineer of the Great Lakes Dredge & Dock Co.

Q. Now, will you kindly begin at your work in life and tell us your working history—what your first job was; I don't want to go into too much detail—and where you started, and what you did up to the present time. We needn't count days or weeks or months, but in general.—A. Well, that is a pretty long history.

Q. It doesn't look it, Mr. Peck.—A. I am 52 years old.

Q. Well, I want to get your experience on the record.—A. Well, I started in in the early eighties on ships running out of the port of New York, between New York and Habana, Mexico, New Orleans, working in the engine department. Finally worked my way up to holding a license as engineer. From assistant engineer to chief engineer. And in 1888 I came up on the Great Lakes—chief engineer of the steamer *Owego*, and ran her a couple of years—and then I

accepted a position ashore in a large flour mill in Milwaukee. I remained there several years.

Q. As engineer?—A. As engineer. I had considerable to do with rebuilding of the engine at that time—remodeling it so as to make it more economical and more satisfactory in its work. Then I afterwards went steamboating again on the Great Lakes. I was with the Lehigh Valley Line on one of their steamers for a while, and then the Minnesota Line. Afterwards this line became the Steel Trust Line, and I was several years in their ships.

Q. As engineer?—A. As chief engineer. Finally I came to Chicago, in 1895, as chief engineer of the Leopold & Austrian Line, and ran their steamer *Manitou* during the season of navigation as a passenger steamer to Mackinaw Island, which was about three months every year.

Q. How long did you remain as chief engineer of the *Manitou*?—A. I was nine years on the *Manitou*. In 1903 I took the examination and was appointed local inspector of boilers in this district, Chicago.

Q. In the Steamboat-Inspection Service?—A. In the Steamboat-Inspection Service, and I remained in that service for 10 years, very nearly.

Q. Here in Chicago?—A. Here in Chicago.

Q. Then what?—A. When I left the service I accepted my present position with the Great Lakes Dredge & Dock Co.

Secretary REDFIELD. We will now adjourn to convene at 2 o'clock p. m., and the examination of Mr. Peck will be continued at that time. (Thereupon a recess was taken (at 12.50 p. m.) until 2 o'clock p. m. of the same day.)

AFTER RECESS.

Parties met pursuant to adjournment.

Present, same as before.

ROY L. PECK resumed the stand for further examination and testified further, as follows:

Examined by Secretary REDFIELD:

Q. Mr. Peck, I understood you to testify that you entered the boat-inspection service by taking a civil service examination. Now, is that quite the whole of it? Isn't there a little more detail that should be given?—A. Yes; perhaps I had better detail it a little more.

Q. Tell the whole detail.—A. I received a temporary appointment as local inspector of boilers on the 30th of April; as I understand the situation, at that time there was no eligible list, there was no boiler inspectors on the eligible list for appointment in this district, and I received a temporary appointment, and while under temporary appointment I took the examination and later was permanently appointed as a result of that examination.

Q. Do you understand that that is the ordinary and usual course when there are no eligible names on the list?—A. So I have understood.

Q. Now, I wish you would state, as fully as you can and as nearly as you can, what your personal contact has been with the steamer *Eastland*. I am not at the moment asking what you did in connection with her, but simply for the moment trying to learn how familiar

you are with the vessel.—A. Well, I was local inspector of boilers when the steamer first came here in 1903. She received her first inspection, of course, at Port Huron.

Q. Pardon my interrupting you, but when you suggest something to me it is your fault and not mine. Why do you say "of course"? You said, as I understand, she received her first inspection, of course, at Port Huron. Now, what do you mean by "of course"?—A. Well, because she was built there.

Q. Well, what does that mean?—A. Well, a steamer must be inspected before she goes out at all.

Q. By what service?—A. By this service, this Steamboat-Inspection Service.

Q. That is what these gentlemen want to know. You mean to imply by that that it is a rule and custom that before she leaves the yard where she is built she receives an inspection.—A. She must be inspected—boilers, hulls, and equipment.

Q. Go on.—A. We inspected the ship while I was inspector three times, I believe, in 1904, in 1905, and in 1906, and I went across the lake on her a great many times in those three or four years.

Q. Now, try and think, because we are very anxious to be just as clear and specific as possible. When you say "a great many times" you know that may mean many hundreds or many thousands. What were a great many times?—A. Well, I would venture to say that I crossed the lake on the *Eastland* probably 12 or 15 times in the four or five years that she was here.

Q. From 12 to 15 times?—A. Yes, sir.

Q. Let me ask was that all in smooth weather?—A. In all kinds of weather, just whatever it happened to be. Of course, in the summer we generally have pretty good weather, but occasionally toward the end of the season you will have a little blow.

Q. I do not want to interrupt you, but does it happen to be a fact that on any of these occasions when you were crossing the lake on her there was rough weather?—A. Yes; I remember of crossing the lake on her when it was rough.

Q. So you can speak from knowledge of the behavior of the ship in sea weather, can you?—A. Yes, sir.

Q. Now, go on.—A. Well, in the number of times that I crossed the lake on her I have only one recollection of her ever having listed in the manner which I thought was peculiar or strange, and that was the first time I ever went on her, the first Sunday that she ever went across. When we got to the dock at South Haven and the crowd began to go off she listed toward the dock, and that is the first time I ever experienced anything of that sort on a ship of her class.

Q. Now, you saw that, did you?—A. Yes, sir. It did not alarm me any, but it struck me as being rather peculiar.

Q. Did you happen to know why that happened?—A. Well, I believed it was because she did not carry any water ballast at the time; the water ballast was all out of her, they said.

Q. Who said that?—A. The engineer and the captain, because the water was quite shallow at the entrance to the dock.

Q. Let me ask you and see if I get you correctly. She was in shoal water then in the harbor was she?—A. Yes, sir.

Q. And the engineer and the captain of the *Eastland* told you that they let the water out of her ballast tanks, and you personally know

that under that condition, so described, she listed to starboard?—A. She listed to starboard at that time; yes.

Q. Now, as an engineer of long practice on the lakes, is it your belief that that was a true explanation?—A. Oh, yes; I have no doubt of it, because I know that it has been necessary, it was necessary afterwards to carry that water ballast, if she had a big load of passengers on to keep her straight.

Q. Can you speak from knowledge as to just the largest number of passengers you ever knew the *Eastland* to have?—A. The *Eastland* to have? Well, when I rode across the lake on her she had in the neighborhood of 3,000 people. I could not exactly remember, 2,900 or maybe 2,800 to 3,000 people.

Q. You were on her crossing the lake when she had over 2,800 people on her?—A. Yes, sir.

Q. How did she behave?—A. I never saw anything out of the ordinary with her on any trip that I was on her excepting the first time.

Q. I want you to be very careful. Did she list when she had 2,800 people on her?—A. No; I never saw her list excepting there would be a strong wind on one side or the other, then she did lean over a little bit with the wind.

Q. Now, do I understand you correctly, as a matter of fact the only listing you ever saw on her was in the harbor you speak of?—A. All I have ever seen was at the harbor.

Q. And do I understand correctly that when she listed in the harbor she had a less load on her than she had when you afterward traveled on her without listing?—A. Yes; I think I understand you.

Q. So, as an engineer, it has been your experience as to the vessel that she listed with a less load than you have personally seen her carry?—A. Yes.

Q. Without listing?—A. Yes.

Q. Now, how do you account for that?—A. The only way I have ever been able to account for her listing was because of the fact they would not have a water ballast in her.

Q. You account for the fact that the *Eastland* listed with a smaller load than you have seen her carry without listing because she did not have water ballast?—A. Yes, sir.

Secretary REDFIELD. I think at this time I will ask Capt. Westcott to take the oath. Is Capt. Westcott here?

A VOICE. Yes, sir.

(Witness excused temporarily.)

Capt. CHARLES H. WESTCOTT, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Captain, will you be kind enough to give your full name, address, and age to the stenographer.—A. Charles H. Westcott; residence address, St. Clair, Mich.; office address, Detroit, Mich.; age, 67 years.

Q. What is your occupation, Capt. Westcott?—A. United States supervising inspector of steam vessels.

Q. And your office is where?—A. At Detroit, Mich.

Q. What area is within your jurisdiction?—A. All of the waters north and west of Lake Erie, on the Great Lakes.

Q. Including Lake Huron, Lake Michigan, and Lake Superior?—

A. And all the connecting waters; yes, sir.

Q. By whom were you first appointed supervising inspector?—

A. By President Harrison.

Q. You were removed under President Cleveland, were you not?—

A. Yes, sir; for about three years.

Q. By whom were you reappointed?—A. President McKinley.

Q. And have you been continuously in the service ever since President McKinley reappointed you?—A. Yes, sir.

Q. Were any charges made against you of any character?—A. No, sir.

Q. Now, while we are on this subject, I wish you would start as Mr. Peck did, at your young manhood, and tell your experience. Where did you begin and what did you do?—A. I was a boy on a farm. My parents were very poor. I don't suppose that is necessary, however.

Q. Speak up loud so all of these gentlemen can hear. Mr. Sullivan is very much interested.—A. I began sailing very young, I think about 12 or 13 years of age.

Q. You began on the water at 12 or 13?—A. Yes, sir; the first position I had was carrying food to the deck on a steamer running between Detroit and Saginaw, and I worked along in different capacities during that time. My father was a shipbuilder afterwards and built ships for Capt. E. B. Ward.

Q. Your father was a shipbuilder?—A. Yes, sir; and when I did not feel particularly tired or did not want a particularly easy job I worked in the yards; whenever I got tired I went to sailing. I worked along, and in 1873 I got my first license as a master.

Q. What kind of a master's license did you get?—A. Covering the northwestern lake district.

Q. I beg your pardon.—A. I think the first one was limited a little bit, but I think in 1872 I got one covering the whole northwestern lakes as a first-class master; then I was sailing from St. Clair.

Q. What do you mean? How did you get that license? Wait just a moment.—A. I got it from the local inspectors.

Q. Did they give it to you for the asking?—A. No; they gave it to me after an examination.

Q. Now, what did you do when you got your license?—A. What work?

Q. Yes, sir.—A. I took command of a steamer called the *St. Clair*, running from Lake Erie to Lake Superior ports.

Q. How long did you stay on her?—A. Two years, I think.

Q. What did you do next?—A. I followed up, in line, and sailed a vessel called the *George H. Ward*, one called the *Alice H. Richards*, the *Lowell*, and was sailing a sailing steamer called the *Alpina* when this position was offered to me.

Q. Now tell us about these vessels. Were they tugs?—A. No, sir; they were all freighters, general freighters.

Q. All freighters?—A. Yes, sir.

Q. How big were they?—A. Well, commencing in 1873 the vessels running were not of very large tonnage, from 300 to 500 tons; that is the registered tonnage I refer to.

Q. Yes.—A. And coming along up to 1873 we had vessels on the lake having about a 2,000-ton capacity, but I never sailed one of those vessels.

Q. Now, did you take a cheap job in that *Alpina* position?—A. No, sir; I was getting \$1,800 a year on that and the *Lowell*, which I think was as great as any salary at that time on the Lakes.

Q. How did you come to be appointed inspector?—A. Well, I was in Bay City with my tow; I had a tow of three steamers behind this, and I received a letter from Detroit that Capt. Joseph Cook had died, supervising inspector, and if I wanted the position come to Detroit and take it.

Q. Who wrote you that letter?—A. It was written by my brother, who was a general marine man in Detroit, but he had been told so by people that were connected with—I think with Senator McMillan's office.

Q. Did you go to Detroit?—A. So I did not even know Senator McMillan or any of his family. No, sir; I went on down the lake, and got another letter that they wanted me to answer it 20 miles below there, but I didn't do that; I was not even courteous, I had no thought of a political job, and when I got to Cleveland I told the vessel owners and some of my friends about it, and they advised me to come back and to take it, and I went back to Detroit and took it, and I have never sailed since.

Q. How many times can you say, with safety, that you have seen the steamer *Eastland*?—A. I don't know that I ever saw the steamer *Eastland* excepting in Chicago Creek or River.

Q. How many times did you see her there?—A. Oh, in the round of the lakes that I make frequently I look over boats, and I might explain further back, however, in former years the supervising inspector had a semimonthly report to make naming the vessels visited, and it was one of my duties to do that, and when I would get to Chicago I would go down on the docks and look over the boats, and I remember of being on the *Eastland* several times; I would not want to say whether 6 or 12.

Q. Well, was it six?—A. Well, certainly as much as six.

Q. And perhaps not over 12?—A. Oh, it is a good while ago, and I have no records, the records have all been burned up.

Q. But you think it was six?—A. I think unquestionably.

Q. So you think you could say that you saw the *Eastland* six times?—A. Oh, I think so; always on the dock.

Q. It was not your duty as supervising inspector to inspect vessels, was it?—A. No, sir; absolutely not.

Q. Now, did you ever receive a complaint about the *Eastland*?—A. Yes, sir.

Q. How many?—A. I am very positive that I never received but the one complaint; I did not know that I had received that until I went through my files, and had my clerk in Detroit do so, and we found out that I had one under file. It was from a man by the name of Schmitt.

Q. Suppose I read you a letter written to you and ask you if you can identify that as the complaint that you received.—A. Yes, sir; I have a file with me covering that.

Q. That is a photograph of the original?—A. Yes, sir; I have a file in my package here covering that same case.

Q. I will read the letter, which will be made a portion of the record:

CHICAGO, August 6, 1906.

To the Hon. L. M. SHAW,  
Secretary of the United States Treasury,  
Washington, D. C.

DEAR SIR: On Sunday, August 5, 1906, I took a trip across Lake Michigan on the steamer *Eastland*, running between Chicago and South Haven, Mich., and going over the steamer was more than overcrowded, and it is no exaggeration to state that the people were packed like sardines, and it was necessary to fight to get on the promenade deck so as to get fresh air.

I am informed that there is a United States law which only allows a certain amount of people to be carried on excursion boats, if so, no attention is paid to same or enforced.

It is not only this steamer, but all other excursion boats leaving Chicago on Sundays have the same overcrowded conditions.

In case of a fire or anything to create a panic, the calamity would be something terrible; and the responsibility would be placed to your department; as I understand that it comes under your jurisdiction.

I have always been under the impression that the United States laws were strictly enforced, especially when pertaining to the public's welfare and safety, but this law might as well be repealed, and trust to luck that no accidents will occur.

Respectfully, yours,

GEORGE J. SCHMITT.

Q. Now, this letter is marked "Received Steamboat-Inspection Service, August 9, 1906, Department of Commerce and Labor" and as answered on the 15th of August of that same year. It is marked as being in the office of the supervising inspector at Detroit on August 10, the day following its receipt in Washington. Now I ask you if this is a photograph of your letter in response to that complaint? [Passing letter to witness.]—A. That is my signature, sir.

Q. That is a photograph of your signature?—A. Absolutely, sir.

Secretary REDFIELD. I read this letter, which will form a portion of the record, the reply. It is dated at the office of the supervising inspector, eighth district, Detroit, Mich., August 10, 1906. I ask that on the record it be noted that the reply is dated four days after the receipt of the letter in Washington, and dated seven days after the date of the original letter in Chicago, I think.

OFFICE OF SUPERVISING INSPECTOR, EIGHTH DISTRICT,  
Detroit, Mich., August 13, 1906.

Hon. GEORGE UHLER,  
Supervising Inspector General,  
Washington, D. C.

SIR: Replying to letter of the 9th instant, from your office, with one from Mr. George Schmitt, of Chicago, inclosed, relative to overloading of the steamer *Eastland* and other passenger steamers running out of Chicago, I beg to report as follows: That I proceeded to Chicago on the 10th instant and made a very thorough investigation of the subject; I called upon the customs officials and local inspectors and was assured by both that at no time during the season had any of the steamers to their knowledge carried more passengers than allowed by their inspection certificates and excursion permits; that on Saturdays and Sundays officers were detailed from the customs department to count the passengers on all steamers of any importance; that on Sunday, August 5, the day that Mr. Schmitt complains of, two customs inspectors, F. B. O. Gallagher and Charles H. Harding, were detailed to and did count the passengers on the

steamer *Eastland*; and that the number of passengers carried out of Chicago on the *Eastland* on that date was 2,530, which fact is certified to by those officers at the bottom of the enclosed report of passengers carried out of Chicago by several steamers on August 4 and 5, made by Mr. M. J. Griffin to the Hon. John C. Ames, collector, and dated August 6.

I also inclose letter from the local inspectors, showing that the *Eastland* is allowed by her certificate and excursion permit 3,000 passengers; also an affidavit from Mr. Cochrane, traffic manager, showing that on the 5th, the *Eastland* carried from Chicago to South Haven 2,492 and brought back 2,763 passengers; also a letter from the local inspectors at Grand Haven, stating that on August 5, at South Haven, the passengers were counted on the *Eastland* by Local Inspector Pardee; that she carried out of South Haven 2,994; all of which goes to show conclusively that at no time upon the date (Aug. 5) that Mr. Schmitt complains of was the steamer *Eastland* carrying in excess of, or even up to, the capacity allowed by the local inspectors. As to the discrepancy in the count between the inspectors and the owners, would say that I am informed by the inspectors and customs officers that they count children, while the owners only count the persons that are of an age to require a ticket. I am informed by Inspector Mansfield that he has ridden on the *Eastland* when carrying her limit, and that in his opinion she was not overcrowded; I, however, directed Inspector Peck to take the trip from Chicago to South Haven and return on Sunday, the 12th instant, for the purpose of examining the situation; I also directed the inspectors to remeasure all the excursion steamers running out of Chicago, and if they find in their opinion any of them are allowed too many to reduce the number to what they can carry with safety and prudence.

In conclusion I would say that unquestionably there are at times places on a steamer carrying a large load of excursionists that would be crowded when everybody wanted to get in the cabins out of the rain or cold, or on one side of the vessel out of the sun or on the upper deck to escape the heat, when under ordinary circumstances there would be sufficient room for all.

Respectfully,

C. K. WESTCOTT,  
Supervising Inspector.

P. S.—I also inclose Mr. Schmitt's letter as directed.

Secretary REDFIELD. There is attached to this the following letter, which is also a portion of the record:

UNITED STATES CUSTOMS SERVICE,  
Port of Chicago, August 6, 1906.

Hon. JOHN C. AMES, Collector.

SIR: Herewith please find statement of number of passengers carried Saturday afternoon, August 4, and Sunday morning, August 5, 1906, on excursion vessels leaving this port:

SATURDAY, P. M., AUG. 4.

Vessel.	Number of passengers carried.	Number of passengers allowed.
Theodore Roosevelt.....	2,468	3,500
Eastland.....	1,578	3,000
City of Benton Harbor.....	1,237	2,520

SUNDAY, A. M., AUG. 5.

Theodore Roosevelt.....	2,922	3,500
Eastland.....	2,530	3,000
City of South Haven.....	1,949	2,530
Christopher Columbus.....	2,830	4,000
City of Benton Harbor.....	1,584	2,500
Paritan.....	841	1,200

Respectfully submitted,

(Signed) M. J. GRIFFIN,  
Deputy Collector.

Secretary REDFIELD. And upon that we have this:

PORT OF CHICAGO, August 11, 1906.

We hereby certify that the steamship *Eastland*, on leaving the port of Chicago, Sunday a. m., August 5, 1906, carried 2,530 passengers, of which 350 boarded the steamer at one gangway, and 2,180 at the other gangway.

F. B. O. GALLAGHER,  
Inspector of Customs.

Secretary REDFIELD. There is also the following document inclosed; these are photographs of the originals in our possession:

COUNTY OF COOK, State of Illinois, ss:

On this 11th day of August, 1906, A. D., personally appeared before me, Harry B. Lockwood, a notary public in and for the County of Cook, and State of Illinois, Mr. W. H. Cochrane, who, being duly sworn, deposes and says that he is traffic manager of the Chicago-South Haven Line, operating the steamship *Eastland*, and that on the 5th day of August, 1906, the said vessel carried a total of 2,492 passengers on the trip from Chicago to South Haven and a total of 2,763 passengers on the trip returning from South Haven to Chicago on the said 5th day of August, 1906.

Deponent further states that the passengers were counted going on the said steamer *Eastland* both at Chicago and at South Haven by United States Government customs inspectors.

W. H. COCHRANE, Traffic Manager.

Subscribed and sworn to before me, this 11th day of August, 1906.

HARRY B. LOCKWOOD, Notary Public.

Secretary REDFIELD. The following documents, also photographs of documents of the files of the department:

OFFICE OF LOCAL INSPECTORS, Chicago, Ill., August 11, 1906.

Hon. H. C. WESTCOTT,  
Supervising Inspector, Detroit, Mich.

SIR: In reply to your inquiry as to the number of passengers allowed the steamer *Eastland*, would say that she is allowed 517 by her certificate of inspection, and has an excursion permit allowing her to carry 2,483 persons, a total of 3,000 persons.

Very respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

Secretary REDFIELD. Is that your name, Roy L. Peck?

A. Yes, sir.

Q. Is that a photograph of your signature?—A. Yes, sir.

Secretary REDFIELD. And also the following, dated August 11, 1906:

AUGUST 11, 1906.

Hon. C. H. WESTCOTT,  
Supervising Inspector, Detroit, Mich.

SIR: In replying to your telegram of this date, in reference to counting passengers on steamer *Eastland* on August 5, 1906, will say they were counted by Inspector Pardee, and there were counted on board 2,994, as the register still shows, and the steamer was compelled to leave 10 minutes ahead of her regular time. Excursion permit allows 3,000.

Respectfully,

GEORGE W. PARDEE,  
CHARLES C. ECKLIFF,  
Local Inspectors.

Secretary REDFIELD. And the following letter under date of August 11, 1906.

CHICAGO, August 11, 1906.

Mr. W. F. CATCHILL,  
Chief Clerk Department of Commerce and Labor.  
Washington, D. C.

DEAR SIR: Replying to your letter of the 9th instant, I herewith attach an editorial from the Chicago Daily News, August 10, 1906, and which confirms what I wrote on the 6th instant, relative to the overcrowding of passenger boats leaving Chicago.  
Yours, truly,

GEORGE J. SCHMITT.

ROY L. PECK, recalled for further examination, testified as follows:

Secretary REDFIELD. Is it a fact that at any time the *Eastland* had a passenger limit under the law of 3,000?

A. Yes.

Q. That is a fact?—A. Yes.

Q. Is it not a fact that she had that passenger limit at a time when she was still carrying her staterooms on her upper deck?—A. Yes.

Q. Is it not a fact that the staterooms have since been entirely removed?—A. I believe they were while she was away. I heard a number of them had, and I afterwards learned, when she went to Cleveland, that they all had.

Secretary REDFIELD. Capt. Westcott, can you say whether it is a fact that these staterooms have been entirely removed?

Capt. WESTCOTT. Not from my personal observation.

C. H. WESTCOTT, recalled for further examination, testified as follows:

Secretary REDFIELD. Captain, you do not know that of your own knowledge?

The WITNESS. I have figures here taken from the Department of Inspection Service; the figures show that she had 88 staterooms originally, and 49 were taken off in the winter of 1904 and 1905 at Chicago, and the balance—the other 39—were taken off after she went to Cleveland; so they have all been taken off now.

Q. The records of the service show that all these staterooms have since been removed?—A. Yes, sir.

ROY L. PECK, recalled for further examination, testified as follows:

Secretary REDFIELD. Mr. Peck, as the chief engineer of the company that you have named, is it your opinion that the removal of these staterooms rendered the vessel more or less able to carry a load?

The WITNESS. More able.

Q. More able?—A. Yes, sir.

Q. So that if I understand you correctly the fact is this, that whereas the steamer *Eastland* had, in fact, carried 2,994 persons and had a passenger allowance of 3,000, her record last week was that of being allowed to carry only 2,500 persons, while in the meantime she had been made safer by the removal of the upper weights; is that so?—A. Yes, sir; that would be my opinion.

Capt. C. H. WESTCOTT, recalled for further examination, testified as follows:

Secretary REDFIELD. Capt. Westcott, have you ever had any other complaint about the steamer *Eastland*?

The WITNESS. No, sir.

Q. Do you know of any of your officers that ever have received any complaint about her?—A. Not from my personal knowledge, sir, I do not.

Q. Have any of them told you they had a complaint about her?—A. No, sir.

Q. Is it not a fact that the only complaint you ever received about the *Eastland* was the one which had solely to do with the question of whether she had more or less passengers than the legal number of passengers allowed her by law?—A. The only complaint that I ever had was that Schmitt complaint, and that complaint was that the boat was overcrowded. I do not know that he said she had more than she was allowed by law; he said she was overcrowded, and that might have been his estimation of what a crowd was.

Q. So that you have never received from any source, to your knowledge, any complaint that the vessel was unsafe?—A. No, sir; never.

Q. Or even a crank?—A. No, sir.

Q. Or in any way defective?—A. No, sir.

Q. Had you, from anything which anybody has ever written you or any of your subordinates, any reason whatever to suppose that the *Eastland* was unsafe to carry the reduced capacity after her weights had been altered?—A. Certainly not, sir.

Secretary REDFIELD. Now, Gen. Uhler, I will ask you to examine Mr. Peck, and we will excuse Capt. Westcott for the present and call him later. Let me ask you to examine Mr. Peck on the subject of water ballast, but before you do so I want to ask Mr. Peck a question that occurs to me while I am speaking of it.

(Witness excused.)

ROY L. PECK, recalled as a witness, further testified as follows:

Secretary REDFIELD. Mr. Peck, how much do 2,500 passengers weigh if you estimate the average weight at 160 pounds per person? I will ask you to just take that table and figure it out.

A. Two hundred tons.

Q. So that 2,500 passengers at 160 pounds average weight would amount to how much?—A. Two hundred tons.

Q. Two hundred tons?—A. Or 400,000 pounds.

Q. Or 400,000 pounds, equaling 200 tons?—A. Yes, sir.

Q. Do you happen to know what the displacement of the *Eastland* was?—A. No; I do not; excepting that her gross tonnage was nineteen hundred and some odd.

Q. Her gross tonnage was nineteen hundred and some odd?—A. Yes, sir.

Q. You do not recall what her displacement was?—A. No, sir.

Q. Do you know about her draft?—A. The best of my recollection is that she was drawing about 13½ or 14 feet aft and 10 to 14 feet forward.

Q. Was that loaded?—A. Yes; loaded.

Q. Loaded. Now, is this not a fact, that a vessel of that form when she is loaded goes down by the bow, but draws about the same at the stern?—A. Well, I think she would probably go down more forward than she would aft on account of her shape—very thin forward.

Q. Now, is it not a fact to your knowledge that the limit of passengers for the *Eastland* was reduced from 3,000 to 2,500 as a result of action in the local board in Chicago in which you took part?—A. Yes, sir; that is my recollection; that is a matter of 10 years ago, and I have been out of the service nearly three years, so I have not been able to examine documents or anything of that sort, but it is my recollection of an event that occurred shortly after this letter was written.

Q. So that, although she had to your personal knowledge carried 3,000 persons at a time when she still had 88 staterooms, which she does not now have, there was an act of your board which reduced her from 3,000 to 2,500 carrying capacity?—A. Yes, sir.

Q. And that since that time, as you understand it, she has had these weights removed?—A. Yes, sir.

Secretary REDFIELD. Now you may examine, Gen. Uhler.

Examination by Gen. UHLER:

Q. Mr. Peck, you were speaking about being chief engineer of the steamship *Chemung* or the *Owego*. She was a new vessel, as I understand it, owned by the Erie Railroad Co.—A. It was a steamer owned by the Erie Railroad Co.

Q. Of what construction was she, Mr. Peck?—A. Well, she was built a great deal like an ocean steamer.

Q. And of what material?—A. Steel steamer.

Q. Steel?—A. Yes, sir; designed by George Mallory, of New York.

Q. Was she a single-deck or double-deck steamer?—A. She was what they called a double-deck steamer.

Q. That is, a main deck and a hurricane deck?—A. A main deck and a hurricane deck.

Q. Engaged exclusively in the carrying of cargoes?—A. How is that?

Q. Was she engaged exclusively in the carrying of cargoes?—A. Yes; she was a freight steamer.

Q. Packet straight steamer, I take it?—A. Packet straight steamer.

Q. Did you have ballast tanks in that steamer, Mr. Peck?—A. Yes, sir.

Q. And what was the capacity of the ballast tanks, as you remember it?—A. I think the *Owego's* ballast tanks carried about 1,000 tons.

Q. About a thousand tons of water?—A. That is as I remember it.

Q. How were the tanks subdivided?—A. They were divided fore and aft and aforeships; I think she had about 6 tanks on a side, as I remember it; that would be about 12 compartments.

Q. Divided up into one bulkhead?—A. Yes.

Q. Were these tanks automatically connected—that is, from one side to the other—or was it necessary to fill them with the operation of valves from one side to the other?—A. There was a manifold in the engine room with a series of valves which connected them, a separate valve for each compartment.

Q. And in order to fill all the tanks at once all of the valves leading to the compartments opened from the main cock or from the manifold?—A. All the valves would have to be opened.

Q. Did you ever, at any time, Mr. Peck, during your service on the *Owego*, go up or down the lake light?—A. Quite frequently.

Q. Quite frequently?—A. Yes; her up cargoes were generally very light—westbound cargoes.

Q. And at that time you regulated the trim of the ship and her stability by the manifolds of the water ballast?—A. Yes, sir. If we got into bad weather, we let some water into the water-ballast tank.

Q. Under whose direction was the water ballast manipulated?—A. How is that?

Q. Under whose direction were they manipulated—by the orders of the captain or by the chief engineer?—A. Generally by the orders of the captain; that is, the captain, if he thought the weather was threatening and the ship pounding on the sea, he would send down word to fill up some of the compartments.

Q. Did you ever find the necessity, Mr. Peck, of using water ballast to maintain stability of the ship?—A. Not on her nor any other ship that I have ever been on.

Q. Then the water ballast was used to maintain the proper trim of the ship?—A. Yes.

Q. And to properly steady her?—A. Steady her in bad weather.

Q. Do I understand you to say that you have seen the water ballast used quite frequently on the *Owego*?—A. Well, we used it considerably in the fall of the year, but not much in the summer time. The most frequent use of water ballast, of taking it in and taking it out, that I ever had was on a passenger steamer running to Mackinaw.

Q. May I ask Mr. Peck, if I remember correctly, if you were not chief engineer of the *Manitou*?—A. Chief engineer of the *Marisko*.

Q. Chief engineer of the *Marisko*?—A. Yes, sir.

Q. It is, as I remember it, exclusively cargo ship?—A. Exclusively cargo.

Q. And carries no passengers?—A. Carried no passengers.

Q. Double-deck ship?—A. Double deck.

Q. Did they have water ballast?—A. Water ballast in each one.

Q. And how much capacity?—A. Well, a considerably greater capacity than there was in the *Owego*. I can not say exactly what it was—anywhere from 1,000 to 1,500 tons of water.

Q. From 1,000 to 1,500 tons capacity?—A. Yes, sir.

Q. And the *Manitou* was about how long?—A. Two hundred and ninety-five feet long.

Q. A 20-foot hold, as I remember it?—A. Yes; I think it was about 20 feet deep. I can not remember that exactly.

Q. As I remember it, it was exclusively a passenger ship?—A. Exclusively a passenger ship.

Q. And carried no cargo at all?—A. Carried no cargo at all.

Q. You used water ballast in the *Manitou*?—A. Yes, sir.

Q. And what was the *Manitou's* capacity?—A. She carried about 350 tons.

Mr. REDFIELD. Of water?

The WITNESS. Of water.

Gen. UHLER. And where located?

The WITNESS. In her bottom—double bottom.

Q. About what portion of the ship?—A. The whole length of the ship.

Q. The whole length of the ship?—A. Yes, sir.

Q. Subdivided, of course?—A. Subdivided fore and aft and afore-ships.

Q. What was the passenger allowance of the *Manitou*, Mr. Peck?—A. About 500 passengers.

Q. About 500 passengers?—A. First-class passengers; she did not carry any excursionists.

Q. Did you ever find it necessary during your service on the *Manitou* to use water ballast?—A. Yes.

Q. For what purpose?—A. For the purpose of making the ship more comfortable in sea weather, so that the people would not get seasick.

Q. Did you ever have occasion to use your water ballast to regulate or to change the trim of the ship?—A. No, sir; she was a good, stable ship.

Q. You have spoken in your testimony, Mr. Peck, and in order to make it plain I want to ask you if you did not testify that the use of convenient ballast is not only a practice but that it is a custom?—A. I don't think there is any ships plying on the Lakes to-day that do not have water ballast—passenger or freight.

Q. They all carry water ballast?—A. Yes, sir.

Q. Now, isn't it a fact that in the passenger allowance and in the calculation of the stability of the ship herself her ballast is taken into account?—A. It certainly is, and was by this board in the *Eastland*.

Q. Would it have been possible, Mr. Peck, in any of these ships on which we have spoken not to have used that ballast?—A. Well, hardly in the case of the *Eastland*, because it was necessary to discharge that ballast to get her into port at some places where she went.

Q. Doesn't the same condition maintain in the case of the other ships?—A. Yes, in a great many cases, at least.

Secretary REDFIELD. How much difference in her draft, Mr. Peck, would the filling of the *Eastland's* tank make, from empty to full?

A. I could not say, because I never made any observation of it.

Q. Well, can you say, as one familiar with the vessel or with the circumstances of the navigation, whether it would be 6 inches, a foot, or 2 feet?—A. Well, I should judge it might raise her about a foot.

Q. That would make a difference of a foot?—A. That would make a difference of a foot in her mean draft.

Q. Did I understand you to say in answer to a question from Gen. Uhler that as between the licensed officers of the ship, captain upon the one hand and chief engineer upon the other, the regulation of the ballast tank rested with the captain?—A. Well, the captain is in charge of the ship and the engineer is supposed to obey any orders he receives.

Secretary REDFIELD. Capt. Westcott, have you any letter from the chief engineer of the *Eastland* on the subject of the ballast tanks?

Capt. WESTCOTT. There is one of them with the local inspectors here that he has written since the disaster.

Secretary REDFIELD. Will you please produce it?

Capt. WESTCOTT. It was sent to a couple of inspectors afterwards, Mr. Redfield.

Gen. UHLER. You are familiar, Mr. Peck, with the dry-dock facilities of the Great Lakes?

Mr. PECK. I am pretty well acquainted with them.

Q. Suppose it were necessary in the navigation of the ship under the conditions that are met in the navigation of the Great Lakes, where a ship on one of her voyages is full of cargo and the other light, necessitating on the light voyage the use of dead ballast, and that it might not be discharged—when once put into the ship it was fixed—do you know of any of the dry docks on the Great Lakes that would not be able to take the ship unless her ballast was discharged?—A. No; I do not recollect any. There are some smaller ones, perhaps, that might not be able to take her, but the dry docks at Chicago, or Cleveland, or Buffalo, I think, she could be docked—I think any passenger ship could be docked. A freight ship might be in a position that she could not be docked—draw too much water.

Q. Are there any of the dry docks that will take ships that are full draft?—A. Are what?

Q. Are there any of the dry docks on the Great Lakes that will take ships that are full draft?—A. No; I don't think they would, not with a cargo or ballasted.

Q. So that in order to meet the needs of navigation, and in order to make a convenience of transportation it is quite necessary that ballast be not fixed, and that it be convenient ballast, and that the only convenient ballast is water ballast; am I right in that supposition, from your experience?—A. That has been my experience, and I think that is the case.

Q. Mr. Peck, I remember you as a young man, as a junior engineer on a Southern Pacific Co. boat from New York to New Orleans.—A. Yes, sir.

Q. Do you remember the conditions of the water ballast on those ships?—A. Well, the old ships, I believe, had no water ballast; they were without water ballast.

Q. How is that?—A. I think the old ships had no water ballast—the old ships of the Morgan Line—they had no water ballast that I remember.

Q. Did you ever have any trouble with the manhole plates in the deep hole?—A. I don't know.

Q. And the old Morgan Line ships.—A. No; not that I remember of; not any that I have sailed on; that is a good many years ago; it is possible that I have not got a recollection of those ships that I ought to have.

Q. It is a good while to ask you to go back, but I did not know but perhaps you might remember it.—A. It might have been over 30 years ago.

Q. This passenger allowance it may be safely assumed was estimated to determine upon the stability of the ship, and the stability of the ship depended to a great extent upon the use of ballast?—A. Yes, sir; the ballast. The ballast of the *Eastland* was a most important factor.

The SECRETARY. That is not a question, Gen. Uhler, that is a statement.

Gen. UHLER. May I ask if you did depend upon the use of ballast? The WITNESS. Both Capt. Mansfield and myself, while we were inspectors, depended a great deal upon the water ballast—even on the *Eastland*, for her carrying capacity it was certainly very essential to be properly looked after.

Q. Were there any changes in the arrangement of the ballast tanks or their capacity, Mr. Peck, from the time you first knew the *Eastland* until she left Chicago?—A. No; I do not know of any change in her water ballast or in the arrangement; I do not recollect it any how. If there was any it was to increase it. It seems to me that there were some additional ballast tanks put into her bottom, but I am not certain of that.

Q. Isn't it a fact, Mr. Peck, that ships on the Great Lakes, cargo ships particularly, at times carry not only their tanks full of water, but also put water in the lower hold and the tank tops?—A. Yes, sir; I have done it myself on the steamer *Kearsage*.

Q. I want to know at this time, and I ask the question, how many tons of water have you seen carried on the tank tops outside of the capacity of the tanks?—A. I remember one trip we made with the steamer *Kearsage* on Lake Superior we had 500 tons of water.

Q. Five hundred tons of water in the tank tops in addition to the water in the tanks?—A. Yes, sir.

Q. You did that in order to maintain—A. That was in order to maintain headway with her against a strong gale of wind.

Q. And to maintain a draft that would keep the wheels at work?—A. Keep the wheels in the water.

Gen. UHLER. I have nothing further, Mr. Secretary.

Mr. WESTCOTT. Mr. Secretary, there is the original letter. I had some copies made (handing paper to Secretary).

Gen. UHLER. Mr. Secretary, may I ask Mr. Peck a question?

The SECRETARY. Go on.

Gen. UHLER. Do you remember the steamer *Louisiana*?

The WITNESS. Very well; she is one of the first ships I ever served on.

Q. Am I correct in my recollection that she had fixed ballast?—A. She had.

Q. No tanks?—A. No tanks.

Q. I think probably during your incumbency in the office or, probably later, the *Louisiana* capsized at the levee in New Orleans?—A. I have heard that she did; I was so informed by the local inspectors in New Orleans.

Q. Did they give you the reason or the cause for that capsizing?—A. I think they did, but it is a matter that has passed from my recollection now.

Q. Do you suppose that had the *Louisiana* been fitted with ballast tanks that might have been manipulated at the convenience for the ship's loading and discharge, that it would have avoided that accident?—A. I think it would have helped.

The SECRETARY. I read for the record at this time a letter; the original is in the hands of Mr. Thurman. I will read the copy.

Mr. WESTCOTT. The copy was made by Mr. Nichols. I do not think it has been verified or read over. It is presumably all right; there might be some slip in it.

(Secretary Redfield here read the above-mentioned letter as follows:)

CHICAGO, ILL., July 25, 1915.

UNITED STATES LOCAL INSPECTORS, Chicago, Ill.

GENTLEMEN: I hereby beg to report the accident on steamer *Eastland* morning of July 24 while taking on passengers at Clark Street Bridge in this city.

We were taking on passengers about 6.25 or 6.30 a. m. The ballast tanks had all been pumped out before any passengers came on board. This had been done every morning in this port, and as the passengers came on July 24 morning the ship started to list a little to starboard side; about 6.43 a. m. water was run in No. 2 port tank; about two or three minutes then the valves were shut off, as the ship was about on even keel; at 6.53 a. m. the ship started to list a little to port; valve to No. 2 starboard tank and the sea cock were opened for about four or five minutes, and she was on about even keel again. The passengers were coming on board fast, and from the facts that she started to get a port list the passengers must nearly all have gone to the upper decks toward the port side. About 7.05 a. m. the main engines were started to warm them up; the starboard engine, which was nearest to the dock, was worked astern, and the port engine was worked ahead. The ship remained with a little port list to 7.16 a. m., when No. 2 and No. 3 tank valves on the starboard side were opened, and the sea cock, located on the port side, was opened. At 7.17 a. m. I went in the top engine room on the starboard side, when Mr. R. Davis came and asked me if we were to straighten the ship up. I said we had the valves on tanks No. 2 and No. 3, starboard side, opened, and I asked Mr. Davis to see the first mate and see to it that the ship did not hang on the dock. The ship had the same list to port as she had at 7.16 a. m. At 7.18 a. m. she straightened up some and remained with a little list to port to about 7.20 a. m. We stopped both engines and kept the water going in the starboard tanks No. 2 and No. 3 all the time. At 7.23 a. m. she listed to port quite heavy. I sent the first assistant engineer forward to tell the passengers to go over to the starboard side, and I told the passengers and the purser to have all the people on the main deck aft of the engine room to go over on the starboard side.

At 7.24 a. m. the captain rang "stand by." We answered at once. The ship straightened up some for a minute, still having a heavy list to port side. At 7.27 a. m. she listed over to port side more than ever, say about 25° or 30°. She stayed there for a minute, perhaps two minutes; then she started over, slow at first, and kept on going over faster, till she rested on the bottom with the port side, leaving the starboard side about 6 or 7 feet out of the water. I remained in the engine room all the time, and till about a minute or two, perhaps longer, after she rested on her port side, and did everything within my power at all times to hold the ship on even keel. Then I managed to reach the steering cable under the deck on the starboard side, and by standing on the air duct under deck starboard side reached the porthole, where the watchman, Mr. Brooks, pulled me through. None of the boilers or the main steam pipes let go as near as I could ascertain. After changing some dry clothing about 8.40 a. m., which I managed to get in my room on the starboard side by going through the porthole, the captain and both mates and myself and the first assistant engineer were placed under arrest by the chief of police.

Yours, truly,

JAMES ERICKSON,  
Chief Engineer Steamer *Eastland*.

The SECRETARY. Mr. Peck, I ask your opinion as an expert engineer, was the *Eastland* a safe vessel with her ballast tanks empty?

The WITNESS. With a load of passengers on?

Q. Yes.—A. I would not think so; not at the dock.

Q. Not at the dock?—A. Outside, I think, she would be all right.

Q. Would you say that if she had a load of passengers and her tanks were empty she would be safer in motion?—A. Yes, sir.

Q. At sea?—A. Yes, sir.

Q. Than she would be light at the dock, motionless?—A. That is my idea.

Q. Was the *Eastland*, in your judgment, a safe vessel for a passenger load with her ballast tanks full?—A. I think she was.

Q. How long a time do you regard it as requiring in active service to tell whether a vessel is a safe vessel or not?—A. I think I should be able to determine that in less than a year after she started running.

Q. Suppose you take from what you know to be the experience of men, careful men, upon the Lakes and add to it enough to satisfy what your judgment would call their competency, how long a time in active service should you think it ought to take to show whether a vessel was a safe vessel or not?—A. Well, if the ship started on her career in the spring, I think that it would be perfectly safe to make an assertion that she was a safe or unsafe vessel by the time the end of the year had come.

Q. Would you regard it as correct that a careful man might say that a vessel after 10 years' use to be perfectly satisfactory, unless some unexpected contingency occurred, that she was a safe vessel?—A. Why, most assuredly.

Q. And that notwithstanding the fact—this is a question—that notwithstanding the fact that she might be considered what is known as a cranky ship?—A. Yes, sir; if she had gone 10 years, even though she was called a cranky ship, and safely carried her load, she ought to be considered a safe ship.

Q. Now, then, I want to sum up a series of circumstances which I will try to state correctly. Let it be assumed that a vessel has had active service over 10 years; that she has been granted a passenger capacity of 3,000 passengers and has actually carried that capacity in service; that at the time when she carried 3,000 passengers she had in her 88 staterooms, which were later removed; that after these upper weights were thus removed her capacity was reduced to 2,500, and that she operated thereafter some years without accident; that afterwards when lying at the dock with a load of 2,500 passengers on board she overset in the way described by her chief engineer in the letter that was just read. I ask you whether under those circumstances it would be your judgment that some unusual condition other than the mere load of passengers must have been present to have occasioned the accident?—A. In my opinion some unusual condition existed.

Q. And that the unusual condition was something other than the load the vessel carried; is that so?—A. Yes, sir; something different from a load of passengers had to do with it.

Q. In other words, that having carried more passengers than this with safety, that the danger which now arose must have been due to some element not present when she carried the heavier loads?—A. Certainly.

Q. You say, "Certainly"?—A. Yes, sir.

Q. Can you, from your experience on the Lakes as a chief engineer familiar with handling ships with water ballast, say that the circumstances were such as would in your judgment cause what happened?—A. It is my opinion that the water ballast was not put in the right place, or there was not any put in at all; some mismanagement of the valves; perhaps something stopped up the sea cock that did not get water; but judging from the action of the boat continually listing

to the port, it is my opinion that the water went in on the port side instead of on the starboard side; helped to tip her over.

Q. Mr. Pool asks me to ask you, Mr. Peck, whether, if the vessel were grounded, there would be a tendency to foul the sea cock?—A. If she was grounded to any extent sufficient to foul the sea cock I do not think she would roll over, because she would have—the sea cock is pretty well up on the side; that is, on the bottom; she has considerable dead rise; necessarily she would not have been on the ground to a great extent to get any dirt or mud in the sea cock to stop it up. I do not think the ship was grounded there; I think there was plenty of water underneath her.

Mr. SULLIVAN. Mr. Peck, you are now connected with the Great Lakes Dredging Co. of this city?

A. Yes, sir.

Q. You have been aboard this boat since she went over?—A. Yes, sir.

Q. Taking up the question of the weight of the passengers, did you see the dead children and dead women that were taken off this boat?—A. I saw a number of the passengers that were recovered from the hull and river; no children.

Q. Did any of those weigh anywhere near 160 pounds?—A. No.

Q. In fact, the average was nearer to 100 than 160?—A. One hundred and sixty pounds was Mr. Redfield's proposition, not mine; in making calculations on passengers I generally take them on an average of 150.

Q. Did you know what percentage of women and males were drowned on this boat?—A. I believe there were more women than men, but I saw more men's bodies recovered than I did women while I was there.

Q. Now, on the question of ballast, did you ever work on a boat that had stationary ballast?—A. Yes, sir.

Q. What kind; how was it secured in the boat?—A. Why, it was pig iron.

Q. Tied or roped in some way to hold it in one place?—A. Pig iron laid in the bottom.

Q. Laid in loose?—A. It did not roll around much; pig iron, when you stick it in—pig iron don't roll around much when you stick it in.

Q. They did not secure it in any way?—A. No; there was not anything done to secure it. The wooden floor on top of it would hold it in a way.

Q. Now, you saw that?—A. (Continuing.) If she turned bottom side up it would not stay there.

Q. (Continuing.) With the water ballast system that is the better of the two?—A. It is so considered by engineers.

Q. And the fact that this boat ran 10 years caused it to have a reputation for stability and safety unquestioned?

The SECRETARY. Excuse me. Let him answer the question.

The WITNESS. My statement, I believe, was that with water ballast she was a stable boat.

The SECRETARY. I want to say for the record that the statement made by Mr. Sullivan is not in the record, was not asked by me, and was not stated by the witness.

Mr. SULLIVAN. Let me put it in this way to keep well within the record. This vessel with the water-ballast system she had, assuming

she had an ordinary system, was in no danger if the tanks were filled?

A. If the water ballast was properly handled.

Q. Properly handled?—A. I think it was all right.

Q. So that by allowing a boat such as the *Eastland*, to carry passengers out of any port on these lakes, you had to rely in a large measure at least upon the water ballast?—A. And the human element in connection with it.

Q. I am just coming to that.

The SECRETARY. Your answer was, as I understood it: "And the human element in connection with it"?

A. Yes, sir.

Mr. SULLIVAN. You had to rely on that water ballast and in addition to that the character of the men that handled the vessel?—A. Exactly.

Q. And if these men were incompetent, then it did not make any difference how the boat was ballasted or what kind of a ballast system you had, did it?—A. If you put incompetent men in charge there is sure to be trouble sometime or other.

Q. Whose fault is it if incompetent men are in charge?—A. Well, that would be the fault of the people who gave those men licenses; it would be the fault of the people who hired them.

Q. Wouldn't it be the fault also of the people into whose district they ran in and out?—A. I could not say so. The man who examined the men and gave them the licenses, would be the man who might be called liable for that.

Q. We will assume that the board of inspectors of whatever district we are in examined Harry Pedersen and Joseph Erickson; Pedersen is licensed as a captain and among his qualifications was the fact that for several years he was the mate of a freight boat; among Erickson's qualifications we have several years that he was second or third assistant engineer on a grain boat, they examined him and gave him a license to run a vessel. Is there no way under your rules here that limits those same men to a captaincy and chief engineership on the same character of boat to her, that they had liberty to go on the best passenger steamers on the lake with that license?—A. The rules permit the inspectors to grant to the men any kind of license they find him qualified for.

Q. But is the license you gave him—take this case of these two men—does it authorize them to take or have charge of a passenger boat carrying probably the greatest number of people of any boat on the lake?

The SECRETARY. Mr. Sullivan, you have that wrong, it is issued by the inspector and the license contains the service for which they are qualified, they can limit it to a tug boat or a boat of the line.

Mr. SULLIVAN. Why did they not do it in this case? Or were they satisfied that these two men were competent under their licenses to handle a big passenger boat?

The SECRETARY. That would depend, I imagine, upon the the result of their examination papers.

The WITNESS. Yes, sir; I should say so. Mr. Sullivan, I do not know either one of the gentlemen, either Capt. Pedersen or the engineer, and I do not know where they got their licenses, but wherever they got them there will be the examination on file which shows

what their qualifications are; it will also show their experience—that they qualified for examination.

Q. What I am trying to get at is, Is that system right when it permits a man who is promoted, say, from first mate to a captain, that it does not limit him to some boat such as the kind he has been used to working in, say, a freight boat? Suppose, in other words, a man never worked on a passenger boat in his life; that he got a license by the terms of which he could under your rules take a position as master on a passenger boat.

The SECRETARY. You are supposing a thing, Mr. Sullivan, very much like supposing that the sun suddenly turned green, a state of affairs which does not exist. I would suggest that your questions, which are highly proper, and concerning which there is no objection in the world to having them in the record, should be addressed to some of the officers who are in the service and are able to answer.

Mr. SULLIVAN. Mr. Peck, whom I have known a great many years, was in the service here, and was put on as an expert, I assume.

The SECRETARY. In part, yes. Go on. It was in the interest of saving time.

The WITNESS. Mr. Sullivan, I do not see that it makes any difference whether a man is going to be a captain of a passenger ship or a captain of a freight ship, if he has had the necessary experience in his duties as a mate and has worked up from the lowest rung of the ladder, from wheelman, or, perhaps, watchman, and qualified himself by his experience of years on a freight ship or passenger ship; I do not see that it makes a particle of difference; I think he is just as well qualified.

Mr. SULLIVAN. You think an engineer or captain does not have to exercise any greater judgment whether running an ore boat or a heavily laden passenger boat?

A. I think the man of the ore boat ought to exercise greater judgment than the captain of a passenger boat; at times his ship is nearer the bottom than the passenger ship is. A ship runs down this lake, for instance, at right angles to the course of most of our passenger ships and might sink one of them to the bottom quicker than a wink if he struck it with a load of ore. I think he has got to exercise exceedingly good judgment for both.

Q. That is your answer to that question?—A. I believe a man is just as well qualified to be the master of a passenger ship if his experience has been on a freight ship and vice versa.

Q. If these men did not fill the tanks on that steamer last Saturday morning—this chief engineer, would you call him a competent man?—A. I should say that he was highly incompetent.

Q. How do you explain his getting a license; if he was incompetent last Saturday he was incompetent the day he got his license, wasn't he?

The SECRETARY. Mr. Sullivan, I would like to make a suggestion. I want to offer this suggestion, if you care to follow it, that you fail to distinguish between incompetency on the one hand and inexcusable negligence on the other.

The WITNESS. That would be the only way to it.

Mr. SULLIVAN. Would you say the man who failed to fill the tanks of a boat like the *Eastland* last Saturday, with 2,500 men on board, was inexcusably negligent or incompetent?

The WITNESS. Mr. Sullivan, I do not know whether the tanks were filled or not; I say if they were not filled that was probably the cause of the tipping over. Mr. Erickson may have thought those tanks were being filled; he probably opened the valves or caused the valves to be opened by an assistant or subordinate or perhaps an oiler, and it is quite possible that the subordinate may have opened the wrong valve, or there may have been some obstruction to letting the water flow in. It seems to me if I had been the chief engineer and the ship I noticed was continually listing to port, after I had been trying to let the water in on the starboard side, I should have investigated and found out whether there was any water going in on the starboard side, and I should have had those tanks sounded. I would have the tanks on either side sounded to see if it was going there where I wanted it to.

Q. When a boat is allowed to navigate the Lakes and carry passengers—should there be any doubt about the machinery going right or wrong—isn't it the duty of the inspectors, in other words, to see that she has shipped the proper kind of machinery, so that if the water is expected to go in on the right side of the ship it won't go in on the left-hand side?

Mr. SULLIVAN. I have been up against that game. When you open the valve, there is a pressure on the valve and the water goes into the manifold, it runs to the top of the valve and it pulls open from the bottom, and the water goes out and it lists, or the valve may not have been open.

Q. The engineer says that he had five tanks on each side of the boat, he used Nos. 2 and 3 on the port and starboard sides, is that good seamanship?—A. If his No. 3 tank—

Q. The best seamanship with 2,500 people on board?—A. His No. 3 tank probably held nine-tenths of the water that he shipped. It was in the largest part of the bottom. The No. 2 and No. 1 and No. 5 were in the small part of the ship forward and aft.

Q. Would not safety require in putting in ballast tanks that you would so arrange the machinery that you can take in ballast and put out ballast simultaneously?—A. I do not know but what the *Eastland* was arranged that way.

Q. The engineer says not.

The SECRETARY. There will be more testimony than this.

The WITNESS. I think you will find there will be testimony that she was arranged that way. I am not able to state, because as I say it was nine or ten years ago since I had anything to do with that ship.

Q. Isn't it within the province of the United States inspectors to have the safest kind of machinery or safe machinery put into these boats in reference to ballast?—A. Most assuredly.

Q. Is it safe machinery when you can not transfer ballast quickly?—A. I did not say that she did not or could not transfer ballast quickly; that is my impression that she could transfer her ballast very rapidly. I have seen her when she was standing at the dock or bridge; I have seen her list and straighten up very rapidly.

Q. How do you explain this failure to get on an even keel?—A. I explained her ballast was put in the wrong place, that is my theory.

The SECRETARY. Let me ask—if you don't mind, when you come to it—ask the witness whose duty it was to give orders to use the ballast.

Mr. SULLIVAN. Will you answer that question, Mr. Peck?

The WITNESS. I presume it was the captain's duty to give orders, if any orders were necessary. I do not think in this case orders were necessary, I think the engineers were well enough acquainted with the character of this ship to know when to put in and take out ballast.

Q. You say that when the 88 staterooms were taken off this boat, do you say the carrying-passenger capacity was decreased or increased?—A. That decreased the carrying capacity.

Q. At the request of the owners?—A. No.

Q. Why?—A. For this reason. You heard the letter read which this gentlemen named Smith wrote to the department. The supervising inspector came over here to look over this ship and remeasure them and see what their deck space was, so that if anything should ever happen to any ship at any time they would be in a position to justify themselves for the stand they had taken in giving them the number of passengers.

Q. So you reduced her from 3,000 to 2,500?—A. We reduced all the ships at that time, not only the *Eastland* but the *City of South Haven* and the *Roosevelt*.

Q. The *Eastland* was further reduced to 2,500?—A. I could not say as to that.

Q. It was not in your time?—A. It was not in my time.

Q. Sometimes the companies ask that the carrying capacity should be reduced, do they not?—A. Never to my knowledge.

Q. How do you account for the fact that the carrying capacity in Cleveland of this same boat was limited to 563?

The SECRETARY. The supervising inspector of Cleveland is present and will answer that question himself.

Mr. SULLIVAN. Do you know why that was, Mr. Peck?

The WITNESS. I do not know why, and I do not know that that was the case.

Q. Do the duties of inspectors require them to keep in touch with the ballast tanks in the various boats to see how they are working?—A. The duties of the inspector, everything in the shape of apparatus on a ship, pumps as well as all the other machinery.

Q. What is the size of the tanks ordinarily in passenger boats on the lake?—A. Those that were constructed about the time the *Eastland*, about 4 feet deep. Those that were constructed later I think they made somewhat deeper.

Q. You say that, in your opinion as an expert, that the turning over of this boat was due to a failure to have proper ballast—the chief factor?—A. The failure to have it or the improper distribution of it.

Q. You found your opinion solely on the ballast?—A. I think that was the only reason she tipped over.

Q. Do you know when this boat was last examined by the inspectors to ascertain the water-ballast system?—A. No; I have not been connected with the service for nearly three years.

Q. Would a boat that takes in water by what you call the sea cock—the sea cock is on the left-hand side of the boat—takes in water only from that point, is that a safely constructed boat, as far as ballast is concerned?—A. It depends upon the size of the sea cock; there may have been a 6-inch valve or a 12-inch valve.

Q. Is it safer to have a separate intake or sea cock on each side, the starboard as well as the port tank?—A. Let me say this, that when the *Eastland* was built, 12 years ago, that was the common mode of construction for the ballast arrangement for all ships, freight and passenger. Since that time there have been some different arrangements; there has been arrangements made so that ballast can be taken in on either side or discharged from either side at the same time. The manifold is divided in the center with a valve that closes up and divides it in half, the sea cock on each side, or made on each side, connected with this manifold and permits of its being taken from one side or the other.

Q. In other words, you can transfer from the port to the starboard?—A. You can take it out of the port and put it on the starboard or you can take it out of the starboard and put it into port.

Q. Do you think the safety element would have required the installation of that system in a boat, even though she was 10 years old?—A. Well, she would get along all right the way she was or had been for a good many years.

Q. Do you know what the reputation of this boat was for instability and crankiness?—A. Well, sir, I say I never saw her list while I was on her; I have seen her list when I was off of her, but I never saw her list when I was on her but once. I think she had the reputation of being cranky.

Q. A boat with that reputation should require a great deal of watching, should it not?—A. She required great watchfulness and care in the manipulation of her water ballast.

Q. Have you got in your records the total deck space of the *Eastland*, of the various decks?—A. In company with the assistant boiler inspector, in 1906, I measured the deck space of the *Eastland* and all of the passenger and excursion steamers in this port, and at that time had a record of it. A sketch of the decks showed the space measured. Since I have left the service I have not got that record, and I really can not tell what I did with it; I do not know whether I left it in the office when I left there, or what did become of it. I am sure there is such a record in the office, or should be.

Q. Can you recall about what your total measurements were?—A. To the best of my recollections we allowed 9 square feet for every person.

Mr. SULLIVAN. Nine square feet to the person?

A. I figure that she had capacity for between 1,800 and 1,900 persons.

Q. Capacity for what?—A. Between 1,800 and 1,900. Now, it is a matter of multiplication; you can see what deck space she had.

Q. Now, you say that in coming into port it is good seamanship to discharge all the water in the tanks of a steamer like the *Eastland*?—A. I don't see any necessity for it in Chicago. There is plenty of water in the river.

Q. Assuming that it is good seamanship; it is bad seamanship, isn't it, to take on 2,500 people without having your tanks filled proportionately?—A. Yes; I think it was.

Q. Do you know whether the discharging of all the water from the tanks, coming in and going out of the Chicago River, is due solely to the desire to save coal?—A. I don't think so. It takes a certain amount of coal to pump that ballast out.

Q. This *Louisiana* that you spoke of upsetting, do you know whether that was due to the character of the ballast or to some other cause?—A. I answered that, that I have no recollection of what the causes were stated to be. The local inspector in New Orleans was a friend of mine, and on a visit here in Chicago one time he told me about the thing, knowing that I was formerly in the ship, and thought I might be interested in knowing that that was the end of it.

Secretary REDFIELD. Is that all?

Mr. SULLIVAN. That is all.

Secretary REDFIELD. Mr. Peck, have you never heard of a vessel sinking because the seacock was inadvertently left open?

A. Yes, sir.

Q. There have been more than one such case within your knowledge?—A. Lots of them.

Q. Lots of them?—A. Yes, sir.

Q. Now, when you multiply seacocks you multiply the liability of accidents of that character, do you not?—A. Yes, sir.

Q. For instead of having one seacock you have two, you have got just twice as great a chance of accident of that character?—A. The more holes there are in the ship's bottom of that nature, the more chance there is for her to be sunk.

Q. If I overstated to you the weight of the passengers as 160 pounds each, which I purposely did, is it not the fact that by so much as they were lighter than that the vessel was safer?—A. Certainly.

Q. So that if the average weight was about 100 pounds per passenger, instead of having to carry a load of 200 tons she had to carry a load of about 125 tons, isn't that so?—A. Yes; it would be that much lower.

Q. And therefore it ought to be much more stable?—A. Therefore it ought to be that much more stable.

Q. Isn't it the fact that the general practice, so far as your knowledge goes, of the United States Navy is to use water ballast on all new ships?—A. All the ships that are constructed nowadays are built with water ballast.

Q. All the ships that are constructed nowadays are built with water ballast?—A. I haven't heard of any being built any other way.

Q. Yes. And isn't it a fact that a battleship is built not only for stability but for steadiness as a gun platform?—A. Most certainly.

Q. That is so, isn't it?—A. Yes, sir.

Q. And that they use water ballast for that express purpose?—A. I understand so.

Q. Yes; and that all the great liners that carry passengers across the Atlantic Ocean are water ballasted?—A. Yes, sir.

Q. And that upon the use of that water ballast judiciously and well by the officers of the vessels the safety of the ship not only does but must depend; isn't that so?—A. That is so. They burn an awful lot of coal in going across the ocean, and they must replace that weight with something for stability, and they use water.

Q. Isn't it a fact that the statements you have just made in response to my questions are the common knowledge of every seagoing man?—A. Yes; I think that is the case.

Q. Is there anything new about that, Mr. Peck?—A. Nothing new.

Q. Very widely known to be so, are they not?—A. Ships have been known to carry water ballast for 30 years, to my knowledge.

Q. Yes; and the best ships that are now constructed are constructed on that principle?—A. Yes, sir.

Q. And can you imagine a naval architect so much behind date to-day as to design a ship, a modern ship, without water ballast for all the ordinary uses of life?—A. I haven't known of any ships being built that way. There was a passenger ship built here in Chicago a number of years ago, a small steamer, not very large. She was a freight and passenger steamer combined, and that might account for this. But she had no water-ballast tanks. But she is the only one that I know of around here. She was a freight and passenger combined, however. She carried freight, which, of course, takes the place of water ballast.

Q. Do you know who licensed these two officers?—A. I don't know.

Q. Do you know what examination they had to pass?—A. Well, I can imagine what each one had to pass if it is anything like what I used to submit the candidates to, in my office.

Q. Isn't the only record that is valuable upon that matter the official record of the examination itself?—A. Yes, sir.

Q. Isn't anything else a pure matter of surmise?—A. Entirely so.

Q. Yes. About which nobody knows anything whatever, and can know nothing whatever, isn't that so?—A. Certainly.

Q. And all deductions based upon anything else but the actual documents are wind, are they not?—A. I should say so.

Mr. SULLIVAN. May I ask one more question, please?

Secretary REDFIELD. Certainly.

Mr. SULLIVAN. The question of wind doesn't enter so much in the case, does it, Mr. Peck, when you take into consideration that more than a thousand women and children were killed by the mishandling of this boat?

The WITNESS. Well, Mr. Sullivan, I think I have said what I thought about that thing pretty plainly.

Mr. SULLIVAN. Very well.

Secretary REDFIELD. I understood you, Mr. Peck, to say that it was water.

The WITNESS. I say that the water was not in the right place, or it was put in the wrong way.

Mr. SULLIVAN. It was either wind or water.

The WITNESS. Now, it is possible when this hull is raised and the thing looked into that the man may be found entirely innocent of doing anything wrong. You may find the water there, and then my opinion will not be worth anything. And you may not find the water there, and you may find why the water isn't in, and it may be something entirely beyond the man's control, and then he would be a competent man, wouldn't he?

Secretary REDFIELD. Mr. Peck, the question of wind that I addressed to you was a question as to wind in this room, and not as to wind anywhere else. The difficulty, as I understand it from you, was the absence of water where it was needed.

Mr. SULLIVAN. We both understood each other about that wind, and the water, too. May I ask one more question?

Secretary REDFIELD. Certainly.

Mr. SULLIVAN. Doesn't the law place the duty upon these boards to see that a crew of deck hands, oilers, patrol men, etc., competent to perform their duties, should also be employed?

The WITNESS. A duty placed on whom, Mr. Sullivan?

Q. On the inspectors, to see that a competent crew outside of the licensed officers must also be provided?—A. The law states that the inspectors shall nominate the crew or name the crew necessary to navigate the ship for the business in which she is engaged, and there are a certain number of that crew who must be licensed—the captain and the engineers and mates—and, of course, it is up to some inspector to see that those men are qualified by reason of their examination. I don't think that the law calls upon them to see that there is a competent oiler, or a competent water tender, or a competent fireman, or a competent deckhand, or a competent waiter, or a competent cook on board.

Q. So that it is up to the captain and engineer to put aboard that boat, except in a licensed position, if they see fit, 50 or 60 men who were never on a boat at all before in their lives to wield a broom and shovel coal, etc.?—A. I think that the owners of the ship, in connection with the captain and the engineer, should see that they have competent men.

Q. But it is left entirely to their discretion, isn't it?—A. The number of men is not. They are required to have a certain number of men in each station.

Q. Getting back to the weight of such passengers. The lower the weight the less danger there would be in case the passengers would rush to one side or throng to one particular side of the boat; isn't that true?—A. It would be the way that I look at it.

Mr. FOUKE. May I ask a question?

Secretary REDFIELD. Yes.

Mr. FOUKE. In regard to the construction of this boat, Mr. Peck, that Mr. Sullivan speaks of, is there a board that passes on the construction of boats that ply the Lakes and the ocean, with regard to their safety and seaworthiness before they are inspected by the Steamboat-Inspection Service?

A. Is there a plan, you say?

Q. Yes; is there a general inspection?

Secretary REDFIELD. A board.

Mr. FOUKE. A naval board or some board of architects, naval architects, that inspect?

A. Well, I believe that nearly all the ships that are built—in fact, all the passenger ships are inspected by the Bureau of Veritas or some other bureau of shipbuilding in this country. My recollection is that the *Eastland* had a certificate from the Bureau of Veritas hanging up in her cabin, right alongside of her certificate of inspection.

Q. So that the seaworthiness of the boat is not left entirely to the Steamboat-Inspection Service?—A. Certainly not. That being the case—

Secretary REDFIELD. May I follow that up, Mr. Fouke, a little bit.

Mr. FOUKE. Yes; I would like to know about that.

Secretary REDFIELD. Mr. Peck, isn't it the fact that before the Steamboat Inspection Service gets at a vessel she has had at least two scientific examinations by trained men, the first being that of

the architect that designed her, the builder that constructed her, and the result of her own trial trip?—A. Yes.

Q. The second being that of one of the four great bureaus that classify vessels, namely, Lloyd's, the Bureau Veritas, the American Bureau of Shipping, or the Great Lakes Register?—A. Yes, sir.

Q. Whose surveyors, trained men for the purpose, examine that vessel critically and give the certificate on which alone she can obtain insurance?—A. Yes, sir.

Q. Isn't that the fact?—A. That is the fact.

Q. So that every vessel before the first examination, after her completion, is made, has already two highly trained, technical examinations made of her?—A. Yes, sir.

Q. So that if it is to be assumed that the *Eastland* was faulty in design, and as such was approved by the Steamboat Inspection Service, then it must follow as a matter, of course, that both the naval architect and builder, and those who observed her on her trial trip, and the surveyor of the Great Lakes Register, in which she was classified, must have preceded that mistake by one like it, isn't that so?—A. It would occur that way to me.

Q. Now, as a matter of fact this vessel was classified in the Great Lakes Register, was she not?—A. Either in that or the Bureau of Veritas.

Q. And that meant that she had been carefully surveyed by the surveyor of that service, isn't that so?—A. Yes, sir.

Q. Do you know of any law which authorizes the Government to make that kind of a survey of a ship?—A. 4417 is the only statute that I have in mind that would authorize the inspectors to conduct such an examination if they saw fit.

Secretary REDFIELD. Capt. Wescott, have you got that?

Capt. WESCOTT. I have got that.

Mr. FOUKE. May I ask one more question?

Secretary REDFIELD. Yes, Mr. Fouke.

Mr. FOUKE. Is it customary, Mr. Peck, to release the water ballast when the boat comes into the port?

A. Why, it is in some places. Now, it depends on the draft of water that the ship has to get into. It might be at South Haven that the bed of the river would be so shoal that she would strike the bottom, and they would have to pump the ballast out to get her in over the bar.

Q. Now, if that ballast was pumped out of the *Eastland*, and she didn't have enough water ballast, would it be the duty of the captain or the ship's officers to see that that boat had sufficient ballast before it left port, and would it require any unusual expert knowledge to know whether the boat had enough ballast or not?—A. It is a very simple matter to ascertain what amount of ballast is in one of those boats. There are sounding pipes that go from the tank up to the main deck, and it is a matter of dropping a rod down into that pipe, with a line attached to it, and you can see just how many inches of water you have there.

Q. Into the ballast?—A. Into the ballast tank. Every tank is provided with those sounding pipes.

Q. It doesn't require any great expert knowledge, does it?—A. Why, no. Any man that knows how to drop a rod down a pipe could do that.

Q. So it would not have been very difficult to ascertain whether it had enough ballast, would it?—A. A very simple matter to find it out.

Q. Sir?—A. A very simple matter to find it out. The thing that has surprised me, and I haven't heard about it in the *Eastland* affair, was whether water was coming into the tanks, or whether anybody knows that there was or not.

Q. So it would have been the captain's duty or the ship's officers' duty in charge of that detail of work to see that the ship had sufficient ballast?—A. The way that thing was always conducted on ships where I rode around as an engineer, the engineer opened the valves that let the water into the tanks, and the captain, or some of his subordinates had those tanks sounded, and they would report to the engineer what amount of water there was, and there was a blackboard where they would mark it down—so many inches in the tank of water—so the engineer could see it.

Q. The steamboat inspector then would have no supervision over that immediately?—A. Oh, no.

Q. That boat leaving, it would not be part of his business to see whether the tanks would be properly ballasted or not, would it—or wouldn't it?—A. No; that provision of that blackboard, and that rod and line to sound the tanks was just as common as the necessity for a clock in the kitchen so the cook would know when to get breakfast.

Q. So it was a detail for the ship's officers to follow; that is, to see whether they had enough ballast as it was to see that they had enough water in the boilers—just as necessary?—A. Exactly.

Mr. SULLIVAN. May I ask a question, Secretary Redfield?

Secretary REDFIELD. Yes.

Mr. SULLIVAN. With reference to inspection of boats, Captain, do your boards, or any of them, go into the question of stability, under your rules?

The WITNESS. The law—

Q. Yes or no, please?—A. I never saw it done.

Mr. SULLIVAN. You never saw it done. That is all.

Secretary REDFIELD. Quite right.

Q. Mr. Peck, you are not able to speak of the present conditions in the service, are you?—A. No.

Secretary REDFIELD. Any further questions of Mr. Peck? If not, Mr. Peck, you will be excused. We may ask the privilege of recalling you later, but we are very much obliged to you, sir.

(Witness excused.)

CHARLES H. WESTCOTT, recalled as a witness by the board, testified as follows:

Examination by Secretary REDFIELD:

Q. Capt. Wescott, do you know of any law which empowers you to survey vessels to determine their metacentric height?—A. No, sir; I do not.

Q. Do you know of any officer provided by law, or authorized by law in the Government service for the purpose of determining the metacentric height of vessels?—A. I do not, sir.

Q. If you were to put an inspector at the work of determining the metacentric height of vessels, would you not be breaking the law?—A. I wouldn't know under what section to get my authority.

Q. You wouldn't know where to find authority?—A. No, sir; I would be doing something without authority.

Q. Is it not your understanding of the law of the Government service that it is only able to do that for which it has specific authority?—A. The steamboat inspectors work clearly and purely under the statutes, and under no other authority.

Q. And that, in so far as they may pass beyond the authorized work into that which, however necessary, is not authorized, they commit a breach of the law?—A. I think so; yes, sir; and would be held responsible for it.

Q. Is it not a fact that these three processes are required in order to undertake work under the Government; first, an authorization that the work shall be done; second, an authorization that a man shall be employed to do that specific work; and third, an appropriation for that specific work? Isn't that the fact?—A. That is true, sir.

Q. I call your attention to this placard and ask you if you have ever seen them before.—A. Yes, sir.

Q. What is that placard?—A. That is a placard issued by the department for the local inspectors, to see that the officers of the ships have one to put up in the engine room and one in the pilot house.

Q. And were they furnished to your office for the purpose?—A. So far as I know they have been furnished in every office. I have every reason to believe that they have been, sir.

Q. Do you know whether one of those placards was posted in the engine room and the pilot house of the *Eastland*?—A. I do not, sir.

Secretary REDFIELD. I think we will excuse you for the moment, and ask Capt. Nelson to come to the stand.

Mr. SULLIVAN. Is this witness to be recalled, Mr. Secretary?

Secretary REDFIELD. Oh, yes; we will give you every opportunity to examine him. Mr. Sullivan, let me say for the record, that if it should be desired later at any time to ask any further questions of any witness, even though he may have been apparently finally excused, he will be recalled for that purpose.

Mr. SULLIVAN. Thank you, sir.

(Witness excused.)

NILS B. NELSON, called as a witness by the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you kindly give, Capt. Nelson, your full name and address and occupation to the stenographer?—A. Nils B. Nelson; supervising inspector ninth district; Cleveland, Ohio.

Q. Capt. Nelson, what has been your experience in seafaring matters?—A. I went to sea when I was 14 years old.

Q. Fourteen?—A. Yes.

Q. Go on; tell us the story.—A. I sailed on salt water till I was past 17, and I came up in the Great Lakes and sailed up till 1905, when I was appointed local inspector of hulls.

Q. Where were you appointed local inspector of hulls?—A. At Cleveland.

Q. How did you happen to get the job, Captain?—A. Civil-service examination.

Q. You took the civil-service examination?—A. Yes, sir.

Q. Where did you take it?—A. At Cleveland.

Q. And how long did you serve as local inspector of hulls?—A. From June, 1905, till January, 1912.

Q. And what happened to you then?—A. I was appointed supervising inspector.

Q. By whom?—A. By Taft.

Q. By President Taft. And do you know why?—A. Why, the supervising inspector died, and I was promoted to that.

Q. Did you apply for the job?—A. No, sir.

Q. You were appointed without your request, were you?—A. Yes, sir.

Q. By President Taft?—A. Yes. I applied in a way—I sent in an application.

Q. You sent in an application?—A. The usual form.

Q. Yes, the usual form. Now, you have been supervising inspector of—what district is that?—A. Ninth.

Q. And what area do you cover?—A. From Toledo, Ohio, to Burlington, Vt.

Q. Captain, do you ever run short of men in your district?—A. I don't know what you mean.

Q. Tell the whole story, Captain; tell the whole of it. Don't keep anything back.—A. Run short of men?

Q. Yes.—A. Several times.

Q. Now, isn't it a fact—let us get the record straight—that in order to keep up with your work in the lake ports men are called from New York, Philadelphia, Baltimore, and Norfolk?—A. Not Baltimore.

Q. Well, they have been called from Baltimore, haven't they?—A. Philadelphia—yes; that is right.

Q. They have been called from those cities for what reason?—A. To help us out as inspectors.

Q. Is it a fact that your men have an eight-hour day, Captain?—A. No, sir.

Q. How long do they work?—A. As many hours as we can put in.

Q. Isn't it the fact that they sometimes work from before 7 o'clock in the morning until after 10 o'clock at night continuously?—A. Well, we often take the train at half past 7 in the morning.

Q. Isn't it a fact that at your request there have been more than one request for an additional force for your district?—A. Yes, sir.

Q. That the estimates of the department have called upon Congress to supply you a larger force; isn't that so?—A. Yes, sir.

Q. And have you received the men?—A. No, sir. There have been men detailed at various times for a short time.

Q. From other districts?—A. From other districts; yes, sir.

Q. And do you happen to know whether the situation became such that I told the New York Maritime Association that, either for lack of men or because of overworked men, it was certain that something serious would happen unless we were provided the added men needed?—A. I recall reading it.

Q. Now, Capt. Nelson, the *Eastland* was located within your jurisdiction for some time, was she not?—A. 1907, 1908, 1909, 1910, 1911,

1912, and in the spring of 1913. Mr. Secretary, this statement is subject to the records I have with me, of course.

Q. You have them with you?—A. Yes, sir.

Q. Those records are put in the custody of the Federal district attorney, but anybody authorized may have access to them. Did you ever see the *Eastland* yourself?—A. A number of times.

Q. How many?—A. Oh, I couldn't tell.

Q. Well, was it twice, three times, or thirty times?—A. Oh, at least 40 times.

Q. How many?—A. About 40 or 45, the first season she was there.

Q. Now, Captain, has anybody discussed the subject of what you should testify with you, Captain?—A. No, sir.

Q. Have I had the privilege of meeting you before since you entered the city?—A. Not since I came here; no, sir.

Q. You see, there is a little atmosphere of doubt, you know. I wish you would tell my friend Mr. Sullivan, yonder, and the local inspectors from Milwaukee here, and this distinguished group of newspaper gentlemen all that you know about the *Eastland*, good, bad, and indifferent; tell it all.—A. Well, as I stated before, this is subject to correction from my records.

Q. Have you any other records which relate to the *Eastland*?—A. Yes; lots of them.

Q. Lots of them. Have you them here?—A. Up at the inspector's office.

Q. Well, of what nature?—A. Of inspection and reinspections, the number of passengers carried, the number of excursion permits issued, the number of passengers allowed.

Q. Would you be able from those records to give us a fairly complete history of how she was dealt with in the service?—A. I think I could give it without the records, I am so familiar with the ship.

Q. Very good, then you may state the case as you know it, with the understanding that you are speaking from memory, and subject to correction by the actual records which you have. Now I am going to ask you to be very specific, to keep nothing back, tell all you know, and tell it as plainly as you can, so that nobody misunderstands you. And you will have all day to-morrow, if you need it, to tell it in.—A: In 1907, I believe, in the month of May, the *Eastland* arrived at Cleveland, Ohio. She was inspected by the Grand Haven Board, and had a certificate, I believe, of five hundred and some passengers and an excursion permit which I have no record of, as we did not take up the permits and certificates in those days like we do now, but to the best of my belief, a total of 2,700 or 2,800 passengers, that is with the excursion permit and the total number of passengers.

The first time I went aboard the *Eastland* she was lying up at No. 2 dry dock, and there were two inspectors detailed from Milwaukee—that is, one from Milwaukee and one from Detroit. That is the time in 1907 when they shifted the assistant inspector from one district to another, and I sent Mr. Swift and Mr. Miller up to the dry dock to give her a little reinspection.

Mr. Swift presented his book, and in that book is a memorandum of three thousand and some life preservers under a certificate of inspection, but he said he could only find two thousand and some hundred, and I went up there and found a number of life preservers stowed away in some little locker that Swift had overlooked. And

I believe on the 4th day of June the steamer *Eastland* gave an excursion to the newsboys; that is the first crowd of passengers she took out of Cleveland, and naturally I wanted to watch her.

Q. Why naturally?—A. The first time she had been in the district, and I wanted to see for myself.

Q. Why, that implied that you were trying to look after the vessel, Captain?—A. Well, that is not any self praise, by any means.

Q. No; I am simply trying to get your habits. I am not disposed to assume it was bad, but was it your custom to go, when new vessels came into your district, and look at them?—A. Yes, sir.

Q. Was it your custom?—A. Yes, sir.

Q. And your duty also?—A. Yes; my duty also.

Q. Well, did the law require you to do that?—A. If I had time, the law requires us to supervise it.

Q. Anyhow, you did it?—A. I did it.

Q. What happened?—A. They gave an excursion to newsboys, and I think my record shows that I tallied two thousand three hundred and seventy-five or eighty or ninety newsboys. Now, I will qualify that by saying that may be a couple of hundred got away from me, because they crowded on very quick and the newsboys hadn't been on board very long before they climbed all on the upper deck; that is, not all of them but a good many of them, and I wanted to see whether the boat listed or not. I had heard so much about the boat—the *Eastland*—being cranky, and I was satisfied she could carry the load.

Q. You became satisfied she could carry the load?—A. Yes, sir.

Q. Now, let us see if we get those facts correctly. These 2,600—A. No; two thousand three hundred something.

Q. Two thousand three hundred something?—A. This is all subject to my record.

Q. Yes; that is understood. These 2,300—if the record is questioned we will produce the documents—these 2,300 or so newsboys, you say, all got up to the upper deck?—A. Most all of them.

Q. And you got up there?—A. No; I stayed on the dock and then on the bridge and watched her going out.

Q. And you say she didn't list with the boys?—A. She listed a little bit. Nothing very alarming.

Q. You say you became satisfied she could carry the load?—A. Perfectly satisfied; yes.

Q. How much water did she draw?—A. I didn't notice. I might have noticed it at the time but made no memorandum.

Q. What is her displacement—tonnage?—A. Why, I believe it is one thousand nine hundred something. I have forgotten. That is a matter of record in the book that you can easily find out.

Q. Well, what next did you do?—A. Why, then we tallied passengers from time to time on the steamer *Eastland*.

Q. Where did she run?—A. Between Cedar Point and Cleveland, just up from Sandusky, and gave moonlight excursions.

Q. Ever have any complaint of the *Eastland*?—A. Why, complaint in a way.

Q. What way?—A. There seemed to be stories circulated that the *Eastland* was a cranky boat.

Q. You say there seemed to be? Do you not mean that there were?—A. Why, different people would come up and say, "I rode on the *Eastland*, and is she safe?"

Q. You had people come and tell you that?—A. Yes; come and tell me that—ask us the question.

Q. Ask you the question? Did you ever have any definite complaint?—A. No definite complaint.

Q. Were you ever asked to make any special or unusual investigation into the *Eastland*?—A. No, sir.

Q. In what classification service was she registered?—A. Why, that I have no recollection of, whether it was the Bureau Veritas or Lloyd's.

Q. You think it was Lloyd's or the Bureau of Veritas? Now, as a matter of fact, is it common for vessels to change from one classification to another?—A. Why, it might have been the Great Lakes classification. I have forgotten.

Q. The Great Lakes classification service is centered in Cleveland, is it not?—A. Yes; centered in Cleveland.

Q. But, in any event, you know she had been classified?—A. I knew she had been classified.

Q. Then, what else about her?—A. Then, in 1908 we inspected her for the first time.

Q. That was the first year?—A. That was the first year; our first inspection.

Q. That was your annual inspection?—A. Our annual inspection.

Q. Now, I wish you would tell the gentlemen present what you mean when you say you inspected her. What did you do? Did you go on board in a dress suit and look about?—A. Why, the records will show what I did.

Q. What records do you mean?—A. The records that I have.

Q. Why, you keep a record of each inspection?—A. Yes, sir.

Q. And does that record show just what was done at each inspection?—A. It doesn't show all that was done. It shows the principal parts that was done.

Q. What form is that record in?—A. In a book form.

Q. How big a book?—A. I think it is 4½ by 7.

Q. A handbook?—A. A handbook.

Q. And is there a separate book of this kind for each inspection?—A. Each inspection; yes.

Q. And does the person that makes that inspection, after filling out that book, sign that book and file it?—A. Yes, sir.

Q. He does. So that you have an actual signed record of every inspection made by every officer of that boat?—A. Yes, sir.

Q. And you have them here?—A. Yes, sir. Mr. Secretary, I would like to qualify by stating that we had a lot of work to do that spring, and both I and the assistant hull inspector inspected that boat. We had to go down there and do things whenever we had time. I tested the hydrostatic pressure of the boilers; I measured up the bulkheads, made a memorandum of it, went through her water bottom.

Q. Did you go through the water bottom?—A. Yes.

Q. You found she had one, then, did you, Captain?—A. Yes, sir.

Q. And you went into it?—A. Yes.

Q. What did you do that for?—A. To satisfy myself that everything was all right.

Q. And you found it so?—A. Yes, sir.

Q. What was that water bottom used for?—A. Ballast.

Q. Is that an ordinary practice?—A. It is an ordinary practice on all boats except some of the paddle-wheel boats; they haven't got water ballast; some of the old types.

Q. Now, the big freighters that run out of your district to Duluth, are they water ballasted?—A. Yes, sir.

Q. These vessels that carry 10,000 to 11,000 tons of freight, are they water ballasted?—A. Some of them have water ballast for 10,000 and 11,000 tons.

Q. What is that?—A. Some of them have water ballast of 10,000 and 11,000 tons.

Q. You mean as much as that ballast?—A. Yes, sir.

Q. You mean there are vessels that carry 10,000 to 11,000 tons water ballast?—A. Yes, sir; side tanks.

Q. Side tanks?—A. Yes, sir.

Q. And that is a universal practice in your district, is it?—A. Yes. I don't believe a ship without a water ballast could handle it.

Q. So you examined the *Eastland* to see whether the water-ballast tanks were in good order?—A. Yes, sir.

Q. And for that purpose you went into her tanks yourself?—A. Yes, sir.

Q. And you found them so? A. Yes.

Q. Did you ever do that a second time?—A. No.

Q. Did you ever have anybody else do it?—A. Not that I know of.

Q. Now, the method that you have described of inspection, is that a personal affair of your own?—A. No, sir.

Q. And that is what happens in other districts?—A. Why, I suppose so; I don't know.

Q. But as far as you know, in working with those fellows—A. In as far as I know.

Q. —Working with your fellow supervisors, is that the rule of the service?—A. Yes, sir.

Q. Do you know, or do you not, whether this habit of keeping a record of every inspection in a separate book so that reference to it at any time can be made, whether that is usual in the service?—A. It is compulsory.

Q. It is compulsory, is it, indeed?—A. Yes.

Q. Who compels it?—A. The head of the bureau.

Q. The head of the service?—A. Yes.

Q. Now, is it a fact, then, Capt. Nelson, that I can take at random any vessel in your district, anywhere between Burlington, Vt., and Toledo, Ohio, any number of years back—10 or 12 or 15—and ask you to bring the record of inspection here and show us what was done, and who did it, and how it was done?—A. Yes, sir.

Q. You can produce all that, can you?—A. Yes, sir.

Q. Do you know whether that is the case in all the districts?—A. It is in all of mine.

Secretary REDFIELD. Now, Mr. Nockels, can you do that?

Mr. NOCKELS. Yes, sir.

Secretary REDFIELD. Capt. Carroll, can you do that?

Capt. CARROLL. Yes, sir.

Secretary REDFIELD. Capt. Westcott, can you do that?

Capt. WESTCOTT. That is done in my district. When I was inspector that was done in our districts, and I can produce record of any vessel you wish.

Secretary REDFIELD. I suggest that you bring to us here and let us see what it is; bring us from your office a Detroit book, let us have a Duluth book, a Milwaukee book, and a Chicago book, and pick out half a dozen parts, and see how quick you can get them.

Capt. WESTCOTT. There will be two books, Mr. Secretary.

Secretary REDFIELD. Yes; I know that; one for hulls and one for boilers. Let us see how quick you can lay your hands on the book.

Capt. WESTCOTT. I can only get the books for Chicago. I can give you now the books of the last two inspections.

Secretary REDFIELD. Yes; I know that; but just get some of those books. I would like to show them to these gentlemen.

Q. Now, Capt. Nelson, what else do you know about the *Eastland*?—A. Why, I have to examine all the life preservers, testing the fire hose, life belts, etc.

Q. What do you mean by examining the life preservers?—A. Why, we examine every life preserver as to its general condition.

Q. What do you do with it?—A. We stamp it, if it is all right, and reject it if it is not.

Q. Was this boat equipped with life preservers made in Cleveland?—A. Some in Cleveland and some in Pittsburgh. The Armstrong Cork Co., of Pittsburgh, makes more than anybody in the United States.

Q. Do you ever reject any?—A. A number of them.

Q. The Upson Walton Co., of Cleveland—they make some, do they not?—A. They make very few.

Q. I might make it a matter of record and you say if it is true, that on Tuesday, the 27th instant, I examined personally six life preservers on the *Eastland*. I cut them all open, both those which were in the water and those which had not been used, and they were not selected by me, but were brought to me by the police force. Each of them bore the mark of inspection during each year of its life since it had been purchased. They were all made, either by the Armstrong Cork Co., of Pittsburgh, or by the Upson Walton Co., of Cleveland, and they were all in perfect condition, and each of them showed in the presence of the assembled throng, perfect condition. Would that be true?—A. If stamped they would. The Upson Walton Co., however, re-cover a good many of them, put new covers on several hundred of the life preservers that were on the *Eastland*.

Q. Now, go on and tell us what else you know about the *Eastland*.—A. After she passed inspection, we issued her a certificate in 1908 and, I think, we gave her 1,500 passengers.

Q. Why didn't you give her any more?—A. Then we issued an excursion permit.

Q. And how many did you give on that?—A. I think the first excursion permit we issued allowed a total of 2,200.

Q. Your first excursion permit allowed her a total of 2,200 passengers?—A. Then, after we saw the boat could take care of 2,200, after observing the boat and how she acted with 2,200, then we increased her to 2,400.

Q. You say, after observing the boat and how she acted with 2,200, you increased her to 2,400?—A. Yes, sir.

Q. Now, captain, would you have given her a license for 1,800, except upon the supposition that she was going to use her ballast tanks?—A. No, sir.

Q. Isn't your understanding of the ballast tanks such that they are there to be used?—A. Yes, sir.

Q. And they are not put in there for fun?—A. No, sir.

Q. They are supposed to be placed there for service, are they not?—A. Yes, sir.

Q. And is not all your action, as regards the number of passengers she shall carry, based upon the supposed intelligent use of her ballast tanks?—A. Yes, sir.

Q. And is not this so upon every vessel that is licensed?—A. Yes, sir.

Q. Both on the lakes and on the ocean?—A. Yes, sir.

Q. And when the ballast tanks are not used intelligently an element is introduced over which you can have no control?—A. No.

Q. Isn't that so?—A. Yes; certainly.

Q. Well, go on Captain.—A. Well, Mr. Secretary, when I made that statement that I issued a permit for a total of 2,200 for her and then issued one for 2,400, I don't want you to infer that I saw 2,400 on her before I increased it.

Q. Now, what did you say when you increased her capacity to 2,400 after observing her; what did you mean, rather, by observing her; explain on what basis you made that increase.—A. After observing her, seeing her leave the dock, making several trips on her out of the dock and on the lake; that is what I meant by observing her.

Q. Why do you use the words "leaving the dock"?—A. Why, a number of people were always on one side; more on one side than on the other, and the boat will list more at the dock than it will out in the lake, for you know people always will get on the side of the boat next to the dock.

Q. Isn't it a fact that there are possible conditions of danger at the dock more than at the sea?—A. I always considered the *Eastland* more dangerous alongside of the dock than out in the lake.

Q. You don't say that because you heard Mr. Peck say the same thing?—A. I didn't hear Peck say so. If he said it, I didn't hear him.

Q. Running?—A. Yes; he said running.

Q. Go ahead, Captain.—A. She went through the season of 1908, and in 1909 we inspected her again and gave her about 1,500 passengers and increased the excursion rate; gave her an excursion permit, if she needed it, up to 2,200. That is the highest. She remained at 2,200 up until 1912. I was appointed supervisor inspector at that time and Capt. Gould was assistant, and he gave her 2,000.

Q. Why did he do that?—A. Well, that was his judgment. I don't know.

Q. You say it was his judgment?—A. Yes.

Q. Is it your understanding of the law that your local inspector under you had the right to use his judgment?—A. In that case he has.

Q. Is it your understanding of the law that it is his duty to use his judgment?—A. Yes, sir.

Q. Is there any responsibility in that matter placed by law upon the supervising inspector?—A. I understand there was no appeal in the case of the number of passengers from a local supervisor, a local inspector to a supervisor inspector.

Q. You understand that the law of the United States places the entire responsibility—A. On the local inspector.

Q. —for determining the number of passengers on the local inspector?—A. Yes, sir. Now I will qualify that by saying that Capt. Gould and I talked the matter over before he reduced her to 2,000.

Q. Then what happened?—A. Capt. Gould took the view that if he gave her 2,000 you would not have to depend so much on the water ballast.

Q. But he gave the reason for reducing her in this case as you have stated?—A. Yes; so that you would not have to depend so much on the water ballast.

Q. If she had 2,000 passengers she would not have to depend so much on the water ballast as she would if she carried 2,400?—A. Yes, sir; and that is the reason I reduced her from 2,400 to 2,200, lessening the element of danger in depending on her water ballast.

Q. Because she had 2,400 or more, did you or did you not feel that she was dependent on her water ballast?—A. Very much dependent on her water ballast.

Q. Did you ever talk with the captain of the ship about that?—A. A number of times.

Q. You did?—A. And to the engineer, too.

Q. What did the captain say about it?—A. When we talked about it we told him to be careful and tend to the water ballast and see that they were always under control.

Congressman SABATH. I didn't get that Mr. Secretary.

Secretary REDFIELD. Read it, please.

(Answer read.)

Q. Why did you tell the captain that?—A. Why, a boat like the *Eastland* relies on the water ballast.

Q. She relies upon her water ballast?—A. A good deal.

Q. Well, is that what it is put there for, to be her reliance?—A. Well, it is put there to use for that particular purpose—for stability.

Q. She is not meant to be used without it, is she, Captain?—A. What is that?

Q. She is not meant to be used without it, is she?—A. No, sir.

Q. Any more than she is meant to be used without her boilers?—A. Well, that is a pretty hard question to answer.

Q. She is supposed to use both of them, isn't she?—A. Yes, sir.

Q. She is supposed to use her water ballast just as much as she is her engines?—A. You could get along without the water ballast for a very few people, but you couldn't get along without the boiler or engine.

Q. That is very true. That is quite different.—A. Yes, sir.

Q. What did the captain say? Did he object to being told that?—A. No, sir.

Q. Did he seem to think it was true?—A. Yes, sir.

Q. What captain was that?—A. We had one, two, three—we had four captains on her, in all, the time she was doing this work.

Q. And you had a number of different chief engineers?—A. Just two. Dave Donaldson and Walter Brown, and his brother, Grant Donaldson, remained in the service.

Q. Do you know where Mr. Donaldson can be found?—A. Yes, sir; both of them.

Q. I wish you would send to Mr. Donaldson, and ask him if he would come here and appear before this investigating committee.—A. By the way, Mr. Secretary, one of the men from the Department of Justice saw me, and I gave him all their addresses.

Secretary REDFIELD. Mr. Thurman, have you subpoenaed Mr. Donaldson, the former engineer?

Mr. THURMAN. No, sir; we haven't subpoenaed him.

Secretary REDFIELD. You have his name?

Mr. THURMAN. Yes. We will have to telegraph for him, Mr. Secretary. I understand he is in Cleveland. I couldn't send a subpoena down there. It would take a day to go down there and a day and a half to get back.

Secretary REDFIELD. I will ask you to telegraph to-night to Mr. Donaldson, and ask him to appear here at his earliest convenience. His expenses will be paid.

Q. Did you say you talked with the chief engineer about the use of the water ballast?—A. Yes, sir.

Q. Did the chief engineer make any objection to that?—A. No, sir. They were all very attentive to the water ballast.

Q. How do you know they were?—A. Well, I watched that boat a good many times. I was on the dock a good many times while the *Eastland* was there.

Q. Why was that?—A. Well, people talked so much about it and there was so much controversy in the newspapers about the *Eastland* that I wanted to satisfy myself that everything was all right.

Q. Well, what else, Captain?—A. That is all that I know. She never lost a life or injured a passenger all the time she was in continuous service.

Q. Was she in continuous use?—A. No; her season was probably about 70 days. She made daily trips to Cedar Point by moonlight every night.

Q. Was she doing the same class of business as she was doing in Lake Michigan?—A. The same.

Q. Substantially the same?—A. Yes; but her route was not so far.

Q. Now, isn't Lake Erie considered to be the roughest one of the lakes?—A. It raises a very heavy sea in a short time. I have ridden on her in a choppy sea many times when there was a sea on, and I went along just to see her condition.

Q. You went along on the *Eastland* in a choppy sea just to see how she acted?—A. Yes, sir; just to see how she acted.

Q. And how did she act?—A. Fine. She was a fine sea boat.

Q. A fine sea boat?—A. Yes, sir.

Q. Captain, you are an old seaman?—A. Yes, sir.

Q. Now, look back and think of the time when you were not a mere government official; think of the time when you were just a man and remember when you were a seaman whose judgment was

good, and then tell me, based upon your judgment as a man before you lost out and became a Government official, tell me whether you really think as a seaman that the *Eastland* was a good sea boat?—A. I could only tell as a seaman that she was a good sea boat.

Q. And as a seaman you say so, do you?—A. As a seaman I say so.

Q. How many years at sea have you?—A. Since I was 14 years old. I am 60 now.

Q. From 14 to 60?—A. Yes, sir.

Q. How long a time do you think it takes a man to know a good sea boat when he sees one, Captain?—A. Well, that depends on your ability to judge of things. Mr. Secretary, I would like to qualify that by saying that a good sea boat—what we call a good sea boat—is the kind of a boat that people on shore may say is an awful boat, which they said about the *Eastland* because she rolled, but she rolled easy and she rolled even, like any good, clean ship would roll. She would come back again. The people on shore would say that she was an awful roller. Now, a sailor don't care how much a boat rolls, as long as she rolls easy. It is the ship that jerks you off your feet that is a bad sea boat.

Q. Captain, isn't a vessel which stands up stiff in a heavy sea apt to be a dangerous ship?—A. A ship that rolls gradually, as she rolls and comes back again before she has lost her ability to come back—before she increases her roll too much—has stability.

Q. And, as she rolls, her submerged area becomes greater?—A. Yes, sir.

Q. Now, did you ever travel on a torpedo-boat destroyer, Captain?—A. No, sir.

Q. Well, don't you do it.—A. I would like to.

Q. Have you looked at the *Eastland* here?—A. No, sir.

Q. Have you ever seen her drawings?—A. I saw her in the dock at Cleveland one time, and I admired the beautiful lines of the *Eastland*.

Q. There has something been discovered about her which I want to call your attention to; some genius has discovered that she had no keel. What about that?—A. None of our boats up here have any keel.

Q. What?—A. None of our boats up here have any keel.

Q. Explain yourself, Captain. What do you mean by saying that none of our boats have any keel?—A. Maybe some of them do; but our freight boats, for instance, have no standing keel. They have just a flat bottom—a flat keel.

Q. Is that safe?—A. Why, they seem to get along.

Q. You mean to say that these Great Lakes freighters that have 10,000 tons of cargo get along without keels?—A. Yes, sir.

Q. And they are deliberately built by thoughtful men, who put their good money into them knowing they have no keels; is that so?—A. None of our freight boats, even vessels, don't have any keel.

Q. This is astonishing. You astonish me very much! I knew it was true, but I thought these people knew it.—A. I can give a reason for that, Mr. Secretary. In the early days we were limited to a shallow draft of water in going up through the Lakes, and if we had two or three inches on a keel it took just that much off our carrying capacity; so we built the boats just as flat as we could.

Q. In a very large ship what would the difference in carrying capacity be for every inch of draft?—A. Why, the large ships that carry all the way from 50 to 70 tons an inch, large snips carrying about 70 tons to the inch—

Q. Well, if you had a 4-inch keel projecting at bottom of a large boat, it might mean a loss in carrying capacity of 280 tons; is that true?—A. Why, we figure that on the largest ship we carry 70 tons to the inch. That would be about right.

Q. Now, as an old sailor, Captain, I want to call your attention to something else which has been discovered, at least it was said to have been discovered, and that is that this vessel has a flat bottom. She has not, but it does not matter. Isn't it a fact that your Great Lakes freighters all have flat bottoms?—A. Why, the flatter they are on the bottom the more stable they are.

Q. Isn't it a fact that all the battleships of the United States Navy all have flat bottoms?—A. Our regular freighters on the lakes are built as flat as this floor. We have very little dead space.

Q. They are purposely built so?—A. Yes, sir.

Q. Did you say that the *Eastland* had beautiful lines?—A. Beautiful.

Q. Do you regard her, from your experience as a seaman, as a safe vessel, if her water ballast was used?—A. If she is properly handled she is perfectly safe.

Q. Now, must I draw the inference from what you say that, if she was unsafe, she was improperly handled?—A. Yes, sir.

Q. That is your sober judgment?—A. That is my sober judgment. Of course, there is a limit, Mr. Secretary, to what you may call safety.

Q. Go on, Captain, go on.—A. I considered the *Eastland* was perfectly safe while she was in Cleveland, under the conditions in Cleveland. I don't know what her condition was here, but in Cleveland I considered the *Eastland* perfectly safe for 2,500 people.

Q. In Cleveland you considered the *Eastland* perfectly safe for 2,500 people?—A. Yes, sir; I considered her perfectly safe for 2,500 people, because that is what we gave her, 2,400 passengers and 100 in the crew.

Q. When you mention these limits you mean that these were in addition to her crew?—A. Yes, sir. We gave her 100 crew.

Q. So that, when you said you had a limit of 2,400, you meant in addition to a crew of 100?—A. Yes, sir; 100.

Q. Two thousand five hundred persons in all?—A. Yes, sir.

Q. Now, captain, I want to tell you very frankly.—A. Pardon me. This is subject to correction from my records.

Q. Yes; I understand. I want to tell you very frankly that there is very properly and very naturally very deep feeling aroused because of the terrible sadness which has fallen on this community.—A. I realize it. Nobody realizes it more than I do.

Q. And I want you to speak with soberness, as a thoughtful man; and in view of the fact that it has happened—a ship lying yonder on her side in the water—I want to tell you again—I want to ask you whether it is true that you think this vessel, properly handled and with her ballast in proper use, was safe for 2,500 people?—A. I not only think so, but I know so.

Q. You think so?—A. I know so.

Q. On what do you base that opinion?—A. On past observation.

Q. Well, observation of the vessel continued over how many years?—A. From 1907 to 1912. She left in the spring of 1913, but she had no passengers.

Q. Did you happen to know that you were commended to me for the post, retention in your post, by the mayor of the city of Cleveland?—A. No, sir.

Q. You didn't know that?—A. No, sir.

Q. Is there anything more that you can tell about the *Eastland*, captain?—A. I can not think of anything just now. Maybe something might come out if I am asked questions.

Secretary REDFIELD. Gov. O'Hara, do you want to ask any questions?

Mr. O'HARA. Yes; thank you.

Q. You had been acquainted with conditions on the Lakes how many years?—A. I left the ocean on the 2nd day of June, I believe, and came up on the Great Lakes.

Q. What year?—A. 1873.

Q. In that year, Captain, what was the largest number of passengers or human beings carried by any boat on the Great Lakes at that time?—A. I have no idea. I was just a sailor before the mast. I had no use for a passenger boat in those days.

Q. Well, how many years, Captain, has the present or modern steamboat as we have it on the lake of to-day, the passenger steamboat, been developing?—A. Why, gradually from year to year. When I first went into the service we had the *City of Buffalo* and the *City of Erie*, which carried 2,000 people.

Q. How many years ago was that, Captain?—A. 1905 and 1906. That is subject to my records, of course.

Q. In 1905 those were the largest boats on the lakes in carrying capacity?—A. I didn't say on the lakes, but in my district.

Q. Of your knowledge?—A. In my district.

Q. In your district?—A. Yes.

Q. And they carried 2,000 passengers?—A. That is what we allowed on the *City of Erie* and the *City of Buffalo*.

Q. In 1906 was there constructed a boat carrying more passengers?—A. Why, we had two ships called the *Americana* and the *Canadiana* down in Buffalo that I believe had 3,000 or over 3,000, and they ran between Buffalo and Crystal Beach. They ran out every day.

Q. Now, Captain, as this industry developed, was there any kind of competition between boat lines—among boat lines?—A. Why, there has never been any competition in Cleveland that I know of.

Q. In other words, what I am getting at—A. I would like to qualify that by saying that the boats that run between Cleveland and Detroit make one line, between Cleveland and Buffalo is another line, and between Cleveland and Put-in-Bay is part of the C. & B. line. The *Eastland* ran from Cleveland to Ceday Point. She had no competition. The boats that ran between Buffalo and Crystal Beach had no competition to speak of. Once in awhile some might come in, but not very much.

Q. Captain, was it any advantage to the owners or the proprietors of the boat to advertise its carrying the largest number of passen-

gers, was there any commercial advantage in that which you observed?—A. Why, I can answer that from hearsay, not from my personal knowledge.

Q. Yes.—A. From hearsay I used to understand that they liked to go out and advertise and say that this boat would carry 2,500 or 3,000, with the view that they might sell 2,000 tickets; if they advertised 3,000, they would get 2,000, and if they advertised 2,000 they would get 1,500 tickets sold. Of course that is what I heard. I don't know anything about it, because I have never been in the passenger business.

Q. Then from the conversations you have heard from the people and from popular interest in the various steamers running out of ports in your district popular interest was aroused in their carrying capacity?—A. They all liked to carry as many as they could.

Q. Now, Captain, did you ever hear of any case wherein a boat owner or any person interested in a boat line in your district endeavored unduly to influence the action of the Government officials?—A. No, sir.

Q. Then, Captain, when the carrying capacity of the *Eastland* was raised from 2,200 to 2,400, who made the request?—A. Nobody. They asked, I believe—I can not say as I have no record for that, but Mr. Thompson was the manager then and he said he would like to have 2,500.

Q. Now, he said that in writing or orally?—A. Oh, no; just orally.

Q. Orally?—A. Yes.

Q. And there is absolutely no record of that request?—A. No, sir.

Q. In your office?—A. No, sir.

Q. In every such case, Captain, coming under your knowledge, were those requests made orally or in writing?—A. They used to be oral, but now, in late years, an application is made out by the man that requests an excursion permit. They have a regular form for that.

Q. Well, Captain, going back a number of years that have passed since the *Eastland* had her carrying capacity raised from 2,000 to 2,400, there is no scrap of paper, there is no evidence in writing anywhere that can be brought before this body showing exactly who made the request that the capacity be raised to 2,400?—A. Oh, yes. The request was made. It would not have been raised from 2,200 to 2,400 unless the request was made.

Q. I know, but who made the request?—A. I presume the manager, the general manager.

Q. Who was he do you know?—A. Why, I do know.

Q. What was his name, Captain?—A. M. H. Thompson.

Q. He made the request of you?—A. Yes, sir.

Q. You were the proper official to receive the request?—A. Yes, sir.

Q. Now, when the request had been made to you, Captain, what was the next step taken by you, or the first step taken by you?—A. To consider if she could carry 2,400 safely, and then see if she had the proper number of life preservers.

Q. Well, how did you come to consider that matter?—A. Well, I had observed her. I believe I issued an excursion permit June 12, with a total of 2,200, and before the Fourth of July, of course, they wanted all they could get on, and I think it was the 2nd day of July, but all this will be subject to my records.

Q. I see.—A. It is pretty hard to remember all the dates, you know.

Q. Yes; but do I understand, Captain—I think I must misunderstand, but do I understand that your system in considering whether a boat could carry more than 2,200 passengers was to put on 2,400 for one trip?—A. Oh, no; that permit was good until September sometime.

Q. Yes; but just how did you go about it? Is there a mathematical way of telling, any method by which you are familiar in telling how that is arrived at?—A. Only by judgment and personal observation.

Q. By judgment and personal observation and testing with human freight?—A. Yes, sir.

Q. Now, Captain, what year was the carrying capacity or the licensed carrying capacity raised from 2,200 to 2,400?—A. In 1908.

Q. And at that time were the people of Cleveland, to your knowledge, talking about the crankiness of the *Eastland*?—A. Yes, sir.

Q. It was popular talk?—A. Yes, sir; popular talk and a good deal of newspaper controversy.

Q. And without any mathematical test the carrying capacity was raised from 2,200 to 2,400?—A. Sure. I had confidence in doing what I did. I thought I was right in my judgment. I passed judgment that way, and I would do it again; I would raise it to 2,500, provided the water ballast was properly handled.

Q. Now, Captain, I am going to ask you a question that is perhaps a little without the scope of this inquiry, but as an old lake man you, of course, have talked with sailors and captains of experience on the Lakes—it so happened, Captain, that my own father spent his boyhood sailing on the Lakes, and part of my life has been spent among lake men—in your experience and conversation have you many times, or at any time, heard old lake men express the theory that the modern system of permitting 2,000 or 3,000 passengers on any lake boat was unsafe and might lead to a disaster?—A. I have not heard that remark.

Q. Not among old lake men?—A. No; not among old lake men.

Q. That is not the general talk?—A. Oh, no; not among men who know what they are talking about. If it is permissible, I will state the facts of a case down in Buffalo when the *Americana* and the *Canadiana* came down here.

Q. All right.—A. We had never had any real good passenger boats down in Buffalo, and they got these fine, beautiful boats that will stand up under any condition as well as any ever built for them, and lots of people said they would roll over, that they have been there a good many years and they have not rolled over yet, and you can go down there and see them to-day. They would list but a very few inches.

Q. Who were the owners of the *Eastland*, Captain, in 1908, at the time the request was made for the raising of the carrying capacity from 2,200 to 2,400?—A. Why, I have a record of that in my book. Mr. Doty, I think, was the secretary. Mr. Doty was the secretary, and Mr. M. H. Thompson was the manager for two years. Then Mr. Mulhauser was the manager, and after that Mr. Mulholland. There were three managers.

Q. Captain, during the period that you were, as the Secretary says, a man before you had become a servant of the Government—A. All right, if that is the way you feel about it.

Q. Were you ever associated in a business way with any of the gentlemen who were interested in the ownership of the *Eastland* in 1908?—A. I didn't know any of them, but just had a speaking acquaintance with them.

Q. None of them had ever asked any favor of you and you had never asked a favor of them?—A. No, sir.

Q. None had been granted?—A. No, sir.

Q. And the decision to raise the carrying capacity of the *Eastland* from 2,200 to 2,400 was exclusively with you?—A. Yes, sir.

Q. That is, you consulted no one?—A. No, sir.

Q. You did that of your own volition?—A. Yes, sir.

Q. And if any mistake was made at that time, Captain, it was your own mistake and the mistake of no one else?—A. It was a mistake in my judgment.

Q. Now, Captain, at that time you were convinced that the *Eastland*, if the water ballast were not adjusted properly, was an unsafe craft for 2,400 people?—A. Yes, sir.

Q. Did you so notify the owners of the *Eastland*?—A. I don't believe I notified the owners of the *Eastland*, but I took that matter up with the captain and engineer more than anyone else, and told them to be careful about the water ballast.

Q. What is the form, Captain, of giving permission to increase the carrying capacity; is there a usual form?—A. There is now.

Q. At that time was there?—A. Why, if there had been a man come up and say he would like to get an excursion permit increased, and could we increase it to 2,000 or 2,200 or 2,400, I would say no or yes.

Q. If you granted permission you would sign your name?—A. Yes, sir.

Q. On the record or on the copy of the request he would make out?—A. Yes, sir. I say it is a form printed and we fill in the proper passengers, the number that we wanted to carry, the number of life preservers, the boats, and rafts.

Q. Now, Captain, on the certificate or permission granted the owners of the *Eastland* in 1908 to carry 2,400 passengers, did you put a notation something in this form: "Permission granted to carry 2,400 passengers provided the water ballast is properly adjusted?"—A. No, sir.

Q. And yet you knew at that time, Captain, that the boat would be unsafe unless the water ballast was properly adjusted?—A. There would be a number of things. You may as well tell a man: "We will grant you 2,000 passengers provided you have water in your boilers," or "Provided you keep your side lights lit at night," or "Provided you have a good wheelsman on duty."

Q. The presumption is that it is their duty to take care of the ballast?—A. That is up to the master and the engineer to take care of it. It is a part of the master's duty as much as anything else.

Q. Captain, in a boat like the *Eastland* licensed to carry 2,400 passengers and the water ballast is properly adjusted, should the 2,400 people by a common thought go on one side or one portion of the

boat, would the boat be safe, or must the passengers be scattered?—A. There would not be room for 2,400 on one side.

Q. Captain, in 1910 the *Eastland* was in your district?—A. Yes, sir.

Q. Did you see an advertisement in a Cleveland newspaper that year offering a reward of \$500 for anyone proving or submitting proof that the *Eastland* was not a safe boat?—A. I can not recall that I saw it that year, but I saw it the other day published in a newspaper recalling the fact that they offered so many thousand dollars if any naval architect or other person should prove that the *Eastland* was not a safe boat.

Q. But at the time you didn't see it.—A. I don't remember now, but I saw it the other day.

Q. Now, Captain, perhaps that did appear and perhaps it didn't, but we haven't any proof of it.—A. Oh, it appeared all right, I guess, because there was a copy from the newspaper.

Q. That was 1910, according to the newspapers.—A. I don't know what year it was.

Q. In 1910 was the *Eastland* under your jurisdiction?—A. Yes, sir.

Q. And was her passenger capacity again increased?—A. No, sir; it was reduced then to 2,000 by Capt. Gould. I didn't have anything to do with her then.

Q. Oh, yes. Now, Captain, a question was asked you some time ago if the men under you worked eight hours a day. How is that?—A. Why, we have no fixed number of hours. We have to do the work as it comes along, accommodating the public as best we can. I left the office last night with Capt. Gould and the two stenographers at 9 o'clock, getting these records ready to come up here.

Q. It might be possible for a man to work 24 hours at a stretch under your system?—A. We have never asked them to do that. However, in our district sometimes the boys would come home off of a trip Saturday night and would have to come down and tally passengers Sunday morning.

Q. This has nothing to do with this inquiry, but the matter was brought out, and I will ask you this: Will you say as a general practice that a man who does this work of increasing the carrying capacity of a boat from 2,200 to 2,400—would you say as a general practice that he would be more likely to be capable and efficient in giving that judgment and that decision if his hours were restricted to eight a day?—A. Why, he would not give that decision from one observation or two observations, but a number of observations. I want to answer the question, Governor, as I understand it.

Q. Yes; and permit me to say to you that I appreciate the spirit in which you are answering my questions, and there is no intention on my part to embarrass you in the slightest degree.—A. All right.

Q. Now, Captain, in your official capacity you come in contact often with the owners of these Lake boats?—A. Yes, sir.

Q. Do you ever consult with the representatives of the men who are manning the boats?—A. A number of times, as to improvements and additional equipments.

Q. And at all times may a representative of any organization of the men on the boats come to you?—A. At any time.

Q. And receive the same treatment as the owners?—A. Yes, sir.

Q. Now, Captain, during the time that the *Eastland* was in your jurisdiction did any of the men then working on the *Eastland* come to you to make a complaint?—A. Never. I never heard a complaint from the *Eastland* by any of the men that was on her.

Q. Did anyone representing any men on the *Eastland*?—A. No, sir.

Q. Did anyone representing any organization of seamen?—A. Why, I would not—I don't know whether they represented any organization of seamen or not, but a number of people used to come up and ask: "Do you think the *Eastland* is a safe boat?" And I would say "Yes." Sometimes we would have ladies come up and say: "Do you think the *Eastland* is a safe boat?" And I would say "Yes." They would say: "Well, I don't see how you can say that. I was on her last summer and she rolled something awful." I would say: "That don't make any difference how much a ship rolls, that don't make her unsafe."

Q. Did people come up to you, Captain, inquiring about other boats as well as the *Eastland*?—A. At one time I talked passengers on the *City of Buffalo* on an excursion late at night, and I had been on duty the whole day when I was local inspector and they telephoned down that they had to take an excursion out, and I went down at 7 o'clock and the boat left at 8, and a lady came up and says: "Is this boat safe? Aren't you allowing too many people on her?" I says: "No. If you had a statercom that is all you need to care about."

Mr. O'HARA. That is all, Captain. Much obliged to you.

Secretary REDFIELD. Capt. Nelson, is it the habit of all the supervising inspectors to come to Washington in January every year?

A. Yes, sir.

Q. What for?—A. For a meeting of the Board of Supervisors and inspectors.

Q. What do they do?—A. Formulate rules and regulations.

Q. Where do they get the things they talk about?—A. Well, from the number of meetings that are held and people that appear before them, and the things that come up in the service.

Q. And the ideas you get, that you bring there every year in January, come from all over the country?—A. Yes, sir.

Q. The various ideas that have been suggested to you by different persons and parties of all kinds throughout the year, you bring them there and discuss them to see—A. Whether they are practical or not.

Q. Yes; to see whether they are practical or not.—A. Yes, sir.

Q. And various devices for saving life, these are brought there and discussed?—A. A number of them.

Q. And is it or is it not the habit to actually put these devices for saving life to trial?—A. What is that?

Q. And is it or is it not the habit to actually put these devices for saving life to actual trial?—A. Actual test; yes.

Q. How long do you stay down there?—A. Oh, a couple of months, or three months. We have got to stay there until the business of the board is done.

Q. And when you get through, what is done?—A. Why, there is a book printed of our proceedings and any changes are recorded.

Q. And these proceedings, as you call them, are the rules for the coming year?—A. The rules and regulations.

Q. For the coming year?—A. Yes, sir.

Q. Is it not true that every year witnesses a revision of the rules of the service?—A. Yes, sir.

Q. And the adjusting of these rules to alter conditions?—A. Yes, sir.

Q. So that the rules of this year are not the rules of last year?—A. Few changes this year from last year.

Q. And the rules of last year are not the rules of the year before?—A. A number of changes.

Q. And every year the rules are altered by study, are they not?—A. Yes, sir.

Q. Studies arising from experience?—A. Yes, sir.

Q. Who approves these rules before they go to press?—A. The Secretary of Commerce.

Q. They don't become laws until they are approved?—A. Until he signs his name to them.

Q. And then they are printed and given to every captain all over the land?—A. Every steamboat receives a copy of the rules and regulations.

Q. Every steamboat receives a copy of the rules and regulations?—A. Yes; freight or passenger.

Q. Yes. Now, Captain, has it ever been suggested to you in your experience that you should survey ships?—A. No, sir.

Q. What do you understand me to mean, when I say "survey ships"?—A. Well, to survey ships, we do, to a certain extent survey ships as to what damage she has received; what is necessary in the way of repairs; but in the way of classification, like a classification society, that kind of survey we are not called upon to do.

Q. Why not?—A. There is nothing in the rules that compels us to do it, and we don't have the time.

Q. Suppose that Congress should impose upon your service the extra duty of fixing the metacentric height of vessels and the performing of any kind of measurement. Have you any men who could do that work?—A. I can't tell, sir. I couldn't do it myself without studying up a little bit.

Q. Would you not have, with your present force, to leave undone your present work in order to do that work?—A. We would have to. That takes a long while, to tell the metacentric height.

Q. In other words, you have neither the men nor the money?—A. Nor the time.

Q. Nor the authority?—A. Nor the authority.

Q. Has it ever been suggested to you, in your long experience, that the work was the function of the United States Government?—A. Well, it should be.

Q. You think it should be?—A. Yes, sir.

Q. Why do you think so?—A. It is the function of the board of trade in England.

Q. In Great Britain?—A. In Great Britain.

Q. You mean the Lloyd's classification?—A. The Lloyd's classification.

Q. That is a branch of the English board of trade?—A. Yes, sir.

Q. And under their survey?—A. Yes, sir.

Q. How about the Bureau of Verités?—A. That is a French society.

Q. Is that in any sense official?—A. Yes, sir.

Q. How about the American Bureau of Shipping?—A. That is also a classification society.

Q. Yes; but that has no official standing.—A. I believe it has to some extent, Mr. Secretary.

Q. No; the American bureau is owned by the Marine Insurance Co.—A. Yes; that gives it a standing.

Q. You don't understand me. When I say "official" I mean in relation to the Government.—A. No relation to the Government whatever.

Q. Now, isn't it a fact that every vessel in the world over 100 feet long, in every civilized land, is surveyed and is registered and gets a certificate from one of these four services?—A. Why, Mr. Secretary, I couldn't answer that question by saying yes or no, because I don't know.

Q. Well, answer it as you can.—A. Well, I know that vessels over in England receive a certificate from Lloyd's.

Q. The entire English merchant marine is so measured and surveyed?—A. Yes, sir; and in Germany it is the German Lloyd's.

Q. And the German merchant marine is so surveyed?—A. Yes; and in Norway, France, and all other countries they are surveyed. If you don't get that survey, you can not get any insurance.

Q. Before a vessel can get insurance she must have been surveyed as to stability, strength, as to all characteristics of service by one of these surveys?—A. She has no standing unless she has that.

Q. That takes place before you make your examination of the new ship?—A. Yes, sir.

Q. So that before you examine any new vessel that thorough scientific study of the ship has been made?—A. Yes, sir.

Q. Now, there is still another, is there not, in the case of the supervision by the naval architects and all the engineers of the shipbuilding company, who not only watch the vessel throughout her design and construction, but give her a trial trip to determine whether she meets the calculations they have made?—A. Yes, sir.

Q. That is true?—A. Yes, sir.

Q. So that what happens is this: She is under scientific design and supervision from the inception of the plans to the trial trip, and after that she comes into the hands of your service to determine her condition, her physical condition?—A. She can not have a chance until she has qualified and has a certificate. She can not get her clearance.

Q. She can not get a clearance from any board in the country?—A. No, sir.

Q. Or from any customhouse?—A. No, sir.

Q. Now, it is quite important to be right about that. That is the history of every vessel?—A. An offhand history; yes.

Q. And that is correct?—A. Yes, sir.

Gen. UHLER. That is the history of every vessel that wants insurance.

Secretary REDFIELD. Gen. Uhler also suggests that a vessel which hadn't been through this scientific survey and received her classification would hardly be able to get a cargo.

Q. Is that so, Captain?—A. She couldn't get any cargo insurance, either.

Q. Consequently she couldn't do any business?—A. No, sir.

Q. So that it is not possible, even though they tried it, for a vessel to escape this survey at the hands of this scientific staff?—A. No. She couldn't get any rating and she must have a rating.

Q. And when they say a vessel is rated A-1 they must have gone through a survey by one of these classification societies which have made a scientific study of the ship, going into small details, and after which they issue a certificate classifying her as she deserves?—A. A 1 with a star, A 1, B 1, B 2, and so on.

Q. And each of these mean a different quality of ship?—A. Yes; and an advantage, also.

Q. Yes. Now, that is the universal custom, is it not?—A. Yes, sir.

Q. Now, did the *Eastland* escape that experience?—A. Why, she couldn't have got any insurance if she had.

Q. So that the *Eastland* was studied pretty carefully by a scientific staff before you had anything to do with her?—A. She was classified by a classification society.

Q. That is true, is it not?—A. Yes, sir.

Secretary REDFIELD. Do you want to ask any questions, Judge Sabath?

Mr. SABATH. I want to ask one or two.

Q. I have been present at the investigation conducted here before the coroner and heard some of the gentlemen make their statements; I have also heard you, and I can not understand how it is possible that that boat should lie there in the condition that it is in, a first-class boat, navigable and safe, and also in the hands of a safe captain, and some of the gentlemen have stated that the captain has been carefully examined before a permit was granted, and if the boat has been examined by you and is safe and capable of carrying 2,400 people or so, I don't understand how it is possible that within 8 feet of its own dock she should turn over. Can you give a reason for it?—A. Why, there must be a reason. I can not tell the reason. That will probably be brought out some time or other. I have no reason.

Q. Can you give me an opinion?—A. My opinion is that it is due to the water ballast not being properly handled. That is my opinion. I have not seen the boat. I have not gone into any details.

Q. Do you know the draft of this boat?—A. Why, I have seen the draft a number of times, but I have never made a memorandum of it.

Q. Now, if this boat would draw from 12 to 13 feet of water and the soundings that have been made right now where she is lying show 17 feet 8 inches and 17 feet 9 inches, would it be possible, or would you say that she grounded?—A. Why, there might be 16 or 17 feet of water right under her bilge, right along the dock, and I remember that dock down there, and there might be a possibility that her bilge might have rested up on that, but I don't know. I have not seen the boat or examined any of the details, so that whatever I say now is purely an opinion. My opinion now is that

the water ballast was not properly handled. From past experience I can not see how that boat would capsize if her water ballast was properly handled. For a number of years I saw her in Cleveland and handled her, and that is what I base my assertion on.

Q. While she was in Cleveland she had five tanks on each side?—A. I believe so.

Q. Were they all in use at that time? Were they ready for use or in position to be used if necessary?—A. I believe that the practice there was to have one part of that water bottom full before they ever took on any passengers.

Q. The statement has been made that only two of those tanks have been in use lately.—A. I don't know anything about that. I am just speaking about what was done in Cleveland.

Q. Whose duty is it to ascertain whether all the tanks had been used, whether she is in a safe condition?—A. During the time she was taking on passengers?

Q. Well, before she received the right to sail each season.—A. I suppose the inspectors would look over that part of it.

Q. Of this district?—A. Wherever she is.

Mr. SABATH. That is all.

(Witness excused.)

Secretary REDFIELD. I have just learned that Inspector Reid, of Grand Haven, has a very important engagement with the sheriff and is willing to take the stand at once. I would like to put him on at once. We will excuse Capt. Nelson now. Judge Sabath, you and Mr. Sullivan will be given an opportunity later on to examine Capt. Nelson.

ROBERT REID, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Will you state your full name, address, and age to the stenographer?—A. Robert Reid; Grand Haven, Mich.; born February 18, 1856.

Q. What is your occupation, Capt. Reid?—A. At the present time I am working for the Government.

Q. As what?—A. As a local steamboat inspector.

Q. A local inspector of what?—A. Steamboats.

Q. Boilers or hulls?—A. Hulls.

Q. You are a member of the local board located at Grand Haven, Mich.?—A. Yes, sir.

Q. Is that so?—A. Yes, sir.

Q. Capt. Reid, it is my duty to say to you that under ordinary circumstances you would be obliged to answer any inquiries that this local board, or myself acting for them, requested of you, in pursuance of the United States law and of the rights of the local board under that law. You have, however, come voluntarily and on your own motion and consent, though at my request, for the purpose of affording the public information, but as you have been arrested by the authorities of the State of Illinois, and are now in their custody, it is therefore right that I should say to you that you will not be required to answer any question which, in your own personal judgment, you may think likely either to inconvenience or incriminate

you or to affect in any degree whatsoever, in your judgment, the defense which you may make before the courts of the State of Illinois, and that you will be fully protected by the Government department in declining to answer any of these questions for the reasons stated, for if you do answer you do so on your own motion, because you are quite willing to do so, and with the understanding that the representative of the State's attorney here may properly use any evidence you now give against you in a later hearing.

And this further statement that in order to avoid entrapping you with the possibility of a failing memory of your testimony here, a copy of your testimony, if any, will be supplied you for your own use. Under those circumstances I ask you if you wish to testify. What is your answer, Captain?—A. I will testify.

Q. You will testify?—A. Yes, sir.

Q. Thank you, very much; that is what I expected of you, Captain.

Mr. SULLIVAN. May I make a suggestion: In order to guard the rights zealously of the individual we will see that every privilege and opportunity is exercised for Mr. Reid; but I wish you would ask him if he has employed counsel or has consulted with counsel.

Secretary REDFIELD. Have you employed counsel?—A. No, sir.

Q. Have you consulted counsel at all?—A. No, sir.

Congressman SABATH. Mr. Secretary, if you will pardon me, I am as intensely desirous of seeing that everyone who has been guilty of negligence or crime is punished, a great many of my people suffered, my district suffered, and the general public suffered; nevertheless I am of the opinion that every man should have his interests guarded. I believe this man should be informed without all of us being present here by someone in whom he has confidence, of his actual rights and privileges that he has, and I think he should be permitted to consult a lawyer who will advise him whether it would be right for him to testify.

Secretary REDFIELD. Capt. Reid will have privilege of counsel and is happy in the support of his entire local community, where he has lived through his life.

Q. Capt. Reid, I understand from the vigilant safeguard and vigilant watchman of the press that you have been guilty of a crime which I myself have committed, in fact any of us have, namely, that of having a son-in-law.—A. I have.

Q. You have a son-in-law, have you?—A. Two of them.

Q. Is that son-in-law the chief engineer of the steamer *Eastland*?—A. One of them, Mr. Joseph Erickson.

Q. Is your son-in-law?—A. One of them.

Q. Did you make that arrangement for him to become your son-in-law?—A. No, sir.

Q. Was that a matter you fixed up?—A. No, sir.

Q. Did you prepare a scheme whereby he should become your son-in-law and then get that job on that boat so that you might increase the rating of the passengers in that boat?—A. No, sir.

Q. When did you issue the passenger allowance for the *Eastland*?—A. This year, you mean?

Q. Yes; the last one?—A. The first one was issued June 7, 1915.

Q. This year?—A. Yes, sir.

Q. And the second one was when?—A. There was an amendment issued on July 2.

Q. Now, why was there an amendment?—A. Because the steamer had equipped herself with additional life boats and raftage and provided for the extra number of passengers asked for.

Q. Asked for? Did I understand that she asked for the full number at the first time and was refused that because she did not have boatage sufficient?—A. That was the talk we had, but it is not in writing, but the correspondence will show that we had that talk.

Q. You mean to say that at the first inspection they asked for 2,500?—A. Yes, sir.

Q. And it was refused them?—A. Yes, sir.

Q. Because their boatage and life raftage was not up to the required legal quantity; is that so?—A. Yes, sir.

Q. And that then, after they brought it up to the legal requirements the request was renewed and it was granted?—A. Yes, sir.

Q. Do I understand that it would have been granted in the first instance had they complied with the law in respect to the boats and rafts?—A. It would.

Q. Why?—A. Because in my judgment I think she is capable of carrying 2,500 people when she is properly equipped?

Q. On what do you base that judgment?—A. On past experience with the steamer.

Q. You say past experience with the steamer; tell us what it was.—A. Along about 1906, during the month of July and the month of August and the early part of September, she was carrying 3,000 persons, besides her crew; I often was down to the steamer as an assistant local inspector of hulls to see that her equipment was in good condition; I got this vessel mostly on Sundays, and I often saw her leaving dock at Rush Street Bridge with a full complement of 3,000 passengers.

Q. Now, let me get that perfectly clear; you saw her leaving her dock in Grand Haven?—A. In Chicago.

Q. Chicago?—A. Yes, sir.

Q. Leaving her dock in Chicago with 3,000 passengers on board?—A. Yes, sir.

Q. Plus her crew?—A. I should have said that I was located in Chicago in this building at that time.

Q. You were assistant inspector here?—A. Yes, sir.

Q. At that time?—A. Yes, sir.

Q. And you saw her more than once, did you say?—A. Yes, sir.

Q. Leave her dock in Chicago with 3,000 people on board plus her crew?—A. Yes, sir.

Q. How many were in the crew?—A. Approximately 73 or 75 persons—I could not say.

Q. So that you personally knew that she had repeatedly carried from Chicago in excess of 3,073 persons?—A. Yes, sir.

Q. You had seen that done, Mr. Reid, had you?—A. Yes, sir; I had seen the crowd stopped by the inspectors myself.

Q. When they got 3,000?—A. When they got the limit; I had no personal knowledge of the count because I did not make the count.

Q. You had been present when the inspectors stopped them going on board because there were 3,000 on board besides the crew?—A. That was my understanding.

- Q. So you were informed?—A. Yes, sir.
- Q. And you saw that more than once?—A. Yes, sir.
- Q. Now, how many times have you seen the *Eastland*; I mean in your official capacity?—A. I saw her during that year, 1906.
- Q. Often?—A. And during 1907, I saw her once in 1907; I would not be sure about that, and in 1914, and the present year.
- Q. Have you been on board the ship?—A. Yes, sir.
- Q. You said you were inspector of hulls, didn't you?—A. Yes, sir.
- Q. Do the ballast tanks come into your department?—A. The book does not indicate that they come into my department but we make an inspection of them just the same.
- Q. You do make an inspection?—A. Yes, sir.
- Q. When you refer to the book you mean one of these books [exhibits book to witness]?—A. Yes, sir.
- Q. And this book carried printed items that you are supposed to look up, does it not?—A. Yes, sir.
- Q. And you are asked in an inspection a question for every one of these printed items; is it not so?—A. That is my understanding of it.
- Q. Has that been your habit?—A. It has been my habit.
- Q. And the item of water ballast tanks does not appear in the book?—A. No, sir.
- Q. But nevertheless it has been your custom to examine them?—A. Yes, sir.
- Q. What do you mean when you say examine them?—A. Why, going into the tanks, where it is possible to do so.
- Q. How do you get in?—A. Generally through a manhole in the tank.
- Q. And have you personally been inside water ballast tanks of the *Eastland*?—A. I have personally been inside twice.
- Q. Twice?—A. Yes, sir.
- Q. How recently?—A. The last time I was in was May 25, this year.
- Q. 1915?—A. Yes, sir.
- Q. May 25, 1915, you were inside the ballast tanks of the *Eastland*?—A. On May 25; yes, sir.
- Q. And does your book at that time show that you saw them?—A. No, sir.
- Q. It is not mentioned in your book?—A. No, sir.
- Q. Who was with you?—A. There was no one with me when I was in the tank.
- Q. Who was with you in your inspection?—A. Mr. Eckliff.
- Q. Mr. Eckliff was with you at that time?—A. Yes, sir.
- Q. Did he see you go into the tanks?—A. No, sir; I don't think he did; he was busy about the boilers and engines while I was in there.
- Q. What did you find inside of the tanks?—A. I found they were all clean and newly painted.
- Q. Did you examine the connections?—A. I did not, sir.
- Q. The connections are outside of the tanks; I refer to the piping outside of the tanks?—A. There is a boiler inspector who attends to the piping, I believe.
- Q. I see; and you are a hull inspector?—A. Yes, sir.
- Q. The piping does not come within your scope?—A. No, sir.

- Q. Mr. Reid, was any consideration given you for advancing the rating of the *Eastland* to 2,500?—A. No, sir; not a penny.
- Q. Has any favor been asked of you by the owners of the *Eastland*?—A. Never.
- Q. Tell me your personal relations in detail with anybody who has any connection with the ownership of the *Eastland*.—A. I am acquainted with the president of the company, Mr. George T. Arnold, of Mackinac—no; I refer to Saugatuck. He was a resident of Saugatuck at that time, and that would go back a great many years. I could not say how many, but I have known him ever since. My relations to Mr. Arnold has always been friendly. I have never asked nor received a favor, neither have I ever visited him in his home. I think I have been in Mackinac Island within a block of his home on numerous times. I only know him in a business way.
- Q. Has he used his personal influence with you to advance the rating of the *Eastland*?—A. Mr. Arnold personally has never mentioned the subject of the *Eastland* or the passenger allowance of the *Eastland* to me whatever.
- Q. Has your son-in-law ever asked any favors of you on behalf of the steamer?—A. Never.
- Q. Have you ever discussed with your son-in-law the necessity for using ballast tanks?—A. No, sir.
- Q. Have you ever discussed with the captain of the vessel the necessity for using ballast tanks?—A. No, sir.
- Q. Has the subject of the ballast ever been taken up between you?—A. No, sir.
- Q. Do you know whether it is a fact or not, in order to get into her dock at St. Joseph, isn't it?—A. St. Joseph.
- Q. She had to lighten her ballast?—A. I believe not, I believe there is plenty of water there.
- Q. You know of no necessity of emptying her tanks in order to get into the docks?—A. No, sir.
- Q. Could she enter Grand Haven with her water tanks filled?—A. She could.
- Q. Do you know of any reason why she should run with her tanks empty?—A. I do not; they are there for the purpose of being used if necessary; it is up to the captain to say if he sees fit. We have no control over that part.
- Q. You say that your service has no control over the use of the tanks?—A. As far as the captain is concerned and instructing him to use them; no.
- Q. Have you ever given the captain any instructions about how to use them?—A. I have not.
- Q. Did you know that the *Eastland* had been allowed to carry 3,000 passengers?—A. I did.
- Q. And did you know that since that time she had 88 staterooms removed from her upper deck?—A. Yes, sir.
- Q. And did it influence your judgment in the matter in giving her a 2,500 rating when you knew that she had carried a larger number of passengers when she was less stable?—A. I based my judgment on those facts entirely.
- Q. Now, was there any unit rule or formula through which you went in calculating the 2,500 was just the right number?—A. No,

sir; there is no rule that I know of; the common custom has been to allow a deck space of 7, 8, or 9 square feet to each person.

Q. Did you use that rule?—A. I did not on the present time, but I was here in Chicago when she was measured for the 3,000.

Q. You were present at the time?—A. I was present and helped hold the tape line with Mr. William Nicholas.

Q. This is Mr. Nicholas [indicating]?—A. Yes, sir.

Q. Let me see if I understand you correctly. I understand you to say that you were present with the other inspectors.—A. Mr. Peck and Mr. Nicholas and myself.

Q. You were present when Mr. Peck and Mr. Nicholas in the Government service with you went to the *Eastland* and measured her for the 3,000 capacity that was given her?—A. Yes, sir.

Q. And at that time you assisted in holding the tapeline in the measurement, is that so?—A. Mr. Nicholas and I ran the tapeline, and Mr. Peck took the figures.

Q. Had you heard that the *Eastland* was a crank boat?—A. I have heard it, but I never saw it in my experience.

Q. Did you ever cross the lake upon her?—A. I have.

Q. How many times?—A. Twice, to the best of my recollection.

Q. Twice you have crossed upon her?—A. Yes, sir.

Q. Have you ever discussed with the chief engineer the question of her stability?—A. I have not.

Q. Has he ever raised it with you?—A. He has not.

Q. Has he ever expressed himself as in doubt of the vessel?—A. No, sir.

Q. Have you ever regarded your daughter as in danger of losing her husband because of his employment on that vessel?—A. No, sir; I have not. If I had any doubt I would not have given her the 2,500.

Q. Did you feel that under the express authority of the United States statutes you were not only empowered but charged to exercise your judgment in that matter?—A. I so understood the matter.

Q. Had you been so advised?—A. Yes, sir.

Q. That was your interpretation of the law?—A. Yes, sir.

Q. Did you know that the Attorney General of the United States had so interpreted the law?—A. I did not.

Secretary REDFIELD. I would like very well to have Judge Sabath ask you some questions, and I would like to have Mr. Collins and Mr. Van Patten do so if you like.

Examination by Congressman A. J. SABATH:

Q. Do you know the deck space or measurement of this boat, Mr. Reid?—A. No, sir; I do not at the present time.

Q. Did you measure it before you rendered this last license to her?—A. No, sir.

Q. You did not know then her capacity nor her deck space by measurement?—A. Her deck space would be increased on account of removing the 88 staterooms that she had previously.

Q. Do you know the reason that she had been reduced from 3,000 to 2,000 carrying capacity?—A. No, sir.

Q. She did have at one time a right to carry 3,000?—A. Yes, sir.

Q. And it had been reduced to 2,000?—A. I do not know for sure.

Q. You stated that you knew what the measurement was. Were you present when the measurements were taken for 3,000?—A. Yes, sir.

Q. That was one reason why you agreed to give the license for 2,500?—A. That was the reason that I based my conclusion on, that she could carry 2,500, on account of being present when she was measured.

Q. Why didn't you issue it originally for 2,500 when you knew the measurement?—A. I have stated before that the boat was not equipped when we began the first inspection for 2,500.

Q. You issued the first license June 7, did you not?—A. June 7; yes, sir.

Q. Of this year?—A. Yes, sir.

Q. Now, what license did she have up to that time, do you know?—A. I could not give the exact figures; it was something like 2,253; the records show.

Q. Did you not increase it by the license of June 7?—A. We increased it by the amendment to the certificate June 7.

Q. And you again increased it on July 7?

Secretary REDFIELD. No, Judge Sabath, that is not my understanding. July 2d was the amendment of which he speaks.

Congressman SABATH. There were three licenses issued this year, were there not?

A. No, sir.

Q. Was there only one issued June 7?—A. Yes, sir.

Q. Was that her first trip that she had made, did she make any trips before June 7?—A. Not this year; no, sir.

Q. Well, how much did she carry last year?—A. My recollection of last year was 2,045.

Q. Two thousand and forty-five?—A. Yes, sir.

Q. And on June 7 you had issued a license from 2,045 to how many?—A. As I have stated, to the best of my recollection, 2,253.

Q. To 2,253?—A. Yes, sir.

Q. And on July 2, about three weeks later, you issued another license increasing it to 2,500; is that correct?—A. It is; yes, sir.

Secretary REDFIELD. Now, Judge Sabath, ask, will you please, why she had the smaller rating last year.

Congressman SABATH. Yes.

The WITNESS. Her smaller rating last year was governed entirely by her equipment; she only had the equipment for the persons that she was allowed to carry and they did not buy the boats and rafts and equipment necessary until this year.

Secretary REDFIELD. You mean by that, Captain—

Congressman SABATH. What improvements were made upon the boat from last year so that you would increase her carrying capacity from 2,045 to 2,253?

A. Why, the addition of lifeboats and life rafts and life preservers for the additional persons.

Q. Well, they were added since June, were they not?

Secretary REDFIELD. Some, but not all.

Congressman SABATH. The life rafts, four life rafts have been added since June of this year, haven't they?

A. Yes, sir.

Q. And that was the reason why you increased it from 2,200 to 2,500?—A. That was the reason; yes, sir; she had the life rafts and the lifeboats as required by law to carry 2,500 persons, and she had life preservers for that number.

Q. Mr. Reid, how long are you in the service?—A. I entered the service June, 1906.

Q. 1906?—A. Yes, sir.

Secretary REDFIELD. How did you enter it, Mr. Reid?

A. By a civil service examination.

Q. Where did you take it?—A. At Grand Rapids, Mich.

Q. And as what did you enter?—A. As an assistant hull inspector.

Q. And you have, therefore, been promoted in the service?—A. I have; from assistant to local.

Secretary REDFIELD. Now, may I just see if I understand your question correctly, Judge Sabath?

Congressman SABATH. All right.

Secretary REDFIELD. Last year she had a rating of what?

A. Two thousand and forty-five passengers.

Q. Two thousand and forty-five passengers, and do I understand you to mean that it was given her because of the boat and raft equipment and preserver equipment she added, that is that she added enough lifeboats and life raftage and life preservers to care for 2,500 as the law provides, and it was for that reason you granted the increase?—A. That was the reason.

Q. So that last year if she had had the necessary lifeboats and life rafts and the necessary life preservers to comply with the law she could last year have had 2,500?—Yes, sir; she could.

Q. Did they ask for 2,500 last year?—A. I don't remember.

Q. This year, as I understand it, when the season opened, your first inspection was made; then they added some life rafts and boats and more preservers and brought her up to the point where you felt, in your judgment, that you could allow her to carry 2,253?—A. Yes, sir; she got two boats off the *Eugene Hart* and some lifeboats off the *Hart* and brought the equipment up as high as she could. They got the rafts as soon as she could—they were ordered immediately.

Q. So that temporarily you give her a permit for 2,253?—A. Yes, sir.

Q. So when the additional rafts which had been ordered came you gave her a 2,500 permit?—A. Yes, sir.

Q. Now, is that the whole story?—A. That is the whole story.

Congressman SABATH. So that the story is they have done everything possible to give you the right to issue to them a permit to carry 2,500 passengers on the boat?—A. When they equipped the boat for 2,500; yes, sir.

Q. After you had issued this license to carry 2,500 passengers on this boat, did you call the captain's attention that that was the limit?—A. No, sir.

Q. Did you talk with him at all?—A. No, sir; I did not.

Q. Did you talk to your son-in-law, the engineer, about it?—A. No, sir.

Secretary REDFIELD. What does the law require in such circumstances, Captain Reid?—A. That the boat shall be fully equipped with life boatage and raftage and life preservers for each person carried.

Q. But I mean, as regards notice to people, what does the law require?—A. I do not just understand you.

Q. Well, excuse me. Does it require that you give a certain form of license, which is to be posted up in a certain order?—A. I understand you. Yes, sir; it does.

Q. Well, what is the requirement?—A. That the original certificate shall be amended by an amendment, stating the additional equipment that is on the boat.

Q. Yes, sir; then what did you do with that certificate?—A. That is to be framed under glass and posted in a conspicuous place on the boat.

Q. Does the law specifically instruct that you do that?—A. Yes, sir.

Q. And did you do that?—A. We did; I did or helped them.

Q. And is the law to which you refer [reading from book], "The original certificate of inspection delivered to the master or owner of a steam vessel shall be placed by such master or owner in a conspicuous place in the vessel where it will be most likely to be observed by passengers and others, and there kept at all times, framed under glass, as evidence of the authority thereby conferred." Is that the law?—A. Yes, sir.

Congressman SABATH. Did you know, Mr. Reid, about the cost of these improvements that they had placed upon this boat that enabled you and them to increase the number of people or carrying capacity?—A. I did not know the cost of these rafts; no, sir.

Q. There were four rafts, were there not?—A. Yes, sir.

Secretary REDFIELD. Judge Sabath, he has testified that they had procured two boats and some rafts from another steamer.

The WITNESS. He is speaking of the last ones.

Secretary REDFIELD. And that they ordered four more which had not come, and when they did come they gave the increased number so the only purchase, as I understand it, is that of the four rafts; am I right about that?

The WITNESS. You are right; yes, sir.

Congressman SABATH. Have you seen these rafts, Mr. Reid?

A. I have; yes, sir.

Q. What is the size of these rafts?—A. Twenty-five persons capacity.

Q. Sir?—A. Twenty-five person capacity each.

Q. They are four new rafts?—A. Yes, sir.

Q. That would be one hundred passengers for the four?—A. Yes, sir.

Q. And what other improvements have they made?—A. That is all they are required to have for carrying 2,500; they had the life preservers aboard.

Q. Well, they had 2,253 and four rafts carrying one hundred, that would be 2,353?—A. On her first visit she had 2,570 life preservers and she took out rafts and boatage for 2,253; she could not carry the 2,570 passengers because she did not have the boatage for them; she had to be governed by the minimum number of her equipment.

Secretary REDFIELD. Judge Sabath, they carried 30 per cent of life rafts and boats.

Congressman SABATH. You say that they had on it a life boat or life preservers or rafts for each and every passenger?

A. Yes, sir.

Q. How many life preservers does this boat carry?—A. Two thousand five hundred and seventy.

Q. How many boats did it carry?—A. It carried 11 life boats and 1 working boat.

Q. And how many passengers or people would each of these life boats carry?—A. I could not tell you that by memory, the records will show.

Q. There were 11 life boats and there was another boat and how many rafts?—A. There was 37 rafts.

Q. What was the size of the rafts, all alike?—A. No; some run from 6 persons, 8 persons, 10 persons, 15 persons, 20 persons, and 25 persons, and 29 persons; different sizes.

Q. Do you know how many people would be taken care of by these rafts?—A. Thirty per cent of the number allowed or 771.

Q. You allowed 2,500, that would be about 833?—A. No, sir; 771, that is 30 per cent.

Q. Thirty per cent?—A. Yes, sir; 30 per cent of the passengers and crew.

Q. Mr. Reid, how many tanks did you look in when you made your inspection of the tanks?—A. To the best of my recollection there was five tanks on the side.

Q. How many did you actually inspect?—A. All of them.

Q. Did you open all of them?—A. Yes, sir.

Q. Isn't that rather hard to open some of them?—A. The tanks were open already for the inspection; I did not open them.

Q. Oh, they opened them for you, expecting you to inspect the tanks and they were open then at the time you called?—A. Yes, sir.

Q. Did you see them close the tanks?—A. I did not.

Q. Isn't it your duty to inspect not only these tanks to see whether the tanks are in good order, but see also if the openings were in good order to see whether they could be opened and closed speedily?—A. I never so considered it; I considered if the manholes were there and in good shape and the tanks were in good shape and everything as it should be, that was all that was required.

Q. It has been stated only two of these tanks had been used on each side?—A. I know nothing about that.

Secretary REDFIELD. These connections to the tanks are the boiler inspector's work?

Mr. COLLINS. I think Judge Sabath has got a misunderstanding of these tanks, from his questions I gather that he infers there are only two tanks could be used. Understand you can fill any one of these tanks at any time or you can fill all of them at once, just at the pleasure of the man operating the valve. They could use the whole valve, or they could use any part of the tanks they wanted to.

Congressman SABATH. Could they fill the both sides at the same time?

Mr. COLLINS. Yes, sir; that is the general type.

Congressman SABATH. I mean about this boat, could they leave the water out of one side and just put it on one?

Secretary REDFIELD. Inspector Eckliff will tell you about it.

Congressman SABATH. You do not know?

The WITNESS. I do not go into those particulars, no, sir.

Q. You do not know the system they use in filling or emptying the tanks?—A. No, sir.

Q. Or how they made up their ballast at all?—A. Outside of knowing that they have a big ballast capacity, and the size of it, and the capacity, I do not know.

Secretary REDFIELD. What is the size of it and the capacity?

A. I believe the size of the bottom is 12 by 18 stroke.

Q. What is the water cylinder?—A. The water cylinder is 16 inches.

Q. Twelve by sixteen by twenty stroke?—A. Yes, sir.

Q. Single acting pump?—A. I could not say.

Congressman SABATH. You do not know whether it was a single acting pump or whether it was a double pump or whether they could pump in two sides at the same time?

A. No, sir; I do not.

Q. You do not know?—A. No, sir.

Q. Isn't that in your department?

Secretary REDFIELD. It is not in his work, he has nothing to do with the machinery, Judge Sabath. The hull is his work.

Lieut. Gov. O'HARA. Captain, you said that you entered the service in 1906?—A. Yes, sir.

Q. By a civil service examination?—A. Yes, sir.

Q. You gave the names of three gentlemen vouching for you?—A. I believe that was the custom.

Q. Won't you please give the names of the gentlemen vouching for you when you entered the service?—A. I could not, I do not remember them.

Q. Captain, did you happen to be of the same political faith as the administration then in power?—A. I have always been a Republican all my lifetime, and I believe it was a Republican administration then, I would not say.

Mr. O'HARA. I am very much obliged to you.

(Whereupon a recess was taken until 10 o'clock July 30, 1915.)

JULY 30, 1915—9.30 A. M.

Parties met pursuant to adjournment.

Present, same as before, except Hon. Thomas O'Hara was sitting in place of Lieut. Gov. Barrett O'Hara.

ROBERT REID resumed the stand for further examination and testified further as follows:

Examination by Mr. THURMAN.

Q. Mr. Reid, I was not here yesterday afternoon when you were examined, and I have not had an opportunity of reading over carefully the testimony you gave at that time, therefore, I will probably have to cover some of the matters that you covered yesterday; that is my reason for doing so. How long have you been in the Steamboat Inspection Service?—A. Since 1906, June.

Q. Since 1906 in June?—A. Yes, sir.

Q. In what capacity in the Steamboat Inspection Service have you served?—A. First as assistant hull inspector, afterwards as a local hull inspector of steamboats.

Q. You were appointed hull inspector in 1906?—A. Assistant hull inspector.

Q. Assistant hull inspector in 1906?—A. Yes, sir.

Q. At what point or place?—A. Appointed at Milwaukee and detailed to Chicago.

Q. Then you came to Chicago in 1906 as assistant hull inspector?—A. Yes, sir.

Q. How long did you serve in Chicago as assistant hull inspector?—A. I think until February 4, 1908.

Q. Then what happened?—A. Then I was appointed local inspector of steamboats and transferred to Grand Haven, Mich.

Q. You went to Grand Haven then in 1908?—A. Yes, sir.

Q. As assistant hull inspector?—A. As local.

Q. As local inspector?—A. Yes, sir.

Q. Have you been a local inspector of hulls at Grand Haven since that time?—A. Yes, sir.

Q. You are acquainted with the steamer *Eastland*?—A. Yes, sir.

Q. When did you first see that steamer, Captain Reid, if you remember?—A. As near as I can recollect in June 1906, or July or August.

Q. Where?—A. In Chicago River.

Q. At that time did you, as assistant hull inspector, did you or did you not have any official duties in connection with that steamer?—A. Why, I was sent to inspect her equipment every Sunday morning, and at one other time I helped to measure it.

Q. Did you ever make any, or did you at that time or about that time make a regular inspection of her?—A. No, sir.

Q. Was it or was it not your duty as one of the assistant hull inspectors to make such an inspection?—A. It was if I was detailed to do such work.

Q. Did you make any inspection of that vessel while you were in Chicago?—A. No, sir.

Q. You never did?—No, sir.

Q. Did you during the time of your service in Chicago, did you or did you not assist the local inspectors in making an inspection of the steamer *Eastland*?—A. I do not recollect.

Q. You do not know whether you did or not?—A. No, sir.

Q. Do you know from your own knowledge or from records with which you are familiar the number of passengers the steamer *Eastland* was allowed to carry in 1906?—A. Yes, sir, 3,000.

Q. How many?—A. 3,000.

Q. Where did you get that information, Captain Reid?—A. From her certificate of inspection.

Q. Where did you see that certificate of inspection?—A. To the best of my recollection I saw it in the office in the Federal Building in Chicago; also posted on the steamer.

Q. Do you know how long the inspection or the certificate allowing the *Eastland* to carry 3,000 people was in effect?—A. I think it only governs that season, they gave an excursion permit for the extra crowd.

Q. Then according to your best recollection the license of the steamer *Eastland* to carry 3,000 people was in effect during the season of 1906?—A. Yes, sir.

Q. At the Port of Chicago?—A. Yes, sir.

Q. Have you made any inspections or did you in the course of your duties as a local inspector at Grand Haven make any inspections of the steamer *Eastland*, and if so, how many?—A. Two.

Q. When was the first one made?—A. June 10, 1914.

Q. Who made the application for that inspection?—A. I do not recollect.

Q. 1910 you say it was?—A. No, sir; 1914.

Q. 1914?—A. Yes, sir.

Q. The steamer *Eastland* at that time was taken from Chicago and sent to Cleveland, was she not?—A. Yes, sir; I believe she was.

Q. Do you know how long she was in Cleveland?—A. I think from the spring of 1907 to the season of 1912; I would not make a positive statement.

Q. The season of 1912?—A. Yes, sir.

Q. She was brought back to Lake Michigan, then, in 1912?—A. In 1913.

Q. 1913?—A. Yes, sir.

Q. Do you know who made the inspection?—A. No, sir; excuse me, I made a mistake there; 1914.

Q. 1914?—A. Yes, sir.

Q. When she was brought back an application for inspection was made?—A. Yes, sir.

Q. Do you know to whom the first application was made, to what board of inspectors?—A. I think the board at Grand Haven—my recollection was by Capt. Ennis; I would not be positive.

Q. Then, as a matter of fact, as far as you know after the vessel was brought back from Cleveland the first inspection was made by you and Mr. Eckliif as the local inspectors at Grand Haven; is that correct?—A. That is correct.

Q. And you do not know who made the application for that inspection?—A. I do not; our records will show.

Q. Were you acquainted with the owners of that vessel at the time or the officers of the company that owned her?—A. Part of them.

Q. You knew who?—A. Part of them.

Q. Please give me the names of the gentlemen you knew who were either owners of that steamer or officers of the company who did own her in 1914?—A. George T. Arnold.

Q. Who?—A. George T. Arnold.

Q. George T. Arnold. Who is Mr. Arnold?—A. Mr. Arnold is owner of the Arnold Transit Co. at Mackinac Island, Mich.

Q. Did the Mackinac Transit Co. at that time own the steamer *Eastland*?—A. No, sir; I do not think they did. I think Mr. Arnold, though, was president of the other company that owned it.

Q. What company was that?—A. The St. Joseph & Chicago Steamship Co.

Q. The St. Joseph & Chicago Steamship Co., headquarters in Chicago?—A. St. Joe.

Q. St. Joe?—A. Yes, sir.

Q. What position did Mr. Arnold occupy in that company?—A. I believe he was president of the company.

Q. When did you first become acquainted with Mr. Arnold?—A. I could not state that; it is a long time ago.

Q. And you have known him for a good many years?—A. Yes, sir.

Q. What have your relations been—intimate or just personally acquainted?—A. Personally acquainted; I have never visited his house in my life.

Q. Have you ever had any business transactions of any sort with him?—A. No, sir; outside of inspecting the boat.

Q. You do not recall, as I understand it, who made the application for this first inspection of the *Eastland* in 1914?—A. I do not.

Q. The boat was brought to Grand Haven, was she?—A. To Benton Harbor.

Q. Benton Harbor?—A. Yes, sir.

Q. And the first inspection you and Mr. Eckliff made was at Benton Harbor?—A. Yes, sir.

Q. What was the date of that inspection?—A. That was June 10.

Q. June 10?—A. 1914.

Q. Will you give me and the gentlemen here the details of what you and Mr. Eckliff did when you made that inspection? I do not want all your details; I want your general method of inspecting that vessel.—A. The hydrostatic test to the boilers is made by both of us, and each of us together, in conjunction, and the testing of the pumps, fire pumps, and the hose is also made in conjunction. After the hydrostatic test is put on the boilers and set, Mr. Eckliff then proceeds to inspect the condition of the boiler and the machinery, both internally and externally of the boilers. After making the external investigation the water is emptied from the boilers and he goes into the boilers and makes an internal examination of the condition of the boilers in regard to the stays, and so on.

Q. Now, irrespective of what Mr. Eckliff may have done in regard to the boilers, what did you do in regard to the life savers, and so on?—A. I thought you wanted each of us.

Q. I will get that from him and save a little time.—A. After the hydrostatic test to the boilers I then take up the hull and equipment.

Q. What did you find as the result of your examination of the steamer *Eastland* on June 10, 1914, as to her general condition and as to the condition also of her life-saving equipment?—A. I found the steamer in good condition, her hull and the equipment in good condition.

Q. Did you or did you not at that time know how many passengers the steamer *Eastland* had been licensed to carry during the seasons she was on Lake Erie?—A. I did not.

Q. You knew nothing about it?—A. I did not.

Q. Did you and Capt. Eckliff, or Mr. Eckliff, or did you not at this inspection on June 10, 1914, fix the number of passengers that the steamer *Eastland* should be allowed to carry?—A. We did.

Q. What was the number of passengers that you fixed as her maximum allowance on that date?—A. Two thousand and forty-five.

Q. Two thousand and forty-five?—A. Yes, sir.

Q. What elements did you take into consideration in fixing that number of passengers?—A. The number of life preservers and the capacity of the boats and the rafts,

Q. Did you or did you not take into consideration her deck space?—

A. No, sir.

Mr. O'HARA. What is that answer?

The WITNESS. No, sir.

Mr. THURMAN. Q. Then, as I understand it, you based your allowance fixed on July 10, 1914, at 2,045 on the life-saving equipment on board of that vessel at that time?

A. Yes, sir.

Q. Was or was not that the proper method and the method applied by the service in determining the capacity of a passenger-carrying steamer?—A. That is the general practice, to limit the steamer to the equipment that she has.

Q. Have you and Mr. Eckliff ever followed or adopted any other method?—A. Not in our inspections together we have not.

Q. At any time. Do you know whether or not it is the custom of any of the local inspectors, in estimating the maximum number of passengers that a steamer should be allowed to carry, to take into consideration not only the life-saving equipment but also the deck space?—A. That is the general practice, but I had already helped to measure this steamer.

Q. Is there anywhere or is there not a rule or custom which takes into consideration, in addition to the life-saving equipment, the measurement of the deck space in fixing the maximum number of passengers?—A. There is not any rule; there is a rule commonly used, not arbitrarily.

Q. Now, what is that rule that is commonly used?—A. It is to divide the entire number of square feet of deck surface by 6 or 7 or 8 or 9.

Q. Now, Mr. Reid, in fixing the number of passengers that that vessel should carry on June 10, 1914, why did you limit your calculation to the life-saving equipment, and not also take into consideration this rule of deck space?—A. Why, I was aware that the steamer had been measured and was allowed 3,000 passengers, and that she had 88 staterooms at that time that had been removed giving more deck space, but her equipment at that time would allow her only to carry 2,045.

Q. Then, as a matter of fact, in reaching the maximum number of people she should be allowed to carry June 10, you took into consideration the life-saving equipment and your previous knowledge of the measurements of the steamer?—A. Yes, sir.

Q. Did or did not Mr. Eckliff agree with you as to the maximum number of people she should be allowed to carry at that inspection?—A. We agreed that the number that she had appliances to carry.

Q. Was there any difference of judgment between you and Mr. Eckliff as to the propriety of allowing her to carry 2,045 people on that date?—A. Not that I know of.

Q. You mean to convey by that that the fixing of the passenger limit at 2,045 on June 10, 1914, was the joint action of Mr. Eckliff and yourself as local inspectors at Grand Haven?—A. Yes, sir.

Q. Was or was not the fixing of the passenger limit on that date the exercise of your best judgment and discretion?—A. It was, and at that time she was limited on account of her equipment.

Q. Her life-saving equipment was limited about that time?—A. Yes, sir.

Q. Mr. Reid, were any of the officers or owners of that vessel with you and Mr. Eckliff when you made that inspection?—A. Why, to the best of my recollection, Capt. Ennis.

Q. Captain who?—A. Capt. Ennis.

Q. Ennis?—A. Yes, sir.

Q. He was not on the vessel at that time, was he?—A. Yes, sir.

Q. Was this Mr. Arnold there?—A. No, sir.

Q. Was any other officer or officers of the St. Joseph & Chicago Steamship Co., or whatever its name may be, there?—A. I think there were, Mr. Hull and Mr. Steele and some other gentleman were there quite frequently.

Q. Mr. Reid, do you know Mr. Hull?—A. I do.

Q. How long have you known Mr. Hull?—A. About two years.

Q. What has been the character of your acquaintance with him?—

A. Could I bring that in later on?

Q. You do not have to answer any questions you do not want to, Mr. Reid, of course.—A. Why, the reason I say that is I wish to make a statement here when I have time and I want to bring that part in on that statement.

Q. Do you want to make that statement in regard to Mr. Hull now or later on?—A. I would make it now.

Q. All right, sir; I would be very glad to hear it.—A. Not only in regard to Mr. Hull but in regard to Mr. Erickson I should like to make a statement.

Q. I am coming to Mr. Erickson later.—A. But I would like to have you embrace these remarks as a part of the testimony.

Q. Go ahead; yes, sir.—A. Mr. Erickson, in 1912, sailed the steamer *Watts* for the Thompson Line as chief engineer. No; that was in 1913, in 1913, he sailed that steamer, and in 1914 he was transferred to the steamer *Sultana* of the same line as chief engineer.

Q. That is Mr. Hull you are talking about?—A. That is Mr. Erickson.

Q. Mr. Erickson, yes.—A. In March, 1915, he received a letter from the same company saying that he was transferred to the steamer *Saxona* as chief engineer and a contract was sent him to sign and return to the company; he was to get for sailing this steamer \$185 a month for the sailing season, his expenses up to the steamer and while the steamer was being put in shape, and after the steamer was finished to pay his expenses while laying out and pay his expenses back home—that was the sense of the contract. About this time a vacancy occurred in the chief engineer's position of the steamer *Eastland*. Through the influence of his wife he was persuaded to make an application as chief engineer on the steamer *Eastland*; he did so, and he received a letter from Mr. Hull stating that he could have the steamer at \$150 a month for nine months.

Q. By the way, Mr. Erickson is your son-in-law, is he not?—A. Yes, sir; I am touching that on this account and what has been said.

Q. That is all right; we just want to get this right and give you a fair chance to say it.—A. About the same time we received a letter from Mr. Hull asking the Grand Haven Board about the character

and qualifications of Mr. Erickson; we replied to that letter, and a copy is on file, that Mr. Erickson was licensed as chief engineer of all passenger steamers in the Great Lakes by the Grand Haven Board, and, in our opinion, was qualified to fill the position—that is about the text of the letter. No other word or communication or letter or anything has passed between Mr. Hull and myself except this letter I just told you about in regard to Mr. Erickson getting a position there.

Q. Is that all you want to say?—A. No, sir.

Q. All right; go ahead.—A. Mr. Erickson replied to Mr. Hull, thanking him for the courtesy he had extended to him and saying that he could not accept the boat on this condition. About a week elapsed, and Mr. Hull then wrote Mr. Erickson again and asked Mr. Erickson to submit a bid for what he would accept the *Eastland* for as chief engineer. He replied to that letter, inclosing that contract for the Thompson Line sent to him to sign for the *Saxona*, and saying he would take the steamer *Eastland* on the same terms; that is, his expenses must be paid there and back and his board paid while fitting the steamer out and lying up; and Mr. Hull wrote him to come to Michigan City and make out a contract.

That is all the connection I had with Mr. Erickson getting the position as chief engineer of the steamer *Eastland*.

Now, to touch the relations that Mr. Hull and I had together. In 1915, in the early part of May, Mr. Hull, of the St. Joe & Chicago Steamship Co., and manager of two steamships, the *Eugene C. Hart* and the *Eastland*, notified the Grand Haven office that the steamer *Eugene C. Hart* was ready for inspection. She was newly painted, and everything was all ready, and he wanted to put her into commission. Mr. Eckliff and I went to Benton Harbor and applied the hydrostatic test to the boilers, and then I went to the hull and inspected her internally and externally. I found such conditions on the steamer *Eugene C. Hart* that I told Mr. Hull I could not give her a certificate; that she had to go to the shipyards for repairs. He was very much put out about this and said he ought to have been notified about this before; I told him we would have been glad to come up in the wintertime and give her the inspection at his own expense if he had wished it. He then requested Capt. McCarthy and myself—of the *Eugene C. Hart*—to get a raft and a man and go around the steamer and I would mark the defective planks and other things that must be removed from the steamer. We did so, and I marked out several planks, and then we went back aboard and I marked out part of her stanchions in the hull, and I marked out some short beams that had to be taken out of the steamer before she could be put into commission. I gave him not a certificate but a permit to proceed from Benton Harbor to Port Manistee for repairs. He took the steamer there, and she was there about two weeks repairing her, and since that time Mr. Hull and I have merely recognized each other as we met, and that is about as far as our relations go.

Now, I would like to take up here another thing that I have been accused of, and that is that I am under control of the shipowners.

Mr. THURMAN. I will come to that later if you will let me come to it.

A. I would like to give these facts, because they have got a tendency to reflect upon my character.

Mr. THURMAN. All right; if you have got it in your mind, go ahead.

A. I would like to show just how I stand with the shipowners.

Mr. THURMAN. I had that in mind, but if you want to put it in the shape of a statement go ahead.

A. I can not give you the date, but it was when the House of David at Benton Harbor bought the steamer *Minnie M.* and brought her to Benton Harbor. Mr. Eckliff and I went to Benton Harbor to make an inspection of her at the request of Capt. Westcott. We went to the steamer and spent three days on her, and the outcome of this inspection was that we practically ordered a new rebuild of the steamer. The treasurer of the House of David was very much put out, and he wrote a letter to the collector of customs at Grand Haven, Mich., which I think is on file at the present time, denouncing my character in the most severe terms; not only that, but he wrote to the department taking an appeal from our judgment; and Capt. Westcott, in due course of time, notified Mr. Eckliff and myself to meet him at Benton Harbor, which we did. We carefully inspected the boat the second time, and Capt. Westcott sustained our previous inspection and judgment. They made all the repairs they could to the steamer at Benton Harbor, and after that, they had gone as far as they could there, they asked for a permit to take her to Manistee to the shipyards; that was given to them, and they proceeded to Manistee and completed these repairs, taking upward of a couple of months. That shows my connection with the House of David, and also whether I am holding out my hand for emoluments or not.

The next one I will call your attention to is owned by Mr. Gus Kretsinger, the Pere Marquette manager, or owner of the Pere Marquette line of steamers. He had the steamer *Robert C. Wente*, and we made an inspection of this steamer, and the repairs that we ordered to the steamer Mr. Kretsinger took exception to. He wrote to Capt. Westcott in regard to the steamer, and Capt. Westcott directed me to meet him in Manistee, and we carefully went over the steamer a second time, and Capt. Westcott modified in a slight degree some of the repairs I had ordered to be made.

I will next call your attention to the ferry *Santa Marie*, running between Mackinac City and St. Ignatz, carrying passengers and freight across the stream. And we inspected that steamer, I do not just recall the date, but the record will show, and the repairs of that steamer practically amounted to a rebuild. They took exceptions to our judgment and called on Capt. Westcott. Capt. Westcott directed me to meet him at St. Ignatz, and we carefully went over the steamer again, and in the captain's judgment we gave her papers to be operated not as a passenger steamer, but as a freight steamer carrying freight across the straits. The next is the steamer *Carolina*, owned by G. C. Geiken. Mr. Geiken called for an inspection of that steamer, and we went to Manistee. She was at Manistee at the time, and after the inspection I found the condition of her hull to be such that I ordered her to be dry docked and repaired, which he did. He put her on the dry docks and repaired her, but he did not do all the repairs that were ordered. We came back to Manistee on our way back from the north, and he hailed us and came up to the hotel with us, and

wanted to know if we could give him a certificate for the *Carolina*. We then told him that we would examine the condition of the boat, as she was docked, and we went down the next morning and made another examination of the boat, and ordered her placed in the dock, which he did, and when she came out the second time she was in good condition. We inspected the little fishing steamer *Frank P. Geiken* for the Booth Fisheries Co. at Carlevoix and found her condition to be such that we ordered practically a new rebuild, which they would not give her, and she has not been in commission since.

We have ordered repairs to at least four steamers in Sheboygan that were so expensive they would practically put them out of business, and they are there now and not in commission either.

We this spring ordered repairs to the steamer *Robert E. Johnson* and certain other equipment, and the owners employed a Mr. Lilly, a lawyer of Grand Haven, to take the case for them and to take an appeal, and they were sustained on the appeal.

Also since then we have ordered Mr. Morton, of the Graham Morton Transportation Co., to make additional equipment for the steamer *Puritan* in the shape of a lamp. He not being willing to do that took it up with Capt. Westcott, and the matter has not been settled yet. That is a recent occurrence.

There are many other circumstances that I do not recall, but I give you these for you to learn of how we work with the owners and masters of steamers, and everything there is in good condition there at that post, and I earnestly request that an inspection of each and every steamer be made, a personal examination be made of the steamers in the Michigan district to find out the exact condition of each one.

Mr. THURMAN. Is that all, Mr. Reid?—A. Yes, sir.

Q. Now, Mr. Reid, that is a very clear and comprehensive statement, but let us go back to this inspection for a moment on June 10, 1914.—A. Just wait a minute until I make a further statement.

Q. Yes.—A. I wish to state to the gentlemen here that it is a very hard matter for me to recollect all the details of an inspection for this reason; we inspect the following large steamers for the Graham Morton Transportation Co.: We inspect the steamer *Puritan* and the steamer *Holland* for the Chicago & South Haven Steamship Co.; we inspect the steamers *City of South Haven* and *Petoskey* for the Benton Transportation Co.; and we inspect the steamers *Frank Woods* and *Charles McVeagh*.

Q. Mr. Reid, in connection with any of these inspections, if I or any of the other gentlemen ask any questions that you can not remember the details about you are perfectly justified, of course, in saying so.—A. I want to show you that I have to carry in my mind the equipment of about 50 of these large steamers; I am telling you just where the thing is situated. I don't think I am able to do it, but I am here to tell you to the best of my knowledge.

Q. All I am trying to get is all that occurred at that inspection, with all its surrounding details, as far as you can give it to me; I do not ask you to give me something that you can not remember.—A. I will say for your information that before coming here, to refresh my memory I looked over the books on the steamer *Eastland*.

Q. Now, let's get back here for a few minutes. Did you have a conversation or any correspondence with Mr. Hull in regard to the

inspection of the *Eastland* that you were to make on June 10, 1914?—  
A. I could not recollect that; the file will show.

Q. Can you get that file for me?—A. It is in the office here at the present time.

Mr. SHERMAN. Capt. Westcott, will you have that file examined and see if there are any letters in that file from Mr. Hull?

Capt. WESTCOTT. What year is that?

Mr. THURMAN. 1914; to the local inspectors at Grand Haven, or any from the local inspectors at Grand Haven to Mr. Hull.

Mr. THURMAN. Did you have any confidential relations of any kind with Mr. Hull prior to June 10, 1914, or did you not?—A. No, sir; I did not.

Q. Do I understand you correct that you knew him as a mere casual acquaintance?—A. Sir?

Q. That you knew him as a mere casual acquaintance?—A. For about two years; yes.

Q. Had you ever inspected any other boats for him prior to that time?—A. He was connected with the steamer *Eugene C. Hart*, which we inspected.

Q. Mr. Reid, did you ever receive from Mr. Hull or any officer or official of the St. Joe Co. or any other company owning boats which you inspected any letters, messages, or did you have any conversation with any of them or did they attempt either improperly or otherwise to influence your decision in the inspection of their vessels?—A. No, sir; and while you call my attention to it I would just like to touch on a phase that I think of in connection with the steamer *Eastland*.

Q. Now, then, you do that specifically; was any attempt made by anybody?—A. No, sir; there was not.

Q. Wait a minute. To improperly influence you or to influence you or Mr. Eckliff in determining the number of passengers to be allowed the steamer *Eastland* on June 10, 1914?—A. I will speak for myself. There was no one that tried to influence me, and Mr. Eckliff will be here and he may answer.

Q. You speak for yourself?—A. Yes, sir.

Q. Nobody made any such attempt as that?—A. No, sir.

Q. Mr. Hull did not?—A. No, sir.

Q. Any other officer of the St. Joe Co.?—A. Nor any other man.

Q. No other person at all?—A. No, sir. Now can I touch that matter I wish to speak about?

Q. What?—A. Can I touch upon that matter that I wish to speak about?

Q. Go ahead.—A. It is pertaining to my relations to Capt. Pederson, of the steamer *Eastland*. In 1914 she had sleeping quarters aft; they have to have two exits, and one of those exits led into the saloon, and on one of our checking-up trips we found that door closed and locked, if you please. At the time we told Capt. Pederson that that door must be absolutely kept open, and when we got back to the office we wrote a letter and it is now in Capt. Westcott's possession, a copy of it is in his possession.

Mr. THURMAN. I want that letter, captain.

Mr. REID (continuing). In which we took him to task sharply, stating to him if we found such conditions existing again we would summon him to Grand Haven to stand trial and show cause why his license should not be taken away from him.

On another occasion I was counting passengers on what they call the peanut excursion—it is an excursion that is made after the boat arrives from Chicago.

Q. That is another boat?—A. That is the *Eastland*; she arrives from Chicago, puts off the Chicago crowd, immediately loads another crowd and takes them out to the lake for two hours—generally from 2 to 4—if she can get started. I was counting passengers on the aft gangway; she was lying head to the creek, starboard side to the dock, and I was facing the crowd as they came from the town toward the steamer, so I could see the crowd, and at about this time the *City of Benton Harbor* pulled into the pier, and the tug *Lloyd M.* was all ready to fasten to the steamer *Eastland* and turn her around so she could get into the lake; without any warning whatever as to his intention, the stern line was thrown off behind me, the helm put hard aport, and he rung up his engines to go ahead, which swung the steamer into the lake, and if it had not been for the ticket checker and myself some of the passengers would have went into the water also. I had to go to the Graham Morton dock, and I walked. It is pretty near a mile from that dock to the Graham Morton dock, and when I was over on the bridge I still saw the steamer *Eastland* holding the *Benton Harbor* in the river, taking his own time in turning around. When I got back into the river I took him sharply to task for letting go of his line and not notifying his checkers and myself that he was going to do so, and he said it was the orders of Mr. Hull to do it and he did; I told him if he ever done a trick like that again we would take his license away from him for good.

Mr. THURMAN. I hand you a copy of a letter dated June 30, 1914, signed Charles C. Eckliff, Robert Reid, local inspectors, and addressed to Capt. Harry Pederson, steamer *Eastland*, St. Joseph, Mich., and ask you if that is the letter you referred to a moment ago [passing letter to witness]?

A. That is the letter.

Secretary REDFIELD (reading copy of letter above referred to):

Capt. HARRY PEDERSON,  
*Str. Eastland, St. Joseph, Mich.*

JUNE 30, 1914.

DEAR SIR: At the reinspection of the steamer *Eastland* by the assistant inspectors it was found that the life preservers for the firemen, water tenders, and coal passers were in a locker in the barroom, and the door to the barroom was locked. You will at once remove these life preservers from the barroom and place the same in the crew's quarters where they belong.

We must also call your attention to the fact that this door leading to the barroom must be left unlocked at all times, as it is one of the exits to the crew's quarters, and should we find this door locked in our next visit we will summon you and your officers to show cause why your license should not be suspended or revoked for obstructing one of the exits of the crew's sleeping quarters. If it is necessary to protect the contents of your bar, you should keep a watchman there for that purpose, but this door leading from the crew's quarters as one of the exits must never be locked.

They will report that the lifeboats on this steamer have not been scrubbed and painted; said boats being very dirty. This you must attend to at once.

They also report there are not notices where life preservers may be found. These notices you must prepare and have posted immediately.

Kindly give this matter your immediate attention as another examination of your boat will be made next Saturday.

Respectfully,

(Signed)

CHARLES C. ECKLIFF,  
ROBERT REID,  
Local Inspectors.

**Mr. THURMAN.** Mr. Reid, one or two more questions about this inspection of June 10th. As I understand you the number was fixed at 2,470; is that right?—A. June 10?

Q. Yes, or 2,270, was it?—A. No, 2,045.

Q. 2,045; I have got that wrong.—A. It is pretty hard for me to remember which one of those.

Q. It was approximately 2,045; I think that was the figure you gave me. Mr. Reid, the absolute responsibility for the fixing of the number of passengers at 2,045 on June 10, 1914, to be allowed the steamer *Eastland* rests entirely upon you and Mr. Eckliff, does it not?—A. That is the way I take it to be; yes, sir.

Q. It was fixed in the exercise of the discretion of you two gentlemen, without any suggestions, without any influence in any way, shape, or form?—A. As I have stated before, no one broached the subject.

Q. When was the next inspection of that vessel made, Capt. Reid?—A. The following year, June 7, 1915.

Q. June 7, 1915?—A. Yes, sir.

Q. Upon whose application was that inspection made?—A. I could not tell you, the files are here in the office and the records will show.

Q. Who made that inspection?—A. Myself and Mr. Eckliff.

Q. Was the application for it written or oral?—A. A written application.

Q. Can you give me that application?—A. Yes, sir.

Q. I would like to see it right now if I may have it.

(Paper passed to witness.)

**Mr. THURMAN.** Capt. Reid, I hand you an application for an inspection of the steamer *Eastland*, dated May 15, 1915, and signed by Harry Pederson, master, and ask you if that is the application upon which you and Mr. Eckliff made the inspection in June, 1915.—A. It is; there are my initials there on the corner.

Q. Will you please put this into the record? (Reading:)

BENTON HARBOR, MICH., May 15, 1915.

UNITED STATES LOCAL INSPECTORS.

Steamboat-Inspection Service,  
Port of Grand Haven.

GENTLEMEN: The undersigned applies to have the steamer named *Eastland*, of 1,981 gross tons, inspected under the inspection laws of the United States, to be employed as a passenger and freight excursion vessel on the following road or waters, to wit, the Great Lakes, bays, and rivers. The vessel will be found lying at Benton Harbor and in all respects ready for inspection. The current certificate of inspection expires June 10, 1915. I further state that no previous application for inspection has been made to any other board of local inspectors or supervising inspectors.

(Signed) HARRY PEDERSON,  
Master.

**Mr. THURMAN.** I will ask you to also include in the record this:

PORT OF GRAND HAVEN, MICH., May 17, 1915.

The Master or Owner of the Steamer *Eastland*:

Your application in writing to have this steamer inspected has been received. Inspection will be made at the hour of 2:30 p. m. o'clock on Monday, the 25th day of May, 1915, at Benton Harbor, Mich. To insure inspection at the time named it will be necessary to have the water in the boiler registered to a temperature not exceeding 70 degrees Fahrenheit; to have the furnaces, braces, and connection swept clean, the grate bars taken out. All the necessary equipments and the Marine documents now in force must be on board, except in the

case of new steamers not yet documented, and the vessel, her boiler and machinery, must be in every way ready for inspection. A failure in any of these respects, making a second trip of the inspectors necessary to complete inspection will entail upon the owners of the steamer the actual and reasonable traveling expenses incurred by the inspectors in making such second trip, this being in accordance with the direction promulgated under date of February 18, 1897, which will be strictly enforced.

Respectfully,

ROBERT REID,  
CHARLES C. ECKLIFF,  
United States Local Inspectors.

**Mr. THURMAN.** Mr. Reid, did you have any conversation with any of the officers of the corporation owning this vessel or any of the officers of the vessel itself other than those I have incorporated in the record in regard to that inspection to be made in June, 1914?—A. Concerning the time it should be made?

Q. No; not only as to the time when it should be made, but as to the method of making it. I will put it in another way: Did Mr. Hull, as an officer of the corporation, talk to you about making this inspection?—A. No, sir; the only communication we had was a written communication.

Q. Did you have any conversation—I will come right back to it—did you have any conversation with any of the officers of the corporation owning this vessel as to the method you should pursue in making that examination or the conclusions you should reach?—A. No, sir; none whatever.

Q. Did you have any such conversation with any of the officers of the boat?—A. No, sir.

Q. Did you have any such conversation with anybody?—A. No, sir.

Q. I understand that in conformity with this request for inspection and your letter acknowledging it that an inspection was made.—A. Yes, sir.

Q. You made an inspection of the hull of that vessel and her life-saving equipment in conformance with your duties, did you?—A. Yes, sir.

Q. Mr. Eckliff examined the boiler machinery, and so forth?—A. Yes, sir.

Q. Did you witness the hydrostatic test applied to the pumps?—A. I did; that is part of my duty.

Q. At that time, Mr. Reid, or at the time of the application for this inspection, the steamer *Eastland* was carrying 2,045 passengers, was she not?—A. Not at that time.

Q. What was she carrying, then; what was her maximum?—A. She was just having a new inspection at this time.

Q. Well, the year preceding—in 1914?—A. She carried 2,045.

Q. She carried 2,045?—A. Yes, sir.

Q. Now, there is no request in this application for inspection or, rather, any statement of the number of passengers this vessel was allowed to carry under previous inspection and there is no request in this application for a refixing or a renaming of the number of passengers she should be allowed to carry.—A. No, sir; nothing whatever.

Q. That is never so?—A. No, sir.

Q. Now, at this inspection did you and Mr. Eckliff or did you not fix the minimum number of passengers the steamer *Eastland* should

be allowed to carry in 1915?—A. We fixed the number that she should carry at that time according to her equipment.

Q. How did the question of how many passengers this steamer should be allowed to carry through the season of 1915 first come up?—A. I believe the question, to the best of my recollection, came up when they brought the steamer to Benton Harbor in 1914.

Q. How did it come up then? That was for the season of 1914, wasn't it?—A. That was what they would be allowed to carry if they had the equipment for that season.

Q. Who brought it up at that time?—A. I don't know.

Q. You do not recall?—A. No, sir.

Q. Well, as a matter of fact, in 1914 the passenger carrying limit was placed at 2,045?—A. Yes, sir.

Q. So we can eliminate the year 1914; we are talking now about the season of 1915.—A. All right.

Q. What limit did you and Mr. Eckliff place on this vessel at the inspection in June, 1915, for the season 1915?—A. We placed the limit according to her equipment at that inspection. Do you want to know what it was?

Q. Yes.—A. Or if it was increased.

Q. Now, wait a minute, I am coming to that. What did you place it at, the number, at 2,500 or was it less than that?—A. I will get it for you in a minute if you will give me time. 2,253.

Q. At 2,253?—A. I think, I would not say for sure; the records will show.

Q. That is to the best of your recollection in June, 1915, you placed the carrying capacity of this steamer at 2,253 people?—A. I believe so; yes, sir.

Q. Who first brought up the question of the carrying capacity at that time?—A. It was fixed by the equipment the steamer had on board.

Q. Who first suggested fixing it, whose duty is that, yours or Mr. Eckliff's?—A. I make out the list after I examine the equipment and that is submitted to him.

Q. Do I understand then that that is the custom, you as the hull inspector—I am asking for information now—you as the hull inspector go over this vessel, the entire vessel, you take into consideration her life-saving equipment, that is, her lifeboats, her life rafts, and her life preservers, and everything in the shape of a life-saving appliance?—A. That all comes in my line of business.

Q. That is in your line of business?—A. Yes, sir.

Q. Your duty, as I understand it?—A. Yes, sir.

Q. That data is collected?—A. Yes, sir.

Q. And on the basis of that data you and a boiler inspector, constituting a board, determine the number of passengers that that vessel should be allowed to carry?—A. Yes, sir.

Q. The maximum number of people, is that correct?—A. In accordance with her equipment.

Q. Was or was not that the procedure applied in June, 1915, when you fixed the maximum capacity at 2,253?—A. That was the procedure.

Q. Yes, sir.—A. Giving them as many people as they had equipment for.

Q. Did you or did you not at that time take into consideration any deck space on that vessel, or did you in your prior inspection take into consideration your general knowledge of her measurements?—A. I took the general knowledge, I did not repeat the measurements; in fact, we never repeat them after Chicago makes them.

Q. You took no new measurements of the deck space?—A. No, sir. I thought she had more deck space and a less number of people at that time.

Q. Did you or did you not know at that time that under previous licenses the steamer *Eastland* had been allowed to carry a greater number of passengers than 2,253?—A. I knew she had 3,000 in 1906.

Q. Now, when she carried 3,000 in 1906, she was a somewhat different vessel from what she was in 1915, was she not?—A. Yes, sir.

Q. Did or did not that fact have any influence in your board determining the capacity of 2,200 approximately instead of 3,000?—A. We based our judgment on those figures.

Q. On the figures?—A. Yes, sir; that would be safe.

Q. Did, in your opinion, the change in this vessel necessitate a reduction of the maximum number of passengers it should be allowed to carry?—A. No, sir.

Q. It did not?—A. No, sir.

Q. Then why did you fix the number at 2,253 when you knew that in previous years she had been allowed to carry 3,000?—A. I have already stated she did not have the equipment for 2,500.

Q. As a matter of fact, is it not true that this 2,253 was determined by the life-saving equipment on board of her at that time?—A. That is what I have already stated; yes, sir.

Q. Now, Mr. Reid, in all the responsibility for the fixing of the number of passengers in June, 1914, of 2,253 rested wholly and solely upon you and Mr. Eckliff, does it not?—A. 1915?

Q. Yes.—A. Yes, sir.

Q. Now, Mr. Reid, at any time subsequent to June—I will change that—Mr. Reid, was the passenger-carrying capacity of this vessel changed or increased rather, subsequent to June, 1915, at this inspection you have made, and if so, when? At the inspection of June, where you fixed the carrying capacity at 2,253, to put it in another way—I am putting it in another way.—A. We amended that certificate afterwards.

Q. That is what I am getting at.—A. That was amended, I believe, July 2; the record will show.

Q. July 2, 1915?—A. I think so.

Q. What was the carrying capacity fixed at at that time?—A. Two thousand five hundred.

Q. How did that matter of increasing the carrying capacity of this vessel over your inspection certificate of June arise—how did it first come to your attention?—A. Why, by notice that they put the additional equipment aboard the boat.

Q. What do you mean by receiving notice that they put additional equipment on the boat? Had you at any time notified them to put additional equipment on that boat?—A. No, sir; I don't think they had, only this previous talk that they could have 2,500 if they could equip the steamer for that; nothing in the record to show.

Q. Did the inspection in June, when your capacity was fixed by the board at 2,253—was there any talk about fixing it at 2,500?—A. Not at that time; I do not think there was; I do not recollect.

Q. When did you ever at any time have any talk with the officials of this company as to fixing it at 2,500?—A. I would not say for sure, but my idea is that there was something in regard to that previous to that time; I am not certain of that.

Q. Did at any time any of these officers discuss with you the additional life-saving equipment that would be required in order to obtain a certificate for that vessel for 2,500?—A. I think I notified the captain and the mate, Fisher.

Q. Did you do that upon your own volition, or did you do that upon request?—A. I can not recollect.

Q. I hand you a letter dated July 2, 1915, addressed to C. C. Eckliff, Robert Reid, and signed by Harry Pederson, master, and ask you if you ever received it?—A. Yes, sir.

Mr. THURMAN. Yet me read this into the record, please.

ST. JOSEPH-CHICAGO STEAMSHIP CO.,  
St. Joseph, Mich., July 2, 1915.

Capt. C. C. ECKLIFF and ROBERT REID,  
United States Local Inspectors, Grand Haven, Mich.

GENTLEMEN: As per my phone to-day, we placed the following rafts on the steamship *Eastland*:

Raft No. 34, plate No. 3304.

Raft No. 35, plate No. 3306.

Raft No. 36, plate No. 3305.

Raft No. —, plate No. 3307.

Length of each raft over all, 16 feet 8 inches; width of each raft over all, 6 feet. Diameter of cans, 1 foot 10 inches. Number of caps to each raft, 2. Manufactured by David Kahnwieler's Sons, New York.

As per your letter of June 7, this will raise the *Eastland's* passenger-carrying capacity to 2,570. Your file V-636. I trust that you will mail the new certificate to Capt. Pedersen, steamship *Eastland*, 407 Rush Street, Chicago, special delivery.

Yours, very truly,

D/E.

HARRY PEDERSEN, Master.

Mr. SABATH. May I inquire right here when this letter is dated?

Mr. THURMAN. This letter is dated July 2; I am coming to the June 7 letter now.

Q. Mr. Reid, I am going to read you a letter that I find on your file V-, dated June 7, 1915, addressed to local inspectors of steam vessels, Grand Haven, Mich., signed by Harry Pedersen, master. I am going to read it to you so you may know what I am talking to you about—wait a minute; let us go back to the 4th. I am going to read first a letter written by you and Mr. Eckliff to Capt. Harry Pedersen, dated June 4, 1915.

Capt. HARRY PEDERSEN,  
Steamer "*Eastland*," St. Joseph, Mich.

JUNE 4, 1915.

DEAR SIR: You will equip the steamer *Eastland* with one oil tank of 30 gallons cap. or 2 tanks of 15 gal. cap. each. It is optional with you which you install.

These tanks are to be fitted with suitable hose or pipes for distributing storm oil overboard, said tanks to be filled with storm oil, placed in a suitable part of the vessel, and ready for use at all times. These tanks must be installed immediately. Kindly notify this office when tanks are installed and ready for use as required above.

You will also install one mechanical deep-sea sounding apparatus. Many of the steamers are installing a Dobbin McInnes deep-sea sounding apparatus.

A metal can large enough for the engineer to store his greasy rags in.

The safety notices that were sent to you to be framed, one placed in engine room and one in pilot house.

Three stay bolts in the rear head, the after starboard boiler that leaks slightly to be hammered up, and the tube for diamond flue blower to be expanded out and made tight or renewed.

Respectfully,

CHARLES C. ECKLIFF,  
ROBERT REID,  
Local Inspectors.

Q. Why was that letter sent, do you recall?—A. I think it was because they found those defects in the steamer and wanted them remedied.

Q. When did you find those defects?—A. What is the date of the letter?

Q. June 4.—A. I think it was May 30; I would not say for sure.

Q. At the time of your inspection?—A. Yes, sir.

Q. Now, then, in response to that I am going to read you a letter dated June 7, 1915, to the local inspectors of steam vessels at Grand Haven, Mich.:

ST. JOSEPH-CHICAGO STEAMSHIP CO.,  
GENERAL OFFICES,  
St. Joseph, Mich., June 7, 1915.

Local inspectors of steam vessels, Grand Haven, Mich.

GENTLEMEN: Yours of the 4th to hand and contents of instructions carefully noted in regard to steamship *Eastland*.

The oil tanks will be installed with full equipment on Wednesday, June 9, and the order has been placed for deep-sea sounding apparatus and will be placed on the *Eastland* as soon as possible.

Your instruction regarding after starboard boiler and the diamond flue blower have been attended to and put in first-class condition, and tank or can for greasy rags installed, and also your safety notices put up in pilot house and engine room.

I wish necessary permit or papers to move the boat on Thursday, June 10, 1915, and same for allowing *Eastland* to go on her regular Chicago run Saturday morning, June 12, 1915.

The life-saving equipments that the *Eastland* now has gives the boat a capacity of 2,253 persons, crew included, but have ordered four 25-person capacity life rafts and shall expect you to give the boat her full capacity of 2,570 persons as soon as these rafts are installed, of which I shall notify you in due time.

I hereby send you a duplicate of order for deep-sea sounding apparatus, sworn to before a notary public by me, and I also make affidavit as to the veracity of contents of this letter.

Yours, very respectfully,

HARRY PEDERSEN, Master.

Subscribed and sworn to before me this 7th day of June, 1915.

CHAS. W. STRATTON,  
Notary Public, Berrien County, Mich.

My commission expires March 10, 1918.

Q. Was or was not that the first time that this question of increasing the passenger-carrying capacity of the *Eastland* in accordance with the increase of life-saving equipment came up?—A. I think the verbal conversation in regard to that was previous to that.

Q. You had had verbal conversation with Capt. Pedersen?—A. I think so.

Q. At those conversations did you or did you not agree that if this additional life-saving equipment—or did you or did you not agree—to put it another way—upon the additional life-saving equipment that would be required in order to increase her capacity to 2,500?—A. I am quite positive that I informed him previous to that

some time, that when he equipped the steamer with the required equipment, she should carry 2,500.

Q. Now was the equipment named in this letter of Capt. Pedersen to you stating that the additional equipment was put on, was that in conformity with what you told him would be required in order to increase her capacity or was it not?—A. I could not say, but I think it is.

Q. As a matter of fact, Captain, were you or were you not justified in increasing the number of passengers because of the additional life-saving equipment put on that boat?—A. We were.

Q. In accordance with this request did you or did you not, before the passenger-carrying capacity was increased, inspect this vessel to see whether or not this additional life-saving equipment had been provided?—A. You mean the four rafts?

Q. Yes; the life-saving equipment upon which you subsequently based your increase of passengers. In other words, did you examine the boat to find out whether or not that equipment was on before you granted the increase?—A. We did not.

Q. You did not?—A. No, sir.

Q. Did you grant the increase before the life-saving equipment was on?—A. No, sir; it was put on, according to his affidavit there. We granted the additional equipment by that affidavit.

Q. Then do I understand that you accepted the affidavit of Capt. Pedersen that the life-saving equipment had been put on but did not make an inspection of the vessel to see for yourself whether it had been put on; is that right?—A. That is right, sir; but I inspected it July 4.

Q. Was this additional life-saving equipment on then?—A. It was.

Q. It was on then?—A. It was.

Q. After you received this letter of June 7 from Capt. Pedersen, what did you do?—A. I don't know what you mean.

Q. What did you do in regard to complying with his request for additional certificate, if any?—A. June 7?

Q. This letter I have just read to you, July 2, I guess it is, in which he mentioned an increase from 2,253 to 2,570.—A. We amended the certificate of inspection.

Q. You amended it on July 2, didn't you, to get right at it?—A. To the best of my recollection.

Q. You mailed the certificate to Pedersen?—A. Yes, sir.

Q. Is that a copy of the certificate you sent him [handing paper to witness]?—A. Yes, sir.

Q. That is a copy, is it?—A. Yes, sir.

Mr. THURMAN. Will you please, gentlemen, put this in the record?

CERTIFICATE AMENDING CERTIFICATE OF INSPECTION BY CHANGING CHARACTER OF VESSEL, ROUTE, EQUIPMENT, ETC.

DEPARTMENT OF COMMERCE,  
STEAMBOAT-INSPECTION SERVICE,  
OFFICE OF UNITED STATES LOCAL INSPECTORS,  
Port of Grand Haven, Mich., July 2, 1915.

This certifies, That the following described amendments are hereby authorized in the certificate of inspection expiring on June 7, 1916, issued to the steam vessel named *Eastland* classed as passenger, built at Port Huron, in the State of Michigan, in the year 1903, and last inspected in the local district

of Michigan, in the State of Michigan on the 7th day of June, 1915, namely: This steamer being equipped with boatage and raftage for seven hundred and seventy-six (776) persons, and life preservers for twenty-five hundred and seventy (2,570) persons, may carry from May 15 to October 15, both dates inclusive, 2,570 persons, viz, twenty-five hundred passengers and crew of seventy.

CHARLES C. ECKLIFF,  
ROBERT REID,  
United States Local Inspectors.

Mr. THURMAN. Mr. Secretary, will you please read the other letter into the record?

The SECRETARY. There is no letter of inclosure. It occurs to me that Mr. Thurman having mentioned the letter which he asked me to read into the record, and that therefore the subject of that letter having been mentioned, while it has no relation whatever to the matter, I will read it into the record that there may be no question in anybody's mind as to our unwillingness to have it offered in the record; it is as follows:

JULY 13, 1915.

Capt. HARRY PETERSON,  
*Steamer Eastland, St. Joseph, Mich.*

DEAR SIR: Inclosed please find the latest Form 802, which you will please have posted and the old ones removed. The lamp-room door requires slight fitting, so that it will close tight and the latch or lock to be placed in working order.

Respectfully,

ROBERT REID,  
CHARLES C. ECKLIFF,  
Local Inspectors.

Mr. THURMAN. Mr. Reid, was there any other cause or reason for your increasing the carrying capacity of that vessel from 2,253 to 2,570, other than the reasons you have given?

A. Taking into consideration her past performances, the people she has carried, and what she had been certificated for.

Q. Was any attempt made by anybody, person, or corporation to influence you properly or improperly to grant that increase?—A. No, sir.

Q. Then, as I understand you to say, this increase was based upon the application of the captain—was granted upon the application of the captain and based upon the life-saving apparatus on board her, including the additional quantity put on, your previous knowledge of the deck space of that vessel and her past performances as to the carrying of passengers. Now is that a correct statement of the reasons why you increased the certificate?—A. It is a very good one.

Q. It is correct, is it, sir?—A. Yes, sir.

Q. Is there any reason you want to add to it?—A. I might add to that, that this steamer was equipped with four 13½ by 12 modern Scotch boilers allowing a pressure of steam of 200 pounds to the square inch; a boiler of this size so constructed will approximately weigh 44 tons and with the water in it it would approximately weigh 65 to 70 tons. She had four such boilers. She had in the form of her engines piping and pumps and auxiliary light plants, steam pipes, shafts, wheels, the approximate weight would come to about 150 tons.

The SECRETARY. In addition to the boilers?

A. In addition to the boilers. This being situated below the main deck would have a tendency to make the steamer more stable.

Mr. THURMAN. Mr. Reid, the fixing of the capacity, the carrying capacity of these steamers at the various inspections that you made, was fixed by you, was it not, in conformity with your duties as prescribed by section 4450, I think it is—well, in conformity with the United States statutes that places that duty in you and Mr. Eckliff as the local board?

A. Yes, sir; so considered to be.

Q. Did you or did you not, in fixing this carrying capacity on various occasions, and especially when you increased it to 2,500, exercise what you considered to be your best judgment and discretion?—A. I did.

Q. Then as a matter of fact if that discretion was faulty or if a mistake was made in it, you and Capt. Eckliff are responsible for that mistake in judgment, are you not?—A. I should so take it.

Q. What do you say now, Mr. Reid, as to whether or not you think you were mistaken in your judgment?—A. I don't think I was.

Mr. THURMAN. I think that is all I want to ask him, Mr. Secretary. I do not know how you gentlemen want to take that but I think I have asked him all I want to. Do you want to ask him, Mr. Sullivan?

Mr. SULLIVAN. Would the installation of two sea cocks on this boat render her less stable?

A. Sir?

Q. If she had two sea cocks on her instead of one for the filling or draining of the balast tanks, would that improve her or not?—A. I am not in a position to answer that; it would depend largely on how her pipes were pumped up.

Q. The Secretary yesterday suggested that the installation of more than one sea cock might add to the danger; what is your opinion of that?—A. My experience has been that a great many steamers carry three sea cocks.

Q. Would it not be better?—A. Oh, not for the ballast tanks.

Q. Would it not be better for the steamer that carried a large number of passengers to have two sea cocks rather than one, for the fitting of these various equipments?—A. I could not answer that.

Q. Why not?—A. Because I don't know.

Q. You don't know. You say that Mrs. Erickson was the one who communicated with Mr. Hull regarding the employment—or urged Mr. Erickson to communicate with Mr. Hull regarding the employment of her husband?—A. She was the one that influenced him to change from the *Saxonia* and make application for the *Eastland*.

Q. What did she say, what reason did she give?—A. That that boat plied between Chicago and St. Joe and that she could live in St. Joe and be in daily communication with her husband; the season of navigation on the *Eastland* is about 70 days, while his working year would be nine months if he took the *Saxonia*; he would be gone for the whole sailing season.

Q. The *Saxonia* plied between what points?—A. Buffalo and Duluth and Chicago, anywhere they have ore to carry. It was based on a reasoning on this line.

Q. Did she have any talk with any official on the boat regarding the equipment of the ballast tanks?—A. No, sir.

Q. As to the speed with which they may be filled or emptied?—A. No, sir.

Q. Did not that occur to you as being a matter of vital importance?—A. It was in my judgment left to the boiler inspector to take care of that part of it.

Q. That is your associate?—A. Yes, sir.

Q. You knew this boat listed frequently, didn't you?—A. I have seen her list slightly, not dangerously at any time.

Q. Didn't you know that she had a reputation for listing more than that of any other passenger boat?—A. I never knew that she had a bad reputation for listing; no, sir.

Q. You first became acquainted with the *Eastland* in 1906?—A. Yes, sir.

Q. Where were you employed then, in Chicago?—A. In Chicago.

Q. When she went to Lake Erie and did not come back here until 1914; is that right?—A. Yes, sir.

Q. Did you hear what kind of a record she made in Lake Erie?—A. I did not.

Q. Did you learn anything that happened to her there?—A. No, sir.

Q. Does not your department keep you informed, where a boat is transferred in your district, as to anything that happened to that boat?—A. Not that I know of.

Q. There are no rules requiring one district to send the record of a boat to the other district?—A. No, sir.

Q. Is that right?—A. Yes, sir.

Q. Didn't you inquire of Capt. Westcott or Capt. Larson anything about this boat?—A. No, sir.

Q. Why not?—A. Because I did not think it was necessary.

Q. With what officer of this *Eastland* Co. did you transact your business?—A. In what respect?

Q. Any business, official business.—A. Sometimes it is the captain and sometimes the manager or owner.

Q. You transacted no business regarding this boat except with the two you named?—A. Those would be the proper ones; I do not recollect any other persons.

Q. If you took up the question of insufficient ballast tanks and equipment, you would have to take it up with your son-in-law, wouldn't you?—A. My what?

Q. If you took up the question of insufficient ballast tanks on this boat it would lead you directly to your son-in-law, the chief engineer, wouldn't it?—A. I never knew they were inefficient.

The SECRETARY. Did you say inefficient or insufficient, Mr. Sullivan?

Mr. SULLIVAN. Insufficient.

The SECRETARY. Did you understand, insufficient?

A. Either term would be the same answer.

By Mr. SULLIVAN:

Q. Capt. Ennis, you say, and Mr. Hull were present when you inspected the boat first, in 1914?—A. Not at all times, they were not there; not at all times, they would come and go.

Q. Did Capt. Pedersen call on you personally regarding the increasing of the capacity of the boat this year?—A. He did not.

Q. Did he telephone to you?—A. No, sir.

Q. He communicated only in writing?—A. That is all.

Q. What talks did you have with your son-in-law about that?—A. About what?

Q. Increasing the capacity of the boat.—A. None whatever.

Q. None whatever?—A. None whatever.

Q. How many times during 1914 and 1915 did your board require a test of the crew as to their fitness—I do not know whether you call it a test or drill?—A. It was required each week.

Q. The regulations required it each week?—A. Yes.

Q. Were you present at those drills each week?—A. No, sir.

Q. Who was present representing your board?—A. The board did not have to be represented at those drills.

Q. Does not have to be?—A. No, sir.

Q. What record or report or proof do you get that the drills are held as required?—A. The report sent in at the end of each month giving the dates the drills are held on.

Q. Did you get such a report at the end of each month?—A. I could not say; the record would show.

Q. You do not know whether you got them or not?—A. I could not say.

Q. Since you have been made a member of the local board have you been transferred at any time?—A. From Grand Haven, do you mean?

Q. Your first appointment as a member of the board was at Grand Haven; is that right?—A. Yes, sir.

Q. You have never been transferred from there?—A. No, sir.

Q. You say the complaints that were made against you to your immediate superior were two this year; is that right?—A. That is correct.

Q. You say you required repairs on two boats this year?—A. Required repairs on all boats that needed repairs.

Q. You mentioned the steamer *Johnson* and the steamer *Puritan*?—A. The *Robert E. Johnson*; yes, sir.

Q. Those are the two boats that you required to have repairs upon before you would give them a certificate?—A. No; you misunderstood me; those two boats took an appeal.

Q. And previous to that this year there were six other boat owners who took an appeal from your order?—A. Not this year; no, sir.

Q. I mean since you have been in Grand Haven; you mentioned eight boats altogether.—A. There may have been more.

Q. What are the rules and regulations as to final authority being vested in your board?

Mr. THURMAN. About what?

Mr. SULLIVAN. About repairs.

The WITNESS. The owner or master of the steamer has the privilege of taking an appeal from our decision.

Q. Given that right by your rules or by the statutes?—A. I could not say which; he has that right.

Q. Where does the appeal go?—A. To Detroit from our district.

Q. To Mr. Westcott?

Mr. THURMAN. It goes to the supervising inspector of the district.

Mr. SULLIVAN. Has the owner the right to appeal in every case to the supervising inspector?

A. Yes, sir.

Q. In what particular cases have the local board final jurisdiction?

Mr. THURMAN. Mr. Sullivan, I do not want to conceal anything, but I do not think that is a fair proposition. This man is a local inspector; he is not a lawyer. All the information that you are seeking to get from him can be found in the United States Statutes, of which I have a copy here and will be glad to furnish you and with the entire steamboat-inspection list.

Mr. SULLIVAN. Do you mean to say, Mr. Thurman, that this man does not know?

Mr. THURMAN. I do not suppose that he does know generally, if you call the steamboat inspectors alone, they are right here.

Mr. SULLIVAN. This man has the lives of thousands of people in his hands, isn't he familiar with the laws, can he not answer the question?

Mr. THURMAN. Certainly he is familiar with the laws, but how would the safety of anybody in the United States, depend on this man's knowledge of the right of appeal to the supervising inspector?

Mr. SULLIVAN. If he does not know what the common practices are, we would like to know it.

Mr. THURMAN. He does, but the common practices are not the United States statutes.

Mr. SULLIVAN. I want to know whether they are in the rules or in the statutes.

Mr. THURMAN. There is a way of finding it out, it seems to me, you could ask for a copy of the statutes and a copy of the rules which we would be glad to furnish you.

Mr. SULLIVAN. You think that I ought not to ask this gentleman what he knows about it?

Mr. THURMAN. I do not think it is a fair proposition to question this man on his knowledge of the law.

Mr. SULLIVAN. Is it a fair proposition to ask him about the rules?

Mr. THURMAN. I will admit that, yes.

Mr. SULLIVAN. Is there a rule then, Capt. Reid, giving you folks authority, from which your judgment can not be disturbed? In other words, put it this way: If you make a ruling upon a certain situation, can the objecting party go above you and have your rulings set aside and make a different ruling?

Mr. THURMAN. Ruling in regard to what?

Mr. SULLIVAN. For instance, the equipment of a boat.

Mr. THURMAN. All right.

Mr. SULLIVAN. The necessity for equipment.

The WITNESS. I believe that it is the owner's or the master's privilege to take that appeal when he thinks that it is necessary. You will excuse me, but I had an accident to my teeth, they fell out and broke and I have to hold my tongue down to talk.

Q. Suppose you ruled on a master's request for increasing the carrying capacity, against the request and the boat owner was not satisfied, what could he do?—A. I do not know what he would do.

Q. Under your rules and regulations what rights would he have?—A. I should think that he had the same rights there that he would have in any case.

Q. So that he would have a right to appeal from your decision regarding any question of equipment?—A. That is my understanding of it.

Q. And the supervising inspector would have the power to overrule your decision in the matter, would he?—A. If he found my decision wrong.

Q. And that has been done in how many instances since you have been in Grand Haven?

Mr. THURMAN. Now, you are assuming that it has been done, you might ask him if it has ever been done.

Mr. SULLIVAN. All right, I will put it that way.

Mr. THURMAN. Give him a chance.

Mr. SULLIVAN. He is well protected.

Mr. THURMAN. Thank you for the compliment.

The WITNESS. I forgot what the question was—I was listening to the by-play between you.

Q. (Question read as follows:)

And this has been done in how many instances since you have been in Grand Haven?

A. What is it?

Q. (Question read as follows:)

So that he would have a right to appeal from your decision regarding any question of equipment?—A. That is my understanding of it.

Q. And the supervising inspector would have the power to overrule your decision in the matter, would he?

Mr. THURMAN. That was answered "yes."

Q. (Question read as follows:)

And this has been done in how many instances since you have been in Grand Haven?

Mr. THURMAN. I do not think that is a fair question. Ask him if it has been done at all.

Mr. SULLIVAN. Has it been done?

A. It has.

Q. In how many instances?—A. I don't recollect the number.

Q. Well, about how many?—A. Four that I recollect of at the present time.

Q. You say that Engineer Erickson—

Mr. THURMAN. What was the result of those appeals; let us find out now—go all the way through them.

Mr. SULLIVAN. He asks what was the result of those appeals?

A. I am trying to think. You fellows are putting me through such a hard pace I can not keep up with it.

Mr. SULLIVAN. Don't flatter us.

The WITNESS. We were sustained in one. The character of the steamer changed in another one. The requirements slightly modified in another case, and another one held in abeyance up to the present time.

Q. When Engineer Erickson heard from Mr. Hull regarding his application for the position of Chief Engineer, the offer as to salary was unsatisfactory, was it?—A. Yes, sir.

Q. And that offer was—A. \$150.

Q. \$150 per month?—A. Yes, sir.

Q. He had been getting on the *Saxonia* \$185 a month?—A. \$185.

Q. Then he took that matter up with Mr. Hull?—A. Which matter?

Q. Regarding the question of salary, further?—A. Why, they settled it between themselves.

Q. Mr. Erickson and Mr. Hull?—A. Yes, sir.

Q. They got together on it?—A. Yes, sir.

Mr. THURMAN. Did you have anything to do with it?

A. No, sir.

Mr. THURMAN. Excuse me for interrupting you; did you have anything to do with it?

The WITNESS. No, sir.

Mr. THURMAN. If you did, let us know.

Mr. SULLIVAN. Did you know negotiations were going on regarding a better offer of salary?

The WITNESS. It was not a better offer.

Q. \$150 was the final offer?—A. You mean in regard to the *Eastland*?

Q. I mean the *Eastland*; did you know that they were negotiating to increase the \$150 proposition?—A. I know that it was not accepted.

Q. Did you know that he had made a counter proposition?—A. I know that Mr. Hull asked him to make one and that he made it.

Q. What talk did you have with Mr. Erickson regarding that point?—A. I had no talk with him whatever.

Q. You say you knew it; from whom did you learn it?—A. Why, I saw the letters. He lived in my house.

Q. Mr. Erickson and his wife lived with you?—A. Yes, sir.

Q. You were present at this discussion?—A. Present when I read the letter.

Mr. THURMAN. What discussion? Did Mr. Hull come to your house and discuss with Mr. Erickson the question of salary?

The WITNESS. He did not.

Q. Then, these discussions that Mr. Sullivan refers to were discussions between you and Mr. Erickson; is that the idea?—A. He wants to know in a casual way whether Mr. Erickson and I talked about his business matters, I presume that is what he is after, and being my daughter and son there, they might compose a letter and keep me familiar with what was going on, without me interfering.

Mr. THURMAN. I understood that Mr. Sullivan's question said that Mr. Hull was present.

Mr. SULLIVAN. I did not intend that. You and Mr. Erickson and your daughter and son were present when this matter was discussed, were you?

A. I would not say that; I do not recollect.

Q. What proposition did Mr. Erickson submit to Mr. Hull as to salary?—A. That he would take the *Eastland*, as I understand it, on the same salary as the *Saxonia*.

Q. Was that accepted by Mr. Hull finally?—A. It was.

Q. How long did these negotiations take regarding the raising of the salary?—A. I do not know how long it took. He was at work on this; about the 1st of April he went to work on it; a couple of weeks or such a matter.

Q. About two weeks?—A. Might be a little longer and might be less; I do not know how long.

Q. In reference to inspectors' fees, does the Government charge a fee for making an inspection of these boats?—A. In certain cases and conditions.

Q. I suppose your annual inspection you make before a boat starts out in the season?—A. The Government pays for that.

Q. No fee charged the owner?—A. None whatever.

Q. In what cases does the owner pay a fee to the Government?—

A. If it is necessary to make a second trip:

Q. A second trip to the port where the boat is located?—A. Yes, sir.

Q. What is the fee they charge them?—A. The actual mileage and hotel bills; whatever you pay; a reasonable charge.

Q. I am not clear on that. If required to make a second trip, under what circumstances does that happen?—A. That the boat must be ready for inspection in every respect when the inspectors come for this first trip, you understand, and if it was some fault of the machinery or the boiler gives out, or something like that, or the stays won't hold, the boiler can not be inspected; they have to make those repairs. The second trip, if it is necessary—the second trip, if one is necessary, is paid by the owner.

Q. That is the only case, is it, where the Government requires a fee for the services of its inspector?—A. The Government does not get that; the inspector gets that.

Q. That is just for his expenses?—A. Yes, sir.

Q. From whom does he get it?—A. He gets it from the steamship company.

Q. Direct from the steamship company?—A. Yes, sir.

Q. Does he submit a bill to—

Mr THURMAN. Let us go a little further. When you get that money that you are talking about, do you submit any receipt or account for that to the Government?

A. We send a duplicate of it to the Government, the same as what we have on the files, the same as goes to the steamship company; it is made out in triplicate—one to the Government, one to the files, and one to the steamboat company.

Q. To what branch of the Government?—A. The Steamboat-Inspection Bureau.

Q. Where?—A. Washington, D. C.

Mr SULLIVAN. That is all.

Mr THURMAN. Mr. Sabath, how long will you want Capt. Nelson? It is getting along toward adjourning for lunch, and if you can take him now and be through with him before lunch it might be a good thing; and let this other gentleman rest a little.

Mr. SABATH. All right.

Secretary REDFIELD. Is that satisfactory?

Mr. SABATH. Yes; that is satisfactory.

Secretary REDFIELD. You might put this in the record, that in the absence of Lieut. Gov. O'Hara he kindly sent his father, Judge Thomas O'Hara, with a letter of introduction, to represent him in his absence.

Will it inconvenience you, Mr. Sabath, if for a moment I introduce Col. Judson to identify a drawing?

Mr. SABATH. No.

Secretary REDFIELD. Mr. Thurman, will it inconvenience you if I, for a moment, introduce Col. Judson to identify a drawing?

Mr. THURMAN. No; that is all right.

Secretary REDFIELD. He chanced to be in the room, and it might be well to put him on now.

(The witness was temporarily excused.)

Lieut. Col. W. V. JUDSON, called as a witness by the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you give your full name and address to the stenographer?—A. Lieut. Col. W. V. Judson, Corps of Engineers, United States Army. I am district United States engineer in Chicago, with office in this building.

Q. Col. Judson, is that your signature [handing letter to the witness]?—A. It is.

Q. And is this a blue print from the drawing to which it refers [handing blue print to the witness]?—A. Yes, sir; it is.

Secretary REDFIELD. I read for the record this letter:

WAR DEPARTMENT,  
UNITED STATES ENGINEER OFFICE,  
503 Federal Building, Chicago, Ill., July 29, 1915.

Hon. WILLIAM C. REDFIELD,  
Secretary of Commerce, Hotel Blackstone, Chicago.

MY DEAR MR. SECRETARY: I inclose herewith blue print showing soundings taken yesterday and to-day in the vicinity of the capsized steamer *Eastland*. In each case the depth is at the position of the decimal point in the soundings as indicated on the map.

Very respectfully,

W. V. JUDSON,  
Lieutenant Colonel, Corps of Engineers.

WVJ B 1 inclosure.

Secretary REDFIELD. Why was this done?

A. You requested that it be done. I probably should have done it in any event.

Secretary REDFIELD. Any questions.

Mr. SABATH. What does it show, Colonel?

A. Do you wish me to analyze the soundings there?

Q. If you please, because I made that point there yesterday, in view of conditions and testimony adduced here. I would like to know the depth of the river at that point.—A. Well, it shows that at the distance of 20 feet, for example, from the line of the wharf that the depths, beginning at the stern of the vessel and running toward the bow, are, from her stern to her midships, varying from 20.4 feet to 24 feet. Amidships it is about 17½ feet, and at her bow about 17.8 feet; that is, 20 feet from the bow.

General UHLER. Col. Judson, may I ask on what line those soundings are?

A. Those are taken on lines 20 feet apart, soundings taken every 5 feet, the lines running perpendicular from the dock.

Q. How far out from the dock?—A. Well, they run out to the vessel; and beyond the vessel, again, the lines are not the same lines, but other lines are taken in the water out there.

Mr. SABATH. What is the lowest measurement that you have taken anywhere through there?

A. In each case the first sounding on the line going out from the dock is taken immediately at that dock—that is, as close as the sounding pole could be put down—and the least of those soundings is 10.7 feet.

Q. Would that be right at the dock?—A. Right at the dock; right in juxtaposition to the dock.

Q. What would be the measurement of depth about, we will say, from 15 to 20 feet? That would be about the center of the boat?—

A. Well, at 20 feet—that is what I gave you first.

Q. What is that? The lowest would be 17?—A. It is nothing less than 17½ feet.

Q. That would be about as near as any boat could possibly go?—A. No, sir; those vessels bilge. She has quite a bilge; she is quite flat amidships. Her bilge would come pretty close to the dock.

Q. Well, how close, about?—A. Well, I should say, without remembering exactly the contour of the vessel but having it in mind from having seen her there, I should say that it might come within 2 or 3 feet of the dock; but it rounded, you know, and it depends upon what point of it you were speaking of. When you get down to the full depth of the vessel you are probably 10 or 12 feet off.

Q. That is what I mean.—A. Yes.

Q. The full depth of the vessel, or the center of the hull?—A. Yes; the full depth.

Q. That would be what?—A. I should say you would be from 10 to 15 feet out.

Secretary REDFIELD. What is the lowest depth at that point?

A. At 15 feet out?

Q. Yes.—A. The lowest depth anywhere near amidships, and, in fact, that is the lowest depth anywhere, 15 feet out is 17.2.

Secretary REDFIELD. Seventeen feet and two-tenths?

A. Yes, seventeen feet and two-tenths. That is fifteen feet out.

Mr. SABATH. Now, if it is permissible, I will ask you have you seen the boat as it lies there now?

A. Yes.

Q. You have seen the way she is constructed?—A. Yes.

Q. You have sounded the depth of the river. From the investigation that you have made, Colonel, is it your opinion that the boat grounded or that it was possible from the position that she was in to ground?—A. I think it is extremely unlikely, although possible, of course.

Mr. SABATH. That is all.

Secretary REDFIELD. Judge O'Hara.

Judge O'HARA. Colonel, when, immediately before this, were soundings taken at that point?

A. A year ago; well, something less than a year ago last August, I think.

Q. And on that occasion, as on this, a blue print was taken?—A. Yes.

Q. Is that in existence?—A. Yes.

Q. And you will produce it, will you?—A. Yes; I gave a copy of it to Mr. Redfield.

Secretary REDFIELD. Is that the one to which you refer?

THE WITNESS. Yes.

Secretary REDFIELD. Then I will bring it.

Judge O'HARA. Now, what do you say at the present time the depth of the river is at the stern of that boat?

A. Well, at the stern of the vessel the depth varies from 23 to 25 feet.

Q. Did you have personal charge of the soundings taken a day or two ago?—A. No; I sent a competent man there.

Q. Were you present, or did you have personal charge when the soundings were taken a year ago?—A. No.

Q. The person or persons who took the soundings then are present here, are they?—A. They are not in the room. They are in my employ.

Q. Did you ever in your experience have personal charge of an operation of that kind?—A. Oh, many times. In fact, I was present and observed part of this done, but I wasn't immediately directing it. I gave the man who took it the directions as to what to do, and he is a very competent man.

Q. How long have you been in charge in Chicago?—A. About a year; a little over a year.

Q. You are familiar with the character of the bottom of this river?—A. Yes.

Q. What is reported to you now as being at the bottom, at the place of this accident? What is the nature of it?—A. What material?

Q. Is it clay?—A. It is clay, overlaid with soft mud.

Q. Now, then, having in mind and keeping in mind, and basing your answer upon your own experience and your knowledge of this river, its bottom, and the current, what do you say as to whether or not the depths amidship, forward, and aft are the same now as immediately before the accident? In other words, when that vessel went there that morning to moor or to tie up to the dock.—A. Well, I will say what I rather expected to find. I expected to find that the weight of the vessel, perhaps after she had turned over, had pushed the mud in all ways, so that it might have been even shoaler on the dock side of the vessel than it was before she turned over.

Q. And even at some points, Colonel, owing to the current, may it not have been deeper?—A. That is possible; that is possible.

Q. Yes. One further question. What do you say you find the present depth to be amidships? Pardon me for repeating that question, but I have one thing in mind.—A. Seventeen feet and two-tenths. That is, 15 feet from the dock.

Q. Seventeen feet and two-tenths?—A. That is 15 feet from the dock.

Q. And what was the beam of that vessel, 35 or 36 feet?—A. Thirty-eight and a half, I think.

Q. Thirty-eight and a half; something like that. Now, then, immediately amidships, at the present time how much of that hull is above the water line?—A. Immediately amidships—well, I should say that about half is above it immediately amidships. Her bow is not on the bottom at all. Her stern is, and she is balanced on the after half of the boat, the other part being cantilevered out in the water so that the line of the keel runs up at the bottom; does not

run up similarly; I mean the forward part of the boat is not on the bottom.

Q. This perhaps might be hearsay, but this being in a measure informal—you made, naturally, some inquiry as to what that vessel was drawing that morning?—A. Yes.

Q. And you yourself, of course, didn't see it?—A. No.

Q. You were not there?—A. No; I didn't see it.

Q. What do you understand that vessel was drawing aft and forward?—A. I understood she drew 11 feet forward and 15½ feet aft.

Q. And do you understand that that was her draft about 7 in the morning, before the passengers commenced to board her?—A. No; I understand that that is her draft with her load of passengers, but without her ballast; without her water ballast. I only got that, I will say, from another, and you can call the man who told me. Mr. Workman, the insurance adjuster, told me he had made an investigation which satisfied him that those were about the depths she drew. I have no other information than what he told us.

Q. The press informs us that some persons for a period extending perhaps 15 minutes discovered what in their judgment appeared to be an unusual list. This is my last question. Did it occur to any of the onlookers, as you understand it, to take notice as to what the boat was drawing shortly before she capsized?—A. I haven't heard that anyone did that.

Q. You have no information respecting that, hearsay or otherwise?—A. No.

Judge O'HARA. That is all.

Gen. UHLER. Col. Judson, have you observed about how far the vessel is now lying from the dock? She is on her side, and how far is her bottom from the dock, Colonel?

A. Well, I should say it is about 40 feet aft and 10 or 15 feet forward.

Q. And she is not lying exactly parallel with the dock?—A. No; she is not lying exactly parallel with the dock.

Q. A difference of 40 feet and 15?—A. Yes.

Q. And with her bow inclined to the dock?—A. Yes.

Q. Now, Colonel, have you a 10-foot line there from the dock?—

A. Yes. I have a 10-foot line from the dock; yes. I can read those soundings 10 feet from the dock, beginning at the bow of the vessel.

Q. I would be glad if you would do that.—A. 15.7; 16.3; 16.8; 16.4; 16.3; 15.9; 16 feet; 15.2; 14.9; 18.7; 20.7; 20.3; 21.3; 19.5; 21.4.

Q. At what point right there, Colonel, does the 14.9 appear?—A. The 14.9 appears a little bit after the midships.

Q. A little bit after the midships?—A. Yes.

Gen. UHLER. Thank you, sir.

Secretary REDFIELD. Col. Judson, is this a twin-screw vessel?

A. It is a twin-screw vessel; yes, sir.

Q. Do you know whether the propeller blades on the screws project below the vessel's hull?—A. That, of course, would depend somewhat upon her trim.

Q. Normal, I mean?—A. Normal. I couldn't be sure in this case whether that is the lowest point or not. She probably has a shoe underneath there anyway.

Q. Do you know whether it is or is not a fact that the blades of the screw do project below the hull?—A. I am not sure in this case; no. I think probably they do.

Q. Are you able to say, of your own knowledge, whether that is usual?—A. Well, it is usual, although they often have a shoe underneath, as you might say—a shoe underneath that you might say was a part of the hull.

Secretary REDFIELD. Capt. Westcott, have you any plans of this vessel or any other available information which would inform us on that point?

Capt. WESTCOTT. No, sir. I communicated by telephone with the designer of the ship a day or two ago and he promised me to send all the blue prints complete on that or the next day.

Secretary REDFIELD. I wish you would communicate again with whomever can furnish the drawings of these vessels.

Capt. WESTCOTT. Well, I understood from an outside source that he would be here to-day. I can call up again by telephone and get him to do that.

Mr. SABATH. In view of the fact that the vessel lays now on the bottom, and has been there now since last Saturday, would it not be possible that the depth of the water would not be as great to-day as it was last Saturday near the dock on account of the pressure of the boat forcing a great deal of the mud away? That on account of the pressure of the boat a great deal of the mud might have been forced away from the vessel.

The WITNESS. I think there are two influences at work. One would be the weight of the vessel pushing the mud away; the other would be the current, which would be a little increased, but very little, although in there it might take a little of it off. I think it might take a little of it off. I think, on the whole, I should expect to find it pushed up, because so little of the cross section of the river is taken up by the vessel that I would not think the current would be increased enough there to make any material change in the current, although there would be a little. I think perhaps it is safe to say there wouldn't be very much change, unless it were a change upward.

Q. Well, that would be my judgment.—A. I want to add this to my testimony, if I may, and that is that this morning, when I came by the scene of the *Eastland* disaster, I noticed that the Department of Justice, or some of its agents, had a diver there going over this area between the dock line and the vessel, and I told him I would cooperate with him and send a man down, the same man that made this survey, to locate exactly the depth on any spot that might be found; that was not found when these soundings were taken, and I will say that the diver told me, or rather the man who was in charge of the diver told me that he had picked up an old truck in that area which had been placed upon the dock, that truck having been evidently an old abandoned one that some one had thrown off a vessel to get rid of.

Secretary REDFIELD. Did you see it, Col. Judson?

The WITNESS. I saw it; yes. I looked at it to see whether it had any marks on it, and it had none. I saw it and it doesn't look as though anything had touched it. And I unfortunately do not know what

depth it came from or anything, and that is the reason I asked him to let me send my man down, so, for anything he had found, we would take the depth of it.

Secretary REDFIELD. We will have him here to testify.

Gen. UHLER. Colonel, in explanation of that theory, which is so interesting, I am going to ask you now if you have a 5-foot line?

The WITNESS. Yes, sir; I have a 5-foot line.

Q. Will you give me that, please, sir?—A. Beginning at the bow, 13.8, 13.7, 15.3, 12.7, 12.1, 13.4, 12.7, 13.2, 13.2, 17.6, 15.8, 18.9, 20.3, and 18.1.

Gen. UHLER. Thank you, sir.

Secretary REDFIELD. Mr. Sullivan, would you like to ask Col. Judson any questions?

Mr. SULLIVAN. I think not. But Mr. Higgins here might want to.

Mr. HIGGINS. I would like to know what date the chart was made.

The WITNESS. The chart was made yesterday, and the soundings were taken the day before yesterday and yesterday.

Mr. SABATH. Colonel, you have nothing to do with the Inspection Bureau?

The WITNESS. No.

Mr. SABATH. That is all.

Secretary REDFIELD. Col. Westcott, is there any matter connected with this drawing that you are interested in?

Capt. WESTCOTT. No, sir.

Secretary REDFIELD. Now, Col. Judson, would you be willing to furnish duplicates of this drawing to the office of the State's attorney, the Federal district attorney, and to anyone having any official relation?

A. Anyone who applies; yes.

Q. And will you consider this my request that you do so?—A. Yes, sir. The Federal district attorney and the State's attorney.

Q. The Federal district attorney and the State's attorney. And do you care for one, Judge Sabath?

Mr. SABATH. Yes; I would like to have one, Colonel.

Secretary REDFIELD. Please give one to Judge Sabath and one to Judge O'Hara.

The WITNESS. I will give one to Judge Sabath and to Judge O'Hara.

Secretary REDFIELD. Is there anybody else present who like a copy?

Mr. SULLIVAN. The corporation counsel would like to have one.

Secretary REDFIELD. The corporation counsel and the public administrator would like to have a copy.

Now, if there are no further questions, Col. Judson, you are excused, and I thank you.

(Witness excused.)

Secretary REDFIELD. Capt. Nelson, please.

NILS B. NELSON, recalled by the board for further examination, testified as follows:

Examination by Mr. SABATH:

Q. Where are you stationed, Captain?—A. Cleveland, Ohio.

Q. How long have you been there?—A. I was appointed local inspector in 1905 and supervising inspector in the year 1912.

Q. So you are a supervising inspector since 1912?—A. Yes, sir.

Q. And every year since 1912 you would meet with other supervising inspectors in the city of Washington?—A. Yes, sir.

Q. And would hear complaints, or would confer as to what would be the best for the interest of the service?—A. Yes, sir.

Q. In view of the answer which you made yesterday, I am going to ask you if you made any recommendations to the department or to Congress of the shortcomings of the department or the lack of funds that your department received?—A. I believe that I have had some correspondence about it.

Q. With whom?—A. Why, it is written in Washington. When the question came up if we could take care of the spring inspections, I said no, we would have to have some additional help, and the bureau detailed additional inspectors to Buffalo and Cleveland. That was done while I was there.

Q. Well, you would not say the department was short of help this spring, or this year, was it?—A. Not in our district. We had men detailed from other cities. We had four men in Cleveland and four men in Buffalo.

Q. And that is nothing unusual, to have men transferred from one district into the other, where the help would be needed?—A. It is unusual in a way. Why, each district is supposed to retain their own men when they have work enough for their own men. When we had men from New York up there the New York inspectors complained that they were short of men, and they couldn't attend to the inspections as readily as they would wish to.

Q. Have you received any complaints from this district that they were suffering from the lack of assistants?—A. I don't belong to this district. I don't go this far.

Q. Well, while serving on the board at Washington was there any complaint made?—A. Why, I can't recall the number of cases about extra help. I just took care of my own district.

Q. Captain, from your experience what, as a rule, is taken into consideration, and what should be taken into consideration, before a local inspector in charge allows the capacity that any boat can carry?—A. Why, take into consideration the stability and the space; the construction of the ship, the general construction.

Q. The mere fact that a boat may put on two or three thousand life preservers, if there would not be the air space or deck space, that would not justify them to allow the boat to carry the number of passengers that she is capable of securing in so-called life preservers?—A. Why we consider all of the features in connection with the safety of the ship.

Q. Should an inspector take into consideration whether the boat will ply in shallow water or in deep water?—A. Well, as a rule they take in all the details.

Q. Should there be a consideration, or should an inspector before issuing a permit ascertain for what purposes the boat is going to be used?—A. Why, we have got to rely some on the licensed officers. We can not watch the boat all the time, you know, and under different conditions.

Q. Have you been familiar with the changes that were made on this unfortunate boat, the *Eastland*?—A. I don't know what changes were made after she left the Cleveland district.

Q. And still you stated yesterday that it was a safe and well-balanced boat?—A. I stated yesterday that I consider the *Eastland*, if she was properly ballasted—the water ballast taken care of—she was absolutely safe for 2,500 people.

Q. Is it usual for inspectors, when they receive a request for an increased capacity on one day, that the same day, without personal inspection, they would go and grant the increase requested?—A. That depends on the circumstances. I have done it. I have probably issued an excursion permit for 500, and that is all the life preservers she had. Perhaps I may have inspected two or three hundred more life preservers the next day and increased the excursion permit.

Q. Well, we will say an application for a boat whose capacity had been reduced for some reason from 3,000 to 2,000 and the boat underwent certain changes, an application is made for 2,500 and it is refused, and then a few weeks thereafter, within a few weeks, another application is made with the statement that certain things have been complied with and that the request for the 2,500 passengers should be granted; do you think it is proper, without inspection, to do so?—A. Why, perhaps the permit was refused for the simple reason that these requirements had not been complied with. She might not have had the extra boatage; she might not have had the extra life preservers. That was the only question at issue.

Q. Well, shouldn't first an inspector ascertain whether all these provisions have been complied with, whether the life preservers and whether the rafts and the lifeboats have been placed on the boat before the maximum carrying capacity is granted?—A. Why, there is a blank form of affidavit to that effect. There used to be a blank form and they could make an affidavit. She has got the rafts and the boats and there is a certificate of inspection that goes with the boats and rafts.

Q. Now, why is it, Captain, that you allow an excursion steamer to carry a greater capacity than a steamer that is employed in regular trips across the Lakes?—A. Oh, there are several reasons.

Q. Is one reason, Captain, because it is?—A. Let me answer your question, please.

Q. All right.—A. We have steamboats in our district that will probably carry 4,000 passengers that run between Buffalo and Duluth. They have only stateroom accommodations to carry 500 and consequently they don't need any more, because no man will take any passage on a ship for any length of time without he has a stateroom. An excursion steamer is something that would go out for an hour or two or a half day or a day and you don't require a stateroom; you don't require the accommodations.

Q. Well, isn't it also due to the fact that it is expected that such an excursion steamer would keep within 3 miles or 5 miles from shore and that it would be in a water that would not be deep enough to submerge the entire boat?—A. No; that is the regulation for boatage; 3 miles off the shore; it used to be 5 miles; it is reduced to 3 miles. They only have to carry 10 per cent between May 15 and October 15. Beyond the 3-mile limit they have got to carry 30 per cent from May 15 to October 15.

Q. Well, in view of the fact that this boat did travel farther than 3 to 5 miles away from the shore, was she entitled to be permitted to

carry the number of passengers that the local inspectors or the inspectors granted them?—A. You are speaking about this year, are you?

Q. Yes, sir.—A. Well, the number of passengers was regulated by the boatage. She has to carry 30 per cent of boats and rafts for all the people on board.

Q. The mere fact that she would go farther than 5 miles from the shore would not make any difference in her allowance, would it?—

A. As to boatage? Three miles off the shore she is only required to carry 10 per cent.

Q. Yes.—A. And beyond the 3 miles she has got to carry 30 per cent. There is also another provision. Passenger boats equipped with wireless can navigate 10 miles off the shore during the day time with 15 per cent of boatage.

Q. You are acquainted with this rule of the department on page 178?—A. Yes, sir; if you will tell what it is; I know what it is.

Secretary REDFIELD. This is the rules of January, 1914.

The WITNESS. The rules of January, 1914.

Secretary REDFIELD. They are not the current rules, are they?

The WITNESS. We have a new rule now.

Mr. SABATH. You have?

The WITNESS. Yes. But what part of it is it you have reference to? Perhaps it was not changed.

Q. Well, I wanted to know whether the inspectors—Inspector Reid—has complied with this rule?—A. I don't know.

Q. In granting this boat the license to carry 2,500 passengers?—A. That is up to his judgement; that is not mine.

Mr. SULLIVAN. What is that rule? Will you put it in the record?

Secretary REDFIELD. Let me have the book.

The WITNESS. That is rule 3.

Gen. UHLER. What is the section?

A. General Rules and Regulations.

Gen. UHLER. What is the section of the rule?

Secretary REDFIELD. What is it, Judge Sabath, to which you refer?

Mr. SABATH. To this part here, "Lake, bay, and sound."

The WITNESS. Section 1, rule 3.

Secretary REDFIELD. I read from page 178 of the General Rules and Regulations prescribed by the Board of Supervising Inspectors, as amended at the board meeting of January, 1914, and as further amended by the executive committee of the Board of Supervising Inspectors on June 23 and 24, 1914. The edition of July 22, 1914. From rule 3, section 1, at the bottom of page 178, paragraph headed: "Lifeboats required on lake, bay, and sound steam vessels carrying passengers."

Lake, bay, and sound steamers carrying passengers shall be equipped with lifeboats of sufficient capacity to accommodate at one time all persons on board, including passengers and crew: *Provided, however,* That such steamers navigating during the interval from the 15th day of May to the 15th day of October, in any one year, both dates inclusive, shall be required to be equipped with lifeboats of only such capacity as will be sufficient to accommodate at one time at least 30 per cent of all persons on board, including passengers and crew: *Provided further,* That such steamers navigating routes lying at all points within a distance of 3 miles from land, or over waters whose depth is not sufficient to entirely submerge the vessel in case of disaster, shall, during the interval from the 15th day of May to the 15th day of October, in any one year, both dates inclusive, be required to be equipped with lifeboats of only such capacity

as will be sufficient to accommodate at one time at least 10 per cent of all persons on board, including passengers and crew: *Provided further*, That lake, bay, and sound steamers carrying passengers and navigating the waters of the lakes, bays, and sounds tributary to the Pacific coast, the Atlantic coast south of the thirty-third parallel of north latitude, and the Gulf of Mexico shall be equipped with lifeboats of sufficient capacity to accommodate at one time at least 30 per cent of all persons on board, including passengers and crew: *Provided, however*, That such steamers navigating routes lying at all points within a distance of 3 miles from land, or over waters whose depth is not sufficient to entirely submerge the vessel in case of disaster, shall be required to be equipped with lifeboats of only such capacity as will be sufficient to accommodate at one time at least 10 per cent of all persons on board, including passengers and crew.

Mr. SABATH. Mr. Secretary, that doesn't apply to Lake Michigan, does it?

Secretary REDFIELD. Ah, what comes does. Get the whole of it.

Mr. SABATH. All right.

Secretary REDFIELD (continuing reading):

Three-fourths of the lifeboat capacity required on lake, bay, and sound steamers may be in approved decked lifeboats, life rafts, or approved collapsible lifeboats: *Provided further*, That such steamers equipped with wireless telegraphy navigating in daylight only and whose routes are at all times within a distance of 10 miles from land or over waters whose depth is not sufficient to entirely submerge the vessel in case of disaster shall, during the interval from the 15th day of May to the 15th day of October in any one year, both dates inclusive, be required to be equipped with lifeboats of only such capacity as will be sufficient to accommodate at one time at least 15 per cent of all persons on board, including passengers and crew. Three-fourths of the lifeboat capacity may be in approved life rafts or approved collapsible lifeboats.

Q. Capt. Nelson, is this the last edition of the rules?

The WITNESS. No; we just got a new edition the other day.

Q. The edition of 1915 is later?—A. Yes.

Q. Do you know whether this has been changed?—A. There is no change.

Q. There is no change in that respect?—A. No.

Q. Do you know whether the seaman's act supersedes this clause?—A. As I understand, the seaman's act does not go into effect until November 14.

Q. And do you understand that when it does go into effect it supersedes this clause?—A. When it does go into effect it supersedes this clause.

Secretary REDFIELD. That is the exact fact.

Mr. SABATH. And the new rule that went into effect this year, did not that supersede this provision here?

A. It is the same; there is no change.

Q. There is no change made?—A. No change, as far as I can remember.

Q. Now, I am going to ask you one more question. An inspector in charge, having the power and the right to grant to a vessel the privilege of carrying a number of passengers, should he take into consideration the measurement, the deck space, as well as the construction of the vessel, in addition to the number of lifeboats and life preservers and rafts?—A. I have answered that question once before, saying he should take everything into consideration, the stability of the boat, the equipment, and the deck space.

Q. Now, if you would come across a captain who has demonstrated his recklessness in your presence, and who was obliged to be informed of shortcomings and negligence on his boat, would you grant

him the full measure of passengers that the law or rule of the department would technically entitle him?—A. If I came across a captain that I saw was negligent it would be my duty to prefer charges against him to the local inspectors and have him tried.

Q. You have heard the statement of evidence of Inspector Reid here this morning, have you?—A. Part of it. I didn't follow it all.

Q. You have heard what he stated about Capt. Pederson—the reckless way in which he had handled the boat last year in Benton Harbor?

Mr. SULLIVAN. St. Joe River, wasn't it?

The WITNESS. I don't remember that part of the testimony. I guess I was in some other part of the building.

Secretary REDFIELD. One moment, one moment. In justice to Capt. Pederson, whom I never saw and of whom I never heard, I want to ask you, Judge Sabath, if the testimony did say "reckless way" in which he handled the boat?

Mr. SABATH. Well, I formed my own conclusion from the evidence that was given, and I will take it for granted that he must have been not only reckless but careless in doing what he did.

Secretary REDFIELD. What is it, Judge Sabath—

Mr. SABATH. And, furthermore, Mr. Secretary—

Secretary REDFIELD. Yes.

Mr. SABATH. I base my information upon the evidence that I have heard before the coroner's jury here in the county.

Secretary REDFIELD. I have not heard any of it, and have no desire in the least to criticize, only it didn't occur to me that Capt. Reid had said that, and I merely wanted to know whether you were stating your conclusion or Capt. Reid's testimony.

Mr. SABATH. No; Capt. Reid did not say that he was reckless and careless.

Secretary REDFIELD. That is all.

Mr. SABATH. But I take it for granted he must have been, otherwise he could not have handled the ship as he did and as has been stated by Mr. Reid, or Inspector Reid, that he did—the way he did handle it.

The WITNESS. Well, you are making two statements—one statement is you say Reid said so, and now you are saying that he didn't say so.

Mr. SABATH. I say that he didn't use the word that he was careless or reckless, but he did say that the way he handled the boat—

Mr. SULLIVAN. Pardon me for making this suggestion: Reid said to Capt. Pederson, "If you do that again I will take your papers away."

Mr. THURMAN. Now, still another suggestion: Let us have all this testimony and find out just exactly what Capt. Reid did say.

Secretary REDFIELD. Was that yesterday afternoon or this morning?

Mr. THURMAN. This morning.

Mr. SABATH. I was under the impression that you heard the testimony of Mr. Reid. I did not desire to misquote him.

Mr. SULLIVAN. It was during the discussion on the matter at Benton Harbor.

Mr. THURMAN. As I understand, he got his report in the way of some other boat in the river there—getting mixed up with it.

Mr. SABATH. How long have you been in actual service of the Government?

A. Since 1905.

Q. And what have you been doing before that?—A. I had been master of steamboats and master of sailing vessels.

Q. Ever since what year?—A. Oh, that is going back quite a ways. I was master of one steamboat seven years and master of another steamboat seven years—that is fourteen—and master of two or three different boats at other times. I was master of a sailing vessel, one, two, three, four, five, about five years—five seasons.

Q. Well, you have a great deal of experience and knowledge of conditions on the Lakes and our seas, have you not?—A. I have some.

Q. You have heard the evidence here, and you heard the reports about this fated boat, the *Eastland*. You have seen her lying there in the river?—A. No; I have not seen her. I have seen pictures, and I have read about it. I have not seen her.

Q. You have also heard the testimony or the evidence of Col. Judson as to the measurements, and also the soundings and the number of feet of water the boat would draw. Now, what is your opinion?—A. You asked me that yesterday, and I said it must be something at the water bottom, that she wasn't properly ballasted. I said that yesterday, and I will state it again, that I have every confidence that if the steamer *Eastland* was in the same condition that she was in down in Cleveland that I will put 2,500 passengers on her, provided she is properly ballasted.

Q. How long would it take to trim her?—A. Why, that would simply be guesswork, and I refuse to make any statement about guessing anything. That would depend on different conditions—the size of her pipes, and if she had been properly ballasted, she should have been filled before the passengers got on her, that is the time to put the water ballast in a ship.

Q. Before you put passengers on her?—A. Before you put passengers in it. That is some part of the ship.

Q. Well, I agree with you. And if the evidence shows that she was pumped out at 6 o'clock in the morning, or within a few minutes before they commenced to load her, you think that that was a grave mistake on the part of the captain?—A. Oh, I am not here to judge anybody. I am telling you my opinion of an absolute safe way as to how to handle that ship.

Q. Well, was it a safe way to load her without her ballast?—A. I have stated that the only proper way to load that ship would be to have the water ballast on, at least some of the tanks filled, before you begin to take passengers.

Mr. SABATH. That is all.

Mr. THURMAN. That is all, Captain.

(Witness excused.)

Mr. THURMAN. We will adjourn until 2.30.

(Thereupon an adjournment was taken until 2.30 p. m. of the same day, Friday, July 30, 1915.)

JULY 30, 1915—2.30 P. M.

Parties met pursuant to adjournment.

Present: Same as before.

Capt. NILS B. NELSON resumed the stand for further examination, and testified further as follows:

Secretary REDFIELD. Capt. Nelson is upon the stand, Judge Sabath desires to ask him some questions, but I thought there was some other persons present that desired to do so.

A VOICE. Mr. Sullivan wishes to examine him, but he is out just now.

Secretary REDFIELD. Shall Judge Sabath proceed?

A VOICE. Yes, sir.

Mr. SABATH. It was not my intention to charge Mr. Reid that he stated that the captain was reckless or careless; I only inferred from his testimony that he was. Now, this is the statement which Mr. Reid has made and on which I base my opinion. Now, will you kindly read that please [passing excerpt of testimony of Mr. Reid given this forenoon to the witness].

A. I do not know the circumstances connected with that. Perhaps somebody told the captain that everything was all right.

Q. But without anything else would you not yourself be of the opinion that this was a reckless act on the part of the captain?—A. Perhaps somebody notified the captain that everything was all right and he started up his engine and started out.

Q. Isn't the captain the master of his boat, and isn't he held at all times responsible for the boat?—A. Well, he can not be all over. He has got to rely on some one to report to him that everything is all right.

Q. Well, couldn't he first ascertain from people that everything is all right and be satisfied in his own mind before he gives such an order as he gave in this instance?—A. Perhaps some of his own crew notified him that everything was all right. I should want to question the captain and to know all the details of that date before I passed any judgment.

Q. Well, a few months before that it came to your notice—suppose it did—that it was necessary to call the captain's attention to the fact that he must keep the doors open—the doors that lead from the saloon into another compartment where the life preservers are stored—in connection with this wouldn't you then have a right to surmise that he was reckless?—A. Sometimes a captain issues orders to a steward to see that everything is all right around the cabin, and perhaps the steward did not follow out the captain's instructions, and then when the inspector sees anything wrong he calls the captain's attention to it and reprimands the captain.

Q. Well, he is held responsible, though, to see that everything should be carried out.—A. Why, the captain is; but he has got to rely on his subordinates to a certain extent. He can not be all over the ship.

Q. I will again ask you, sir, whether it does not require more care to handle a ship that carries passengers than a ship that carries freight only?—A. Which way?

Q. And especially when a ship depends upon water ballast.—A. There are more details to look after on a passenger ship than there are on a freight ship.

Q. Well, the heavier the boat the easier it carries; is that not true?—A. I do not get that question.

Q. What I mean is if there is ballast in the boat sufficient to its measurement it rides easier and safer than if there is no ballast.—A. It adds to the boat's stability to have ballast.

Q. And where you would load 2,500 people on a boat, and the 2,500 people are carried on the first and second and third decks, wouldn't it be necessary to see that there is some ballast in the boat?—A. Why, I should say if I was master of a boat that expected a record crowd of passengers like that I would see that there was enough water ballast, whether it was necessary to put in one compartment or two compartments, before I began to take any passengers whatsoever.

Q. So there is greater care required on the part of the captain who is the captain of a passenger boat than a freighter?—A. The details are more numerous, and I would call that greater care in a way.

Q. Well, I know; but greater efficiency is required from a captain who secured a license for a passenger boat than on a freighter?—A. Well, I think any man who is able to be master of a freight ship is able to be master of a passenger ship, as far as ability goes. Now, a number of things are required of a captain of a passenger boat that are not required of a captain of a freight ship.

Q. Now, has this thing ever come up in your conferences at Washington, whether more care would be necessary on these newer and greater boats that are now being built than formerly, when boats did not carry one-half the persons that they carry on the present day?—A. It requires the greatest care of the master. The master of a little boat or a tug around here may run into a passenger boat and be the cause of the loss of two or three thousand lives; the master of a freight boat may ram into a passenger boat if there is carelessness.

Q. So you are under the impression, then, that it is just as necessary for experience and efficiency of the men and experience and efficiency for a captain of a tug as there is for the captain of a great big passenger steamer?—A. As to the navigation; but the details are more numerous on the passenger ship than they are on a tug.

Q. Well, if the details are more numerous, therefore it would require greater skill and greater ability, wouldn't it?—A. Well, if he has ability to navigate a small boat or to navigate a freight boat, he ought to be able to utilize his ability to take care of the conditions that may arise.

Q. Under the present rule the captain who secures a license, if he can secure employment on a boat carrying 2,500 or 3,000 passengers, he is promoted to be a captain of a boat of that kind, notwithstanding that he was only the captain of a tugboat when he originally obtained his permit or license?—A. Why, his tonnage may not be large enough to allow him to go on a boat of that kind; his tonnage is limited.

Q. That is what I am trying to find out. Is there any rule which will grade the pilots?—A. Yes, sir; a first-class pilot may be limited to tonnage; a master may be limited to tonnage.

Secretary REDFIELD. Capt. Nelson, tell my friend Judge Sabath all you can about the different kinds of licenses, different kinds of pilots, and different kinds of captains' licenses, so he will have the whole thing clear.

The WITNESS. We have a second-class pilot's license, we have a first-class pilot's license, and we have a master, a first-class license for a master, and no one can get a master's license without he has a first-class pilot's license. He has got to be a first-class pilot and have years' experience as a first-class pilot before he gets a master's license. Then we have assistant engineer, first assistant, and second assistant, and chief engineer.

Mr. SABATH. Who examines these men who make applications for permits—made for a pilot or a captain or what?

A. The local inspectors, and after the local inspectors refuse them a license he has a right to appeal to the supervising inspector.

Q. Will you please inform me—someone made this statement, that this boat had been condemned at one time in or around the city of Cleveland. That is your district, is it?—A. Yes, sir.

Q. Have you refused that boat a license?—A. No, sir.

Q. Some one else in your section of the country?—A. I never knew that boat to be condemned or being refused a license. If I may be allowed to state it, I have heard the rumor that she was condemned because she did not come up to the speed specifications; that is, the owners would not accept her and throwed her back on the builders because she did not come up to the speed specifications. I believe her speed was 22 miles an hour or something. Now, that is just a rumor; her speed was to be 22 miles an hour.

Q. Has the Government any special inspection or inspection of newly built boats before the boat is licensed first, a general inspection on the part of the Government in your department?—A. Why, in some cases there is. Every boiler plate that enters into the construction of a boiler is tested by a Government inspector, and we have a record of that, and then we approved of the blue print before they can build a boiler that is to be used in a steamboat, and all valves and fittings have got to be stamped and marked.

Mr. THURMAN. That has only been in effect two or three years; that is a departmental regulation. Prior to that there was no such regulation.

The WITNESS. And the last five or six years they are supposed to furnish us with a blue print of the hull as well as the boiler.

Mr. SABATH. If I am not mistaken, yesterday you stated that if the application had been made to you that you yourself would have issued a permit for this boat to carry the number of passengers that she was permitted to carry on this date, namely, 2,500?

The WITNESS. I think you are mistaken about that. If you will read the record you will see I did not say that.

Q. Do you remember of making that statement?—A. I did issue a certificate for 2,400 and a 100 of the crew, which made 2,500, while she was at Cleveland.

Q. What is the rule when an application is made for an increase? Is it necessary for the inspector to examine such improvements that have been made upon the boat, or a statement from the captain, and take it for granted that the improvements have been made?—A. It

all depends; we could not accept a new raft or a new boat without we made an examination of it; I mean lifeboats now, understand me.

Q. Well, in this case here, a communication or request has been made on July 2 upon the inspectors, and a statement made that certain improvements have been made, that four rafts have been added, and that they have complied with some other regulations, and that therefore they are entitled to the full limit of 2,500. Without any investigation on the part of the inspectors a license is issued for the vessel to carry that number of passengers. Now, is that usual?

Secretary REDFIELD. Wait a moment, Judge Sabath. Tell it all. Don't stop there; tell the rest. You do not state that it was on an affidavit, nor do you state that two days later it was followed by an examination. Tell it all.

Mr. SABATH. Well, the examination was later on. What I want to know is whether it is a rule or whether the rule permits of issuance of a license upon application accompanied by an affidavit?

The WITNESS. There are different conditions submitted. That might be Mr. Reid's basis; it is not mine.

Q. Isn't it your opinion that there should first be an examination before a license for increasing the carrying list be granted?—A. I won't give you my opinion; I will tell you what my practice used to be; that I always examined the equipment before I increased the permit.

Q. You always did examine before you issued an excursion permit?—A. Yes, sir.

Q. And isn't that the safest condition?—A. It was, in my opinion, the safest.

Mr. SABATH. That is all.

The WITNESS. I wish to say that if it is only a question of 40 or 50 life preservers, or something of that kind, and the captain made an affidavit that he had put 50 or 100 extra life preservers on it, I would take his affidavit for it and then increase the excursion permit.

Mr. SULLIVAN (assistant State's attorney, Cook County, Ill.). Capt. Nelson, you say you are supervising inspector?

The WITNESS. Yes, sir.

Q. You were appointed when?—A. 1912; January, 1912.

Q. And where?—A. At Cleveland.

Q. Did I understand you to say when examined by the Secretary that there was considerable criticism regarding the way in which the *Eastland* handled herself?—A. Some newspaper controversy.

Q. Newspaper controversy?—A. Yes, sir.

Q. And passengers themselves spoke to you about it, did you say?—A. Yes, sir.

Q. What was the nature of the criticism?—A. Why, I remember one particular case where a gentleman came up to my office and asked me if the *Eastland* was safe. I said, "Yes; what makes you think she is not safe?" So, he says, "She is leaking; she is full of water." And I says, "How do you know?" "Well," he says, "I made several trips on that boat, and I saw a man shove down a great big rod, and there must have been about that much water [indicating] on that boat." And after I explained to that gentleman that that was water on the water bottom he went away satisfied and apologized very much.

Q. Did you tell him the boat was a safe boat; or, rather, when you did tell him that were you acquainted with the crew?—A. Yes, sir.

Q. All of them?—A. Oh, not all of them. There was a hundred of the crew. I was acquainted with the officers.

Q. Just the officers?—A. Oh, I might be acquainted with some of the wheelmen and lookouts and so on.

Q. The safety of a boat depends a great deal upon the unlicensed men as well as the licensed men, does it not?—A. To a certain extent; yes, sir.

Q. So that the character of the licensed men is more important because of the increased number of them?—A. Oh, not as important.

Q. Not as important?—A. Not as important as the licensed men.

Q. They are about as important?—A. Not about as much.

Q. Now, this criticism of the newspapers in Cleveland brought forth some newspaper advertisements, didn't it, on the part of the owners?—A. I believe they offered a reward of \$1,000.

Q. Is that ad there a copy of the ad that appeared in the Cleveland papers some years ago [passing paper to witness]?—A. Why, I did not know it was \$5,000. I thought it was only one. It has been so long ago I have forgotten.

Q. The owners offered \$5,000 reward?—A. Yes, sir; that is open to all the scientific men; and no one took it up that I know of.

Q. And there was enough criticism to warrant the company offering a reward of \$5,000 to some one who could demonstrate that she was not a safe boat; is that right?—A. Why, I believe that is the advertisement.

Q. Well, don't you know what the ad says?—A. The ad?

Q. Substantially that is the advertisement in question; didn't it attract your attention?—A. At the time; yes.

Q. Now, at the time this advertisement was printed there what was the carrying capacity of this boat?—A. What date was it?

Q. It appears to be the Cleveland Leader, on August 9, 1910.—A. Two thousand two hundred.

Q. Two thousand two hundred?—A. Yes, sir.

Q. No limitations on that?—A. Lake Erie; good until September.

Q. Was she permitted to cross Lake Erie, or simply go along the coast?—A. The records will show they could sail on any part of Lake Erie.

Q. Did she cross the Lake?—A. No, sir.

Q. Her run then was along the coast between Cleveland and Cedar Point. And where is Cedar Point?—A. About 55 miles from Cleveland.

Q. Which way?—A. West, and Sandusky Bay; the official distance is given as 52 miles, but it measures 55 miles.

Q. Where a boat such as this relies upon water ballast, did you say that she ought to have the very best water-ballast system?—A. I did not say that.

Q. You did not say that?—A. I did not say the very best; I said she should have the water-ballast system.

Q. Where she relies upon a water-ballast system, didn't you say yesterday that she should have the very best system?

Mr. THURMAN. There might be a dispute between the owners and inspectors as to what the best water system was.

The WITNESS. She probably had the best water system.

Mr. SULLIVAN. She probably did.

A. Yes, sir.

Q. Does that fact prevent putting in a better one should one be made?—A. Her system she had to utilize and it was all right when in our district.

Q. You say that a sufficient water-ballast system was skipped over by some of the inspectors?—A. I did not say so.

Q. You did not say so?—A. No, sir.

Q. What is your opinion as to the cause of this accident, we will have you say so now?—A. I don't think that it was properly water ballasted.

Q. And that she was not properly water ballasted—what do you mean by that?—A. Why, her tanks were not properly filled.

Q. Suppose the system was not one that would permit quick filling of the tanks?—A. Why, I just said here some time ago that I would fill the tanks before I began to take in passengers; I would fill these water tanks.

Q. And now we are assuming a state of facts that actually existed. As Mr. Peck, one of your witnesses, stated yesterday, he believed that when the engineer was pumping to fill the starboard tank that the water was in fact going into the port tank; if that be so, then what do you say about the kind of a system they have?—A. Why, I would say the engineer did not use skill in doing it.

Q. What would you say as to the water-ballast system that made it possible for a mistake of that kind to happen?—A. You can make a mistake on any kind of a system.

Q. Would you say that is as good a system as any other boat on the lake has?—A. No; I would not say that.

Q. And in what respect does that differ from better systems?—A. Why, I don't know her condition—of the water ballast up here.

Q. Well, assuming that it was the same general principle that prevailed while she was under you in Cleveland three years ago; she was under you, wasn't she?—A. Yes. From the very fact that we never had any accident there I would say that the water system she had there was all right to handle her.

Q. You were lucky in Cleveland and we were not here.

Mr. THURMAN. I do not call that fair and you can not call it fair, Mr. Sullivan.

Mr. SULLIVAN. It is not a fair answer to my question.

The WITNESS. Mr. Sullivan, state that question again and I will answer it.

Mr. THURMAN. I ask you in all fairness to strike that from the record, in fairness to you and in fairness to the witness.

Mr. SULLIVAN. I think the witness should answer my questions.

Mr. THURMAN. He is trying his best, Mr. Sullivan, to do it, but if a man misunderstands you, you certainly can ask him a fair question in a fair way without casting any insinuations as you did there; it is not fair to you any more than it is fair to him.

Mr. SULLIVAN. Did you say in answer yesterday to a question of the secretary that you thought the Government ought to take into consideration the question of stability?

A. I did.

Q. What do you understand by the term "stability" as discussed between you and the Secretary yesterday?—A. The stability of the ship.

Q. Well, give us more detail on that.—A. Well, there are a number of ships built that do not have the necessary stability; some of them are skillful marine architectures, but the architects make a mistake. We had a fine passenger ship, one of the finest passenger ships that ever was built, go down in Italy a few years ago—rolled over when she was launched. That is a mistake of a marine architect. We have had a number of ships roll over.

I have been informed that the steamship *Empirato*, when she made her trial trip, she got on the bottom and they did not pump her ballast tanks out until they had all her lifeboats down.

Q. What steps does the Government take to determine the stability of boats that are permitted to run around the Lakes?—A. A general observation of the boat.

Q. Who does the observing?—A. The local inspectors.

Q. Are they marine architects?—A. No, sir.

Q. Do you know the captain and engineer of this boat?—A. At this time?

Q. Yes, sir.—A. No, sir.

Q. Have you ever met them?—A. Not that I know of.

Q. Professionally or otherwise?—A. Not that I know of.

Q. Are the local inspectors ever transferred from one district to another?—A. Why, the assistants are.

Q. I mean the local inspectors?—A. No. In some cases they are.

Q. You mean cause must be shown, is that it?—A. No, sir; in my district just now I have inspectors from another district because the Cleveland board is not intact and I have got to have two local inspectors to help me out and I have transferred the inspectors from Toledo down there.

Q. That is an emergency?—A. Yes, sir.

Q. I mean as a general proposition, is there any rule in your department whereby you transfer men from one post to another after they have been there a certain time?—A. Yes, sir.

Q. What is that rule?—A. Why, I have one inspector now, a local inspector of boilers; he was a chief engineer a number of years up in the Great Lakes; he took the civil-service examination and got his first appointment away down in Indiana some place, down the river, and on the first opportunity there was for a local inspector at Toledo or on the lake district he was naturally transferred back.

Q. You do not understand the question. I haven't in mind filling vacancies; I mean simply a general transfer of the men from post to post, not to fill vacancies and not for emergency purposes but for the good of the service.

Mr. THURMAN. Assuming that it would be for the good of the service.

Mr. SULLIVAN. Yes; assuming that it would be good for the service; I will put it that way.

A. In 1907 there was an order that assistant inspectors were transferred from one district to another.

Q. I am not talking about assistant inspectors.—A. I never knew the locals to be transferred.

Q. So if they did their work apparently satisfactory they are never disturbed, as a rule?—A. None that I know of; no, sir.

Q. My attention has been called to the case of the steamer *Balensie*, sailing on the Pacific coast in 1905, when President Roosevelt appointed a commission to find out about that matter, and that commission at that time reported and recommended that the local inspectors be changed from time to time, that it would be for the good of the service. Was that recommendation by President Roosevelt's committee ever put into force?—A. Not that I know of.

Mr. THURMAN. Mr. Sullivan, let me ask you if that question is for the purpose of inquiring as to why such a commission has not been appointed in this case? You will find I am convinced since the appointment of that commission that Congress itself has forbidden the appointment of such commissions in the future.

Mr. SULLIVAN. To be frank with you, I was told to ask that by one of the newspaper men.

Secretary REDFIELD. It is forbidden by law.

Mr. THURMAN. I thought it sounded like it, but I just wanted to know.

Mr. SULLIVAN. That is all.

The WITNESS. Why, Mr. Sullivan, I wish you would state that question again; I always like to answer any questions or give any information; that is what I am here for.

Mr. SULLIVAN. We will talk that over a little later.

The WITNESS. I might be able to answer it; I did not try to evade it. I am to appear before the grand jury.

Mr. WALTER STEFFENS (assistant corporation counsel, city of Chicago). Do you know why the steamer *Eastland* was transferred from Cleveland to Chicago?—A. Those transfers are some times made.

Q. Do you know why it was transferred?—A. No, sir.

Q. Isn't it a fact that the steamer *Eastland* at that time had been a loss so far as financial returns to the owners were concerned, because of its reputation of being unseaworthy and unsafe, and sent here to Chicago where the people did not know it?—A. I do not know that. I have heard she did not make any money, and she did not make any money in Cleveland.

Q. And the reason was that she had the reputation among the people that navigated steamers of being unsafe?—A. No; the reason for her financial loss in Cleveland was because she was too expensive a boat to keep up; she was twin screws, that required an immense amount of men to operate and used a lot of coal.

Q. And people would not patronize it to her capacity?—A. She was well patronized in Cleveland.

Q. Since this catastrophe has the catastrophe changed your opinion as to her stability?—A. I have stated here a number of times, and I will state again, that if the *Eastland* was in the same condition as she was in Cleveland and her water ballast was handled properly I would be willing to grant her a 2,400 passenger and 100 crew permit with a clear conscience.

Q. It has been said during the week by a naval architect that that vessel was improperly constructed—that is, that the hull was so constructed that it had no stability—and furthermore that the ballast tanks were not properly arranged in the vessel. Now, the vessel was in Cleveland in the same condition it was to-day, so far as that is

concerned.—A. That does not make it so because a naval architect said so.

Q. No; I am asking your opinion on that.—A. Why, my opinion, as evidenced by the fact that I issued permits to her a number of years, indicate I must have been satisfied that everything was all right. I must stand on my record.

Q. Then you would say that you would license her to-morrow, if she was raised to-day, to carry 2,400 passengers?—A. I say, under the same condition she was in in Cleveland. I do not know what changes were made at all; there may have been a number of changes made in her; I am only speaking about the condition she was in while in Cleveland. I do not know anything about her condition up here; I do not know anything about it.

Q. I am assuming that her water-ballast tank would be in perfect order, perfect condition, as they were in Cleveland?—A. Yes, sir.

Q. And that the same hull is the same as it was in Cleveland?—A. Yes, sir.

Q. And that the life-saving equipment, preservers, and boats and all are within the law?—A. Within the law.

Q. Then you would say what?—A. She is safe with 2,500; and I am willing to go out in her on any day in any wind that ever blew.

Secretary REDFIELD. I might just ask you a question, whether the statement of the naval architect you speak of was accompanied by drawings of the vessel?

Mr. STEFFENS. This naval architect, as I understand it, in 1903 was employed by the company owning it to make such an investigation of the boat and recommend improvements, and they spent \$3,500 on his recommendations, and since that time he made observations.

Secretary REDFIELD. I ask because we are trying to procure some of the drawings.

Mr. THURMAN. Did he state whether or not the alterations and changes he recommended were made?

Mr. STEFFENS. I believe they were; he said that some were not; but substantially all suggestions were made, but on account of some expenses they did not make them all.

Mr. THURMAN. Did he let you know whether or not these changes were recommended to increase the stability of the boat?

Mr. STEFFENS. Well, I would not want to say yes or no; I do not recall that.

Mr. THURMAN. They were probably made for that purpose, were they not?

Mr. STEFFENS. I would not say yes or no as to that; I think partly so and partly not so.

Mr. THURMAN. Then if these recommendations were carried out of this naval architect and afterwards your naval architect says she is unstable, is that the kind of naval architect to rely on?

Mr. STEFFENS. He did not say they were all carried out. I think they were probably carried out in part, but I think his recommendations as to the hull were not carried out.

Mr. JAMES F. BISHOP (public administrator of Cook County, Ill.). It is not the duty of a Government inspector to inspect a boat each time she puts into port?

A. No, sir.

Q. When a boat changes her dock, her usual dock to which she usually moors, it is not the duty of a Government inspector to advise the shipowners or the ship captain as to the depth of the new dock to which she is going?—A. That is something we haven't any supervision over at all.

Q. Nothing to do with that?—A. We have nothing to do with that.

Q. And would you say, Captain, where a ship was changing its dock, that it should or should not know, and the owners thereof should know, the depth of the water at the dock to which it was going?—

A. Why, I don't suppose any owners of a boat, a passenger ship, would let her go alongside of a dock unless everything was all right.

Q. Well, I am asking you would it not be their duty?—A. I should think, to make a success of the business, they would do it.

Q. You said you considered this a safe boat provided the water ballast was handled properly. That is correct, is it not?—A. Yes, sir.

Q. Assuming that she was not water ballasted, would you consider her then a safe seagoing vessel to carry 2,400 passengers?—A. No, sir. You mean without water ballast?

Q. Yes.—A. No; I would not consider her safe without the water ballast was properly handled.

Q. You would consider that the highest degree of care would require the water ballast to be in the ship before you started to load passengers?—A. When I expected a record crowd like that I would want water in the ballast tank.

Q. The highest degree of care would require that?—A. Yes, sir.

Q. Did you ever hear any rumor to the effect that in her trial trip, when she came from the dock of the builders, that she careened badly or listed badly?—A. Not that I remember of.

Q. And that there was a special request to let her run that trial trip for the purpose of selling her again?—A. I never heard anything about it.

Mr. BISHOP. All right.  
(Witness excused.)

ROBERT REID, recalled as a witness, having been first duly sworn, testified as follows:

Secretary REDFIELD. You have been sworn and are recalled at the request of Judge Sabath and Judge O'Hara, who desire to ask you a few more questions.

Mr. SABATH. You have stated that at two different times you were compelled to call Capt. Pederson's attention to matter wherein you have threatened the last time if it should occur again that you would revoke his license. Do you remember those two statements you have made?

A. Yes, sir.

Q. Can you remember any other occurrence on the part of the captain where you were compelled to call his attention to the improper handling of the boat?—A. No, sir; I do not.

Q. When was this last occurrence—when did this occur where you have called his attention to the fact that you will revoke his license if you should find him doing an act of that kind again?—A. I could not give you the date.

Q. Was it this year?—A. No, sir; it was last year.

Q. Last year?—A. Some time last year.

Q. This last permit or license you have issued here on July 2, is it?—A. Yes, sir.

Q. Are these your files?—A. Yes, sir; they are.

Q. This letter has been dated—this letter from Pederson himself, from his boat, was dated July 2, was it not?—A. Yes, sir.

Q. It shows that it has been received on July 3?—A. I see the stamp on it.

Q. The stamps show that it has been received July 3.—A. I see the stamp on it.

Q. The stamp shows that it has been received July 3. Is this a copy of the certificate that you have issued?—A. Yes, sir.

Q. That is dated on July 2?—A. Yes, sir.

Q. So the record would show that you have actually issued the permit a day before you have actually received the request?—A. According to that it would appear that way, Mr. Sabath; but we had a telephone conversation with Mr. Hull.

Q. So you did not wait until you had received this communication in issuing this license?—A. No, sir.

Q. You have issued the same upon the telephone communication had with Mr. Pederson?—A. Mr. Hull, I said.

Q. Or Mr. Hull?—A. Yes, sir.

Mr. BISHOP. Mr. Hull, who is he?

Mr. SABATH. Hull is the manager and vice president of the company owning this boat; is that true?

A. Yes, sir; as far as my knowledge goes, it is.

Q. What is the rule if applications are made by the captain or master of the boat, or are they made by the owners?—A. Sometimes by the owners and sometimes by the captains.

Q. Isn't this rather unusual—that a license be issued before the written application is received—or is it a common occurrence that people would call you up and say, We have put on a few more rafts; give us permission to carry 300 or 200 or 200 or 300 more passengers?—A. Will you put that question again, please?

Q. Will you read it, please?

[Question read by reporter as follows:]

Isn't this rather unusual—that a license be issued before the written application is received—or is it a common occurrence that people would call you up and say, We have put on a few more rafts; give us permission to carry 300 or 200 or 200 or 300 more passengers.

A. I had absolute confidence that the steamer had the rafts aboard her when I issued that permission.

Q. So that was because you had confidence in Mr. Hull and in his statement that you did not wait for the written applications or for the inspection to have issued the license; is that right?—A. I have stated before that I issued it on telephonic applications.

Q. By Mr. Hull?—A. Yes, sir.

Q. And you have done so because you had the utmost confidence in Mr. Hull?—A. Yes, sir.

Q. You have known Mr. Hull very well?—A. Two years, about; not so very well.

Q. Well, how long have you known Mr. Hull?—A. I said about two years.

Q. Two years?—A. Yes, sir.

Q. You have seen him frequently during those two years?—A. Well, I would be on his dock mostly every Sunday during the excursion season.

Q. Has he made other requests upon you than this one here by phone?—A. No, sir; he notified me by phone that he had the rafts aboard.

Q. Do you recall any other requests that he has made of you?—A. No, sir; I do not.

Q. Do you know Mr. Davis?—A. Not very well; I would probably know him if I saw him.

Q. Do you know who I mean by Mr. Davis?—A. I think you mean Davis of the company, do you not?

Q. Yes.—A. I would not say for certain whether I do or not.

Q. Have you had any business transaction with Mr. Davis?—A. Not that I know of.

Q. He represents Mr. Hull, does he not?—A. I could not say.

Q. You do not know?—A. No, sir.

Q. When did you examine this boat the last time, or I will say inspect it?—A. I could not remember that.

Q. Have you inspected it this year?—A. Yes, sir.

Q. Have you given the boat that inspection that is required by law?—A. Yes, sir.

Q. Did you have the same amount of confidence in Capt. Pederson after the occurrence that you stated here that you had before?—A. I had confidence. I never saw him commit an error after that, and I watched him closely and he took proper care of the steamer.

Q. How many times were you obliged to call his attention to the defects of the boat or to some things that should be remedied in the last year?—A. This year or last year?

Q. Last year or this year?—A. Twice, to my knowledge.

Q. There is a communication on file here of May 8, 1905. Will you have the kindness to let me see that, Mr. Secretary [Secretary Redfield passes file to Mr. Sabath]?

Q. Look at this copy of the letter signed by you and Mr. Eckliff. Who dictated this letter [passing letter to witness]?

Secretary REDFIELD. I will read it into the record if you wish it.

The WITNESS. I think I dictated this letter.

Mr. SABATH. I desire to embody this letter into the record. This is a letter written by two inspectors to the captain of the boat.

Secretary REDFIELD. File No. V-521.

MAY 8, 1915.

Capt. PEDERSON,  
Steamer "Eastland," St. Joseph, Mich.

DEAR SIR: As per agreement with you, I have checked over the life rafts of the steamer *Eastland* and, without actual measurement of the deck capacity of the rafts, would estimate that they will carry 405 persons, in accordance with the new regulations.

Her lifeboat capacity is 150 persons; the combined capacity of the rafts and boats will be 564 persons. This would give the steamer *Eastland*, from May 15 to October 15, a carrying capacity of 1,880 persons, and as you wish to carry 2,500 passengers, carrying the same crew you had last year, would make a total of 2,570 persons, consisting of passengers and crew.

The required boatage and raftage for this number would be 771 persons. Of this amount 193 persons for the boats. This would take two additional boats, either two 18-person boats or one 16 and one 20 person boat, which would leave

578 persons to be provided for by rafts. The estimated capacity of rafts, at present 405 persons, leaving 173 to be provided for.

We would call your attention to the seventh page of the seamen's act, which will be in force for this steamer the season of 1916, and we would advise that in the new rafts you get that they would be in accordance with the seamen's bill. At the present time this steamer has about 10 rafts that have a carrying capacity exceeding 15 persons. In 1916 one-half of the number of rafts carried by any steamer carrying passengers shall have a carrying capacity of exceeding 15 persons. You will find this in the last line of the first paragraph on page 17 under the title of "Certified lifeboat men."

We inspected for this steamer May 6, 2,108 life preservers. The steamer would require 462 life preservers, not counting those required for the lifeboats, which would be 2 for each boat carried.

It is impossible to give you the correct number of persons that the present rafts will carry and would suggest that if you wish to get the accurate number that you find the deck area of each raft and divide that by 4. Next find the cubic capacity in cubic feet of the air space in the tanks, dividing the cubic feet by 3 to get the capacity of the raft. If the raft has deck space for 10 persons and cubic air feet space for 8 persons, the raft would be allowed but 8 persons, but if she had deck space for 7 persons, the raft would be allowed but 8 persons; but if she had deck space for 7 persons and cubic feet space for 7 persons, then in this case the carrying capacity of the raft would be 7 persons.

On page 191, under the title of "Clark life rafts," next to the last paragraph is the following: "There shall be allowed for each person carried not less than 3 cubic feet of air space and a deck area of not less than 4 square feet. This applies to all life rafts of the Clark type, i. e., rafts made of metal cans or cylinders inclosed in a wooden frame." By carefully figuring each raft as above you can get the exact carrying capacity of the *Eastland's* rafts.

Respectfully,

CHARLES G. ECKLIFF,  
ROBERT REID,  
Local Inspectors.

Mr. SABATH. How did you come to write this letter to Pederson?

A. Well, sir, when I was up inspecting the steamer *Eugene C. Hart* we made a visit to the steamer *Eastland*, as we had part of a day left before train time, and we inspected the life preservers at that time, what she had, and, as I have stated there, twenty-one hundred and something—I don't remember the figures—that was based on our inspection, which began May 5. This was about May 8. When we had this partial day on our hands we went on the *Eastland* to inspect the life preservers that she had on hand at that time before we began the annual inspection, to make the annual inspection, to facilitate getting through with it, and this general inspection was not given until May 25 or 24, the month she was inspected, but previous to that we frequently inspected life preservers for steamers ahead of their annual inspection in order to facilitate work.

Q. What did you mean "as per agreement with you"?—A. About the carrying capacity.

Q. Yes; what was the agreement that you had with Pederson?—A. The agreement I had with Pederson was if the boat was properly equipped with life preservers and rafts for 2,500, she would be allowed that; I have no doubt that is what I meant.

Q. And in this communication you set forth the things that he has to have to give you the right to issue a license for him to carry 2,500 passengers; that is so, isn't it?—A. We detail there to enable him approximately to figure how many persons that his life rafts will carry, so he will have ample time to provide others.

Q. At the time that you talked with him he had informed you that he would like to secure a license to carry 2,500 passengers, did he not?—A. I think that must have been the idea.

Q. This letter was in conformity or informing him what he would have to comply with to grant them that license; is that right?—A. Well, it was as I stated before—written for the purpose of giving him a knowledge how to estimate approximately the carrying capacity and the present equipment so he could provide the necessary extras.

Q. There was no actual measurement on your part of the rest of the lifeboats or anything else, was there?—A. We did not commence until May 25. This was a preliminary to the boat, as I said before, to help get the inspection along when we got there.

Q. What did Mr. Hull say to you on July 2, when he requested you to send him that license for 2,500 passengers?—A. My best recollection of it was that he had put aboard the steamer *Eastland*, in Chicago the four additional rafts, the carrying capacity of 100 persons.

Q. I mean why was there this haste; what did he say to you?—A. He did not explain that at all. I do not know the crowds generally would be so much greater than at other times. I suppose he was getting ready for them.

Q. Did he say anything about that, that he expected to carry a large number of passengers?—A. No, sir.

Q. Can you explain the haste in sending this permit?—A. Why, I can in a way. Our territory covers from Benton Harbor down the coast of Michigan, taking in South Haven and Kalamazoo and Holland and Grand Haven, Muskegon, Whitehall, Pentwater, Ludington, Manistee, Frankport, Traverse City, the Snow Islands, St. Ignace, Sheboygan; and we can not remain in the office all the while. We have to be out. We have not sufficient force to stay there. We have to hustle our work in order to get through, and we are practically on the go all the while.

Q. Mr. Reid, did any complaints reach you about the *Eastland*?—A. No, sir.

Q. Last year?—A. No, sir; I did not receive a complaint.

Q. Any this year?—A. No, sir.

Q. Who was with you when you examined or inspected this boat this year and gave her the annual inspection?—A. Mr. Eckliff was the man that was with me.

Q. How long did it take you to inspect the boat?—A. We began on May 24, I believe, about 3 o'clock in the afternoon.

Q. And when did you quit?—A. And we went on her the next day, and my recollection is one boiler gave out, and we got through the third day about 4 or 5. I would not say; I would not make an accurate statement; but one boiler gave out, so we could not complete the inspection, and we had to return home.

Q. What do you mean, one boiler gave out?—A. Broken stay bolts. When the hydrostatic pressure was put on they let go these bolts, and it had to be corrected. We returned home on May 30. I would not make an accurate statement, but that is my best judgment. We returned to complete the inspection; I do not just recollect when we got there.

Q. Who was with you on this inspection, in addition to Mr. Eckliff, representing the company? Was it Mr. Hull, or was it the engineer?—A. Why, the engineer was there, and most all of the crew was around the boat busy getting her ready; they were all busy around there. I could not say who were there.

Q. Did anyone call your attention to the trip that this boat made on the St. Joe River or Benton Harbor, somewhere, when she was in danger?—A. No, sir; but I grasp, I think, what you mean, and I will try to explain it to the best of my knowledge. In the winter-time, when she was laid up there at Benton Harbor, in disconnecting the pipes the sea cocks are generally packed to keep the water from getting into the sea cocks. In the sea cock of this steamer there happened to be a leak. It was not securely packed. It was a big sea cock there. I do not know how deep it is, but it is quite a large one. That became partially pulled away; so pulled away, anyway, that it froze and burst the sea cock, and she listed over badly at the dock on that account. I presume that is what you mean.

Mr. THURMAN. What time was that?

A. I do not know, sir.

The SECRETARY. Was the vessel in service?

A. No, sir; she was not. She was in winter quarters.

Mr. SABATH. Didn't she list very heavily last fall a few days before her last trip?

A. Not that I know of; I did not see her.

Q. You did not receive any report of that?—A. No, sir; I did not.

Mr. SABATH. That is all I wish to ask.

Mr. SULLIVAN. May I ask a couple of questions?

Mr. THURMAN. Oh, Mr. Sullivan, let us do it all at once.

Mr. SULLIVAN. Did you ever recommend anybody to the *Eastland* company for a position of any kind?

A. No, sir.

Q. Did anybody for you?—A. No, sir.

Q. Recommend anybody to a position on any boat line?—A. If I did?

Q. Yes.—A. No, sir; not that I know of. Wait a minute; I will correct that statement. The late Capt. Doyle, on the *Carfey*, at Grand Haven. The officials of the company wanted a man to run their boat—they had lost the previous captain; I have forgotten what his name was—and they came to the office and wanted to know if we could recommend a good, suitable man. Mr. Doyle being an expert, we did recommend him.

Q. Why did their company come to you for a recommendation?—A. Because their office is two blocks from ours.

Q. Is that the only reason you can give?—A. That is the only reason.

Q. Did you overhear a talk between your daughter and her husband, Erickson, in which he complained about being overworked on this boat?—A. I never did.

Q. Or in which he complained about the machinery being in bad condition?—A. I never did.

Q. Never heard him complain about that?—A. No, sir.

Q. About either of those conditions?—A. No, sir; he never complained to me about that.

Q. Did you overhear him make any talk of that kind?—A. I did not; no, sir.

Q. Did your daughter, either?—A. I would not say for that; I could not say what she heard.

Q. Did you ever recommend the purchase of oil of any particular concern?—A. No, sir; not to my knowledge.

Q. Not to your knowledge?—A. Not to my knowledge.

Q. If you ever recommended it, you would recollect it, wouldn't you?—A. I think I would; my memory is defective; it is not carrying perfectly; I will do the best I can for you.

The SECRETARY. Capt. Reid, am I correct in understanding that this season of 1915 you have made four visits to the *Eastland*? I understand from your testimony, taken at various times, that you made a visit to the *Eastland* on the occasion of the 6th and 8th of May at the time when you testified?

The WITNESS. Yes, sir; those days I was there, I think, I could not give you the dates, but I was there early in May, the time we inspected in June here.

Q. Whatever the date was, am I right in understanding there was such an occasion when you visited the vessel?—A. We inspected every week for the lifeboats.

Q. On the second occasion, if I understand you rightly, is what you call the annual inspection on or about the 25th of May?—A. The 24th, I think.

Q. The other occasion, if I am correctly informed, was on or about the 7th of June; is that correct?—A. No; I think the 30th of May, if I am correct.

Q. There was one about the 30th?—A. When they come for the last boiler that was defective.

Q. That was a third time. Now, was there a fourth time on or about the 7th of June?—A. I have no recollection of that.

Q. Then when was the next time?—A. Whether I visited between that and July 4, that I could not say.

Q. Did you visit her on July 4?—A. I did. I left Grand Haven and went to St. Joe for that purpose.

Q. Then am I correct in assuming these four to be the fact, one early in May, on or about the 6th to the 8th; one late in May, on or about the 24th or 25th?—A. The 24th and 25th were one visit.

Q. I understand; I said one.—A. Excuse me.

Q. Please let me get this clear; I am trying to get the facts together in one place, that is all. Am I correct in understanding that these four visits were made by you to the *Eastland* about the dates I shall mention: One visit early in May, on or about May 6 or 8; another, a second visit, late in May, at or about the 24th or 25th; and a third one, on the 30th of May; and a fourth one on the 4th of July?—A. I believe you are correct; yes, sir; I think you are.

Q. Now, did you have before you an affidavit concerning these four additional rafts that were wanted, to the effect that the same had been purchased?—A. I believe it came into the office July 3, to the best of my recollection.

The SECRETARY. Mr. Thurman pointed out to me that it is already in the record, and I will let that pass.

Judge O'HARA. Capt. Reid, in each of several marine events of a certain character the law very wisely provides for an inquiry or an

investigation. Such an investigation is now in progress. That inquiry, under and by virtue of the statute, is conducted by the marine or steamboat inspectors primarily; the law is aimed at the master or some other officer of the vessel; the law, however, provides that it may pertain or apply to the inspectors themselves. In the case of such an inquiry naturally one of the very first things to determine or ascertain, if possible, is what was the cause of the mishap—I will not call it an accident—we will call it a mishap. Now, then, it may have been occasioned by the act of God, by an unavoidable accident, or it may have been occasioned, as it usually is, by the two things specifically named in the statute, namely, incompetency or misconduct. Now, then, we all know, Mr. Secretary knows, and our old shipmate, Capt. Van Patten, knows—with whom I sailed 40 years ago—that this was not the act of God; it was not an unavoidable accident. The newspapers have had something to say about whitewashing in this case. I never had the pleasure of meeting the Secretary of Commerce until this morning, and my knowledge of men in official life, and I have been very fortunate in that regard—I have known many of them who have served in various capacities—my knowledge of men who have held high positions is that the ordinary man strives and labors to make a reputation for himself, and that reputation can not be made unless, ordinarily at least, he deserves it. Upon my part there will be no attempt whatever to whitewash. I believe there is no desire upon the part of any man behind this table to do any whitewashing. I was a shipmate, or rather a deckmate, of yours 30 years ago; I served on the propeller *Messinger* and you were then on a propeller running to Saugatuck; about 35 years ago.

A. The *J. S. Severance*.

Q. Now, then, I say to you frankly, as I have already stated, that this was not the act of God; that the man who would make that assertion would be a dunce. It was not an unavoidable accident. The turning over or turning to one side of that vessel must proceed from either incompetency or misconduct; that is the purpose of this inquiry up to this time; unfortunately this morning we have made no progress whatever; unfortunately we have not gained a step in that direction. Now, then, we are here for the purpose of determining, and we are here, by the way, through the extreme courtesy of the Secretary, and, I take it, secondarily through the courtesy of the members from Milwaukee, Mr. Collins and Capt. Van Patten. Now, then, my questions to you will be very few; not a single question will be aimed for the purpose of attempting to degrade you or humiliate you; and my fondness for you—I think I may employ that word, and I do employ it intelligently and honestly—my fondness for you, growing out of the relations that existed between us away back in the late seventies and early eighties, all this would forbid any misconduct on my part; no man behind this desk has a right to put a question to you or to any other witness for the mere sake of displaying his knowledge or his smartness or for hearing something nice said about him in the newspapers; therefore bear in mind I want you to be as fair with me as I will be with you.

Now, then, you must agree with me that this proceeds either from misconduct or from incompetency. I have a decided opinion with respect to the cause of that disaster. I am not at present, at least, to give what I believe in that regard. But having in mind what

the officer very kindly said to you the other day, that you were to say nothing to me—that you were to give nothing in response to any question put to you that in your judgment, or according to the advice of your counsel, if you have one—that would tend to prejudice you in the future, be as fair with me as you possibly can. Now, then, what is your age?—A. Born February, 1856; February 18, 1856.

Q. Fifty-nine years of age. When did you first adopt the steamboat life; in other words, when did you first commence to steamboat?—A. My recollection—Mr. O'Hara, I was passing upon the issuance of my license.

Q. No; when did you first commence to sail?—A. To sail?

Q. Yes.—A. Not on a steamboat? I commenced first to sail in 1869.

Q. On a sailing vessel?—A. Yes, sir.

Q. How long did you continue on sailing vessels?—A. I continued until the latter part of the seventies or the early eighties; I could not say which.

Q. What position did you attain or reach when you were on sailing vessels?—A. I attained the position of mate, or what was termed as mate of a sailing vessel.

Q. In what capacity did you serve when you first engaged in the steamboat trade?—A. First as a mate or pilot, as it was termed.

Q. Weren't you purser in the first place; didn't you act as purser or clerk on a boat before you became a mate?—A. Excuse me, Mr. O'Hara; I am speaking of the license.

Q. I care nothing about the license; I am trying to get at the history of your life, so we will know how well qualified you were to serve in the capacity.—A. I did take the position to fulfill until there could be something else—clerk on a little steamer.

Q. How long did you act as clerk?—A. I have no record on that.

Q. From the position of clerk to what place were you appointed?—A. To pilot.

Q. By pilot you mean master?—A. No, sir.

Q. First mate or second mate?—A. First mate.

Q. How long did you act as first mate?—A. Up to the season of 1882.

Q. Up to 1882?—A. Yes, sir.

Q. Were you then made master?—A. I was.

Q. The name of the vessel?—A. The *J. P. Heath*.

Q. You succeeded Capt. Ritten, did you, as master in that capacity?—A. I did; yes, sir.

Q. How long did you continue to serve as master of the *Heath*, approximately?—A. About two years, I judge.

Q. How many vessels after the *Heath* did you command?—A. I commanded the steamer *Joseph C. Suit*.

Q. What was she, a steam barge?—A. Steam barge.

The SECRETARY. What is the name; how do you spell it?

The WITNESS. *J. C. Suit*; S-u-i-t, after Judge Suit, of Indiana.

Judge O'HARA. What was her gross tonnage?

The WITNESS. I do not recollect.

Q. What was she, a lumber carrier?—A. A lumber carrier.

Q. What other vessels did you command after that?—A. I commanded the lumber carrier *A. R. Calborn*.

Q. You were then engaged in the Michigan City trade?—A. After the *A. R. Calborn*, the *R. C. Reid*.

Q. Running between here and Chicago?—A. Yes; sir.

Q. I mean between Chicago and Saugatuck or South Haven, which?—A. No; between Chicago and Menominee and Manistee.

Q. The *Reid*, she carried lumber also?—A. Yes, sir.

Q. What was the name of the last vessel you commanded?—A. *Summer S. Peters*.

Q. From the time you went behind the mast to the little *Heath*, up to the time you got a certificate on the Lakes, did you each and every year serve in the capacity of master?—A. I did.

Q. What year was it you quit the Lakes?—A. In June, 1906.

Q. And the occasion for leaving was the appointment to the place you now fill—the official place?—A. Assistant inspector.

Q. Where were you located then?—A. I was located at Milwaukee and detailed to Chicago.

Q. How long did you serve as an assistant?—A. My recollection to the spring—February of 1908.

Q. Now, then, I wish to be perfectly frank with you, Captain. My steamboat experience has been such that I attach no importance whatever on that trifling little matter of acting upon the affidavit of a master; you had seen him, you had told him what to do, how many rafts to supply, and in case of his living up to what you required him to do, then you consented to give him a license to carry 2,500 passengers; that is right, is it?—A. That was my action in the matter.

Q. You had confidence in him and you believed the affidavit to be true?—A. I had confidence.

Q. I did not mean that I attached no importance to that, I do attach considerable importance to many other things to which perhaps others have not attached sufficient importance.—A. If you will allow me to break the statement—

Q. Yes.—A. I issued the certificate on a telephone call that was followed the next day by an affidavit.

Q. You had every reason to believe that what you had requested him to do had been complied with?—A. Yes, sir.

Q. I would have done the same thing I think; so would any other man under the same circumstances.

Mr. SABATH. We will put you on the stand.

Judge O'HARA. I will make as good a witness as you any day and a better one, I think, in Congress or out of Congress.

Mr. SABATH. No doubt about that.

Judge O'HARA. Where was that vessel at the time she was inspected on the 7th of June or—by the way, this inspection was not on the 7th of June; the inspection actually was about the 30th of May, the 29th or 30th of May, and your license was issued on the 6th of June; that is right, isn't it?

The WITNESS. Yes, sir.

Q. When you inspected this vessel was it in the basin at Benton Harbor?—A. It was up near the Government station there, or the factory, you know where that is located, up there not quite to the basin, but between Benton and the Transit Co., and the first row of buildings there. I can not tell you the exact spot, about halfway between, somewhere along there.

Q. That was 1915, was it?—A. Yes, sir.

Q. You had inspected her on one previous occasion?—A. 1914.

Q. We will touch upon that for a moment. Where was the vessel when you first inspected her, at Benton Harbor?—A. I believe it was; yes, sir.

The SECRETARY. You do not mean this year?

Judge O'HARA. When he first inspected her in 1914. You had been aboard that *Eastland* before that, had you not, before the time of the inspection?

The WITNESS. Yes, sir.

Q. Many times?—A. I could not state.

Q. Had you ever taken a ride on her?—A. I had taken two rides on her.

Q. Across the lake?—A. One across the lake, I think the other one was with an excursion.

Q. Where did you take that ride across the lake?—A. I could not tell you.

Q. Did she have many passengers aboard?—A. I have no recollection of the crowd; probably 1,200 or 1,500, maybe less, I could not say, I have no recollection.

Q. Were you acquainted with the master at the time you first took your ride on the *Eastland*?—A. I was.

Q. Did you inspect, unofficially, of course, the vessel at that time?—Did he take you, as is customary for old shipmates, with some degree of pride, to show you about the vessel?—A. I think we made the ride across with him for the purpose of making a reinspection; I will have to refer to the files.

Q. At that time or any other did you ever examine what has been called here the ballast tanks?—A. I have been in the ballast tanks twice.

Q. Now, as a matter of fact are they ballast tanks or are they put there for the purpose of trimming the vessel?—A. I should judge they would be ballast tanks.

Q. Is the old-fashioned trim barrel employed aboard vessels nowadays?—A. Sand barrel you mean?

Q. Yes.—A. There are one or two.

Q. Any sand trim barrels on the *Eastland*?—A. None that I know of.

Q. How is that vessel trimmed, as you understand it?—A. By letting the water into the water bottom. I don't know just the system, through the sea cocks, or something like that.

Q. Have you ever made an examination of those tanks?—A. I have been in twice.

Q. Have you testified—I was not here yesterday—did you testify as to their capacity?—A. I did not.

Q. What is the capacity? By the way, how many tanks are there?—A. To my best recollection there is five; I may be mistaken.

Q. Five?—A. I think that is all.

Mr. SABATH. On a side?

The WITNESS. On a side.

Judge O'HARA. Would that be 10 all told?

The WITNESS. My recollection is it is 10.

Q. What was the location of those tanks?—A. They began—

Q. How far from the bow?—A. I could not state.

Q. How near to the bottom of the boat did those tanks or does any one of them extend on either side?—A. They go to the bottom of the boat.

Q. They go to the extreme bottom?—A. Yes, sir.

Q. How high up on the sides are they carried?—A. My recollection is 40 inches, I think. I would not state for sure—that is my recollection.

Q. What is the depth of water at the point at which you first inspected this vessel in 1914 in the Benton Harbor Canal?—A. I do not know; I never sounded it.

Q. How much water was the *Eastland* drawing on that occasion?—A. I could not say.

Q. Will your records show what she was drawing?—A. No, sir.

Q. Do you know what the *Eastland* did draw at any time?—A. I do not.

Q. In 1914 or 1915 or any other time?—A. I do not; she draws different depths; about 14 feet, I should judge; something about that; she may draw more; I could not say.

Q. Did you ever serve aboard a boat that carried these so-called water tanks for ballast purposes?—A. I have not.

Q. Have you ever done any reading upon that subject?—A. I have not.

Q. Have you ever had any instruction with respect to how these tanks should be manipulated or worked?—A. I have not; I acknowledged that already before.

Q. Now, the Secretary has just suggested to me that this is not within your scope.

The SECRETARY. This particular scope.

Judge O'HARA. That comes within the scope or authority or employment of your associate, the inspector of boilers, is that the idea?

A. I believe all pumps and such like come under his jurisdiction; yes, sir.

Q. I understood you to say this morning that in the case of making certain tests it becomes your duty at the time a test is being made by your colleague, inspecting the boilers, it becomes your duty to verify, not only by your presence but by some positive action on your part?—A. We have to work jointly, as I have stated, to put the hydrostatic tests on the boilers and test the fire pumps and hose. I think I have covered that.

Q. Well, now then, as a matter of fact, Capt. Reid, you do not know anything about those water tanks, do you, other than the mere fact that there were so-called water tanks aboard that boat for ballast purposes?—A. I am not an expert; I do not know how they are manipulated for doing so; I do not know.

Q. Now, then, your colleague, or at this moment perhaps he is your superior, from Cleveland, Capt. Nelson, testified very much to my satisfaction this morning, because up to that time I had heard in court and out of court, so to speak, that, low and behold, the statute made no provision whatever with respect to this knowledge by an inspector of matters pertaining to the general construction of a boat. In other words, the policy seems to be, and I must confess upon reading the testimony so far adduced in this case, that there is reason to believe that inspectors have been acting upon that same

policy and belief—what lawyers sometimes call fireside law—that an inspector has nothing whatever to do when called upon to determine whether the vessel is entitled to carry 2,000 or 2,500 passengers, or any other number; that all the inspector or inspectors is called upon to do is to determine the deck space and the life preservers, look over the lifeboats and the life rafts and determine their capacity, and then, if there be a sufficient number of life preservers and life rafts and there be sufficient deck space to enable the issuance of that requested certificate, why, then it issues accordingly. Now, then, Captain, all that is a mistake; you will agree with Mr. Nelson, of Cleveland, that it is the duty of an inspector to inquire into the general construction of a boat, won't you?—A. Why, go into the construction as far as possible.

Q. The best way in the world right now, and sometimes the best way a case possibly can be determined and solved satisfactorily, truthfully, nicely, fairly, and legitimately, is to get at it backward. We will now presume that this unfortunate vessel shall be raised, as the man from Detroit hopes to raise her. He will seal her; he will then pump her out; he will put her back in the same shape she was before she capsized; then following that they will put on their painters; they will put on their boiler makers; they will put that ship, Capt. Reid, in just the same condition it was before it capsized that morning. Now, then, sir, we have that vessel there; she is just as good as new. By the way, that vessel was built only about 1903 or 1904; that is right, isn't it?—A. 1903, is my recollection.

Q. She is practically as good as the day she was built, isn't she?—A. I think so.

Q. We have boats in other lines, you know, some of them 30 or 40 years old?—A. Yes, sir.

Q. Practically as good as when they came out there; as good as she was when she came from the shipyard; you know her history, and you know that on an unfortunate morning she capsized. Capt. Reid, when trying to serve in the same capacity and called upon once more to issue a license, would you issue a license in this case?—A. I would.

Q. Sir?—A. I would.

Q. You would?—A. Yes, sir.

Q. Would you issue that license without making some little study with respect to the manner in which those water tanks should be manipulated?—A. I would make such an inspection; sure.

Q. Capt. Reid, please to answer this question: You do not believe that to have been the act of God, do you?—A. No, sir.

Q. You do not believe it to have been an unavoidable accident, do you?—A. No, sir.

Q. You know, do you not, that that vessel tipped over there because of incompetency or misconduct, don't you, upon the part of somebody?—A. I would not say that; there was some cause for it.

Q. Some cause for it?—A. If I may be permitted to call your attention to this steamer [handing picture to counsel].

Q. I don't care about that; we are talking about this particular boat. You say, with the knowledge you have now, that you again would license that boat to run on the lakes, would you?—A. I would.

Q. But you would not do it without making a little more study than you have made with respect to the manipulation of these water tanks?—A. I said that already, that I would make a study.

Q. And, Captain, before licensing a man to run or navigate a vessel of that kind, whatever you may have done in the past, in the future you surely will interrogate them a little bit with respect to those water tanks, won't you; and whatever information you may gather in the future you will impart to this navigator; and if you discover that he knows nothing whatever with respect to the manipulation of those water tanks, you will do that, won't you?—A. I should; certainly.

Q. What is your opinion as to whether or not there was any water in those tanks that morning?—A. I have no opinion, no knowledge.

Q. As an old seaman, what do you say now—we will know in a few days—if there was no water in those compartments or tanks when she capsized, will there be water in them when she is raised; in other words, are they water-tight?—A. They are water-tight; there should be no water in there.

Q. Then you think there will be no water in there?—A. No, sir.

The SECRETARY. I think there is a vent.

Judge O'HARA. What do you think the draft of that vessel was when not loaded aft; what do you think it was?—A. 15 or 16 feet aft.

Q. And forward?—A. Might be 13 or 14; I do not know.

Q. This vessel, by the way, carried no freight, did she?—A. Not to my knowledge.

Q. When you issued the permit to carry the 2,500 passengers you were of the belief that she was not carrying any freight?—A. Yes, sir.

Q. They had a little boat over there that was carrying the peaches and other fruit that was shipped?—A. She was only used as an excursion steamer.

Q. Now, then, how much water have they at the dock at St. Joseph and in the vicinity of the dock where the boat winds or turns around?—A. I do not know.

Q. You do not know?—A. No, sir.

Q. Now, Capt. Reid, I think in the future you will make it a point to look those things up. I will ask you frankly, Don't you think now that you should have known a little something as to the depth of water at St. Joseph, also as to the depth of the water in Chicago where this boat docked before allowing that boat to carry 2,500 passengers?—A. I could not tell where that boat was going to be navigated; she might be navigated in good water and then taken where there was no water.

Q. As a matter of fact, Captain, now I ask you at the outset—do not take it from my tone of voice, because I always speak earnestly; don't take it from my tone of voice that I am unkind; I am not; I still have the same regard for you that I had years ago, and I would have bet the last dollar I could have borrowed that that boat would continue to run between here and the dock at St. Joseph, the old Graham Dock, and the same dock at least in Chicago—don't you know, as a matter of fact, that she was put on there for the express purpose of keeping that dock alive; you know that, don't you?—A. Why, she was put on there—

Q. When the Graham & Morton people abandoned—  
The SECRETARY. Let him answer.

A. I believe she was put on there to make an extra boat to St. Joe.

Q. And that she was put on there for the purpose and for the reason that the old A. H. Morrison dock, which had been used for years and years and been known practically all over the United States, that old dock was abandoned; Graham & Morton abandoned their dock at the canal and river, and that the widow of A. E. Graham and Mr. Hull, being her son-in-law, they were anxious they should have a boat there, and that is the reason they got the *Eastland*; you know that, don't you? I will say, if you do not know it, you are the only man on the east shore that don't. You do not want to go on record saying you do not know that?—A. I stated already they put that boat on for extra to St. Joe.

Q. When you issued that license you knew she was operating from that dock in St. Joe?—A. I thought she would be operated.

Q. You had an idea of what she drew, what her draft was when she was not carrying any passengers?—A. Approximately.

Q. If you have a boat drawing about 17 feet aft, how much do you say forward?—A. Why, I could not say; maybe 13 or 14 feet; I do not know.

Q. About 15 or 16 feet aft?—A. Something like that.

Q. And that a boat drawing 15 or 16 feet aft and about 13 feet forward, and she carries no freight; she has no ballast, water or otherwise, pig iron, or lime—she has no ballast whatever, and we will put aboard of her 2,500 people, what do you say, then, would be the draft of that vessel aft and forward?—A. I should imagine she would go down probably a foot; maybe more; I could not tell you without making the experiment.

Q. It has been estimated that perhaps 2,500 would weight about 170 or 180 tons. Do you think that is about right?—A. The average weight of the human race, as I understand, is 142½ pounds; I do not know whether I am correct or not.

Q. Now, then, Captain, from your experience as a navigator and as master of a vessel, won't you agree with me in this, that there is more occasion to employ ballast, more occasion—I prefer to say to trim the boat; there is more occasion to trim a boat when she is receiving a load of passengers to go out of an inside harbor the same as Chicago than there is out in the lake, isn't there? I will tell you why. What do you say—there is more, isn't there?—A. There should be an occasion to trim the boat.

Q. Is not there more occasion; I am speaking now—we will admit that it is smooth outside, no sea, isn't there more occasion to trim the boat inside the harbor with anywhere from 1,500 to 2,500 passengers than there is after you get out on the lake?—A. There should be because the water is shallow.

Q. The water has nothing to do with it in one sense; the people will rush to one side or the other inside of the harbor and say good-by and look good-by at their friends, won't they, whereas when they get out in the lake everything settles down. Now, a very few more questions. Now, honor bright, don't you think there is more occasion, if you were on that pilot house, that pilot house or any other, don't you think you would have more occasion to employ this water for ballast purposes or for trimming purposes than you

would after you got out in the lake?—A. I believe I answered that question already that I thought there would be more occasion to trim at the dock.

Q. Now, then, what communication was there between the engine room and the pilot house on that ship?—A. The system of Chadbourn.

Q. What is that, speaking tubes?—A. No; Chadbourn has a face like a clock with dials on the right and one on the left and the same notations on each; one to go ahead and the other is to go astern; a different section on this half dial or semidial to indicate how they should go ahead or go astern. If you pull that lever over and stop at the full speed, it records in the engine room on the Chadbourn there, "Full speed ahead," and it is impossible for the engineer to change that signal; it can only be changed from the pilot house. He grabs the lever and brings it over which rings a gong back to the captain, which notifies him that he has received the signal.

Q. The captain naturally, on the pilot house, would be among the first to discover the listing?—A. He should be.

Q. If his eye is, perhaps, as good as that indicating gauge in the engine room. How long does it take to indicate with the engineer—about as long as that [snapping fingers]?—A. With the Chadbourn?

Q. I do not care how; whatever means they had in employment. Was there a speaking tube?—A. There was a speaking tube aboard of her.

Q. How long do you think, now, assuming that there was water there and assuming that something was not clogging it up, so as to permit the vessel to water, how long do you think it would take to right that up in case of an ordinary list?—A. Why, I could not say. I am not familiar with the system.

Q. You know nothing about it?—A. Probably about two or three or five minutes; I could not say.

Q. What would you have done, being on the pilot house of that vessel that morning, about the time you discovered the beginning of the list, and what would you advise me or anyone else applying for a master's license to do under such circumstances?—A. Why, I should think the policy would be to stop the passengers going aboard and ascertain what was the cause of the list and correct it. That would be the feasible reason; not give her any more list, but ascertain at the time why she was listing when she started to list.

Q. Naturally you have been reading the papers the last few days rather closely with respect to what may be said about this case?—A. I have read the papers some. I have tried to avoid them.

Q. I have, because of my old associations and my desire to learn whether any of my friends perished or not. That prompted me to read every item respecting it. However that may be, one of the items I read is this: That at the time of the completion of the La Salle Street tunnel, in order to protect it from the ravages of the keels—by the way, somebody testified that no boat has a keel. I was very much surprised to read that on the Lakes—by the way, that is not true. Isn't it a fact that some of our steamboats have keels on the Lakes?—A. I have seen them with keels on.

Q. Some one testified very gravely, I think yesterday, under oath—some of those 600-footers, they are not steamboats—

The SECRETARY. Just boxes.

Judge O'HARA. Capt. Reid, it has been said by somebody—there may be no truth in it; I don't know whether there is or not—that about the time of the completion of the La Salle Street tunnel, in order to protect it from the scrapings of bottoms of vessels, keels or otherwise, a lot of clay was deposited on the roof of the tunnel. Do you know anything about that?

A. I do not; nothing whatever.

Q. Did you hear the officers in charge of this district this morning testify as to the soundings made yesterday as to the dock where this boat capsized?—A. I did not. I saw him testify, but I didn't pay any attention. I went into the anteroom there, or closet.

Q. Did you hear his testimony?—A. I did not.

Judge O'HARA. Is that blue print here, Mr. Secretary, that he testified from?

Secretary REDFIELD. This is it. Now, that you remind me, I will put in this one also. This is the standard; the other was a special one.

Judge O'HARA. Naturally you are expert at this, Captain. Just take that and you will see there are certain figures there that indicate the different depths.

Secretary REDFIELD. This is the standard one, Judge O'Hara. This is the special.

Judge O'HARA. The other was taken a year ago.

Secretary REDFIELD. Yes. I didn't know but you might want to compare them as you went along.

Judge O'HARA. What depth of water does that indicate at the point, or approximately at the point, at which this vessel's stern was that morning?

A. In what position do you mean?

Q. She was headed downstream, wasn't she?—A. Upstream, toward the lake, I should take it from this.

Q. Yes. I mean she was headed toward Lake Michigan.—A. Yes.

Q. Going out?—A. I think so. I haven't seen her. I don't know, only from reports.

Judge O'HARA. Capt. Van Patten, I wish to ask your assistance. I wish that you would interrogate the witness. What I want—and you can do it more intelligently than I can—what I want to know is what he finds there as to the depth of the water now, and what was there when this was taken about a year ago, and whether in his judgment there was sufficient water there for that vessel if these tanks had been loaded.

Mr. VAN PATTEN. When was this taken?

Judge O'HARA. That was taken about a year ago.

Mr. VAN PATTEN. And you want the corresponding one that he had?

Judge O'HARA. Yes. Before Capt. Van Patten puts a question to you I want to ask you this: About the time you granted a license to this vessel, about the 2d or 3d of July, to carry 2,500 passengers, did you have any idea what the depth of water was in the city of Chicago at or about the dock where she was to moor?

A. I had no particular knowledge of the depth of the water in the Chicago River, as I haven't seen any charts of it whatever.

Mr. VAN PATTEN. Now what is it?

Judge O'HARA. Now, then, does he know what the draft of that vessel was? I want to know whether he thinks there was enough water at that dock. I wish to know now what the duty of that master was. Now, this man has had so much experience that he is now serving as an inspector. Now, how much water was there? Is it hard for the master to determine how much water there is at the dock or not? I asked for the production of that old record there this morning. What does that show a year ago?

Secretary REDFIELD. This shows the depth of water at what is marked "amidships" at 17.8, 23.1, 25.5, 25.2, reckoned outward in a line at right angles from the south shore of the river, at a point marked "102" on the chart, and approximately amidships of the place where the outline of the steamer is sketched upon the blue print. That is what you mean?

Judge O'HARA. Yes.

Mr. VAN PATTEN. That water is about the same depth now as it was then?

Secretary REDFIELD. Very little difference.

At the request of Judge O'Hara, and for the purpose of the record, we introduce into the record at this point the chart of Chicago River, Ill., showing soundings taken August, 1914, which is marked "Sheet number 1-273," and bears the following indorsement: "Official U. S. engineer's office, Chicago, Illinois, 'Eastland.' Outlined from best obtainable information July 28, 1915, showing where she lay before overturning on July 24, 1915, W. V. Judson, Lt. Col. Engineer, U. S. A."

Judge O'HARA. Independent of the action taken by the State authorities with respect—so far as it pertains to yourself—with respect to this disaster, nothing has been done to affect your standing as an inspector? You have not been suspended, have you?

A. I have not to my knowledge.

Q. And the inspector of boilers, who acted with you at the time of the granting of the license, he has not been suspended, as you understand it?—A. Not to my knowledge.

Q. Now, then, any queries or investigations with respect to this disaster, in so far as those investigations shall be confined to the scene of the disaster, would they come within your jurisdiction or within the jurisdiction of the inspectors on this side of the lake?—A. They would come within the jurisdiction of the inspectors on this side of the lake.

Q. You would have nothing whatever to do with that?—A. No, sir.

Q. Well, now, Captain, this is about my last question. I think that I know a bit about steamboats. I was offered the secretaryship of quite a big steamboat company at one time, although I have never served in the capacity of master. I have a decided opinion as to how this accident was occasioned and as to how it might have been avoided. You have had much more experience than the man who is interrogating you. I will now ask you if you feel at liberty to express an opinion—or rather before asking for the opinion I will ask you this: Have you an opinion as to what occasioned this disaster?

Secretary REDFIELD. In view of the fact that criminal proceedings are instituted don't you think it might be dangerous for him to answer that question?

Judge O'HARA. Let me think a moment. Well, now, wait. I think that I am as fair as the ordinary man; in fact, I have been charged at times, both on and off the bench, with being too fair, especially as a trial lawyer. Now, I appreciate the pertinency or force of what my friend, Secretary Redfield says, but at the same time, when you come to consider it, I don't think there is anything to it. Capt. Reid, from what I know of you I believe that you will feel down in your heart that you are just as innocent as a babe—don't you—with respect to this disaster? You will feel that you have performed your full duty, don't you?

A. I do.

Q. And when you say that I believe you. Now, then, no guilt upon you, and feeling that you have not been incompetent, that you have been guilty of no misconduct, there is no danger in answering that question of mine. Surely you must have an opinion as to how this accident was brought about, haven't you?—A. I have an opinion. Whether it is a correct one or not I couldn't say.

Q. Now, then, as I said at the outset, and I am going to close with this, this inquiry is being held for the purpose of locating that blame, if possible. Now through you at this time we do not attempt to locate the blame, but surely we have a right to expect of you as an inspector to give an opinion as to the cause of that disaster. That is what this inquiry is for. We want to avoid those things in the future. Now, then, sir, what do you think was the cause of that disaster?—A. My opinion of the cause was the loading of the steamer on the bottom. Whether it is correct or not I wouldn't say. That is only an opinion.

Q. That the boat was on the bottom?—A. That is my opinion; yes.

Q. Now, then, that being the case, don't you think that the master could have discovered that fact? Couldn't you have discovered the fact that you were on the bottom had you been in the pilot house?—

A. I said it was only an opinion. I didn't state it as a fact.

Q. Well, if you were acting as master of that vessel that morning, could you have discovered that fact? By the way, were any lines thrown off?—A. I don't know.

Q. You don't know that?—A. No, sir.

Q. Now, then, if you were on the pilot house just before that boat capsized, in command of that ship, and you believed that your vessel—you knew, of course, that she was listing heavily, and that the cause of it was that you were on the bottom, what would you have done? With that knowledge, possessed of that knowledge—here is a heavy list, two or three thousand passengers aboard, and you believed that you were resting on the bottom—what would you have done?—A. I would get the passengers ashore, I should think, as fast as possible. It is a hard situation to express an opinion upon. It is a most delicate one.

Judge O'HARA. That is all.

Secretary REDFIELD. Are there any further questions?

Mr. SABATH. How long have you known the captain?

A. Sir?

Q. How long have you known the captain?—A. Capt. Pedersen?

Q. Yes.—A. Why, I should judge about two years, maybe longer. It might be three years. Only in recent years. I have heard of the captain, but had not the pleasure of meeting him before.

Q. Have you conversed with him frequently?—A. Why, every time I would meet him we would hold a little conversation.

Q. Did you consider him a capable and able man?—A. I did. He was a very good man, a very good navigator. He has the reputation of being such.

Mr. SABATH. That is all.

Mr. POOL. Mr. Reid, I would like to ask a question. In issuing a certificate of the inspection of the boat, would you get information from any other inspector—the inspector of hulls—as to the condition of these tanks or the hull of a boat before issuing a permit for a certain number of passengers?

Secretary REDFIELD. Mr. Pool, pardon me. You understand that the permit is issued jointly?

Mr. POOL. Well, that is what I wanted to find out.

Secretary REDFIELD. Yes; it is signed jointly by both.

Mr. POOL. In other words, the point was brought out, Mr. Secretary, that Mr. Reid didn't know much about ballast tanks.

Q. Now, who does know, Mr. Reid?—A. Why, the condition of the manipulation of the water bottom is generally in the engineer's department.

Q. And who represented this department, Mr. Eckliff?—A. Mr. Eckliff. And it consisted of a great many valves and pipes leading to different compartments that I couldn't describe to you. They have a system of getting the water and putting the water in different places, and I am not posted on that.

Q. In other words, you work jointly in issuing a permit?—A. Yes, sir.

Q. So that you have the benefit of his knowledge all through?—A. I had to in the inspections of a steamer. We have to depend largely upon each other's work, not as a unit but each as a separate unit, and brought together.

Q. Each man is a specialist in his own work?—A. Yes; that is the idea.

Mr. POOL. That is all.

Secretary REDFIELD. The inquiry is adjourned to 9.30 in the morning at the same place.

Mr. THURMAN. And I want you, Mr. Eckliff, if you please, the first thing.

(Thereupon an adjournment was taken until the following day, July 31, 1915, at 9.30 o'clock a. m.)

JULY 31, 1915—9.30 A. M.

Parties met pursuant to adjournment.

Present: Same as before, except that Lieut. Gov. Barrett O'Hara, of Illinois, attended instead of Hon. Thomas O'Hara.

Secretary REDFIELD. It was the purpose of the local board to call Mr. Eckliff this morning, but because there are present two officers of a vessel whose testimony is desirable, and who must sail this afternoon, we will hear them first.

The session will continue without interruption until 2 o'clock, and will then adjourn until Monday morning at 9.30.

Capt. FRANK A. DORITY, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you please give your full name, address, and age to the stenographer?—A. Frank A. DORITY, 889 Hackett Avenue, Milwaukee, Wis.; 50 years of age.

Q. Captain, what is your present occupation?—A. Master of a steam vessel.

Q. Of what vessel?—A. The *City of South Haven* at the present.

Q. Will you state briefly and clearly what your experience has been as a seaman or as an officer of vessels?—A. I have been a master of vessels for the last 26 years, freight and passenger steam vessels.

Q. And where?—A. On the Great Lakes.

Q. Anywhere else?—A. No, sir.

Q. On the Great Lakes?—A. Yes, sir.

Q. State specifically the vessels that you have commanded and where they operated.—A. My first command was for the Port Huron & Duluth Steamship Co., steamer *Oceola*.

Q. A freight or passenger?—A. Freight.

Q. Freight vessel?—A. Yes. My next command was the steamer *Colorado*, a freight vessel of the same line. The next for the Ann Arbor Car Ferry Line, Frankfort, Mich.; next, the Pere Marquette steamer plying from Marquette to Ludington, Mich.; the Chinango Car Ferry Co., plying from Conneaut, Ohio, to Port Dover, Ontario; next, for the Pere Marquette Line Car Ferry, plying from Marquette to Ludington on the Car Ferry Line, and passenger boats plying the same route; for the Goodrich Transportation Co., the steamer *Eastland*, which was at that time the Michigan Steamship Co., 1903. I was in command of her in 1903, 1904, 1905, and 1906.

Q. You were on her 1903, 1904, 1905, and 1906?—A. 1903, 1904, 1905, and 1906; and from the steamer *Eastland* to the *City of South Haven*, which I am still in charge of.

Q. How long have you been on the *City of South Haven*?—A. I think this is the eighth season.

Q. The eighth season?—A. Yes, sir.

Q. What license do you hold?—A. A first-class license for the Great Lakes, Montreal, Duluth, and all around the Lakes.

Q. How did you get it?—A. By appearing before the board of inspectors.

Q. Where?—A. My first license was obtained in the city of Chicago.

Q. You say your first. Is the one you now hold not your first?—A. No, sir.

Q. What was the first?—A. Second class.

Q. Second class?—A. Second-class papers for second-class pilot.

Q. Second-class pilot?—A. Yes, sir.

Q. What was the next examination you took?—A. First officer's examination.

Q. First officer's examination; where did you take that?—A. In the city of Chicago.

Q. What was the next examination you took?—A. A master's papers.

Q. Where did you take that?—A. In the city of Chicago.

Q. And what was the next examination?—A. That was the last examination which I took.

Q. So, I understand, you then have passed three examinations?—

A. Yes, sir.

Q. In the city of Chicago?—A. Yes, sir.

Q. And what was the date of the last one?—A. The last renewal, Mr. Secretary?

Q. What is that?—A. The renewal?

Q. The last examination, what was the date of the last examination?—A. Well now I just haven't got the date, but I presume it is 20 years or more ago, my last examination.

Q. Now, are these licenses renewed annually?—A. Every five years at the present time.

Q. Every five years now?—A. Yes; without an examination.

Q. Now, will you state in your own way, as fully as you can, your experience of every kind with the steamer *Eastland* while you were her commanding officer, say how you came to obtain her command, adding to that your opinion as to the result of your observation and experience as to the sort of vessel she was, whether she was seaworthy and safe or not. Now, will you read the question, please?

(Question read by the reporter, as follows:)

Now, will you state in your own way, as fully as you can, your experience of every kind with the steamer *Eastland* while you were her commanding officer, say how you came to obtain her command, adding to that your opinion as to the result of your observation and experience as to the sort of vessel she was, whether she was seaworthy and safe or not.

A. I was master for the Indiana & Goodrich Transportation Co. temporarily when the man that brought out the steamer *Eastland* had a little bit of bad luck in a way, he was a man from a barge, and had never had any experience in passenger boats, and was not a success, Capt. John Peru was the man who brought her out when she was new, that was some where about the 1st of July, 1903. I was engaged to take charge of the steamer *Eastland* about the last of July, I would not give the exact date, but the last of the month, and I think I ran that season until Labor Day, which was about September 15 possibly or a little later, without any trouble of any kind. I went on her again the next year, in 1904, and started probably about June 15, I do not just remember the date exactly, but approximately June 15, and had no trouble with her whatever until some time in July, I think about July 20, 1904; on account of the low water in South Haven harbor we were a little afraid to put in her water ballast at South Haven on one occasion on account of the bar at the entrance to the harbor, being unable to get over it, as we thought, and in passing out of the entrance to the harbor without her water ballast the boat creened several times until such time as we got our ballast properly distributed. We came along about our business, we came to Chicago I think about 35 or 45 minutes late on that trip on account of this little difficulty.

Now, you asked me I think one of the questions in this was whether I considered the *Eastland* a seaworthy vessel.

Q. The question covered your opinion.—A. That is the question.  
 Q. Just state what you wish.—A. The *Eastland* I considered a seaworthy vessel under the conditions, with her water ballast that she had, I would consider her so, without it I would not consider her safe with more than perhaps a thousand people on board of her. At that time we were carrying, I think, 3,300 people was her allowance that season if I remember right, 3,000 anyway, and it seems to me 3,300, I know we had 3,300 one season, and I think that was the season.

Mr. THURMAN. Did you ever carry, Captain, her full load?

A. Yes, sir.

Secretary REDFIELD. Do I understand you correctly, if not correct it, that your opinion was with her water ballast she was a safe vessel?

A. With her water ballast properly distributed a perfectly safe vessel at all times.

Q. And without that she would not be safe for over a thousand people, is that right?—A. That is to the best of my ability and opinion.

Mr. THURMAN. Captain, will you tell me, for my own information as well as everybody else, what do you mean by the water ballast being properly distributed?

A. We used to always carry her water ballast in No. 3 tank, No. 3 tank is just about in the center, and we figured that No. 3 tank would hold about half the water ballast in that steamer, somewhere between 225 and 250 tons in that one tank, and that was the only flat surface in the steamer; we carried that tank full; that tank half full was worse than if we did not have any water at all.

Secretary REDFIELD. Why was that?

A. She would shift with the vessel.

Q. Now, you have raised a question here which, as I recall it, has not come up in this hearing yet, and one which I think of very great importance. I wish you would explain for the record what the condition is of a vessel if her ballast tanks are partly filled. Is it just as full as you care to.—A. The *Eastland* was the only vessel that I was ever on that had to carry water ballast; and the tanks partly filled, if the vessel takes to listing the water goes with the vessel and makes the condition worse than if there was no water in her at all, in my estimation.

Q. Why?—A. Because the water goes to the listed side of the vessel; as the vessel lists down the water runs that way.

Mr. THURMAN. And increases the weight on that side?

A. On that side; yes.

Secretary REDFIELD. Do I understand you to say that the No. 3 tank held over 200 tons of water.

A. That is just an estimate.

Q. What was the estimate?—A. 225 to 250 tons; that was the largest tank on the steamer.

Q. Now, am I right in understanding you to mean, then, that that tank half full would have 120 to 125 tons of water in it?—A. Exactly.

Q. Now, what would be your judgment of the effect, if any, of the shifting of that water; will the vessel list?—A. To give the vessel a list; that vessel might be shifted off her equilibrium by the shifting

of the wheel or rudder, and water would, of course, go to the low side.

Q. With what effect?—A. To put her down that much deeper on that side—whichever side the water ran to.

Q. What are the elements involved in such a shift of water, as you understand it?—A. Nothing more than to give the vessel a list, if I understand right.

Q. Can you say why?—A. Why?

Q. Yes.—A. Why, for the same reason if you had sand ballast on that vessel and you rolled a barrel to one side it would give her a list that way; if you put your ballast on one side it would list over that way, and if you put it on the other side it would list over the other way.

Q. Do you understand there is any other element involved?—A. No, sir.

Q. Have you got an estimate of the total weight of water ballast in the vessel?—A. I have, but it is just an estimate; I never measured very particularly; about 500 tons, I should judge.

Q. You speak of letting out the ballast on one occasion to get over a bar?—A. At South Haven.

Q. At South Haven?—A. Yes, sir.

Q. How much would that raise the vessel in the water?—A. I think the ballast we carried in the vessel at that time would raise her about a foot; we used to figure this No. 3 tank would hold 225 tons and would put her down about a foot.

Q. Do I understand you to say that a turn or a shift of the wheel; I think that was your word?—A. Yes, sir.

Q. Would cause the vessel to list?—A. Yes, sir.

Q. Why?—A. The current from the wheel bearing on the rudder in that direction; it will do that on any steamer that I was ever on, regardless of the condition of the ship or the hull or the ballast or anything else.

Q. You mean that your experience, if I understand you rightly—you mean that your experience shows that every vessel, in turning, lists?—A. Yes, sir.

Q. Which way?—A. The opposite way from the way the rudder is put.

Q. Now, will you go on with your statement of your experience and judgment?—A. Of the *Eastland*?

Q. Yes.—A. Well, as I remember, we had no further trouble with the vessel, except that one occasion that I have related, for the next three years that I was master of the vessel.

Q. Does that cover your entire experience?—A. Three years?

Q. Yes.—A. Yes, sir.

Q. What you have now spoken of covers your entire experience?—A. Yes, sir.

Q. Am I right in understanding the record to be that your only occasion of difficulty was that when you had the water ballast out crossing a bar at South Haven?—A. Yes, sir.

Q. And that at that time you had how many on board?—A. I don't know the exact number, but I presume 3,000 people.

Q. Was it your habit to give directions concerning the ballast?—A. The engineer and I always consulted each other regarding the ballast and the other important features of operating the boat.

Q. What were the means of communication between the pilot house and the engine room other than the marine telegraph?—A. Speaking tube.

Q. There was a speaking tube?—A. Yes, sir.

Q. Did you use it?—A. Yes, sir.

Q. What were the means of communication from the bridge to the engine room?—A. Well, that was the same—I mean by the pilot house the bridge—they were the same. Now, if I remember right, it is quite a while ago—it is about eight years ago since I was in that vessel—but it seems to me that she had a telephone, as well as a speaking tube. I think she had.

Mr. THURMAN. Captain, at the time that you had command of the *Eastland* she was a passenger steamer and had staterooms, and so forth, on her, didn't she?—A. Part of the time; I think the second or third year—the second year that I was on her—no, the third year they removed the staterooms from the upper cabin.

Q. Had you seen the *Eastland* recently prior to the date of the disaster?—A. I was aboard of her a year ago.

Q. Was there any difference in her condition as to her structures then and at the time you had her?—A. Yes, sir.

Q. What was that change or difference?—A. The upper cabin had been entirely removed from the smokestacks aft or a little forward of the smokestacks, except the roof.

Q. Then the condition of the vessel a year ago when you saw her was materially changed?—A. Yes, sir.

Q. From what she was when you had her?—A. Yes, sir; the staterooms were also removed from the lower cabin, which they were not when I was in command of her.

Q. At any time that you have seen her since that time have you ever given her any particular examination?—A. No, sir.

Q. Would you, or would you not, be able to give an expression of opinion as to her seaworthiness and stability under the condition in which she was when you last saw her here a year ago, with those changes you have spoken of?—A. I do not see why it should make any material difference—the changes made since the time I was in charge of her.

Q. Just what do you mean by that?—A. The staterooms being removed, I do not see why it should make any difference. I think the conditions would be about the same.

Q. Under what condition, if any, would she have been, in your opinion, seaworthy and stable?—A. Absolutely; with the water ballast and the load of people, as I have stated before.

Q. Then, as far as the stability of the vessel goes, and her seaworthiness is concerned, is it, or is it not, your opinion that no change was made therein, depending entirely on the manner in which the water ballast was handled?—A. I don't think so.

Q. Is that correct?—A. Yes, sir.

Q. Narrowed down that means that, in your opinion, if the water ballast was properly handled she would have been a seaworthy and stable boat, and if not she would not have been. Is that correct?—A. Exactly.

Mr. THURMAN. That is all, Mr. Secretary, that I want.

Secretary REDFIELD. What do you mean, Captain, by saying in the beginning of your testimony that the first captain that brought her out—that you have described—had some bad luck?

A. Why, the captain was not accustomed to a twin-screw vessel, and in handling his vessel and manipulating her in the Chicago River, about the second or third or fourth trip, he had been in a short time only when he sunk a tug; ran into a tug in the river, and a lot of little minor things that did not amount to much. No trouble with the listing I do not think, or passengers, or anything of that sort.

Q. Do you mean then that anything was or was not wrong with the vessel itself?—A. No, sir; there was nothing wrong with the vessel itself.

Q. Did your experience with the vessel cover periods when she had to navigate in rough water?—A. Yes, sir.

Secretary REDFIELD. Mr. Sullivan, do you want to ask the captain any questions?

Mr. SULLIVAN. Yes.

Q. Who owned the steamer, Captain, when you were running her?—A. The Michigan Steamship Co.

Q. Was that the same concern that owns her now?—A. Well, the same men are interested, but it is now the Chicago & South Haven Steamship Co.

Q. Mr. Hull was then interested?—A. No, sir; Mr. Hull was not interested.

Q. Who was the managing owner, as they call it?—A. At the time I went in the boat, Mr. R. R. Blacker.

Q. He is now a stockholder?—A. No, sir; not in the *Eastland*, in our line he is; yes, sir.

Q. Considerable rivalry between the *Eastland* and the *South Haven*?—A. Yes, sir.

Q. There is now?—A. No, sir; not a bit.

Q. What corporation owns the *South Haven*?—A. The Chicago & South Haven Steamship Co.

Q. What corporation owned the *Eastland* was then owned, as I understand it, by the Michigan Steamship Co.?—A. Yes, sir. Par-don me now. When I left her she had been sold at that time to the Cleveland parties.

Q. You never ran her except on Lake Michigan?—A. On Lake Michigan; yes, sir.

Q. You understand the construction of the water-ballast system, Captain?—A. Well, in a general way.

Q. Well, will you give us the best description you can, Captain, of the water-ballast system—how the water is taken in; how it is let out; how it is transferred, if it is transferred, from port to starboard and vice versa?—A. The steamer is divided into fore and aft, a partition in her water bottom, and on each side are five compartments, 1, 2, 3, 4, and 5 on either side, starboard and port.

Q. How many tanks in all?—A. Ten. Now, the 1 and 2 tanks are small tanks; as you understand, the vessel is cut away pretty sharp, and they are right in the bow, and yet get back to the No. 3 tank, as I said before, that holds, as we used to estimate it, about half of the water ballast; one-half of this 500 tons of water goes in No.

3 tank, the tank which we always kept full. The water comes in through a sea cock to the tanks and we empty with a pump, which could not be done; you could not pump out and take in at the same time, if I remember right, with the arrangement of the manifold intakes.

Mr. SULLIVAN. How large was the sea cock and where was it located?

The WITNESS. It was located on the port bulge, right abreast of the engine, but the size I could not state.

Q. How large? You say you could not state the size?—A. I could not state the size, Mr. Sullivan.

Q. Now, if you wanted to transfer the water or if she started to list and you had to shift the water, how long would it take you to shift it?—A. We used to figure that it would take us a half hour to fill this big tank, No. 3 tank; 30 minutes.

Q. And that No. 3 tank was divided, you say?—A. In the center.

Q. In the center?—A. Yes; to fill both sides would take 30 minutes.

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Q. Port?—A. Yes, sir.

Q. And put it in No. 4 starboard?—A. Yes, sir.

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Q. You mean the collision compartment?—A. I mean the collision compartments.

Secretary REDFIELD. Your trimming compartments—do I understand they are tanks which use water?

The WITNESS. Pardon me.

Q. The trimming tanks that you speak of—they are tanks which use water on the *South Haven*?—A. Well, I do not just get that, Secretary.

Q. You speak of using trimming tanks on the *South Haven*, did you not?—A. No; I don't think I did.

Q. I thought you said there were fore and aft tanks?—A. No; I said we had fore and aft tanks used for trimming, but not necessarily.

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Secretary REDFIELD. That is all.

Mr. SULLIVAN. What is your opinion as to the efficiency of the water-ballast system in the *Eastland*?

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Q. Every man would have to be on the job all the time, wouldn't he?—A. I would not say every man, because I think, Mr. Sullivan, you can overdo a thing of that kind. I think it ought to be left in the hands of one or two officials, members of the crew.

Q. Do you think that a system that requires 15 minutes to transfer the trimming-tank water is a good system in a passenger boat?—A. That was the only passenger boat that I was ever on that had to have water ballast.

Q. She had to have it because of her build; or why did she have to have it?—A. Well, possibly it was on account of her build; I would not say as to that.

Q. How many chief engineers was on her when you were captain?—A. Two.

Q. Both still in the city?—A. One of them is.

Q. What is his name, please?—A. William L. Nark.

Q. Do you know his address?—A. I do not; but he is engineer of the *City of South Haven*, the ship I am now on.

Q. He is now running with you?—A. Yes, sir.

Q. Who was the other chief engineer on her?—A. William Eels, whose present residence I do not know.

Q. Address in Chicago?—A. No, sir; I think he is in Pittsburgh.

Q. Working for whom?—A. He is working, I think, for the Travelers' Insurance Co. Pardon me, there was a third man, a man was there in the boat when I went in her, he brought her out—Randall—he brought her out, he was in her the first year she came out.

Q. Do you know his first name?—A. I do not.

Q. Randall?—A. Yes, sir; Randall.

Q. Still lives in Port Huron?—A. I think so; yes, sir.

Q. Were you captain of this boat on the night referred to in the Chicago Examiner article several years ago?—A. Yes, sir.

Q. Now, how many times, in the years you were in command, did you carry 3,300 passengers, how many trips, if you know?—A. I am not in a position to say, Mr. Sullivan.

Q. What is your best judgment?—A. Oh, I presume a half dozen times, I think the records will show that, I don't know.

Q. That is your best judgment now?—A. That is my best judgment now.

Q. Thirty-three hundred was her limit?—A. Yes, sir.

Q. She had her limit several times?—A. Yes, sir.

Q. What were the means of communication between the pilot house and the engine room other than the marine telegraph?—A. Speaking tube.

Q. There was a speaking tube?—A. Yes, sir.

Q. Did you use it?—A. Yes, sir.

Q. What were the means of communication from the bridge to the engine room?—A. Well, that was the same—I mean by the pilot house the bridge—they were the same. Now, if I remember right, it is quite a while ago—it is about eight years ago since I was in that vessel—but it seems to me that she had a telephone, as well as a speaking tube. I think she had.

Mr. THURMAN. Captain, at the time that you had command of the *Eastland* she was a passenger steamer and had staterooms, and so forth, on her, didn't she?—A. Part of the time; I think the second or third year—the second year that I was on her—no, the third year they removed the staterooms from the upper cabin.

Q. Had you seen the *Eastland* recently prior to the date of the disaster?—A. I was aboard of her a year ago.

Q. Was there any difference in her condition as to her structures then and at the time you had her?—A. Yes, sir.

Q. What was that change or difference?—A. The upper cabin had been entirely removed from the smokestacks aft or a little forward of the smokestacks, except the roof.

Q. Then the condition of the vessel a year ago when you saw her was materially changed?—A. Yes, sir.

Q. From what she was when you had her?—A. Yes, sir; the staterooms were also removed from the lower cabin, which they were not when I was in command of her.

Q. At any time that you have seen her since that time have you ever given her any particular examination?—A. No, sir.

Q. Would you, or would you not, be able to give an expression of opinion as to her seaworthiness and stability under the condition in which she was when you last saw her here a year ago, with those changes you have spoken of?—A. I do not see why it should make any material difference—the changes made since the time I was in charge of her.

Q. Just what do you mean by that?—A. The staterooms being removed, I do not see why it should make any difference. I think the conditions would be about the same.

Q. Under what condition, if any, would she have been, in your opinion, seaworthy and stable?—A. Absolutely; with the water ballast and the load of people, as I have stated before.

Q. Then, as far as the stability of the vessel goes, and her seaworthiness is concerned, is it, or is it not, your opinion that no change was made therein, depending entirely on the manner in which the water ballast was handled?—A. I don't think so.

Q. Is that correct?—A. Yes, sir.

Q. Narrowed down that means that, in your opinion, if the water ballast was properly handled she would have been a seaworthy and stable boat, and if not she would not have been. Is that correct?—A. Exactly.

Mr. THURMAN. That is all, Mr. Secretary, that I want.

Secretary REDFIELD. What do you mean, Captain, by saying in the beginning of your testimony that the first captain that brought her out—that you have described—had some bad luck?

A. Why, the captain was not accustomed to a twin-screw vessel, and in handling his vessel and manipulating her in the Chicago River, about the second or third or fourth trip, he had been in a short time only when he sunk a tug; ran into a tug in the river, and a lot of little minor things that did not amount to much. No trouble with the listing I do not think, or passengers, or anything of that sort.

Q. Do you mean then that anything was or was not wrong with the vessel itself?—A. No, sir; there was nothing wrong with the vessel itself.

Q. Did your experience with the vessel cover periods when she had to navigate in rough water?—A. Yes, sir.

Secretary REDFIELD. Mr. Sullivan, do you want to ask the captain any questions?

Mr. SULLIVAN. Yes.

Q. Who owned the steamer, Captain, when you were running her?—A. The Michigan Steamship Co.

Q. Was that the same concern that owns her now?—A. Well, the same men are interested, but it is now the Chicago & South Haven Steamship Co.

Q. Mr. Hull was then interested?—A. No, sir; Mr. Hull was not interested.

Q. Who was the managing owner, as they call it?—A. At the time I went in the boat, Mr. R. R. Blacker.

Q. He is now a stockholder?—A. No, sir; not in the *Eastland*; in our line he is; yes, sir.

Q. Considerable rivalry between the *Eastland* and the *South Haven*?—A. Yes, sir.

Q. There is now?—A. No, sir; not a bit.

Q. What corporation owns the *South Haven*?—A. The Chicago & South Haven Steamship Co.

Q. What corporation owned—the *Eastland* was then owned, as I understand it, by the Michigan Steamship Co.?—A. Yes, sir. Pardon me now. When I left her she had been sold at that time to the Cleveland parties.

Q. You never ran her except on Lake Michigan?—A. On Lake Michigan; yes, sir.

Q. You understand the construction of the water-ballast system, Captain?—A. Well, in a general way.

Q. Well, will you give us the best description you can, Captain, of the water-ballast system—how the water is taken in; how it is let out; how it is transferred, if it is transferred, from port to starboard and vice versa?—A. The steamer is divided into fore and aft, a partition in her water bottom, and on each side are five compartments, 1, 2, 3, 4, and 5 on either side, starboard and port.

Q. How many tanks in all?—A. Ten. Now, the 1 and 2 tanks are small tanks; as you understand, the vessel is cut away pretty sharp, and they are right in the bow, and yet get back to the No. 3 tank, as I said before, that holds, as we used to estimate it, about half of the water ballast; one-half of this 500 tons of water goes in No.

3 tank, the tank which we always kept full. The water comes in through a sea cock to the tanks and we empty with a pump, which could not be done; you could not pump out and take in at the same time, if I remember right, with the arrangement of the manifold intakes.

Mr. SULLIVAN. How large was the sea cock and where was it located?

The WITNESS. It was located on the port bulge, right abreast of the engine, but the size I could not state.

Q. How large? You say you could not state the size?—A. I could not state the size, Mr. Sullivan.

Q. Now, if you wanted to transfer the water or if she started to list and you had to shift the water, how long would it take you to shift it?—A. We used to figure that it would take us a half hour to fill this big tank, No. 3 tank; 30 minutes.

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Q. Both still in the city?—A. One of them is.

Q. What is his name, please?—A. William L. Nack.

Q. Do you know his address?—A. I do not; but he is engineer of the *City of South Haven*, the ship I am now on.

Q. He is now running with you?—A. Yes, sir.

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Q. Now, how many times, in the years you were in command, did you carry 3,300 passengers, how many trips, if you know?—A. I am not in a position to say, Mr. Sullivan.

Q. What is your best judgment?—A. Oh, I presume a half dozen times, I think the records will show that, I don't know.

Q. That is your best judgment now?—A. That is my best judgment now.

Q. Thirty-three hundred was her limit?—A. Yes, sir.

Q. She had her limit several times?—A. Yes, sir.

Q. Would the shifting of passengers on a boat like the *Eastland* have a dangerous effect?—A. I don't think so, not with 2,500 or 3,000 people there would not be much shifting.

Q. Would the removal of the staterooms that you spoke of improve the carrying capacity, improve the stability of the vessel?—A. In my judgment, no.

Q. Why were the staterooms removed, if you know?—A. I don't know.

Q. Was it done to increase the carrying capacity of passengers?—A. I could not say as to that.

Q. This capacity of 3,300, was that before she removed her staterooms or afterwards?—A. Before, I think.

Q. She never had a capacity beyond 3,300, so far as you know?—A. So far as I know, no, sir.

Mr. SULLIVAN. That is all, Mr. Secretary.

Mr. WALTER STEFFEN (assistant corporation counsel, city of Chicago). Captain, isn't it a fact that the reputation of the *Eastland* was that she was a cranky boat during the period that you acted as captain of her?—A. I would say so; yes, sir.

Q. How did she get that reputation, Captain?—A. Well, I don't really know.

Q. Isn't it a fact that it was because—A. I can say to you, gentlemen, that she was a cranky boat without her water ballast.

Q. During the time you operated her the water ballast was properly handled, wasn't it?—A. Well, I hope so.

Q. Well, she gained that reputation during that period, didn't she, Captain, of being cranky?—A. Right from the time she was launched, I presume.

Q. Isn't it a fact that she gained the reputation of being cranky because she listed frequently?—A. I suppose so.

Q. Now, do you know what was the reason for her listing as she did?—A. No, sir; she was cranky.

Q. What was there about the boat that made her cranky? Was it the construction of the hull, for example?—A. Well, I presume that had something to do with it.

Q. Do you believe that the water tanks on the *Eastland* should have been used for trimming purposes only?—A. I believe, gentlemen, just as I have stated, and that was that the 3 tank was always used for ballast and the 4 for trimming in my experience on board that steamer.

Q. Then, would you say that the captain or engineer who was operating a vessel if he did not use any of the tanks for ballast, but simply No. 4 of the tanks for trimming purposes, was not operating the boat with the proper amount of safety?—A. Well, from my point of view, he would not, as I see it, under those conditions.

Q. Yes; I am merely asking your opinion.—A. I would not consider that they are under those conditions.

Q. Would you have considered that the *Eastland* was a more stable boat if she had ballast such as the *City of South Haven* has?—A. The *South Haven* has no ballast.

Q. Of any kind at all?—A. Of any kind at all.

Q. Captain, have you an opinion as to what caused the overturning of the *Eastland*?—A. No, sir; I have not.

Mr. STEFFEN. That is all I want to ask.

Secretary REDFIELD. Judge Sabath.

Mr. SABATH. Captain, you appear to be a very intelligent man, and I think you are, from the answers you have made. Will you please inform me whether a boat that has been constructed like this *Eastland* required more care than those ordinary boats?

A. I should say yes. Do you mean as to her stability?

Q. As to her stability and as to her handling entirely.—A. I should say yes.

Q. Should not that be taken into consideration by the inspectors or by the board before allowing her any capacity?—A. Well, gentlemen, that is something that I can not pass on.

Mr. SULLIVAN. Do you mean, Captain, you do not want to pass on it because you are working for these men?—A. Not that I do not want to, but I could not answer a question of that kind.

Mr. SABATH. Captain, should the construction of a vessel be taken into consideration before the allowance is made as to its carrying capacity?

A. As I understand it, according to the law, no—the space on the steamer.

Q. Well, leaving the law that is now on the statute book alone—eliminating that—what would you say; should there be such a law?—

A. Well, gentlemen, I am in the habit of going according to the law as we have them at the present time; I don't assume nothing—try not to.

Q. Well, you as an experienced man, if you are asked for an opinion by Congress or by the board, what would your recommendation be as to her allowance or as to the allowance of similar boats?—A. Why, I would not consider the *Eastland* overloaded with 2,500 people.

Q. You would not?—A. No, sir.

Q. Well, what do you mean when you say that the *Eastland* was considered a cranky boat? What is understood by the term cranky boat?—A. A cranky vessel is a vessel that lists easily.

Q. And is hard to handle?—A. Not necessarily hard to handle.

Q. What I mean by hard to handle is that she would list, and by her listing is liable to capsize easier than a boat that does not list?—A. Without her ballast properly distributed.

Q. Now, this boat did depend absolutely upon her water ballast, did it not?—A. I would not say absolutely; as I have stated before, that I considered her a more seaworthy vessel with any number of passengers more than a thousand with water ballast than without it; in fact, we never crossed the lake without her water ballast if we had more people than a thousand people on her.

Q. Always had you water ballast on her?—A. Always had our water ballast on her.

Q. When would you fill her, after leaving the river?—A. No, sir; fill her in the river.

Q. Fill her in the river?—A. Yes, sir.

Q. Would you empty her every night?—A. Every night when the passengers started to get off we started to pump her out, because she had a little free board, and her plank would be almost straight out, and we started pumping water as soon as the people started off, to raise her up.

Q. And when would you start to fill her?—A. In the morning. We most generally knew whether we would have a crowd or not according to the excursions we had billed, and whether there would be a few or a lot of people. Of course, the weather had a good deal to do with it; a nice sunshiny day would make a difference.

Q. Evidence has been given in this matter that they started to pump in the *Eastland* about 17 minutes before she turned over. You said it takes 30 minutes to fill her; is that right?—A. Well, yes and no; I said we used to figure it would take us 30 minutes to fill her No. 3 tank.

Q. Well, if it took you 30 minutes to fill No. 3 how long would it take you to fill all the tanks?—A. It would not take any longer, because you could let her run into all of them at the same time.

Q. And it would take 30 minutes to fill them?—A. We estimated it took about 30 minutes to fill No. 3 tank.

Q. When the pumps were working in perfect order?—A. You don't have to have the pumps to fill the tank.

Q. You just open the valves and let the water run in?—A. Just open the valves and let the water run in.

Q. Was it possible to fill that No. 3 tank in 17 minutes?—A. I could not say; we never did.

Q. In view of the fact, Captain, that this steamboat depended upon water ballast and was allowed to carry 2,500 passengers, doesn't it require a greater amount of care and skill and ability to handle her than other vessels that did not depend on water ballast—that is, without any change—on every trip she makes?—A. Well, she would require a little more attention, possibly, but you are giving me the wrong impression when you say handling the boat; you mean in general, do you?

Q. In general; yes.—A. Or taking her up and down the river.

Q. I do not mean in order to guide her course, but I mean to look after her care and general condition.—A. Yes.

Q. That is the duty of a master?—A. I would say yes.

Q. I will again ask you the question, Captain, would you think if you would have the jurisdiction and the power to make allowances and pass upon the number of passengers which are to be carried, would you take into consideration how the boat is constructed, or would you only depend upon her deck space and the number of life preservers the boat would carry?—A. I would go according to law, and that is all that is required.

Q. Well, we will say that we have no law.—A. But we have law.

Q. But I am trying to see whether we should amend the law.—A. That is a question which I could not answer, not being placed in the position; perhaps never will be.

Q. But I am placed in that position, and I would like your advice. I think you are a very intelligent gentleman.—A. Well, that is a question I could not answer.

Q. This boat *Eastland* is peculiarly constructed. Is it or is it not? I will change this. The great majority of the boats plying on our Great Lakes are built differently?—A. I would say yes; on different lines; that is, I mean on any boat that I was ever on.

Q. And it was due to her construction and her lines that she acted as you said she did, and that was the reason she was considered a cranky boat?—A. Yes, sir.

Q. Did you at any time talk to the owners of this boat after you had handled her a few times that she was a cranky and dangerous boat?—A. I don't remember especially. I knew the owners personally, but I don't remember of talking to them particularly about that particular thing.

Q. Have you ever talked to any Government inspector about this boat?—A. I presume I have; I can not recall any special occasion.

Q. Were you ever asked about this boat, in view of the fact that she was peculiarly constructed or was known as a cranky boat?—A. I can not cite any particular time when I was ever asked any questions about it.

Q. You never were asked by anyone whether she is a safe boat on the lake?—A. Oh, I presume I have been a thousand times, but I can not recall any particular time.

Q. I mean by a Government inspector.—A. I can not recall any particular time a question of that kind was asked me.

Q. You were captain of this boat for three seasons?—A. Four.

Q. Four seasons?—A. Mostly four.

Q. Were you the captain of the boat in 1904?—A. Yes, sir.

Q. Do you remember an occurrence in Benton Harbor when a few people fell off that boat?—A. I never saw Benton Harbor while I was on the *Egstrand*.

Q. Or—A. *South Haven*.

Q. *South Haven*.—A. Remember an occurrence of what kind?

Q. When a few people fell off the vessel, due to her listing.—A. That never happened in my experience on the steamer.

Q. Have you heard of that?—A. No, sir; I never heard that before; the four years I was there we never lost a life and no one ever fell off the boat.

Q. How much water would that vessel draw, Captain?—A. I should think perhaps 15 or 16 feet aft, with her water ballast and a full complement of passengers.

Secretary REDFIELD. Forward or aft?

A. Aft.

Q. How much forward?—A. Perhaps 9 or 10 feet.

Q. And this water ballast was used frequently for the purpose of lowering the boat and again for raising her?—A. In lowering the boat.

Q. And while raising the boat?—A. And raising the boat.

Mr. SABATH. Well, the ballast was not used to raise it; she was removed so she would raise.

A. Make it easier for the passenger to alight from the steamer.

Q. So it was to accommodate and make it easier for people to get on or get off?—A. Yes, sir; to get off; easier for the people to get off; not to get on.

Q. To get off?—A. Yes, sir.

Q. Well, couldn't there have been a different plank constructed so as to make it easier for the passengers to get off without lowering the boat?—A. It could be done, but it never was.

Q. That would not cost a great deal?—A. Perhaps the owners of the property would object to cutting their dock; there are reasons for all those things.

Q. Do you know the rules and regulations of the board of examining engineers or the board that has jurisdiction—the inspection

board—as to the inspection of vessels?—A. Why, partially; yes. We have copies of those rules on all of our vessels, but I could not repeat them word for word; but in a general way I am conversant with them.

Mr. SULLIVAN. This draft figure you gave awhile ago, fore and aft, was that light or loaded; the draft of the vessel you said—

A. It was loaded.

Q. It was loaded?—A. Yes; that is loaded with a full complement of passengers and water ballast. I might be out a few inches on that, Mr. Sullivan, you know, but I think that is it, to the best of my ability.

Mr. SABATH. Is it your opinion that the law and the rules are sufficient to safeguard the lives, if properly, of course, and honestly carried out, to safeguard the lives of all the people and also the vessels—that inspection?

A. You mean our rules and regulations for the government of these things?

Q. Yes.—A. Yes, sir.

Q. Or is it your opinion that it is not necessary to enlarge upon the regulations of inspection of boats to protect the lives?—A. Up to the present time it has not been.

Q. Well, in view of this unfortunate occurrence would you say now that there is sufficient or that any greater care is required or is necessary to investigate and examine boats before their permit or license is granted to them?—A. Well, that is a question I could not answer. I do not just get your part of that question I do not think.

Q. What I mean, Captain, is this: Do you think, is it your opinion, that the present laws and the present regulations are sufficient if honestly carried out to give the inspector ample power and authority to pass upon the carrying capacity of a boat?—A. Yes, sir; I do.

Q. You do not think that we need additional safeguards or regulations or laws?—A. From my point of view, no.

Q. Well, don't you think that where a boat is specially constructed or peculiarly constructed like this boat that in addition to her deck space and the number of lifeboats and life preservers and rafts she carries the constructions should be taken into consideration before the allowance is made as to her carrying capacity?—A. Well, I considered that steamer a perfectly safe steamer with all the people that she was allowed to carry.

Q. But it does require more care and a greater amount of intelligence to handle her than it does the steamer you are on now?—A. Well, more care; yes; I would say yes.

Q. Well in view of that fact wouldn't you say it is a very dangerous boat if recklessly handled, more dangerous than the ordinarily constructed boat?—A. Yes; if recklessly handled.

Q. Well, we will say if negligently handled.—A. Exactly; negligently handled.

Q. And shouldn't that be taken into consideration before the allowance is made by the inspectors?—A. Well, that is a question I can not answer, gentlemen.

Q. Captain, you are not afraid of the board, are you?—A. Not a bit; no, sir; I am not afraid of the board or anybody else, gentlemen; I have nothing to fear.

Q. I just want you to know that you do not have to be afraid of them.—A. I have nothing to be afraid of.

Q. You do not have to be afraid of anyone.—A. I court investigation of my actions as a steamboat master wherever I have been all my life.

Q. I think you can handle any steamer, and I would be willing to intrust my life to you at any time.—A. Thank you.

Q. But I am not willing to trust it to some of the captains that I have seen handling boats carrying large numbers of passengers. Captain, did you make applications for your vessel for carrying capacity; that is, do you make the application or the affidavit asking that she be inspected?—A. Yes, sir.

Q. You make that affidavit yourself?—A. Yes, sir.

Q. And you also request that the measurements be taken or the allowance be made by the inspectors?—A. We make an application for an inspection, and we are allowed, according to the equipment we have, a certain number of people.

Q. And that application after inspection carries with it also an examination for the number of people that you can carry?—A. Yes, sir.

Q. When do you make this application—once a year?—A. Once a year.

Q. I mean what time in the year—about?—A. We usually make that about June 1, inasmuch as we start about June 15.

Q. After you make the application, within a few days there is an inspection?—A. An inspection; yes, sir.

Q. And how soon thereafter do you receive your license?—A. As a rule we get a permit until we get our regular license.

Q. A temporary permit?—A. Yes, sir.

Q. How soon after the examination do you receive this permit?—A. The permit?

Q. Yes, sir.—A. Oh, perhaps a week.

Q. Have you ever received a temporary permit from the inspectors before the boat was inspected?—A. Before the boat was inspected?

Q. Yes.—A. No, sir; I think not.

Q. Have you ever made a request for an increased capacity where the allowance was made?—A. We have.

Q. You have?—A. Yes, sir.

Q. What do you do in a case of that kind?—A. We ask how much additional equipment we have to put on in order to have our passenger limit raised to a certain number.

Q. And after they inform you of what you must do, then if you desire to increase the capacity you make these additional improvements, do you?—A. Yes, sir.

Q. What do you do, put in these improvements and notify the board that you have complied?—A. We notify the board that we have complied with their request.

Q. Do they then make another examination?—A. They usually do.

Q. Well, you say usually; don't they always?—A. Occasionally

we make an affidavit that we have made such and such additions to our equipment.

Q. Who makes the affidavit, the captain?—A. The master of the vessel.

Q. The master of the vessel?—A. Yes, sir.

Q. And it is upon that affidavit that a permit or license is issued for the additional number of passengers?—A. Yes, sir.

Q. Do you think that is good practice?—A. From my personal point of view; yes.

Q. Well, don't you think for the protection of life—A. As a rule the inspectors, either at the time or a day or two afterwards, will inspect the boat personally, but in order to save time it is an accommodation—

Q. To the shipowners?—A. To myself.

Q. Well, it is not an accommodation to you.

Secretary REDFIELD. Wait a moment, Judge Sabath. I want the record read. Read me the last part of the record.

(The last several questions were read by the reporter.)

Mr. SABATH. I want you to know, Mr. Secretary, that I do not desire to be unfair to the witness.

Secretary REDFIELD. I thought there was a clerical error.

Mr. SABATH. And I know I could not put words in the mouth of this witness.

Secretary REDFIELD. Nobody knows you as well as I do, and I do not think of it for a moment.

Mr. SABATH. But when you say for yourself—you have no direct benefit, whether the boat carries two or three or five hundred more, have you?

A. Financially, no; my personal interest is as much, I think, as anybody's in the steamboat which I operate and in the owner, or my interest in my company who owns my steamer.

Q. That is, of course, proper; I realize that, employed by a company, it is your duty as a man to do everything in your power in their behalf; but, directly, there is no benefit to you?—A. Financially, no.

Q. Do you think that these temporary permits should be issued without an examination on the part of the inspectors?—A. I can not see any reason why they should not.

Q. Well, wouldn't it be safer, after application is made, even though accompanied by an affidavit, for the inspectors to first inspect these improvements before they would issue a license for an additional number of passengers?—A. For me, no; I can not answer for anybody else.

Q. Well, what if it should be that we should have on our lakes some captains who are reckless or careless, or who do not examine, perhaps, the application when it is made out, or leave it to some one who is anxious to secure a few hundred more carrying capacity for the vessel, then, in that case, don't you think it would be safer for the inspector to first inspect before they would rule on the application?—A. Well, that is merely supposition; I could not reply to a question of that kind. I am just answering these questions, Judge, from my own personal point of view.

Q. In view of what has transpired, have you, or could you, make any recommendations about it—how the lives of people can be better pro-

ected so as to prevent such an occurrence as we have witnessed here a week ago to-day?—A. I wish I could, but I can not.

Q. Do you think a water-ballast vessel—that depends wholly upon water ballast—is just as safe as other vessels?—A. No, sir.

Q. They are not?—A. No, sir.

Q. Well, then, should we not eliminate the construction of such vessels?—A. Possibly that would be an improvement.

Q. Should we not take that into consideration in making the allowance for carrying capacity on those that are already built, or similarly constructed, like the *Eastland*, and those vessels depending on water ballast?—A. I do not know of any other vessel depending on the water ballast out of the city of Chicago.

Q. Well, are there not some other vessels on our Great Lakes?—A. Possibly; I am not thoroughly conversant with other vessels at the present time, except in your city here of Chicago.

Q. But, if there are other vessels similarly constructed as the *Eastland*, do you think you could allow them as great a carrying capacity as you would the others that are differently constructed, if the measurements would be the same?—A. I would consider it was a safer proposition where the vessel did not have to have ballast of any kind in order to carry her complement of passengers.

Mr. SABATH. That is all I wish to ask him.

Mr. SULLIVAN. There is one question or two the captain suggested. I am trying to get here, if the regulations of the Government are the wisest in this regard, a passenger-carrying steamer, especially of large capacity, should have probably the highest type of captain, and under the regulations as they exist now a man of ordinarily good seamanship will get his license as a master and without any further restrictions, assuming it is of the proper tonnage, without any further restrictions or examination, a boat owner can put him aboard one of the largest passenger vessels; is that right?

The WITNESS. Yes, sir.

Q. Do you think that is a wise regulation that will permit this rule? In this case they happened to select a man who, in my opinion, is an excellent sailor, but his ability stops right there; he hasn't the ability to command men or think quickly or act quickly, and all that sort of thing; what would you say as to a regulation of that kind that permits that situation?—A. Well, Mr. Sullivan, I never thought that matter out; that is a matter that would have to be considered in order to give an intelligent answer.

Q. I do not want to give you any flattery, but in my opinion if a man of your type had been on that boat a week ago this morning that this accident would not have happened. Now, what could be done to correct that situation?—A. Well, I could not say as to that at the present time.

Mr. SULLIVAN. That is all.

Secretary REDFIELD. What is the nature of the examination that you passed for a first master's license; what does it take into account?

The WITNESS. Experience and a good acquaintance with the certain localities where you ask for your license; the lighthouses and reefs and courses. It was a verbal examination that I took at that time.

Q. How long ago was that?—A. At that time it was perhaps 20 years ago, at a rough estimate.

Q. Do you know the nature of the present examinations?—A. I know that it is a written examination now instead of as it used to be.

Q. Have you ever taken one?—A. No, sir.

Q. Have you ever been present when one was being taken and witnessed it?—A. No, sir; I never have.

Q. Can you testify from your own knowledge concerning the nature of the present examination?—A. No, sir.

Q. Or as to what it covers?—A. No, sir; I can not.

Q. Do you or do you not know whether the examination for a first-class master's license differs from that of a second-class master's license?—A. Yes, sir.

Q. It does differ?—A. It did when I took my examination.

Q. Do you know whether it differs now?—A. I could not say; I presume it does.

Q. What in your judgment would be the source of the truth in that matter; where would you go to have the truth?—A. Where would I go to find the truth?

Q. About an examination; do you know?—A. The board of local inspectors.

Q. In what shape would you find it there; do you know?—A. I presume they keep records of all those examinations.

Q. Do you know or do you not know whether the actual record of the examination is kept on file?—A. I presume it is; I have no knowledge about it.

Q. Is there any other source, to your knowledge, from which the truth concerning the examination can be better found than that?—A. No, sir.

Q. If there is, say so.—A. There is not.

Q. Is it your understanding of the truth that the record in detail of each examination is preserved?—A. I understand so; yes, sir.

Secretary REDFIELD. That is all.

Mr. SABATH. Can I ask the captain two or three more questions, Mr. Secretary?

Secretary REDFIELD. By all means.

Mr. SABATH. How many engineers did you have under you in your experience as a master—about?

A. All told?

Q. About; yes; 20 or 30 or what?—A. I presume so; about that; as many as 30 anyway.

Q. Have you found them to be all efficient and capable, or were you obliged to discharge some of them from time to time?—A. Yes; I think I have been.

Q. When you discharged an engineer for inefficiency or for some other cause do you report that to the inspectors?—A. In some cases, yes; but not always.

Q. Well, for what causes do you report?—A. Oh, drunkenness, incapability, insubordination, or something of that sort.

Q. Do the rules of the department demand that?—A. I think so; yes, sir.

Q. And frequently you discharge an engineer for causes that you do not report to the department?—A. Well, Judge, you know in the days—

Q. When you see what I mean, that is the practice of the different captains; what I am trying to get at is the practice.—A. No; I was just going to correct your question if you will allow me to.

Q. Yes.—A. Nowadays the captain of a steamer has not very much to do with the engineer except to prefer charges against him at the general manager's office. The engineers are put aboard most all of our vessels by the superintendent or general manager, and in case anything is wrong we prefer charges to our general manager, and if we can substantiate those charges, perhaps the engineer will be dismissed. Otherwise the captain possibly—and there is very few steamers now of the larger type where the captain hires the engineers—they are put on by the manager.

Q. So we are getting away gradually from the old law?—A. Yes, sir.

Q. That a captain was absolute master of his vessel and he engaged all his assistants?—A. Yes; you understand the captain is still in charge of his vessel, except in that particular case.

Q. Yes; I understand that if you were engineer, that I might be engaged by the owners or managers of such vessel, but that he is subject to the orders of his captain.—A. Exactly.

Q. So it is not the captain that would make the report to the board of engineers as to the reason why such engineer would be dismissed?—A. Yes; I think it is. I would consider it my place to do so.

Q. And you believe that it should be done in each and every instance where an engineer is dismissed for inefficiency, inability, or recklessness or drunkenness or for any other cause that such report be made to the board of engineers or inspectors?—A. I certainly do.

Q. And do you think that a man of that kind should again be granted a license when once dismissed?—A. No, sir; not for the time being, at least.

Q. And not until he has demonstrated or conclusively proven that he is in a position to give better service?—A. Exactly.

Q. A great deal depends upon the engineer?—A. Yes, sir; a great deal.

Q. And great care should be exercised in engaging the engineer?—A. Yes, sir.

Q. A man of years of experience should be engaged as the chief engineer; isn't that true?—A. Sometimes I have found that the most competent engineers I have had have not had so very much experience. They have proven to be the best men. That does not always work out.

Q. Are you acquainted with this engineer on the steamer *Eastland*?—A. I am not; no, sir.

Q. Do you know Snow, the assistant engineer?—A. Slightly. I think he was on our boat at one time; but I do not think I would know the man if I met him on the street.

Q. What kind of a crew did this *Eastland* have?—A. Sir!

Q. Were you familiar with the *Eastland*, the engineer, the assistant, the first mate, and the second?—A. No, sir; none of them.

Q. It was a crew that was picked up here, there, and everywhere, wasn't it?—A. I could not tell you. I scarcely knew any of the officers of the steamer.

Q. Are you acquainted with the captain?—A. Slightly; just a speaking acquaintance.

Q. Have you ever heard people comment upon his ability as a captain?—A. No, sir.

Q. So you do not know much about it?—A. I do not know very much about him; now, that is a fact.

Mr. SABATH. That is all.

Mr. POOL. Capt. Dority, I understand you were master of the *Eastland* for about four years?

A. Yes, sir.

Q. Why did you leave the *Eastland* services?—A. She was sold.

Q. She was sold?—A. Yes, sir.

Q. To another company?—A. Yes, sir.

Q. Are you still with the company that you were with at that time?—A. Yes, sir.

Q. How much would the filling of the tanks in the *Eastland* lower her in the water when she was loaded with 2,500 people?—A. As I stated, I think a foot.

Q. A foot?—A. Yes, sir. That is an approximate figure. I do not know just exactly, you know.

Q. In other words, the water ballast would probably not affect the load line of the vessel over 1 foot regardless of the load?—A. I think not.

Q. About a foot?—A. Yes, sir.

Q. What is that—about 17 tons to the inch?—A. You understand me that that is the water ballast that we carried?

Q. Yes.—A. We carried about half of the capacity, possibly. We never used the forward tanks; we never used 1 and 2; if at all, very rarely.

Q. In other words, all of the tanks required for her stability would lower the vessel perhaps a foot?—A. I would say yes.

Q. Are there any vessels on the Lakes that have a combination of solid and water ballast?—A. If so, I do not know of any.

Q. If the *Eastland* had half of her ballast in solid ballast and then an adjustable ballast—flexible ballast in the form of water—would it be a safer boat?—A. Well, I can not conceive of any safer ballast than water, if it is properly handled.

Q. Yes; but there is always a contingency of the proper handling. Assuming that the water is subject to improper handling and that the fixed ballast is not and that a solid ballast is not, would a boat like the *Eastland* be safer with half of its ballast requirement solid and the other half flexible, as in the case of water ballast?—A. Well, from the viewpoint of incompetent handling of the ballast, I would say yes.

Q. That is what I wished to get at. You said a while ago it would take about 30 minutes to fill the ballast tanks.—A. Yes, sir.

Q. Is that quick enough to be able to fill tanks of that sort, when you get the load on the boat very rapidly before that, as fast as you load that boat, say, in 15 minutes; is there a sufficient margin of safety in trimming the ship to rely upon intakes that will fill the tanks in 30 minutes?—A. Well, I never could load the boat in 15 minutes. You could not put 2,500 people on a boat in 15 minutes, nor could you put them off in 15 minutes.

Q. You could not?—A. At least, I never could.

Q. With two gangways?—A. We always used two exits in unloading our passengers, but 2,500 people will take from 20 minutes to half an hour, at that.

Q. You could get them on in 20 minutes?—A. No, sir; not get them on; they are slower getting on than they are getting off, because we are not allowed to use only one gangway in loading our boat. I do not suppose you could load 2,500 people in less than a half hour; that is the best you could do.

Q. You would feel that in using two gangplanks on the *Eastland* that the intake to the ballast tanks will admit sufficient water to trim the boat as fast as you can put the load of passengers on, loading to capacity?—A. No, I do not say that; I agree with you that the faster you can handle that water the better, there is no question about that; but, you understand, the *Eastland* is 12 years old, and 12 years ago that was about the most modern way they had of handling water ballast; you go aboard a steamer that was built a year ago; why, the new freighters, they can handle the water ballast three times as fast—yes, four times as fast as they could on the *Eastland*; but at the time the *Eastland* was built, that was about the most modern way they had of handling that ballast.

Q. Then, under the improved method of handling water ballasts—A. Yes, sir.

Q. Do you know whether the requirements are different to-day with reference to handling water ballast than they were 10 years ago?—A. I do not know as the requirements are any different.

Q. Should they be different?—A. Well, there might be an improvement.

Q. As I understand it, there is a division from fore and aft in No. 2 tank on board the *Eastland*, a sort of a fin that divides the ballast tanks?—A. A bulkhead; yes.

Q. And that that bulkhead has large openings in it that will permit the passage of water from one side of the boat to the other; is that a fact?—A. No, sir; not in her case.

Q. Do you know whether it is a solid bulkhead or not, as you remember No. 2, as between the starboard and the port side?—A. Yes, sir; it used to be if they have not changed it.

Q. Is there anyone here who can answer that as to the present condition?

Secretary REDFIELD. I do not know. We have got the engineer of the vessel waiting here, the former engineer.

Mr. POOL. If there were a connection between these two tanks, and the tanks were being filled, understand—follow me?

A. Yes.

Q. You would fill the tanks half full, would the water be in a position where it could flow from one tank into the other, and the crowd of passengers on the upper deck of that vessel, if they should cause it to list slightly, and shift its lower level so that the water could flow from one tank into the other, say, from the starboard tank into the port, and the passengers were loaded on the port, would that tend to cause the boat to tip over more rapidly?—A. Yes, sir.

Q. In other words, until the tanks were full they would be unstable in that particular?—A. Yes, sir.

Mr. POOL. That is all.

Mr. FOUKE. May I ask a question, Mr. Secretary?

Secretary REDFIELD. Yes; go ahead.

Mr. FOUKE. Captain, if you were captain of the *Eastland* and had received a certificate of inspection from the steamboat inspectors on July 2, would you feel that your boat had been properly inspected on July 24, when this accident occurred, so far as the working order of the boat was concerned?

A. Will you read that question, please?  
(Question read by reporter, as follows:)

Captain, if you were captain of the *Eastland* and had received a certificate of inspection from the steamboat inspectors on July 2, would you feel that your boat had been properly inspected on July 24, when this accident occurred, so far as the working order of the boat was concerned?

A. I would.

Q. Would you consider it your duty to see that these tanks were properly filled before the boat left the dock?—A. I would.

Q. That duty would rest upon you?—A. The engineer and myself.

Q. Does the captain of the boat on the Lakes have full authority over his vessel in that respect?—A. Yes, sir.

Q. Full control over his crew?—A. Yes, sir; he should have.

Mr. FOUKE. That is all.

Mr. JAMES F. BISHOP (public administrator of Cook County). Captain, if your boat had been inspected and there was some defect to the boat in which the inspector had not been advised and could not be advised, then you would not consider that your boat was safe to put to sea, would you? Or assume that the inspectors did not detect a defect, and that you or the owners had knowledge of such a defect with reference to the boat, you would not consider that such an inspection would relieve you of the liability, would you?—A. Well, now, as I understand you, if my steamer had been inspected and we had knowledge of any defect that the inspectors did not know of?

Q. Yes.—A. You understand all licensed masters and officers on board licensed vessels are sworn to secret nothing from the board of inspectors?

Q. Yes, sir.—A. That is the only way I can answer that question. What other people may do I could not say, I am only giving it from my own personal viewpoint, gentlemen.

Q. But the inspectors licensed would not know anything about it, withheld from the inspectors, say, something concerning the construction or the present condition of the boat, and a license was secured, that would not give the master of the ship the right to proceed under the sole protection of the license, in other words the master of the ship or the owners of the ship, if they have knowledge of the defects which are concealed from the inspector, would be bound to exercise the highest degree of care in remedying these defects before the ship put to sea, wouldn't they?—A. They certainly would.

Secretary REDFIELD. Capt. Dority, were there baffle plates in the *Eastland*? Do you know what I mean by that?—A. No, sir.

Q. What was the name you used for them, Mr. Gillette?

Mr. GILLETTE. Swash plates.

Secretary REDFIELD. Or swash plates?

A. No, sir.

Mr. COLLINS. They are plates put in, Frank, to keep the water from splashing.

Secretary REDFIELD. To keep it from flowing rapidly back and forth.

The WITNESS. I do not think there was any such thing in the *Eastland*.

Secretary REDFIELD. Are you or are you not familiar, Captain, with the force in nature that is called momentum?

A. Well, yes and no, both.

Q. You know there is such thing?—A. Yes, sir.

Q. Do you know what it is?—A. I know what I have always considered it to be.

Q. What do you consider it to be?—A. If the vessel is proceeding up the Chicago River, after you stop her machinery, the engine, the momentum of the vessel will take her a certain distance.

Q. Does the water have the same property in its motion?—A. I think so.

Q. In considering the movement of water in a tank did you or do you not think the question of the momentum of the water in that tank should be considered?—A. Do you mean taken in regard to the listing of the ship, the equilibrium of the ship, or what?

Q. In any movement of water in a tank is the question of the momentum of the water to be considered?—A. I do not just get the drift of your question.

Q. Do you mean you do not understand my question?—A. I do not understand your question the way you put it.

Q. Suppose this book which I hold horizontally before me represents a tank half filled or partly filled with water, and suppose it is inclined, as I now show you there, is or is not in such a case the momentum of the water to be considered?—A. Why, yes; absolutely and certainly.

Q. And do you know or can you state how momentum arises, what causes it?—A. In this particular instance that you cite?

Q. Yes; or any similar one?—A. Why, as I said before the shift of your wheel, there are a hundred causes, perhaps a little roll of the sea or anything of that kind.

Q. You do not understand my question. If I strike a blow with a hammer, what causes the blow; what are the factors in the blow? Do you know?—A. Well—

Q. I asked you if you knew?—A. Why, it is the physical force behind you.

Q. Is that all?—A. That causes the blow; in the first place it is your mind.

Q. Now wait a minute, if I strike a blow with a hammer what elements are in that blow? If you do not know, say so.—A. Well, I do not know.

Q. I am trying to find out.—A. I do not know.

Mr. BISHOP. When you sailed the boat there were no lives lost on the boat?

A. No, sir.

Q. That was probably due to the high degree of efficiency which you exercised as the master of the boat; in other words, you exercised the highest degree of efficiency?—A. Well, I did the best I could, gentlemen, and we lost no lives.

Q. It would not require a man of great experience to determine the fact that she was a cranky boat and somewhat treacherous?—A. No, sir.

Q. The same company does not now own the boat that owned it while you sailed it?—A. No, sir.

Q. Exercising the highest degree of efficiency required of you as master of the vessel, you would consider that it was your duty to have the water ballast on board before you took on the full twenty-five hundred passengers?—A. Yes, sir.

Q. When the owners of the vessel order you to change your dock, was it not the duty of the owner to know the draught at that place where that boat is to be docked?—A. Well, under certain conditions; yes.

Q. Is that so—that is, if they order you to do so?—A. Of course, if they ordered me to a certain dock they ought to know whether there is water enough there for my vessel or whether there is not.

Q. They should know, shouldn't they?—A. They should know.

Q. And any owner or lessee of a vessel who orders you to change from the dock where you have been usually docking right along should know whether or not there was sufficient water there in which to dock the vessel with the water ballast on board; that is true, isn't it?—A. I should think so.

Mr. BISHOP. That is all.

GEN. UHLER. Capt. Dority, you have stated that your loaded draft was about 9 or 10 feet forward and 15 or 16 feet aft?

A. If my memory serves me right, General; yes.

Q. Yes; that is the record. Loading your passengers over this one gangway, distributing them as they come aboard the boat, Captain, would that affect her trim, would she go down bodily or would she go down aft a little bit better than she would go down forward?—A. I would say that she would go down bodily.

Q. She would go down bodily?—A. The way that passengers usually distribute themselves.

Q. Now, Captain, can you remember approximately the height of that gangway when your ship was loaded; that is, the height above the water line when the ship was loaded?—A. The free board?

Q. The free board of the gangway?—A. I remember; all of her gangways were very close to the water line.

Q. What distance would you mean by that, Captain?—A. I would say from 6 inches to a foot for the two after gangways.

Q. Six inches to a foot?—A. Yes, sir.

Q. Now, Captain, will you tell me if you remember the height of the lower deadlights above the water's edges?—A. I don't remember. To the best of my recollection the deadlights were forward. If I remember right, there were no deadlights aft. They were forward of the boilers, I think. I don't think the *Eastland* had any deadlights aft. I should think three or four feet—three possibly. These deadlights that you refer to, Captain, are in the hull of the vessel and not above the main deck.

Q. Exactly so; I mean in the hull of the vessel below the main deck?—A. Yes, sir.

Q. Do you remember the size of them, Captain?—A. I think about 8 inches.

Q. And were they generally operated by any one who wanted to use them, whether to open or close them?—A. I presume they were.

Q. Captain, I have one question to ask and that will be all from me at the present time. Suppose there was no law on the statute

books, suppose there were no rules or regulations governing the inspections of steam vessels, if you were master of a vessel whose capacity is 2,500 passengers, whose safe capacity was known to yourself as the master of your vessel, in the absence of any law, in the absence of any rules or regulations, what would be your procedure in proceeding to sea with that vessel with that load of passengers, would you take it upon yourself, the responsibility of going to sea with her if she had too many passengers in your estimation or would you remain alongside of the dock?—A. Well, if in my estimation she was overloaded I would remain alongside of the dock.

Gen. UHLER. That is all.

Secretary REDFIELD. Any further questions?

Mr. COLLINS. I would like to ask you, Captain, who was in actual charge of the ballast tanks when you sailed the *Eastland*; that is, in regard to putting in the water, I do not mean the actual operation of putting the water in, but who had the say in regard to when water would go in?

A. Mr. Nack, the chief engineer of the vessel, was the man that I always consulted with regarding the water ballast.

Q. Did he ever put any water in the ballast tank without your instructions?—A. I presume he has, but we had a thorough understanding about it.

Q. If you did not have any water in the tank would the speed of the boat be increased?—A. Yes, sir.

Q. How much?—A. I presume a half mile or so an hour.

Q. On this occasion that you refer to, when the boat listed over at South Haven, how long did she lay over?—A. I think about a half hour.

Q. About a half hour?—A. Yes, sir.

Q. And what means did you take to straighten her up?—A. Water ballast.

Q. Did the tanks, when you sailed her, at all times respond to her?—A. Yes, sir.

Q. You said that you always kept the tanks full; that is, No. 3?—A. Yes, sir.

Q. Would the filling of those additional tanks, Nos. 1, 2, 4, and 5, would that add stability to the boat?—A. No, sir; the stern tank did not have any effect on the stability of the boat, but 3, 4, and 5 possibly would.

Q. In your previous testimony you mentioned, I believe, leaving this port several times with 3,300 persons aboard. What dock did you take them aboard from?—A. The north end of Rush Street Bridge. No, pardon me; Wells Street dock at that time, in 1904; that is right across from the old Northwestern depot.

Q. At the time you sailed the *Eastland* did you take any special precautions for the distribution of the passengers as they came aboard?—A. No, sir; I might mention at that time the passengers were allowed all over the vessel, everywhere.

Q. Are all of what we term crank boats good sea boats?—A. From my observation, yes.

Q. By good sea boats what do you mean? As a sailing man takes it.—A. Well, as an illustration, I think for the four years that I ran her we never shifted our course on account of bad weather, and

it is a common thing; other ships always have to hold up and change their courses; that is other ships that I have been master of.

Q. When you were master of the *Eastland* did you take any precautions with deck lights below the main deck?—A. Yes, sir.

Q. What precautions did you take?—A. The engineer and I gave it our personal supervision.

Q. As to what?—A. With a crowd of passengers on, to see that the dead lights were always closed not only below the main deck but on the main deck.

Q. Did the *Eastland* ever list to any great extent to put these dead lights on the water level?—A. No, sir.

Q. When you had a full load of passengers and No. 3 tank full of water would she bear up amidships?—A. I could not say as to that; I would estimate it perhaps 12 feet 6 inches or 13 feet.

Q. On receiving the increased number of passengers that you got by the system and affidavit was it customary for the inspectors to come aboard later and check up this equipment and examine it?—A. Always.

Q. Have you as agent of the owners ever through any undue influence tried to have the inspectors increase your passenger allowance?—A. No, sir.

Q. Did you ever hear of any master doing it?—A. No, sir.

Mr. VAN PATTEN. Capt. Dority, are those trimming tanks that you spoke about, what we call side tanks, above the deck of the ship or are they below?

A. Below.

Q. You said you never had to keep off or keep by any course across the lake.—A. I don't remember having to do that.

Q. And she was all right?—A. Yes, sir.

Q. No roll to her?—A. No, sir.

Q. Like a schooner?—A. Yes, sir.

Q. Were you ever in any other boat that you could do that with?—A. I do not think I was ever in as good a sea boat as the *Eastland*, what sailors consider a sea vessel.

Q. Now, while you were in command of the *Eastland* did you ever land at the dock west of the Clark Street Bridge and on the south side of the river?—A. Yes, sir—pardon me, no, sir; Clark Street Bridge you said?

Q. Yes.—A. No, sir.

Q. Are you familiar with most docks along the river down in the down-town district of Chicago?—A. I think so.

Q. I think you are as well as I am, maybe better. A great many of these docks are old, are they not?—A. Yes, sir.

Q. Ships navigating the river did not need over 15 feet?—A. Yes, sir.

Q. Is that right?—A. Yes, sir.

Q. Do you know whether the docks years ago in this harbor were faced with short filling?—A. I understand that is the fact.

Q. Is dredging done close to these docks?—A. No, sir.

Q. Do you know of any rock ledges in Chicago Harbor?—A. No, sir.

Q. Do you remember of a rocky shoal in the harbor between 17 and 18 feet, the water on it—I think this was about 15 years ago?—A. The Chicago River?

Q. Yes.—A. I don't recollect it.

Q. About the harbor?—A. I don't recollect it; no, sir.

Q. Never saw boats aground?—A. No, sir.

Q. Suppose there was a shoal there, Captain, would the direction and force of the wind have any effect on that shoal?—A. I think so.

Q. Don't you know it?—A. Yes, sir; I know it.

Q. Now, I think, I am getting out of your latitude here; you did not lumber barge very much, did you?—A. Never in my life.

Q. I wanted to know if you ever knew of a rocky shoal west of the Thirty-fifth Street Bridge?—A. No, sir.

Q. On the south fork of the river?—A. No, sir.

Mr. VAN PATTEN. I wanted to find out whether there was any rock around there, that is all.

Mr. BISHOP. You always had your water ballast in, especially if it was a day that was overcast?

A. That would not make any difference—a day that was overcast.

Q. If it looked like a storm?—A. That would not make any difference.

Q. You did have your ballast on?—A. When we had over a thousand people we figured on having the water ballast.

Q. You considered her a seaworthy boat when she had over a thousand people on and had her water ballast on?—A. Yes, sir.

Q. You would not have been willing to have considered her seaworthy and to have taken your chances without her water ballast on with 2,500 people aboard, would you?—A. No, sir.

Lieut. Gov. O'HARA. Mr. Secretary, the evening before this board of inquiry commenced its labors I addressed a letter to the distinguished Secretary of Commerce, suggesting that there be named as a member of the unofficial citizens' board of inquiry a representative of that group of our citizens who toil, who are known as constituting the laboring class, and from which group came most of the victims of the deplorable *Eastland* disaster. The Secretary promptly acknowledged the receipt of my letter, thanked me for the suggestion, and requested that I act as a member of the unofficial board named by him and as especially representing the group mentioned in my letter. I suggested to the Secretary that it would be better were he to name some one officially connected with the laboring group, and in this connection I suggested the names of John Walker, president of the State Federation of Labor; John Fitzpatrick, president of the Chicago Federation of Labor; Simon O'Donnell; Congressman Buchanan; Clarence Darrow; and possibly one or two others. The Secretary suggested that I see him in person on the following morning, which I did, and he then urged me to accept the appointment, as he did not believe it advisable for any member of the citizens' committee to be strongly allied or to have especial interest in any one group of citizens, whether that group be a laboring or an employing one. I accepted the appointment and served on the board during the first day of the inquiry.

The second day of the inquiry it was necessary for me, then acting as governor of the State, to attend the camp of the State militia at Camp Dunne near the city of Dixon, and in order that my absence might not be misunderstood or misinterpreted, I named with the consent of the Secretary a substitute who attended the full session

of that day. I desire to continue as a member of the board of inquiry, but in justification of my position I respectfully suggest to the Secretary that the meeting of the board named by him be called for Monday morning and at that meeting there be considered the advisability of adopting a regular procedure, and also the advisability of widening the scope of the inquiry to cover a complete, exhaustive, and thorough investigation of the system of Federal steamboat inspection during the last 15 years. I am not now in a position to say that this board has any authority to conduct such an investigation, nor do I know that the Secretary of Commerce has authority to order such an investigation, but I do believe that the matter should be discussed and considered by the members of the board named by the Secretary at a meeting to be called not later than next Monday morning before the next witness is called in this inquiry. I now suggest that our citizens should refrain from criticizing this board or the Secretary of Commerce until a decision has been reached in this regard or until the inquiry has been completed.

Until the disastrous Iroquois fire in Chicago, our citizens had not been aroused to a public opinion demanding adequate fire protection. That disaster started investigations with the result that there have been few losses of life through theater fires since that time. The investigation subsequent to the Iroquois disaster resulted in a general change in theater construction. It is possible that the highest monument to the memory of the lives of those who perished in the *Eastland* will take the form of revised laws suggested by this board of inquiry, if its scope be broadened and adopted by next Congress, change and reform the system of Federal steamboat inspection.

I desire to say in order that there may be no misunderstanding on the part of any one, that this position taken by me is not in the slightest degree a reflection upon the Secretary of Commerce or upon any member of his department down to the person holding the most minor position, nor do I believe that an inquiry such as that suggested by me, should be considered by any one as reflecting upon the gentleman named.

In conclusion, because of the especial reason of my appointment to an unofficial place on this board, I respectfully suggest that the meeting of the board on Monday next, if called, also consider the advisability of calling as witnesses before the board of inquiry any and all officials connected with organized seamen as well as any and all officials connected with the organized employing interests on the Lakes, as well as any and all other citizens who may have suggestions and who may desire to be heard. In short, I suggest and I believe that I am speaking the sentiment of the Secretary of Commerce, as I am sure I am speaking the sentiment of Mr. Pool and perhaps other members of the board, that this inquiry be not confined to fixing any blame or responsibility for the *Eastland* disaster but be enlarged to give every citizen an opportunity to make any suggestions that may prove of benefit to the steamboat service of the Lakes.

Mr. THURMAN. Gov. O'Hara, I have just got the gist of the last few remarks you have made and I gather from them that it amounts to a request that this investigation, made under the statute and the only authority under which it can possibly be made, and for the purpose of investigating the conduct of the licensed officers of the

Steamboat-Inspection Service and the licensed officers of that steamer in connection with this disaster, be broadened out to a general inspection of the general conditions of the United States Steamboat-Inspection Service throughout the United States. Am I correct on that?

Lieut. Gov. O'HARA. With the exception, Mr. Solicitor, that I would speak merely of steamship service on the Lakes.

Mr. THURMAN. Lieutenant Governor, I will say to you very frankly, that what you ask in this investigation can not sir, under the statute, be granted. We are here for the purpose of conducting an investigation, for the purpose set forth in the statute and limited to the confines of that statute. I will, however, go farther with you and say sir, and I say it with the authority and with the consent of the honorable Secretary of Commerce, that if any head of any labor organization, if any citizen of Chicago, if any citizen of the United States has charges of any sort or description against any acts of any of the officials of the Steamboat-Inspection Service, or against the Steamboat-Inspection Service as a general service, if you or they will present those charges to the Department of Commerce in proper shape and proper form, we will afford you the fullest, the completest, and the most thorough examination of that service from beginning to end, from the Secretary of Commerce down to the lowest deputy inspector that you may require. It can not be done, sir, at this hearing, because we are limited by the statute; but it can be done, a separate investigation under the general authority of the Secretary of Commerce, and we are very willing and very glad to give it to you sir.

The SECRETARY. I am in the most entire accord with Lieut. Gov. O'Hara. It was my purpose in coming here to stay as long and to do as much as would disclose, in every crack and cranny of the Steamboat-Inspection Service the infinite and final truth. I am more than ready and willing now that that shall be done. It has always been so. No one who knows me can say with truth that there has ever been the faintest suspicion of concealment anywhere; my life for 30 years, I reckon, as a public officer of the city and of the Nation, should have protected me against the prejudgment of those who asked no questions, who accuse of wrong. I am advised by the legal adviser, whom it is my duty under the law to follow, that there is no power in law to extend this particular hearing beyond the scope that the law provides; that to do so would be a breach of law and that money spent in so doing must be individually and personally paid by me. I have gone to the verge of stretching the law already in asking hither the gentlemen who are here. Never before in the history, I think, of this country, was it the case that an inquiry into any officer of the Steamboat-Inspection Service, was attended by officers of the State, of the city, and of the county, with the doors thrown wide open to them all and yet I know you gentlemen of the press in particular know what has been the result. I give to Gov. O'Hara, I give to you gentlemen, I give to the press of this city and of the Nation, my personal assurance that if charges are presented by any man, the humblest to the highest, they shall have, as they have always had, the most searching public and complete inquiry, through such length of time and at such cost of labor as is necessary to satisfy every man. No such charges have ever been presented; they have

been asked for, but thus far they are wanting. But I have the right to say that no man shall be accused, least of all held publicly up to scorn as a wrongdoer, until he has had a chance to be heard for himself, and I refuse to condemn any man here, yonder or anywhere until he has had his day to be heard, and I have a right to ask from the common honor of this great city, that if you must abuse me for any personal or public reason, in God's name spare the men whom it is my duty to give a square deal to. Take not from them without just cause; take from no man without just cause the merit and honor of a good name. If he has done wrong let us join in condemning him, but not until we know. Gov. O'Hara, say to anyone, to present to me informally by mail at Washington, any request for an investigation, make its scope what you will, suggest the taking part therein of whom you desire, and it shall be done.

The hearing is adjourned until Monday morning at 10 o'clock, and the meeting that Gov. O'Hara has requested will be held in the adjoining room at 9 o'clock on Monday morning, and all who have taken part as questioners in this inquiry are invited to be present.

Mr. BISHOP. As an official of this State, Mr. Secretary, and the county, attempting to preserve the interests of the survivors of the deceased persons, I came to this hearing, not expecting to participate or ask questions. I was fully aware of the statute and the scope of this hearing under the Federal statute. Personally, I want to thank the Secretary for the extreme courtesy shown me, and of the opportunity to avail myself of obtaining some information here which I think will be valuable in the discharge of my duties.

The SECRETARY. I think you very much. The hearing is adjourned.

(The further hearing is adjourned to 10 a. m. Monday, August 2, 1915.)

CHICAGO, ILL., August 2, 1915—10 a. m.

Parties met pursuant to adjournment.

Present: Same as before.

WILLIAM L. NACK, called as a witness by the board, being first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Give your full name and address to the stenographer, please.

Mr. THURMAN. You have not been served with a subpoena to appear before the Federal grand jury, have you?

The WITNESS. No, sir.

A. William L. Nack, 739 Willow Street, Chicago.

Secretary REDFIELD. Mr. Nack, what is your occupation?

A. Chief engineer of the steamer *City of South Haven*.

Q. What is your age?—A. Forty-one years.

Q. Will you state your experience as an engineer from the time you began that work?—A. I got my license in 1898, I think it was.

Mr. COLLINS. A little louder, Mr. Nack, please.

Secretary REDFIELD. Yes; we want these gentlemen to hear you. The room I find a little hard to speak in myself.

A. The first four or five years I was engineer on the smaller boats, tug boats. After that for a number of years I worked on small

barges, such as board barges, lumber barges, etc. I have served in the passenger business for 12 years, passenger-boat business.

Q. Is that your experience in brief?—A. In brief; yes, sir.

Q. On what passenger vessels have you served as engineer?—A. I have been on the Goodrich boats *Indiana*, *Georgia*, *Chicago*; on the steamer *Pere Marquette No. 5*; on the *Eastland*; and I am now seven years on the steamer *City of South Haven*.

Q. How long did you serve on the *Eastland*?—A. Three years, three seasons.

Q. Three years?—A. Three; yes.

Q. What license do you hold?—A. Chief engineer of ocean steamers of all kinds.

Q. What license did you have when you began?—A. First assistant engineer of a thousand tons, I think it was.

Q. What was the next?—A. First assistant of all tonnage; first assistant engineer.

Q. Then what?—A. Chief engineer of 1,000 tons, and another examination that I failed to obtain a license for unlimited tonnage; in another examination the following year for unlimited tonnage, for chief engineer of lake steamers, lake steamers and sound steamers, which I passed. I served on that license for five or six years, and then I applied for license as chief engineer of ocean steamers and was examined and got a license.

Q. So how many examinations have you passed altogether?—A. Well, I have passed—let me think a minute—six examinations.

Q. You have passed six examinations?—A. Yes, sir.

Q. In addition to the one which I understood you to say you did not pass, and which you took again?—A. That is added to it; yes, sir.

Q. And you have held four different kinds of licenses?—A. Yes; four different kinds.

Q. In giving your testimony respecting your experience with the steamer *Eastland* I will ask on behalf of the board of inquiry that you kindly keep in mind our desire to learn not only the facts which exist fully and clearly, but also such facts as your experience shows to exist as may guide the board in its purpose to offer suggestions as to changes in the law or practice which may prevent a recurrence of this deplorable accident we are now considering. How did you obtain your employment on the *Eastland*, Mr. Nack?—A. When I first went on the *Eastland* I was first assistant chief engineer. I was hired by the chief engineer of the boat.

Q. Who was he?—A. William P. Eels.

Q. And how did you become chief engineer?—A. Mr. Eels secured a better position, and I was promoted into his position through the management of the steamboat line.

Q. How long had you been on the vessel at that time?—A. Two seasons as assistant engineer.

Q. You ran her as chief engineer how long?—A. One season.

Q. One season?—A. Yes, sir.

Q. During that time had you occasion—I mean during the three years—had you occasion to note that the vessel listed?—A. Yes, sir; one time.

Q. I beg your pardon.—A. One particular day I did; she listed on us.

Q. When and where was that?—A. South Haven, Mich.

Q. What did you do at that time?—A. Well, the water was shallow in South Haven, and we could not put in our water ballast in the boat, and we waited until we got out in the lake where the water was deep enough to allow us the required draft when the water was in, and we put the water in out in the lake; but the boat careened before we got clear outside where it was deep. We filled the tanks with ballast, and it straightened her up, and she went right along.

Q. How much difference in her draft did filling the tanks make?—A. Filling the entire boat with water, it would make about 2 feet of difference, I should say.

Q. How much did she draw full?—A. Between 15 and 16 feet.

Q. Do you know what load was on board the vessel at the time she careened; and if so, what was it?—A. She had a full load, and we were allowed 3,000 people, I think. I do not remember whether it was three thousand or thirty-three hundred; I could not say; but we were loaded with a full load—to our capacity.

Q. How long did it take you to straighten her up?—A. About a half hour.

Q. Please tell the board as clearly as you can what the system of ballast was or how it was in your own way, and I want these gentlemen all to hear.

Gen. UHLER. Speak up loud, please.

The WITNESS. The ballast is admitted to the boat tanks through a manifold, and it is let into the manifold from the sea through a valve sufficiently large to supply the entire manifold and open all the valves and fill all the tanks at once if necessary to be done.

Gen. UHLER. Now, Mr. Nack, I want you to explain fully what a manifold is.

A. Well, a manifold is the receiver with an attachment of a number of valves or outlets and inlets. This receiver is supplied by or through steam and water, whichever the manifold is used for.

Secretary REDFIELD. In this case water?

A. In this case water; yes. And from this manifold the different outlets lead to different departments, to different tanks, or different lines of pipe, wherever it happens to be, wherever needed, and for this purpose, for each and every valve that leads away from the manifold is a valve, and you shut it off or open it up, and in that way we distribute the water from the manifold to different tanks in the boat.

Q. How many tanks were there?—A. There were five in length, but they were divided off in the middle, so that consequently there were 10 individual tanks.

Q. And how many separate inlets?—A. Ten separate inlets.

Q. And were there therefore 10 separate valves?—A. Ten separate valves.

Q. The manifold connects with the water outside the hull by a sea cock?—A. Sea valves; yes, sir.

Q. Or sea valve?—A. Yes, sir.

Q. And was opened from the outside?—A. Yes, sir.

Q. By turning the valve or revolving the valve?—A. Yes.

Q. In other words, it was a screw valve?—A. Yes, sir.

Q. Now, in order to fill the entire system of tanks, how many valves had to be operated?—A. If you wanted to fill the entire system all at the same time, you would have to operate 10 valves.

Q. Is that all?—A. Yes, sir.

Q. Well, wouldn't you have to open the sea cock also?—A. Oh, well, that is, coming from the sea, yes; including that, it would be 11.

Q. Eleven, including that?—A. Yes, sir.

Q. Now, how were these valves located?—A. Well, the manifold was a square box and they were located in this manifold on the top end of it so as to have quick admittance to them.

Q. Do I understand you to mean that the 10 valves were on top of the manifold?—A. Yes, sir.

Q. So placed that they were all near together?—A. Yes, sir; they were within 10 feet from one end of them to the other; I should think about that; 10 or 12 feet was the most.

Q. And in line with one another?—A. Yes, sir.

Q. Now, the pipes connecting these manifolds with each of the 10 separate tanks were necessarily—were they or were they not, I will say—of different lengths?—A. Yes, sir.

Q. What was their size?—A. I think they were 6-inch pipes.

Q. How long was the longest one?—A. Well, the longest one would have to go to the front of the boat, to No. 1 tank; that would be about 150 feet long, I should judge.

Q. And how short was the shortest one?—A. It was immediately under the manifold and it would not have to be over 3 or 4 feet long; maybe 6 feet.

Q. How did you handle that valve system when you used it?—A. Well, the first thing, we would usually see to opening the sea cock and admit the water to the manifold, then it was accessible to any valve in that manifold, and then we would open whichever valve we wanted to use—to whichever tank we wanted to use—we would open that particular valve and let the water run through that valve and into the tank.

Q. State what you did, as clearly as you can, when the vessel careened that time as to filling the tanks, giving us the order in which you worked?—A. Well, we opened two tanks at the same time. No. 5 and No. 4; No. 4 is immediately after the engine and No. 5 is the next tank aft to the engine; we opened them four valves and let the water run in.

Q. When you say No. 4, you mean the pair of tanks which together make No. 4; is that right?—A. Yes, sir.

Q. And when you say No. 5, do I understand you to mean the pair of tanks which together make No. 5?—A. Yes, sir.

Q. So am I right in supposing you to mean that when you opened No. 4 you opened the full width of the vessel?—A. Well, yes; we did; they are divided in half; starboard and port.

Q. Excuse my interruption; do I understand you opened No. 4 first?—A. Yes, sir.

Q. Then No. 5?—A. Yes, sir.

Q. Go on.—A. Gradually, as the water ran in the flat tanks, the boat straightened right up.

Q. Did you fill more than these two?—A. No, sir; no more than these two; four, in fact.

Q. Yes; two pairs?—A. Yes, sir.

Q. But you say she straightened right up when these were filled?—A. Yes, sir.

Q. Did you fill any of the tanks partly?—A. No, sir.

Q. Why not?—A. Well, we might have to put the boat down by the stern to draw the most of the water aft; that is the reason we did not put any water anywhere else.

Q. Did you ever use the tanks partly filled?—A. Why, at different times we did; yes; when we didn't have a full load of people on.

Q. Understand me correctly. I do not mean did you ever use part of the tanks.—A. Yes; I understand what you mean.

Q. I mean did you ever use any tank half filled?—A. Oh, yes; we have used it half filled.

Q. In rough water?—A. No, sir.

Q. When the vessel was listing?—A. No, sir.

Q. Why did you use the tanks half filled and under what circumstances?—A. Well, we had a system on that boat that we studied out, and found that by filling a certain tank, which was No. 3 tank, right under the boilers, that would be sufficient water to ballast that boat up with any amount of people on her, and filled No. 3 tank full, so she was not in a condition for the water to slush around in there in case that she should roll; and now, after we got out, if she should have a little list one side or the other we would use No. 4 tank just to straighten her up, and she would run that way continually. If the people shifted from one side to the other, we adjusted our tank; therefore we kept her perfectly straight all the time, using No. 3 tank as a ballast tank and No. 4 as a trimming tank.

Q. And No. 4 partly filled?—A. Yes, sir.

Q. Why did you try to avoid the water slushing around, as you have described it, in No. 3?—A. Well, the way we figured that, if you had a tank half full it would be as bad as if you didn't have any water.

Q. Why?—A. Because the water would go in the same direction as the boat would list.

Q. What would that do?—A. It would hold her down on that side until you straightened her in some way to get her to go on the other side.

Q. What is the effect of water in a tank partly filled running down to one side? You spoke of it holding down that side; just what do you mean?—A. Well, the water running to one side in the tank that is not filled will list the boat.

Q. Why?—A. There would not be anything to stop that boat from going over or to stop the water from going over to the extreme side of the ship.

Q. And what effect would that have?—A. She would list.

Q. From what cause?—A. From the water not being properly distributed and nothing there to keep it from running.

Q. Is it the weight of water that causes that trouble?—A. Yes, sir.

Q. Anything else?—A. No, sir; I don't think there is anything else.

Q. How much water would be in No. 3 tank if she were partly filled? I beg your pardon; I mean half filled.—A. Well, if she holds about 250 tons of water full, it would be half of that.

Q. Well, if with half of that, 125 tons, she listed and the water ran to one side, what in your judgment would follow?—A. She would list to that side.

Q. And, again, why?—A. The weight of the water would be on one side of it.

Q. Anything else?—A. No, sir.

Q. How far would that water have to go to get over to the side?—A. Have to go about 20 feet, almost 20 feet, anyway.

Q. Was there any other factor there other than the weight itself?—A. No, sir.

Q. Do you know what drives a water wheel?—A. Oh, yes.

Q. What?—A. A water wheel is driven by water; the water is what drives it.

Q. Yes; I am not trying to catch you; what I want to get, if you know as an engineer, I want to get the elements that were present here in this matter; I am not trying to entrap you at all. Of course, the water wheel is driven by water; but what is it in the water that drives the wheel; is it the weight of the water?—A. Yes, sir.

Q. And is it anything else?—A. Well, it is momentum and weight.

Q. Precisely. Now, in a tank half full of water, containing 125 tons, if it slushes around, as you have described it, is it or is it not a fact that there is present weight as well as momentum?—A. Weight and momentum; yes, sir.

Q. And is the momentum a factor in force?—A. Yes, sir; absolutely.

Q. Exactly; that is what I wanted to get at.

Gen. UHLER. What is the size of your main ballast Kingston on the *Eastland*?

A. The main ballast tank?

Q. No; the main ballast Kingston or sea cock.—A. I should judge about 10 inches.

Q. Ten inches?—A. I should judge that; yes, sir.

Q. And with a pipe of sufficient area to supply it?—A. To supply the manifold.

Q. And what were the sizes of the valves on the manifold?—A. Six inch.

Q. Six-inch valves?—A. Yes, sir.

Q. And what were they?—A. They were brass.

Q. No; I mean the pipe.—A. The pipes were steel pipes.

Q. How long would it take you, Mr. NACK, to fill No. 3?—A. It takes close to half an hour to fill No. 3 tank; say, 25 minutes, along there somewhere.

Q. And No. 4?—A. Well, No. 4 would not take over 10 or 12 minutes.

Q. Not over 10 or 12 minutes?—A. Yes, sir.

Q. I understood you to say that you used No. 3 for ballast and No. 4—A. For trimming.

Q. And 5 for trimming; is that correct?—A. Yes, sir.

Q. So that unless it was necessary to trim your vessel you would not use anything but No. 3 tank. Am I correct in that?—A. That is it.

Q. And the capacity of No. 3 tank was what?—A. Approximately, I figured it out, it was 250 tons—250 tons of water.

Q. And were the ballast tanks emptied every night?—A. After the people were off.

Q. Exactly; that is what I mean.—A. Well, we filled the tanks every time—we filled them every morning—before we left any passengers on that boat at all.

Q. That is what I want to get at.—A. We filled No. 3 tank, and if we needed to trim her we used No. 4 as a trim tank.

Mr. ACKERSON. Mr. Nack, was it customary for you to fill your tanks in the morning before you took passengers wherever it was practicable to do so?

A. Yes, sir.

Q. If you were alongside of a dock in which there was not sufficient water to take both your tanks filled with water and your passengers aboard, what did you do?—A. I did not get that.

Secretary REDFIELD. Read the question.

(Question read by the reporter as follows:)

If you were alongside of a dock in which there was not sufficient water to take both your tanks filled with water and your passengers aboard, what did you do?

A. Well, we have had that experience, too; we found that the first time that boat careened on us that was why, and we didn't care whether there was any water there or not afterwards; we filled our tanks anyway, and we pushed our boat with her power over the bank; wherever there was shallow water we loaded her right down on the mud.

Q. Did you do that at South Haven?—A. Yes, sir; we did it after that, after we had that first trouble.

Secretary REDFIELD. When you say you did not care whether there was water there or not, you mean sufficient water to float the vessel?

A. Yes, sir.

Q. You did not care whether there was sufficient water to float the vessel or not?—A. Yes, sir.

Mr. ACKERSON. Why did you let the water out at night?

A. We did not want to keep it in; it was not necessary; and we would start removing the water as the people would be going off—that is, take the water out of the opposite side when they were going off.

Q. It cost you coal to take that water out, didn't it?—A. Yes, sir.

Q. Why did you take it out at night and put it in in the morning?—A. Well, we didn't want to operate that boat without ballast.

Q. Why take it out at all?—A. Well, sometimes it is not necessary to ballast the boat.

Q. If you go alongside of a dock in the afternoon and you are going to take passengers the next morning, why should you take the water out at night?—A. Well, we made it a rule; there is not any reason why we could not leave it in; we just made it a rule to pump it out.

Secretary REDFIELD. I understood you to say that the taking out of the ballast listed the vessel perhaps 2 feet; is that it?

A. Yes, sir.

Q. Was it easier to land the passengers, or did it have any effect upon landing the passengers?—A. Well, from the captain's viewpoint it did; to raise it would give the gangplank a straighter lead;

she would not be so far down; that was nothing of my affairs, but I pumped them tanks each night just because I wanted the water out of her after the people were off.

Q. Did you do that on the captain's orders?—A. Yes, sir.

Mr. ACKERSON. Do you know whether the propeller on the *Eastland* is below the line of the keel?

A. Well, the blades must be, I think.

Q. The blades must be?—A. I think they are; yes, sir.

Q. Did you have difficulty in going out of the Chicago River if you were on the bottom?—A. No, sir; not a bit. It was only possible our propeller would strike the mud, but that would not harm it any; we developed the same power on that propeller even if it was dragged through this mud.

Q. What difference in the speed of the *Eastland* does it make whether her ballast tanks are full or empty?—A. Well, I never found that out accurately, but that made some difference.

Q. About how much?—A. I could not tell you that anywhere near a half mile or a mile; I could not get close enough to it; but you know she went a little bit faster without her water than she did with water.

Q. Possibly three-quarters of a mile or so?—A. Well, you can say that; yes.

Q. What speed could you make between here and South Haven?—

A. Well, our average speed throughout the season was about 20 miles an hour.

Q. You were on the vessel when she sailed between here and South Haven?—A. On the *Eastland*?

Q. Yes.—A. Yes.

Q. And what time would it leave here?—A. 9.30.

Q. 9.30?—A. Yes, sir.

Q. What time would you be back here?—A. Well, I think it was up about 9.30 in the evening when we got in; 12 hours.

Q. You did not make two trips a day?—A. No, sir; one trip.

Gen. UHLER. Mr. Nack, do you remember what the average revolutions of your engines were?

A. When we were able to hold our steam at 200 pounds, which we were allowed, it would turn about 140 or 145 revolutions a minute.

Q. About 140 or 145 revolutions a minute?—A. Yes, sir.

Q. And the diameter was what?—A. 11 feet or 10 feet by 8.

Q. With how much pitch?—A. 15 feet.

Q. And with that you say she would average practically 20 miles an hour?—A. Yes, sir; if the turns made 140 or 145. Now, then, that all depended upon whether our steam was always up or not; but up through the season I remember one time we averaged close to 20 miles throughout the season.

Q. How much coal would she carry, Mr. Nack?—A. Well, now, she would carry about 160 tons, I should judge.

Q. In wing or athwartship bunkers?—A. Athwart bunkers, and wing bunkers, too.

Q. Now, did you use the coal out of the three bunkers, Mr. Nack, or did you use the wing bunkers first or the athwartship bunkers.—A. We used the athwartship bunkers first.

Q. Cleared your athwartship bunkers first?—A. Yes; that would take her across the lake; we used the side bunkers coming back, and

that would just about stop her when we got back here, so it was never necessary to shovel the coal out of the bunkers.

Q. It was never necessary for the coal passers to shovel the coal?—A. No, sir.

Q. How much did the bunkers hold?—A. About 60 tons each.

Q. About 20 in the wing and about 40 in the athwartship bunkers?—A. Yes, sir.

Q. Did you ever have occasion during your experience on the *Eastland* to use either one of the wing bunkers to the exclusion of the others?—A. No, sir; never.

Q. Have you ever had occasion to notice what the use of a wing bunker—what effect would that have on the ship? What I mean is, either one of the wing bunkers you would use, you never had either one or the other empty; you always used them both?—A. Yes, sir.

Q. So you have no knowledge of the effect of clearing one bunker, what effect it would have on the ship?—A. Nobody ever does that; when we coal her up she is about balanced on either side.

Q. Exactly.—A. And it is kept balanced by using the coal from one side and the other.

Q. I know that myself, but I had an object in asking you.

Mr. NACK. Suppose it were necessary or desirable to use one of your wing bunkers and leave the other bunker intact, what effect in listing would that have on her—just approximately?—A. Well, she would have considerable of a list; she would list a good deal, but I could not approximately estimate how much.

Gen. UHLER. That is all.

Mr. POOL. I would like to ask Mr. Nack two or three questions. I have to leave in a few moments, and there is two or three things I would like to inquire about.

Q. I understood you to say there were 10 valves from the manifold to the tanks, and the sea valve from the water to the manifold?—A. Yes, sir.

Q. What was the size of the sea valve?—A. I think it was 10 inches.

Gen. UHLER. He testified it was 10 inches.

Mr. POOL. What was the size of the other valves?

A. Six inches.

Q. Are they the same, without regard to the size of the tanks?—A. Yes, sir.

Q. In other words, they are just the same on the large No. 3 as on the other tanks?—A. Yes, sir.

Q. Is that good practice?—A. Yes, sir.

Q. Do you consider it good practice?—A. Yes, sir.

Q. Do I understand you that when No. 3 tank was half full of water that it was sufficient to carry 3,000 passengers?—A. I never said any such thing; I said we would have her full all the time when we carried a load of people.

Q. No. 3 had to be full all the time in order to carry the 3,000 passengers?—A. Yes, sir; we used it.

Q. In trimming the vessel, did you make the trim of your own initiative?—A. Well, it was necessary on that particular boat to get together, the captain and the engineer, and figure out and decide upon a certain way of handling the people and do this trimming, so

the captain would come down and we would talk it over, and we finally decided that the No. 3 tank was the tank to fill and keep it filled.

Q. Well, supposing No. 3 tank was half full or empty, you were at the dock and you saw that your boat began to list, would you of your own initiative begin to fill No. 3 tank?—A. Yes.

Q. You would not wait—or would you wait for orders from the captain?—A. I would not wait for any orders, because that was established, how they are to handle that in case it had any kind of a list.

Q. That is an arrangement that is optional with the captain and the engineer?—A. Yes, sir.

Q. Is that a good practice, Mr. Nack?—A. We made that arrangement; we were on that boat together. I don't know what other people did; some people might have a different ruling.

Q. You possibly made that arrangement because of the difficulty you had had with the boat?—A. Yes, sir.

Q. You have been on other boats, Mr. Nack?—A. Yes, sir.

Q. Did you have the same understanding with the captains of other boats with reference to trimming her when occasion seemed necessary?—A. Well, on boats that I have been on that had ballast tanks, they were not passenger boats, and it was practically then up to the captain to give orders according to the ballast he wanted to carry.

Q. Would you as an engineer consider it necessary if you saw your boat listing—A. On what kind of a boat?

Q. On a water-ballast boat?—A. Passenger boat?

Q. Supposing you had no such arrangement with the captain?

Secretary REDFIELD. He asked you on a passenger boat.

Mr. POOL. Yes; and in a passenger boat; I am talking about passenger service now altogether.

A. All right; ask the question over again; I don't know what you want.

Q. I say, if you were on a passenger boat would you consider it necessary to have an understanding with the captain before you trimmed the ship in case of a bad list?—A. Well, if I saw the ship listing I would not probably run up there and ask him; I would not probably call him up on the tube, or anything; I would fill it up on my own accord; undoubtedly so.

Q. That is the point I wanted to get clear. On the other hand, it is right probably for him to instruct you to fill the ballast tanks?—A. Yes, sir; but I would understand the condition of the boat, and I would take that upon myself.

Mr. POOL. That is all. I would like to be excused, Mr. Secretary, if I may.

Secretary REDFIELD. Certainly.

Q. Were there baffle plates on this boat?—A. Yes, sir.

Q. How were they constructed?—A. On the *Eastland* I think they were fastened to every frame, the deck beam, every tank top cover fastened to every beam; they had holes dug through them so any man could go through from one of these rooms, these slush plates, he could get from one end of the tank to the other, but they had slush plates on every frame.

Q. How large were the openings in these plates?—A. Oh, I think they were about 16 inches in diameter.

Mr. ACKERSON. Did you ever have any trouble with the Kingston valve or the sea valve clogging up in the river?

A. No, sir.

Q. How would you clean it out in case it did clog up?—A. Well, that is very easy to do. If anything gets in front of that sea-cock strainer you can open your valve and close it and the momentum or the action of the water will shove that away from the strainer, the natural action of the water shutting it off so quickly, stopping the inlet, it will naturally float it away from there.

Q. Are there any steam connections there to blow it out?—A. It is not necessary to have them on there.

Q. Have they got them?—A. They haven't them on the *Eastland*, they don't use them on anything only where they have ice to get into the sea cock.

Q. How did you determine whether your ballast tanks were full in case you were using them?—A. Well our ballast tanks, as well as, we will say, the whole length of the boat, and also on each side, starboard and port, had pipes on it, we called them vent pipes, the displacement of the air would come up through the vent pipes; now when she was full of water there was no more air coming out of that pipe and consequently it must be full or there would be some air coming out.

Q. Did you sound the tanks?—A. Oh, yes; we did that every time we filled them to know they were full.

Q. Somebody was detailed to sound these tanks?—A. Yes, sir; they were reported to us every half hour.

Q. During your entire voyage?—A. Yes, sir; through the entire voyage; and we had a blackboard in the engine room where it was written on it how much water was in every tank; we always wrote on it how much there was.

Q. Who did that?—A. The watchman, I think it was.

Q. Is he in the engineer's department?—A. No, sir; in the master's department.

Q. It was your practice when you sailed out of Chicago on the *Eastland* always to have the ballast tanks filled before the passengers came aboard?—A. Yes, sir.

Q. Did you ever attempt it otherwise?—A. Attempt what?

Q. To take the passengers aboard without your No. 3 ballast tank filled?—A. No, sir.

Q. Have you any idea as to what the probable list of that vessel would be had you attempted that?—A. Attempted to go out without it?

Q. Attempted to load your passengers at the dock without the ballast tanks filled?—A. Well, I don't know; I could not state that, what the probable list would be; I am not capable of saying that anywhere near correctly.

Q. I understood you tried it once at South Haven?—A. Oh, yes; if you want to take it from that viewpoint I could tell you that, about how long she listed.

Q. Yes; what would you say in your opinion was the amount that vessel listed then?—A. Well, I can not come close enough to it by degrees, that is a sure thing.

Q. No; perhaps 15°?—A. I would not estimate it at all by a degree.

Q. It was a good list?—A. It was a fairly good list.

Gen. UHLER. Ask him on the side of the ship how much list there was.

Mr. ACKERSON. You can ask him that.

The WITNESS. I can tell this; the boat listed far enough to take water in the gangways anyway.

Mr. ACKERSON. She did?

A. Yes; but we happened to have the gangways closed; we always closed them up before we put any people on to eliminate any possibility of water coming in.

Q. Now, when you took passengers aboard at South Haven and this vessel listed sufficiently to put your gangways at the water's edge, what, in your opinion, would have happened had the gangways not been tight?—A. Well, the boat would have filled up with water; the boat would have filled up with water.

Q. In your opinion, could anything have saved it?—A. Not after it came in; not after she was listed far enough to get in the full side of that gangway; you could not get near it.

Mr. ACKERSON. I have nothing else.

Gen. UHLER. That is all unless Mr. Collins may have something.

Mr. COLLINS. I would like to ask, Mr. Nack, whether the arrangement of your manifold was such that you could pump out of one side and fill on the other side at the same time?

A. No, sir.

Q. Each one was separate?—A. There was no dividing valve on her manifold whatever.

Q. This time you spoke of—when she listed at South Haven—how many people were on it; do you know?—A. As I said before, I do not really remember; it did not come under the head of my department, to know what people we are supposed to carry, or our load that is being carried; but I know we had a full load; but I am not sure at that time we were allowed 3,000 people—I think that we were, but I would not state it definitely.

Q. Did she have a full load?—A. We had a full load; yes, sir.

Q. Now, in addition to your water ballast, did this boat have any tanks or fresh water for sanitary purposes?—A. Well, the first year the boat ran she used one of the water-ballast tanks for fresh-water tanks, but that was eliminated the following season by making some tanks and putting in on top of the tank top a fresh-water tank; and the tank which was originally a ballast tank and that was used for fresh water that season then was used for a ballast tank the same as with any of the other tanks.

Q. How large are these tanks?—A. They are not all the same size; they are different sizes. Oh, you mean the fresh-water tank?

Q. The fresh-water tank you spoke of having put in?—A. They are 6 inches in diameter and they must be 18 or 20 feet long, and there are four of them; they must hold in the neighborhood of 4,000 gallons of water.

Q. Were these tanks full all the time while the boat was in port, or what was the practice of handling them?—A. Fresh-water tanks?

Q. Yes.—A. Understand me, now, they are not ballast tanks.

Q. No; I understand they are fresh-water tanks.—A. We kept them pretty solid; we might run short of water and would not have any water for cooking purposes, etc., and we kept them pretty well filled; we would fill them all the way across—pump water into them.

Q. What was your method of trimming this No. 4 tank that you spoke of—you said you did your trimming with No. 4 tank; how did you know when she was listing?—A. We had a pendulum in the middle of the boat, in the engine room, and any time she would move this pendulum would move with her and tell us just how much of a list she had.

Q. Yes.—A. And if we had No. 3 tank full of water, we would use No. 4 tank to trim if she listed over; I would run a little water in starboard or port side.

Q. How would you operate the valve—would you take soundings in your No. 4 tank?—A. Yes; we took soundings right along.

Q. Did you have your cover off?—A. I had the cover off of my own manifold so I could see how much water was in the tank from the engine room, and besides that they sounded her every half hour.

Q. In using that water ballast was it your general practice leaving Chicago to have the valve open?—A. I don't know just exactly what you mean.

Q. I mean, for instance, you say you would have to open your sea cock before you put any water into your tanks.—A. Yes, sir.

Q. Then, if you wanted to shoot some water into No. 3 tank you would open the valve to No. 3 tank?—A. Yes, sir.

Q. When you got through would you close the valve both to the sea cock and the tank or just close up the tank valve and leave the sea cock open?—A. Leave the sea cock open; when I wanted to close the tank valve I left the sea cock open.

Q. I mean when you were through filling.—A. Oh, then we would close the sea cock.

Q. Close the sea cocks?—A. Yes, sir.

Q. With regard to this boat's gangways and closing them, were they in halves or quarters or all one piece, which was it?—A. I really don't know whether the passenger gangway was in four quarters or halves; I think that they were in halves when I was on there; but what would be the forward gangways were in quarters.

Q. Was this after gangway closed the most of the time while you were running along on the lake?—A. Yes, sir.

Q. Both top and bottom parts?—A. Yes, sir; upper holes and chinks and everything was closed up at that time.

Q. What kind of an ash ejector has that boat got?—A. It is a regular ash ejector, the type I could not state, any certain type of it.

Q. You shot it out with the pumps?—A. Shot it out with the displacement of air and water, yes.

Q. How big a pipe was that?—A. Six inch.

Q. Where was it, outside?—A. Outside, toward the side of the pumps.

Q. I mean about where, below the main deck?—A. It was below the main deck.

Q. Close to the water edge?—A. Well, with the boat loaded with people it was very close to the water edge; I don't think it was any more than an inch.

Q. Was there any means in the fireroom of closing up the ash gun so in case she was running in?—A. Yes, sir.

Q. What means was there?—A. Well, every one of these ash guns has a hopper where you throw the ashes in to displace them.

Q. Yes.—A. Now, that hopper has a cover on it, and it has a faced surface, with a gasket and clamp screws, and clamped down tight, which makes it water-tight.

Q. Any siphons going through the side or the outside shafts?—A. Yes, sir; there are some siphons going through the side.

Q. Do you know if this boat had siphons in each compartment?—A. I don't know, but I think she did have.

Q. In every water bottom?—A. Oh, no; not in any of the water bottoms.

Q. That is what I mean.—A. Oh, I think there were siphons in different compartments, but not in the water tanks.

Q. None in the water tanks?—A. I think so, but I am not sure about that.

Q. Were any of the deadlights permanently sealed during the time you were on that boat, any of the top deadlights?—A. Yes, sir.

Q. They were permanently sealed?—A. Yes, sir; we sealed them up and jammed up the threads on the bolts so they could not take them off.

Q. And left the glass in the deadlights?—A. Yes, sir.

Q. What was the object of sealing those up—what was the occasion of it?—A. So there would not be a chance for anybody to open them and leave them open and us not know anything about it.

Q. Had you had any trouble with them at any time?—A. Yes; they came very close to the water sometimes; and we closed them up permanently to eliminate a possibility of one of them being left open.

Q. Now, in the event one of these was open or broken or anything of that kind, and the water should flow in or over your gangways, where would it flow to?—A. It would go on the main deck first and then into the engine room and into the fireroom.

Q. Would it go into the main deck?—A. Yes, sir.

Q. Didn't you have any deadlights below your main deck?—A. Yes, sir; there were some; I think 15 on each side.

Q. Those are the ones I refer to. Now, in the event of the water coming into any of those where would it go to?—A. Right down in the bottom of the boat.

Q. In what you call your cargo?—A. Yes, sir.

Mr. COLLINS. That is all I want.

Mr. VAN PATTEN. Mr. Nack, did she have steel shutters for these deadlights?

A. Steel shutters?

Q. Yes.—A. She did; glass and cast iron.

Mr. VAN PATTEN. That is all I want.

General UHLER. Did they have a blind light to protect the shutter?

A. Yes, sir.

Q. Did they have a protecting shutter over the glass?—A. Now, I think they did; I would not state definitely, but I think they have a protecting shutter on the inside over the glass, iron—cast iron.

Q. You are not sure of that?—A. I am almost sure, but I would not say; it is some time ago since I have been there.

Mr. ACKERSON. There is a line of air ports that are also below the gangway's lowest edge, is that right?

A. Lower than the bottom of the gangway?

Q. Yes.—A. Yes, sir.

Q. And if the gangway was under water then the air ports must necessarily have been under water before the gangway?—A. Yes, sir.

Mr. COLLINS. I would like to ask Mr. Nack, did you ever have all her water-ballast tanks full?

A. No, sir; it has never been necessary.

Q. You never filled them?—A. No, sir; it has never been necessary.

Q. About what was the size of the largest amount of ballast you ever had aboard?—A. While I was chief engineer all we filled was No. 3 tank; I figured that would be about 250 tons, maybe a little more, and if she listed any we would put water in No. 4, and keep her straight so she would not have too much list; that would probably take 15 or 20 ton altogether.

Q. How long would it take to pump the tank out; you say it took about 30 minutes to fill it; how long would it take to pump it out?—A. We would pump it out about as fast as we could fill it.

Q. What kind of a pump did you have?—A. We had a reciprocating duplex pump.

Q. Duplex pump?—A. Yes, sir.

Q. Do you remember the size of it?—A. I think it was 18 by 24.

Q. That was about it?—A. That is, I don't remember the exact dimensions of it.

Q. At any time did you have any trouble with the valves coming off the stems of your manifold valves?—A. Yes, sir.

Q. Your valves would come off the stems?—A. Yes, sir; we found the cause of that, too, you know.

Q. What was the cause?—A. When the tank was very near pumped out, you know, there is not much water coming through there to steady this valve, and the vibration of displacement of air and water comes through and hits these valves as it goes into the pump and it causes them to shatter out, it will gradually wear them through, and we always made it our business to look at these things as soon as they made a different sound, and quite a few times we found them quite worn, etc., and we took them out.

Q. Now, in the event this valve should come off the stem at any time, would it be possible to operate your valve system, providing you were operating that system?—A. The valve would remain seated.

Q. You would get water in any event?—A. Yes, sir; but you see one valve come off, if it came off at any time and we wanted to use this manifold we would take this top off the valve and put in a piece of block, a 2 by 4 block, we had down there, and hold it there before we could pump or anything, but then we could do anything we wanted to.

Q. I mean before you made an examination. Now, I have seen lots of vessels with stem valves, where the valve comes off the stem, you open the valve and it will admit no steam. Of course, with that steamer you have water, and the passage of the same through the pipe would be the same, would it not?—A. Yes.

Q. At any time did you ever have any difficulty with debris from the river flowing through your sea cocks, little chips of wood and dirt, and getting on your water pump?—A. Yes; we had a little difficulty there; it is not coming in from the sea cock at all, it is coming in from the tank. When the boat was first built there was a lot of wooden stuff used in these ballast tanks for drilling purposes, and when we pump this all out sometimes a piece of 2 by 4 would come right up through the valve, and then you could not close the valve, and we would take the top off and take that out and put it back on again, but that didn't come through the sea cock.

Mr. ACKERSON. If you were instructed to make the maximum speed with the vessel possible, would you have in mind to disregard the use of the ballast tanks?

A. No.

Q. You would not?—A. No; never.

Mr. O'HARA. Mr. Nack, what years were you connected with the steamer *Eastland*?

A. 1904, 1905, and 1906.

Q. 1904, 1905, and 1906?—A. Yes, sir.

Q. Had you ever before that been connected with a boat, a passenger boat carrying water ballast?—A. I don't remember. Let me think. I don't think I had been, not a passenger boat carrying water ballast before that.

Q. The system of water ballast is not usual. Is it usual in vessels engaged in the passenger traffic?—A. Well, I do not know that; I could not state whether it is or not. Now, the *Columbus* has got water ballast; I don't know why they don't put it in more, or why they do; I really do not know; I could not tell that.

Q. Would you give your opinion of water ballast as used in a vessel engaged in the passenger traffic?—A. Well, I think it would be right to have the water ballast in any passenger vessel; I would rather have the water ballast than no water ballast.

Q. You have no criticism, then, to find with that system of ballast?—A. No criticism, no, sir.

Q. You said, Mr. Nack, that you conferred with the captain?—A. Yes, sir.

Q. For what reason?—A. For the filling of the tanks, the filling of the ballast tanks.

Q. I understood you to say, Mr. Nack, that you have found the *Eastland* somewhat cranky, was a little cranky, yes, sir.

Q. That was the reason of your conference with the captain?—A. Yes, sir.

Q. Did you also confer with the owner of the boat?—A. I did not know the owner myself; I do not know whether the captain did or not.

Q. Your conference was explicitly with the captain?—A. Yes, sir.

Q. Now, at that time, Mr. Nack, did you make a report to any Government official, to any inspector, as to the crankiness of the *Eastland*?—A. I did not make any myself.

Q. Did you suggest to the captain that he should make some report to the Government inspectors?—A. Did I suggest it?

Q. Yes.—A. No, sir.

Q. Did the thought ever occur to you?—A. No; it did not.

Q. Did the thought ever occur to you that the Government had any right to be informed as to facts that might be a menace to passengers?—A. No; it did not then. I did not qualify myself to be capable of dictating to anybody in reference to the construction of a ship, because I am not a builder.

Q. Then, Mr. Nack, I understand your position to be this, that you feel no responsibility to anyone other than the captain in command of the vessel?—A. Ask me that question again.

(Question read as follows:)

Then, Mr. Nack, I understand your position to be this, that you feel no responsibility to anyone other than the captain in command of the vessel?

A. The captain and the manager, I should judge.

Q. You feel no responsibility to bring to the attention of the Government officials any defect in the vessel that you might have reported to the captain without action being taken?—A. No. When I go aboard a boat I go there to run that boat; I don't make it a study to find any fault with the boat, unless it is an old wooden trap of some kind that you can find fault with.

Q. Then, if you became convinced that a vessel of which you were the chief engineer had a serious defect imperiling the lives of passengers, you would not consider it your duty or you would not bring it to the attention of the Government inspectors?—A. I would bring it to the attention of the captain.

Q. If the captain did not act after a reasonable period of time?—

A. He would act, undoubtedly.

Q. But you would leave it to the captain and not go any further?—

A. (No answer.)

Q. Now, Mr. Nack, you said, if I understood you correctly, and you will correct me if my understanding is wrong, that the *Eastland*, several times during the period of your connection with her, struck the bottom of the harbor at South Haven?—A. She struck it a number of times; yes, sir.

Q. How can you as chief engineer tell when a vessel strikes the bottom?—A. The best way I can tell is when the propeller strikes in the mud.

Q. When the propeller strikes the mud what do you as chief engineer do?—A. Well, I do not do anything only to obey the signals coming from the pilot house.

Q. Do you make a report to the captain?—A. Oh, yes, sir; he knows that any way, he feels that himself.

Q. Is there any danger to the safety of a vessel by the vessel striking the bottom of the harbor?—A. No; I don't think there is. No; I do not think there is.

Q. Mr. Nack, you took an examination before receiving a license as an engineer?—A. I do not know what you asked me; what is that?

Q. The Government requires you to undergo an examination?—A. Yes, sir.

Q. Before receiving a license as engineer?—A. Yes, sir.

Q. How long ago did you take that examination?—A. Why, I have had six examinations altogether, all told.

Q. Now, outside of taking the examination or of undertaking the Governmental test, are you required to make any report to Government officials?—A. Yes, sir.

Q. Or does your connection with the Government cease?—A. Yes, sir; anything that happens; anything that I think is not right, I know is not, I must make a report to the Government inspectors or lose my license.

Q. That is your understanding of the law?—A. Of the law; yes, sir.

Q. Now, do you understand that if a boat lists badly for any reason that you are also required to make that report to Government inspectors?—A. I have never heard anything to that effect. You get the book of rules, and I never saw anything in the book of those rules and I do not know why it should be necessary why I should make a report on that. It never happened to me any way that I had any serious trouble to that effect. But anything with the machinery or ballast of the boat that any man sees, he must report.

Q. You made the statement during this examination that you thought no responsibility to report any defect in the vessel to any one other than the captain. Do you now desire to amend that statement?—A. I do not take any responsibility as far as the hull is concerned; any defect in the hull comes under the head of the captain's department.

Q. Any defect in the engine?—A. Oh, yes, sir; everything is reported, absolutely.

Q. Reported to whom?—A. To the inspectors.

Q. How many times, Mr. Nack, during your connection with the *Eastland* did you make a report to the Government inspectors?—A. I was first assistant on that boat two years. I do not know whether the chief engineer had to make any report; we never had an accident on that boat; we never found any defects which would require us to report them. When I was chief engineer I did not have any occasion to make any reports, for I had no trouble or no accidents and found no defects.

Q. You never made any report to the Government inspectors?—A. I made reports to Government inspectors on other boats, but not on that particular boat, because I was not on that boat.

Q. Is the chief engineer required to report to the Government inspectors?

The SECRETARY: I can for all I know. I do not think the chief engineer being in supreme command of the vessel has authority to do anything on that boat, I think. Mr. O'Hara: The clogging, we consider that to be your duty; if it is not, I could not say it.

Q. Then, Mr. Nack, you are responsible for the clogging of the water tank?—A. The clogging of the water tank is not my department. No; I would not say that, but that is the responsibility of the department. The clogging of the water tank or any other part of the construction of the ship and the water tank is not the responsibility of the captain's department, don't you think? I can make a report to him if I should see that I can take care of it.

Q. Now, Mr. Nack, was you convinced by your own observation that it was necessary for the safety of the *Eastland* that

No. 3 tank always be filled, you consulted with the captain?—A. Yes, sir.

Q. After this conference with the captain a standing order was issued that tank No. 3 always to be filled?—A. Always to be filled.

Q. Was a report of that made to the Government inspector?—A. Well, not that I have made any; I have not made any. I do not know.

Q. Did you ever, Mr. Nack, tell the Government inspector, in writing or orally, that the *Eastland* was unsafe if tank No. 3 was not filled?—A. Did I ever write to—

Q. Yes.—A. No; I never did.

Q. Did you tell him orally?—A. Tell who?

Q. Did you ever tell him by word of mouth?—A. No, sir; no, sir.

Q. Then the Government was left in entire ignorance of your conviction of the unsafety of the *Eastland*, if tank No. 3 was not filled?—A. I never considered her unsafe. I never considered that boat unsafe.

Q. I don't wish to put you in a wrong light, Mr. Nack, or misunderstand you; let us see whether I do understand you.—A. You did not ask me whether I considered the boat safe or not.

Q. I understood during your previous examination you stated that you had consulted with the captain and the captain and you had decided it to be the part of wisdom always to keep tank No. 3 filled?—A. Yes, sir.

Q. And that the *Eastland* could not safely carry, I think you mentioned, 3,000 passengers if tank No. 3 were not filled?—A. Why, I would not never take any chance of that kind; I never tried to without any water in it with 3,000 people on. At that time when that boat careened I was first assistant engineer on the boat; I had been in charge of them tanks, and when they were running them I used to be the man that filled them.

Q. During the years that you were chief engineer on the *Eastland*, Mr. Nack, did any Government inspector ask you concerning the water tanks?—A. Well, now, I do not know how I can answer that question; I was only chief engineer one year on that boat.

Q. The one year that you were chief engineer, Mr. Nack?—A. Why, during that time I don't remember whether they did; I could not say; I could not state. It was a small thing for me to take care of that ship, but of all the people she carried I don't know. I did not find any reason to consult anybody for information.

Q. Mr. Nack, how many times during the year that you were chief engineer of the *Eastland* did you meet anyone connected with the inspectors' service of the Federal Government?—A. Did I meet them?

Q. Yes; personally meet them.—A. If I am not mistaken, they were down on the boat—I don't remember—but they were counting the people; if they were counting the people there or not, they were down on the boat every Sunday and almost every day, I think.

Q. Inspecting the engines?—A. They were giving orders according to their own laws, I think, etc.; cautioned us a number of times about being very careful, etc.; that is all I can remember.

Q. Did they ever question you?—A. I do not know; I do not know whether I ever was questioned. I know I have been examined almost every time we laid the boat.

Q. Can you recall now a single time during the year that you were chief engineer on the *Eastland* that any Government inspector made inquiries concerning the water tanks?—A. I can remember one time definitely where Mr. Peck was on the boat and asked me about the tanks.

Q. Can you recollect any of that conversation?—A. No; I think it was only a very short one. I think he said, "Mr. Nack, have you got your tanks trimmed," or "filled up?" I said, "Yes." That is when I was chief, before that I don't remember. He may have been talking to the chief that I was working for.

Q. Did Mr. Peck ask you what your form of the water tanks was?—A. He was not familiar with the boat as much as I was.

Q. Now, wait; let us not presume anything; did he ask you?—A. I believe he asked me and I told him I had No. 3 tank filled.

Q. Did he, for instance, ask you if tank No. 3 was filled?—A. I don't remember whether he asked me that or not; it is a long time ago, I know.

Q. And you did not consider the examination at that time of very much importance?—A. No, sir; I did not myself, personally.

Q. And yet there was an understanding between you and the captain that tank No. 3 was to be filled for the safety of the vessel?—A. By experience in the study of the boat we finally decided upon that.

Q. You testified, Mr. Nack, that the water was pumped out of these tanks at night?—A. Yes, sir.

Q. Did you ever tell the Government inspector of that custom?—A. I never told him.

Q. Did any Government inspector ask you?—A. I tell you, I can not answer those questions because it is too deep for me; I do not see why it should be necessary for me to ask anybody if I can pump the water out of my boat, if I know it ought to be pumped out; if I have to call in an inspector for that in the middle of the night, I do not think it is necessary.

Q. Let me remind you, Mr. Nack, that the Government, as I understand from your answer to me, had the power to take away your engineer's license if you failed to report the defects?—A. Yes, sir.

Q. In the engine?—A. Yes, sir.

Q. Or in any department, or any part of the machinery of the vessel under your control?—A. Yes, sir.

Q. I am simply endeavoring to ascertain, Mr. Nack, whether you performed your full duty.—A. I surely did.

Q. In not making a report, a full report regarding the water tanks?—A. I considered that my full duty, yes, sir; to handle that water ballast as we saw fit and best for the convenience of everybody, people and all.

Q. Do I understand, Mr. Nack, that during the time when you were chief engineer, from your previous testimony, that the vessel listed very badly in the South Haven Harbor?—A. She did one time—one time to my knowledge—I was on the boat.

Q. What did you do at that time, on that occasion?—A. On that particular occasion we filled the two aft tanks, that was our first experience with that particular boat, we filled Nos. 4 and 5 and straightened her up, I think it took about half an hour to straighten

Q. You say "we filled," you mean it was filled under your direction?—A. Also the captain; he came down to the engine room.

Q. The captain came down to the engine room and consulted with you and gave you the order?—A. Yes, sir.

Q. What year was that?—A. I think it was 1904.

Q. Do you remember the date?—A. I don't remember the date, I think it was on July 4 to 9, one of those dates, 4 or 9, I am mixed up on that.

Q. There were approximately how many passengers on the vessel?—A. I think she had 3,000 on or more, I do not know, I do not remember so much about her passenger-carrying capacity.

Q. Under the law, or under your understanding of the law, are you required to make that report to the Government inspectors in writing?—A. Yes, sir.

Q. Subsequent to the 4th of July, 1904, did you make a report in writing to the Government inspectors of this incident on the 4th of July?—A. I did not, no; I was not the chief engineer.

Q. Who was the chief engineer at that time?—A. A man by the name of William P. Eles.

Q. Is he now living, is he now living?—A. I have not heard of him since that; I think he is living, I have not heard anything to the contrary. I wish to state to you that whenever I was chief engineer and had any accident, it was only when I made reports in writing, it only happened once that is was necessary.

Q. Let me ask you, Mr. Nack, as the chief engineer of the vessel did you have anything to do with the steering or steering apparatus?—A. With the steering apparatus, with the engine, he takes care of the engine.

The SECRETARY. There is a distinction there between the steering; the engine, that is a part of the steering apparatus, that is all the chief has to do with it, the rest of it—

The WITNESS. Just the engine.

The SECRETARY. Just the engine.

Mr. O'HARA. Suppose if the steering engine—that is what you call it—

The WITNESS. The steering engine—

Q. Suppose the steering engine is out of commission, what does the chief engineer of a vessel do?—A. If the steering engine is out of commission he would have to report that to the inspector himself; that would be my duty, because it is my engine and my department; anything pertaining to the steam machinery would be my duty to report, which I would do immediately.

Q. What is your opinion, Mr. Nack, if you desire to state it, of the Federal inspection system on Lake Michigan?—A. Well, I am not qualified to make any criticism, because I do not consider myself able to do so; I did not make any of the laws myself, and I do not feel justified in making any criticism or making any suggestions whatever.

Q. Have you any suggestion to offer this board concerning possible improvements in the service?—A. I could not do it. I could not do that. I have been held to strict discipline in my position as chief engineer, and that was always a plenty for me; I have been held under the strict rules and discipline, and it has always kept me busy

to follow the rules. I do not know why I should make any suggestion; I could not.

Q. Follow whose rules?—A. The rules set down by the Government officers on steamships.

Q. May I ask, Mr. Nack, if in this system of discipline in which you have been trained, it is regarded as offensive for a subordinate to call the attention of anyone other than his immediate superior to what may appear to him to be a vital defect in a vessel?—A. No; I could not answer that question very well.

Q. Let me put it this way: Have you been brought up to regard it as a bad business to go over anybody's head?—A. No; I have not been brought up that way, not a bit; no.

Q. Suppose your chief engineer—during the year that you were chief engineer on the *Eastland*, suppose that the assistant had gone over your head and gone over the head of the captain and personally reported something to the owner, would you have considered it a correct procedure?—A. No; I would not.

Q. Would it have made you mad?—A. No; I don't think it would, if there was something I overlooked and did not see; it was his duty; I think it was his duty to do that.

Mr. O'HARA. I am much obliged, Mr. Nack; that is all.

Mr. UHLER. Mr. Nack, during your incumbency of the position of first assistant engineer of the *Eastland* and that of chief engineer on the same ship, did anything ever happen to the boilers or the machinery or to any part of that ship that in your estimation was sufficiently grave to justify a report to the local inspectors?

A. No, sir; no, sir.

Q. Suppose there had been; what would have been your procedure?—A. As chief engineer?

Q. Yes.—A. The first thing I would have done I would have written a letter and sent it to the inspector and stated exactly what had happened and what defect I found in my machinery.

Q. What is the length of the season of navigation for that steamer, Mr. Nack, the steamer *Eastland*?—A. Well, if we can judge that from the date that school closes to Labor Day, that is usually about 6 or 8 weeks, 10 weeks, something like that—60 or 70 days.

Q. During that time while you were chief engineer of the *Eastland* how often were the Government inspectors aboard of your vessel to reinspect her?—A. I am sure they did it every month; they were down there every Sunday that I know of.

Q. And outside of that annual inspection about how many reinspections were given the vessel?—A. I could not say that definitely; I think it was three or four, anyway.

Q. In addition to the annual inspection?—A. In addition to the annual inspection.

Q. Three or four inspections during the time that the ship operated?—A. Yes, sir.

Q. In addition to the annual inspection?—A. Yes, sir.

Q. At that time and at the time that the inspectors were aboard of the vessel, if you had known of any defect, or if there was anything about the structure or operation or navigation of the vessel that in your opinion jeopardized the lives of the passengers or anyone of

the crew, would you have told the inspectors about it?—A. Yes, sir; take them right to the scene and tell them.

Q. Would you also have written an official letter to the local inspectors?—A. Yes, sir.

Q. In the absence of any rule or regulation on that subject, would you have felt it a duty to have done the same thing?—A. Yes, sir.

Mr. BISHOP. Mr. Nack, I do not understand why it is the duty of the Government inspector to board your ship in sailing the Great Lakes each time she touches port, to inquire of you whether or not your water ballast is on board.

The WITNESS. I do not know—put that question to me again.

Q. As far as you know it is not the duty of an inspector to climb aboard your ship each time that you get into port and to ask you if your water ballast is on?—A. No, sir.

Q. Or if you have them filled and distributed properly?—A. Yes, sir.

Q. You understand their duty is to make an annual inspection?—A. Yes, sir; and reinspection.

Q. And reinspection?—A. Yes, sir.

Q. In answer to Lieut. Gov. O'Hara's question, you said that you would consider this boat safe even though she struck the bottom and rested on the bottom?—A. Yes, sir.

Q. You meant by that, didn't you, that provided she was properly ballasted?—A. Oh, yes, sir; she would have to be ballasted; yes, sir.

Q. You would consider it to be necessary for her to have the No. 3 tank full, at least if there were 2,400 or 2,500 people distributed about the boat, if she struck the bottom?—A. I would have it full; yes, sir; yes, sir, I would.

Q. As careful a man as I think you to be, do you care to take the chance of her being a seaworthy boat unless you have water ballast on board?—A. I would consider that.

Q. Before you took any chances?—A. Yes, sir.

Mr. STEFFEN. Do you operate the valves going into the tanks yourself, or would you order some subordinate to do that?

The WITNESS. When I was chief engineer of that boat I did not trust anybody with that ballast or the valves; I took care of those every minute.

Q. Would you consider it a breach of your duty to ask the oiler to do it, for example?—A. No, sir; I would not trust him.

Q. Now, with reference to the position of these 10 valves, approximately how close together are they?—A. Some of them I should judge about a foot to 18 inches apart.

Q. Is there any markings on them which indicate which tank they run to?—A. Yes, sir; No. 4 starboard and No. 4 port, etc.

Q. Do you think it is possible that you could make a mistake as to the opening of a wrong valve; for example, suppose you wanted to fill the port tank, would it be possible for you to turn the starboard valve, on account of the location of those valves?—A. I should answer that question like this: For a man that does not take any interest in the thing, like a chief engineer, this man is liable to make a mistake any time; that is the reason I done it myself; I would not take any chances of anybody doing it.

Q. Under existing conditions—for instance, the boat was listed badly and you became alarmed, under those conditions would it be possible to turn the wrong valve?—A. I never would.

Q. Does it take a man of any skill or more than the average intelligence to operate those valves?—A. It does; not to the operation of the valves, but the judgment and necessary ability to operate them properly. A man could make a mistake in valves on the boat if he was an excited man, and get into trouble, as well as he could a manifold valve.

Mr. SULLIVAN. Were you aboard this vessel on an occasion when it was considered necessary to turn the hose on the passengers to drive them to a certain side of the boat?

A. No, sir; I never heard of it.

Q. Never heard of that incident occurring on the *Eastland*?—A. No, sir; I never saw that, never heard of such a thing.

Q. What degree of list on this boat would cause her to ship water through the gangways or deadlights?—A. Well, as I stated before, I can not add to that question by degrees of listing; I could say this, that when the gangways go under then the water comes into the gangway, of course. But what degree of listing that is I could not tell you.

Q. You do not know what degree?—A. Could not say by degrees.

Q. You would not want to express an opinion?—A. No.

Mr. GILLETTE. Mr. Nack, was there any plugs furnished for the aft fire lead of that vessel when the lines were hauled in and you were under way; were there any plugs lying alongside there that could be used to fill up that fire lead?

Mr. UHLER. Chocks.

The WITNESS. We had doors, but they were always closed tight; the scupper holes that went out to starboard, we had plugs for them.

The SECRETARY. What was the vessel's freeboard with the ballast tanks in?

A. With the ballast tanks filled amidships, I think she must have been about 4 or 5 feet to the aft; right at the social-hall gangway I think it was about 3 feet; then it increased as it went up forward—it was higher forward.

The SECRETARY. Any further questions of Mr. Nack?

Mr. VAN PATTEN. Did I understand you to say that the bottom of the gangway was 3 feet out of water, 3 feet above the water?

A. I went to look at that; it must be about 2 or 3 feet; I went to look at that side of it.

Q. Did she have more than one gangway for loading passengers?—A. Yes, sir.

Q. One each side?—A. Yes, sir; she had some more port that we used to put them on board.

Q. Was there any reason why they could not use the forward gangway at all times for loading passengers?—A. Yes, sir; they could use it all the time; we did use it all the time when I was on the boat.

Q. Was there a stairway from that gangway, immediately inside the gangway?—A. Yes, sir; forward. The reason we did not load them aft is, we wanted to keep this gangway herself closed and chocked while they were loading; that is the reason we loaded her forward always.

Mr. J. L. ACKERSON. If the vessel were alongside the dock here, for example, and there were 2,000 or 2,500 passengers on board and the vessel started to take a list and your ballast tanks are empty,

—what would you do? Your ballast tanks are empty and you have 2,500 passengers on board; your vessel starts to take a list, takes a slight list; what would you do?

The WITNESS. It is almost too late to do anything; you are too late, in my estimation, to do anything.

Q. Would you attempt to do anything?—A. All I could do then in a case of that kind would be to tell them to get off the boat or something like that.

Q. You would not attempt to fill your tanks?—A. You could not if she listed that far.

Q. As soon as you noticed the list?—A. I have never given her a chance to list an inch; my eye used to watch her like a cat.

Q. This is a supposititious question, and I was wondering what you would do under those circumstances, you yourself.—A. I do not know as I could do much, but what would come to mind in a second; I would do something; I would try to run the water in, but I do not see how you can run water up hill.

Q. You would try to run water in?—A. You could try to, but you would not get it in.

Q. If you started running water in do you think it would help you any?—A. If you could get water to run in the proper tank or the side—

Q. You think it would help?—A. Oh, yes, sir; it would help to straighten her right up.

Q. It would help if the tank were filled, but do you think it would help if the tank were only partly filled?—A. Any amount of water in a list like that would help right away—help to straighten her.

Q. You think it would?—A. Yes, sir; at the dock particularly, because you have to watch and hold her any way.

Q. Did you ever try it?—A. I have never been subjected to one of those conditions.

Q. On the *Eastland* aft, under the counter, there is a line of air ports, I think; is that right?—A. Line of air what?

Q. Air ports?

Mr. UHLER. Dead lights.

A. Yes, sir; I think there are some air lights; yes, sir; port lights.

Mr. VAN PATTEN. While you were on the vessel were there any orders that those should be closed on the *Eastland*? Were you under orders to do that?

A. There were orders issued to that effect, and to overcome the possibility of any of them ever being left open I know I went down there, and I drove nuts on that cover tight, riveted the threads through the ends, so that nobody could take them off unless they broke them off.

Q. You are on the *South Haven* now, are you?—A. Yes, sir.

Q. There is a line of air ports aft, about 2 feet from the water line?—A. Yes, sir.

Q. Are orders given that they should always be closed?—A. No; on the *City of South Haven* hers are not as close to the water as the *Eastland's* are.

Q. They are not more than 2 feet, I believe, on the *South Haven*?—A. They are less than 2 feet.

Q. Are orders given that at times they should be closed?—A. On the *City of South Haven*?

Q. Yes.—A. I always look after them myself. Whenever we see the water is rough we close them; when it is not rough we leave them open.

Q. You do?—A. Yes, sir; the *City of South Haven* is a stiff boat; it is not necessary.

Q. You think that distance of 2 feet—A. She would not go down to the port holes; she would not list that far. When it is rough we close them up tight; when it is nice and quiet we get a little air through them and open them up.

The SECRETARY. You are excused. I thank you very much, indeed.

I will read as a portion of the record a communication received by me to-day:

CORNELL UNIVERSITY,  
Ithaca, N. Y., July 26, 1915.

DEPARTMENT OF COMMERCE,  
Washington, D. C.

Re *Eastland* disaster.

GENTLEMEN: Since reading the account of the catastrophe, I have made diligent search among my records for certain data, but not finding a scrap, it is evident that all were given to the party referred to, and at the time stated below.

Probably 13 or 14 years ago a member of the Jenks Shipbuilding Co., of Port Huron, Mich., came to me regarding the most suitable form for a twin-screw vessel, capable of carrying 1,000 passengers and a number of tons—which I do not remember—of fruit in baskets or crates at a speed of 20 or 21 miles per hour. Some limitations of dimensions were, I believe, stated. I think the draft was limited to 10 or 12 feet.

I went into the matter and recommended a form which my experience led me to believe would fulfill the speed and draft conditions, and at the same time would have a metacentric height (GM) of about 18 inches in fully laden condition. He remained in Ithaca and drew out the form (lines) but no other of the plans. The general arrangement or design of the construction or internal arrangements was a matter I took no interest in, as he consulted me on the form only. If my memory serves me right, during the process of the work, he went back to Port Huron at least twice, and on each occasion returned with some proposed changes; the nature of these I do not recollect; but I do remember that on the second occasion I objected to going any further in the matter unless a finality was reached and a definite statement of the conditions made. As I remember, he was huffy at my attitude, packed up the "lines" which he had drawn out, and leaving, said he could attend to the rest himself. I heard nothing more from him, except when he wrote me regarding some detail of the brackets supporting the outboard shafting.

Under the circumstances I took no further interest in the matter, but understood that the firm went on with the design and construction; noted an account of the launch, in a trade magazine, of a boat which I took to be the one we had had under discussion; I never heard from them regarding as how she performed as to speed or anything else. I have never seen the *Eastland*; in fact have not been on the Great Lakes since, except a hurried trip to Cleveland five years ago. Nor do I know that the form I furnished was adopted in her case; but I expect it was.

From what I have read, and more particularly from the pictures I have seen in the newspapers, I am positive that the boat as she is to-day is at least the height of one deck greater in depth than that for which the form was selected; this together with the increase from 1,000 to 2,500 passengers, if I am correct, would affect the metacentric height materially.

If the *Eastland* was as dangerous as the catastrophe would seem to indicate, I am completely at a loss to understand why she did not turn turtle earlier in her 12-years' life. I have read, however, in some accounts which are given that she had been completely remodeled; if this is so, a possible reason for the calamity may be furnished.

One bad feature which I notice in the press cuts, is the location of the gangways in the sides; they are at least one deck too low, thereby reducing the "range of stability," an all important point in vessels engaged in a service like the *Eastland*. Had I been consulted in this I would have condemned them, as well as other points which I have observed.

In your search for possible causes of the disaster, contributory or otherwise, permit me to draw your attention to one. In one of the accounts I have read that while the passengers were embarking the vessel had a list, and some one gave orders to run water in the double bottom in an endeavor to right her; this was an absolutely wrong thing to do, nothing being more prejudicial to stability than free water, reducing as it does the height of metacenter and the possibility of wiping out any positive stability the vessel may have had.

I have written this long detail because I think that all information bearing on the possible causes of the calamity should be in your hands. I should be very glad if you could give me some reliable details as to dimensions and other features—if possible, blue prints—so as to refresh my memory on a great many points which at this distant date, from the time I speak of, are very hazy and dim. I might as a consequence be in a position to furnish you with more definite details.

Yours, faithfully,

GEO. R. McDERMOTT.

The SECRETARY. Also the following communication for the sake of the record:

TREASURY DEPARTMENT,  
OFFICE OF THE COLLECTOR, U. S. CUSTOMS SERVICE,  
Chicago, Ill., July 24, 1915.

The SECRETARY OF THE TREASURY,  
Washington, D. C.

SIR: I wish to inform you of the unfortunate catastrophe that occurred at this port to-day at 7.35 a. m. to the excursion steamer *Eastland*.

The Western Electric Co. were giving their employees an annual excursion to Michigan City, Ind., and they chartered four vessels for this purpose, one of which was the steamer *Eastland*. She commenced to load at 6.30 this morning at her dock on the Chicago River under the supervision of Deputy Collector McCreary and two navigation inspectors under the Department of Commerce, L. A. Lobdell and H. G. Oakley. The count was made jointly, and according to the count of the inspectors there were 2,500 people on board, the number permitted by her certificate of inspection. The two navigation inspectors, Lobdell and Oakley, counted at the same gangway. The count was absolutely correct, and there can be no controversy on that point.

Inspector Lobdell remained on board the vessel all night in order that he might be on duty early in the morning so as to see that no one came on board without being counted. He remained on board to accompany the vessel to Michigan City, Ind., in this district, for the purpose of counting the passengers on the return trip, and was on board when she went down, and swam ashore.

Deputy Collector McCreary, as soon as the count showed that 2,500 passengers were on the boat, ordered the gangplank pulled in, which was done, notwithstanding that there were several hundred people on the dock attempting to go on board. When this was done the vessel threw off her lines and started to pull from the dock when she listed to port and continued to list gradually until the port gangways were entirely submerged, and then she went over and sank very quickly, throwing some passengers into the river and others going down with the boat, her starboard side being above water.

The loss of life is estimated at this time at between 500 and 1,000 lives, mostly women and children.

I am greatly gratified to be able to report that the officers from this office were present and counted the passengers on board and did everything that was required, so that the disaster was not due to the overcrowding of the vessel, or to any negligence on the part of officers connected with this office.

Respectfully,

RIVERS McNEILL,  
Collector of Customs.

Secretary REDFIELD. Also report upon the steamer *Eastland*:

[Bureau of Navigation. File 42837.]

OFFICE OF SPECIAL AGENT, TREASURY DEPARTMENT,  
Chicago, Ill., October 30, 1906.

The SECRETARY OF THE TREASURY.

SIR: Having been assigned to investigate the alleged overcrowding of certain passenger steamers engaged in excursions at this port, I have the honor to report:

"Section 4464 of the Revised Statutes of the United States provides that 'the inspectors shall state in every certificate of inspection granted to steamers carrying passengers, other than ferryboats, the number of passengers of each class that any such steamer has accommodations for, and can carry with prudence and safety.' Section 4466 provides: 'If any passenger steamer engages in excursions the inspectors shall issue to such steamer a special permit in writing for the occasion, in which shall be stated the additional number of passengers that may be carried, and the number and kind of life-saving appliances that shall be provided for the safety of such additional passengers; and they shall also, in their discretion, limit the route and distance for such excursion.'

The certificate of inspection granted to the steamship *Eastland* permits her to carry 3,000 excursion passengers between this port and South Haven, Mich. On August 5, 1906, said steamship had on board 2,530 passengers, that being the greatest number carried at any one time during my investigation. A personal investigation shows that on this date said passengers, in many instances, were unable to find seats or move around with any reasonable degree of comfort. The steamship company keeps at certain parts of said boat large quantities of small seats, which in a great many cases passengers were unable to obtain by reason of their inability to move from the position originally taken and were compelled to stand during the entire journey, which occupies about some four hours.

Inasmuch as the official steamboat inspectors have seen fit to grant said boat a license to carry the aforesaid number of passengers, and at no time during my investigation has that number of passengers been exceeded, I am not prepared to say that the number of passengers allowed by said certificate is too great for the safety of said passengers; but I am of the opinion that prudence and a reasonable degree of comfort require that the number permitted to be carried be reduced.

Respectfully,

GEO. E. FOULKES,  
Special Agent.

Secretary REDFIELD. There is also a report here, a similar report of the same tenor, of the steamship *Columbus*. That has no bearing on this. Inspector Mansfield.

IRA B. MANSFIELD, called as a witness by the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Have you been subpoenaed, Inspector Mansfield, to appear before the Federal grand jury?—A. Not yet; no, sir.

Q. Will you state your name, address, and age to the stenographer, please.—A. Ira B. Mansfield; 64 years of age; 529 Federal Building and 726 Sheridan Road.

Q. What is your occupation, Mr. Mansfield?—A. Inspector of hulls, Chicago.

Q. And will you state, beginning at your first employment, what your work has been.—A. As an inspector?

Q. No; before you were an inspector. Beginning from the beginning.—A. Well, I began very young as a sailor, I guess they call it.

Q. You may state that, please.—A. About 1863 I began sailing on small vessels, sailing vessels, and continued in sailing small vessels until about 1880. In the meantime I was also master of tugs in Ohio. Later on, in about 1880 or 1881, I became master of a steamer, and at different periods from that time on until I became a member of this board I was on steamers and schooners, mostly steamers.

Q. What licenses did you have before you entered the service?—A. Masters license, Chicago, Duluth, and Buffalo.

Q. How did you get that license?—A. I got it in 1876 in Cleveland, Ohio, through a verbal examination by Capt. Stannard.

Q. How many examinations did you personally take?—A. I personally only took the one.

Q. Took one?—A. No; I will correct that by saying that I took two. The first was a first-class pilot's examination, and given a first-class pilot's license, and later on took a master pilot's license.

Q. And you were a first-class pilot and master when you entered the Government service?—A. Yes, sir; and had been for years; since 1876.

Q. Did I understand that you were first appointed assistant inspector?—A. No, sir.

Q. What was your first position?—A. Local inspector.

Q. Local inspector?—A. Local inspector of hulls.

Q. And how did you get that position?—A. By appointment.

Q. After an examination?—A. Yes, sir. I was appointed temporarily before examined.

Q. By whom conducted?—A. By whom?

Q. Yes.—A. By the examiners in Chicago.

Q. What examiners?—A. Civil service.

Q. Civil-service examiners?—A. Oh, yes, sir.

Q. In other words, if I understand you correctly, it was a temporary appointment?—A. For a two or three months' period; yes, sir.

Q. And then, having taken the civil-service examination, you received a permanent appointment?—A. Yes, sir.

Q. When was that?—A. In 1903.

Q. And have you acted as local inspector ever since?—A. Yes, sir.

Q. In the same office?—A. Yes, sir.

Q. So that you have been 12 years in the same post?—A. Yes, sir.

Q. Now, I wish you would state as clearly as you can your experience, if any, with the steamer *Eastland*. Whether you were ever called upon to inspect her; and if so, when and what was done. Tell us all you know about the vessel.—A. This board made the first annual inspection of the steamer *Eastland* in 1904. We granted her, in 1903, the first excursion permit she received, at which time we allowed her 2,800 people, as I remember. In 1904, 1905, and 1906 we granted her her annual inspections, and at each time we made a thorough investigation and inspection of the ship and all her appurtenances, equipment, etc. In 1904, 1905, and 1906 that was.

Gen. UHLER. Go right ahead and tell what you did, how many people you gave her, and everything.

The WITNESS. Well, we allowed her at the first go-off 2,800 people, if my memory serves me rightly, and later on she was increased to 3,000 people, and she carried 3,000 people during that year a great

many times, as I remember it, from 2,800 to 3,000 people, varying at different trips, but in a great many cases she had a full complement. I never have known of any trouble with the *Eastland*, with the exception of one trip, in 1904, that they left the water out of her ballast tanks to get over the bar in South Haven, and they could naturally not put it in until she had crossed the bar, and she had at that time 2,270 passengers, by count of the tickets. There may have been a deadhead or two, but the actual count of tickets was 2,270. I counted the tickets myself after she had kind of cut up this dido.

Secretary REDFIELD. Two thousand two hundred and seventy?

The WITNESS. Yes, sir; I counted the tickets in the purser's office. And the matter at that time was because, as the master had been advised by us, that at no time should she allow, if my memory serves me, 600 people on the roof. And there were men put at each end of the vessel to watch those gangways or stairways here, and they were instructed when they would get 600 people up there to close the shutters down and refuse more people to go up. But at this time it seems that through some hook or crook they allowed approximately, as near as I could judge, 1,200 people up there—I was aboard of the vessel there myself so I had an opportunity, a good opportunity, to judge the people, and that is what I figured it—and she listed first to port slightly, and later on she listed to starboard. I don't know at just what degree, but I think she went to about a twenty angle, and in fact I was a little bit scared or afraid myself; well, I didn't know what the result might be; that she might go farther, but she stopped at that point, and by getting her water into her hold immediately she straightened up and came across the lake without any further trouble. That is the only time I saw any danger or any trouble with the *Eastland*.

Q. Were you on board of her that day?—A. Yes.

Q. Why were you there?—A. I was there because I had been across the lake to look after the passengers going over.

Q. Were you there to count the passengers coming back?—A. I didn't have to count them, because when I got there I found there was an inspector of customs counting the passengers. An inspector of the board was there, and was counting.

Q. Was it by the inspector of the board that you knew or counted that she had 2,270?—A. No, sir; by count of the figures after we got outside; count of the tickets.

Q. Now, how many times have you crossed the lake on the *Eastland*?—A. Well, I presume in those four years she was here, possibly eight or ten times, Mr. Secretary.

Q. When you made an examination of her hull, what did you do with regards the water tanks, ballast tanks?—A. Well, those usually are left more to the boiler inspector. He takes care of that part down there, although I have been down there several times, but never through the tanks, you see. But I have seen them and noticed the arrangement of the tanks, but couldn't describe them, you see. That remains more particularly with Mr. Peck, my partner in the office.

Q. You never have been into the tanks?—A. No, sir; I never have been into the tanks. I never thought it was necessary to go in there.

Q. Was any complaint ever made to you by any one concerning the *Eastland*, and if so, what?—A. Never any complaint of her re-

garding the listing or that sort of thing, but they complained several times about not having plenty of sitting room; that is, chairs, etc. That was the only complaint about her, in regard to her.

Q. How many passengers was it that you said you allowed her on inspection here?—A. Two thousand eight hundred the first year, and I think after that it was 3,000, and later on she was reduced to 2,800 again.

Q. On what basis did you reckon 2,800?—A. On the deck space, and by the tonnage she was allowed, boatage, by law, and we had figured the deck space down and found that she had plenty of room for that—plenty of room.

Q. Was that when the ship was new?—A. Yes, sir; she came out in 1903, you know.

Q. Yes. Did you give any consideration to the stability of the ship at that time?—A. Well, we considered, after we had seen this episode of the listing, that the ship required her ballast in her at all times, and we so informed the captain and engineers; also Mr. Blacker, the president of the company.

Q. How did you inform them of that?—A. By letter.

Q. Have you a copy of that letter?—A. Yes, sir; I believe so, in my office.

Q. Will you produce a copy of that letter?—A. I will.

Secretary REDFIELD. Send to the office for it now, and get it.

Q. Can you tell the board how many times you have made a personal examination of the *Eastland*?—A. Why, that would be a hard matter. We made the regular annular inspections, and we also made intermittent inspections, according to our laws and rules.

Q. And how many?—A. Well, probably, we made the intermittent inspections three or four times a year; about four, I think, in addition to the annual inspection.

Q. How many times altogether can you say you have examined the *Eastland*?—A. Oh, with the annual inspections, I should say 15 to 18 times, at least, and many other visits to her, don't you know, when we would be near her and go aboard her and look her equipment over. While not our duty in a way, it was our duty to keep in touch with her all the time.

Q. Have any persons come to you verbally and asked you whether the vessel was safe or not?—A. Not to my recollection, sir.

Q. And you have no written communications complaining that the vessel was unsafe?—A. No, sir; I have none that I know of.

Q. Did you not know that the vessel was known to be a cranky ship?—A. Well, perhaps, yes; after I saw what she did by not being provided with the ballast that she was built to have in her bottom-water bottom.

Q. Did you or did you not, from your experience as a master of vessels on the lake, think that the condition you then saw was one which showed that the vessel was a dangerous vessel?—A. No, sir.

Q. Did you or did you not think that the condition you then saw showed that the vessel needed special care in handling?—A. Yes, sir.

Q. In what sense do you say that she needed special care?—A. Keeping the ballast in her tanks.

Q. Do you consider that the *Eastland* was a safe vessel without ballast in her tanks?—A. Perhaps not safe with the full complement

of 3,000 people, but properly handled and properly manipulated she would be perfectly safe to go anywhere in any kind of weather.

Q. When you say properly handled, do you include among the proper handling the filling of her ballast tanks?—A. Yes, sir; more especially.

Q. I beg your pardon?—A. Most especially.

Q. Most especially. Would you regard her as a safe vessel for 2,500 people without the tanks full?—A. Well, I never saw her without the water in her tanks, except the one time that I mentioned, and I don't know how she would act without water in her tanks.

Q. Were you not personally acquainted with her engineer and officers?—A. Yes, sir.

Q. Did you not confer with them as to their way of handling the ship?—A. At the time of this listing affair we took it up with both the captain and engineer and instructed them in the future to see that the water was in her tanks at all times—all the time.

Q. All the time?—A. Yes, sir.

Q. Then, do I understand you that the action of the officers of the ship, which has been testified to here, namely, emptying the tanks at night, was contrary to instructions that you had given to them?—A. If they emptied them. I never knew that they emptied them.

Q. Well, it has been testified here that they were emptied every night. Now, if that was done, was it contrary to instruction you had given them?—A. No, sir; not according to our instructions that she should keep the water at all times when she was carrying passengers.

Q. Your instructions?—A. But laying alone, or at night and perfectly light, she was perfectly safe without any water in her tanks at all.

Q. Now, did you mean, or did you understand your orders to mean, that she was to have her tanks full before she commenced to load passengers?—A. Yes, sir; a tank. No. 3 tank was a large tank across the middle of her body, and with that tank full she was all right to go anywhere and everywhere in all kinds of weather. The other tanks, the smaller tanks, were forward and aft of this No. 3 tank, and it was for trimming her more than anything else that they were used for.

Q. When did you last pass upon the *Eastland* and inspect her?—A. That would be in the spring of 1906.

Q. Have you given her no examination since?—A. Dry-dock examinations only.

Q. When?—A. Last year, in 1914, and this year, in 1915.

Q. When did you inspect her in dry dock?—A. At South Chicago this year and the North Dock last year.

Q. What was being done to her in the dry dock?—A. Repairing wheels and shafts.

Q. Did the vessel have bilge keels?—A. No, sir.

Q. What did you do with her at the dock examination?—A. We examined the ship's hull outside all over, and found her without blemish on the hull, but that the shafts were in bad shape, and also the wheels.

Secretary REDFIELD. Do you want to ask any questions [addressing Mr. Ackerson]?

Mr. ACKERSON. I would like to.

Q. If you should form an opinion in the examination of the *Eastland* that the gangway ports were not sufficiently high from the water, what would you do?—A. If I were to form an opinion?

Q. Yes; if you came to that opinion upon an examination of the vessel, what would you do?—A. I would say that they were low.

Q. What?—A. They were low; they were too low. If they had not been closed before she started to loading the passengers they should be closed, the after gangway particularly.

Q. Is that the only thing you would do? Would you make any suggestions to anybody that those ports be closed, plated over, and not to be used, and others cut elsewhere?—A. You are referring to the gangways now, are you?

Q. Yes; the gangway port.—A. The gangways are one thing and the ports are another thing. The deadlines are under the port.

Q. The gangway port I was speaking about.—A. Yes; I would suggest that the lower half be closed up, yes; for the aft gangway.

Q. You would suggest that it be plated there?—A. Well, for absolute safety, perhaps; yes; in all kinds of weather.

Q. To whom would you suggest it?—A. To the owners, the captain, and owners and managers.

Q. Would he be compelled to do it?—A. I think he would, or we would not allow her to proceed any further.

Q. You have that authority?—A. Yes.

Q. Has it ever been exercised?—A. I don't think it has.

Q. So far as you know, do the owners of vessels like the *Eastland* have any stability calculations or information on file? Have you ever seen any?—A. Not to my knowledge.

Q. Have you ever asked for any?—A. No, sir.

Mr. ACKERSON. That is all.

Secretary REDFIELD. Have you any questions, Mr. O'Hara?

Mr. O'HARA. How long have you been in the Government service?

The WITNESS. Since 1903.

Q. Were you in the Government service in 1906?—A. Yes, sir.

Q. In what capacity?—A. Inspector; hull inspector.

Q. Did you inspect the steamer *Eastland* during the year 1906?—A. Yes, sir.

Q. As hull inspector, are you in position to give judgment as to the carrying capacity of a vessel?—A. I think so.

Q. And in 1906 it was your judgment that the *Eastland* was capable of carrying how many passengers?—A. I think, if it was in 1906—I don't remember just—that at one time we allowed her 3,300 people, from her dock measurement and the equipment.

Q. And was it your judgment that that figure was correct?—A. Yes, sir.

Q. During the year 1906 were you acquainted with George E. Foulkes?—A. I don't remember the name.

Q. During the year 1906 were you informed that a special agent from the Treasury Department at Washington had been sent to Chicago to report on the *Eastland*?—A. Not as my memory serves me now; no, sir.

Q. Did you ever hear?—A. Had I ever heard that, you say?

Q. Had you ever heard that such an inspector was sent here from Washington?—A. No, sir; not to my best knowledge and remembrance.

Q. During the year 1906 were you ever on the *Eastland* when she was crowded?—A. I can't say that I was ever on her during that year any special time that she had her complement of passengers on board. I don't remember that I did.

Q. Had you ever heard that during the year 1906 the *Eastland* was carrying an insufficient number of chairs?—A. I think we had some complaint; I don't remember the year. It may have been in that year, but I don't remember that year; but we at once took that matter up with the master, and the general manager, as I remember it now, I think orally, or by letter, I don't just remember—I think by letter.

Q. If a vessel is licensed to carry 3,300 passengers or 3,000 passengers, and carries an insufficient number of chairs so that many of the passengers are required to stand the entire trip, would you consider the rating of 3,000 excessive?

A. No, sir; not as to her carrying capacity, but for accommodations, yes. If she didn't have the accommodations to seat those people, why she was at fault—that is, the ship was not at fault, but the management was at fault.

Q. And that didn't come under your jurisdiction?—A. I don't remember what there was on that, I am sure. It may have—

Q. Now here is what I am endeavoring to find out: If you had any official responsibility for the care of these passengers after they were once on the vessel?—A. If we had any?

Q. Yes, sir.—A. I presume we had, but that seating apparatus, whatever there may have been chairs and settees, they may have been on her at this time when she went over, and on the next time when she went over there would not be as many as on the previous trip.

Q. Now, what particular Government official or inspector had that knowledge?—A. Well, I presume that would be up to us as inspectors.

Secretary REDFIELD. This letter here, Governor, will cover that whole thing.

Mr. O'HARA. Permit me, Mr. Secretary, to make this statement, then. There has been made a part of the record a copy of a letter sent by George E. Foulkes to the Secretary of the Treasury, under date of October 30, 1906. This letter officially reports to the Secretary of the Treasury that on August 5, 1906, the steamer *Eastland* carried 2,530 passengers. That many of these passengers were unable to find seats or to move around with any reasonable degree of comfort. That they were unable, many of them, unable to move from the position originally taken, and were compelled to stand during the entire journey. The concluding paragraph is practically a recommendation that the licensed carrying capacity of the *Eastland* be reduced.

The official files which I have before me here show that on the 3d day of November, 1906, this report was sent to the Commissioner of Navigation of the Department of Commerce by F. H. Bowen, chief clerk, and that on the 6th day of November, 1906, it was referred by T. B. Sanders, acting commissioner, to the Supervising Inspector General of Steam Vessels. I should like to have called, Mr. Secretary, the gentleman to whom this was referred on the 6th day of November, 1906, and to find out what action was taken on this report.

This report practically condemns the *Eastland* as a safe vessel or a convenient vessel to carry 2,530 passengers. I would suggest, Mr. Secretary, that if it is possible for this board of inquiry, that the then Secretary of the Treasury, to whom that report was made, be called in person. There we have evidence, Mr. Secretary, of a report going to one of the highest members of the Government in 1906, a Government report.

Secretary REDFIELD. But I think, Gov. O'Hara, you put a weight upon it which is hardly consistent with its tenor. "I am not prepared to say," the report reads, "that the number of passengers allowed by said certificate is too great for the safety of said passengers." However, the concluding part reads: "But I am of the opinion that prudence and a reasonable degree of comfort require that the number permitted to be carried be reduced."

Mr. O'HARA. Yes; the sentence above that: "Inasmuch as the official steamboat inspectors have seen fit to grant said boat a license"—that is a very courteous suggestion or a very courteously framed recommendation.

Secretary REDFIELD. Well, it speaks for itself. I will ask that Gen. Uhler be instructed to find from the files of the Treasury Department or of the service the action, if any, taken by the Department of the Treasury pursuant to that letter.

Gen. UHLER. I will.

Mr. O'HARA. Now, may I ask the witness?

Q. You were in the service in 1907?—A. Yes, sir.

Q. In what capacity?—A. As local inspector of hulls.

Q. The same capacity in which you served during the year 1906?—A. Yes, sir.

Q. What communications, if any, did you receive from your superior officers concerning the steamer *Eastland*?—A. Not anything that I know of.

Q. You received no communications?—A. Not to my knowledge.

Q. Had such a communication been sent you, would it now be in the files of your office?—A. I think it would. For your information, I will say that the steamer *Eastland* left Chicago in 1906, the fall of 1906, and was not here at all in 1907. We had nothing at all to do with it. We knew nothing of her.

Q. And not in your jurisdiction?—A. She passed to Grand Haven and from Grand Haven to Cleveland that year.

Q. And you heard nothing of her that year?—A. Not to my knowledge; no, sir.

Q. Were any inquiries made of you by your fellow inspectors that year?—A. No, sir.

Q. Did you receive any communications from Washington, from the Department of Commerce or from the Treasury Department, during that year?—A. Not that I know of; 1907?

Q. 1907.—A. Not that I know of.

Q. From November 6, 1906, until January 1, 1907, did you receive any communications from Washington concerning the steamer *Eastland*?—A. Not as I recollect. If we had any communication from Washington it would be in our files. It would be a matter of record in our files.

Mr. O'HARA. Thank you, sir.

Secretary REDFIELD. I will read for the record the letter to which the witness has testified, which was sent to the owners of the steamer *Eastland* July 18, 1904.

DEPARTMENT OF COMMERCE AND LABOR,  
OFFICE OF LOCAL INSPECTORS, STEAMBOAT-INSPECTION SERVICE,  
Chicago, Ill., July 18, 1904.

Mr. R. A. BLACKER,  
President Michigan Steamship Co., Chicago, Ill.

SIR: In view of the occurrence on the steamer *Eastland* yesterday evening leaving South Haven, this board, one member of which made the trip on the boat, has arrived at the conclusion that the cause of the boat's listing in the way she did is that the water ballast was not properly confined. We have arrived at this conclusion partly from our knowledge of such matters and partly from conversation with the captain and engineer of the steamer. We feel absolutely satisfied that if no more persons are carried on her upper deck than our measurements permit her to carry, viz, 500 people, the approximate weight of which number would not be over 37½ tons, that it would be impossible to list the boat in the way that she was listed Sunday night.

We think possibly the water may leak from one side of the No. 3 compartment to the other through a faulty partition. The bulkhead may have leaks in it or may have openings left in it purposely to permit the water to run from one side to the other. In either case, it should not be. When water is put into one side or the other of the compartments it should be contained there and not permitted to run through from one side to the other.

We recommend that water be admitted at one or the other side of this compartment and the other side be opened up, the manhole plates taken off, and some one get inside and see if any water passed through the bulkhead. We are satisfied that our conclusions in this matter are correct, because after the water bottom had been properly filled last night the boat straightened up and there was no more trouble from the ship listing on the way across.

This condition must absolutely be remedied at once.

We also know from actual observation that the steamer has not adequate seating capacity for the number of passengers allowed. We therefore suggest that you have furnished at least 500 camp stools or other suitable means of seating passengers.

The matter of the trouble last night has been brought to the attention of this board for an official investigation by several of the persons who went across on her, and we therefore feel that we are absolutely compelled to take cognizance of the conditions.

We trust that this matter will receive such earnest attention on the part of the officers and owners of the *Eastland* that we shall not be compelled to cut down the number of passengers allowed or cause her to discontinue her service. We expect to receive satisfactory assurance of your immediate attention to this matter or we feel that we shall be compelled to put the steamer out of commission until such time as changes have been made to render a recurrence of this listing impossible.

Respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

Secretary REDFIELD. I ask if that is a copy of your signature?

The WITNESS. Yes, sir.

Q. You wrote that letter?—A. Yes, sir.

Secretary REDFIELD. The letter is found on pages 388 and 389 of letter book marked on back January 4, 1904—August 31, 1904.

To it I read the response:

CHICAGO, July 22, 1904.

MESSRS. IRA B. MANSFIELD and ROY L. PECK,  
United States Steamboat Inspectors, Chicago, Ill.

GENTLEMEN: Immediately upon receipt of your favor of the 18th I took up with Capt. Dority and Engineer Eales the matter of the water ballast on steamer *Eastland*, and it will have their careful attention. Ballast and bulk-

head partitions were found water tight. In carrying out your suggestion I have issued the following order:

"Capt. DORITY, Steamer 'Eastland.'"

"DEAR SIR: In future you will allow not to exceed 500 passengers on the upper deck of steamer *Eastland*, including children. See that this order is strictly enforced.

"Yours, truly,

"R. R. BLACKER,  
"President and General Manager."

I feel under great obligations to you for the information contained in your letter and, in addition to carrying out your orders I shall at all times be pleased to carry out any of your suggestions looking to the safety and comfort of our passengers.

Yours, truly,

R. R. BLACKER,  
President and General Manager.

Secretary REDFIELD. This is on the letterhead of the Michigan Steamship Co.

Gov. O'HARA. What is the date, Mr. Secretary?

Secretary REDFIELD. I will give you that, excuse me. July 22, 1904. Just four days after the other letter.

Q. I hand you a paper and ask you if it is the certificate signed by yourself and Peck as inspectors allowing the steamer *Eastland* 375 regular and 2,925 excursion passengers, a total of 3,300?—A. Yes, sir; that is my signature.

Q. That is your signature, is it?—A. Yes, sir.

Q. And this is marked, I will say for the record, "Canceled July 26, 1904," and a new permit issued, the original date being June 24, 1904. So that this was in use one month and two days?—A. Yes, sir.

Q. Now, I ask you if this is the certificate entitled, "Permit to carry excursion party," which allows the steamer *Eastland* to carry a total of 2,800 persons?—A. Yes, sir.

Q. And that is signed by you?—A. Yes, sir; and Mr. Peck.

Q. Any by Mr. Peck?—A. Yes, sir.

Q. Why was this change made?—A. Well, I can tell you in a little time, Mr. Secretary, why it was made.

Q. Take your time.—A. The manager of the *Eastland*, the steamship *Eastland*, and the manager, also, of the steamship the *City of South Haven* were very impulsive and, of course, doing a lot of advertising, and with the rest we noticed in the paper that they were advertising that while they were allowed by the Government inspectors to carry a total of 3,300 people, still they said to the public: "We will never carry over 3,000 people." We took it for granted that if they were so liberal and didn't care to carry that many people we said we would arrange it so you can not carry any more people than 3,000 people. That was why the change was made at that time.

Q. Why did you understand that the steamboat people deliberately advertised that they would carry 300 people less than they were permitted to carry?—A. Oh, a little matter of rivalry. I don't know how else they would put it. Of course they wanted to do a little boasting in the papers, through the papers.

Q. They would make more money by carrying a full 3,300. wouldn't they?—A. I presume they would.

Q. Did you ever hear of a case of that kind before, of a steamer voluntarily agreeing to carry less than the officers lawfully allowed?—A. Never.

Q. When this letter was received, which has been made a portion of the record, stating that the tanks had been found water-tight, did you make an examination to see that they were so tight?—A. I believe Mr. Peck made that examination, it being in his department, in a way.

Q. Isn't it a fact, Mr. Mansfield, that you received a number of written complaints to the effect that that vessel was overcrowded?—

A. I think we did receive such complaints: overcrowded, but never overloaded. That overcrowding came from the fact that we had up here, now, a scarcity of seating apparatus—chairs and stools, etc.

Secretary REDFIELD. I find this letter, Mr. Mansfield, dated—

DEPARTMENT OF COMMERCE AND LABOR.  
STEAMBOAT-INSPECTION SERVICE.  
Washington, August 2, 1904.

United States local inspectors, Chicago, Ill.

GENTLEMEN: I beg to acknowledge receipt of your very complete report in reply to letter of Mr. Edward C. Nichols in regard to steamer *Eastland*, and there seems to be only one thing the department would like you to explain in regard to your suggestion in letter to Mr. Blacker, president Michigan Steamship Co., of July 18—

That is the letter I have read to you.

The WITNESS. Yes.

Secretary REDFIELD. And referring also to his reply [continuing reading]—

recommending that some one get inside compartment No. 3 and see if any water passes through bulkhead. Why this was not made a matter of your own personal inspection instead of getting the report of the steamboat people? Please explain this as soon as possible.

By direction of the Supervising Inspector General.

Respectfully,

W. F. GATCHELL, Chief Clerk.

Secretary REDFIELD. What was the explanation?

The WITNESS. I don't remember the wording of the letter exactly, but I am quite sure that Mr. Peck made the investigation and inspection in the hold, and went into those tanks, and I think perhaps you will find a reply to that letter in the copy book here somewhere. I am not sure.

Secretary REDFIELD. I wish you would look for that and verify that, Gen. Uhler.

Q. Mr. Mansfield, when you were on the *Eastland*, when she was running, or at any time when you were on board, did you ever observe how high the rear gangways were above the water?—A. Did I ever observe?

Q. Yes.—A. In actual inches and feet I couldn't say, but they were very low. I think with her complement of people aboard of her the after gangways would be probably inside of 12 inches from the water, the bottom of the gangways; the lower half closed.

Q. When you were on board of her and she listed in South Haven Harbor, did you go down to see whether the water came over that or not?—A. Yes, sir; I did, personally.

Q. And did it come over?—A. No, sir, but I immediately ordered the gangways all shut on that side, and they also shut the gangways on the port side, which was the high side. They shut both of them.

Q. Why did you order them shut?—A. Because we were afraid she might list farther and get some water on the deck, and consequently in the hold.

Q. If the water came into those gangways, was the construction of that vessel such that it would flow into the hold?—A. It could have flowed into the hold if it got into amidships of the vessel.

Q. Was there any combing or other structure that prevented it going into the hold if it got into the vessel?—A. There was about a 6-inch combing, as I remember now, around the engine room.

Q. How near did it come to that gangway when you ordered it closed?—A. I presume it was about 6 inches from the gangway, as I remember.

Q. About 6 inches?—A. About 6 inches.

Q. Wasn't it nearer than that?—A. I don't think so. I don't think it got up to the gangway.

Q. Now, as a matter of fact, did it or did it not come up on the deck at that time—the water?—A. No, sir; not in my presence.

Q. Well, at what time was your presence had? Were you there at the moment of listing, or were you there after it?—A. The moment of listing was the time I started down there.

Q. Yes; but how long did it take you to get down?—A. Not more than five minutes. Of course, there was some people on there; I had to get through the crowd; it was about five minutes.

Q. During those five minutes had she recovered somewhat?—A. I think so. I think she had.

Q. So that the water might have been higher before you got there?—A. I think so; possibly.

Q. Anyway, you thought the situation one that required you to close that gangway?—A. I did; yes, sir.

Q. Now, is that all you did on that subject, on the subject of that gangway?—A. We closed both gangways at that particular time, I know; and, in fact, on both sides of the boat.

Q. Did you in writing call the attention of the owners or the officers of the boat to the fact that that gangway had on one occasion been dangerously near the water?—A. I don't think we have any record to show that.

Q. Did you do it?—A. I think we did it orally.

Q. Do you know for sure?—A. Well, I am quite positive we talked it all over with Mr. Blacker and the general manager at that time, who was Mr. Cochran, and the engineer and captain.

Q. Did you give any instructions in writing or orally to the effect that that condition was one which would require those gangways to be kept closed?—A. I think we did.

Q. Can you produce a copy of those instructions?—A. No, sir; I can't. I think it was all done orally, sir.

Q. Well, were those instructions obeyed, to your knowledge?—A. To the best of my knowledge; yes.

Q. Well, how much knowledge have you of the matter?—A. Well, knowledge of the fact that many times after that I was aboard the ship and rode on her under all conditions.

Q. And did you personally examine that rear gangway to see?—A. Yes, sir.

Q. And did you always find it closed?—A. The lower half was always closed when the people got aboard of her.

Mr. ACKERSON. In the letter of July 18, which was read, I believe you stated that you believed the reason the vessel listed was because the water was not properly confined. In your testimony a few moments ago I believe you stated she had no water ballast at that time. Which is right?—A. She had no water ballast when she left the dock at South Haven. This occurrence took place outside of the river, just outside of the harbor, after she left the bar; over the bar.

Q. And she had ballast in at that time?—A. At the time she started to list?

Q. Yes.—A. She had very little in at that time. Just started to run it in.

Q. She didn't start to list until they started to put the water in it; is that it?—A. I think that is true.

Q. Is that your understanding of it?—A. Yes. I don't know what time they started to put water in it, but immediately after they left the bar.

Q. As soon as the ballast tanks were completely filled there was no list?—A. Not a sign.

Q. What?—A. No, sir.

Q. Then the question of whether the center-line bulkhead was tight or not would not make any difference after she was completely filled?—A. Not after she was completely filled; clear across in the holds; in the two tanks.

Q. That is the way they are supposed to fill them, isn't it?—A. Yes, sir.

Secretary REDFIELD. Did you go on shore that day at South Haven, Mr. Mansfield?

The WITNESS. I presume I did. I can't remember the detail of that, Mr. Secretary.

Q. There was a good deal of rivalry with the *City of South Haven*, wasn't there?—A. Yes, sir.

Q. The people used to come down to see the boats off, didn't they?—A. Thousands of them.

Q. Crowds?—A. Yes, sir.

Q. And do you happen to know personally whether there were a good many people on the day that the listing occurred?—A. Not particularly on that day.

Q. I beg your pardon.—A. I don't remember particularly on that special day. They were attending on every ship that went there; every ship. I was there on Sunday; on Sunday was the only day I ever went over there.

Q. Now, as I understand it, you thought the movement of the vessel on that occasion was sufficiently serious to justify you in immediately having the aft gangways closed?—A. Yes, sir.

Q. And in giving instructions to keep them continuously closed thereafter, did you not?—A. Yes, sir.

Secretary REDFIELD. Well, did you or did you not know that the condition which gave rise to that conclusion in your own mind was seen by a large number of people?

The WITNESS. Aboard the ship?

Q. On board the ship and on shore.—A. They couldn't help but see it, sir.

Q. They couldn't help but see. Did it occur to you that some assurance was necessary to those people to satisfy them of the safety of the use of that vessel?—A. Why, naturally; yes.

Q. Well, what did you do in that connection?—A. We assured them by letter, I think, that the listing was caused from—the reason that it was caused—the lack of water ballast.

Q. And that is what you referred to in your letter to the company?—A. Yes, sir.

Secretary REDFIELD. Put in the record at this point, and as a portion of the subject on which at the moment this witness is being examined, letter received by me to-day:

WINSTON-SALEM, N. C., July 31, 1915.

WILLIAM C. REDFIELD,  
Secretary of Commerce,  
Chicago, Ill.

DEAR SIR: I know not whether the information will be of use to you in your investigation of the *Eastland* disaster, but I wish to give you the knowledge that 11 years ago this summer, when the *Eastland* first began running between South Haven, Mich., and Chicago, I was living in South Haven. As there were two competing companies at that time there was much rivalry and racing between the two steamships, *Eastland* and *City of South Haven*. The arrival and departure of the two boats were attended by large crowds of people on the piers at the entrance to the South Haven Harbor. One day as the *Eastland* was passing out of the harbor as she met the waves of the lake she listed so badly that it created great excitement for a few minutes and everybody thought the boat was going over. People, both on the boat and on the piers, screamed, and some women fainted. When this event occurred my wife and I were standing on the pier. The effect of this action on the part of the *Eastland* was never entirely overcome so long as I resided there. Although the Michigan Steamship Co. tried to have the people feel that the boat was safe, many people refused to cross the lake on it, feeling that she was top heavy and liable to capsize.

I know not who is responsible for the recent disaster; but it seems that its original construction must have been incorrect. If this information is of any service to you in placing the blame, my object in writing it will be accomplished.  
Very respectfully,

Dr. P. S. STAINES.

Secretary REDFIELD. Do you know anything about the facts that he mentions there?

The WITNESS. No, sir; I do not. I do know it is a fact that upon the departure of either of those vessels on those occasions the bank above the bridge, and it was a very high bank, and the piers were generally thronged with people. It was very easy for this gentleman to have seen the occurrence from where he stood on the pier.

Q. Capt. Mansfield, you say you are inspector of hulls?—A. Yes, sir.

Q. Did you ever give, or did you ever receive from your superiors special instructions to watch the *Eastland* with other and more particular care than was given to another vessel?—A. Not to my knowledge.

Q. Did you not know, as a matter of fact, that she was considered by many people, whether rightly or wrongly, to be a ship that was cranky or likely to list or to tilt? Did you not know that there was that feeling?—A. Yes, sir.

Q. You did know that, didn't you?—A. Yes, sir.

Q. Did you or did you not feel that your personal experience of that fact, together with the general-public belief that that was the fact, charged you in any measure with a special responsibility with regards to that vessel?—A. Yes, sir.

Q. You did so feel?—A. Yes, sir.

Q. What did you do in discharge of that responsibility?—A. We had the matter up personally with the master of the ship and the engineer as well as the letter written to Mr. Blacker, which you have read, and we were satisfied that if the ballast was kept in her bottoms as it should be there would never be a recurrence of that accident or a similar accident or an excitement.

Q. Can you state specifically what you told the captain and engineer on that occasion?—A. I don't know as I can repeat the conversation verbatim.

Q. No; but the substance.—A. The substance of what we told them was, "Gentlemen, be careful of the water in this vessel; always keep No. 3 tank full, all the time, and you will be perfectly all right. Trim her if you want to on that forward and aft tank, but No. 3 full all the time." And we had reason to believe that when she had passengers aboard of her that those instructions were carried out in full detail.

Q. To whom did you tell that?—A. The captain and engineer.

Q. Who were they?—A. Capt. Frank Dority and William Eales, the first year; in fact William Eales was there two years, I think. Later on the gentleman who was before you, William Nack, was appointed as chief engineer for several years—during the part of the time that she was operating out of Chicago.

Q. Did you tell him that?—A. Yes, sir; and in fact Mr. Nack was there and present at the conversation that we had with the original chief engineer.

Q. Did you ever give such instructions to the captain who had charge of her when she came back from Cleveland?—A. No, sir.

Q. Why not?—A. Because she was in another territory.

Q. Do you mean by reason of her running to St. Joseph?—A. No, sir; by reason of her having been inspected by the Grand Haven board, and I have every reason to believe that everything that was necessary to advise the captain was so done by the inspectors at South Haven.

Q. Then it didn't occur to you as necessary to say to Capt. Pedersen what you had said to Capt. Dority?—A. No, sir. In fact, Capt. Pedersen was a man who was very hard to approach from my standpoint, and not very liable to acquiesce to anything I might ask him to do or to say to him, unless he would be given to understand that unless he did so action would be taken on his license. He is a peculiar man.

Q. Did you write him?—A. No, sir.

Q. Did you ever have any personal difference with Capt. Pedersen?—A. Not specially; no, sir.

Q. Why do you qualify it? Did you not have a personal difference with Capt. Pedersen?—A. I had, perhaps, some little difference with him on caring for the equipment of the ship.

Q. What was that?—A. With reference to her life preservers.

Q. Tell it.—A. My first visit to this ship, after she came back here from Cleveland, I noticed that a great many of the life preservers, the belt straps were knotted in front, which is absolutely against our instructions on any steamer that goes out of this port, and I advised him at that time—I only advised him; I said, "Captain, that is not according to our idea of life preservers, to have the belt straps knotted. Keep them all free." In case any accident should occur to her at any time—and not to her any more than to any other vessel—but in case of accident, they could be easily adjusted to any person that might want to use them; they wouldn't have to stop and untie the belt straps. And a little later on, on a visit to her when she was in the drydock on the North Side here, I boarded the ship during the making of the drydock inspection, and found that the life preservers had not been cared for. And I very emphatically called the master up and said: "Now you either go ahead and take care of these life preservers as you have been instructed to do, or I will take action on your license." At a subsequent visit I found that they had all been cared for.

Q. Captain, on a ship on which you have had personal experience of the kind you have described and of such a character that you thought fit or thought it your duty to caution the captain and the engineer, after some years of absence it comes back to the city where you are employed as an inspector, and the circumstances are such that she comes back under the immediate supervision of another board than that of which you are a member, do I understand you correctly that you felt that under those circumstances it was incumbent on you, or a duty, to personally give similar instructions to the new captain that you had given to the old one?—A. Well, we would naturally think that perhaps if there was any especial instructions to be given out to him that they would be given out by the other board where she was inspected and being cared for in reinspections, naturally. Right here, if I am permitted to do so, I want to state a little occurrence that took place with reference to this captain. After I had had this little difference with him on the life-preserver question a gentleman who is in the employ of the Government was in this building at that time, and said to me one morning, "I am going over on your pet steamer." "Why do you call her my pet?" "Why, because you are looking after her pretty closely." And I said to him, "I wish you would take up the matter and look after the life preservers"—this was between the first and second visits that I quoted—"and see if the life preservers have all had the knots removed from the belts, and all that sort of thing, and also to see that there are covers on the boats," which I had suggested at the time of my first visit, which never were put on her until this year. He said, "All right." And the matter of this gentleman being very friendly with the manager, and also with the captain, it seems that the conversation was brought up to this effect, that "The damned inspectors had been down there," meaning me, of course, "and advised them to do and not to do certain things"—in the presence of the manager, and this gentleman tells me, whom I can produce, in fact, that the manager said, "It is damned funny that the fresh-water sailors are going to tell us seagoing captains what we should do in regard to the safety of the vessels and the equipment of the ship." He came back and told me that that was the conversation that he had there.

Q. Who are the parties?—A. A gentleman by the name of Meyer.  
Q. Who is he?—A. He is in the city here. I don't know where he is now. I think he could be got—could be obtainable. That is in substance, as I remember, the conversation. Perhaps not just in detail, but that is in substance.

Secretary REDFIELD. The board will adjourn to meet at 2 o'clock. (Whereupon an adjournment was taken until 2 o'clock p. m. of the same day, Monday, Aug. 2, 1915.)

MONDAY, AUGUST 2, 1915—2 P. M.

The board met pursuant to recess.  
Present, same as before.

IRA B. MANSFIELD resumed the stand and testified as follows:

Examination by Secretary REDFIELD:

Q. Capt. Mansfield, I hand you letter purporting to be signed by E. M. Sweeney, dated July 28, 1905. Did you receive that letter?—A. I initialed it; yes, sir.

Q. Does that letter contain a complaint against what is said to be the crowding on the *Eastland*?—A. I should think it does; yes, sir.

Q. I hand you a letter dated June 26, 1905, purporting to be signed by George Eddy Newcomb. Does that contain a complaint as to conditions for handling passengers on the *Eastland*?—A. Yes, sir; I think it does.

Q. Did that letter reach you?—A. Yes, sir.

Q. I hand you paper purporting to be copy of letter from F. G. Nelson, dated July 18, 1904. Did that letter reach you?—A. I think it did; yes, sir.

Q. And does it contain a complaint about the overcrowding on the *Eastland*?—A. I presume it does.

Q. I hand you letter purporting to be signed by George B. Frost, dated July 26, 1905, and ask you if that reached you and if it contains a complaint regarding the overcrowding on the *Eastland*?—A. Yes, sir.

Secretary REDFIELD. And, Capt. Westcott, I hand you a telegram and a letter, or papers purporting to be such, and ask if the telegram was sent by you and if the letter bears your signature?

Capt. WESTCOTT. The letter bears my signature; yes, sir. The briefing on that letter appears to be the writing of the clerk that I had at that time, and the telegram I suppose I sent, although it is not my writing, of course. I suppose that is my telegram. The briefing was done in the handwriting of the clerk I had at that time.

Secretary REDFIELD. What is your rule about reporting to the supervising inspector complaints that reach you respecting overcrowding?

The WITNESS. We are presumed to report anything of that sort that is presented by the inspector. We expect to do that.

Q. Well, do you?—A. I think they do. I may be mistaken.

Q. Are you not sure?—A. Well, we are sure that we answer all required correspondence, and if they should go to the supervising inspector, they go; any reports.

Q. You say if they should go to the supervising inspector, they go?—A. I mean by that that if they should go to him, should be referred to him, they go to him in reply in a letter form.

Q. Did you send these complaints to the supervising inspector?—A. I don't remember about that now.

Q. Do you know whether it is or is not the fact that you did not send them to the supervising inspector?—A. No, sir; I do not know.

Q. Do you or do you not know that there was a general complaint about the overcrowding of vessels during the year 1904?—A. There must have been some complaint about those letters that we received here. I presume they were all referred to the supervising inspector.

MR. THURMAN. Capt. Mansfield, here is a letter dated July 26, 1905, Chicago, addressed to the United States inspector of steamboats, Federal Building, signed by a gentleman by the name of George P. Frost, containing a general charge, or a charge of the overcrowded condition of the steamer *Eastland* on Sunday evening, July 23, 1905, on her return trip from South Haven. That letter, in its original form, is attached to a sheet of paper, on the back of which is written "File number," and then "George P. Frost, complained of overcrowding on the steamer *Eastland*." Tell me, if you can, what was done with that complaint?

The WITNESS. I do not recall what was done; I do not remember whether we reported to the supervising inspector or not.

Q. Is there any way in which you can find out just what was done in regard to that letter?—A. I do not know of any way, without you have a reply to him in that letter book.

Q. Now, if anything was done at all with that letter, where would it be found? If that letter was answered, if a letter was sent to Mr. Frost in reply to that, or if your office here took notice of it, or if it was sent to the supervising inspector, where in the records of your office would such procedure be filed?—A. It would be in the letter file.

Q. Do I understand, then, that if there is no reference to this letter of Mr. Frost's in that letter file that your office took no notice of it, at all?—A. No, sir; I don't remember now that the man appeared to me—ever came to the office and talked this matter over with us and dismissed it in a way, and we told him it would never occur again.

Q. If you got a letter like that, didn't you even acknowledge the receipt of it?—A. Usually; yes, sir.

Q. Don't you always do it?—A. We aim to, yes, sir; it may have been an oversight on our part at that time, perhaps.

Q. If there was an answer sent to this letter, it would be found in this letter book?—A. Yes, sir; I presume so.

Q. If not in that letter book, the supposition is that you did not answer it; that is correct, is it?—A. I presume so; I don't remember of the occurrence now, as to replying to that letter or not.

Q. Now, let me ask you, Captain, on the receipt of a letter of that sort, what is the usual procedure—what should be the usual procedure, or is the usual procedure, in your office?—A. Should be to reply to the letter and refer the matter to the supervising inspector.

Q. That is what I am getting at. Is a matter of that sort—a complaint of that sort—one for your office to attend to, or is it your duty

to send it to the supervising inspector? In other words, just what is the duty of the local inspectors upon receipt of a complaint similar to the one received at your office from Mr. Frost?—A. I presume it would be a report to the supervising inspector.

Q. Now, let us not presume, Captain. What would be the procedure?—A. That would be the procedure, or else, as I have already said, the man may have been in and talked the matter over. We talked the matter over with him and satisfied him that it would never occur again, or something of that sort. I do not say that is the case, for I don't remember.

Q. When you have these conversations with these gentlemen who file written complaints and follow them in person, do you make any record at all of your conversations with them?—A. I don't remember of making any. I will say, for your edification, previously, as far back as 1904, 1905, and 1906, those things were not thought of as they are thought of at present. Perhaps we may have been lax in replying to some of those things and referring them to the proper person. There are two of us in the office, and if it were a fact that we considered it and some disposition of it was made between Mr. Peck and myself, the oversight could not be charged to us. It would have to be charged to the board.

Q. Then, as a matter of fact, Captain, you do not know from any of the files you may have what was done with this complaint received from Mr. Frost?—A. No, sir.

Q. You have no way of telling?—A. No, sir; I don't remember.

Q. Is there any difference in the regulations now or the rules governing the handling of complaints as distinguished from the years 1904, 1905, and 1906?—A. Very decidedly; yes, sir.

Q. In what respect?—A. We are more prompt in answering and in inspections and everything else; very much.

Q. How do you handle complaints with regard to steamboats at the present time, generally speaking?—A. We generally reply to them, and if it is something we can not reply to ourselves, something above us, we refer it to the supervising inspector.

Q. Suppose a letter similar to this of Mr. Frost's should come to your office in regard to some other steamboat, what would be the procedure under the rules and regulations?—A. Refer it to the supervising inspector.

Q. Would you not acknowledge the receipt of it?—A. Yes, sir; and refer it to the supervisor, the proper party.

Q. That, I understand you to say, is due to a change in your rules and regulations?—A. A change in the rules and regulations after a better understanding of what was required of the office, of the service; an improvement all around.

Q. Here is a letter dated July 18, 1904, addressed to the Hon. William P. Nixon, director of customs, Chicago, Ill., signed by F. G. Nelson, being in regard to a complaint on the overcrowding of the steamer *Eastland*, referred by the collector to the Steamboat-Inspection Service. Is there any way of telling what action was taken on that complaint?—A. I think that was referred to the supervising inspector, if I remember correctly.

Q. As a matter of fact, then, you have no distinct recollection of any of these four complaints dated in the years 1904 and 1905, have

you?—A. I can not recollect those things. I don't remember what disposition was made of them.

Q. If any action was taken, to repeat again, it would be found in this letter book that the Secretary now has?—A. If we replied to the letter?

Q. Or if they were sent or forwarded to the supervising inspector, that record would be found in the letter book, would it not?—A. I think so.

The SECRETARY. Pursuant to this line of questioning, I will read into the record a letter dated July 27, 1904, found on page 412 of the letter book:

Hon. C. H. WESTCOTT,  
Supervising Inspector, Detroit, Mich.

JULY 22, 1904.

SIR: Referring to Department Circular No. 44, May 23, 1904, in relation to the overcrowding of passenger steamers, we have to respectfully state that this board is in receipt of numerous verbal complaints that the various steamers running to points on the east shore of Lake Michigan (among others St. Joseph and South Haven) and returning to this port in some instances overcrowded. We are informed that this is especially true of the trip returning to Chicago Sunday evening, when the people leaving Chicago on Saturday as well as the people leaving this port Sunday morning all attempt to return Sunday Evening.

We have conferred with the Hon. William Penn Nixon, collector of customs at this port in regard to counting passengers, and are working in harmony with him in that respect. However, it has been found impossible by not only ourselves, but also by the deputies detailed by the collector of customs, to accurately count the number of passengers leaving the steamer at this port Sunday evening, for the reason that they leave the boat by several gangways and in addition, many jump from the upper deck to the dock. Inasmuch as we have no means of counting the passengers taking the steamers at the ports on the east shore of Lake Michigan we thought best to appraise you of the facts in the matter. We are able to say that no steamer has left the port of Chicago overcrowded.

Very respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

In response to that letter C. H. Westcott, the supervising inspector, sent the following telegram, dated July 23, 1904:

DETROIT, MICH., July 23, 1904.

United States local steamboat inspectors, Chicago, Ill.:

Letter received. You will request collector of customs at Chicago to have deputies make round trip on passenger steamers leaving Chicago Sunday morning, returning Sunday evening, that have been reported to you for returning overloaded. Such is the practice with collector here you should investigate all such cases.

C. H. WESTCOTT,  
Supervising Inspector.

A letter of the same date addressed to you as local inspector at Chicago:

JULY 23, 1904.

United States local inspectors, Chicago, Ill.

GENTLEMEN: This office is in receipt of your letter of the 22d instant, in relation to the numerous verbal complaints that have been made to you that passenger steamers running to ports on the east shore of Lake Michigan are returning to Chicago, in some instances, overcrowded, and in reply would say, as in telegram of this date, that in cases such as you refer, where you have any reason to believe that a passenger steamer may be overcrowded, you should go to the chief officer of customs and request that deputies be put on

the steamer for the round trip, with instructions to count the passengers on at each end of the route. There are just such cases here; for instance, from Detroit to Port Huron and return, on Sundays and excursion days. Collector Rich has deputies go from Detroit to Port Huron and return, and where the steamer has its full complement they make no more stops, but come straight through for Detroit. This sometimes occurs on the return boat Sunday evening after the people have been going up to the flats and other summer resorts all day, and all want to come back on the late boat. You should keep in close touch with the collectors and make requisitions for men to assist whenever needed. You should also thoroughly investigate such cases as may come to your observation, or are reported verbally or otherwise.

Respectfully,

C. H. WESTCOTT,  
Supervising Inspector.

Q. The present rule for counting passengers—the present work of counting passengers is no longer in your hands, is it?—A. No, sir.

Q. Do you understand in whose hands it is?—A. The inspector of customs' hands, handled by the deputy.

The SECRETARY. It is already in the testimony "handled by the navigation inspectors."

Capt. Mansfield, is this your signature [showing letter book to witness]?

A. Yes, sir.

The SECRETARY. I read a letter dated July 30, 1904, addressed to the Hon. George Uhler, Supervising Inspector General, Washington, D. C.:

JULY 30, 1904.

Hon. GEORGE UHLER,  
Supervising Inspector General, Washington, D. C.

SIR: We have to respectfully acknowledge the receipt of letter of Mr. Edward C. Nichols, of Chicago, Ill., with reference to the conditions on the steamer *Eastland* while returning from South Haven, Mich., to Chicago, Ill., on the night of July 17, by reference from your office for report.

Reply to the same has been delayed on account of press of business.

In reply, we would respectfully state that Capt. Ira B. Mansfield, local inspector of hulls at this port, made the round trip on the steamer *Eastland* on the day named, Sunday, July 17, from Chicago to South Haven and return. On the return trip, which is the trip mentioned by Mr. Nichols, Capt. Mansfield boarded the steamer just as she was leaving her dock in South Haven. The day was very warm, and as the steamer is constructed entirely of steel, it was uncomfortably warm in the cabins and on the lower deck. Therefore the passengers attempted to all get on the upper deck in order to get the benefit of whatever breeze there might be; so many succeeded in getting on the upper deck that it was uncomfortably filled. In addition, the water bottoms of the steamer in which is carried the water ballast had been partly emptied in order to allow the steamer to get alongside her dock at South Haven, as there is not depth of water enough at the dock there to permit a steamer of the *Eastland's* normal draft to approach the dock.

Also, while the steamer was lying at the dock, the water from the largest water bottoms, which had been filled with clean water from the middle of Lake Michigan, had been used for sanitary purposes, cooking, etc., thus partially emptying them, which further reduced the ballast. It is the opinion of this board that the listing which occurred was due entirely to the two features above mentioned, viz, a large number of people on the hurricane deck and less than the normal amount of water ballast in the water bottoms. At the time the listing occurred, Capt. Mansfield suggested to the master of the steamer that he request a number of the passengers on the hurricane deck to go below and thus lower the weight, which might have a tendency to remove the trouble. This suggestion was at once acted upon, and the passengers were sent below. Meanwhile the water ballast was being put into the water bottoms, and in a very short time the ship was on an even keel and remained so during the remainder of the trip to Chicago.

While the vessel was in an uncomfortable position at the time of the listing, at no time was it considered by either Capt. Mansfield or the officers of the steamer that there was any danger.

As soon as possible, Capt. Mansfield requested of the officers information as to the number of passengers aboard, and was permitted to count the tickets, passes, etc., taken up at the gangway before leaving South Haven. After a careful and accurate count he is absolutely certain that there were 2,142 passengers aboard on the trip, which number included those who had transportation in the shape of tickets, passes, etc.

At the time of performing the annual inspection of this steamer at this port, on June 24 last, we measured the deck space allotted to passengers and found that the vessel has over 30,000 square feet of actual deck space available for passengers. We have twice examined the steamer in dry dock, and consider the vessel of a good model and well built. Considering both the model and stability of the vessel, as well as the deck space, we allowed a total of 3,300 passengers, as we considered that she was perfectly safe to carry that number of passengers.

In order to prevent a recurrence of such an affair as is the subject of Mr. Nichols's letter, we wrote the following letter by Mr. R. R. Blacker, president of the Michigan Steamship Co., owners of the steamer *Eastland*.

The SECRETARY. Here follows the letter of Mr. Blacker, which appears in the record on this same date.

On July 23 he received the following reply—here follows the reply of R. R. Blacker—which appears in the record of this date:

Since the above correspondence with Mr. Blacker, we have recalled and canceled the steamer's excursion permit allowing a total of 3,300 passengers and substituted one allowing a total of 2,500 passengers. We did this, not because we considered the steamer unsafe with 3,300 passengers, but to avoid any further complaints about the steamer's being uncomfortably crowded.

In addition to the above precautions, there has been a space the full width of the steamer and 50 feet long on the upper deck railed off with iron rail, and no passengers are permitted to enter that inclosure at any time, thereby making it impossible for the upper deck to be overcrowded.

The steamer *Eastland* is fully equipped with the required number of Kapoc life preservers, and each life preserver is stenciled with the steamer's name, and in addition bears the stamp of the United States assistant inspector at New York, who passed them. Mr. Nichols must be mistaken in his statement in regard to these life preservers, as every one of the number comprising the equipment of this steamer has been examined by this board, and we are positive that they are properly marked.

Capt. Mansfield is positive that at no time during the trip from South Haven to Chicago were persons under the influence of liquor in evidence. It is nearly a universal custom on the passenger steamers that this board has ridden upon or knows anything of, either at this port or others, to maintain a buffet and sell liquors on board while not at the dock or in harbor. We have never understood that this is a matter under our jurisdiction, and have, therefore, never taken cognizance of it.

Mr. Nichols, in his selection of newspaper comment on the occurrence of the steamer *Eastland's* listing, used the version of a newspaper of this city which bears a reputation for presenting every item of news to its readers in as sensational a manner as possible, and it has been alleged that when facts are not available the imagination of its writers is sometimes drawn upon. Certainly it seems to have been the case in this instance, where a most unfavorable impression is given to the public.

It is the opinion of this board that, in view of the steps already taken by the owners and officers of the above-named steamer, a recurrence of this listing referred to will be impossible. From the fact that the steamer has, since the date referred to, carried her share of the passengers traveling on the route between this port and South Haven, we believe that the public confidence in the steamer and her officers has not been shaken.

Mr. Nichols's letter, with newspaper clipping inclosed, is returned herewith as directed.

Very respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

The SECRETARY. This is another letter to the Hon. George Uhler, Supervising Inspector General, Washington, D. C., dated August 2, 1904:

AUGUST 2, 1904.

Hon. GEORGE UHLER,

Supervising Inspector General, Washington, D. C.

SIR: We have to respectfully acknowledge the receipt this date of letter from the honorable the Secretary of the Treasury, inclosing a copy of letter from Mr. Frank G. Nelson, of Chicago, Ill., in reference to conditions on the steamer *Eastland* on Sunday, July 17, 1904, by reference from your office, directing that a report on the same be made by this board.

Replying thereto we have to respectfully state that the steamer in question was inspected by this board on June 24 last, and the deck space assigned to passenger use measured by this board. A total of over 30,000 square feet of deck space on the steamer *Eastland* was assigned for passenger use; and considering this, together with the model and stability of the vessel, we considered her perfectly safe for a total of 3,300 passengers, which number was accordingly allowed her, and which number she was allowed on the date mentioned. It is the opinion of this board that the steamer was not overcrowded leaving Chicago on the morning of July 17, and it certainly was not overcrowded on the return trip from South Haven. Of this latter assertion we are positive, for the reason that Capt. Ira B. Mansfield, inspector of hulls at this port, made the round trip on the said steamer, and leaving South Haven counted the tickets, passes, etc., taken up at the gangway and counted a total of 2,142, which represented the number of grown people aboard the steamer, or, in other words, the number of people for whom fare was charged, but did not include children in arms.

Leaving the harbor of South Haven the steamer listed, which was caused by the combined facts that the water ballast had been removed from the water bottoms of the vessel, in order to reduce the draft of the steamer to allow her to get alongside of her dock, and also that on account of the day being very warm and the steamer built of steel throughout the passengers as they boarded her proceeded to the hurricane deck to get any possible breeze. When the steamer left the dock there was a greater number of people on the hurricane deck than it had been measured for, and thus the weight was distributed unevenly.

The officers in a very short time had a number of the people removed from the hurricane deck to positions on the lower decks, and the water ballast having been pumped into the compartments designed for that purpose, the vessel righted and proceeded on an even keel throughout the entire voyage to Chicago. At no time was the machinery or any part thereof disabled on that date.

Immediately after the occurrence the subject was taken up with the officers of the Michigan Steamship Co., owners of the *Eastland*, by this office, and steps have been taken to prevent a recurrence of the circumstance by reducing the allowance of passengers on the hurricane deck and the distribution of them on the vessel.

This board is informed that the steamer was built according to the specifications of the Bureau Veritas, after the model of a steamer used on the English Channel, and it is considered by us to be of excellent model and design and seaworthy in every respect.

On the trip above named Capt. Mansfield is positive that there were numbers of stools or camp chairs piled up in reach of anyone who desired to use them that were not so used by the passengers aboard.

Letter of the honorable the Secretary of the Treasury and copy of Mr. Nelson's letter returned herewith.

Very respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

The SECRETARY. A letter dated August 5, 1904, to the Hon. George Uhler, Supervising Inspector General, Washington, D. C.:

AUGUST 5, 1904.

HON. GEORGE UHLER,  
Supervising Inspector General, Washington, D. C.

SIR: We have to respectfully acknowledge the receipt of letter from your office under date of August 2, instant, in relation to reply made by this office to the letter of Mr. Edward C. Nichols in regard to steamer *Eastland*, number in upper left-hand corner 8-5915, asking why the matter of examination of the water bottoms of the said steamer on July 16, ultimo, was not made a matter of our own personal inspection instead of getting the report of the steamboat people.

In reply thereto we would respectfully state that, while the desirability of making the inspection of the water bottoms on the said steamer a personal matter by this board was apparent, it did not appeal to us as being absolutely necessary, for the reason that we have the utmost confidence in the integrity of the officers of the steamer *Eastland*, and know that they understand perfectly their responsibility under section 4448, Revised Statutes of the United States. The examination of the water bottoms was made by the assistant engineer of the steamer.

Furthermore, it was not possible for us to make a personal examination of the water bottoms without holding the steamer at this port until after her sailing time, or else make the examination during the night after the arrival of the vessel at 10.30 p. m. We would respectfully add, however, that since the occurrence we have had demonstrated to us personally on board the ship that these water bottoms are tight, viz, on July 25, ultimo, while the vessel was in dry dock at this port a thorough examination was made of the hull and water bottoms.

We wish to respectfully submit that to make proper inspections of such matters as the one above referred to, together with daily visits to the 36 excursion and passenger steamers leaving and arriving at this port, in addition to regular office duties, examinations of applicants for license, and investigations, together with annual and intermediate inspections, the force at this office is not large enough. During the week in question, viz, July 17 to 23, inclusive, five annual inspections of steamers were made by this board, candidates for examination for license were present three days, the investigation of alleged violation of the pilot rules was held, and one intermediate inspection of a passenger steamer previous to granting an excursion permit was made. The office has been open for business from 8 a. m. to from 5 to 6 p. m. daily.

The above explanation is offered not in a spirit of complaint but to present to the department the strong desirability of such changes in the laws as would give a large and important city like Chicago, with its growing passenger business, more adequate facilities for steamboat inspection.

Very respectfully,

IRA B. MANSFIELD,  
ROY L. PECK,  
Local Inspectors.

Q. Do you recall that correspondence?—A. Very well, sir.

Q. How many men have you in your Chicago office?—A. Four inspectors.

Q. Four inspectors?—A. And one clerk.

Q. You mean four assistants?—A. No; two assistants.

Q. Two local inspectors, two assistants, and one clerk?—A. Yes, sir.

Q. Have you asked the service to give you a larger force?—A. I think we have in times past; yes, sir.

Q. Do you know whether you have or not?—A. No; I don't really know, I could refer to the correspondence on that, there is some correspondence in that book somewhere that shows it.

Q. When did the steamer *Eastland* come back here?—A. In the spring of 1914.

Q. Been here a little over a year then?—A. Yes, sir.

Q. During that time have you or your associates made any inspection of her?—A. Not annual, only dry dock inspection.

Q. Have you been on board of her?—A. Yes, sir.

Q. Did you look at the after gangways?—A. Yes, sir; we looked at the gangways, we looked the ship over generally in a way, the time we have to do it in the morning you know, I do not know as we paid especial attention to the gangways at this time, we are so familiar with her in a way we know what is there.

Q. Have you had any other disagreement with Capt. Pedersen than that you mentioned?—A. No, sir.

Q. If you have had only that one incident and if you made no formal inspections, on what basis would you say that he is a hard man to get along with?—A. Well, I meant that he would ignore some things if he was permitted to, in the way of advice and instructions perhaps.

Q. How do you know?—A. Because he proved it to me.

Q. When?—A. He did not do what I asked him to do in relation to his life preservers until some time after, which he could have done just as well as not at the time.

Q. Is that the only incident?—A. The only one.

Q. Is that the point you base your statement on that he was a hard man to get along with?—A. Perhaps I was a little harsh to make that statement, that is the way I felt about it. There is no personal difference between the captain and myself.

Q. Had you given him any instructions that he had failed to carry out?—A. No; I think not.

Q. Have you told all your connection with Capt. Pedersen of every kind, Mr. Mansfield?—A. I don't recall anything else.

Q. Did you know him personally as a friend?—A. Well, I knew him as a captain, not as a friend, I knew him as an acquaintance, a captain, that is all, in the business.

Q. Did he ever come up to the office to talk to you?—A. He was in the office a great many times in the past.

Q. Within the past year?—A. No, sir; I don't think so, not the past two or three years, perhaps; he comes up principally to talk with the assistant inspector of hulls, Capt. Adkinson.

Q. For what reason?—A. Because some time past, a great many years ago he used to be a mate with Capt. Adkinson, later they sailed sister ships.

Q. Did you ever in any of those visits at your office speak to him about the vessel and tell him what to do?—A. I do not know that he has been in the office in the last two years, possibly he has. I don't remember at all.

Q. How many times have you been on the vessel in the last year?—A. As I said previously we have made two dry-dock inspections of her, either the local inspectors or the assistant inspector visited her every Sunday during the time she was in service here.

Q. Here in Chicago?—A. Yes, sir.

Q. He has visited her every Sunday?—A. Yes, sir.

Q. As far as this season is concerned, up to the time of the accident?—A. Up to the present writing.

Q. What did you do when you visited her at that time?—A. We looked over the equipment and went over the ship and saw that

everything was in place, the fire apparatus and life-saving apparatus, see that they were in their proper condition and proper place, and notice if there was anything wrong in anything.

Q. What time of day did you go, Captain?—A. From o'clock in the morning until evening time—10 o'clock.

Q. She left Sundays at 10 o'clock?—A. Yes, sir.

Q. When you go on board between those hours you go before the passengers are on board?—A. Sometimes we are there, it depends on where we start.

Q. And when you go on board when the passengers are not on board, do you observe whether the ballast tanks are filled or not?—A. No, sir.

Q. Don't look for it?—A. No, sir.

Q. When she was under your jurisdiction, as I understand it, you cautioned the chief engineer and captain never to start with her unless she had her ballast tanks filled, even when she was taking on passengers; do I understand that in the past year you have been on board of her and have not noticed that matter at all?—A. Perhaps my partner, Mr. Nicholas, has done that part of it; he takes care of the ballast tanks and other things pertaining to the machinery; I was paying little attention to that below the main deck; he may do it every time he goes there; the assistant boiler inspector would do that.

Q. Did he take part with you in your formal caution to the captain?—A. Mr. Nicholas?

Q. Yes.—A. He was not on the ship at that time.

Q. He was not in the service?—A. He was an assistant at that time.

Q. You know it was the custom to empty those tanks at night, don't you?—A. Here? No, sir; I do not.

Q. You do not know that?—A. No, sir.

Mr. FOUKE. I would like to ask the captain a few questions.

Q. Do you consider the requirements of the department at present—what makes me ask this question is these letters written in 1904—do you consider that the rules and regulations of the department now are as strict as they were in those days or stricter or not as strict?—A. More strict; much more, decidedly so.

Q. They are more strict than they were then?—A. Yes, sir.

Q. What is the custom of your office when you receive a complaint—you receive similar complaints to those that were written in 1904—what do you do?—A. I can only make the same reply that I did in the other matter, that if it is something that could be taken care of here and it is not necessary to go to the supervising inspector, we would do it. Sometimes a man would come in after writing a letter of complaint to see us about the matter and we would arrange with him and tell him it would not occur again—say it would not. If it was necessary to go to the supervising inspector, it would go to the supervising inspector.

Q. You gave each and every complaint consideration?—A. I believe we did; we meant to.

Q. I know, but do you know of your own knowledge that that is done?—A. Why, yes, sir; I know; I guess there is no question about that. There might be a matter of complaint come in the office and

I would be out and the other inspector is in charge and he would take care of the thing.

Q. That would be on file, if it would be taken up?—A. Yes, sir; if it was necessary to reply, it would be on file.

Q. Is that your custom?—A. Yes, sir; our custom; yes, sir.

Lieut. Gov. O'HARA. Capt. Mansfield, during July, 1904, I understand that you addressed a letter to the owner of the *Eastland* and in that letter you warned the owner of the *Eastland* to provide more chairs for the accommodation of the passengers on the vessel. Did I understand the reading of that letter correctly?

The WITNESS. I believe I did; yes, sir.

Q. Now, Captain, suppose you gave an instruction to an owner or to any operator coming under your jurisdiction and that instruction is not obeyed, what do you do?—A. Well, we stop the vessel or we take action on the master of the vessel to prevent her leaving.

Q. Suppose, Captain, that you fail to take that action, or suppose that you fail to enforce the strict text of your instruction, are you negligent in your duty under your interpretation of the law?—A. I do not know that that would be negligence—yes; perhaps that might be charged with negligence, but I do not know why it should.

Q. In other words, Captain, if you discover a flaw or a defect or a carelessness or negligence on the part of the owner of the boat, captain, or members of the crew and you warned them to correct that carelessness or negligence for that defect and they refused to comply with your warning or instruction, what is your further responsibility?—A. It is to take action on the ship or crew and stop her.

Q. Are you presumed by law to take that further action?—A. Yes, sir; if she does not comply with the laws and rules.

Q. Then, if you give an instruction and that instruction is disobeyed, and you neglect to punish the disobedience, you yourself are negligent of the performance of your official duty?—A. A person might disobey and we not become cognizant of the fact, we might not know it.

Q. After you have given an instruction what precautions do you take to see that your instruction is obeyed?—A. We usually follow them up; if the instruction has been given in correspondence we follow it up with correspondence.

Q. Then, I understand that if the steamer *Eastland* had listed badly during July, 1904, and you addressed a letter to the owner, suggesting, among other things, that more chairs be allowed; now, during the season of 1905, the following season, did you make any effort to learn if your instruction regarding the additional chairs was being complied with?—A. We presume that the rules or request for more chairs had been complied with. I do not know if we had any complaint in 1905; perhaps we did.

Q. The law defining the duties of your position gives you just exactly what range of presumption? In other words, Captain, let me ask you, are you negligent in the performance of your official duty if you presume rather than ascertain the facts?—A. No, sir; I don't think so. I will ask you a question. If the master or the management of a ship tells us he is abundantly supplied with seating capacity or chairs, do you think that a steamboat inspector could

board a steamboat and every time count the camp chairs and other chairs; do you think we could do that and do business? We can not do that.

Q. Now, Captain, in the year 1906 did you make any effort to learn if your instructions regarding the additional chairs were being complied with?—A. I do not know that there was ever any complaint made to that effect.

Q. In 1904 you, over your own signature that you have recognized here, gave instruction to the owner of the boat that more chairs must be provided, that was your official instruction?—A. Yes, sir.

Q. In 1906 did you make any inquiries or any investigation to find if your instruction was being followed?—A. No; but we had a man there that reported to us that it had been carried out—our instruction—by the captain and officers of the ship, which were ordered to do their duty. If there had been any complaint, we would have known it. We had no complaint in the year 1906, I do not know of any; there may have been, I do not recall it.

Q. Then, Captain, if in the year 1906 there had been any insufficiency of chairs you would have received possibly a complaint from citizens?—A. Well, perhaps and perhaps not; perhaps we did receive one.

The SECRETARY. Pardon me, I am very thankful to have all the facts relating to the duties of the service brought out, but the inspection service has no more to do with the number of chairs on board a vessel than it has with the color of the eyes of the captain. Furthermore, the matter on this occasion was not an instruction, it was simply a suggestion, and therefore it is only just and equitable to say that they had had the courtesy to do something for the comfort of passengers, but they are in no sense whatever accountable for the furniture on board vessels, at least, I know of no such provision of the law, and I would be very glad to have it appear if you know or anybody knows of any clause in the law under which there is any authority over a vessel's furniture; I know of none. I would be very glad to have it developed.

Lieut. Gov. O'HARA. Perhaps I can develop it with some further questions.

The SECRETARY. Go ahead.

Lieut. Gov. O'HARA. I understand from your previous testimony that reference was made to reducing the allowance of passengers on the hurricane deck and also as to the distribution of the passengers.

The WITNESS. I think so.

Q. Was that a part of the official correspondence read here over your signature?—A. I think that we allowed them, as my memory serves me, five or six hundred people up there; this is a long ways back to remember those things in detail without having any idea.

Q. Let me be fair. Following the bad listing of the *Eastland*, the only action taken by the Federal inspection service had to do, quoting the exact language of the correspondence, with the reduction of the allowance on the hurricane deck and the distribution of the passengers. Am I correct in that?—A. If we said it, perhaps it may read that way. One thing, there was plenty of deck space on the decks below the hurricane deck on that steamer for all the people she was being allowed for, consequently we confined them and kept

them below where they should be, and not allow any more to go up on top.

Q. Would you say that the placing of chairs would have anything to do with the distribution of passengers?—A. No; I should not think so very much; the placing of chairs is usually done by those that want to use them; they are located usually by the crew on all the decks; placed around where they are accessible to passengers.

Q. Did you ever receive an instruction from a superior officer informing you that part of your duty in the inspection service is to take precautions against possible panic among passengers?—A. Possible panic?

Q. Yes.—A. It would be the moral duty to take all the precautions we could without instructions from the department at all.

Q. Under your interpretation then of your duties you are presumed to make some effort to prevent panic among the passengers?—A. I don't understand you.

Q. Let me put it in this way: Have you, during your connection with the service, received a letter from a superior officer bearing on the subject of possible panics?—A. Possibly, but I do not recall it.

Q. Would you say, Captain, that there would be a greater likelihood of a panic on a boat were the passengers not given enough chairs, as there would be on a vessel where each passenger could conveniently and easily find a chair?—A. We do not consider a chair a life-saving apparatus, neither do we count chairs. We will presume that we endeavor to make everybody as comfortable as we can, but there is no stated rule for that.

Q. Your presumption in writing in the letter to the owner of the *Eastland* after the bad list in 1904 was in what way; how did you presume to mention the chairs?—A. To make them more comfortable, the people who patronize the boat; that is all the idea we had.

Q. That letter that you wrote to the owners of the *Eastland* after the bad list in 1904, was that made public by the owners of the *Eastland* at that time?—A. What letter—his reply to us—his reply to our letter?

Q. Your letter to the owner of the *Eastland*.—A. I do not think so; I don't think he published it; I know we did not; it was there for any responsible person to come in and see it; we did not publish those things in the paper.

Q. Do you know whether the owners of the *Eastland* informed the people generally, either orally or through the newspapers, that after the bad listing the United States Inspection Service had gone into the facts and had found that the listing was caused by an insufficiency of chairs?—A. It was not.

Q. And that that having been removed that the *Eastland* was now safe?—A. It was not caused by insufficiency of chairs; I could not say that. I would not admit it.

Q. Captain, if I understood correctly, you submitted an official report in 1904 in which you used this language: "The *Eastland* is perfectly safe in carrying 3,300 people." Do you still hold to that belief?—A. Does that letter read that? If it does it means it.

Q. You still hold to that belief?—A. I certainly do. In her condition at that time, properly handled, she would carry 3,300 people safely.

Q. Now, I want you to tell me briefly something of your education and experience that fits you to judge of the carrying capacity of a steamer like the *Eastland*?—A. That is a pretty hard matter to do; it is a long experience. I could not go into my whole life and show the class of vessels I have been on; I can not remember.

Q. I would like you to, to the extent of 5 or 10 minutes.—A. I have gone through that for the Secretary.

Q. Would you mind doing it again?—A. I would not; but I can not give you days and dates or the names of ships that I have been on and the various grades.

Q. How old are you, Captain?—A. Sixty-four.

Q. What was your first occupation?—A. I think I was cook on a scow first—my first initiation.

Q. How old were you then?—A. About 12 years of age.

Q. And you have been on the lakes constantly from the age of 12 until the present time?—A. No, sir; I would not say that; two years I was ashore.

Q. What did you do the two years you were ashore?—A. Took care of a coal concern in Canada with an Ohio firm.

Q. When did you enter the Government service?—A. 1903.

Q. Did you take any examinations?—A. I certainly did.

Q. What scope did that examination cover?—A. Everything they asked me—ship instructions and board of navigation, and all that sort of thing.

Q. Were there any questions asked at that time, for instance, tending to test your qualifications for judging of the carrying capacity of a passenger vessel?—A. No, sir; not directly; no, sir.

Q. Not at all. Do you recall the name of the man that conducted that examination?—A. I do not.

Q. Was any political pull used in securing your position?—A. I was never in politics in my life; no more a political friend to one side than the other.

Q. Now, then, Captain, in 1904, when you declared the *Eastland* perfectly safe and could carry 3,300 passengers, what mathematical test did you apply?—A. The law and the measurement of her deck space and the equipment that the law required her to have.

Q. Now, would you mind telling this board exactly the test complied with by you in reaching that judgment?—A. Reaching what judgment?

Q. That the vessel could carry 3,300 people safely?—A. Used natural intelligence and experience in these cases and the deck space required for that number of people, which would comply with the law in carrying them, and the life-saving equipment, etc.

Q. Is there any mathematical test which may be applied?—A. I do not think so; I don't know why it should.

Q. You wish the board to understand that it is entirely a matter of judgment?—A. No, sir; I did not say so; I said the deck space was measured and she proved she had plenty of deck space for more than 3,300 people. She only had the permit for 3,300 people for about 30 days.

Q. I want to know what you understand by the proof; how do you prove it up?—A. Measure her deck space and put it into feet.

Q. How do you do that?—A. Put it into feet.

Q. Then what?—A. There is not any given figure to abide by that we know of.

Q. Guesswork?—A. No; no guesswork; a little common sense as to the stability of the ship and the conditions of her construction, and all that sort of thing.

Q. And from that you arrive at the number of passengers that that vessel can carry. Now, do you allow in your calculations that those passengers may be moving about so that all of them may be on one deck at the same time?—A. No; I did not say that.

Q. What do you do?—A. Why, the total deck space is measured; she has four decks; we allow her very few on the roof; all the rest are supposed to be down below, and the deck space is all measured up; the available deck space. That work was not done by myself; I had a partner; Mr. Peck and myself made the measurement, and the dimensions of the roof was had from his figures particularly.

Q. Captain, can you recall during the year 1906 and competition between rival boat owners of the South Haven-Chicago route—I think you have already answered that question.—A. In 1906—no, I do not think that question was put to me before—there was a rivalry between two steamers, two lines, the *City of South Haven* and the *Eastland*.

Q. Public interest was running high?—A. I think so.

Q. Did you ever hear, Captain, at that time that members of the crew of the *Eastland* were betting wages as to which boat would reach South Haven first, the *Eatsland* or the *South Haven*?—A. I never heard of it.

Q. You never heard of it?—A. I never did.

Q. If that statement should have been printed in a newspaper at that time, would you dismiss the matter with the excuse that the newspapers exaggerated those things?—A. No, sir; I would say I never heard of it, never saw it, never heard of it before; I don't think the steamers raced across in the world. They tried to get passengers, but there was no racing.

Q. Did you in 1904, after the *Eastland* had listed badly, excuse a report or account of that listing in one of the newspapers in a communication above your signature, charging it to the yellow press?—A. Well, I don't remember; I believe there is something in the letter you read here—the Secretary read a while ago—I do not know what was given; it appeared in some papers here or I would not have written it.

Q. Now, if a boat lists badly do you think that a newspaper has any right to make comments concerning it?—A. Certainly; they do it whether they have or not.

Q. Do you think that any citizen has?—A. Why, I guess they have a perfect right to question these things and look into the matter for the cause of the listing, etc.; yes, sir.

Q. And now, Captain, you dismissed the listing of the *Eastland* in 1904 without much of an investigation, simply by writing a letter to the—A. No; we did not. I did not say that; the letter does not admit it, and I do not admit it.

Q. What did you do?—A. Went up there and saw the evidence right with my own eyes, in sight of my own, in my own view; I was there on the top.

Q. You wrote a letter to the owners of the *Eastland*?—A. Yes, sir.

Q. And you did what else?—A. What else? We reported to our superiors.

Q. Reported to your superiors?—A. Yes, sir; on every occasion, I remember now, but I do not remember all the details.

Q. And what inquiry was made by your superiors?—A. Well, the evidence is there in the letters that were written by our superiors to us; the replies are all there; the Secretary just read them to you.

Q. Outside of the interchange of two or three letters, nothing was done?—A. What do you mean by nothing being done? There was something done all the time; every day I was here from the 5th of May there was something done.

Q. After the year 1905 did you reduce the carrying capacity?—

A. Yes, sir; I said a while ago—well, we did it every—

Q. As I understand the reason that you reduced her carrying capacity was because she was advertising that she was not carrying as many people as the Government allowed her.—A. They said they did not expect to carry 3,300. My tongue is a little thick; I can not speak very plainly and properly, I assure you that; but the matter of this yellow paper they are talking about—we did not refer to any particular paper, whatever paper that appeared in, what came into our minds at the time, we used that expression; I could not tell you what paper it appeared in; I could not do it.

Q. I do not know, Captain, that it has anything to do with this inquiry, but don't you think it is rather a bad policy in answer to a complaint concerning the alleged overcrowding of a vessel to make comment of the disposition on the part of the press to exaggerate matters?—A. Well, perhaps it was. I don't remember whether Mr. Peck or myself dictated the letter.

Q. In view of the fact that the *Eastland* eight days ago—eight or nine days ago—tipped over, do you still believe that the newspapers in 1904 exaggerated?—A. Well, I do not know as I care to answer that specially; I do not know. Whatever we said or thought at that time is what we wrote, circumstances existing at that time permitting us to say what we did.

Q. I desire to get your judgment on this point. Suppose, in 1904, when the *Eastland* listed badly, an inquiry similar to the one now under way had been authorized by the proper officials, do you think it possible that precautions would have been taken to have prevented the tipping of the *Eastland* last Saturday, a week ago?—A. Do I think precautions should have been taken to prevent it?

Q. Yes.—A. Yes, sir; it never should have occurred, there is no question about that in my mind; this accident never should have occurred.

Q. Then, Captain, do you believe that there was negligence on the part of some one in not taking the listing of the *Eastland* in July, 1904, more seriously?—A. No; I do not think that there was anybody that did not take it seriously; I know our department took that seriously; I know ourselves, as inspectors, and the inspector general, they all took cognizance of the fact.

Q. In 1906, I think you have answered this already, you heard of no agent of the Federal Government being sent from Washington to conduct an independent investigation?—A. I do not remember of any.

Q. But since I have asked you the question last you have not refreshed your memory sufficiently in that particular that you do remember of having heard of that investigation in any way, manner, or form?—A. No; that was in 1906?

Q. That was in 1906.—A. Well, we have had a good many things come up you know since then; it may have occurred, but I do not remember of it at all.

Q. Now, Captain, you are under civil service, are you?—A. Yes, sir.

Q. And under civil service before you can be removed from your position it is necessary that charges be filed?—A. I understand so; yes, sir.

Q. Is that the rule?—A. I understand so; yes, sir.

Q. Have charges ever been filed against you?—A. Not that I know of.

Q. Have charges ever been intimated?—A. Complaints may have been intimated and filed, but never any charges that I know of.

Q. Do you know, Captain, that, in view of the fact that the *Eastland* went over with 2,500 people on board, that a Government official who declared that the vessel was perfectly safe in carrying 3,300 people, do you think rather he would be liable if brought before the civil-service trial board?—A. No, sir; I should not think so; in justice, no. In 1904 that occurrence happened, you know. That is a long while since then. There may have been many changes in the ship and that sort of thing, in the ship between that time and now. I do not know of any, although I have been on board her last year and this year; I have not noticed any particular changes that would make her any less or more seaworthy or safer than she was at that time.

Q. Now, who is your immediate superior in the service?—A. Who is my immediate superior in the service?

Q. Yes, sir.—A. Supervising Inspector Westcott.

Q. And who is his immediate superior?—A. Gen. Uhler, the Inspector General.

Q. And his immediate superior?—A. The Secretary and then the President.

Q. And your immediate inferior?—A. My immediate inferior?

Q. Yes.—A. Why, my next inferior is the Assistant Hull Inspector Atkinson.

Q. Now, during the period that you have been in the service have many changes been made in the personnel of the service?—A. Not very many.

Q. You are now under civil service?—A. Yes, sir.

Q. It is a matter of stepping one step higher?—A. Yes, sir.

Q. And during your period of service there has been no new blood in the service to renovate it?—A. To renovate it?

Q. Yes.—A. Does it need renovating?

Q. I do not know; I am asking you that.—A. I do not know; there are younger men in the office than myself and they have come in since that time, but not as local inspectors.

Q. And when you went into the service, Captain, let me understand, there was no mathematical way of arriving at a decision as to the number of passengers a vessel safely could carry?—A. Why, yes; it was all mathematical at that time—measure up and divide.

Q. It was mathematical?—A. Yes, sir.

Q. It was a matter of measuring up and dividing?—A. Yes, sir.

Mr. O'HARA. Mr. Secretary, I believe that the inspector general of the service sent a letter in the year 1912, a circular letter. Has that been read into the record yet?

Secretary REDFIELD. I do not know; he sent a good many.

Mr. O'HARA. That was the one, General, that you were kind enough to show me this morning.

Do you recall, Captain, receiving a letter in April or May, of 1912, a circular letter signed by George A. Uhler on this matter, this subject matter [passing letter to witness]?

The WITNESS. I think so.

Q. And you recall, Captain, the following language: "It is impossible to lay down any ironclad rule as to how many passengers shall be allowed on a steamer, for some steamers, by reason of their construction and stability, are able to carry more persons than other steamers that many actually have more deck space." That is what the letter says. Do you hold a contrary belief to this?—A. No; I do not.

Q. And do you now desire to amend your previous statement—that the number of passengers carried by a vessel is arrived at through a mathematical calculation strictly?—A. Yes; we do that. As I told you a moment ago, by measuring the deck space. She must have boatage as to comply with the law, to take care of a certain number of people, and life preservers and all that sort of thing, but it does not say you have to arrive at that in a certain way or that by compliance with the law you can get a certain number of people. Dividing it up, sir, and figure it out; that will take care of it.

Now, there is no rule that says what we shall divide by that I know of. There may be a rule that is in use somewhere, but we haven't any such rule on that; not from our superiors anyway.

Secretary REDFIELD. Did you read this letter into the record?

Mr. O'HARA. No, sir; I left that for your judgment. I do not wish to presume any.

But two other questions, Captain. You testified concerning a disagreement with Capt. Pederson.

A. No; I did not.

Q. The captain of the *Eastland*.—A. Not a disagreement; no. I did not use that expression, a disagreement. I do not believe I did. I would like to have you refer back to my testimony if I said a disagreement. I said he did not comply with my request or my instructions; but that is not a disagreement.

Q. Do I understand, Captain, that your testimony is that you instructed the captain of the *Eastland* to make some changes in the placing of the light apparatus, and that Capt. Pederson refused to do so?—A. No, sir; I did not say so.

Q. What did you say?—A. I said he did not immediately comply with my request; he did not immediately comply with my request because he had not changed it about a week after my request; then he did do it. I did not say he refused to do it.

Q. Now, during that intervening week when the captain was not complying with your request, what effort did you make to compel the captain to comply?—A. None; not anything.

Q. Did you file a protest against him?—A. No, sir.

Q. Did you try to take his license away from him?—A. No, sir.

Q. Did you try to stop the running of the boat?—A. No, sir.

Q. Then suppose, Captain, that during that week the *Eastland* had met with an accident and at that instant the condition of the life apparatus had been defective because the captain had not complied with your request; would you have been guilty of negligence? A. I would not say so.

Q. In not compelling the captain immediately to comply with your instructions?—A. I would not think so, because the first notice I had taken of these things was Sunday morning within about an hour of his leaving time; I would say about an hour, perhaps less; it would not have been practical for him to have gone at that particular job at once, without the passengers all around there; we left it to him, he being under oath as master; we left it to him to do that thing during the week, because he would not be carrying many passengers anyway, and then the next Sunday I came around he had cause to go into the dry dock, and it was at that time that I said to him that he must do it; I told him to do it that day, at that time. There was no feeling between Capt. Pedersen and myself.

Q. All right, Captain. Have you been in the habit of permitting captains to disregard your instructions?—A. No, sir; we have not.

Q. Have you been in the habit of permitting them to make such changes as you order at their pleasure and convenience?—A. Well, sometimes at their convenience, if it would be impossible for them to do it at the time we were asking them to do it; that is, perhaps, things of not very much importance, or did not amount to very much; some minor detail.

Q. But life savers are important, are they not, Captain?—A. Oh, yes; they are important, and they are cared for.

Q. Now, as a matter of fact, Captain, is that delay granted the captain in making such changes as you have described an accommodation to the captain or the owner of the vessel?—A. I do not know as it would be to anyone's advantage, particularly; in some cases it might be negligence on the part of the master, the one who is ordered to do these things, but it may be that it being an unimportant time or an inappropriate time to work some things out, they can not leave everything to go on with some minor requirement we may ask them to do; we do not ask them to do that; anything that is of vital importance we stop the ship for.

Q. So it is your policy, Captain, to make things as easy as possible, to apply the law as gently as possible with the owners of the boats?—A. No, sir; oh, no.

Q. You do not want to do anything to injure the business, of course?—A. We would not want to hold a boat up and make her lose a trip because of some little technicality; you would not want us to do that if you owned a boat.

Q. For information, Captain, I want to get your viewpoint. Suppose the steering apparatus of one of the largest passenger-carrying boats—steamers—carrying two or three or four thousand passengers was broken so that the wheel could not be used, and it should then become necessary to steer the boat by placing six men on one side and six men on the other side at the wheel, guiding her; before that vessel would leave port would it be necessary for her to

have the permission of some Federal Government inspector?—A. She never would leave the port with the Federal Government's permission.

Q. She never would?—A. She would not be allowed to leave by anyone that I know of.

Q. But suppose she did leave without first getting permission from the Government inspector, would you think—A. Well, if he got away from us before we got him somebody else would get him; if he got out of our jurisdiction we could not take action on her; if he got away we could not get action to take his license away.

Q. Suppose he left your port in that condition?—A. Well, if we did not know it, that is different. They might do that, but I don't believe there is a master in this part of the country who would do it. I never heard of such a case.

Q. You never heard of such a case?—A. No, sir.

Q. Now, would it be possible for a vessel to leave the city of Chicago carrying 3,000 people in that condition?—A. With six men at each side of the wheel?

Q. Yes, sir.—A. I don't think so. I never heard of a case of that kind.

Q. You say it would not be possible?—A. No, sir; I do not say it would not be possible. I say it is not probable.

Q. Now, would it be possible or probable for a vessel in such condition carrying 3,000 passengers to reach another port, we will say the port of St. Joseph?—A. Why, it depends on just what the conditions are at that time. You say it takes six men on each side of the wheel. I don't know where they would put them on each side of the wheel. They might have a cable or rope on each side and have six men steer her course. That has been done thousands and thousands of times when that happened out in the lake, and they could get her into St. Joe that way. But it is not practical to ask a question of that kind, because they do not do a thing of that sort. If they could do it without our knowledge they might, but we never saw any such case; and what we do not see we can not, of course, control.

Q. You never received such a complaint, Captain?—A. No, sir; not that I know of.

Q. And you are very certain the Federal inspectors would not permit that sort of thing if they knew about it?—A. No, sir; not if they knew about it.

Mr. O'HARA. That is all, Captain. Thank you.

Secretary REDFIELD. Any questions?

Mr. SULLIVAN. Just a couple of questions, Captain. Did you ever hear of this incident that is supposed to have happened on the boat, where the crew were compelled to turn the hose on the passengers?

The WITNESS. On what boat?

Q. On the *Eastland*.—A. No, sir.

Q. You never heard of it?—A. I have heard that in conversation around the room here, but it has proven not to be true by the captain, who says it is not a fact.

Q. Did you ever hear anything about lack of harmony between the different departments of employees on the *Eastland*?—A. No, sir.

Mr. BISHOP. What is that question?

Mr. SULLIVAN. A lack of harmony on the boat. You never heard of a lack of harmony between the engine crew—

A. No, sir.

Q. And the crew of the master?—A. No, sir.

Q. What degree of list would cause the ship to take in water through the gangways and deadlights on this ship?—A. What degree of list?

Q. Yes; on the port side on the Saturday morning in question?—

A. With her gangways down in the position she was in and the deadlights open she would not have to go very far, but I could not tell you the degree to fetch these deadlights in water; it would not be a very great degree.

Q. Would 15° cause her to take water in at the deadlights and gangway?—A. Well, 15 or 20, anyway, I would say.

Mr. SULLIVAN. That is all.

Mr. BISHOP. Captain, it is the duty, is it not, of the owner of a vessel to select competent men—competent and efficient crews?

The WITNESS. Well, we will presume yes, if he can obtain such men.

Q. Well, they can be obtained, can't they?—A. Yes, sir.

Q. When a licensed officer presents his license to the Government inspector, the Government inspector then assumes, or has the right to assume, any knowledge to the contrary notwithstanding—that is, unless he has contrary knowledge—that the owner has selected a competent man to handle the particular vessel; isn't that true?—A. Yes, sir; I think so.

Q. The masters of ships and the various licensed officers scale in the efficiency, the degree of efficiency, for their particular work as men in ordinary walks of life scale in efficiency in their particular work, do they not?—A. Well, I think so; yes, sir; there are good and bad.

Q. In other words, there are better and there are some that are worse?—A. Yes, sir.

Q. You could conceive, could you not, Captain, a man who might be able to slip through an examination for a licensed officer of a boat—he can be lucky enough to get through; I do not mean any advantage taken, as a doctor might get through an examination of the State board of health or a lawyer get through an examination of the State board of bar examiners, and if the lawyer or doctor got through and the lawyer was not a successful practitioner, or the doctor was not, it would not necessarily condemn the system that examined him, would it?—A. That is a long question for me to retain and answer correctly. The only way I can answer that, and will answer it, is that nobody ever gets through or gets by our examination without giving us the goods, and it would have to be in black and white, too.

Q. In other words, they have got to show you that they have had a certain amount of experience?—A. Yes, sir; and answer a certain amount of questions, so that we are satisfied they are qualified for what they have asked for before we give them a license at all.

Q. The owners of the vessel hire the men on the vessel, do they not?—A. The owners?

Q. Yes.—A. Usually; yes.

Mr. BISHOP. That is all.

Secretary REDFIELD. Capt. Van Patten?

Mr. VAN PATTEN. Capt. Mansfield, I would like to ask you if the life-saving apparatus on the *Eastland* was out of order just because the life preservers, belts, or straps were tied in a bow knot?

The WITNESS. No, sir.

Q. They were not out of order?—A. No, sir.

Mr. VAN PATTEN. That is all.

The WITNESS. They do not comply with our idea of having them untied, though.

Mr. VAN PATTEN. That is all I want.

Secretary REDFIELD. Capt. Collins?

Mr. COLLINS. Nothing.

Secretary REDFIELD. Mr. Fouke?

Secretary REDFIELD. Mr. Pool?

Mr. POOL. No, sir.

Secretary REDFIELD. I wish to put into the record the whole of the circular letter to which the lieutenant governor has referred, and from which he has quoted:

DEPARTMENT OF COMMERCE AND LABOR,  
STEAMBOAT-INSPECTION SERVICE,  
Washington.

UNITED STATES SUPERVISING AND LOCAL INSPECTORS,  
*Steamboat-Inspection Service:*

As the season approaches when water travel will be at its height, you are directed to give particular and careful attention to the matter of the inspection and equipment of all steamers under your jurisdiction, especially those steamers accommodating a large complement of people. You must see that all of the life-saving apparatus, such as life preservers, lifeboats, and life rafts, is in first-class condition, a conclusion that must be reached only by actual personal examination on the part of the local or assistant inspectors.

Hose, pumps, fire extinguishers, etc., must be carefully examined by a local or assistant inspector to determine that the fire-fighting apparatus is in good condition and ready for immediate use.

Another matter to which most careful consideration must be given, and one that has had the attention of this bureau, is that of passenger allowance on excursion steamers. It is impossible to lay down any iron-clad rule as to how many passengers shall be allowed on a steamer, for some steamers, by reason of their construction and stability are able to carry more persons than other steamers that may actually have more deck space. In arriving at the passenger allowance, you should have in mind, not only the stability of the ship, but also the possibility of panic in case of disaster. If the passenger allowance of excursion steamers invites any doubt whatever, do not hesitate to cut down such allowance, for you are aware that you are responsible, and will be held responsible, in the event of disaster to such boats.

GEO. UHLER, D. N. H.

Secretary REDFIELD. You are excused, Captain.  
(Witness excused.)

CHARLES C. ECKLIFF, called as a witness on behalf of the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Give your name, address, and occupation to the stenographer, and your age.—A. Charles C. Eckliff, 419 Lafayette Street, Grand Haven, Mich.

Q. And your age?—A. My age, 57 years old.

Q. Have you been served with a subpoena to attend before the Federal grand jury?—A. No, sir.

Secretary REDFIELD. Mr. Thurman, have you received from the Federal district attorney any information in the matter?

Mr. THURMAN. I have received a statement from Mr. Clyne, stating that Mr. Eckliff is to be a witness before the grand jury now in session.

Secretary REDFIELD. In that case, under Judge Landis's order, we will excuse you for the present.

Mr. THURMAN. I feel that he is within the spirit if not within the letter of the order.

Secretary REDFIELD. We will excuse you for the present, Mr. Eckliff.

(Witness excused.)

WILLIAM NICHOLAS, called as a witness on behalf of the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you give your full name, address, and age to the stenographer.—A. William Nicholas, 4004 North Hermitage Avenue, 47 years old.

Q. Mr. Nicholas, have you received a subpoena to appear before the Federal grand jury?—A. No, sir.

Q. You have not?—A. No, sir.

Q. Mr. Nicholas, what is your occupation?—A. Local inspector of boilers.

Q. And where?—A. Chicago, Ill.

Q. Now, will you state what your employment has been from the time you began work up to the time you entered the Federal service?—A. I was a deck hand on a steamer.

Q. Will you speak up as loudly as possible so all the gentlemen can hear?—A. I was a deck hand on the steamer *E. H. Ketchum* in 1894; and finished the season as a fireman; I fired about four months in 1884, and I fired one season on the *Nayhant*, that was in 1888; and I went to tugging in the Chicago River and fired on various tugs for the Dunham Line and C. O. D. Line.

Q. They can not hear you, speak up as loud as I do.—A. And I got a license as an engineer for 60 tons noncondensing steamer. I was assistant engineer on the tug *Chicago*, that was in 1890, I think, and I was engineer on the steamer *Luella Wellington* in 1893 and 1894. Then I went as chief engineer of the steamer *John W. Moore* in 1895, and then I was in the *Moore*, I believe, three seasons.

Q. I can not hear you.—A. Chief engineer of the steamer *John W. Moore* for three seasons, and I went in the steamer *Black Rock*.

Q. If you can not give them all the names, just say steamers of such and such a character?—A. And the steamer *Ravens Craig* for two seasons, and chief engineer of the steamer *Indiana* for two seasons, and then I went with the Travelers' Insurance Co. as an inspector in the liability department for a number of years, and then I went in the Government service in 1906.

Q. What different licenses have you held?—A. Special engineer for 60 tons noncondensing; an engineer of 100 tons; a first assistant of 1,250 tons; unlimited first assistant; chief for 1,500 tons, I believe, and then unlimited chief engineer. All of these changes were made due to examinations.

Q. Six?—A. Yes, sir.

Q. Six different licenses?—A. Yes, sir.

Q. Meaning that you passed six examinations?—A. Yes, sir.

Q. And where were those examinations taken?—A. All in Chicago.

Q. And at the hands of the local inspectors here?—A. Yes, sir.

Q. When was the last one taken?—A. I guess about 1900; somewhere along there, I forget now.

Q. Now, how did you enter the United States service?—A. As a result of a civil-service examination.

Q. Where did you take that civil-service examination?—A. In Chicago.

Q. How did you pass?—A. I do not know just what I did pass, I never learned; I took two examinations.

Q. You took two?—A. Yes, sir.

Q. Did you fail on one?—A. No, sir; but the eligible list was only good for a year; and at that time you took an examination every year.

Q. So you took two civil-service examinations before your appointment?—A. Yes, sir.

Q. And you were first appointed assistant inspector, am I right?—A. Yes, sir.

Q. And how long did you stay assistant inspector?—A. From 1906 to 1913.

Q. How did your promotion come about?—A. My superior left the service and I was promoted to his position.

Q. Did you take an examination on promotion?—A. No, sir.

Q. And you have been a local inspector of boilers since 1913; is that right?—A. Yes, sir.

Q. Now, tell us what you know about the steamer *Eastland* of your own knowledge, both before you entered the service and since you have been in the service.—A. I do not know anything about her of my own knowledge before I went into service; I think the first time I ever was aboard of her was in 1906, and that would be for an examination on a Sunday perhaps, which would be just a quick looking over of the equipment—that is, life rafts and life preservers, hose, and so on—and then I did not see her again until 1914. She went into dock, dry dock, and I examined her shafts at that time, and she put in two new outlet shafts as a result of that examination.

Q. Did you require these shafts to be put in?—A. Yes, sir. And this year she went in the dock again and we had one of those new shafts repaired; and I have been aboard of her, oh, maybe, three times or four times, I believe.

Q. Since when?—A. This year.

Q. This year?—A. Yes, sir; and perhaps a like number of times last year.

Q. Now, state the occasion for your visiting her this year, and say what you did.—A. Of a Sunday morning, while making the rounds

of the boats, I look over their equipment, etc.; just step aboard for a few minutes and visit with the engineer and take a look around: the different decks perhaps, go up on top, walk forward and aft on the upper deck and down to the next deck, etc., and look over the hand props, the hose, and get just a general idea of the conditions—cover the boat; that is it. I made a trip in her this year; made a trip across to St. Joe and back.

Q. What did you do while you were on that trip?—A. Just visited with the engineer most of the time.

Q. Well, where did you go with him?—A. I did not go anywhere with him over at the other side, just around the boat.

Q. Yes; but whereabouts in the boat did you go?—A. Oh, down in the boiler room, down in the engine rooms.

Q. Did you go below the grating?—A. Yes.

Q. Down onto the floor of the ship?—A. Yes, sir.

Q. Did you go into the boiler room?—A. Yes; I went in the boiler room.

Q. Does the description you have given apply to all the visits you made to the vessel when she was in Chicago this spring—is that the kind of thing you did?—A. Yes, sir.

Q. Did you on each of those occasions go down into the engine room?—A. No, sir.

Q. Or did you go into the boiler room on these occasions?—A. No, sir.

Q. So that I am to understand that you have made four visits to the vessel in which you have taken a general look through the boat?—A. Yes, sir.

Q. Glancing at her equipment?—A. Yes, sir.

Q. And that in addition you have made one trip across the lake?—A. Yes, sir.

Q. Part of each time you spent in the engine room and in the boiler room?—A. Yes, sir.

Q. Now, is the vessel under your official care?—A. Well, just like every other steamer is that comes in here.

Q. Well, perhaps you do not understand me. Are you supposed to make boiler inspections of that vessel?—A. No, sir.

Q. Who is?—A. The inspectors who made the annual inspection, in this case Grand Haven.

Q. In other words, am I right in supposing you to mean—do I understand you correctly—that the vessel was officially under the care of the Grand Haven inspectors, who made the annual inspection?—A. Yes, sir.

Q. And who are, therefore, supposed to make the annual reinspection—the four annual reinspections?—A. No, sir; the three annual reinspections.

Q. The three annual reinspections completing the four?—A. Yes, sir.

Q. And then your work was additional to theirs, and voluntary on your part?—A. Yes, sir.

Q. You did not usually have anything to do with issuing, if I understand you correctly, the license or giving her a passenger allowance?—A. No, sir.

Q. Did you have anything to do with certificating the vessel in any way?—A. No, sir.

Q. Now, why did you go there at all?—A. Because we do that to all the passenger boats that come in here; we look them over that way—that is a Sunday detail.

Q. Now, how much had you been told about the vessel being a crank?—A. Well, I had already heard she was a crank boat ever since I had heard of her, and I had heard about the time that she had listed so badly at South Haven, but I was always under the impression that she was a boat that required particular care.

Q. On whose part?—A. On the part of everybody connected with her—that is, the operation of her by the master and his crew, the engineer and his crew, and the steward and his crew.

Q. Why?—A. Because she was liable to list at any time, and bring any part of the ship down into the water if she was not properly cared for, and liable to result in disaster.

Q. Did you ever see her list?—A. No.

Q. Well, now, why do you say she was liable to bring some part of the vessel down into the water? I do not quite understand what you mean by some part of the vessel.—A. Well, knowing she was a boat that would list if she was not properly taken care of, there was always a chance for her to tip over enough to bring the dead lights or gangways or something of that kind, the dead lights and gangways principally, down below the water level and the water could rush in and, perhaps, result in a disaster.

Q. You say there was always that chance?—A. Yes, sir.

Q. Now, had you that especially in mind when you visited the boat Sundays?—A. I had it in my mind on the three occasions when I spoke to the engineer.

Q. What did you say to the engineer?—A. I asked if he was having any trouble with her listing. He told me "No." That he was having no trouble whatever, that he had perfect control of her, and that she did not bother him in any way.

Q. What engineer was that?—A. Erickson.

Q. Erickson?—A. Yes, sir.

Q. When was that?—A. This year.

Q. What month?—A. I think it was in July.

Q. July?—A. Yes, sir.

Q. Well, did you caution him at all?—A. Yes, sir; that is, I did not caution him because he did not complain at all; I asked him if he had any trouble at all, and he told me no; I questioned him about her listing at any time out in the lake. My opinion was that she was bad to list, and he said no; that he never had any trouble with her, and while I was making this trip she took a list at port, and the dancers, I heard some of them complain about dancing up hill, and I went to look for the engineer, and when I got down into the engine room I failed to find him, but I saw one man down there. I am not sure whether he was an engineer or one of the oilers, and I says, "What is the matter; can't you get this list out of her?" He said, "We will have that out of her in a minute; we are fixing it right now." I went looking for the engineer and did not find him, but the list went out of her; he seemed to trim her then without any trouble.

Q. Now, what method did he use for trimming her down?—A. Well I did not go into any of those details; just my general knowledge of those conditions.

Q. Well, what do you understand they did to trim her down as you recall it?—A. I never had any particular understanding about how they handled that boat any different to any other boat; I did not know there was any particular way.

Q. What was the way they used, water or what?—A. Put water in one side to tip them this way and in the other side to tip them the other way.

Q. You mean they used water ballast?—A. Yes, sir.

Q. Now tell us from your knowledge about the ship, what the water ballast system was, and how it was used?—A. Well, from my own knowledge I do not know; only just what I have seen since she turned over.

Q. Well, tell us what you have seen since she turned over. Is what you have seen since she turned over such as to inform you about the vessel?—A. Just on the starboard side.

Q. Now what did you see?—A. I saw the ballast pump and the manifold and the three valves, the three pipes leading from the manifold.

Q. Three pipes?—A. Yes, sir.

Q. They would be one each for three tanks?—A. Yes, sir.

Q. There were how many tanks on that side of the ship?—A. Well, I know now; that is, I have understood there were five tanks on each side.

Q. Do you mean to say when you say you saw three that the others were covered with water?—A. Yes, sir.

Q. Did you see the valves of the three you saw?—A. Yes, sir.

Q. Were they opened or closed?—A. The No. 1, leading to No. 1 tank was closed, but No. 2 and No. 3 were open.

Q. No. 2 and No. 3 are the single tanks, are they not?—A. Yes; on the starboard side three is the big tank.

Q. And two is the next forward?—A. Yes, sir.

Q. Was the sea cock open?—A. Well the sea cock I could not see; the sea cock is on the other side; I just saw the ballast on the starboard side.

Q. Do I understand it that you can describe the system that they used? If so, do so.—A. There is a sea cock on the port side, which is a pipe leading from out to a manifold which extends all the way across the ship.

Q. Athwartships?—A. Yes; straight across it; and it is connected on the other side to the ballast pump, and from that manifold there are pipes leading to the 10 tanks.

Q. This manifold, you say, runs across the ship?—A. Yes, sir.

Q. And the 10 pipes start out from it, running forward and aft?—A. Yes, sir.

Q. That makes how many valves?—A. It makes 10 valves on the manifold, and the sea cock would be 11.

Q. Eleven valves?—A. Yes, sir.

Q. What is the size of the valves?—A. I should judge that the valves on the manifold are about—well, the pipes leading from it are about 6-inch; I ain't clear about that, but I should judge they are about 6-inch.

Q. Then, what is the process precisely by which the tanks are filled?—A. The sea cock is opened and the various valves, as desired, are opened to conduct water into the different tanks.

Q. What is the relation of the valves on the manifold and on the sea cocks as to the engine room; how near are they?—A. They are in the engine room.

Q. They are in the engine room?—A. Yes, sir; and, I think, right forward of the engine.

Q. Then, do I infer from what you have said that they are immediately accessible?—A. Yes, sir.

Q. You have seen them there, have you?—A. Yes, sir.

Q. How long would it take you to turn them on, go through the motion of opening the valves?—A. I ought to be able to open all of them in a minute, I should think, or very near it.

Q. Then, do I infer correctly from you that they are all coarse thread?—A. Yes; I did not see the thread, because the thread is down below.

Q. Have you ever tried to open one of them?—A. No, sir.

Q. How do you know they have a coarse thread?—A. Well, they usually build them with a coarse thread, and it is just a case of four or five turns and you have got these valves wide open.

Q. They are wheel valves?—A. No, sir; it is just a stem sticks up, and you drop down a box wrench.

Q. They are valves which you turn with a box wrench?—A. Yes, sir.

Q. Where is the wrench kept?—A. I don't know.

Q. Suppose you lost that wrench?—A. Well, you could use a monkey wrench if you had to; it would be a little bit unhandy, but with a monkey wrench you could probably stand up on the platform and drop that wrench down and keep it going right around.

Q. You mean it turns like a carpenter's bit?—A. Yes, sir.

Q. A socket wrench?—A. Yes; socket wrench.

Q. Not a box wrench?—A. No, sir.

Q. Now, there were no handles on these valves?—A. No, sir.

Q. Now, isn't it a fact under that arrangement that if that wrench were mislaid you might be inconvenienced for a time?—A. Yes; it would be a little bit unhandy; I don't know just how the arrangement is in relation to the floor, but frequently these manifolds are down a foot or two.

Q. Now, would you feel justified in telling the chief engineer that he ought to put a wheel valve on there?—A. No, sir.

Q. Why not?—A. Oh, it is not really necessary; and if that wrench should happen to be mislaid it could be handled with any monkey wrench or any adjustable wrench—a monkey wrench or a Stilson wrench, or anything like that.

Q. Now, how long did it take to fill the big tank?—A. I don't know from my own knowledge.

Q. Could you calculate it from knowing the area of the tank and the size of the inlet?—A. Yes, sir.

Q. What was the size of the sea cock?—A. I did not see the sea cock; the sea cock is on the port side.

Q. Would it, in your judgment as an engineer, be of any advantage if there were two sources of entry to the system from both sides of the ship?—A. Yes, sir.

Q. Why?—A. You should also have another ballast pump, a ballast pump and sea cock on each side, a dividing valve between, in the center of the manifold, then you can trim each side separately.

Q. Did you ever recommend that?—A. No, sir.

Q. Why not?—A. Well, I never inspected it.

Q. You never have inspected the *Eastland*?—A. No, sir.

Q. And you do make a distinction between the visits you spoke of having made every Sunday and a definite inspection?—A. Yes, sir.

Q. Now, do you think, as a matter of fact, Capt. Nicholas, that if you were the officer who made the inspection of that vessel that you would recommend putting in of a duplicate system there?—A. No, sir; I do not think I would.

Q. Why not?—A. Well, she has been used for quite a number of years successfully, and no one seemed to complain about her; I never heard any engineer complain about his ability to trim her properly when he wanted to.

Q. Well, wasn't it up to you to do the complaining?—A. Well, I never saw her list any, and never knew that there was any danger.

Q. I thought you said a moment ago you were out on the lake with her when she listed?—A. Yes; but he took the list out of her right away.

Q. Yes; but the system you have mentioned, as I understand it, is one which you think would have made her more handy, isn't that so?—A. Yes; but I didn't think it was necessary to install that kind of a system on that boat because when she was properly handled you could let in that water in either one of these tanks to tip her the other way, so she would answer to the water in three or four minutes.

Q. Well, how long did it take to fill No. 3 tank?—A. Well, that I don't know, only what I have heard testified here.

Q. You have seen the tank?—A. No, sir.

Q. You never saw the tank?—A. No, sir.

Q. Didn't you inspect—oh, you never have inspected the vessel, that is so.—A. No, sir.

Q. Would you hesitate to recommend the putting in of another ballast pump and another sea cock for lack of authority to do so?—A. No, sir; not for lack of authority, but I never tried—I always try never to recommend anything unless I think it is necessary.

Q. What distinction do you draw there, Capt. Nicholas, between an improvement and a necessity?—A. Well, it might make it easy, that she would be easier, and that you could get the water in and out of her quicker, but I thought it was not necessary; she was in port every night; she was laid up every night; and you could have your tanks whichever way you wanted on the morning.

Q. Well, wasn't the ballast more necessary lying at the dock than it was out in the lake?—A. Well, I would not say as to that. I would not be sure as to that.

Q. How does such a steamer start from the dock; doesn't she start going in the position in which she lay, with the helm hard starboard and the rudder to port?—A. Not the *Eastland*; they would not hardly dare start her that way, because she is a twin screw and one of those screws is liable to hit the dock; you have to go along with the dock quite a ways before you can get her over much.

Q. Isn't it a fact that when she was turned hard with the rudder and running with the screws in reverse direction that she would list?—A. I never saw her do that and never knew she would.

Q. Was running along the dock that way a precaution against her listing?—A. No; against hitting one of the screws against the dock.

Q. You mean that when she swung out, if she swung out suddenly her projecting screw on the starboard side would hit the dock as she came around?—A. Yes, sir.

Q. Was it the fact or was it not the fact that the *Eastland* had to be handled tenderly?—A. Well, I never thought she had to be handled any more tenderly than any other twin-screw boat.

Q. Are there not a great many twin-screw boats up here?—A. Yes; quite a few.

Q. Do they have to be handled with the same degree of—A. Well, you have in mind the water ballast now?

Q. Yes.—A. No; I don't know of any of them that had to be handled with the same care with regard to water ballast, with regard to getting her away from the dock, etc., like the *Eastland*.

Q. Do you know whether the *Eastland* was brought into a section by herself as a vessel which had to be very tenderly handled?—A. Never considered her so.

Q. You knew she was a cranky ship?—A. Yes, sir.

Q. Was she what they call sometimes on the ocean a tender ship?—A. Well, I don't know just what is meant by that term; we don't use that here.

Q. Well, a ship that was so cranky she was liable to go too far sometimes suddenly?—A. Well, I never considered her in that class.

Q. Did you know that her after gangways were dangerously near the water?—A. No; I don't know as I ever did.

Q. How many degrees of list would submerge them?—A. Well, it would not take—it would not take much of a list to bring the bottom of her gangways into the water, because judging from her water line now it could not have been over, I don't think, 15 or 18 inches above the water.

Q. How many degrees of list would submerge the gangway?—A. I guess 25° would bring it pretty close to it.

Q. How much?—A. 25 or 30°.

Q. As much as that, you think?—A. 25°.

Q. Would you be sure it wasn't less than that?—A. I have not very clear in my mind just how much a degree would affect the deck level.

Q. Now, Mr. Nichols, supposing you knew to-day a ship dependent upon her water ballast for stability, that had the reputation of the *Eastland* for crankiness, that you had known to list as you saw her when you were on board, and as you knew of happening at the South Haven incident, with gangways as low down and related to the water as those were, carrying 2,500 passengers under a license from your service to-day; suppose you knew of those things, would you or would you not feel now that that ship ought to receive special and peculiar attention from you?—A. Yes, sir.

Q. Well, what would you feel from it?—A. Well, I can see now what can happen as the result of not giving her that special attention.

Q. Well, now, do you or do you not feel now, looking into your mind, that you ought to have felt it before?—A. Well, it would have been a whole lot better if I did, but it is not in my line, you know.

Q. I recognize that—in justice to you—you are a machinery inspector.—A. Yes.

Q. Yet I want you to tell me frankly, and from the sense of detachment that that gives you, whether in your judgment the fact is or is not clear now that the reputation of the vessel, the fact that your associate and yourself have both been on her when she showed the tendency to list, the fact that as you probably knew that your associate, that your associate had ordered the gangways closed on that occasion, and kept closed; the fact, which you may not have known, that the captain and the engineer had been warned to be careful about the water ballast. Under all those circumstances, does it not seem to you now that a higher degree of care should have been given to that ship?—A. Well, from my own standpoint I didn't know, but if I ever did know I had forgotten it, that that listing over there was as serious as it was. I had forgotten about how far over she went at that time. And when she started to run here again, about the only thought that was in my mind about her was that she was a cranky boat. And when I went aboard her last year I talked to Mr. Donaldson, that was then the engineer of her, and asked him about her listing, etc., and he said that he never had any trouble with her; that he always could keep her in an upright position, and he found her the same as other boats; that he handled her all right.

Q. When was this you said, Mr. Nichols?—A. That was last year when Donaldson was running, and after talking to Erickson this year, and having him tell me that he had no trouble with her listing, that it never bothered him at all, I came to the conclusion that a good deal of that listing talk was coming from the rival steamboat companies.

Q. Yet it was sufficiently in the air for you to make it a subject of conversation with both of the chief engineers, was it not?—A. Yes.

Q. Now, did you ever receive these instructions:

It should be the spirit of your service that the presumptions exist against the local inspectors and the supervising inspectors, that they are responsible if an accident takes place, and that the burden of proof is on them in each case to show that everything had been done, not merely in accordance with the rules and customs of the service but which practical, sound judgment dictated to foresee and prevent the accident. Every accident, therefore, puts the inspectors of the district in which it occurred on explanation, recognizing, of course, that in many, if not in most cases, the explanation will be ample, but also recognizing that there will be fewer accidents if every inspector knows he must individually account for the nature of his work in connection with the vessel.

Did you ever hear those words?—A. Yes. I don't remember just when that letter came in, but I have received lots of them just along those lines.

Q. Did you ever see that, and if so, what is it [handing letter to the witness]?—A. Yes; a department circular.

Q. I beg your pardon.—A. A department circular. We receive a lot of them along those lines.

Q. Now, are those instructions which were sent out to every local inspector?—A. Yes, sir.

Q. And when?—A. In 1913.

Q. Do you or do you not think, Mr. Nichols, that instructions that say: "The burden of proof is on the inspector to show in each case everything had been done, not merely in accordance with the rules and customs of the service but which practical, sound judgment dictated to foresee and prevent the accident"—that that was done in connection with the *Eastland*?—A. No; I don't think everything

was done that should have been done. I think in view of her past history that we should have kept that after gangway closed and made them use the fore gangway. We ought to have kept the after gangway closed all the time; never used it; make them load and unload passengers forward.

Q. Did you ever urge that that should be done?—A. No.

Q. I ask you that with the further statement that I understand this was not your particular province. Did you ever hear anybody urge that the circumstances and history of the case were such as to call for a care peculiar to this ship?—A. No. No; I am sure I never did.

Q. And yet I understand you are thinking that the instructions which were sent out on the 18th of December, 1913, were such as would apply especially to a case of this kind, were they not?—A. Yes, sir.

Secretary REDFIELD. Any questions, Mr. Shaw?

Mr. A. B. SHAW. Is the term "cranky" or the word "cranky" a common term about the vessels on the Great Lakes?

The WITNESS. Yes, sir.

Q. In other words, there are out of the large number of vessels on the Great Lakes a number that are termed cranky?—A. Oh, yes.

Q. Cranky in different ways?—A. Yes.

Mr. SHAW. That was all.

Mr. POOL. Mr. Redfield, I would like to ask him a couple of questions here.

Secretary REDFIELD. Yes.

Mr. POOL. In your position of inspector of boilers do you have jurisdiction over the tanks—ballast tanks?—A. No; that is part of the hull, but I have jurisdiction over the pipes that lead to the tanks.

Q. You are not a hull inspector?—A. No.

Q. You inspect the mechanical devices on the boat?—A. Yes.

Q. Did you ever go into the *Eastland* tanks?—A. No.

Q. What day did you last see the valves on the *Eastland*?—A. Last Saturday, I think it was.

Q. That is, the tank valves?—A. Yes. That is, I just saw those three upper ones.

Q. How soon after the vessel sank—tipped over?—A. No; that was just day before yesterday, you know. Last Saturday—not a week ago Saturday.

Q. You don't know, then, whether the valves were opened or closed on the day that the vessel tipped over?—A. No.

Q. You think, from your experience, it is important that a cranky ship, dependent on water ballast for her stability, should be constructed so she would trim more quickly than another ship?—A. No; I should say it would be advisable to have her arranged so that she would not be any more cranky than you can help.

Q. Well, I guess you don't get my point. Here is a ship whose after gangway was 10 or 12 inches above the water.—A. Yes, sir.

Q. That was known to be a badly listing ship.—A. Yes.

Q. And wouldn't it make any difference to you as to whether you could trim that ship in 30 minutes or 15 minutes?—A. Yes.

Q. Well, that is the question I asked you.—A. Yes, yes; it would.

Q. Then you do think that you should be able to trim a cranky ship quicker than one that is not cranky?—A. Yes. Yes; you should be able to.

Q. Consequently, when you were examining the tanks and the sea cocks you would have in mind, or you should have in mind, the rapidity with which that vessel's tanks could be filled?—A. Yes, sir; yes.

Q. Under those circumstances wouldn't the element of time in finding a wrench to turn those valves with be an important factor? Wouldn't it make a difference whether an engineer could find a wrench, or whether a wrench was right over the valve, or whether he had to go to a tool box or bench somewhere to get a monkey wrench to turn those valves?—A. Yes, that would be a factor, but if he was handling the ship right he ought not to have to be in such a hurry.

Q. Yes, but it has been testified that it took 30 minutes to fill these tanks.—A. Yes, that is to fill her and get her ready for loading.

Q. Well, they are not any good until they are full, as I understand it? They are dangerous rather than otherwise?—A. Well, they never carried only the two tanks full, you know, the No. 3 tank—both sides of No. 3 tank.

Q. Yes, but they were empty at 6 o'clock on the morning of the accident?—A. Yes.

Mr. POOL. I think it was 6.30, Mr. Secretary.

Secretary REDFIELD. They were empty before the accident took place. They were not full when the accident took place.

Mr. POOL. That is all.

Secretary REDFIELD. You were not there, were you, at the time of the accident?

A. No.

Mr. POOL. Do you know whether this boat was pulled away from the dock by a tug or not? Have you heard?

The WITNESS. I know that she was not. I wasn't there, but then I was there within an hour, and I went aboard the tug and questioned the tug crew.

Q. Well, there was a tug standing by, wasn't there?—A. Yes, sir, the tug had a line.

Q. The tug had a line out to the boat?—A. Yes, but he had not straightened out to the boat at all.

Q. This boat does not leave the dock on her own power?—A. No.

Mr. POOL. That is all.

Mr. SHAW. I would like to ask another question, Mr. Redfield.

Secretary REDFIELD. Mr. Shaw.

Mr. SHAW. What was the comparative general reputation of this boat? By that I mean, did she have the reputation of being the crankiest boat on the Lakes? Were there many other boats with reputations about the same as hers?

The WITNESS. I don't think she had the reputation of being especially cranky. It was a general, all-around bad reputation she seemed to have—seemed to have. People would say that she had been condemned a number of times, and she was sent away from here because they wouldn't let her run here, and all those kind of things, and you heard so many things about the boat that you knew did not come from sailor people, that you knew that a lot of it was not reliable.

Q. But, would you say, then, that she had a reputation of being the most cranky boat on the lake?—A. No.

Q. Was her reputation exceptionally bad, that would single her out for your special attention?—A. No; I wouldn't say that she was, that her reputation was that way. There are a number of boats that have the reputation of being cranky, that they have to be careful with in handling cargoes, freight, etc.; they list badly.

Mr. FOUKE. Were you familiar with the duties of a boat captain and handling of a boat?

A. Well, yes, I might say, with the most of his duties.

Q. Would you consider it was the duty of the captain in handling that boat to see that those side gangways were closed, knowing that they were so close to the water? Would you consider that the captain should see to that?—A. Yes.

Q. Just the same as it would be the engineer's duty to see that he had enough water in the boilers?—A. Yes.

Q. I say that, regardless of whether an inspector has asked him—recommended that that be done or not?—A. Yes.

Q. You think that would be one of his duties?—A. Yes.

Secretary REDFIELD. Any further questions? Mr. Sullivan, do you care to ask this witness any questions?

Mr. SULLIVAN. No questions.

Secretary REDFIELD. Mr. Gillette?

Mr. GILLETTE. No.

Secretary REDFIELD. If not, the witness is excused. We will adjourn to meet at 9.30 a. m. to-morrow.

(Whereupon an adjournment was taken until the following day, Tuesday, Aug. 3, 1915, at 9.30 o'clock a. m.)

CHICAGO, Ill., August 3, 1915—9.30 a. m.

Parties met pursuant to adjournment.

Present: Same as before.

EDWARD C. GILLETTE, called as a witness on behalf of the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examination by Secretary REDFIELD:

Q. Will you please give your full name and address to the stenographer?—A. Edward C. Gillette, Washington, D. C.

Q. What is your age, Mr. Gillette?—A. Forty-two.

Q. What is your occupation?—A. Superintendent of naval construction, Lighthouse Service.

Q. Department of Commerce?—A. Department of Commerce; yes, sir.

Q. Will you please state, beginning at the time when you began to work, what your various employments have been.—A. Well, I started in as a young man—learned a trade.

Q. What trade?—A. Machinist, and was employed by the B. F. Sturdevant Co. as an outside erecting engineer, in connection with marine work principally, and assistant engineer in private electric plants, and then entered the Government service in the Navy Department.

Q. Speak up loud, so these gentlemen can hear you.—A. As special mechanic in connection with the construction of machinery for torpedo boats, naval machinery, and vessels and entered the Lighthouse Service under competitive examination as superintendent of construction, and as superintendent of construction I have been in the service ever since.

Q. When did you enter the Lighthouse Service, Mr. Gillette?—A. 1903.

Q. And have you been promoted in that service?—A. Yes, sir.

Q. State what your record therein has been in that respect.—A. I was superintendent of construction when I entered the service, and from superintendent of construction was promoted to inspector of the second lighthouse district, with offices at Boston; was then promoted to assistant engineer of the bureau, on duty at Washington; was again promoted from assistant engineer to superintendent of naval construction, the position which I now hold.

Q. How long were you connected with the Navy Department?—A. About three years and a half.

Q. Will you state for the record the names of some of the principal vessels that either in your private or public capacity you have worked upon? Omit for the time those of your present service.—A. I was on the *St. Louis* and the *St. Paul* at Cramps.

Q. You mean the trans-Atlantic liners of that name?—A. Yes, sir. The steam yacht *Josephine* belonging to Mr. Widener. I can not recall the names, but two or three of the Philadelphia & Reading Railroad Co.'s tugs. The steam yacht *Enterprise*. Mr. Secretary, there is a great many boats I can not recall the names of, various boats, different types.

Q. I simply want to get enough to establish the fact of your acquaintance, whether broad or narrow, with naval matters.—A. I was also assistant inspector on the construction of the machinery of the torpedo destroyers *Truxton*, *Whipple*, and *Warden*.

Q. Can you state on what private vessels you did work for B. F. Sturdevant Co.?—A. Yes, sir; I have named some, others whose names I can not recall.

Q. Then does your experience as a naval and practical engineer cover both trans-Atlantic and coastwise vessels, as well as naval vessels?—A. Yes, sir.

Q. That is the fact?—A. Yes, sir.

Q. Now, will you state how many vessels the Lighthouse Service has in use?—A. At the present time there is a fleet of various light vessels to the number of 113; 66 of these are light vessels, and the balance are tenders—47 tenders.

Q. Are any of those tenders sea-going vessels?—A. Yes, sir; nearly all of them.

Q. Are any of those tenders upon the lakes?—A. There are seven tenders on the lakes in the different districts.

Q. Can you in a general way say where they are?—A. One of them is located at Buffalo, two with headquarters at Milwaukee, one with headquarters at Duluth, and three with headquarters at Detroit.

Q. Are these vessels in constant service upon the Lakes?—A. Yes, sir.

Q. Throughout the season?—A. Yes, sir.

Q. Are you at the present time in charge of constructing any vessels?—A. Yes, sir.

Q. If so, of what nature?—A. We have on the boards at Washington at the present time one tender in construction and two light vessels.

Q. Did you design the lighthouse tender *Cedar*?—A. Yes, sir.

Q. A vessels now under construction?—A. Yes, sir.

Q. For what special service is that vessel intended?—A. For the off-shore work of western Alaska, northwestern Alaska.

Q. What are the characteristics of that work as regards requirements of steadiness upon the boat?—A. Stability and carrying capacity; stability at all times due to the nature of the seas and severe weather that is prevalent in those waters where she is to work.

Q. What is the nature of your work in so far as it affects the stability of the vessel?—A. Well, our work is particularly affected by the question of stability inasmuch as our vessels are rigged with hoisting gear for handling heavy buoys, anchors, and moorings that are attached to the buoys.

Q. State, if you can, what the size and weight of the large buoys this vessel is designed to handle is.—A. About 21,000 pounds without the moorings.

Q. How large are they?—A. They measure about 50 feet over all; 50 to 60 feet.

Q. Now, in the operation of handling such a buoy, what is done?—A. The vessel goes alongside of the buoy and makes fast with a line and passes a beam over the side, and with bridle chains and tackles such as we use are made fast and the buoy hoisted out of the water and landed on top.

Q. What connections would there be?—A. A number of chains.

Q. Light chains?—A. Inch and a half for that size buoy.

Q. How much does it weigh to the yard?—A. I should say to the fathom.

Q. To the fathom?—A. I think it runs about 175 pounds to the fathom, as near as I can recall right now.

Q. How long are these chains?—A. They vary according to the depth that the buoy is moored in.

Q. Taking for example the buoy that is to be placed off of Cape St. Elias, in Alaska.—A. Yes, sir.

Q. Would this vessel be expected to handle that buoy?—A. Yes, sir.

Q. An in rough water?—A. Yes, sir.

Q. What would be the length of chain attached to that buoy?—A. I do not recall the depth of water there.

Q. What is the common practice in such a case?—A. Well, the length of the chain is about three times the depth of the water to provide for the rise and fall of tide and the work on the buoy.

Q. Now, is it necessary or is it not to replace buoys of that size in rough water?—A. Very often it is; yes, sir.

Q. Is it possible to wait until the water becomes smooth to replace them?—A. Unless there is a very severe sea on we go out and handle them. We have to handle them in very rough water.

Q. Then, if I understand you correctly, the vessel of which you are speaking—the United States lighthouse ship *Cedar*—is designed

to work at a long distance from land in very rough water, with the long storms in the Pacific and to handle heavy weights over her sides; is that a correct statement?—A. Yes, sir; that is correct.

Q. And to handle these weights over her side, do I understand you, without regard to anything except the severest temperatures?—A. We provide for them heeling by our calculations and weights and stability on that vessel.

Q. Now, what do you use for ballast in that type of ship?—A. In this particular ship I have designed a vessel with a double bottom with a capacity for about 60,000 gallons of water, which is to be used as a reserve boiler feed as well as ballast.

Q. What would be the weight of that water used as ballast?—A. About 200 tons, roughly.

Q. Now, why did you choose water ballast for this vessel?—A. For the reason that cargo space was at a premium for the size of vessel that we had, and in order to increase the steaming radius of the vessel as much as possible we might use every inch of space on the vessel, and I therefore designed her with a double bottom to carry reserve feed water to give us valuable cargo space. This vessel—her cargo space, by the way, was made sufficiently large to carry three of these buoys; that is, large-sized buoys, abreast in the hull, which we could not have done if we had filled it up with separate tanks for water.

Q. Did you take into account when designing this ship for this service her stability?—A. Yes, sir.

Q. Did you or did you not think that water ballast was a safe ballast to use for stability?—A. We thought it was safe, but the vessel is safe without any ballast in her at all.

Q. What does your experience show to be a common practice in designing vessels as to ballast, the kind of ballast used?—A. If we design a vessel with ballast, of course it is important to make the necessary calculations to have the vessel stable, ignoring ballast; but the weight of ballast, of course, is—well, for instance, a vessel has to be loaded heavily and then unload and pass back to her home port without anything in her; it is necessary to have something to draw her down in the water so the action of the wind and sea is reduced; that vessel will work better and her wheel is submerged better with ballast.

Q. And what is the common practice as to the material used for ballast?—A. Water is more commonly used because it is easier to handle; if you were to use pig iron, which was used in the old sailing days, why, if a man needed to shift the ballast it is quite an expensive as well as laborious operation to discharge and take on board ballast in that form.

Q. Do I understand you correctly that modern practice calls for the use of water ballast?—A. Yes, sir.

Q. Is that a general practice?—A. It is very commonly used; I think there are a lot of vessels designed without any ballast of that character.

Q. Now, is or is not water ballast used for the vessels designed for the Atlantic Ocean?—A. Yes, sir; it is.

Q. And for the Great Lakes?—A. Yes, sir; as far as I know it is, I believe, on the freighters there.

Q. And for the Pacific Ocean?—A. Yes, sir.

Q. And is it the fact, so far as your experience permits you to judge, that the use of water ballast is modern and scientific practice?—

A. I think so; yes, sir.

Q. Now, does water ballast require special care in its handling?—

A. Yes, sir; there is great danger in free water; the tanks must be empty or filled.

Q. Now, what is that danger and how does it arise?—A. Well, the energy that is set up in a body of water can be measured by the distance through which it travels and multiplied by its weight; for instance, 5 tons of free water traveling 30 feet would be equivalent to 150 foot-tons.

Q. By 150 foot-tons do you mean the energy would be equal to the weight of a fall of 150 tons 1 foot?—A. About that; yes, sir.

Q. Did I understand you to say that a partially filled water-ballast tank was an element of danger?—A. It is; certainly; due to this movement of the water, the free-water movement.

Q. Then is it your experience that special care is required to be used in connection with water ballast to have the tanks either full or empty?—A. Yes, sir. Another provision we make in design is to fit swash plates in there to dampen the movement of that water or break it up.

Q. How are the water tanks in the vessel we have been speaking about filled? I refer to the *Cedar*.—A. They are filled by a large ballast pump through a manifold, and emptied the same way, and they are also cross connected through an additional pump, to the fire and bilge pump, so that in case of the breaking down of the one the fire and bilge pump can be used. It is also connected so the water can be turned from any individual compartment and pumped into another without the necessity of pumping it overboard.

Q. Are you familiar with the water-ballast system used on the steamer *Eastland*?—A. Only what I have learned through the testimony and what I saw, which was very small, on board the ship last Saturday.

Q. What did you see?—A. All I could see was the upper part of the manifold as it stuck out of the water in the engine room, and I was down on the cylinders of the main engine and with the aid of a light that the assistant boiler inspector had there I could just see the three valves to the manifold.

Q. Is that system one such as you have designed for the *Cedar*?—

A. No, sir; not exactly. We do not fill with the sea water, although we can do it if we want to without the use of the pump because the head of the tank is below the water line; we can fill by gravity if we want to, but if we want to hurry the operation we can put a pump on and force it.

Q. When you say you do not fill by sea water you mean you do not fill through a sea cock?—A. I mean directly by gravity.

Q. The system of a pump is used because it is quicker, did you say that?—A. Yes, sir.

Q. What difference, as regards safety would there be between the system of filling direct by gravity, as in the case of the *Eastland*, and the system of filling by pumps, as you have described?—A. Well, in a case of a vessel listing it might be necessary for the engineers to take the water from one compartment and put it into another, or to quickly fill the compartment on the low side or the high side,

which could not be done by gravity, that is it could be done, understand, but I mean at the same speed, the velocity of the water.

Q. Was the system on the *Eastland*, in your judgment, a safe system if it was carefully used?—A. Yes, sir; I think so.

Q. What was the nature of the care required?—A. I do not know as I understand your question in regard to that, Mr. Secretary. Do you mean in the operation of the system?

Q. Yes; I should have said in the operation of the system; of course, that is what I mean.—A. To see that all of the valves were in working order, that the pipes were free, that the strainers were clear, sounding pipes clear. In other words, the engineer should be fully cognizant of what he was doing, and, further, to get the water into the compartment that he wanted.

Q. Would you or would you not say, from your experience as a naval engineer and marine constructor, in connection with the operating of the vessel, that it was safe to load a normal load—whatever it might be—upon the steamer *Eastland* with her tanks empty or partly filled when lying at the dock?—A. No, sir; I should have filled the tanks full before I permitted a passenger to go aboard, if I were engineer of that vessel, if there was any doubt about her stability or holding qualities.

Q. Can you say, from your knowledge of private marine practice, what the custom of private vessel owners is as regards determining the stability of the vessel?—A. In well-regulated shipyards it is common practice to do that—make inclining experiments after the vessel is completed; but in a great many other yards they do not do it—yards at which we have had our vessels constructed—for instance, the New York Shipbuilding Co., of Camden, N. J., voluntarily made inclining experiments on lighthouse tugs of the *Tulip* class, eight of which were built by them in 1908. They made the inclining experiments without solicitation. At other yards they never made any.

Q. To what extent does the supervision of the naval architect who designs a vessel cover this question of stability in yards where the practice is not that of testing it by the inclining experiments, as you have described?—A. Only by preliminary calculations which they make in the design of the vessel, the form of the vessel, and so on. After the weights are in and the centers of gravity fixed, and so on, they can determine the stability of that vessel by calculation; but they should be proven by actual experiments, in my estimation, after the vessel is completed.

Q. What are the so-called classification societies?—A. Classification societies, such as the American Bureau of Shipping, the Bureau of Veritas, and Lloyds, are bodies composed of well-known people in the naval architectural line, and they have formulated rules by which the scantlings in the construction of vessels are governed. The American Bureau of Shippings and Lloyds—well, I guess all of them are so extensive—but more especially the American Bureau of Shipping rules are used in determining the size of frames and all of the structural parts that go to make the vessel. They have certain fixed and laid-down rules which are printed in this book that they publish and by which the naval architects work.

Q. Does a vessel have to be constructed in accord with the specifications of one or the other of these classification societies in order to obtain insurance?—A. Yes, sir.

Q. Now, what happens on the part of these classification societies—what is done by them prior to the vessel getting its insurance?—A. They must be examined by the representative of that society.

Q. Who is that representative?—A. Well, they have regular inspectors connected with that bureau.

Q. Then would these men examine the vessel?—A. The plans are submitted to them. Yes, of course, go over it and see the size of the vessel, the scantlings, and so forth, and rivetings.

Q. Do they or do they not take in to account elements other than the physical construction of the ship?—A. I don't know whether they do in every case or not; in some cases they do, in my opinion, and in others they do not; it is according to his knowledge of the inspection of the vessel and the specifications on which they are written.

Q. Do they prescribe the limits of widths and steps within certain limits of lengths?—A. Do you mean in regard to the scantlings of the vessel?

Q. No; the size of the hull.—A. Oh, the size of the hull?

Q. Yes.—A. I do not think their rules cover that specifically; they do not touch upon it.

Q. Are there any of the rules of the classification societies which in terms or by natural inference cover the question of stability?—A. I don't think there is anything in the rules that cover the shape—the form of the vessel. The book that we use simply refers to the scantlings and the size of the vessel; whether they have other rules or not I don't know; I have not seen them.

Q. Well, the question of the stability of a ship has an important bearing upon it as an insurable risk, hasn't it?—A. Well, it is my opinion if the plans of a vessel were submitted and the American Bureau of Shipping after inspection they pass upon the shape as well as the structure in order to give classification, certainly if the vessel is to be classed as A1, which is their highest classification, they surely would not pass by the question of stability.

Q. But that stability question, as I understand, is passed upon by them, is it not, from calculations derived from certain known standards of construction and not from actual trial of the vessel?—A. Oh, yes, sir; that is, from calculations; calculations are always made for stability of the vessel, and it must be in the design.

Q. And are there other and separate calculations made bearing on the ship and specifications and drawings as a result of these calculations bearing on it are made which have to do directly with the question of stability?—A. Yes, sir.

Q. Can you therefore say that apart from other elements of the ship's construction this question of stability is given special study by them?—A. Yes, sir; it is.

Q. And is the result of that special study, known to the surveyor who comes for the classification society?—A. Yes, sir; he should know them.

Q. Are you familiar with their practice as regards the determining of stability in the English merchant marine?—A. No, sir; I am not.

Q. Can you say from what you saw when you visited the *Eastland* what kind of a freeboard she had?—A. In my estimation the freeboard was very small; that is, taking into consideration the gangways, or the gangway ports, their height above the water.

Q. What was their height above the water?—A. I should judge as near as I could see from the water line at the lower corner of the after one, was not more than 2 feet from the air ports in the hull under the guard, and forward probably were not over 14 inches. I had no rule but I judged that distance standing on the vessel's side.

Q. Could you estimate, and did you estimate to what extent the vessel must heel to submerge either the air ports or the after gangways of which you have spoken?—A. Well, that would depend somewhat upon the trim of the vessel by the stern as to that angle, but it appeared to me from what I could see in the position she lay that not a very great angle would be required to bring them awash, bring the bottom of the board awash.

Q. By that you mean bring the water up level with the bottom of the port?—A. Yes, sir.

Q. Are you familiar with the estimated average weight of passengers?—A. How do you mean, weight per man?

Q. Yes.—A. I think it is taken on an average from 150 to 175 pounds, but I am not positive on that point.

Q. Would you say that weight is the average in the case of a crowd which was largely composed of women?—A. Well, I am not familiar enough with that kind of things, and I do not know as my figures are right on that. I am only attempting to state it.

Q. Assuming the weight of passengers at 160 pounds average of them all, what would be the total weight of 2,500 passengers?—A. About 33,000 pounds. Let me figure it up: Four hundred thousand pounds.

Q. How many tons?—A. That would be about 200 tons.

Q. About 200 tons?—A. Yes, sir; at 2,000 pounds.

Q. Is a load of 200 tons in your judgment, based upon your experience, excessive for a vessel which carried 250 tons of water ballast in her central tank and additional water ballast in the other tanks amounting to not less than 400 tons total, provided said tanks are properly filled?—A. No, sir; I do not think that is excessive weight, provided it is not; no, sir, I do not think that is an excessive weight at all, not for a ship of that size.

Q. Is it or is it not a proper deduction to be made, and in your judgment as a marine engineer and constructor a safe deduction to be made, that a vessel which has carried 3,300 passengers and on repeated occasions 3,000 passengers may be safely allowed, without material change in her construction, and if her ballast is properly handled, to carry 2,500 passengers?—A. Why, if she safely carried that number of passengers then she would surely do it again.

Q. What length of time would you consider necessary in the vessels over which you have had either supervision or control to test whether a vessel was safe or unsafe when properly handled? When I say what length of time I mean what length of time in the service.—A. Why, you could find that out within a month's time of hard continuous service.

Q. Mr. Gillette, you have under your charge in a general way, under your supervision, something over 40 seagoing steamers?—A. Yes, sir.

Q. And 60 lightships?—A. Yes, sir.

Q. Scattered all over the oceans, both the Atlantic and Pacific, and in the Great Lakes and in the Gulf. Is there any one of these

vessels which has, after having one year's use, thereafter shown herself to be otherwise in her characteristics than she appeared to be during that first year?—A. No, sir.

Q. Are you justified as a marine erecting engineer, and as having supervision of a large fleet, covering both the Atlantic and Pacific Oceans, the Gulf, and the Lakes, in saying, therefore, that any vessel would exhibit all her normal characteristics in use within five years after she was put into service?—A. Yes, sir; absolutely; in less time than that without there was some material change in her structure or something of that kind.

Secretary REDFIELD. Gov. O'Hara.

Mr. O'HARA. Mr. Gillette, how many lightships have you in your jurisdiction?

The WITNESS. We have 66.

Q. That includes lighthouse ships stationed at what ports on the Great Lakes?—A. Let's see. We have 11 on the Great Lakes. Why, there is 1 at Buffalo, there is 1 at Bar Point, there is 1 on Lake Huron, 1 in Lake St. Clair, and 1 at Milwaukee, and 3 are up in the other end of Lake Michigan.

Q. Have you ever had any difficulty with lightships stationed at ports on the Great Lakes as regards stability?—A. Never.

Q. When was the lightship at Milwaukee constructed—what year?—A. She was constructed in—I think it was about 1910. Yes; 1910 or 1911. I have just forgotten which. I was not in my present position at that time.

Q. And do you know, Mr. Gillette, who approved of the lightship at Milwaukee at the time of her construction?—A. Who approved of her?

Q. Yes; who O. K'ed the plans?—A. The superintendent of naval construction at that time. I think it was Mr. Warrington.

Q. Do you know if any difficulty was ever experienced with that lightship?—A. I believe they had some trouble with her at the dock there, due to a gale of wind, in connection with the water ballast in her.

Q. Did the lightship at Milwaukee on the occasion to which you refer tip over or capsize?—A. She went down, I believe, right at the dock during a gale of wind one night.

Q. Was she blown over?—A. That I can not say. I am not familiar with all the facts in the case.

Q. Do you recall what year?—A. I say I think it was in 1910 or 1911; I am not sure. I was at Boston at that time as inspector.

Q. And under whose jurisdiction was the lightship at Milwaukee at that time?—A. Under Mr. Warrington's, the superintendent of naval construction at that time; my predecessor.

Secretary REDFIELD. He has since left the service.

Mr. O'HARA. He has since left the service?

Secretary REDFIELD. Yes, sir.

Mr. O'HARA. You expressed it as your belief that the lightship at Milwaukee was carrying water ballast at that time?—A. I believe there was something in connection with her water ballast; I am not familiar with that; that is not just now, because I have not seen the plans, but from what I have heard there was some mistake in the filling of the tanks; either they were partly filled or something of

the kind there; she did not have a regular water ballast, as I remember it now.

Q. Mr. Gillette, you as an expert have testified as to the efficiency of water ballast. At the time you gave that testimony were you at all familiar with the working of the water ballast in the lightship at Milwaukee?—A. No, sir; I have not seen those plans and do not know the arrangement of that; that is, I am not familiar with it now. They are on file in my office.

Q. Reference was made, Mr. Gillette, to a lightship for the coast of Alaska?—A. No; a lighthouse tender.

Q. A lighthouse tender?—A. Yes, sir.

Q. What is the difference in construction as regards the ballast between the lightship at Milwaukee and the tender for the coast of Alaska?—A. Why, they are very different-shaped vessels.

Q. As regards the ballast, Mr. Gillette?—A. As I say, I can not recall just the arrangement of the water ballast, whether she has just got trimming tanks or not in the lightship; I can not recall that condition, but in the vessel you are speaking of, the *Cedar*, she has water ballast under her engines and boilers, throughout the bottom of the ship.

Q. Would you say as an expert, Mr. Gillette, that the capsizing of the lightship at Milwaukee was because of defective water ballast, and that would furnish reasonable grounds for doubting the efficiency of the water ballast on the tender for the coast of Alaska?—A. No, sir; there is no comparison at all, because they are different-shaped ships. The bottom is entirely different, entirely different form.

Q. How long, Mr. Gillette, had the lightship at Milwaukee been in service when she tipped over?—A. She had never been in service; she was in the builders' hands.

Q. Had she been accepted by the Government?—A. I can not answer that question, but I think they had had a trial trip, an official trial, but I am not positive on that point.

Q. Now, Mr. Gillette, when the Government undertakes the construction of a vessel, by whom are the plans drawn? I am speaking now of the Navy Department.—A. Of the Navy Department?

Q. By whom are the plans drawn of a vessel to be used by the Navy Department?—A. Well, in my experience the plans were prepared by the Navy Department themselves, and a set of plans are furnished to the successful bidder or bidders prior to the opening of bids, and then the builders are required to make their own plans from those others, making necessary corrections and changes as may be necessary in the course of construction. Also, I believe the Navy kept a corps of inspectors or draftsmen at the builders' yard, also, for the purpose of going over this work.

Q. And is it presumed, Mr. Gillette, that when the plans of a vessel before construction have been submitted to the naval engineers and approved by them that the vessel when constructed will be seaworthy? Is that the natural presumption?—A. Yes, sir; the calculations of the designer must surely show that.

Q. Now, Mr. Gillette, can you inform the board, if you know, the practice of the classification bureaus or societies referred to in this regard? Upon what evidence does the classification society declare

the vessel seaworthy?—A. I do not know that I can answer that question, because in some cases the classification societies have their own inspectors on the work; but what procedures they go through, I am not familiar with that.

Q. Is it true that in some cases coming under your notice the classification societies have accepted the engineer's drawings?—A. Well, they would have to, I think, in order to pass on the construction of the vessel in general, because their rules require certain scantlings, and in order to approve the scantlings they must approve the drawings entering the ship or the vessel first, so I would consider that in order to give her a classification certificate that the classification society would naturally have to give consideration to the question of the shape of the ship as well as her structural members.

Q. Well, as a rule, Mr. Gillette, do these classification societies go any farther than a classification of the drawings of the ship that is to be inspected?—A. They make an inspection of the ship, of the material that goes into it, if you require it.

Q. If you require it?—A. Yes, sir.

Q. By whom?—A. They have their inspectors that even go to the mills, the same as we do, and make a physical test of the steel; every piece of steel is marked by them after it is tested, so that we know the physical properties of that material.

Q. And at what period in the vessel's construction is she pronounced seaworthy by the classification society?—A. After she is completed.

Q. And launched?—A. Of course, it is passed on as the work progresses; they have an inspector right on the work all the time, the same as we do.

Q. Now, going back to the lightship at Milwaukee, Mr. Gillette, suppose this lightship had been in the merchant-marine service, would she have been pronounced by the classification society?—A. Well, I can not say that; I don't know whether they would or not. They do not inspect our work, you know; we have our own inspectors.

Q. I think the question is a little unfair, Mr. Gillette. I understand that you are only enlightening the board from your hearsay knowledge of the workings of these classification societies.—A. We have, Mr. O'Hara, we have very little to do with the classification society except in this way, that we use their rules; our specifications are all drawn for our vessels in this way: That should any variations or any misunderstandings in the specifications come up the American Bureau of Shipping Rules shall govern the construction. For instance, if we forget in the specifications—it is omitted—the size of a bar, of a hatch combing, a reverse bar, or something of that kind, the question of stiffening a binding strap or bosom strap, or say where strength is required, these rules—the classification rules—cover all these points, and we say in our classification, these rules shall govern in the construction of the vessel in the cognizance of the Bureau of Lighthouse Construction. That is, we can go strong on that, if we consider their scantlings and so on are not strong enough for our work, we consult the bureau, that is the reason we say in the cognizance of the Bureau of Lighthouse Construction, so if we want to demand of a builder a stronger type we can do it; and in that connection let me say it has been my purpose in our work, from my experience in the Lighthouse Service, our vessels are subject to a great

deal worse conditions than the merchant marines are, for the reason that we go out and do work when the other vessels will stay in behind the breakwater; our vessels go out and do the worst kind of work because we have got to look out for the safety of the merchant marine. Our buoys have got to be kept in position, our lights have got to be kept lighted, our lightships must be supplied with food and oil and coal and water, and I have been on our tenders and gone out myself personally when they said we would never come back, but we had to do it; it was our duty for the safeguarding of the people, so for that reason we go, what I say, two numbers higher than the classification rules in the construction of our vessels and the deterioration; that is a great factor at the present time in a vessel where corrosion will eat up iron.

Q. You mean deterioration is a large factor, Mr. Gillette. Is that quite consistent with your previous statement that a vessel after five years of service might continue to show the same, or some, or all of her normal characteristics?—A. If she was properly cared for; yes, sir.

Q. Then what factor does deterioration to which you have referred enter?—A. There will be not a great deterioration in five years on a vessel if she is properly cared for.

Q. After five years, Mr. Gillette?—A. Well, after five years—we have vessels in the service—we have got one vessel now that is 65 years old—66 this year—and she is as good as any of them.

Q. I was merely desiring to get from you, Mr. Gillette, some idea of your conception of that factor of deterioration.—A. Well, that is up to the personnel of the vessel; we have had a sad experience in this service on that point recently, within the last three years.

Q. To what experience do you refer, Mr. Gillette?—A. Well, I mean general experience, as I have had all the repair work on vessels; we find that deterioration goes on if water is allowed to lay on iron, a cake of rust will start and unless that is scraped off and taken care of and painted properly and the surface kept in good shape the first thing you know you have got nothing there but a cake of rust; but with proper care and keeping there is no reason why a vessel should not last to a good old age.

Q. To what inspection and at what intervals should a vessel be subjected in order to prevent loss of stability through the working of the factor of deterioration?—A. Why, I don't think that has anything to do with the stability at all; that is merely a question of structural weakness; that would not have any effect upon stability.

Q. Mr. Gillette, you say that the old ships constructed for your department undergo a test two points higher?—A. Yes, sir.

Q. Than these vessels in the merchant marine?—A. I mean two points higher; I mean two numbers higher, I should have said; that is what I meant; the classification society says they give for scantlings of the vessels on these tables numerals, and these numerals refer to different-size ships; the length by the breadth times the half girth measurement gives you a certain numeral; it may be 50,000 or 60,000 or 5,000 or 6,000, according to the length of the ship; and then you look in these rules, and you will find 5,000, and on up to 60,000, whatever you are looking for, and you find right in that line it tells you the size of the force, the size of the beams, the size

of the reverse bars, the size of the shoulder stroke, the size of the keel, the size of the stem, all that is tabulated out with the numbers; we go two numbers higher than that, just for the sake of a little added strength; we don't have to do it, but we do it just for a little safeguard to ourselves and to add to our strength and not jeopardize it. If you get a bar one-sixteenth of an inch thicker, that will last longer than one one-sixteenth of an inch smaller, won't it? That is simply the condition that the Lighthouse Service wants.

Q. Now, Mr. Gillette, is it a reasonable presumption that if the stability of the *Eastland* were determined by a classification society that she went two points lower than the test applied to the Milwaukee Lighthouse boat which capsized, is that a reasonable presumption?—A. No; I don't think you have got the point at all. The two points means the kind of scantlings; I mean the structure of the ship. Now, that vessel was probably carrying a class A certificate for insurance, and the scantlings and materials in the *Eastland*—I do not know, I simply say that we go a little bit stronger or two numbers higher in order to give a little added strength for our own work, our specific work, because our vessels have to stand out at sea and take a drubbing when these other folks are in at shore and in bed.

Q. Let me put it this way: Is it a reasonable presumption that the Milwaukee Lightship was submitted to a more severe test than that applied to the steamer *Eastland*?—A. Oh, far more; I can not say that without question, because I know that all of that steel in that vessel was inspected, and I know that every piece of that steel—I think the records are in our office of exactly what the conditions were throughout that vessel, because they require all these tests to be made at the mills of all the material that we get and use in these vessels, and we keep that record for future reference.

Q. Since 1910, Mr. Gillette, has the system of inspection or of stability testing in your department been revised in any degree?—A. I do not know that there is any great revision; we have from time to time inclined our vessels, but we do it for our own safety. For instance, in some particularly old vessels we have rebuilt them. We have changed the wooden masts which they had originally, and put steel masts on, consequently changed the center of gravity, and in order to satisfy ourselves that the vessel was still stable we have made inclining experiments for our own use.

Q. Since 1910 has the department with which you are connected conducted any inquiry into the efficiency of water ballast?—A. No, sir; I think not, because we have very few vessels that are fitted with it, except trimming tanks forward and aft. We have about three vessels, I think, that are fitted with water ballast. One of them was in Alaska—the *Lilac*. It has been doing work which the *Cedar* is to do; although she is a much smaller boat, she has traveled those seas with water ballast in her, and has made a trip recently from San Francisco to Honolulu.

Q. You have how many vessels did you say under your jurisdiction?—A. About 113—66 light vessels and 47 tenders.

Q. And of that number how many carry water ballast?—A. Well, do you mean the double-bottom water ballast or trimming tanks; there is a difference between them?

Q. What is the difference?—A. We use ballast for trimming, though you would not call it ballast, either; we always have a trimming tank forward of the collision bulkhead and generally one aft, and all of our steel vessels are fitted—nearly all of our steel vessels are fitted with trimming tanks, but it is not, strictly speaking, water ballast.

Q. Well, strictly speaking, how many of the 113 vessels carry water ballast?—A. Including the *Cedar*, I think we have three, to my knowledge, right now.

Q. Is it the custom of the Navy Department, Mr. Gillette, to discard all apparatus found to be inferior to a later invention?—A. I could not answer that. I am not familiar enough with their procedure at the present time to answer that.

Q. Why, Mr. Gillette, in your judgment, do not more vessels in your department carry water ballast exclusively or strictly?—A. Well, because the nature of the work does not require it. Our vessels are not large. We do not carry a large amount of cargo. The lighthouse tenders, of course, are primarily designed to supply lighthouses and light vessels, and, while we carry coal to them and provisions, yet the carrying capacity is not of such great importance as it would be on a freight vessel.

Q. Did I understand you to say, Mr. Gillette, that one of the things most persistently sought in the construction of your vessels is stability and seaworthiness?—A. Yes, sir; absolutely.

Q. The vessels carrying water ballast, the two or three referred to, were constructed what years, if you can recall?—A. I wish I had my annual report here. The *Lilac* and the *Columbine* are the two I have reference to. One is in the New York district and the other in Honolulu at the present time. These vessels are, I think, in the neighborhood of 17 or 18 years of age; I do not know but a little more than that.

Secretary REDFIELD. Wait a minute. I do not think the question was fully answered. You did not tell him about all the vessels.

The WITNESS. I said, including the *Cedar*, three that I can recall, but the *Cedar* is not completed yet.

Secretary REDFIELD. That is what I wanted to get at. Two are 17 years old and one is now being constructed.

Mr. O'HARA. Yes. How many vessels have been constructed since 1910 in your department?

The WITNESS. I do not know whether I can give the exact number, but I think it is somewhere in the neighborhood of 9 or 10; I won't say this is accurate, understand; that is as near as I can recall, light vessels and tenders.

Q. And of that number, roughly speaking, how many have been constructed to carry water ballast?—A. Only the one, the *Cedar*; that is the vessel just now under construction, and which is the largest vessel, by the way, in the service or that has ever been in the service.

Q. And that is to carry water ballast?—A. Yes, sir. By the way, Mr. Secretary and Mr. O'Hara, I forgot one vessel, that is the *Armeria*, she was double bottom.

Q. Would you say, Mr. Gillette, that the capsizing of the lightship at Milwaukee is at all responsible for the small use of the water

ballast in vessels in your department?—A. I do not think it has anything to do with the question; the question of stability is a calculation, that is made with or without water ballast, and if I were designing a ship I would design her to be stable without water.

Q. You would?—A. Yes, sir.

Q. Then, Mr. Gillette, do you think that any ship should pass muster as being safe if her safety depends upon the carrying of a certain amount of water ballast?—A. Let me understand the question first.

Q. Read the question.

(Question read as follows:)

Then, Mr. Gillette, do you think that any ship should pass muster as being safe if her safety depends upon the carrying of a certain amount of water ballast?

The WITNESS. Just read that again, I did not quite catch it.

(Question read by reporter as follows:)

Then, Mr. Gillette, do you think that any ship should pass muster as being safe if her safety depends upon the carrying of a certain amount of water ballast?

The WITNESS. Well, that is a hard question to answer. It would depend upon calculations as to what the previous calculations were and an idea of the water ballast, whether it was intended—there is a question of whether it was intended to be used actually as ballast or not. There are some vessels designed that have to go into shoal water, and they have got to pump out all their ballast in order to get over the shoal spots and then fill up again to keep the wheels under water. It seems to me a question of designing on that. I can not answer that question offhand; there are too many points that bear on that subject.

Q. Will you, Mr. Secretary, read Mr. Gillette's answer to the previous question and give him all the answer.

(Questions and answers read by reporter as follows:)

Q. Would you say, Mr. Gillette, that the capsizing of the lightship at Milwaukee is at all responsible for the small use of the water ballast in vessels in your department?—A. I do not think it has anything to do with the question; the question of stability is a calculation that is made, with or without water ballast, and if I were designing a ship I would design her to be stable without water.

Q. Then, Mr. Gillette, do you think that any ship should pass muster as being safe if her safety depends upon the carrying of a certain amount of water ballast?—A. Let me understand the question first.

The WITNESS. When I say that I mean for our service, because many times we have to work in shoal water where we could not use water ballast, even if we wanted to; the vessel would be on the bottom. As a matter of fact, our vessels are on the bottom half the time, anyway. We have got to work on the edge of channels; we are doing that all the time. We could run, anyhow. Maybe you do not understand my answer to that question, but under those conditions, with the heeling that we have, with the boom out to the side of the vessel, and the weight on her, we have got to have something for her to stand up on her feet with; we have to have something on her.

Q. Was the lightship at Milwaukee constructed to be safe without water ballast?—A. I do not know; I did not see its calculations. Mr. Warrington made those.

Q. Is the vessel now under construction to carry water ballast or to be constructed to be safe without water ballast?—A. She is to be

safe herself; she is a square box; she is very similar to your lake freighters here.

Q. Then the water ballast has nothing whatever to do with her stability?—A. Well, of course, that will add to it; when you put water ballast in her that will sink her that much deeper in the water and change the center of gravity, and she will be more stable with the water in her.

Q. But as an expert, as a naval engineer and constructor, you can now tell this board that the vessel now under construction is calculated to be safe without water ballast?—A. Yes; this particular *Cedar* is, just for our particular work.

Q. But you are unable to inform the board whether that was assumed to be the case with the lightship at Milwaukee?—A. Well, these vessels are so entirely different, and the work for which they are designed is so entirely different, it would hardly be any comparison at all.

Q. How many vessels in your department or in your jurisdiction are unstable without ballast?—A. I think some of our later ships, some that were built away back; we have got some. Oh, they are 35 or 40 years old, some of the old wooden ships, where the construction has been changed and they have been put into service as lightships. We have put in some pig-iron ballast to make them trim right. As far as stability is concerned, no question about that, because some of these vessels were sailing vessels. They sailed the seas with sails before they went in as lighthouse ships.

Q. Does the United States Naval Department accept any vessel depending for its stability on ballast?—A. Well, oh, I do not know what the Navy's practice is on that. I do not know what their practice is.

Q. In your department?—A. Oh, in our department. Well, that I do not know. In my experience I have had no such conditions to arise. The vessels that I have had charge of or the construction of I have never had any question of that kind come up.

Q. You never have accepted the plans or approved the plans of any vessel depending for its stability upon ballast?—A. No, sir.

Q. And, as a constructor or builder of vessels, you would not build a vessel for any trade depending for its stability upon ballast?—A. I say that is a question of design. It might be necessary to do that. There is no objection to water ballast or any other kind of ballast if you need it for certain specific reasons, any specific reason, as I can see, because I say sometimes it is necessary. There are vessels that are working light in shoal water. We have to have some means of lightening them up to go out and in, you know. That is a question of design purely and simply, the problem you are up against. You may be hampered by beam and by the length of the boat, due to short, twisting channels, you know, and depth of water. It is all the question or proposition that is before you as to whether you need ballast or not.

Q. Now, let me understand, Mr. Gillette, you say it may be necessary in the construction of some vessels in order to permit them to pass from shallow water into deeper water, and under that necessity, I presume, or is it a reasonable presumption, when a vessel is in the shallow water she releases or lets out some of the water ballast?—A. Yes, sir; maybe empty one tank or two tanks.

Q. Then would you say that the vessel when in shallow water under that necessity would be as stable as one carrying more ballast in deeper water?—A. That would depend on the load she carries and where she carries it too, that has some effect on it.

Q. Who would determine that?—A. That is always within the jurisdiction of the master of the vessel, he has got charge of the vessel, he takes care of her throughout her trip, he is responsible for her performance while she is underway, at least that is the way we hold our masters.

Q. As an expert, Mr. Gillette, would you mind giving this board your opinion as to the maximum carrying capacity of any vessel in the passenger traffic on the Great Lakes, taking into consideration the possibility of storms such as we have on the Lakes, the possibility of unwise distribution of the passengers, the possibility of the shifting of what cargo may be carried in the hold of the vessel, do you mind giving this board the benefit of your judgment as to the maximum carrying capacity under the most favorable circumstances of any vessel on the Great Lakes?—A. How could I answer that question without I knew the size of the boat?

Q. Any size boat, Mr. Gillette?—A. I know, but you might have the *Great Eastern* here.

Q. Take the *Great Eastern*.—A. It would be a question of size and beam of the boat and the shape of her. That is a very broad question to ask, I do not see how anybody could answer that question.

Q. Then, as a naval engineer, Mr. Gillette, you wish the board to understand that it is impracticable to fix the maximum number of passengers on any vessel regardless of her size?—A. No; I did not say that; I said I would have to know the size of the vessel.

Q. I think you misunderstood my question, Mr. Gillette, I am not trying to trap you.—A. I understand.

Q. Regardless of size can there be fixed by law a maximum number of persons to be carried on any vessel?—A. Oh, I think so; I think a rule could be—I do not know about a rule, it is quite a problem, because weights vary so, we may have a bunch of passengers on there that will weigh 200 tons, and the same number of people may come on to-morrow that will only weigh 120 tons; it is such a varying quantity it would be almost impossible to make any rule on that. You might have a party of fat men one day and a party of lean men the next, the same number of people on there just the same; they might have their pockets loaded with bullets and lead, and the others might have a light lunch; it is quite a problem.

Q. We had a city ordinance, for instance, restricting the height of buildings.—A. Yes, sir.

Q. We have suggested in some cities laws restricting the number of cars that are to constitute one train. Would it be feasible, say, for the National Congress—in your judgment as an expert—for the National Congress to restrict the number of passengers to be carried on any one vessel at one time?

Mr. THURMAN. Are you asking him as a naval expert or a legal expert upon the powers of Congress?

(Question read as follows:)

We have suggested in some cities laws restricting the number of cars that are to constitute one train. Would it be feasible, say, for the National Congress—in your judgment, as an expert—for the National Congress to restrict the number of passengers to be carried on any one vessel at one time?

Mr. THURMAN. You are asking for his opinion now, with all due respect, for his opinion on the powers of Congress to enact laws.

Lieut. Gov. O'HARA. No; I am asking his advice, Mr. Solicitor, as an expert whether that would accomplish any good.

Mr. THURMAN. That question means the laws Congress could enact.

Lieut. Gov. O'HARA. Is it feasible?

Mr. THURMAN. That is all right.

The WITNESS. That might be for consideration by proper authorities. I would not attempt to answer that question myself.

Lieut. Gov. O'HARA. Do you think, Mr. Gillette, that such a law might in any circumstances work for the safety of life or prevent an accident?

The WITNESS. It might or might not.

Q. You have no positive opinion?—A. No, sir.

Q. Mr. Gillette, are you familiar with the stability tests in the merchant marine of any country other than this country?—A. No, sir; I am not, except that general rules laid down, which have come across the water for our use, laid down in text books by naval architects in England, which are practically the same as we use here—that is the only thing. I am not familiar with what they actually do.

Q. Mr. Gillette, did I understand you correctly when you said that if a vessel safely carried a certain number of passengers once she can do it again?—A. I do not see why she can not under the same conditions.

Q. Is the fact that a vessel on one occasion carried 3,000 passengers sufficient proof that she is a seaworthy vessel and can carry 3,000 passengers on another occasion?—A. If the working conditions were identical and the weights of the people on there were the same, why I should say I would not see why she could not do it to-day as well as she could to-morrow.

Q. Is it a fact that a vessel on one occasion carried 3,000 passengers a sufficient reason in your judgment as an expert for any inspector to grant that vessel permission to carry 3,000 passengers on any and all occasions or under any and all circumstances?—A. Well, that would be a question of judgment of the man that—

Q. As an inspector to whom is submitted that proposition, would you license on that evidence a vessel to carry 3,000 passengers?—A. I think, if I had positive proof and had known that that vessel had carried that number of passengers and her conditions were identical, there had been no change in her structural conditions, I do not see why I should not permit the same thing to occur again, if it had been done once or twice or several times before safely.

Q. Would you take into account at all the possibility of a sudden storm similar in violence to the storm that overturned the lightship up in Milwaukee?—A. Nobody can figure against a thing like that; the thing to do is to stay home in a condition of that kind or make for harbor if you can get there.

Q. Do you believe that any inspector should grant a license to any vessel to carry more passengers than that expert believes the vessel safely can carry in time of a severe storm?—A. Well, that is a matter of his judgment.

Q. If you were such inspector, what would be your decision?—A. Well, I should want to know the conditions of the ship pretty well before I made a decision.

Q. Do you accept for your department any vessel that you believe would have difficulty in weathering the most severe storm?—A. Well, we are generally pretty sure about that beforehand; our calculations—we check the calculations of the builders, you know.

Q. In your calculations, do you take into account the possibility of a storm?—A. Well, we do to a certain extent, what is wind pressure and so on; yes, sir; but we can not provide for a violent gale such as you referred to awhile ago, where I understand the wind was 85 miles an hour.

Q. Mr. Gillette, did I correctly understand you to say that a vessel will show during her first year or first five years of service all of her normal characteristics?—A. Yes, sir.

Q. Is it a reasonable presumption, therefore, that a listing of such a nature as to cause many persons to believe the vessel in danger of capsizing should be regarded as a normal characteristic of that vessel?—A. No; that would be an abnormal characteristic which should be traced up to find out what caused it, if it had been proven that she was always steady before that.

Q. If a vessel during her first five years of service listed on one or several occasions to such an extent as to gain the reputation of being cranky, would you regard as a naval expert crankiness one of her normal characteristics?—A. A vessel may be cranky and still not unstable.

Q. I don't think you quite answered the question, Mr. Gillette.  
(Question read as follows:)

If a vessel during her first five years of service listed on one or several occasions to such an extent as to gain the reputation of being cranky, would you regard as a naval expert crankiness one of her normal characteristics?

The WITNESS. If she only did that on one or two occasions over a long period of time I should not consider that a normal characteristic, I should call that an abnormal condition.

Q. If, in a period after the vessel had been in service five years, she finally listed to such an extent as completely to turn over, would you regard that as a final proof of a normal characteristic shown by her previous listings during the first five years of her service?—A. No; I should not consider that—I should not consider that as a normal characteristic—a vessel turning over.

Lieut. Gov. O'HARA. I am very much obliged, Mr. Gillette, for your frank and enlightening testimony. Thank you, sir.

The SECRETARY. Mr. Gillette, what kind of ballast is used in the present Milwaukee light ship?—A. As I said before, Mr. Secretary, I can not recall the design of that vessel, because that was made prior to my incumbency to my present position. Those drawings are on file. I have not had occasion to refer to them, but it seems to me that she has trimming tanks forward and aft. That vessel is now on station for Milwaukee; she has been there ever since she was constructed.

Q. Do you know whether she has any other kind of ballast besides the trimming tanks?—A. I think she has, but I won't be sure on that.

Q. Is that the same vessel which sank?—A. Yes, sir.

Q. What were the conditions, so far as you know, under which she sank at the dock?—A. I do not know, sir; I only saw the newspaper accounts; I was in Boston that time. I had no knowledge of it at all.

Q. Are her drawings on file in your office?—A. Yes, sir.

Q. And can be produced?—A. Yes, sir.

Q. On any inquiry?—A. Yes, sir.

Q. To your knowledge, is a report—the details of that accident—on file in your office?—A. I think they are; yes, sir.

Q. Would you, if you were called upon, produce both the drawings and report?—A. I think I could find those without any trouble, sir.

The SECRETARY. I will say to you, Mr. Gillette, for the record, that if at any time either the drawings or report are called for, I should be very glad to have them produced for the benefit of anybody who may inquire.

The WITNESS. Yes, sir.

Q. Now, Mr. Gillette, your service lost a lightship some miles off Buffalo, did it not?—A. Yes, sir.

Q. Under what conditions?—A. I was not there present. Our reports state that that vessel was lost during a gale that reached a velocity of 85 miles an hour, a severe windstorm.

Q. What is your judgment as to the cause of the accident?—A. The heavy seas, I think, boarded her. She had a wooden house and carried a single mast—with a little jury mast—but a single lantern mast and folding door, which opened out to permit the lantern to be hoisted. I think the water boarded that vessel, and four of these doors which blew ashore afterwards, as we found the wreckage, and according to reports she filled right up like a tin can and went down. There was nothing else for her to do.

Q. Was she anchored?—A. She was anchored; yes, sir.

Q. And how long a chain?—A. Well, I do not know how much they paid out at the time, I think something like 150 to 160 fathoms of chain.

Q. Did she have power?—A. Yes, sir.

Q. What sort of power?—A. She had a 20-square condensing engine, single cylinder size engine, steam boiler.

Q. Was the vessel found?—A. I believe the lake survey has located her.

Q. Has she been raised?—A. The work is under way at the present time.

Q. So you do not know from actual examination of the vessel just what her exact condition is?—A. No, sir.

Q. The doors were found?—A. Some of the doors and floating wreckage was found, and I believe the diver has reported that the whole top of the house is gone, part of the bulkheads, and so on.

Q. Mr. Gillette, if you were to design a vessel for carrying coal or other heavy freight down a shallow river, and another vessel for carrying freight on the Atlantic Ocean, and another vessel for fast passenger service; would you design them alike as regards the hull?—A. No, sir.

Q. Is it or is it not a fact that vessels are and must be designed for the particular service they have to do?—A. That is a fact; yes, sir.

Q. Is that a universal fact?—A. Yes, sir.

Q. Is it a necessary fact?—A. Yes, sir.

Q. Is it possible, therefore, to argue from a vessel of one type to a vessel of another type as regards means used for stability?—A. No.

sir; the form of the vessel and the water plane; all those points, they are factors of the stability of the vessel; the shape and form affects the whole thing.

Q. You spoke of the *Cedar* being a square box.—A. Yes, sir.

Q. Is it a fact that the *Cedar* is specially designed for severe service?—A. Yes, sir; it is.

Q. When I say severe service, is it to your knowledge service of exceptional severity?—A. My understanding is that they have very severe weather in the northwest of Alaska, and long, heavy seas and heavy blows, and for that reason I made special effort to design that ship with due regard to strength, stability, and power.

Q. Is it a fact that that vessel must work many hundreds of miles distant from any available port?—A. About 800 miles, I think; yes, sir.

Q. Was it for that reason that after designing her so she would be stable, you in addition put in water ballast?—A. Yes, sir; and to save the available space for cargo.

Q. And is it not the fact, also, that in addition to her carrying capacity she was designed as peculiarly suitable, because the nature of her work requires her in heavy weather to lift heavy weights over her side?—A. Yes, sir; that was one of the important points in her design.

Q. Has the *Cedar* a projecting keel?—A. No, sir; she has a flat plate keel, a keel plate, but she is stiffened longitudinally with a center keelson.

Q. Center within?—A. Yes, sir.

Mr. FOUKE. Mr. Gillette, you spoke awhile ago of the high side or light side of a ship as it went over; ballast tanks, the construction is so that one tank may be pumped into another. Do you know whether the *Eastland's* tanks were arranged so that the tanks on the port side could be pumped into the tanks on the light up side, and at the same time receive water on the starboard side from the outside of the ship?

The WITNESS. I have not seen the drawings, but from the testimony I understand there is no pump connection to these tanks, that they are all filled by gravity from the manifold, by the sea cock, but they could be emptied by a pump.

Q. Would it be possible to put enough passengers on one side of that ship to turn it over if the ballast tanks were full?—A. I could not answer that question; I do not know anything about the ship, personally; I do not know what her calculations were as to stability; it would be very hard for me to tell.

Q. About how many tons of freight could a 2,000-ton boat carry with safety?—A. That would depend on the size of the quarter. Now our tender, the *Cedar*, she is designed for about 1,800 tons displacement; she will carry about 650 to 700 tons of cargo. Now, we could let her down a little more, because she has 5 feet freeboard. It is a question of freeboard and displacement.

Q. Do you know how many tons of freight a design of the *Eastland* would carry—would justify?—A. No; I would not know what to say about that because I have not seen the boat at all; she is upside down in the water, and I only saw one side of her.

Q. Would you consider her safe to carry 400 tons, 2,000 tons displacement?—A. Two thousand tons displacement?

Q. That is what I heard testified here.—A. And carry how much, 400 ton?

Q. Yes.—A. Oh, she will carry that, but according to where it is located; put it at the masthead, she would not; down below, yes.

Q. I mean with all reasonable care in placing the freight.—A. Yes, sir; the proper ratio; yes, sir.

Q. On any of the decks she would carry 400 tons?—A. Yes, sir.

Q. Do you consider 2,500 passengers absolutely safe to carry on that boat with her ballast tanks full?—A. Why, the testimony said that she carried 3,000 many times; I can not see why she could not carry them again. I supposed that the ballast tanks were full at all times when that load was on.

Q. When we speak of crankiness of a boat, does that expression arise usually from the construction of the boat, or is it in the handling of the boat?—A. Well, it may be due to her shape sometimes, and sometimes to the construction.

Q. When a boat tips over as the *Eastland*—I mean when it lists, as it is said that the *Eastland* has listed—would you or would you not consider that due to the handling of the boat with regard to the ballast tanks?—A. Yes, sir; if she carried a heavy load with her tanks full and stood upright, and the tanks are emptied and she tips, I should surely say it was a question of the handling of the vessel, undoubtedly.

Q. You think it would be the handling of the vessel?—A. That is, the handling of the tanks.

Q. The handling of the tanks?—A. Yes, sir.

Q. If the stability of a ship was determined by the use of her ballast as a factor in her stability, would it be safe to use her without water ballast?—A. Well, that would depend on the load you were going to put on her and where it was going to be put.

Q. Would it be safe?—A. It would all depend on the calculations; I would not know what the calculations were and the center of gravity and the metacenter height and so on to answer that question.

Q. A ship like the *Eastland* that had water ballast and was carrying 2,500 passengers—I take it from the testimony I have heard the *Eastland* was built for the use of its water ballast; that is what it relief upon; would you consider it safe to go out of the harbor with 2,500 passengers on it without the ballast tanks properly filled before it left the harbor?—A. No, sir; I would not from what I heard of the testimony.

Mr. SHAW. As a technical expert and student of building and operation of boats, do you think that the absence of 250 passengers from this boat on the morning of the accident would have prevented the accident?

The WITNESS. Well, I can not say; it is a question of whether—where those people were; if they all went up on the top deck or suddenly rushed to the side, it might have helped it. Of course every pound you take off a boat would have some effect, but 250 passengers I don't believe would have made a great amount of difference.

Q. How many degrees would that boat have to list before the gangway would be under water do you think?—A. That I could not say accurately, because I would have to see the plans, take

measurements of the exact location of the water line of the vessel aft, and the location of the ports with respect to the water plane.

Q. Do you think it would be more than 20°?—A. I would not think so from what I saw of the vessel lying on her side; it would be the nearness of the port to the chop of the water; very close.

Q. Are you familiar with a large number of the ocean-going steamships by reputation?—A. Yes, sir; I am pretty well acquainted with lots of them running out of Atlantic ports.

Q. Is the term "cranky" applied to a very considerable portion of them?—A. I have known of some that are considered cranky; they are not dangerous.

Q. Is it a common term; by that I mean is 1 boat out of 100 cranky, 1 per cent of the boats?—A. You could hardly figure; that is a variable ratio, I should say; I would not say that one out of a hundred; it might be and might not be. The question of crankiness does not mean dangerous condition. A vessel may be cranky due to her center of gravity being high, but she makes a good sea boat oftentimes; she will roll easily and come back.

Q. But a cranky boat is an unusual boat, is it; are there a great many cranky boats?—A. Yes, sir; some of them are cranky and some are not; some are stiff; they are the other way; they will throw you out of your bed they are so stiff.

Q. Do you think the inspection service should single out all boats called cranky boats for special attention?—A. That would be a hard thing to do, because I expect it would be based on personal opinions; you might think a boat was cranky and I might not.

Q. If there seemed to be a general impression that a certain boat was a cranky boat and generally understood to be such, do you think the inspection service should pay particular attention to that boat?—A. Well, I suppose probably they naturally would if it was brought to their attention and was of sufficient importance and they were of the opinion that those opinions were correct if you probably looked into it.

Q. In your estimation is a boat particularly dangerous because it is a cranky boat?—A. No, sir; there are lots and lots of cranky boats, as they are termed, that are not dangerous.

Q. You would not care to make an estimate of what percentage of boats are called cranky?—A. No, sir; I could not do that, because they are so widely different, the construction and everything, so many of them. Lots of them, as I said before, is based on somebody's personal opinion.

Q. You would not say that 10 per cent of the boats are cranky?—A. Well, from hearsay evidence, from different captains I have heard remark about the cranky boats; I think possibly 5 or 10 per cent; that is only a rough stab, though. There are lots of boats that are called cranky.

Mr. COLLINS. The ship 95 stationed at Milwaukee, did that boat capsize and roll over, I mean sink?

The WITNESS. I do not know, sir; I only saw the newspaper accounts of that; I was in Boston at the time; I understood it occurred in a heavy gale of wind; what the conditions were I do not know.

Q. Is she now rendering efficient service?—A. Yes, sir.

Q. Subject to all the elements of the sea?—A. She has been on her station now for three and a half or four years, I think, and she

has been reported—we have had several reports of that vessel from the master in which he said that she was a particularly easy-riding boat.

Q. Now, in taking water ballast out of a twin-screw steamer that requires water ballast to make her stable, would the taking out of ballast when she is in motion to go over a bar, with her twin propellers working, would the working of the propellers add any to her stability?—A. They have a tendency to stiffen her up; yes, sir, to some extent.

Q. On the same principle as driving a two-wheel bicycle, the forward momentum would render her stable?—A. Yes, sir.

Q. Now, do you think that if the gangways and portholes of the *Eastland* had been closed, no water had entered the ship, even if she had listed very badly, that she ought to capsize?—A. From my observation Saturday down there, the high-side vessel that she was, with all ports closed and water-tight, why, she would have gone over in my opinion—she would have gone over a certain distance and laid there, because, due to her high sides, if everything was water-tight and no water entered her, the area of the water plane would increase.

Mr. COLLINS. That is all I want, Mr. Gillette.

The SECRETARY. Where was the so-called Milwaukee lightship when she sank?

The WITNESS. At the dock of the Racine Tressick Shell Lake Boat Co., of Muskegon, Mich.

Q. Had she been put into service?—A. I am not positive; I told Mr. O'Hara I thought that she had just about made her official trial; I do not know that point.

Mr. FLEMING. Mr. Gillette, you spoke about vessels that were constructed for the purpose of being able to pass over shoals when they would have heavy ballast tanks which they could discharge and fill as the occasion might demand. Now, do you believe that the inspectors ought to be informed of the construction of a vessel like that, so they could, in determining her passenger allowance, take that into consideration?

The WITNESS. I should think that would be a question for the designer and the builder to furnish that information to the owner.

Q. Do you think he ought to be compelled to furnish that information to the inspector, so the inspector would know it in determining the passenger allowance?—A. It would appear that way to me, because that is a question of design pure and simple.

Q. Would an inspector going on a vessel—could he reasonably be held to find that out from the inspection of her hull, for example?—A. No; he could not find that out without going to experiments to find all the centers of gravity, and so on.

Q. Now, take two vessels, one of that construction which was built to go over shoals and another one of similar general build but one which has the stability without reference to any ballast, would there be any difference, in your opinion, as to the number of passengers either one of those should be permitted to carry?—A. Well, I might design a boat with water ballast with the same metacenter height as one without.

Q. Suppose you designed two vessels of equal deck area, say, so far as the deck area is concerned they would be of equal size, but one would be a vessel constructed to pass over shoals and there would be

one which would travel in deep water all the time; should both those vessels be permitted to carry the same number of passengers?—A. That would depend on her shape and displacement.

Q. The deck area ought not to be the determining factor, then?—A. Well, to some extent; yes, sir.

Q. With reference to the manning of two such vessels, should the officers, the captain and engineer, be any more capable in the one case than the other?—A. Yes, sir; for the handling of water ballast is a very important condition; a man should be thoroughly versed in it and know how to handle it properly; know that in a rolling sea it would not do to go to work and shift the ballast.

Q. Then, is it your opinion that the inspection service there ought to have incorporated in their rules certain requirements in reference to examining engineers and captains in reference to their knowledge and experience in handling ballast tanks?—A. Well, is not that covered by the rules now? They require a man to have experience; they won't give him a license until he does know.

Q. I mean experience specifically in handling ships that rely upon water ballast?—A. I think that is covered by the questions in their examinations that they give them now; all those calculations that they give them are very stiff. I know the examinations for engineers is very stiff at the present time, and I should think probably that is covered very nicely by their examination questions.

Q. Would you say that a man who had had experience on vessels that had stability without any water ballast, and an engineer who had never operated on a vessel that did not have water ballast, that he would be able to get a certificate or his license rather because of that experience; do you think that he ought to be permitted to get a vessel that relies on water ballast without previously having been on a vessel of that kind?—A. Well, from my experience, the average engineer holds a chief's license; they are a pretty intelligent crowd of men, and if they are capable of passing an examination for chief, an unlimited license, I think they have a pretty good idea how to handle water ballast, that is my opinion from the engineers we have got in our own service.

Q. In reference to that vessel *Cedar*, Mr. Gillette, the ballast tanks of that vessel, are they divided into compartments?—A. Yes, sir.

Q. Now, can you discharge from one tank and take in at the other at the same time?—A. Yes, sir.

Q. Do you believe that a ballast system that does not provide for means of discharging and taking in water at the same time is a good one?—A. Well, that is another matter of design. The question of cost enters into that, too. It costs more money to put in pumps and extra pipe for doing that work than it does to fill by gravity, and gravity is the simplest way that you can do it, provided you can get the water in sufficiently fast; that the areas are large enough, and the pipes.

Q. Well, they have testified here that the steamer *Eastland* could not take in and discharge water at the same time. Is it your opinion that that system was put in for the purpose of saving money with the system?—A. It might have been, or it might have been deemed sufficient for those small tanks. That is not a very large ship, and with those small tanks, at the time that vessel was built, it was prob-

ably considered safe, inasmuch as the size of the boat would not warrant an elaborate system like there is in these big trans-Atlantic liners.

Q. Is there any advantage in having two sea cocks on the vessel as the intakes for these ballast tanks?—A. Well, there is on the Atlantic coast. You do not run in ice, but we have to contend with what is known in naval parlance as "mint julep" ice, which is small particles of ice that will clog up a strainer very quickly, and in that case, of course, we have steam connections for blowing that out, but while you are blowing that out it is nice to have another sea cock that you can use, because you have got a chance to keep the circulating pump going, if it is a main ejection valve, but up here on the Lakes you don't run in ice. And if the sea cock is properly submerged at all times, I don't know that it is an absolute necessity, although it is more of an advantage.

Q. There is just one other question. Is it your opinion that the records of the inspection service in each district should show whether or not each particular vessel is a water-ballast vessel, for the benefit of the inspectors who are compelled to examine them?—A. I believe that is of record, isn't it, Mr. Secretary? It seems to me with the ships of the United States, that is gotten out by the Bureau of Navigation. It appears to me that there is.

Q. Well, what I asked before is, whether the inspectors would have a record. Perhaps I didn't make that clear. A record, so that the inspectors would know whether a boat was built for the purpose of passing over shoals? Would there be anything in the record to apprise the inspectors of that fact?—A. I can't answer that question. I don't know whether there would be.

Q. Isn't it your opinion that there ought to be some record which the inspectors could rely upon to know just the construction of that vessel before they go on to inspect her?

Secretary REDFIELD. We have the drawings, you know.

Mr. FLEMING. The hull inspector?

Secretary REDFIELD. Every vessel that is now built.

The WITNESS. They examine the vessel when they inspect her, and they can surely tell the difference between one that has a double bottom and one that has not; they can do that, so undoubtedly the record would be made out when they make their report; but as to the exact procedure of that I don't know.

Mr. FLEMING. Would the mere fact that she had a water bottom indicate that she was built for the purpose of passing over shoals?

A. Not necessarily.

Mr. FLEMING. That is all.

Secretary REDFIELD. Mr. Gillette, are you acquainted with C. H. Eckliff, United States inspector of boilers at Grand Haven, Mich.?

The WITNESS. Yes, sir.

Q. Have you had occasion to be employed with him, or has he been employed under your supervision?—A. Yes, sir. I had charge of the construction of the lighthouse tender *Crocus* at the works of the Townes & Downey shipbuilding yard at Shooters Island, N. Y., in 1903 and 1904, I think it was, and Mr. Eckliff was then in the Lighthouse Service as chief engineer of the tender *Hayes*, which has since been sold by the department, and he was designated as engineer

of the *Crocus* and came down there to assist me in connection with the work of construction with reference to the machinery of the vessel.

Q. Did he to your knowledge act as engineer of the *Crocus*?—A. He did, sir.

Q. And where was the *Crocus* used?—A. Well, he didn't act as engineer only for a short time at New York, because I think he entered this service before she actually went into commission in her district, but during the trials and the running of the vessel while she was lying at Tompkinsville and awaiting her trip to the Lakes he was the engineer in full charge of the machinery department.

Q. And is the *Crocus* now employed upon the Lakes?—A. Yes, sir; with headquarters at Buffalo.

Q. I wish you would state for the record what your experience was from personal contact with Mr. Eckliff in this work, whether he was competent or whether he was incompetent; whether he was hasty in his judgments or wise in them, and such other facts as appeared to you from your actual personal knowledge of him?—A. Mr. Eckliff was a very valuable assistant to me at New York, and particularly so on account of his qualifications to look out for work. I, of course, had charge of the entire vessel, both hull construction, joiner work, plumbing, rigging, engines and boilers and piping, and everything under my supervision, and he was particularly conscientious in his work at that time when he came there, because we were in the throes of—the concern went into receivers' hands, and we had to take up people, pick up people that we could around there to finish the ship, and we had a particular lot of trouble with the finishing up of the main engines. I found a lot of defective work, and Mr. Eckliff also found it in the cylinders; the rings were poorly fitted, instead of being turned and properly fitted and scraped to fit, as they should be in a piston, they were simply rasped off with a bastard file and thrown in there any old way, and Mr. Eckliff and I were close together; and we worked, both on that and on the boiler work, and he was very anxious to have everything right, and showed good judgment in connection with all the work there, and, as I said before, he was of valuable assistance to me.

Q. How long did this mutual service last?—A. I think it was almost 10 months; 9 or 10 months, if I remember right. He came down and reported for duty, I think, in February—January or February—and was with me until the vessel was turned over, which was along in the latter part of December of the same year.

Q. When you say "turned over" you don't mean "upset," do you?—A. No, sir; that is the term we use—turned over from the contractors to the owners.

Q. Has the vessel been in service since?—A. Yes, sir; she has been in continual service since that time.

Q. Were her engines satisfactory?—A. Yes, sir; after we got over that trouble.

Q. Mr. Gillette, would you be willing to assist at my direction, or under my instructions to do so, any vessel owner who desired to have the stability of his vessel determined in this locality?—A. Yes, sir.

Secretary REDFIELD. I will make the statement for the record that Mr. Gillette is at the service of any vessel owner who desires to

conduct any inclining experiments or other studies for the purpose of determining the stability of the vessel, without any expense whatever to the owners for conducting that work, and in like manner Naval Constructor Ackerson is also at the service of anybody who may desire his assistance for a similar purpose. Both gentlemen having been brought here at my request with this in view.

Any further questions, gentlemen? Any questions, Gen. Uhler? Gen. UHLER. No.

Secretary REDFIELD. The board will adjourn to meet to-morrow morning at this place at 9.30 o'clock.

(Thereupon an adjournment was taken until the following day, Wednesday, August 4, 1915, at 9.30 o'clock a. m.)

CHICAGO, ILL., August 4, 1915—9.30 a. m.

Parties met pursuant to adjournment.

Present: Same as before.

JAMES L. ACKERSON, called as a witness on behalf of the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Will you kindly give your full name, address, and age to the stenographer?—A. James Lee Ackerson, Navy Department, Washington, D. C., age 34.

Q. Mr. Ackerson, what is your profession?—A. Naval constructor.

Q. How long have you been a naval constructor?—A. Since 1903—12 years.

Q. Are you a graduate of the Naval Academy at Annapolis?—A. Yes, sir.

Q. Will you state for the record what vessels you have dealt with as constructor or in the course of your professional work—the principal vessels, I should say?—A. Well, I have been associated in the design and building of the battleships *Oklahoma*, *Nevada*, *Pennsylvania*, *Arizona*, *California*, *Idaho*, *Mississippi*; also with the destroyers Nos. 37 to 68.

Q. Inclusive?—A. Inclusive, and with certain other auxiliary vessels that have been built or designed in the past five years.

Q. I understand you to mean you have had to do with professionally the designing and construction in one form or another with 31 destroyers?—A. At least; yes, sir.

Q. Are you familiar with the use of water-ballast vessels?—A. Yes, sir.

Q. Will you state as fully and frankly as you can what the best marine practice is, speaking from your own experience, so far as the Navy is concerned, or from any knowledge you may personally have regarding the merchant marine, state whether the use of water ballast is common or not, for the purposes for which it is used; whether or not it is a condition widely known among marine engineers both in the Navy and merchant-marine service; whether it involves any special dangers or provides special safeguards; whether it required unusual skill or such as any naval or merchant chief engineer should

properly be expected to have, and in brief state your knowledge upon the subject for the information of the board as fully and without reserve as possible.—A. So far as the Navy is concerned water ballast is limited, I think, to colliers and certain auxiliary vessels, and it is used when the vessels are returning in a light condition. For example, we have recently built two colliers for the Panama Canal, the *Achilles* and another; these vessels normally would not carry water except reserve feed water in their double bottom; they can carry it at all times, but they normally would not, because of the load of 12,500 tons of coal, they have all the stability in the world, all that any vessel would want or could use. When they discharge that 12,500 tons of coal, the vessels immediately become very light; her draft is not enough to submerge her propellers, for example, and in order to overcome that they let water in the water ballast tanks to take the place of the coal that has come out; it does not go into the same place where the coal is, but it answers the same purpose, and for that use the water ballast is common in that class of vessels.

Whether it is common in the passenger service, I am not prepared to state. I doubt if it is common to use it in the manner in which it was used on the *Eastland*; I doubt it very much.

In naval vessels proper it is not necessary to use it, because we are able to get our weight low enough in the vessel to make it entirely unnecessary; as a matter of fact, in the design of a war vessel your object is to get the weight and the important parts of the machinery as low as possible below the water line so that they can be protected. We can not let the cylinders of an engine stick up above the deck—in passenger vessels they stick away up—and in so doing we change the center of gravity in the ship—what you would attempt to do in passenger vessels by using water ballast.

As to the safety of water ballast, I do not think it is generally understood what the effect of water in a tank is. If you have a tank in the bottom of a ship filled with water, and it is absolutely filled, no air space, and the water can not move, it is exactly the same as if you put sand or iron in there equal to that weight of water and it is exactly the same thing; or, if you opened that particular compartment to the sea, you could just as well knock a hole 1 foot in diameter in the bottom of the ship and let the water in in that way as in any other provided it is filled.

If the compartment is not filled and the water is free to move the water acts as a pendulum and not only changes the center of gravity by the water shifting but it also changes what is commonly known as the "metacenter" of the ship. The metar point is the point high up and the center of gravity is the point low down. The distance between those two points is what determines the ability of a vessel to come to the upright once it is listed. If you push the center of gravity up or if you push the metacenter up the effect is the same, and if you reduce the distance between those two points you reduce what is termed the "initial stability." Now, free water will do that.

Q. You mean the free movement of water in tanks?—A. Yes, sir; if the tank is not filled. If the tank is absolutely full it will make no difference with the metacenter, but will lower the center of gravity which, on the contrary, increases the stability. So there is

a big difference in having the tank absolutely full of water and leaving a 3 inch on top of her. So far as lowering the metacenter is concerned, it makes no difference whether the water is 3 inches or 3 feet deep provided it is free to move.

Q. Suppose a tank were half filled which, when filled, would provide sufficient ballast, what then, would be the condition as to security, in your judgment?—A. You can not tell unless you know what her initial stability is. You could only say that it would reduce that stability, whatever it might have been originally—that is, you can tell that specifically if you have all the information and the lines of the vessel and the data from inclining experiments, you could tell, but as an abstract question you could only say it would reduce the initial stability.

Q. And by that reduction do I understand contribute so far to the instability of the ship?—A. Yes.

Q. So that a vessel with tanks partly filled is as compared with a vessel whose tanks are fully filled in a condition of greater relative instability?—A. Much greater; yes. Now, that instability might not be the difference between safety and nonsafety, of course, depending upon what the condition of original stability was, but it would be a vastly unsafer position.

Q. Are you able to state from your own knowledge whether the large trans-Atlantic and coastwise steamers use water ballast?—A. Not of my own knowledge I could not state. Some large passenger vessels I know use what are called antiroaming tanks, which are large flat tanks in which the water is free to move; they know that, and they are designed with that in view, and they know exactly what will happen when that moves; they put it in there to stop rolling, but it must be carefully designed and handled by one who has intimate knowledge of the effect of freely moving water. It is never done haphazard.

Q. Is a vessel that is, so to speak, a cranky vessel, necessarily a dangerous vessel?—A. It depends on what you mean by cranky. What you might say is a cranky vessel I might say entirely opposite. I suppose that people around here use the term cranky to mean a vessel that rolls easily. That is not the term that is usually applied to it. A cranky ship, in my opinion, at any rate, is a ship which rolls very rapidly. There is a big difference, and the ship with a high metacentric height like a monitor has got a very high metacentric center. She will roll like this [indicating].

Q. With a jerky motion?—A. Yes, sir; the tendency of the vessel to turn is so great that with the least displace she will do this [indicating], and if she gets to going she will whip. This is what I understand to be a cranky vessel. But I believe the words "cranky vessel," as applied to the *Eastland*, referred to the opposite; that is a vessel that would roll considerably or roll slowly; that would mean a vessel with a low metacentric height. You can not say a vessel is safe because it has a high metacentric height or can you say it is unsafe because it has a low one. Many vessels are designed with particular reference to their metacentric height. I can not illustrate that by saying that our earlier destroyers built in the last two years have a development from the preceding types. We built a boat with weights down low, we having that in mind all the time, getting them

down lower than we really needed them, and we found when these vessels went into service they were very uncomfortable, perfectly stable, but they were uncomfortable to the people who went in them. So in the last ones we have purposely given them a lower centimetric height, knowing when they go into service they will roll more easily, and be more comfortable to the people who use them. As a matter of fact, their safety is identical, or perhaps a little better.

Q. So that the mere fact of rolling, taken by itself alone, or so to speak, the sea rolling is not an indication of the vessel's safety or otherwise.—A. Not by itself; no. You can make a metacentric height what you choose almost, within reasonable limits, and give the same ultimate safety to the vessel.

Q. If, then, by the word "cranky" is meant the tendency to list or roll readily, is it a correct statement to say that such a vessel is therefore dangerous?—A. No, sir; not having in mind that one characteristic itself.

Q. And taking that same characteristic by itself again, is it or is it not the fact that vessels which exhibit this tendency to list or roll easily are sometimes safe vessels?—A. I do not believe I understand that.

Q. Read the question, please.

(Question read by the reporter as follows:)

Q. And taking that same characteristic by itself again, is it or is it not the fact that vessels which exhibit this tendency to list or roll easily are sometimes safe vessels?

A. Often safe vessels.

Q. Often safe vessels?—A. Yes, sir; as a matter of fact, I don't know whether I am allowed to answer more than your question.

Q. Yes, go ahead.—A. As a matter of fact in the design of ocean liners account is taken of the fact that if a vessel has a high centimetric height it will be very uncomfortable to the passengers, and they can not get anybody to go on it, so they make a safe vessel, they give her a low centimetric height, which is termed the low initial stability so they will make the passengers more comfortable; they do not sacrifice any safety for it at all.

Q. In other words, to put it in common language, these ocean vessels carrying passengers are, in short, deliberately designed to roll easily.—A. They are deliberately designed to have a lower metacentric height, a metacentric height that is lower than one they could easily give her; they could easily design a vessel with a higher metacentric height if they wanted to, but they do not want to.

Q. Does or does not that involve the ship's rolling more easily?—A. Yes; the ship will roll more easily with a low metacentric height, it will take longer to roll.

Q. Is it or is it not the fact that as the vessel rolls she may sometimes then immerse a greater area of her surface and thereby lend greater resistance to overturning?—A. Oh, she does, but as a matter of fact on most vessels the angle at which the vessel has the greatest tendency to return to the upright is in the neighborhood of 30° to 40°; in other words, if a vessel heels over to 40° it has a greater tendency to return to the upright than at any other angle; it increases up to that point, and then decreases to 70° or 80° or 90°, depending upon the vessel.

Q. How far in your knowledge and experience does a vessel like a torpedo-boat destroyer roll from the perpendicular? State in degrees.—A. Oh, we have records to indicate that they have rolled at least 45°, and it is reported as much as 65°, though any report of a 65° list would probably be inaccurate, not purposely, but because it is impossible to estimate it. You get on the side of a wave and you might think you are rolling over 90°; as a matter of fact it may be only 65°, but we do know they roll and have rolled in cases up to 45°.

Q. And when you say that you mean 45° on one side of the center?—A. Yes, sir.

Q. Making a total arc or roll of 90°.—A. Yes, sir.

Q. Any of these vessels ever overset?—A. Never, in our Navy.

Q. And do you regard them as perfectly safe when they roll to that extent?—A. Yes, sir; but there is a difference in a vessel rolling that way in a sea water and a vessel that rolls that way because of weight applied to her.

Q. I understand. Have you examined the water-ballast system of the *Eastland*, and are you familiar with it?—A. I am familiar with it so far as the testimony has brought it out. I understand, I think, what the distance was, though not of my own personal observation.

Q. Have you heard it described here?—A. Yes, sir.

Q. As consisting of boxes in the bottom of the ship?—A. I have heard it, I have read all the testimony in regard to it.

Q. Is it or is it not your judgment as a naval constructor that the water-ballast system of the *Eastland*, used with such ordinary care as a chief engineer normally gives machinery and apparatus, provided a safe vessel?—A. I do not know what care a chief engineer would give to that. I can only say that if that vessel, in my opinion, that if her ballast tanks were absolutely filled, and if her ports were closed, as they should be, that she could safely take passengers from here to St. Joe and back. She has done that, of course, and I think she would be safe to that extent.

Q. How long, Mr. Ackerson, is it necessary in your judgment to determine in use whether a vessel used in accordance with her design is safe or unsafe, when used in accordance with her design?—A. Why, in my opinion the best way of determining whether a vessel is safe or unsafe is to make inclining experiments on her and carry the calculations to an end; then you can tell at a glance. That is not any estimate; it is proved there. You are sure of your results; you can tell that a vessel under certain conditions will do certain things. Having that to satisfy yourself from then that a vessel is safe it will take a few weeks to determine whether there are any weaknesses, because it is only weaknesses that will make a vessel unsafe if your calculations and inclining experiments indicate that she is safe. But without those figures I do not believe anybody could say whether a vessel is safe or unsafe.

Q. Do you mean ever?—A. I would not want to say that with any assurance. I have been trained to see so much more from these calculations than you could possibly tell from an observation of the vessel; you are working in the dark in one case and in the other case it is absolute light.

Q. Does the fact that a vessel rolls easily create of itself a presumption she is unsafe?—A. In the minds of the passengers perhaps, but

does not necessarily to one who is versed in questions affecting the safety of the vessel.

Q. I mean in fact.—A. Oh, in fact, no.

Q. How high above the water are the after gangway ports upon the *Eastland*, do you know?—A. Why, I have estimated it in my mind as being about 4 feet, but it is very hard to tell, because you can not tell where the water line of the vessel was; you have to estimate that, but it looked to be about 4 feet, and that corresponds with some testimony I believe that was given here.

Q. Can you say how many degrees of list would submerge those after gangways?—A. I should say that it would be in the neighborhood of 30°.

Q. Can you say whether the conditions you observed were such as to require an unusual degree of care in keeping those gangways closed or not?—A. Yes; I should say that it would be very hard to keep them closed tight, very hard.

Q. Do you mean that we should infer from your answer that an unusual degree of care on the part of the officers of the ship was necessary to do it?—A. I mean rather that the design of them itself is not good; I think with the design as it exists I do not believe with any reasonable care you could make them what is termed a water-tight opening.

Q. Should they in your judgment be kept closed all the time?—A. In my judgment, yes.

Q. Would it in your judgment or would it not be safe to take a considerable load of passengers upon the *Eastland* with her water tanks either empty or partly filled?—A. It would be unsafe, I think.

Q. Speaking from your experience as a naval constructor, would the listing which you have described in the testimony as occurring on that vessel be a normal result on her when loaded and without her tanks filled?—A. I should say that it was a very possible result and influenced only by how many more passengers went on one side than on the other. I should say that, with 2,500 passengers on that vessel, that you might easily have a sufficient number on one side in excess of those on the other side to produce a heeling of 20 to 30 degrees.

Q. You mean with the tanks empty?—A. You stated, that, I believe.

Q. That was in your mind in answering the question?—A. Yes, sir.

Q. Do I understand you correctly, that if a load of that number were on board the vessel with the tanks empty, such a condition might or might not, in your judgment, produce a list sufficient to submerge the aftergangways?—A. Well, in the absence of the ability to make any accurate calculations on that, I should say an estimate leads me to believe that that would be the case—that it would be perfectly possible to do it.

Q. Was the water-ballast system, as you have heard it described by former engineers of the vessel under oath, such, in your judgment, as to require an unusual degree of mechanical skill for its operation?—A. Not as described here. On the contrary, it was very simple.

Q. Am I correct in understanding you to mean that what it required was rather attention than skill?—A. Well, I think it required attention to see, first, that the water ballast was in; first, to

see that the ballast was in, and, second, a degree of care and skill and intelligence on the part of the captain, officers, and crew not to have the tanks half filled; but, once understanding that the tanks must be filled, I think it would require no particular skill on the part of anybody to see that that was done. He would have only to open the tanks and stick a sounding rod in to see that the tanks were filled. Then he might forget it.

Q. Would you regard it as reasonable or unreasonable that the vessel, with her tanks filled, had repeatedly carried 3,000 passengers, that, with her tanks filled, she might carry 2,500?—A. Well, you could only say that, having in mind the question of probability and chances, in the absence of any stability data of the vessel, but knowing that the vessel had for 10 years carried 2,500 passengers, and apparently in all safety, when the vessel was properly handled, I think the chances are very much in favor of the vessel being able to do it again. There is nothing to indicate that she was unsafe when in a proper loaded condition; but, if you had stability data it might show the opposite to be true; I do not know.

Q. Have you examined, to-day, or conducted experiments upon the steamer *Christopher Columbus*?—A. Yes, sir; at least, I superintended it; I saw it done.

Q. What was it that you did?—A. We made an inclining experiment on the vessel to determine her metacentric height, and will work out the stability data for that vessel at all inclines, and so on.

Q. Are the calculations not yet completed?—A. Incomplete at present.

Q. Have you seen anything in the result of that experiment upon that vessel to lead you to think that she is unsafe?—A. Oh, no; on the contrary, it leads me to believe she is perfectly safe, subject to verification when the calculations are worked out, of course.

Q. Do you know of your own knowledge, Mr. Ackerson, whether it is customary on the Lakes to conduct inclining experiments on either passenger or freight vessels?—A. Of my own personal experience, I could not say. It is my understanding, from those who are familiar with such matters and from the information of some employed in the service, that it is not customary to do it; but to my own knowledge I do not know.

Q. Can you say what is the custom with merchant vessels in the same work on the Atlantic coast?—A. I should say that all of the large shipbuilding concerns on the Atlantic coast would perform that; and I think that the larger shipowners on the Atlantic coast require that unless, perhaps, they have constructed a duplicate vessel upon which it has been done.

Q. Do you know the custom on the Pacific coast?—A. No, sir.

Secretary REDFIELD. Any questions, Mr. Foulkes?

Mr. FOULKES. I think of none.

Secretary REDFIELD. Capt. Van Patten, some questions?

Capt. VAN PATTEN. No.

Secretary REDFIELD. Capt. Collins, any questions?

Capt. COLLINS. No.

Secretary REDFIELD. Any questions?

Mr. STEFFEN. Are you familiar with the type of men who act as licensed engineers on the Lake passenger vessels?

A. No, sir.

Q. Do you know whether or not men who generally operate passenger vessels are familiar with the effect of partially filling water tanks upon the stability of boats?—A. I do not know; I would not know whether they are familiar with that or not.

Q. Do you know whether the inspectors know anything about the effect of partially filled tanks?—A. I have no personal acquaintance either with the inspectors, engineers, or captains operating Lake boats.

Q. Now, it has been testified by some one that the *Eastland* had no stability without the proper handling of her water-ballast tanks. Just what would that mean?—A. Well, it would mean that with no water in the tanks her metacentric height would be zero; in other words, her center of gravity would be as high above the keel of the vessel as the point termed the metacenter, or the point from which the metacentric height or initial stability is measured. It would mean this: That, take the vessel absolutely light, with no passengers on board and no water in the tanks, her center of gravity would be a certain distance above the keel. If you put 2,500 passengers on there and do not do anything else to the vessel, the passengers would be so distributed that, collectively, their center of gravity would be higher than the original center of gravity would be; but that would apply to the center of gravity of the boat, and the passengers would make the center of gravity higher than before the passengers went aboard. Now, if they pulled that up so high that the center of gravity coincided with the metacenter, there would be no initial stability, and, in theory, if you dropped a 5-pound weight on one side of the vessel it would start to heel.

Q. Then I understood you to say if the tanks were partially filled it would decrease the stability.—A. If they were partially filled it would pull the metacenter down.

Q. Below zero?—A. No, sir; from where it was.

Q. I understood you to say if she had no stability her metacenter would be zero?—A. If she has no stability?

Q. Yes.—A. Yes.

Q. Then if her stability is lessened by the fact these tanks are partially filled—A. Then she would have a negative metacentric height, which would mean she would push over with the slightest touch.

Q. Then would you say that the *Eastland* had no stability without her tanks filled? Then partially filled she was less safe than if she had no water in her at all?—A. I would say that if your assumption that she has no stability at any time with her tanks empty?

Q. Yes.—A. If that is true, if you partially filled her tanks she has less than no stability; she has a negative stability.

Q. If a vessel lists easily, has that anything to do with crankiness?—A. As I have explained here a little while ago, the term crankiness is one by which there are as many different opinions as there are people, and unless you term what you mean by crankiness, I do not know.

Q. I do not know myself; I have heard it used here, and I assumed it obtained that reputation because she frequently listed.—A. If you take that as the definition, yes.

Q. I assume that is what it means. Do you believe that the Department of Commerce ought to require that all passenger-carrying

vessels should be subject to inclining experiments?—A. Oh, I could not express an opinion on that without a study of the conditions. There are so many things entering into it I could not say.

Q. I mean as affecting the safety of the vessel?—A. I have no opinion on that. I should do it, though.

Q. Would the fact that a vessel operated for 11 years, carrying passengers without accident, raise a presumption that she had stability?—A. Yes; that would certainly raise the presumption that she was safe, in the absence of any other information, of course.

Q. Do you think an inspector would be justified in relying on that presumption of stability in fixing the passenger allowance?—A. Why, in my opinion I should say yes, in the absence of any other information than what you have given.

Q. But it is not conclusive of the fact of stability?—A. No; not at all.

Q. Other elements should enter into it?—A. The question of a ship's having stability, gentlemen, is a fact that can be—

Q. Determined?—A. Calculated and determined; but in the absence of these calculations or determination, I would say it was probability and chance.

Q. If the question of stability can be determined, don't you think that for the protection of people who travel on lake vessels it ought to be determined?—A. I think unquestionably it should be.

Q. Before fixing—A. But by whom that should be determined is another question.

Q. But the stability ought to be a fixed fact?—A. I think it ought to be determined and certified to by some one, some place.

Q. Do you think that a vessel that relies upon water ballast for stability ought to be licensed as a passenger-carrying vessel?—A. That would depend altogether upon its characteristics without the water, in my opinion.

Q. Well, would you say that a vessel that was unstable or is not stable without water ballast is an unsafe vessel without the ballast?—A. In my opinion, yes.

Q. Then wouldn't it be a fact that the safety of the vessel would depend upon the operation of the water ballast?—A. It would in the case you cite; in that case I do not believe she should be licensed to carry passengers.

Mr. STEFFEN. That is all.

Secretary REDFIELD. Mr. Ackerson, is stability a fixed term?

The WITNESS. No, sir; it is not.

Q. That is a relative term, is it not?—A. Yes, sir; it takes into consideration several things. When you speak of a vessel being stable or unstable it is pretty hard to state what you mean unless you are familiar with all the circumstances.

Q. Is there or is there not a wide range of stability?—A. Oh, yes.

Q. Within which range a vessel may still be safe?—A. Yes; in general the determination of stability of the vessel and the final answer go into the shape and the curve that she has; how much curve she has; the ability of that vessel to return to the upright, and its range as indicated by the point at which that ability becomes zero. You can look at the curve and tell how good or how bad it is.

Q. So speaking in the popular language, in the case of the destroyers of which you spoke, you deliberately reduced the degree of

stability for the purpose of making them roll more easily, while still working within the limits of safety?—A. Oh, yes. We reduced the initial stability, which is the stability of the vessel to return to the upright if she were to get a slight inclination; that does not effect the incline to which she may ultimately go, but the maximum riding loom, but only the initial roll, and that is what makes one sea sick.

Q. Is not this whole question of relative stability a problem in physics?—A. Yes; sure.

Q. Requiring for its determination accurate knowledge and use of the laws of physics?—A. Yes, sir.

Secretary REDFIELD. Any further questions, Mr. Thurman?

Mr. THURMAN. No, sir.

Secretary REDFIELD. Gentlemen?

Capt. VAN PATTEN. No, sir.

Capt. COLLINS. No.

Secretary REDFIELD. Is or is not stability, as you have described it, synonymous with strength?

The WITNESS. Has nothing to do with it.

Q. Stability and strength are two entirely separate things?—A. Entirely so; one has nothing to do with the other.

Q. And do I understand you correctly that vessels with a wide range of initial stability may all of them be perfectly safe vessels?—

A. Yes; and no one shall say which of the two or three is the safer.

Q. And none can say which of the two or three is the safer?—A. No, sir.

Q. That is what you said?—A. Yes, sir.

Secretary REDFIELD. Any further questions?

Mr. STEFFEN. May I just ask one question?

Secretary REDFIELD. Certainly; go right ahead.

Mr. STEFFEN. Are you familiar with vessels that are constructed to navigate deep waters and also shallow waters and are purposely built with ballast to raise and lower the vessel by taking in and discharging water?—A. I do not know of any such vessels.

Q. Could you tell if you saw the plans of the *Eastland* and had an opportunity to examine them, could you form an opinion as an expert that she was constructed for that purpose?—A. I could not tell what was in the mind of the man who examined her, but if the *Eastland* were raised, and we had the plans of her, or if we did not have the plans and had the time and force necessary to measure her and measure the lines you could form a calculation and experiment which would very quickly tell you all about her safety and stability.

Q. If you had an opportunity to examine her after she is raised could you give an opinion that would in your opinion be reliable as to her stability and safety?—A. After making that experiment; of course.

Secretary REDFIELD. Mr. Ackerson, from what you have seen of the vessel and what you have heard testified to under oath are you able to express an opinion whether or not upon the morning of July 24 the accident would have happened had the port gangways been closed?—A. I could not give an opinion on that because there are other openings in the ship that might have had the same effect that the gangways would have had.

Q. Under the conditions in the preceding question can you give an opinion as to whether the accident would have happened had the port gangways been closed and all other openings in the side of the ship, the port side of the ship, been closed?—A. No; I could not give an opinion on that because whatever moment there was, whatever weight there was on that vessel to turn it over, if it was greater than the maximum of the vessel to return to the upright, she would go over anyway, regardless of those openings being closed. If, on the other hand, that moment were sufficient to heel the vessel to 20° and when she reached 20° some openings reached the water she would go over anyway. In the one case it might be possible to put her over if the openings were closed, in the other it might be possible to put her over only in case some of the openings were open.

Q. Under the conditions stated in the two preceding questions can you say whether, in your opinion, the accident as it has been described would have happened if the water-ballast tanks of the ship had been full and all openings to the water on the port side of the vessel closed?—A. In my opinion she would not have gone over.

Secretary REDFIELD. Any further questions?

Capt. COLLINS. I have got one question I would like to ask.

Q. Will you define for the record what is meant by the term "stability"?—A. The stability of a vessel is generally meant and understood to mean the property that that vessel has to return to the upright position when it is listed from the upright in unrestricted rolling; that is necessary; that is if a vessel goes out in the open sea and the waves start her to rolling, and she rolls over, for example to 40°, that vessel has a tendency to return to the upright measured usually in terms of moment. Now that ability, that tendency to return is the stability of the vessel in that condition.

Capt. COLLINS. That is all, Mr. Secretary.

Secretary REDFIELD. That is all; thank you. You are excused. (Witness excused.)

WILLIAM P. EELS, called as a witness by the board, having been first duly sworn by Secretary Redfield, testified as follows:

Examined by Secretary REDFIELD:

Q. Will you kindly give to the stenographer your full name, address, and age?—A. William P. Eels, 415-417 Walnut Street, Philadelphia; 49.

Q. What is your occupation, Mr. Eels?—A. I am supervising inspector for the Travelers' Insurance Co., Philadelphia.

Q. What is it?—A. Supervising inspector, Travelers' Insurance Co., Philadelphia district. I have charge of the work in six States in the eastern section of the country.

Q. What is the nature of your work, Mr. Eels?—A. Perhaps 40 per cent steam boiler and other vessel insurance and inspection; 60 per cent manufacturing, construction work, mining, and other lines of industry.

Q. Are you a steam engineer by profession?—A. I am.

Q. Will you please state for the record your experience since you began to work, not going into too many details?—A. Well, I served five years as an apprentice in a general machine shop and foundry.

Q. Where was that?—A. In Alpena, Mich., where marine work was done largely, repairs to vessels themselves and motive power of vessels and paper-mill and sawmill machinery. At the end of five years I started sailing. I started firing on the Lakes. During the summer seasons I sailed on the Lakes and in the fall I went to sea. I fired for—that is, I fired, was water tender, donkey man, etc., and oiler until the fall of 1892, when I got a license, marine license here in Chicago, assistant engineer's license. My first ship as second engineer was the *R. H. Owen*. She was a sailing vessel and freight boat. I was assistant engineer on her in 1893 and 1894. From her I went as second engineer on the *Ann Arbor No. 1*, a wooden vessel, carrying cars across Lake Michigan, from Frankfort to Kewaunee and Manitowoc. I stayed in her until the opening of the navigation season in the spring, and when that opened I went as second engineer on the *Thomas Davidson*. The next year I went as chief engineer to the steamer *Jim Sheriffs*. I was chief engineer on her until, well, it was about five years, I have forgotten which year now. From the *Sheriffs* I went as chief engineer in the *City of London* and was chief engineer for her for a season, until about the close of navigation, when I went as chief engineer on the steamer *Indiana* on the Goodrich Line; I was chief engineer of her for perhaps 20 months or something along there, when I went as chief engineer to the *Eastland*. I was chief engineer to the *Eastland* in 1904 and 1905. In November, 1905, after the close of the passenger season, I went with the Travelers' Insurance Co., and am with them yet.

Q. How many examinations have you taken for various classes of licenses as engineer?—A. I should say 15.

Q. From how many different local boards of inspectors?—A. Marine boards?

Q. Yes; steamboat inspection boards I mean.—A. Well, always in Chicago, but I have forgotten whether the board changed during my different examinations for marine licenses. When I said 15 I referred to stationary, technical, and several other examinations.

Q. So you have held both stationary and marine licenses?—A. Yes, sir; I have enough licenses to trim up a Christmas tree. I say that for this reason: In my present work, in the work of inspecting boilers in the six or eight different States, say in the States of Pennsylvania and Massachusetts, they have their own boiler law, so has Indiana, and the city of Detroit has its own law, and having charge of all the boiler inspection work, why, I have qualified to pass on the reports as they come to me.

Q. Under the laws of each State?—A. And they are multiplying all the time. We hope to establish a uniform boiler code this year in the American Society.

Q. Now, Mr. Eels, I ought not to go further, by the way, without thanking you for coming so far.—A. That is all right.

Q. Let me ask you if you were the engineer on the *Eastland* at the time when on leaving South Haven she listed?—A. I was chief engineer.

Q. Now, will you tell us in your own way and as fully as you can just what occurred and what you did and why?—A. We had the postal clerks from Chicago on that day, if I remember correctly, it was on a Saturday, we took a full load going over; if I remember correctly again many of them stayed over for Sunday and we came

back with part of a load. We were lying at the dock in South Haven, the passengers got aboard perhaps a little after 5 in the afternoon, they were all on the dock side, her port side was to the dock. We limbered up the engines and we got a bell to go ahead, I think; we could usually spring her off the dock with our engines in South Haven. As soon as we started ahead the wheels commenced to drag on the bottom, I think the port wheel hit the bottom first. It listed her to port a little bit. Whether through some change in the distribution of the passengers or what it was I do not know, she went over starboard a little, the starboard wheel dragged on the bottom; I noticed that the listing was perhaps becoming more aggravated. We were getting under more steam all the time, our speed was increasing and perhaps by the time we got out to the piers we were running 12 or 14 miles an hour. All this time her wheels were striking on the bottom, hitting logs and everything like that. As soon as I felt her wheels quit that then I immediately filled up with water; that is, filled all the water compartments, every compartment and then we come across the lake first rate.

Q. Was there any more listing after your compartments were filled?—A. Not a bit, as stiff as a church.

Q. Now, Mr. Eels, please tell if you ever saw her or knew her, during your experience as chief engineer of that vessel, to so behave that you did then or since regard the condition which you then saw and knew as a dangerous condition?—A. I did not consider it a bit dangerous; I felt extremely secure on her, particularly in bad weather. I felt more secure on her with a full cargo, up to capacity, than I did a half or 75 per cent cargo.

Q. Why?—A. Because the cargo was so placed and distributed that every time we met a boat or we had a rainstorm or something they did not all move to either side. It was just like a cargo of dead weight of grain or iron or anything else. I preferred the *Eastland* chuck full.

Q. Did you run with passengers?

Q. Yes, sir.—A. I never had a shortage of space; of course I could not get to the captain's quarters, that was my understanding of it, that were reserved.

Q. And I understand by the regulations that a vessel as safer in your opinion, if she was empty or partially full, for that matter?—A. Yes, sir.

Q. For the reason that the vessel is lighter?—A. Yes, sir.

Q. Did I understand you to say, sir, that she was lighter?—A. Yes, sir.

Q. Now, will you tell me how long she was full?—A. She was full for a day coming from South Haven.

Q. Did it take?—A. It took her about 24 hours to get up.

Q. Yes; we were up wholly at that time?—A. As soon as we got clear of the dock I ordered her or rather; I never left the throttle open for 24 hours or until she had rather; I think I had my assistant open both sea cocks and open all the other compartments, excepting the forward bulkhead.

Q. You say both sea cocks?—A. Both sea cocks. No; one sea cock. To the best of my recollection, there was only one sea cock on her;

but that is 10 years ago, and my memory may have dimmed a little bit; there may be two, but whatever there may be, there was one good ample one anyway.

Q. What was the nature of the valve that admitted the water from the manifold to the tanks?—A. They were all window valves with threaded raising stems, to the best of my memory.

Q. With a wheel?—A. No; there were no wheels on the manifold valves.

Q. What tool did you use for opening them?—A. A wrench; a crank wrench. I think I had it made.

Q. Was the sea cock of sufficient capacity to fill all the tanks simultaneously?—A. It was.

Q. Was it or was it not your practice to keep the water ballast tanks full when loading passengers?—A. You mean prior to that incident in South Haven?

Q. Before and after, both.—A. Before that we never carried her water trims full before that. After that we always had No. 3 chock full.

Q. You are speaking now of the times you were lying at the dock, are you, or all times?—A. We never wasted the steam to pump out No. 3 port and starboard. If we were going to lay up in the fall or go into dry dock or something; if it was for the diver to tip her stern up, we would; but we wasted no steam pumping out No. 3.

Q. For that reason you kept No. 3 tank in and out of port?—A. Yes, sir; the valves open and the sea cock open most of the time.

Q. When the valves were open and the sea cock open were the conditions or were they not such that the valve of the tank took care of itself?—A. They would fill up automatically up to the level of the sea.

Q. And that meant up to the top of the tank, did it?—A. Yes, sir; the sounding pipes and vent pipes, about 8 or 10 feet above the top of the tanks; perhaps 8 feet. Those were small pipes.

Q. Let me understand you clearly. To secure the position of certainty in filling the tanks all that you had to do, if I understand you rightly, was to leave your valves standing open?—A. We opened the valves and opened the sea cock, and the water compartments No. 3 port and starboard filled.

Q. In order to keep them, do I understand you, in order to keep them full all that was necessary was to leave the sea cock of the valves and the manifolds standing open?—A. Oh, yes, sir; kept them full all the time.

Q. That would always keep them full, would it?—A. Certainly; they would keep full.

Q. I want you to answer my questions exactly.—A. Pardon me.

Q. Am I right in understanding that no attention or manipulation of any kind was necessary to keep those tanks full if and as long as the manifold valve and the sea cock stood wide open?—A. Not a bit.

Q. So that if attention were given to that operation and it were properly done and left standing in that condition, the filling of the tanks and the keeping of them full required no further attention whatever?—A. Not a bit; not a bit.

Q. During the time you were chief engineer of the vessel you ported on the west side of the lake in the Chicago River, did you not?—A. Yes, sir.

Q. Did you find it necessary to empty the tanks in order to make the dock in the river?—A. No.

Q. Do you know of any necessity arising from your experience on the vessel for emptying the tanks in the river in order to make the dock or to load passengers?—A. You are referring to No. 3 tanks or the other tanks?

Q. One or both or all.—A. It was never necessary to empty No. 3 port or starboard. We very frequently did the No. 2; and if we did anything in No. 4—well, very frequently we pumped that out.

Q. What was the difference between Nos. 2 and 3 and 4?—A. No. 2 were the second forward and the second aft of the collision bulkhead; No. 3 followed, and No. 4 followed. I would say off-hand that the No. 3 was perhaps almost or equal the capacity of Nos. 2 and 4 combined. The height was uniform all the way through; of course, the dimensions longitudinally and transversely were different.

Q. You said, if I recall correctly, that you esteemed the *Eastland* a safe vessel?—A. Yes, sir.

Q. Under what conditions, if any, did you esteem her to be safe?—A. Exceptionally so in bad weather.

Q. Was your answer based upon the tanks being filled or partly filled or unfilled, or upon any condition in the management of the ship?—A. With normal cargo or no cargo it was immaterial whether the tanks were filled or not. I brought her up from Port Huron without a pound of water in her, we pounded a southwest sea from the shank to South Haven, and she was as steady as could be.

Q. Without a load?—A. No passengers; that is, from the ship yard up, her second year. Once in a while we made an extra trip. We go across the lake usually from the west short here without passengers, perhaps only 200, due to bad weather, or something then, they stayed over there, and some Saturdays we made a special trip, that is, we came back Saturday night in order to be here Sunday morning, and she would come over flying whether there was any weather or no weather; she was very comfortable.

Q. When carrying a full load do you or do you not think her safety was based upon the water-ballast tanks being filled?—A. When carrying a full load? Well, with 3,300 people on her she behaved very creditably with only No. 3 full.

Q. No. 3, I understand, was the largest of all?—A. Yes, sir.

Q. I understood you to say, if I am correct, that it contained as much ballast as 2 and 4 put together.—A. Roughly on an estimate.

Q. Approximately?—A. Yes, sir.

Q. Are you able to say, therefore, from your experience on the vessel, in personally handling ballast tanks or having them handled under your direction, that with a load in excess of 3,000 passengers she did behave well?—A. Well, yes, sir.

Q. Now, Mr. Eels, is it a fact that you would have been willing, from what you saw of her behavior with such a load under your management, to have taken your own family on board of that ship?—A. They traveled with me many a time.

Q. They have traveled with you?—A. Yes, sir; many a time.

Q. You used the phrase, a few moments ago, "limbered up." Am I correct in understanding that that means starting the engines slowly to get them heated up?—A. That is the shop parlance.

Q. I understand it perfectly, but I want to get it in the record.—A. It is another technical term, an academic term.

Q. You said something about not having left the throttle until certain times, did you refer to the throttle which controlled the admission of steam to the engine cylinders?—A. Yes, sir; two; one to each engine.

Q. You did not refer to anything in connection with the water ballast?—A. No, sir.

Q. You used the phrase "full load" and have since, the figures "3,300"?—A. Yes, sir.

Q. What do you mean by full load?—A. Until that incident, to the best of my recollection, we were allowed 3,300, and we frequently carried up to capacity. The *Eastland* became a very popular boat at that time on account of the speed, and I had in mind when I referred to the 3,300, before that—that is the first season before July 17.

Q. Was it ever necessary or did you as a matter of fact unload the ballast tanks in order to make speed?—A. I have pumped her out aft very frequently.

Q. When you say aft, just what do you mean?—A. I mean I have No. 4 or something aft of No. 3.

Q. And that was for the purpose of raising the bow in the water?—A. No; that was just the reverse—for raising her stern—it had that tendency.

Q. I beg your pardon, that was a mistake of mine. Did she drag by the stern at high speed?—A. She did. Her ballast was her two bustles aft—the lower you kept them the more stable she was; the higher you kept them the more it increased her speed.

Q. Did her propeller blades project beneath her hull?—A. Not normally when she was on an even keel. If she was heeled over, for example, in a sea down aft, heeled over, she being a twin-screw ship the propeller blades, if they were on opposite centers, there would be one blade below the level of the ship.

Q. You often broke a blade for that reason?—A. I think I put on 28 new blades on her in one year, the year 1904.

Q. These were detachable blades?—A. Yes, sir.

Q. Put on by bolts?—A. Yes, sir. We broke them in South Haven as a rule. Once in a while we threw one outside, but I always attributed it to having hit some submerged obstacle in South Haven.

Q. Can you say whether, and if so how much, it increased her speed to empty her aft tanks?—A. It would speed her up a mile and a half an hour; a little better or more than a mile.

Q. Did you under those circumstances always leave No. 3 tank full?—A. After July 17, 1904, her tanks were never empty. No. 3 on the port and starboard we never emptied in the passenger season, except we had to dock her each season and I loosened up her strut twice. We docked her once in Miller's dry dock, once in Chicago, and on each occasion, of course, we pumped out No. 3 port and starboard.

Q. Mr. Eels, based upon your experience in other vessels and upon the *Eastland* herself, and upon the results of the operation of that vessel while under your care and that of the captain who commanded her, when you were chief engineer; upon your knowledge and experience of steam engineering, and in general, is it or is it not your

opinion that the accident of July 24 was an avoidable one?—A. It was avoidable unless some external cause or condition of which I have no knowledge accelerated or assisted.

Q. Why?—A. Because if she was deep enough aft she could not list. The whole question of keeping the *Eastland* trimmed was to keep her down aft.

Q. Now, that question was "Why?" The next question is "How?"—A. By having No. 3 port and starboard filled, by having her tank top dry, and, if necessary, having something in No. 4 and the lazaretto.

Q. Based upon your experience with the vessel and your knowledge of steam engineering, both before and after your experience with her, was or was not the presence of 2,500 passengers a factor in causing the vessel to capsize?—A. Yes, sir.

Q. How far, in your judgment, did it or did it not affect the matter?—A. I was not present and I do not know just what the external conditions were. I know that 2,500 people, mostly on one side or the other, would cause her to list slightly unless she was properly trimmed. Just where the people were placed at the time she started to careen I do not know; I was not there. If there were double that number on her, she would not have careened; I know that, because they would have been distributed over her like a load of iron ore or coal.

Mr. THURMAN. That is assuming all the time, Mr. Eels, that her ballast tanks were properly filled. Do I understand you correctly?

The WITNESS. Until July 17, when she gave us a taste of her performance in South Haven, we did not pay much attention to the water compartments, and we carried, I think, up to capacity before that time. We did at that time.

Q. I am talking about the opinion that you have expressed as to this accident on July 24. You expressed an opinion as to the number of passengers on the vessel at the accident of July 24. Was that based upon the estimation that the ballast tanks were filled or unfilled?—A. I don't understand.

Q. To put it another way, if the ballast tanks were filled in the way you have described them to have been filled, would the presence of 2,500 people on board that vessel have caused her to capsize as she did?—A. No, sir.

Q. What would you say in case her ballast tanks were empty or only partially filled?—A. Now, I would prefer the tanks empty to only partially filled, if I was responsible for her—that is, No. 3 port and starboard, I mean.

Mr. COLLINS. Mr. Eels, after the time the boat listed at South Haven in 1904 and you decided to keep her No. 3 tanks full at all times, did the *Eastland* ever list dangerously during your time aboard the ship?

The WITNESS. Oh, no.

Q. After you had decided to keep them full?—A. Never to give us any concern in this respect. After we cut out her hurricane deck for passengers—that reduced them, I think, to 500—the inspectors did—I think at the end of that season we voluntarily eliminated the upper deck entirely. Prior to July 17, 1904, we carried 50 per cent or over up on the hurricane deck. There was nothing transpired after that date that gave me the least concern.

Q. On whose authority did you fill or pump out the tanks?—A. Why, on consultation with Capt. Dority and myself; we were in very close cooperation all the time in handling her.

Q. Did you ever assume it on your own responsibility?—A. Which tank?

Q. Any of the tanks aboard that boat?—A. Oh, yes, sir; very frequently.

Q. In your previous testimony you said that the *Eastland* was a very popular boat at that time.—A. She was.

Q. After she had made this list did that affect her popularity in any way?—A. It did perhaps for two days; after that it increased it. We carried our largest load after the 17th of July, that is up to capacity; her capacity was reduced, but she was generally filled better after that than she was before.

Q. We will assume that No. 3 tanks were not chock full, only partially filled, what would be the effect in the event that she took a list?—A. It would increase the list.

Q. For what reason?—A. Because the center of gravity would shift the bulkhead—if she listed to starboard and she careened, say to 22½ per cent, the water in the port bulkhead would have gone over to the longitudinal bulkhead—the water in the starboard compartment would run—you would change the ballast trim amidships to the starboard.

Q. The weight would be on the starboard?—A. Yes, sir; instead of an equal depth.

Q. Why was it necessary to keep the vessel down aft, in order to prevent?—A. Because that is where her bearings were, she had nothing forward.

Q. What do you mean by bearings?—A. Her bustle; we call it her bustle. Of course, I am not a naval architect, but as an operating engineer it was apparent to me in a week.

Q. I want you to state that; I understand what you mean thoroughly, but I want this for the record.—A. I see.

Mr. COLLINS. Those are all the questions I want to ask, Mr. Secretary.

Mr. STEFFEN. Why did you leave the service of the *Eastland*?

The WITNESS. To better my position and make more money.

Q. How soon after July 17, 1904, was that?—A. A year and a half; that is a season and a half; the seasons were short.

Q. How many gallons does No. 3 tank hold that you kept constantly filled after July 17?—A. Of course, you can not expect me to answer that correctly now after 10 years, but I would assume that, putting it in tons, 250 tons; I would say 250 tons.

Q. How many inches would that submerge the vessel or tend to lower her in the water as against when she was not filled?—A. Well, it would put her down forward a very little, maybe 6 or 8 inches, and put her down aft perhaps 15 or 18 inches. As a matter of fact my work was inside the ship, not outside.

Q. Now, assume it did not put her down 18 inches; assume it put her down 10 inches, didn't you find difficulty after you were filling No. 3 tanks in going in the river in Grand Haven?—A. Yes, sir; we kept breaking our wheels right along, but I did not regard that.

Q. Didn't you have any difficulty in breaking the blades in the river?—A. We kept breaking the blades all the time; I think I broke 28 that year. You mean in South Haven?

Q. Yes.—A. Yes, sir.

Q. Why did you on July 17 keep No. 3 filled?—A. Because the inspectors in Chicago ordered it filled.

Q. Did you change your opinion after July 17 as to the safety of that vessel?—A. Well, it naturally perhaps influenced it a little, but then it did not cause me any fear or apprehension.

Q. Did you regard the handling of these ballast tanks as a delicate proposition?—A. Not at all; every oiler and every boiler tender and every assistant engineer was as familiar with that as I am.

Q. You did not consider that it needed any particular handling of these tanks to make her safe?—A. Not anything more than to have No. 3 filled.

Q. Would you permit the oiler to turn on these?—A. Under my direction I always told him to; I don't suppose I put my hand on a wrench a dozen times myself.

Q. But you did regard it as an absolute necessity to keep No. 3 filled?—A. After we were ordered to do so by the inspectors; yes, sir.

Q. Did you personally look after that every day?—A. Yes, sir; I never slept on her outside.

Q. You do not know why they removed the *Eastland* from Chicago to Cleveland, do you?—A. No; when I went down to Pennsylvania from Chicago that time I lost track of the marine interests up here entirely. I understand, though, it was on account of some financial jockeying or failure or something.

Q. You say after the July 17 incident her passenger patronage increased after a few days?—A. Yes, sir; the next day we loaded in Chicago.

Q. What was the carrying-capacity allowance made to the *Eastland* after that season?—A. The first made was twenty-five.

Q. After July 17, 1904?—A. The remainder of the season?

Q. No; the following season.—A. Well, it was reduced several hundred; I have forgotten—somewhere between twenty-five and twenty-eight hundred. As a matter of fact, a marine engineer is not always familiar with the carrying capacity of the vessel.

Q. Do you know why she was reduced?—A. Because we eliminated her hurricane deck for passenger service, which leaves available space for passengers.

Q. Just when was she reduced after July 17?—A. If I remember correctly, on the 18th of July we laid at the dock here; but I think we were, by restricting the number of passengers on the hurricane deck, we were reduced right along, immediately after.

Q. Then your statement that the capacity was increased is wholly erroneous in that you don't know the carrying capacity?—A. I said her carrying capacity.

Q. It could not have been increased if your carrying allowance was decreased?—A. Before the 17th of July, about the only time we filled her was on such an occasion as the postal clerks' society or something of that sort; during the week we had some scant crowds; after July 17 it was invariably light, but better during the entire week than it was before.

Q. Did you ever know that the people of Chicago felt that it was an unsafe vessel?—A. Why, I do not know whether they felt it or not.

Q. Did you ever hear of it?—A. We had competitors down here. Many of them aggravated it.

Q. That did not influence your crowds any?—A. It influenced it; it gave us more passengers.

Mr. POOL. Captain, were you aboard the *Eastland* when she was reduced from 3,000 to 2,270?

The WITNESS. I can not recall whether I was or not. I was in her the entire season of 1904 and 1905. If it was during those two years, I was in her.

Q. Was this boat ever loaded or ever brought to the dock where the accident happened while you were chief engineer?—A. Where did this accident happen? I have not been down yet.

Q. On the south side of the river; between Clark and LaSalle.—A. No; her dock was just above the Wells Street Bridge.

Q. You never docked there?—A. No, sir.

Q. So you do not know of your own knowledge whether that boat could dock at that point with her No. 3 tanks filled?—A. No; I have no knowledge of there at all, even at that time. Of course, it might be entirely different now. That was 10 years ago.

Q. You eliminated the hurricane deck. Eliminating the hurricane deck raised the stability of the boat?—A. You mean for passenger service, keeping the passengers off of the hurricane deck?

Q. Yes.—A. It improved it wonderfully.

Mr. STEFFEN. Did you know Engineer Nack?

The WITNESS. He was second assistant with me in 1904 and 1905 on the *Eastland*. He was first assistant with me on the *Indiana* the preceding year, the year before.

Q. He testified here the other day in response to my questioning that he regarded the handling of the ballast tanks a very important matter, and that he left that in nobody's hands but himself; that he manipulated these valves himself, and would not allow anybody else to. Do you think that was a foolish precaution on his part?—A. Not at all. That showed that his direct attention was on it; he had the interest of it.

Q. You do not think it is a delicate proposition?—A. Delicate or important? You asked me delicate; just now you said important.

Q. Probably we are playing on words.—A. When you asked me about delicate I replied to you whether it took a technical man.

Q. Did it take extreme precaution in operating these valves, in directing how much water should go into the tanks?—A. Extreme precaution?

Q. Yes.—A. No; every oiler and every assistant engineer on the lake does just like—just as natural as any ordinary engineer on a steam vessel with her compartments.

Q. He testified here that this particular vessel, the *Eastland*, that her safety depended absolutely upon the operation of these tanks, and it has been intimated that was the cause of her going over, that the tanks were not properly handled. Do you disagree with the opinion that the tanks were the important and only factor that made the *Eastland* a safe vessel, the operation of the tanks?—A. They

could contribute to the accident if they were not operated intelligently. As long as No. 3 port and starboard was filled the other tanks were simply other compartments. There were no tanks on her; there were no ballast tanks on the *Eastland* at all; the other compartments were relatively unimportant.

Q. Prior to July 17, did you have any trouble with her?—A. Not a bit; that is the reason we had trouble July 17; after July 17 why we kept on our toes, paid particular attention to it.

Mr. COLLINS. Did you know at the time this boat listed at South Haven on July 17, 1904, if she put her gangways and lower dead lines under water?

The WITNESS. Yes, sir.

Q. She did?—A. Yes, sir.

Q. Did she take any water aboard the ship?—A. Yes, sir.

Q. Through the gangways?—A. Through the dead lines. Our room got quite wet, my room was on the starboard side right aft of the engine. I got the water in there.

Q. Did you see the water come in personally?—A. No; I was in the engine room, I saw my books and bed and one thing and another.

Q. What did the *Eastland* draw when she was light and no water in her?—A. You mean with the boilers filled in service?

Q. Oh, yes.—A. I can not answer that with any accuracy.

Q. Do you know what she drew when she had No. 3 tank filled?—A. And no passengers?

Q. Yes.—A. I think it was something around 13.8.

Q. Forward or aft?—A. Aft, I think it was something around there, it is so many years ago of course I can not tell.

Mr. COLLINS. That is all.

Secretary REDFIELD. The witness is excused. The meeting of the board is adjourned until 2.30 p. m. this afternoon at this place. The members of the board of inquiry will meet in executive session in the adjoining room immediately.

(Whereupon an adjournment was taken to 2.30 o'clock p. m., August 4, 1915.)

WEDNESDAY, AUGUST 4, 1915—2.30 P. M.

The board met pursuant to recess.

Present, same as before.

Secretary REDFIELD. Owing to the fact that Gen. Uhler will appear before the State grand jury this afternoon we will take an adjournment until 9.30 o'clock to-morrow morning.

(Thereupon an adjournment was taken until the following day, Thursday, August 5, 1915, at 9.30 o'clock a. m.)

CHICAGO, Ill., August 2, 1915—9 a. m.

At a conference called by Secretary Redfield, to be held in the chambers of the hearing room, 603 Federal Building, the following remarks were made:

Secretary REDFIELD. Mr. Sullivan, the first question we might take up, informally, is what we wish to do at this conference as to admitting the press. Mr. Maloney, of the city press, came in this morning

and asked me what our wishes were. I told him my preference was for their presence, but it would rest with us all to consider whether we might hamper anyone from speaking with the frankness he desired. What is your view?

Mr. SULLIVAN. I think it would hamper some people in speaking frankly.

Secretary REDFIELD. Do you think it would hamper them enough to make it unwise to bring them in?

Mr. SULLIVAN. I think so.

Mr. REDFIELD. What would you say about admitting the press, Gov. O'Hara?

Mr. O'HARA. I would say, your honor, inasmuch as the press has taken a very hostile attitude, and anything would be misinterpreted and mistook, it would make it better not to have any secret hearing; that is, not to exclude the press.

Secretary REDFIELD. Would that be consistent with your views, Mr. Sullivan?

Mr. SULLIVAN. It is immaterial to me.

Mr. POOL. I believe having just the representative of the city press—that gives news to all the press—that might be a good idea, to give them the benefit of the conference, but all on the same grounds.

Mr. O'HARA. I think that is a very splendid suggestion.

Secretary REDFIELD. What do you say, Mr. Thurman?

Mr. THURMAN. I am for giving it all the publicity we possibly can.

Secretary REDFIELD. So am I.

Mr. SULLIVAN. If that is your view, then I will adopt your view.

Mr. THURMAN. All right, Mr. Sullivan; that is mine, and very strongly.

Secretary REDFIELD. Mr. Steffens, we were discussing the propriety of a secret session or of the press being present at this conference. Mr. Maloney, of the city press, is here, and asked if that was our wishes, and I told him I did not know.

Mr. STEFFENS. Without knowing just what may arise, I do not know as there is any objection. I do not know if it is going to hold this body up to criticism if not admitted.

Secretary REDFIELD. Well, the suggestion has been made that the city press, who gives news to all the papers, should be admitted. Mr. Thurman's point of view seems to be that they should all be in. Now, I want the view of all of you on the matter.

Mr. POOL. I do not know but what it would be better to admit all the papers and preclude the possibility of having it said that we showed any partiality or any preference.

Mr. THURMAN. I am very strongly inclined to think that we should let them all come right in with us.

Mr. ACKERSON. I think we should let them in.

Secretary REDFIELD. The press representatives will be admitted.

I think, gentlemen, that on Saturday morning there was perhaps an unconscious discourtesy shown by me, to my friend, the lieutenant governor here, and other members of the board here in an effort to better accommodate my friend Mr. Sullivan. We met quite promptly in the morning, and as something had detained you, Governor, and Mr. Poole was not there, and I was anxious that Mr. Sullivan should have an opportunity to examine the witnesses, I invited him to take

the seat which you and your father have ordinarily occupied, and he did so, and from that it arises that we quite neglected the members of the board in the way in which we carried on our questions. I felt later that I should have explained that to you when you came in, so that you should know that what took place was not intentional but was accidental. And if you feel now that any apology is needed, Governor, here it is.

Mr. O'HARA. Oh, no; not at all, Mr. Secretary.

Secretary REDFIELD. What would you like to bring before this meeting?

Mr. O'HARA. The suggestion, Mr. Secretary, that you were kind enough to make on Saturday, that if possible the scope of the inquiry be broadened to include an investigation that would make it possible for this board to recommend such changes in the service or such changes in the now existing laws as will make it impossible, or as near impossible as will permit, the repetition of a similar disaster.

In other words, Mr. Secretary, in putting it in plain language there is a feeling in Chicago among our people that travel on the Lakes is not safe. That feeling has been going on for years. Unquestionably much of that feeling is built upon this information; some of it at any rate; and I feel, Mr. Secretary, if it were possible for the scope of this inquiry to be broadened to permit us to go into every angle of the situation, to call before this board inspectors and others—in other words, to go into the service for the last 15 years and to call representatives of the organized employers, to call citizens generally, and to conduct a thorough investigation, I feel very certain in my own mind, Mr. Secretary, that that will meet with the approval of the people and serve to remove this fear, and that the Secretary of Commerce would be widely and popularly praised by our people, even though it were necessary, Mr. Secretary, for you, somewhat of your own volition, to go beyond the strict interpretation of the law under which this present hearing is being held.

Secretary REDFIELD. In order to bring that up fully let me say that I am in most entire accord with your views, and have intended that your suggestion be carried out—have intended that from the beginning—it is merely the question of legal form and procedure that concerns me.

We have not the right, as executive officers to extend by our acts the scope of any law; our right is only to do that which is expressly authorized by law, and which we may be advised by the Department of Justice is the legitimate inference from that law.

Speaking for the moment of present inquiry, I have already stretched it into an unprecedented form. There has never been one before that has not been conducted by the local board of inspectors, as the law says, and I will call your attention to the fact that we are personally here at this inquiry.

Now, I think it will be possible to cover that much that you have suggested in the course of this inquiry, and after the suggestion which you made to me I had intended to say to you this morning, to do it in calling the first witness, that I shall be very glad, and Mr. Thurman would, and all of us would, to have you address your inquiry toward matters which would develop weaknesses in the law or weaknesses in practice under the present law which might be cor-

rected so that we might reach just the very point that you so well stated, and present, so far as it is possible the cause of this thing, that was first; in other words, to go as far as we reasonably can in this inquiry in that direction.

Now, that will hardly be far enough because we could hardly venture to go far enough in this inquiry lest, to be candid, the officers who have charge of the payment of the expense of this inquiry would say, "You have gone beyond the law," and hold up the expense, and that they have the right to do, as you know. There was a second step, which I am anxious to have done very promptly to relieve the public mind here, and it was for that reason I have asked Mr. Gillette to come here, and I have asked the Secretary of the Navy to detail Mr. Ackerson. It occurs to me that it may be desired both by the public and by the steamboat owners to have some examination made outside of the Steamboat-Inspection Service, and made promptly, of such vessels as are in service now that will assure the local public from the highest possible source of the safety, so to speak, of the vessels that remain. I have not talked to you gentlemen about this as yet, but it is my hope and my desire that you will assist on request anybody who presents a reasonable request, and either see or conduct under your joint direction such drills and experiments on vessels carrying passengers in this district as will enable the public to be secured in their minds on the question of their stability, and whatever can be done, I do not know, that will be a matter for you gentlemen to decide, but I earnestly desire that everything possible shall be done, and I know that one company desires that you, Mr. Gillette and Mr. Ackerson, should attend and direct the inclining experiments for the purpose of showing the stability of their ships. I hope you will do that.

Mr. ACKERSON. Yes, sir.

Secretary REDFIELD. That was the second step.

Now the third step, and the large one—no; the fourth step is the large one—the third step is this: I have already written to the President that I think I should recommend, from what had already appeared, that the Steamboat-Inspection Service be given authority to survey vessels as to their stability and other necessary points before they go into service at all and make a report thereon, that that authority, now lacking, and the force now lacking with which to do it, seemed to be something that should be supplied.

Secondly. That we should probably recommend that an appeal be permitted by the law, which is not now the case, from the fixing of passenger allowances on vessels, but under proper safeguards to prevent their annoyance, the question can be raised before a higher authority than the local inspectors as to whether the allowance is sufficient or insufficient. There is now no appeal by the law; I think there ought to be one.

Mr. STEFFEN. Pardon me, Mr. Secretary. Does that mean that an outsider, for example, could question the capacity of a vessel? For example, some outsider, like Mr. Olander, claiming that vessels are carrying too many could go before the proper body with that complaint.

Secretary REDFIELD. There should be some such arrangement, but some limitation should be placed upon it.

Mr. THURMAN. You have to have a limit somewhere, because if not you would have a hundred cranks from all over the country with a grievance against this steamship company or the other presenting complaints. You can not open it indiscriminately.

Secretary REDFIELD. I would not want to put it in the hands of an engineer discharged for cause or a captain in the same position, or a crank. Put it in the hands of an individual merely would not, I think, prove satisfactory, because those having individual complaints would have the power to arrest the property of a company upon the claim that their vessel was not properly safeguarded. I think we should have to let Congress pass upon that, however, and that will be determined after a hearing before a committee.

Mr. O'HARA. Would you suggest this, suggest a board consisting of five members, one elected by the sailors, one by the employees on the lake, the other by the employers, and the other two be selected possibly one direct by the President of the United States, and the other to be named in such manner as would represent the citizenship at large.

Secretary REDFIELD. I will tell you what I would say, Gov. O'Hara, that I would thankfully receive any arrangement Congress might make. Now that is all I can say. That is a matter for Congress.

Mr. THURMAN. What is this, on a general investigation?

Secretary REDFIELD. No; this is a matter of the personnel of the board, the body to whom the appeal on passenger allowances could be made.

Mr. THURMAN. Oh, well, if you are going to appeal that way you might as well wipe out our inspection service, if you are going to have your appeal by outsiders, you might as well wipe out your present Steamboat-Inspection Service.

Mr. O'HARA. The Secretary is making a suggestion, Mr. Solicitor, which, in our judgment, will appeal very strongly to our people. It is the Secretary's suggestion.

Mr. THURMAN. I did not mean to say it was your suggestion; but on first flash I would not agree with it, even with the Secretary.

Secretary REDFIELD. I do feel very strongly, and it is not a new feeling, the matter will be found in my annual report for the year 1913, a paragraph there which I think I showed you in my room, the whole question is discussed at length. I am simply prepared to say there should be some appeal which would provide additional safeguards against these things, but I think that appeal should be limited so as not to permit some trouble maker to appeal these things. That is all I am prepared to say, because that is a matter lying with Congress; if they deal with that matter and call me before them and ask for suggestions on that ground I should answer them, of course, but I do not know now what I should answer.

Mr. POOL. I should say, Mr. Secretary, that for the purpose of this executive session that things we are all agreed upon are things that ought to be passed. If we are all agreed up to that point, that there should be an appeal or that there might be an appeal, that that is a pretty good place to stop.

Secretary REDFIELD. That must necessarily rest with Congress.

Mr. SULLIVAN. Why wouldn't it be a good thing to leave the initiative to be taken, for instance, by the municipality, and let it be the objector, if you are to have an objector.

Mr. THURMAN. As Mr. Pool suggests, everybody agrees this law should be amended so there is an appeal. Isn't it time to stop? We can not accomplish anything by discussing it.

Secretary REDFIELD. Yes; because there is nothing we can do about it here, and there will probably be another hearing in which this matter may very well be discussed.

A BYSTANDER. The details will have to be settled later.

Secretary REDFIELD. Yes; it will fall in the hands of our good friend Judge Alexander in Congress, and there is no more capable man in America on that subject.

Now, fourthly. I have told the President I would welcome a further inquiry into the whole thing, this accident inclusive, in case it is not sufficiently covered in this present inquiry, into the whole service, dealing with it in all its forms, and all over the country; I would not be content to be restricted to the lengths myself, because while we are at the job we might as well do it thoroughly; and I told him that I would desire, in fact suggest, the selection of members of the staff of the Navy of the United States, gentlemen representing the merchant marine, on its technical and scientific side, such as Mr. Gillette occupies; men representing the interests of labor, men representing owners, and probably others representing the citizenship of the country at large without any interest to act with the department officers; and I told him I would welcome that.

It has been our custom and it is now, and I should be glad to have that inquiry commenced as early in the fall as practical, and that perhaps it was a mistake to give the impression, if it was given, that that would be dependent upon whether somebody brought formal charges against anybody or not. I am not sure that the impression was given, but I certainly would be sorry to have that impression remain. But everything of that kind must have a beginning, and a written request from you, Gov. O'Hara, or from anybody of sufficient weight and public standing to give it any attention at all would be immediately met with the official statement that that inquiry would be held it would probably last, as these things go, a number of weeks.

Mr. O'HARA. Then, let me understand, Mr. Secretary, in order, if that inquiry be undertaken or be ordered, it would first be necessary for some one or some group of citizens to make a formal request for a hearing?

Secretary REDFIELD. Send a letter.

Mr. O'HARA. Send a letter to you, Mr. Secretary?

Secretary REDFIELD. Yes; I will undertake to say that within sufficient time for me to dictate a response and get it typewritten they will have a written statement from me saying they will have an inquiry from me in the fall.

Mr. O'HARA. Then, it is your recommendation that such a request shall be made?

Secretary REDFIELD. I earnestly hope you will make it.

Mr. O'HARA. I asked that question, Mr. Secretary, so that no one could say that the request for an inquiry was made without your consent or your approval.

Secretary REDFIELD. It has my earnest approval.

At the same time I do not think we ought to lose sight of this present inquiry. There is a little ground, to come back now, I think

we ought to learn all that we can in this present inquiry without going so far as to get outside of the law. I think you gentlemen here are lawyers, most of you at least, and you appreciate that condition.

Mr. POOL. Mr. Secretary, I am not a lawyer, I am sorry to say, but I think it is a fine profession, and I want to say you have clarified the atmosphere very much, and I think your suggestions are fine.

Secretary REDFIELD. Now, does that cover your suggestions, Gov. O'Hara?

Mr. O'HARA. Yes; just one question: Is it possible, by any stretching of your authority or any interpretation of it for you, so as to give immediate relief, to create a board of appeals such as you have suggested be authorized by law?

Secretary REDFIELD. No; I think not.

Mr. THURMAN. That is a congressional act?

Secretary REDFIELD. Congressional action will be necessary; the statute is perfectly clear, and furthermore it is reinforced by at least one opinion of the Attorney General and two or three by the solicitors. The law places the responsibility for determining the passenger allowances upon the local board. I think it would interest you, and I think it would interest you, Mr. Sullivan, to get the debates of Congress. I need hardly tell lawyers like you, they are commonly referred to as indicating the intent of Congress. I have not looked at them in this case, but the debates at that time would, in my opinion, show that the object of that law was to localize the authority where the men were supposed to be best posted and informed as to the conditions, and that you will find that is the theory of the present law. Now, I suppose that what we are going through is the result of an evolution; that is, I presume, that the faster traffic, I think the congested traffic, has gone up since that law was passed in each particular locality, and that now the conditions present a situation which Congress did not have before it at that time. That is my opinion.

Mr. THURMAN. You will find another thing, Governor, if you will take the laws on the Steamboat-Inspection Service you will find a number of provisions and sections in particular cases specifically providing for appeals; for instance, a master may be suspended by the board of local inspectors; he has a right to appeal to the supervising inspector of that district; if he is still overruled he has a right, then, to further appeal to Gen. Uhler, the Supervising Inspector General.

Gen. UHLER. Under peculiar conditions.

Mr. THURMAN. Yes; there are a number of appeals specifically provided for in these sections.

Now, there is no mention of an appeal at all in this section 4450, providing for the fixing of the number of passengers. That is placed specifically within the discretion and power of the local inspectors. You will find that, if you will just take a casual run through the inspection laws, you will find that that condition exists.

Mr. O'HARA. Now, Mr. Solicitor, I think the Secretary's statement has covered the situation very thoroughly. The Secretary's suggestion of another board of inquiry, with a broadened scope, will, I am sure, meet the approval of our people, especially that class I am representing.

Secretary REDFIELD. Now, may I say something to you?

Mr. O'HARA. Certainly, Mr. Secretary. Secretary REDFIELD. This is absolutely personal. When I go to these big cities I frequently have men whom I do not know come to see me, and to find out that they are old workmen who 8 or 10 years ago or more were employed in one of the shops in which I was interested. They come because their former employer was their friend; because they want to see him. I would like to say to you, as a representative of labor, that I would not ask any greater honor at your hands than to have you search into the records of the factories which I have managed, or have to do with the management; I would be thankful if you would do that; you will be glad and I will not be sorry. And among the men who are associated with me to-day in my own work—I hope I have brought that letterhead with me; I wonder if I did. I did. The organization which bears my name as president has also with it these men: Hugh Frayne, organizer of the American Federation of Labor, New York City; Frank Duffy, secretary-treasurer United Brotherhood of Carpenters and Joiners of America, Indianapolis, Ind.; John Golden, general president United Textile Workers of America, Fall River, Mass. And I would be perfectly willing to have you ask Mr. Samuel Gompers what he knows of my attitude toward the efforts of organized labor to improve its conditions, and I will be perfectly willing to take his answer; he knows. I take that off of that letter and just ask you to show it to some of your people and ask them, then, this question: Would they like me, as a friend and associate for years past—and I think they have been willing associates; they did not have to be—to some of the strongest men in the labor movement, and as the personal friend of the Secretary of Labor, would they like me to use my influence with these men to try to harm them without giving them a single opportunity to say a word for themselves? You just ask them that question, will you?

Mr. O'HARA. Mr. Secretary, and also persona, I think that there has been a lack of understanding on both sides. It has never been my conception that the Secretary of Commerce was at all hostile toward the interests of labor, but that he has not been fully understood—

Secretary REDFIELD. I think that is true.

Mr. O'HARA (continuing). By our citizens.

Now, Mr. Secretary, I see that your judgment, your good judgment, covers the situation.

But I want to suggest this, that our people would like at once and for the present safety—informally and unofficially created as it may be—a board of appeals that the inspector in granting the carrying capacity and license to the various vessels may consult with. For instance, Mr. Secretary, I would suggest this: That the Secretary of Commerce now appoint a board of appeals, of his own authority, consisting of such men, we will say, as the mayors of the cities of Chicago, Cleveland, Buffalo, Milwaukee, and Detroit, and that such board of appeals be consulted, unofficially and informally, annually by the inspectors before granting these licenses.

Secretary REDFIELD. You are going outside of the law.

Mr. THURMAN. You could not do that, Governor.

Secretary REDFIELD. That would be absolutely illegal.

Mr. O'HARA. It could not be done.

Mr. THURMAN. Now, wouldn't it be entirely impractical? Suppose an official elected by the city of Cleveland—what does he know about the stability of boats? If I were elected mayor of Cleveland, I might be entirely competent to be mayor of Cleveland but I might not be competent to entertain an appeal from a board of men on the stability of a vessel. How could I possibly tell whether they were right or wrong? I would probably be inclined, as you would be inclined, to sit in, and after it was over with would not know anything about it. I think we would make ourselves ridiculous to try to do anything of the kind, even if we could.

Secretary REDFIELD. Now, we will do anything that we have the power to do, because I think the public mind has naturally received a terrible shock, from which it is proper it should have assurance. We will have these two gentlemen here, and, Gen. Uhler, I want you, please, to afford Mr. Gillette and Naval Constructor Ackerson the assistance of your staff and your officers and records in any way you can, and aid immediately in any experiment or other work which may be done under their direction to determine the stability of any of the vessels.

Gen. UHLER. They have but to express the desire, and we will give them the whole force. They are at your disposal, Captain.

Secretary REDFIELD. Now, I ask you, Gen. Uhler, and this is just a question, would it be possible for you to appoint an executive committee of the Board of Supervising Inspectors, of, say, five, taking a man from the coast, I mean from the Atlantic, and a man from the Pacific, and a man from the Gulf, and have them come here and, with Nelson and Westcott, review this whole lake situation as an executive committee, and advise, through you, as to what should be done both as to safeguarding conditions and as to meeting the public mind?

Gen. UHLER. The executive committee, Mr. Secretary, is already provided for by law. The law distinctly and absolutely states that that executive committee shall be called by you, and that it shall consist of the supervising inspector general and any two supervising inspectors. That law was made, Mr. Secretary, the law was enacted for the purpose of meeting situations that might come up between the annual meetings of the board of supervising inspectors. A few years ago there was no relief to be had of any kind except at the annual meetings of the board, which were in January and extending over into March. An amendment was made to the law, I think, in 1906, providing that the Secretary may call an executive committee to pass upon certain things, and to make rules and regulations and also to pass upon the approval or, at least, to give their approval or rejection to any life-saving apparatus that might be submitted to them; in fact, the executive committee had the same power as the full board, and their acts had to be approved by the Secretary, just the same as the board.

Secretary REDFIELD. Just a moment. If you were ill, who would act in your place on the executive committee?

Gen. UHLER. The acting supervising inspector general.

Secretary REDFIELD. And who might he be?

Gen. UHLER. Mr. Hoover.

Secretary REDFIELD. And in his absence?

Gen. UHLER. Anybody who might be acting.

Secretary REDFIELD. Mr. Thurman, you might advise me in this respect: Is there or is there not power under the law, in your judgment, for me to appoint and request the supervising inspector general to appoint a committee of supervising inspectors from outside of this district, from another district, to proceed to this district and there make a survey of the conditions and report to the head of the service?

Mr. THURMAN. I am inclined to think that you could.

Secretary REDFIELD. Very well. I will.

Gen. UHLER. I want to explain that the provisions and conditions of the law often make a man express himself in a way that he may be misunderstood. There is no man on the face of God's green earth to-day who courts a wider, more detailed, more extensive investigation of the Steamboat-Inspection Service than I do. I have stated that; I have expressed it time and again to you, sir.

Secretary REDFIELD. Often.

Gen. UHLER. And, too, I think perhaps the quicker this thing was done the better it would be for everybody concerned. Now, I would like to have a committee of 5, 10, 15, or 20; I don't care what the extent of the committee is; I don't care what its make-up; I don't care what its personnel is; let them go to work just as soon as it is possible and conclude something. I would welcome an extensive investigation. I court it; I always have, and I do now, and as I have stated, and I want to say to you, Gov. O'Hara, that the inexorable provisions of the law makes a man express himself so he might be misunderstood, but I want it understood that I am positively and emphatically not against an investigation.

Secretary REDFIELD. I want to say for Gen. Uhler that he has always courted such a thing.

Then I shall probably give you, Gen. Uhler, instructions as soon as I can get a typewriter, to have a special committee of supervising inspectors formed, consisting of an inspector from the Pacific coast and one from the Atlantic coast, an inspector from the Gulf coast, to meet with the inspector from Cleveland and the inspector at Detroit, to constitute a committee to review the conditions upon the lakes as regards passenger vessels in particular, general conditions in the lake and in particular those respecting passenger vessels and passenger allowances, and to report through you to me what they find; and understand that their report will be published in full, and I shall ask you to give them entire freedom and scope to make their inquiries as searching and thorough as they possibly can.

Mr. POOL. Is there any reason why the inspector from Milwaukee should not replace the man from Detroit? The Milwaukee man is on Lake Michigan.

Secretary REDFIELD. There is none at Milwaukee.

Gen. UHLER. You might call the full board. You have that authority under the law.

Secretary REDFIELD. Yes, I know. Then I will put it this way: To give a clear and full opportunity to make that inquiry will practically stop the service, which I do not wish to do. Let your committee of five report to the full board to be called to consider the report.

Mr. O'HARA. Mr. Secretary, I am speaking somewhat from ignorance now, but would it be possible to add to that inspection committee an official from the United States Naval Department?

Secretary REDFIELD. Well, I can not do that.

Mr. O'HARA. I say I am speaking from ignorance, Mr. Secretary.

Secretary REDFIELD. I can not do that, but I will say to you now, this committee of inspectors, which you will understand is purely intraservice, we will instruct them to consult with the officers of the labor organizations on the lake, and hear what they have to say; not in any sense that this takes the place of the other matter, but I want the service to see what it can do within itself. This is entirely separate from the other matter and has no relation to it.

Mr. THURMAN. This is simply a thing, as I understand it, which can be done immediately, and is in line with your suggestion.

Mr. FOUKE. I would like to suggest to Gov. O'Hara, if he does not know that, the fact that Naval Constructor Ackerson and Mr. Gillette are here and looking over the boat which they are requested to look over, to make suggestions in regard to the safety of the boats on the lake.

Mr. O'HARA. I think the steps are now being taken to attain the ends we desire.

Secretary REDFIELD. Is there anything further, gentlemen, to be brought before us now in this conference?

(No response.)

And thereupon the executive conference of the committee was adjourned.)

#### REPORT OF THE BOARD OF INQUIRY TO THE SECRETARY OF COMMERCE.

HON. WILLIAM C. REDFIELD,

Secretary of Commerce:

In obedience to the order of the Federal Court of the Northern District of Illinois, Eastern Division, dated July 31, 1915, that no witnesses subpoenaed to appear before the Federal grand jury be examined in any other proceedings relating to the *Eastland* disaster, and in view of the fact that some of said witnesses are necessary before this investigation is concluded, adjournment is taken until after the Federal grand jury has submitted its report.

Not having completed our investigation we are not prepared at this time to express an opinion as to who is to blame, nor what agencies contributed to the capsizing of the steamer *Eastland*.

From the evidence thus far submitted, however, we are prepared to make certain suggestions designed to further safeguard marine travel. Therefore we earnestly urge that you transmit to the President and to the Congress of the United States the following preliminary recommendation for changes in existing laws governing the inspection of steam merchant vessels, and urge that ample force and sufficient funds be provided for a technical and scientific inspection in addition to the present practical methods employed.

1. Provide that there shall be created in the Department of Commerce a board of competent naval architects whose duty it shall be to pass, prior to their construction, upon the plans and specifications of all steam merchant vessels over 100 tons burden.

2. No steam merchant vessel of over 100 tons burden shall be certificated for service until its plans and specifications shall have been approved by the above-named board, nor until its safety, seaworthiness, and stability shall have been demonstrated to the satisfaction of said board.

3. Provide methods whereby any and all findings of the boards of local inspectors may be appealed.

4. Provide that whenever the passenger-carrying capacity of a steam merchant vessel is increased by any board of local inspectors, said increase must be approved in writing by the supervising inspector of the district.

5. Provide that any alterations of the original plans and specifications affecting stability, seaworthiness, and safety of any steam merchant vessel must have the approval of the above-constituted board of naval architects.

Pending the enactment of this legislation, we suggest the following be immediately incorporated in the rules and regulations of your department:

1. Increases in passenger-carrying permits must be issued by inspectors only after personal inspection of the vessel, of which inspection a written record shall be made.

2. All inspectors are ordered to require owners of vessels whose stability they have any reason to question to make "inclining tests" on such vessels, under the supervision of expert naval architects provided by the Department of Commerce.

Respectfully submitted.

BOARD OF INQUIRY.

(Official members: William A. Collins, Frank W. Van Patten, United States local board of inspectors. Civilian members: Marvin B. Pool, Harry A. Wheeler, Barratt O'Hara, Philip B. Fouke.)

CHICAGO, ILL., August 5, 1915.

LETTER FROM THE SECRETARY OF COMMERCE, TRANSMITTING COPY OF THE PRELIMINARY REPORT OF THE COMMITTEE OF SUPERVISING INSPECTORS OF THE STEAMBOAT-INSPECTION SERVICE.

DEPARTMENT OF COMMERCE,  
OFFICE OF THE SECRETARY,  
Washington, December 18, 1915.

MY DEAR MR. SPEAKER: Among the steps taken by the Department of Commerce immediately after the *Eastland* disaster to determine what if anything was needed to improve the Steamboat-Inspection Service upon the Great Lakes, was the appointment of a special committee of supervising inspectors—one from the Pacific coast, one from the Atlantic coast, and the third from the Gulf—to cooperate with the two supervising inspectors on the Great Lakes in studying conditions in the service there. This committee immediately began work and continued it until early November. At that time the seamen's law took effect and it became necessary to return the inspectors to their several districts.

Meanwhile they had devoted six weeks of earnest study to the matter. At my request the secretary of the committee submitted a report of the work done up to the adjournment of this special committee. The records of the House of Representatives will show that prior to the opening of the session of Congress I furnished to it a copy of the testimony taken by the board of inquiry in the *Eastland* case, together with my own report to the President thereon, and the statement made by the board of inquiry at its adjournment.

In pursuance of my purpose to inform the public as fully as possible on every condition relating to the Steamboat-Inspection Service, I now hand you copy of the preliminary report of the committee of supervising inspectors described above. May I venture respectfully to point out that it deals with matters that affect not only that committee of the House of Representatives which has the Steamboat-Inspection Service under its care, but also deals directly with the matter of the sufficiency of the working force. This is a subject that has been repeatedly before the Committee on Appropriations, and I venture to hope it may be placed before them again.

I venture respectfully to reaffirm what has been already stated in my annual report, namely, that the force of steamboat inspectors is not sufficient to properly safeguard life and property either on the Great Lakes or on our coasts, and the clerical force is insufficient to keep pace with the work which is pressed upon it. The inclosed statement shows that "it is not infrequent that inspectors must work 18 hours a day during the season of navigation to accomplish the inspections." The law limits the hours of employment for labor in Government institutions to 8 hours daily. It is a fact that the inspectors of our service must often work twice as long as that.

I should do injustice to the public and to Congress if I did not emphasize in the clearest way the fact that not only should there be an immediate and considerable addition to the force of the Steamboat-Inspection Service in the respects named, if it is to do its work in accordance with the law, but that the

board of naval architects suggested in the statement of the board of inquiry (to provide for which a bill has been already introduced into Congress) is also required, if the service is to safeguard life as it should.

The people of the country trust themselves and their property on our vessels, confiding in the thoroughness of the inspections made. The service desires and intends that those inspections shall be all that the people expect. They can not be so unless a greater force is provided for the work and until sufficient means are given for doing the work.

It is my duty to point out the facts with frankness and candor, as I am now trying to do, and having so done I must leave the responsibility with those who have the power to provide the only means by which the work can be properly done and whom I do not doubt appreciate that responsibility fully.

Yours, very truly,

WILLIAM C. REDFIELD,  
Secretary.

The SPEAKER OF THE HOUSE OF REPRESENTATIVES,  
Washington.

PRELIMINARY REPORT, COMMITTEE OF SUPERVISING INSPECTORS, STEAMBOAT-INSPECTION SERVICE.

DEPARTMENT OF COMMERCE,  
STEAMBOAT-INSPECTION SERVICE,  
OFFICE OF SUPERVISING INSPECTOR, FIFTH DISTRICT,  
Boston, Mass., December 3, 1915.

The SECRETARY OF COMMERCE,  
Washington, D. C.:

Pursuant to instructions contained in your communication of August 13, 1915, directing me to meet with the supervising inspectors of the first, eighth, ninth, and tenth districts in the office of the supervising inspector of the ninth district, Cleveland, Ohio, on September 10, 1915, there to organize for the purpose of studying conditions on the Great Lakes, with special and immediate reference to passenger service thereon, I have the honor to report that the committee met at the time and place designated.

Your committee immediately proceeded to organize by the selection of the supervising inspector of the fifth district as chairman and the supervising inspector of the tenth district as secretary, and the method of procedure for a most comprehensive study of the conditions, as outlined by you, was carefully discussed. The following outline was adopted:

1. That the committee visit each local office on the Great Lakes.

(a) Interrogate the local inspectors as to conditions in their respective districts.

(b) Ascertain their method of inspection and knowledge of the law and general rules and regulations.

2. Inspect all passenger vessels at the ports visited to determine as to their seaworthiness, stability, and efficiency of inspection.

3. Examine into complaints or rumors that any vessel is unsafe, unseaworthy, or unstable.

In so far as it was possible to do so, the procedure was adhered to, though the committee was in a measure handicapped due to the fact that most of the passenger vessels, particularly those of the excursion type, had been placed out of commission for the season; in many instances the equipment had been removed and crews dismissed. No attempt was therefore made to subject these vessels to stability tests. However, certain recommendations of this important subject were considered and are submitted later in this report.

LOCAL OFFICES.

In each of the local offices visited the files of the passenger vessels were examined and found to be properly executed in accordance with the instructions of the bureau. The field officers and clerks were observed in the performance of their duties.

From the very beginning it was realized that the inspection force on the Great Lakes was inadequate to handle the volume of business it was called

upon to perform and do so in an efficient manner. At many of the ports visited it was found that inspectors were compelled to travel long distances to make inspections, requiring much time because of unsatisfactory transportation facilities, and it is not infrequent that inspectors must work 18 hours a day during the season of navigation to accomplish the inspections. While the service labors under such difficulties the best results will not be obtained.

The standard of inspection has materially improved in the past 10 years, which, together with the increase in the size and tonnage of vessels inspected, has added much to the work of the inspectors. It may truthfully be said that the inspection work has outgrown the force, and unless there is an increase in the number of inspectors on the Great Lakes the service can not be improved. The same condition is true with regard to salaries of inspectors and clerks. Salaries have so advanced in the mercantile field that the service is not in a position to attract the best men from other lines of employment.

I am firmly of the opinion that more assistant inspectors and clerks, with increased salaries, should be detailed at the following ports: Buffalo, N. Y.; Oswego, N. Y.; Chicago, Ill.; Grand Haven, Mich.; Milwaukee, Wis.; Detroit, Mich.; Toledo, Ohio; Port Huron, Mich.; Duluth, Minn.; Marquette, Mich.

#### INTERROGATING INSPECTORS.

At each of the ports visited, except Grand Haven, the inspectors were examined at length as to their knowledge of the law and general rules and regulations, condition of vessels in their district, method of inspection and certification of vessels, with regard to officers and crews and number of passengers allowed to be carried.

The inspectors appeared to be conversant with the rules and familiar with their duties. In some instances it appeared that the minimum number of licensed officers designated in certificates of inspection was not the number actually carried on board the vessels. This condition was made the subject of much discussion, with a view of determining whether or not the number specified in certificates of inspection by the local inspectors was sufficient for the safe navigation of the vessels. No conclusion, however, had been arrived at up to the time the committee adjourned.

It developed in the course of our investigation that inspectors experience considerable difficulty in conducting investigations of accidents and trials of licensed officers in accordance with section 4450, United States Revised Statutes. The general rules and regulations require that the local inspectors of the district in which an accident occurs shall make the investigation, and in a great many cases on the Great Lakes it was pointed out that vessels never touch at the ports where the investigation or trial is being held, which necessitated the forwarding of interrogatories to the ports where vessels operate from, and the delay caused thereby, owing to frequent changes in crews, prevented satisfactory results. It is therefore recommended that on the Great Lakes reports of accidents shall be forwarded to the local inspectors at the port of first arrival, which board shall conduct the investigation and take the necessary action.

#### METHOD OF INSPECTION.

The vessels visited appeared to have been properly inspected and in full compliance with the law. The efficiency of inspections appeared to depend upon the force available and the circumstances under which the inspections were made. On vessels which were inspected at the home ports of inspectors it appeared that greater attention had been given to the details of inspection. Instances were noted where the committee believed improvements could be made, and they were called to the attention of the inspectors and the owners of vessels.

Particular attention was paid to bulkheads and the method employed to close bulkhead doors, and also to the cleanliness of cargo and other compartments. These details require the constant and careful attention of inspectors, especially the cleanliness of compartments, for the reason that it is often overlooked and at the same time means so much in the safety of the vessel from fire.

#### INSPECTION OF PASSENGER VESSELS.

The committee was agreed that the construction of the vessels was the most important matter to consider, and special attention was directed to this feature of its work. It did not, therefore, go into the minute study of the equipment,

for to do so would have taken a greater period of time than should reasonably be devoted to the work of the committee.

The passenger vessels were found to be in a safe and seaworthy condition. The newer vessels, of steel construction, were in very good condition. There are, however, a number of wooden vessels that will require the special attention of local inspectors. Some of these vessels have recently been rebuilt, while others have not. Careful examination should be made of these wooden vessels while in dry dock and when repairs and alternations are being made. When occasion demands, inspectors should carefully bore the vessels to assure themselves of the soundness of the timbers.

If there is any doubt as to the stability of any vessel or any rumors that a vessel is not stable, local inspectors should personally make a trip for the purpose of observing the action of the vessel in operation.

Speaking in a general way, if the passenger steamers visited can be accepted as a standard by which to judge of the condition of all passenger vessels on the Great Lakes, and it would appear that such is the case, these steamers may be considered safe and seaworthy for the trade in which they are engaged. They were built and equipped in accordance with law and the rules and regulations of this service, and in many instances exceed these requirements. For this reason they should very properly be permitted to operate so long as they remain seaworthy and stable.

#### INVESTIGATING COMPLAINTS.

In the files of the local inspectors at Buffalo, N. Y., it was found that complaint had been made against the steamers *Grand Island*, *Welcome*, and *Niagara Frontier*. These vessels were carefully examined by the committee, and it was found that the complaints were without foundation; that the vessels were safe for the service in which they were engaged. The gentleman who made the complaint was invited to appear before the committee, but did not reply.

The committee received an anonymous letter relative to the stability of steamer *But-in-Bay*, which was investigated and found to be without foundation.

There was a question in the minds of some of the inspectors regarding the stability of steamers *City of Erie* and *Frank E. Kirby*. The committee visited and also made a trip on these vessels to observe them while operating, and found them to be safe and stable. It was the opinion that no immediate action should be taken regarding these vessels, other than to comply with the recommendation embodied in this report.

#### LISTENING TO COMPLAINTS.

Any person who desired to come before the committee was accorded the privilege through the public press in each of the cities visited. In two instances only was the invitation accepted. A gentleman appeared before the committee in Buffalo regarding the stability of steamers *Americana* and *Canadiana* and expressed a fear as to these vessels. The matter was carefully investigated and the vessels were visited. The committee found no cause for concern regarding the vessels.

While in the same city, a gentleman representing the engineers' association appeared before the committee regarding the undercertification of lake vessels as to the number of engineers. His complaint was to the effect that a sufficient number of licensed engineers was not required by the local inspectors upon the Great Lakes, and that the actual number of engineers carried on the vessels in many cases was not designated in the certificate of inspection. The complaint was in a large measure with relation to freight vessels, and it became evident that to study the conditions on freight vessels would unduly prolong the work of the committee and less satisfactory work on passenger vessels would result. It was decided that no recommendations should be made with regard to freight vessels.

#### STAFF OF NAVAL ARCHITECTS.

It is my understanding that you have recommended to his Excellency the President of the United States and to Congress that a staff of trained naval architects be attached to the Department of Commerce to pass upon the plans

and blue prints of all merchant vessels of 100 gross tons and over hereafter constructed. With this recommendation, I am of the opinion the committee is in full accord. A higher standard of construction and uniformity must result from such supervision.

I am also of the opinion that the standard of construction should be not less than the requirements of the rules and regulations of the American Bureau of Shipping.

#### RECOMMENDATIONS.

##### EXISTING VESSELS.

###### *Stability.*

The question of stability is a fundamental one and should form an important consideration before the dimensions of the vessel are finally decided upon. Assuming in most cases such has been the practice, the committee found that material changes had been made in the superstructure of some of the vessels visited, additions having been made to cabin and stateroom accommodations, and on practically every vessel visited an increase of top weights, due to additional life-saving equipment, had been made. These facts warrant the belief that in the interest of greater safety it would be advisable to subject all passenger vessels to inclining tests under the supervision of expert naval architects, and accurate stability calculations with full explanatory notes covering the various service conditions under which the vessel operates should be furnished the local inspectors. These tests should be made at the next annual inspection or as soon thereafter as is practicable.

It is essential that the calculations and explanatory notes regarding stability tests submitted to the local inspectors should be of as simple a character as the nature of the subject will permit, because of the great number of vessels it will be necessary for the inspectors to pass upon.

###### *Ballast.*

No passenger vessel should depend upon liquid ballast to insure the vessel's stability. When ballast is required it should be permanent in character. Liquid ballast should be permitted for trimming purposes. I do not recall that any of the vessels visited were dependent upon water ballast. Many of them were, however, fitted with large trim tanks located one on each side on the guards, and it would be advisable to determine what would be the effect of the movement of weights, equivalent to the number of people carried, from side to side with the tanks filled on side to which the weights are moved, the vessel being in actual service condition.

###### *Deadlights.*

The committee found that on many of the vessels visited openings were provided in the hulls for the admission of light and air, and in some instances these openings were within 18 inches of the water line. With a view of greater safety, it is advisable to prohibit such openings in a vessel's side below the deck next above the deep-load line, or at a point where the underside of such opening will be at least 5 feet above the deep-load line. Every opening within 10 feet of the deep-load line should be provided, in addition to the glass shutter, with a metal shutter so arranged as to close water-tight. All such openings, when located in places not accessible while vessel is in operation, should be closed water-tight before the vessel leaves port.

###### *Inlets and discharges.*

All inlets and discharges in the sides of vessels should be arranged to prevent the accidental admission of water into the vessel.

The above-described openings should be frequently inspected by the master or other officer assigned to this duty by the master and a record of the inspection made in the official log book.

#### FUTURE CONSTRUCTION.

##### *Subdivision.*

I am of the opinion that the time has arrived when earnest effort should be made to prepare regulations for the subdivision of passenger vessels to conform to the highest practicable standards. Bulkheads should, where practicable, be extended to the highest continuous deck in the vessel's hull. Where it is not practicable to extend bulkheads to the highest continuous deck the subdivision should be such as to prevent the flooding of adjoining compartments due to the vessel's trim after damage, and the bulkheads should be of sufficient strength to withstand a pressure of water to which they may be subjected in the event of damage.

Passenger vessels should, for a given length, be subdivided to remain afloat after damage with any single compartment open to the sea; above that length they should be subdivided to remain afloat with at least two adjacent compartments open to the sea. The initial stability of a vessel should be such that the vessel will not capsize in the above damaged condition.

##### *Boiler casing.*

A steel trunk should be carried from the under side of the deck next above the fireroom, in the way of uptake and funnels, to the uppermost continuous deck. In addition to serving as a safeguard against fire, this trunk should be so constructed as to permit of the hot gases of the fireroom having free access to the atmosphere. Iron or steel should be used in so far as it is practicable in the fireroom, and all woodwork approaching within 2 feet of the boilers should be covered with noncombustible material.

In making the above recommendations, consideration is given to your instructions that the changes should be in the rules and regulations of the Steamboat-Inspection Service and in the absence of further legislation by Congress.

I have therefore avoided making recommendations that were not based upon the authority of the present statutes and at the same time have made this report as short and concise as possible pending further discussion.

EUGENE E. O'DONNELL,

*United States Supervising Inspector, Fifth District, chairman of Committee of Supervising Inspectors appointed to study conditions on the Great Lakes.*

(Through the Supervising Inspector General Steamboat-Inspection Service.)

#### LETTER FROM THE SECRETARY OF COMMERCE TO CHAIRMAN ALEXANDER IN REFERENCE TO PRELIMINARY REPORT.

DEPARTMENT OF COMMERCE,  
OFFICE OF THE SECRETARY,  
Washington, January 12, 1916.

MY DEAR JUDGE ALEXANDER: I note from House Document 504 that same has been referred to the committee of which you are chairman, and therefore I am confident the important subject therein treated will receive very thoughtful care. I hardly know how far one important committee of Congress can undertake to influence another, but I would respectfully point out that the question of enlarging the force of steamboat inspectors and providing a clerical staff sufficient to do its work must necessarily be provided for by the Committee on Appropriations. In my annual report and in this Document 504, and in a further statement sent to the Speaker of the House on January 10 showing actual conditions at the port of Buffalo, I have tried to deal with the subject of safeguarding life by means of the Steamboat-Inspection Service with the frankness that the emergency existing in that service requires.

May I now again ask your attention to the paragraphs on page 2 of Document 504 and ask you to take them at par. I greatly dread lest the coming of some sad accident involving loss of life may bring a storm of unjust wrath down upon the heads of an insufficient and overworked force. Must we always learn at the cost of human life? Can not we foresee? Now and here, with a full sense of my responsibility as the officer charged with the execution of the

work and speaking to you not merely as a friend but as chairman of that great committee of our National Legislature, I affirm that the work of inspecting our steam vessels so as to provide proper safeguards for life can not be done as it should be done with the present force available; that the said force is at times seriously overworked, and that accidents are certain to happen of a serious nature unless Congress, which has alone the power to provide men and funds, will take early and sufficient steps in the matter.

Yours, very truly,

WILLIAM C. REDFIELD,  
*Secretary.*

HON. J. W. ALEXANDER,  
*Chairman Committee on Merchant Marine and Fisheries,  
House of Representatives, Washington, D. C.*