

March 4, 1915.
[S. 136.]

[Public, No. 302.]

Merchant seamen.
Vol. 30, p. 755.

Loss of seamen to be replaced.
R. S., sec. 4516, p. 873, amended.

Report to consul.

Vessels excepted.

Division of crew into watches.

At sea.

Continuous duty.

Alternate work prohibited.

Saving life or property.

Fire, etc., drills.

In harbors.
No unnecessary work Sundays or holidays.

Day's work in harbor.

Vessels excepted.

Payment of wages.
Vol. 30, p. 756.

Time for payment.
Coasting voyages.
R. S., sec. 4529, p. 875, amended.

Foreign voyages, etc.

At discharge.

Penalty for refusal.

CHAP. 153.—An Act To promote the welfare of American seamen in the merchant marine of the United States; to abolish arrest and imprisonment as a penalty for desertion and to secure the abrogation of treaty provisions in relation thereto; and to promote safety at sea.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That section forty-five hundred and sixteen of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

"**SEC. 4516.** In case of desertion or casualty resulting in the loss of one or more of the seamen, the master must ship, if obtainable, a number equal to the number of those whose services he has been deprived of by desertion or casualty, who must be of the same or higher grade or rating with those whose places they fill, and report the same to the United States consul at the first port at which he shall arrive, without incurring the penalty prescribed by the two preceding sections. This section shall not apply to fishing or whaling vessels or yachts."

SEC. 2. That in all merchant vessels of the United States of more than one hundred tons gross, excepting those navigating rivers, harbors, bays, or sounds exclusively, the sailors shall, while at sea, be divided into at least two, and the firemen, oilers, and water tenders into at least three watches, which shall be kept on duty successively for the performance of ordinary work incident to the sailing and management of the vessel. The seamen shall not be shipped to work alternately in the fireroom and on deck, nor shall those shipped for deck duty be required to work in the fireroom, or vice versa; but these provisions shall not limit either the authority of the master or other officer or the obedience of the seamen when, in the judgment of the master or other officer, the whole or any part of the crew are needed for the maneuvering of the vessel or the performance of work necessary for the safety of the vessel or her cargo, or for the saving of life aboard other vessels in jeopardy, or when in port or at sea from requiring the whole or any part of the crew to participate in the performance of fire, lifeboat, and other drills. While such vessel is in a safe harbor no seaman shall be required to do any unnecessary work on Sundays or the following-named days: New Year's Day, the Fourth of July, Labor Day, Thanksgiving Day, and Christmas Day, but this shall not prevent the dispatch of a vessel on regular schedule or when ready to proceed on her voyage. And at all times while such vessel is in a safe harbor, nine hours, inclusive of the anchor watch, shall constitute a day's work. Whenever the master of any vessel shall fail to comply with this section, the seamen shall be entitled to discharge from such vessel and to receive the wages earned. But this section shall not apply to fishing or whaling vessels, or yachts.

SEC. 3. That section forty-five hundred and twenty-nine of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

"**SEC. 4529.** The master or owner of any vessel making coasting voyages shall pay to every seaman his wages within two days after the termination of the agreement under which he was shipped, or at the time such seaman is discharged, whichever first happens; and in case of vessels making foreign voyages, or from a port on the Atlantic to a port on the Pacific, or vice versa, within twenty-four hours after the cargo has been discharged, or within four days after the seaman has been discharged, whichever first happens; and in all cases the seaman shall be entitled to be paid at the time of his discharge on account of wages a sum equal to one-third part of the balance due him. Every master or owner who refuses or neglects to make payment in the manner hereinbefore mentioned without sufficient cause

hundred and ten persons, the minimum number of certificated lifeboat men shall be five; if the boat or raft carries from one hundred and eleven to one hundred and sixty persons, the minimum number of certificated lifeboat men shall be six; if the boat or raft carries from one hundred and sixty-one to two hundred and ten persons, the minimum number of certificated lifeboat men shall be seven; and, thereafter, one additional certificated lifeboat man for each additional fifty persons: *Provided*, That if the raft carries fifteen persons or less a licensed officer or able seaman need not be placed in charge of such raft: *Provided further*, That one-half the number of rafts carried shall have a capacity of exceeding fifteen persons.

Provisos.
Rafts with less than 15 persons.
Capacity of rafts.

Allocation.

The allocation of the certificated lifeboat men to each boat and raft remains within the discretion of the master, according to the circumstances.

Certificate of efficiency required.

By "certificated lifeboat man" is meant any member of the crew who holds a certificate of efficiency issued under the authority of the Secretary of Commerce, who is hereby directed to provide for the issue of such certificates.

Examination, etc., for issue.

In order to obtain the special lifeboat man's certificate the applicant must prove to the satisfaction of an officer designated by the Secretary of Commerce that he has been trained in all the operations connected with launching lifeboats and the use of oars; that he is acquainted with the practical handling of the boats themselves; and, further, that he is capable of understanding and answering the orders relative to lifeboat service.

Certificated lifeboat men added to crew.
R. S., sec. 4463, p. 864, amended.

Section forty-four hundred and sixty-three of the Revised Statutes as amended is hereby amended by adding the words "including certificated lifeboat men, separately stated," to the word "crew" wherever it occurs.

Manning of boats.

MANNING OF BOATS.

Officer, etc., in charge.

A licensed officer or able seaman shall be placed in charge of each boat or pontoon raft; he shall have a list of its lifeboat men, and other members of its crew which shall be sufficient for her safe management, and shall see that the men placed under his orders are acquainted with their several duties and stations.

Motor boats.

A man capable of working the motor shall be assigned to each motor boat.

Duties.

The duty of seeing that the boats, pontoon rafts, and other life-saving appliances are at all times ready for use shall be assigned to one or more officers.

Crew.

MUSTER ROLL AND DRILLS.

Special duties.

Special duties for the event of an emergency shall be allotted to each member of the crew.

Muster list.

The muster list shows all these special duties, and indicates, in particular, the station to which each man must go, and the duties that he has to perform.

Posting, etc.

Before the vessel sails the muster list shall be drawn up and exhibited, and the proper authority, to be designated by the Secretary of Commerce, shall be satisfied that the muster list has been prepared for the vessel. It shall be posted in several parts of the vessel, and in particular in the crew's quarters.

Muster list.

MUSTER LIST.

Assignment of duties.
Crew.

The muster list shall assign duties to the different members of the crew in connection with—

- (a) The closing of the water-tight doors, valves, and so forth.
- (b) The equipment of the boats and rafts generally.
- (c) The launching of the boats attached to davits.

(d) The general preparation of the other boats and the pontoon rafts.

(e) The muster of the passengers.

(f) The extinction of fire.

The muster list shall assign to the members of the stewards' department their several duties in relation to the passengers at a time of emergency. These duties shall include—

(a) Warning the passengers.

(b) Seeing that they are dressed and have put on their life jackets in a proper manner.

(c) Assembling the passengers.

(d) Keeping order in the passages and on the stairways, and, generally, controlling the movements of the passengers.

The muster list shall specify definite alarm signals for calling all the crew to the boat and fire stations, and shall give full particulars of these signals.

Stewards.

Alarm signals.

MUSTERS AND DRILLS.

Musters of the crews at their boat and fire stations, followed by boat and fire drills, respectively, shall be held at least once a week, either in port or at sea. An entry shall be made in the official log book of these drills, or of the reason why they could not be held.

Drills, etc., required.

Different groups of boats shall be used in turn at successive boat drills. The drills and inspections shall be so arranged that the crew thoroughly understand and are practiced in the duties they have to perform, and that all the boats and pontoon rafts on the ship with the gear appertaining to them are always ready for immediate use.

LIFE JACKETS AND LIFE BUOYS.

A life jacket of an approved type, or other appliance of equal buoyancy and capable of being fitted on the body, shall be carried for every person on board, and, in addition, a sufficient number of life jackets, or other equivalent appliances, suitable for children.

First. A life jacket shall satisfy the following conditions:

(a) It shall be of approved material and construction.

(b) It shall be capable of supporting in fresh water for twenty-four hours fifteen pounds avoirdupois of iron.

Life jackets the buoyancy of which depends on air compartments are prohibited.

Second. A life buoy shall satisfy the following conditions:

(a) It shall be of solid cork or any other equivalent material.

(b) It shall be capable of supporting in fresh water for twenty-four hours at least thirty-one pounds avoirdupois of iron.

Life buoys filled with rushes, cork shavings, or granulated cork, or any other loose granulated material, or whose buoyancy depends upon air compartments which require to be inflated, are prohibited.

Third. The minimum number of life buoys with which vessels are to be provided is fixed as follows:

Length of the vessel under four hundred feet, minimum number of buoys, twelve; length of the vessel, four hundred and under six hundred feet, minimum number of buoys, eighteen; length of the vessel, six hundred and under eight hundred feet, minimum number of buoys, twenty-four; length of the vessel, eight hundred feet and over, minimum number of buoys, thirty.

Fourth. All the buoys shall be fitted with beackets securely seized. At least one buoy on each side shall be fitted with a life line of at least fifteen fathoms in length. The number of luminous buoys shall not be less than one-half of the total number of life buoys, and in no case less than six. The lights shall be efficient self-igniting lights which can not be extinguished in water, and they shall be kept near

Life jackets and buoys.

Number required.

Conditions.
Life jackets.

Buoys.

Prohibitions.

Number of buoys.

Attachments, etc.

the buoys to which they belong, with the necessary means of attachment.

Accessibility.

Fifth. All the life buoys and life jackets shall be so placed as to be readily accessible to the persons on board; their position shall be plainly indicated so as to be known to the persons concerned.

Penalty for failure of owner to equip with lifeboats, etc.

The life buoys shall always be capable of being rapidly cast loose, and shall not be permanently secured in any way. The owner of any vessel who neglects or refuses to provide and equip his vessel with such lifeboats, floats, rafts, life preservers, line-carrying projectiles, and the means of propelling them, drags, pumps, or other appliances, as are required under the provisions of this section, or under the regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce, authorized by and made pursuant hereto, shall be fined not less than \$500, nor more than \$5,000, and every master of a vessel who shall fail to comply with the requirements of this section, and the regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce, authorized by and made pursuant hereto, shall upon conviction be fined not less than \$50, nor more than \$500. Section forty-four hundred and eighty-nine of the Revised Statutes is hereby repealed.

Penalty for noncompliance of master.

R. S., sec. 4469, p. 868, repealed.

Report of accidents to barges in tow required.
Vol. 18, p. 128.

SEC. 15. That the owner, agent, or master of every barge which, while in tow through the open sea, has sustained or caused any accident, shall be subject in all respects to the provisions of sections ten, eleven, twelve, and thirteen of chapter three hundred and forty-four of the Statutes at Large, approved June twentieth, eighteen hundred and seventy-four, and the reports therein prescribed shall be transmitted by collectors of customs to the Secretary of Commerce, who shall transmit annually to Congress a summary of such reports during the previous fiscal year, together with a brief statement of the action of the department in respect to such accidents.

Treaty agreements for mutual arrest, etc., of deserting seamen to be terminated.

SEC. 16. That in the judgment of Congress articles in treaties and conventions of the United States, in so far as they provide for the arrest and imprisonment of officers and seamen deserting or charged with desertion from merchant vessels of the United States in foreign countries, and for the arrest and imprisonment of officers and seamen deserting or charged with desertion from merchant vessels of foreign nations in the United States and the Territories and possessions thereof, and for the cooperation, aid, and protection of competent legal authorities in effecting such arrest or imprisonment and any other treaty provision in conflict with the provisions of this Act, ought to be terminated, and to this end the President be, and he is hereby, requested and directed, within ninety days after the passage of this Act, to give notice to the several Governments, respectively, that so much as hereinbefore described of all such treaties and conventions between the United States and foreign Governments will terminate on the expiration of such periods after notices have been given as may be required in such treaties and conventions.

Notice to be given foreign Governments.

Expiration after notice.

SEC. 17. That upon the expiration after notice of the periods required, respectively, by said treaties and conventions and of one year in the case of the independent State of the Kongo, so much as hereinbefore described in each and every one of said articles shall be deemed and held to have expired and to be of no force and effect, and thereupon section fifty-two hundred and eighty and so much of section four thousand and eighty-one of the Revised Statutes as relates to the arrest or imprisonment of officers and seamen deserting or charged with desertion from merchant vessels of foreign nations in the United States and Territories and possessions thereof, and for the cooperation, aid, and protection of competent legal authorities in effecting such arrest or imprisonment, shall be, and is hereby, repealed.

R. S., sec. 5280, p. 1023, repealed.
R. S., sec. 4081, p. 786, amended.

SEC. 18. That this Act shall take effect, as to all vessels of the United States, eight months after its passage, and as to foreign vessels twelve months after its passage, except that such parts hereof as are in conflict with articles of any treaty or convention with any foreign nation shall take effect as regards the vessels of such foreign nation on the expiration of the period fixed in the notice of abrogation of the said articles as provided in section sixteen of this Act.

Time of taking effect.

SEC. 19. That section sixteen of the Act approved December twenty-first, eighteen hundred and ninety-eight, entitled "An Act to amend the laws relating to American seamen, for the protection of such seamen, and to promote commerce," be amended by adding at the end of the section the following:

Seamen discharged abroad.

"Provided, That at the discretion of the Secretary of Commerce, and under such regulations as he may prescribe, if any seaman incapacitated from service by injury or illness is on board a vessel so situated that a prompt discharge requiring the personal appearance of the master of the vessel before an American consul or consular agent is impracticable, such seaman may be sent to a consul or consular agent, who shall care for him and defray the cost of his maintenance and transportation, as provided in this paragraph."

Sending incapacitated seamen to consul. R. S., sec. 4531, p. 887, amended. Vol. 30, p. 759, amended.

SEC. 20. That in any suit to recover damages for any injury sustained on board vessel or in its service seamen having command shall not be held to be fellow-servants with those under their authority.

Injuries on vessel. Status of seaman in command.

Approved, March 4, 1915.

CHAP. 154.—An Act Authorizing the President to reinstate Joseph Eliot Austin as an ensign in the United States Navy.

March 4, 1915. [H. R. 2642.]

[Public, No. 303.]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the President be, and he is hereby, authorized, by and with the advice and consent of the Senate, to appoint Joseph Eliot Austin an ensign in the United States Navy and after one year's service as ensign he shall be promoted to the grade of lieutenant, junior grade, as an additional number in that grade and in any grade to which he may thereafter be promoted, to take rank with and next after the officer at the foot of the list of lieutenants, junior grade, at the date of the approval of this Act: Provided, That the said Joseph Eliot Austin, after one year's service as ensign, shall establish to the satisfaction of the Secretary of the Navy, by examination pursuant to law, his physical, mental, moral, and professional fitness to perform the duties of lieutenant, junior grade, in the Navy.

Navy. Joseph Eliot Austin may be appointed ensign.

Promotion.

Proviso. Examination, etc.

Approved, March 4, 1915.

CHAP. 155.—An Act Authorizing the Secretary of the Treasury to disregard section thirty-three of the public buildings Act of March fourth, nineteen hundred and thirteen, as to site at Vineland, New Jersey.

March 4, 1915. [H. R. 16642.]

[Public, No. 304.]

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of the Treasury be, and he is hereby, authorized, in his discretion, to disregard that portion of section thirty-three of the public buildings Act, approved March fourth, nineteen hundred and thirteen, which requires that the Federal building site selected at Vineland, New Jersey, shall be bounded on at least two sides by streets.

Vineland, N. J. Public building street exposure modified. Vol. 37, p. 800.

Approved, March 4, 1915.

shall pay to the seaman a sum equal to two days' pay for each and every day during which payment is delayed beyond the respective periods, which sum shall be recoverable as wages in any claim made before the court; but this section shall not apply to masters or owners of any vessel the seamen of which are entitled to share in the profits of the cruise or voyage."

Seamen sharing profits.

SEC. 4. That section forty-five hundred and thirty of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

Partial payments.
Vol. 30, p. 756.

"SEC. 4530. Every seaman on a vessel of the United States shall be entitled to receive on demand from the master of the vessel to which he belongs one-half part of the wages which he shall have then earned at every port where such vessel, after the voyage has been commenced, shall load or deliver cargo before the voyage is ended and all stipulations in the contract to the contrary shall be void: *Provided*, Such a demand shall not be made before the expiration of, nor oftener than once in five days. Any failure on the part of the master to comply with this demand shall release the seaman from his contract and he shall be entitled to full payment of wages earned. And when the voyage is ended every such seaman shall be entitled to the remainder of the wages which shall then be due him, as provided in section forty-five hundred and twenty-nine of the Revised Statutes: *Provided further*, That notwithstanding any release signed by any seaman under section forty-five hundred and fifty-two of the Revised Statutes any court having jurisdiction may upon good cause shown set aside such release and take such action as justice shall require: *And provided further*, That this section shall apply to seamen on foreign vessels while in harbors of the United States, and the courts of the United States shall be open to such seamen for its enforcement."

Payments while in port.
R. S., sec. 4530, p. 876, amended.

Proviso.
Limitations.

In full at end of voyage.

Ante, p. 1164.
Setting aside of release.
R. S., sec. 4552, p. 890.

Foreign seamen in American ports included.

SEC. 5. That section forty-five hundred and fifty-nine of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

Ships unseaworthy in foreign ports.
Vol. 30, p. 757.

"SEC. 4559. Upon a complaint in writing, signed by the first and second officers or a majority of the crew of any vessel, while in a foreign port, that such vessel is in an unsuitable condition to go to sea because she is leaky or insufficiently supplied with sails, rigging, anchors, or any other equipment, or that the crew is insufficient to man her, or that her provisions, stores, and supplies are not or have not been during the voyage sufficient or wholesome, thereupon, in any of these or like cases the consul or a commercial agent who may discharge any of the duties of a consul shall cause to be appointed three persons of like qualifications with those described in section forty-five hundred and fifty-seven, who shall proceed to examine into the cause of complaint and who shall proceed and be governed in all their proceedings as provided by said section."

Duties of consul on complaints.
R. S., sec. 4559, p. 882, amended.

Examination proceedings.
R. S., sec. 4557, p. 882.
Vol. 30, p. 757.

SEC. 6. That section two of the Act entitled "An Act to amend the laws relating to navigation," approved March third, eighteen hundred and ninety-seven, be, and is hereby, amended to read as follows:

Crew space.
Vol. 29, p. 688, amended.

"SEC. 2. That on all merchant vessels of the United States the construction of which shall be begun after the passage of this Act, except yachts, pilot boats, or vessels of less than one hundred tons register, every place appropriated to the crew of the vessel shall have a space of not less than one hundred and twenty cubic feet and not less than sixteen square feet, measured on the floor or deck of that place, for each seaman or apprentice lodged therein, and each seaman shall have a separate berth and not more than one berth shall be placed one above another; such place or lodging shall be securely constructed, properly lighted, drained, heated, and ventilated, properly protected from weather and sea, and, as far as practicable,

Space required for crew hereafter.

Sanitary construction, etc.

properly shut off and protected from the effluvia of cargo or bilge water. And every such crew space shall be kept free from goods or stores not being the personal property of the crew occupying said place in use during the voyage.

Hospital quarters.

"That in addition to the space allotment for lodgings hereinbefore provided, on all merchant vessels of the United States which in the ordinary course of their trade make voyages of more than three days' duration between ports, and which carry a crew of twelve or more seamen, there shall be constructed a compartment, suitably separated from other spaces, for hospital purposes, and such compartment shall have at least one bunk for every twelve seamen, constituting her crew, provided that not more than six bunks shall be required in any case.

Steamboats on the Mississippi, etc.

"Every steamboat of the United States plying upon the Mississippi River or its tributaries shall furnish an appropriate place for the crew, which shall conform to the requirements of this section, so far as they are applicable thereto, by providing sleeping room in the engine room of such steamboat, properly protected from the cold, wind, and rain by means of suitable awnings or screens on either side of the guards or sides and forward, reaching from the boiler deck to the lower or main deck, under the direction and approval of the Supervising Inspector General of Steam Vessels, and shall be properly heated.

Washing accommodations on new vessels.

"All merchant vessels of the United States, the construction of which shall be begun after the passage of this act having more than ten men on deck must have at least one light, clean, and properly ventilated washing place. There shall be provided at least one washing outfit for every two men of the watch. The washing place shall be properly heated. A separate washing place shall be provided for the fireroom and engine-room men, if their number exceed ten, which shall be large enough to accommodate at least one-sixth of them at the same time, and have hot and cold water supply and a sufficient number of wash basins, sinks, and shower baths.

Penalty for noncompliance.

"Any failure to comply with this section shall subject the owner or owners of such vessel to a penalty of not less than \$50 nor more than \$500: *Provided*, That forecastles shall be fumigated at such intervals as may be provided by regulations to be issued by the Surgeon General of the Public Health Service, with the approval of the Department of Commerce, and shall have at least two exits, one of which may be used in emergencies."

Provided.
Fumigation, etc.

Offenses by seamen.
Vol. 30, p. 760.

SEC. 7. That section forty-five hundred and ninety-six of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

Punishments for specified offenses.
R. S., sec. 4596, p. 890, amended.

"SEC. 4596. Whenever any seaman who has been lawfully engaged or any apprentice to the sea service commits any of the following offenses, he shall be punished as follows:

Desertion.

"First. For desertion, by forfeiture of all or any part of the clothes or effects he leaves on board and of all or any part of the wages or emoluments which he has then earned.

Absence not amounting to desertion.

"Second. For neglecting or refusing without reasonable cause to join his vessel or to proceed to sea in his vessel, or for absence without leave at any time within twenty-four hours of the vessel's sailing from any port, either at the commencement or during the progress of the voyage, or for absence at any time without leave and without sufficient reason from his vessel and from his duty, not amounting to desertion, by forfeiture from his wages of not more than two days' pay or sufficient to defray any expenses which shall have been properly incurred in hiring a substitute.

Absence without leave.

"Third. For quitting the vessel without leave, after her arrival at the port of her delivery and before she is placed in security, by forfeiture from his wages of not more than one month's pay.

“Fourth. For willful disobedience to any lawful command at sea, by being, at the option of the master, placed in irons until such disobedience shall cease, and upon arrival in port by forfeiture from his wages of not more than four days’ pay, or, at the discretion of the court, by imprisonment for not more than one month.

Disobedience at sea.

“Fifth. For continued willful disobedience to lawful command or continued willful neglect of duty at sea, by being, at the option of the master, placed in irons, on bread and water, with full rations every fifth day, until such disobedience shall cease, and upon arrival in port by forfeiture, for every twenty-four hours’ continuance of such disobedience or neglect, of a sum of not more than twelve days’ pay, or by imprisonment for not more than three months, at the discretion of the court.

Continued disobedience, etc.

“Sixth. For assaulting any master or mate, by imprisonment for not more than two years.

Assaulting officer.

“Seventh. For willfully damaging the vessel, or embezzling or willfully damaging any of the stores or cargo, by forfeiture out of his wages of a sum equal in amount to the loss thereby sustained, and also, at the discretion of the court, by imprisonment for not more than twelve months.

Damaging vessel, embezzling, etc.

“Eighth. For any act of smuggling for which he is convicted and whereby loss or damage is occasioned to the master or owner, he shall be liable to pay such master or owner such a sum as is sufficient to reimburse the master or owner for such loss or damage, and the whole or any part of his wages may be retained in satisfaction or on account of such liability, and he shall be liable to imprisonment for a period of not more than twelve months.”

Smuggling.

SEC. 8. That section forty-six hundred of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

Insubordination abroad.
Vol. 30, p. 761.
Consuls to discountenance insubordination.
R. S., sec. 4600, p. 892, amended.

“SEC. 4600. It shall be the duty of all consular officers to discountenance insubordination by every means in their power and, where the local authorities can be usefully employed for that purpose, to lend their aid and use their exertions to that end in the most effectual manner. In all cases where seamen or officers are accused, the consular officer shall inquire into the facts and proceed as provided in section forty-five hundred and eighty-three of the Revised Statutes: and the officer discharging such seaman shall enter upon the crew list and shipping articles and official log the cause of such discharge and the particulars in which the cruel or unusual treatment consisted and subscribe his name thereto officially. He shall read the entry made in the official log to the master, and his reply thereto, if any, shall likewise be entered and subscribed in the same manner.”

Investigation.
R. S., sec. 4583, p. 887.

SEC. 9. That section forty-six hundred and eleven of the Revised Statutes of the United States be, and is hereby, amended to read as follows:

Record of discharge.

“SEC. 4611. Flogging and all other forms of corporal punishment are hereby prohibited on board of any vessel, and no form of corporal punishment on board of any vessel shall be deemed justifiable, and any master or other officer thereof who shall violate the aforesaid provisions of this section, or either thereof, shall be deemed guilty of a misdemeanor, punishable by imprisonment for not less than three months nor more than two years. Whenever any officer other than the master of such vessel shall violate any provision of this section, it shall be the duty of such master to surrender such officer to the proper authorities as soon as practicable, provided he has actual knowledge of the misdemeanor, or complaint thereof is made within three days after reaching port. Any failure on the part of such master to use due diligence to comply herewith, which failure shall result in the escape of such officer, shall render the master or vessel

Entry in log.

Corporal punishment.
Vol. 30, p. 761.

Flogging, etc., abolished.
R. S., sec. 4611, p. 894, amended.

Punishment for violations.
Duty of master if by other officer.

Liability for non-compliance.

or the owner of the vessel liable in damages for such flogging or corporal punishment to the person illegally punished by such officer."

Scale of provisions.
Vol. 30, p. 762.
R. S., sec. 4612, p. 895,
amended.

Water and butter al-
lowance increased.

Wages of seamen.
Vol. 30, p. 763,
amended.

Restriction on pay-
ments.
Vol. 23, p. 55.
Vol. 24, p. 80,
amended.

Payment in ad-
vance, etc., unlawful.

Punishment for vio-
lations.

Liability of vessels,
etc.

Punishment for re-
ceiving pay from sea-
man for employment.

Allotment to family
allowed.

Conditions requisite
for valid allotments.

Punishment for false
claim of relationship.

SEC. 10. That section twenty-three of the Act entitled "An Act to amend the laws relating to American seamen, for the protection of such seamen, and to promote commerce," approved December twenty-first, eighteen hundred and ninety-eight, be, and is hereby, amended as regards the items of water and butter, so that in lieu of a daily requirement of four quarts of water there shall be a requirement of five quarts of water every day, and in lieu of a daily requirement of one ounce of butter there shall be a requirement of two ounces of butter every day.

SEC. 11. That section twenty-four of the Act entitled "An Act to amend the laws relating to American seamen, for the protection of such seamen, and to promote commerce," approved December twenty-first, eighteen hundred and ninety-eight, be, and is hereby, amended to read as follows: -

"SEC. 24. That section ten of chapter one hundred and twenty-one of the laws of eighteen hundred and eighty-four, as amended by section three of chapter four hundred and twenty-one of the laws of eighteen hundred and eighty-six, be, and is hereby, amended to read as follows:

"SEC. 10 (a) That it shall be, and is hereby, made unlawful in any case to pay any seaman wages in advance of the time when he has actually earned the same, or to pay such advance wages, or to make any order, or note, or other evidence of indebtedness therefor to any other person, or to pay any person, for the shipment of seamen when payment is deducted or to be deducted from a seaman's wages. Any person violating any of the foregoing provisions of this section shall be deemed guilty of a misdemeanor, and upon conviction shall be punished by a fine of not less than \$25 nor more than \$100, and may also be imprisoned for a period of not exceeding six months, at the discretion of the court. The payment of such advance wages or allotment shall in no case except as herein provided absolve the vessel or the master or the owner thereof from the full payment of wages after the same shall have been actually earned, and shall be no defense to a libel suit or action for the recovery of such wages. If any person shall demand or receive, either directly or indirectly, from any seaman or other person seeking employment, as seaman, or from any person on his behalf, any remuneration whatever for providing him with employment, he shall for every such offense be deemed guilty of a misdemeanor and shall be imprisoned not more than six months or fined not more than \$500.

"(b) That it shall be lawful for any seaman to stipulate in his shipping agreement for an allotment of any portion of the wages he may earn to his grandparents, parents, wife, sister, or children.

"(c) That no allotment shall be valid unless in writing and signed by and approved by the shipping commissioner. It shall be the duty of the said commissioner to examine such allotments and the parties to them and enforce compliance with the law. All stipulations for the allotment of any part of the wages of a seaman during his absence which are made at the commencement of the voyage shall be inserted in the agreement and shall state the amounts and times of the payments to be made and the persons to whom the payments are to be made.

"(d) That no allotment except as provided for in this section shall be lawful. Any person who shall falsely claim to be such relation, as above described, of a seaman under this section shall for every such offense be punished by a fine not exceeding \$500 or imprisonment not exceeding six months, at the discretion of the court.

“(e) That this section shall apply as well to foreign vessels while in waters of the United States, as to vessels of the United States, and any master, owner, consignee, or agent of any foreign vessel who has violated its provisions shall be liable to the same penalty that the master, owner, or agent of a vessel of the United States would be for similar violation.

Applicable to foreign vessels in American waters.

“The master, owner, consignee, or agent of any vessel of the United States, or of any foreign vessel seeking clearance from a port of the United States, shall present his shipping articles at the office of clearance, and no clearance shall be granted any such vessel unless the provisions of this section have been complied with.

Clearance denied for noncompliance.

“(f) That under the direction of the Secretary of Commerce the Commissioner of Navigation shall make regulations to carry out this section.”

Regulations to be issued.

SEC. 12. That no wages due or accruing to any seaman or apprentice shall be subject to attachment or arrestment from any court, and every payment of wages to a seaman or apprentice shall be valid in law, notwithstanding any previous sale or assignment of wages or of any attachment, encumbrance, or arrestment thereon; and no assignment or sale of wages or of salvage made prior to the accruing thereof shall bind the party making the same, except such allotments as are authorized by this title. This section shall apply to fishermen employed on fishing vessels as well as to seamen: *Provided*, That nothing contained in this or any preceding section shall interfere with the order by any court regarding the payment by any seaman of any part of his wages for the support and maintenance of his wife and minor children. Section forty-five hundred and thirty-six of the Revised Statutes of the United States is hereby repealed.

Attachment or prior payment of wages invalid.

Fishermen included. *Proviso*. Family support excepted.

R. S., sec. 4536, p. 379, repealed.

SEC. 13. That no vessel of one hundred tons gross and upward, except those navigating rivers exclusively and the smaller inland lakes and except as provided in section one of this Act, shall be permitted to depart from any port of the United States unless she has on board a crew not less than seventy-five per centum of which, in each department thereof, are able to understand any order given by the officers of such vessel, nor unless forty per centum in the first year, forty-five per centum in the second year, fifty per centum in the third year, fifty-five per centum in the fourth year after the passage of this Act, and thereafter sixty-five per centum of her deck crew, exclusive of licensed officers and apprentices, are of a rating not less than able seaman. Every person shall be rated an able seaman, and qualified for service as such on the seas, who is nineteen years of age or upward, and has had at least three years' service on deck at sea or on the Great Lakes, on a vessel or vessels to which this section applies, including decked fishing vessels, naval vessels or coast guard vessels; and every person shall be rated an able seaman, and qualified to serve as such on the Great Lakes and on the smaller lakes, bays or sounds, who is nineteen years of age or upward and has had at least eighteen months' service on deck at sea or on the Great Lakes or on the smaller lakes, bays, or sounds, on a vessel or vessels to which this section applies, including decked fishing vessels, naval vessels, or coast guard vessels; and graduates of school ships approved by and conducted under rules prescribed by the Secretary of Commerce may be rated able seamen after twelve months' service at sea: *Provided*, That upon examination, under rules prescribed by the Department of Commerce as to eyesight, hearing, and physical condition, such persons or graduates are found to be competent: *Provided further*, That upon examination, under rules prescribed by the Department of Commerce as to eyesight, hearing, physical condition, and knowledge of the duties of seamanship a person found

Crew requirements. R. S., sec. 4463, p. 864, amended. Proportion able to understand orders.

Percentage of able seamen.

Rating of able seamen. Service on the seas.

On Great Lakes, etc.

Graduates of school ships.

Provisos. Physical examination.

Qualified acceptance of one year's deck service.

competent may be rated as able seaman after having served on deck twelve months at sea, or on the Great Lakes; but seamen examined and rated able seamen under this proviso shall not in any case compose more than one-fourth of the number of able seamen required by this section to be shipped or employed upon any vessel.

Certified seamen.
Examinations, etc.,
of applicants for rating.

Any person may make application to any board of local inspectors for a certificate of service as able seaman, and upon proof being made to said board by affidavit and examination, under rules approved by the Secretary of Commerce, showing the nationality and age of the applicant and the vessel or vessels on which he has had service and that he is entitled to such certificate under the provisions of this section, the board of local inspectors shall issue to said applicant a certificate of service, which shall be retained by him and be accepted as prima facie evidence of his rating as an able seamen.

Record of certificates
to be kept.

Each board of local inspectors shall keep a complete record of all certificates of service issued by them and to whom issued and shall keep on file the affidavits upon which said certificates are issued.

Muster of crew to
determine if law com-
plied with.

The collector of customs may, upon his own motion, and shall, upon the sworn information of any reputable citizen of the United States setting forth that this section is not being complied with, cause a muster of the crew of any vessel to be made to determine the fact; and no clearance shall be given to any vessel failing to comply with the provisions of this section: *Provided*, That the collector of customs shall not be required to cause such muster of the crew to be made unless said sworn information has been filed with him for at least six hours before the vessel departs, or is scheduled to depart: *Provided further*, That any person that shall knowingly make a false affidavit for such purpose shall be deemed guilty of perjury and upon conviction thereof shall be punished by a fine not exceeding \$500 or by imprisonment not exceeding one year, or by both such fine and imprisonment, within the discretion of the court. Any violation of any provision of this section by the owner, master, or officer in charge of the vessel shall subject the owner of such vessel to a penalty of not less than \$100 and not more than \$500: *And provided further*, That the Secretary of Commerce shall make such rules and regulations as may be necessary to carry out the provisions of this section, and nothing herein shall be held or construed to prevent the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, from making rules and regulations authorized by law as to vessels excluded from the operation of this section.

Clearance withheld
for failure.
Proviso.
Time for filing com-
plaint.

Punishment for false
affidavit.

Punishment for vio-
lation by vessel owner,
etc.

Regulations, etc.

Life-saving regula-
tions.
R. S., sec. 4488, p. 868,
amended.
Board of Supervising
Inspectors to compel
compliance with.

Vol. 33, p. 1024.

In effect, July 1, 1915.

Proviso.
Compliance by for-
eign vessels leaving
American ports.

SEC. 14. That section forty-four hundred and eighty-eight of the Revised Statutes is hereby amended by adding thereto the following: "The powers bestowed by this section upon the Board of Supervising Inspectors in respect of lifeboats, floats, rafts, life preservers, and other life-saving appliances and equipment, and the further requirements herein as to davits, embarkation of passengers in lifeboats and rafts, and the manning of lifeboats and rafts, and the musters and drills of the crews, on steamers navigating the ocean, or any lake, bay, or sound of the United States, on and after July first, nineteen hundred and fifteen, shall be subject to the provisions, limitations, and minimum requirements of the regulations herein set forth, and all such vessels shall thereafter be required to comply in all respects therewith: *Provided*, That foreign vessels leaving ports of the United States shall comply with the rules herein prescribed as to life-saving appliances, their equipment, and the manning of same."

REGULATIONS.

LIFE-SAVING APPLIANCES.

STANDARD TYPES OF BOATS.

The standard types of boats classified as follows:

Class.	Section.	Type.
I (Entirely rigid sides).	A.	Open. Internal buoyancy only.
	B.	Open. Internal and external buoyancy.
	C.	Pontoon. Well deck; fixed water-tight bulwarks.
II (Partially collapsible sides).	A.	Open. Upper part of sides collapsible.
	B.	Pontoon. Well deck, collapsible water-tight bulwarks.
	C.	Pontoon. Flush deck; collapsible water-tight bulwarks.

STRENGTH OF BOATS.

Each boat must be of sufficient strength to enable it to be safely lowered into the water when loaded with its full complement of persons and equipment.

ALTERNATIVE TYPES OF BOATS AND RAFTS.

Any type of boat may be accepted as equivalent to a boat of one of the prescribed classes and any type of raft as equivalent to an approved pontoon raft, if the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, is satisfied by suitable trials that it is as effective as the standard types of the class in question, or as the approved type of pontoon raft, as the case may be.

Motor boats may be accepted if they comply with the requirements laid down for boats of the first class, but only to a limited number, which number shall be determined by the Board of Supervising Inspectors, with the approval of the Secretary of Commerce.

No boat may be approved the buoyancy of which depends upon the previous adjustment of one of the principal parts of the hull or which has not a cubic capacity of at least one hundred and twenty-five cubic feet.

BOATS OF THE FIRST CLASS.

The standard types of boats of the first class must satisfy the following conditions:

1A.—OPEN BOATS WITH INTERNAL BUOYANCY ONLY.

The buoyancy of a wooden boat of this type shall be provided by water-tight air cases, the total volume of which shall be at least equal to one-tenth of the cubic capacity of the boat.

The buoyancy of a metal boat of this type shall not be less than that required above for a wooden boat of the same cubic capacity, the volume of water-tight air cases being increased accordingly.

1B.—OPEN BOATS WITH INTERNAL AND EXTERNAL BUOYANCY.

The internal buoyancy of a wooden boat of this type shall be provided by water-tight air cases, the total volume of which is at least

REGULATIONS.

Life-saving appliances.
Standard types of boats.

Classification.

Strength.

Alternative types of boats and rafts.

Acceptable types.

Motor boats.

Buoyancy.

First class.

Conditions.

Internal buoyancy.

Wooden boats.

Metal boats.

Internal and external buoyancy.

Wooden boats.

equal to seven and one-half per centum of the cubic capacity of the boat.

Material required.

The external buoyancy may be of cork or of any other equally efficient material, but such buoyancy shall not be secured by the use of rushes, cork shavings, loose granulated cork, or any other loose granulated substance, or by any means dependent upon inflation by air.

Capacity.

If the buoyancy is of cork, its volume, for a wooden boat, shall not be less than thirty-three thousandths of the cubic capacity of the boat; if of any material other than cork, its volume and distribution shall be such that the buoyancy and stability of the boat are not less than that of a similar boat provided with buoyancy of cork.

Metal boats.

The buoyancy of a metal boat shall be not less than that required above for a wooden boat of the same cubic capacity, the volume of the air cases and external buoyancy being increased accordingly.

Pontoon boats.

1C.—PONTOON BOATS, IN WHICH PERSONS CAN NOT BE ACCOMMODATED BELOW THE DECK, HAVING A WELL DECK AND FIXED WATER-TIGHT BULWARKS.

Dimensions, etc.

The area of the well deck of a boat of this type shall be at least thirty per centum of the total deck area. The height of the well deck above the water line at all points shall be at least equal to one-half per centum of the length of the boat, this height being increased to one and one-half per centum of the length of the boat at the ends of the well.

Reserve buoyancy.

The freeboard of a boat of this type shall be such as to provide for a reserve buoyancy of at least thirty-five per centum.

Second class boats.**BOATS OF THE SECOND CLASS.****Conditions.**

The standard types of boats of the second class must satisfy the following conditions:

Collapsible sides.

2A.—OPEN BOATS HAVING THE UPPER PART OF THE SIDES COLLAPSIBLE.

Buoyancy.

A boat of this type shall be fitted both with water-tight air cases and with external buoyancy, the volume of which, for each person which the boat is able to accommodate, shall be at least equal to the following amounts: Air cases, one and five-tenths cubic feet; external buoyancy (if of cork), two-tenths cubic foot.

Measurements.

The minimum freeboard of boats of this type is fixed in relation to their length; it is measured vertically to the top of the solid hull at the side amidships, from the water level when the boat is loaded.

The freeboard in fresh water shall not be less than the following amounts:

Length of the boat.	Minimum freeboard.
<i>Feet.</i>	<i>Inches.</i>
26	8
28	9
30	10

The freeboard of boats of intermediate lengths is to be found by interpolation.

2B.—PONTOON BOATS HAVING A WELL DECK AND COLLAPSIBLE BULWARKS.

Well deck pontoons.

All the conditions laid down for boats of type 1C are to be applied to boats of this type, which differ from those of type 1C only in regard to the bulwarks.

Conditions.

2C.—PONTOON BOATS, IN WHICH THE PERSONS CAN NOT BE ACCOMMODATED BELOW DECK, HAVING A FLUSH DECK AND COLLAPSIBLE BULWARKS.

Flush deck pontoons.

The minimum freeboard of boats of this type is independent of their lengths and depends only upon their depth. The depth of the boat is to be measured vertically from the underside of the garboard strake to the top of the deck on the side amidships, and the freeboard is to be measured from the top of the deck at the side amidships to the water level when the boat is loaded.

Measurements.

The freeboard in fresh water shall not be less than the following amounts, which are applicable without correction to boats having a mean sheer equal to three per centum of their length:

Depth of boat.	Minimum freeboard.
<i>Inches.</i>	<i>Inches.</i>
12	2 $\frac{1}{4}$
18	3 $\frac{1}{4}$
20	5 $\frac{1}{8}$
30	6 $\frac{1}{2}$

For intermediate depths the freeboard is obtained by interpolation. If the sheer is less than the standard sheer defined above, the minimum freeboard is obtained by adding to the figures in the table one-seventh of the difference between the standard sheer and the actual mean sheer measured at the stem and sternpost. No deduction is to be made from the freeboard on account of the sheer being greater than the standard sheer or on account of the camber of the deck.

MOTOR BOATS.

Motor boats.

When motor boats are accepted, the volume of internal buoyancy and, when fitted, the external buoyancy, must be fixed, having regard to the difference between the weight of the motor and its accessories and the weight of the additional persons which the boat could accommodate if the motor and its accessories were removed.

Buoyancy.

ARRANGEMENTS FOR CLEARING PONTOON LIFEBOATS OF WATER.

Clearing pontoons of water.

All pontoon lifeboats shall be fitted with efficient means for quickly clearing the deck of water. The orifices for this purpose shall be such that the water can not enter the boat through them when they are intermittently submerged. The number and size of the orifices shall be determined for each type of boat by a special test.

Means required.

For the purpose of this test the pontoon boat shall be loaded with a weight of iron or bags of sand, equal to that of its complement of persons and equipment.

Tests.

In the case of a boat twenty-eight feet in length two tons of water shall be cleared from the boat in a time not exceeding the following: type 1C, sixty seconds; type 2B, sixty seconds; type 2C, twenty seconds.

In the case of a boat having a length greater or less than twenty-eight feet the weight of water to be cleared in the same time shall be, for each type, directly proportional to the length of the boat.

Construction.

CONSTRUCTION OF BOATS.

Open boats.

Open lifeboats of the first class (types 1A and 1B) must have a mean sheer at least equal to four per centum of their length.

The air cases of open boats of the first class shall be placed along the sides of the boat; they may also be placed at the ends of the boat, but not in the bottom of the boat.

Pontoons.

Pontoon lifeboats may be built of wood or metal. If constructed of wood, they shall have the bottom and deck made of two thicknesses with textile material between; if of metal, they shall be divided into water-tight compartments with means of access to each compartment.

Steering oar.

All boats shall be fitted for the use of a steering oar.

Pontoon rafts.

PONTOON RAFTS.

Conditions.

No type of pontoon raft may be approved unless it satisfies the following conditions:

First. It should be reversible and fitted with bulwarks of wood, canvas, or other suitable material on both sides. These bulwarks may be collapsible.

Second. It should be of such size, strength, and weight that it can be handled without mechanical appliances, and, if necessary, be thrown from the vessel's deck.

Third. It should have not less than three cubic feet of air cases or equivalent buoyancy for each person whom it can accommodate.

Fourth. It should have a deck area of not less than four square feet for each person whom it can accommodate and the platform should not be less than six inches above the water level when the raft is loaded.

Fifth. The air cases or equivalent buoyancy should be placed as near as possible to the sides of the raft.

Capacity.

CAPACITY OF BOATS AND PONTOON RAFTS.

Computation.

First. The number of persons which a boat of one of the standard types or a pontoon raft can accommodate is equal to the greatest whole number obtained by dividing the capacity in cubic feet, or the surface in square feet, of the boat or of the raft by the standard unit of capacity, or unit of surface (according to circumstances), defined below for each type.

Cubic capacity.

Second. The cubic capacity in feet of a boat in which the number of persons is determined by the surface shall be assumed to be ten times the number of persons which it is authorized to carry.

Standard units.

Third. The standard units of capacity and surface are as follows:

Units of capacity, open boats, type 1A, ten cubic feet; open boats, type 1B, nine cubic feet.

Unit of surface, open boats, type 2A, three and one-half square feet; pontoon boats, type 2C, three and one-half square feet; pontoon boats, type 1C, three and one-fourth square feet; pontoon boats, type 2B, three and one-fourth square feet.

Acceptance of smaller dimensions.

Fourth. The board of supervising inspectors, with the approval of the Secretary of Commerce, may accept, in place of three and one-fourth, a smaller divisor, if it is satisfied after trial that the number of persons for whom there is seating accommodation in the pontoon boat in question is greater than the number obtained by applying the above divisor, provided always that the divisor adopted in place of three and one-fourth may never be less than three.

CAPACITY LIMITS.

Pontoon boats and pontoon rafts shall never be marked with a number of persons greater than that obtained in the manner specified in this section.

This number shall be reduced—

First. When it is greater than the number of persons for which there is proper seating accommodation, the latter number being determined in such a way that the persons when seated do not interfere in any way with the use of the oars.

Second. When in the case of boats other than those of the first two sections of the first class, the freeboard, when the boat is fully loaded, is less than the freeboard laid down for each type respectively. In such circumstances the number shall be reduced until the freeboard, when the boat is fully loaded, is at least equal to the standard freeboard laid down above.

In boats of types 1C and 2B the raised part of the deck at the sides may be regarded as affording seating accommodation.

EQUIVALENTS FOR AND WEIGHT OF THE PERSONS.

In test for determining the number of persons which a boat or pontoon raft can accommodate each person shall be assumed to be an adult person wearing a life jacket.

In verifications of freeboard the pontoon boats shall be loaded with a weight of at least one hundred and sixty-five pounds for each adult person that the pontoon boat is authorized to carry.

In all cases two children under twelve years of age shall be reckoned as one person.

CUBIC CAPACITY OF OPEN BOATS OF THE FIRST CLASS.

First. The cubic capacity of an open boat of type 1A or 1B shall be determined by Stirling's (Simpson's) rule or by any other method, approved by the Board of Supervising Inspectors, giving the same degree of accuracy. The capacity of a square-sterned boat shall be calculated as if the boat had a pointed stern.

Second. For example, the capacity in cubic feet of a boat, calculated by the aid of Stirling's rule, may be considered as given by the following formula:

$$\text{Capacity} = \frac{1}{12}(4A + 2B + 4C)$$

l being the length of the boat in meters (or feet) from the inside of the planking or plating at the stem to the corresponding point at the stern post; in the case of a boat with a square stern, the length is measured to the inside of the transom.

A, B, C denote, respectively, the areas of the cross sections at the quarter length forward, amidships, and the quarter length aft, which correspond to the three points obtained by dividing l into four equal parts. (The areas corresponding to the two ends of the boat are considered negligible.)

The areas A, B, C shall be deemed to be given in square feet by the successive application of the following formula to each of the three cross sections:

$$\text{Area} = \frac{h}{12}(a + 4b + 2c + 4d + e).$$

h being the depth measured in meters (or in feet) inside the planking or plating from the keel to the level of the gunwale, or, in certain cases, to a lower level, as determined hereafter.

Capacity limits.

Maximum.

Reductions.

Pontoons.

Equivalents for and weight of persons.

Test computations.

Cubic capacity.

First class open boats.

a, b, c, d, e denote the horizontal breadths of the boat measured in feet at the upper and lower points of the depth and at the three points obtained by dividing h into four equal parts (a and e being the breadths at the extreme points, and c at the middle point, of h).

Third. If the sheer of the gunwale, measured at the two points situated at a quarter of the length of the boat from the ends, exceeds one per centum of the length of the boat, the depth employed in calculating the area of the cross sections A or C shall be deemed to be the depth amidships plus one per centum of the length of the boat.

Fourth. If the depth of the boat amidships exceeds forty-five per centum of the breadth, the depth employed in calculating the area of the midship cross section B shall be deemed to be equal to forty-five per centum of the breadth; and the depth employed in calculating the areas of the quarter-length sections A and C is obtained by increasing this last figure by an amount equal to one per centum of the length of the boat, provided that in no case shall the depths employed in the calculation exceed the actual depths at these points.

Fifth. If the depth of the boat is greater than four feet, the number of persons given by the application of this rule shall be reduced in proportion to the ratio of four feet to the actual depth, until the boat has been satisfactorily tested afloat with that number of persons on board all wearing life jackets.

Sixth. The Board of Supervising Inspectors shall impose, by suitable formulæ, a limit for the number of persons allowed in boats with very fine ends and in boats very full in form.

Alternative computations.

Seventh. The Board of Supervising Inspectors may by regulation assign to a boat a capacity equal to the product of the length, the breadth, and the depth multiplied by six-tenths if it is evident that this formula does not give a greater capacity than that obtained by the above method. The dimensions shall then be measured in the following manner:

Length. From the intersection of the outside of the planking with the stem to the corresponding point at the sternpost or, in the case of a square-sterned boat, to the afterside of the transom.

Breadth. From the outside of the planking at the point where the breadth of the boat is greatest.

Depth. Amidships inside the planking from the keel to the level of the gunwale, but the depth used in calculating the cubic capacity may not in any case exceed forty-five per centum of the breadth.

In all cases the vessel owner has the right to require that the cubic capacity of the boat shall be determined by exact measurement.

Eighth. The cubic capacity of a motor boat is obtained from the gross capacity by deducting a volume equal to that occupied by the motor and its accessories.

Deck area.

DECK AREA OF PONTOON BOATS AND OPEN BOATS OF THE SECOND CLASS.

Pontoon boats.

First. The area of the deck of a pontoon boat of type 1C, 2B, or 2C shall be determined by the method indicated below or by any other method giving the same degree of accuracy. The same rule is to be applied in determining the area within the fixed bulwarks of a boat of type 2A.

Second. For example, the surface in square feet of a boat may be deemed to be given by the following formula:

$$\text{Area} = \frac{1}{12}(2a + 1.5b + 4c + 1.5d + 2e),$$

l being the length in feet from the intersection of the outside of the planking with the stem to the corresponding point at the sternpost.

a, b, c, d, e denote the horizontal breadths in feet outside the planking at the points obtained by dividing l into four equal parts and subdividing the foremost and aftermost parts into two equal parts (a and e being the breadths at the extreme subdivisions, c at the middle point of the length, and b and d at the intermediate points).

MARKING OF BOATS AND PONTOON RAFTS.

Marking required.

The dimensions of the boat and the number of persons which it is authorized to carry shall be marked on it in clear, permanent characters, according to regulations by the Board of Supervising Inspectors, approved by the Secretary of Commerce. These marks shall be specifically approved by the officers appointed to inspect the ship.

Boats.

Pontoon rafts shall be marked with the number of persons in the same manner.

Pontoons.

EQUIPMENT OF BOATS AND PONTOON RAFTS.

Equipment.

First. The normal equipment of every boat shall consist of—

Boats.

(a) A single banked complement of oars and two spare oars; one set and a half of thole pins or crutches; a boat hook.

(b) Two plugs for each plug hole (plugs are not required when proper automatic valves are fitted); a bailer and a galvanized-iron bucket.

(c) A tiller or yoke and yoke lines.

(d) Two hatchets.

(e) A lamp filled with oil and trimmed.

(f) A mast or masts with one good sail at least, and proper gear for each. (This does not apply to motor lifeboats or lifeboats on the Great Lakes or other inland waters.)

(g) A suitable compass.

Pontoon lifeboats will have no plug hole, but shall be provided with at least two bilge pumps.

In the case of a steamer which carries passengers in the North Atlantic, all the boats need not be equipped with masts, sails, and compasses, if the ship is provided with a radiotelegraph installation.

North Atlantic passenger steamers.

Second. The normal equipment of every approved pontoon raft shall consist of—

Pontoon rafts.

(a) Four oars.

(b) Five rowlocks.

(c) A self-igniting life-buoy light.

Third. In addition, every boat and every pontoon raft shall be equipped with—

For all boats and pontoons.

(a) A life line becketed around the outside.

(b) A sea anchor.

(c) A painter.

(d) A vessel containing one gallon of vegetable or animal oil. The vessel shall be so constructed that the oil can be easily distributed on the water and so arranged that it can be attached to the sea anchor.

(e) A water-tight receptacle containing two pounds avoirdupois of provisions for each person, except on vessels navigating fresh water.

(f) A water-tight receptacle containing one quart for each person, except on vessels navigating fresh water.

(g) A number of self-igniting "red lights" and a water-tight box of matches.

Fourth. All loose equipment must be securely attached to the boat or pontoon raft to which it belongs.

Secure attachments.

Davits.

STOWAGE OF BOATS—NUMBER OF DAVITS.

Number required.

The minimum number of sets of davits is fixed in relation to the length of the vessel; provided that a number of sets of davits greater than the number of boats necessary for the accommodation of all the persons on board may not be required.

Handling.

HANDLING OF THE BOATS AND RAFTS.

Facilities required.

All the boats and rafts must be stowed in such a way that they can be launched in the shortest possible time and that, even under unfavorable conditions of list and trim from the point of view of the handling of the boats and rafts, it may be possible to embark in them as large a number of persons as possible.

The arrangements must be such that it may be possible to launch on either side of the vessel as large a number of boats and rafts as possible.

STRENGTH AND OPERATION OF THE DAVITS.

Strength.

The davits shall be of such strength that the boats can be lowered with their full complement of persons and equipment, the vessel being assumed to have a list of fifteen degrees.

Operation.

The davits must be fitted with a gear of sufficient power to insure that the boat can be turned out against the maximum list under which the lowering of the boats is possible on the vessel in question.

OTHER APPLIANCES EQUIVALENT TO DAVITS.

Equivalent appliances.

Any appliance may be accepted in lieu of davits or sets of davits if the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, is satisfied after proper trials that the appliance in question is as effective as davits for placing the boats in the water.

DAVITS.

Attachment of boats.

Each set of davits shall have a boat of the first class attached to it, provided that the number of open boats of the first class attached to davits shall not be less than the minimum number fixed by the table which follows.

Reduction of minimum number.

If it is neither practicable nor reasonable to place on a vessel the minimum number of sets of davits required by the rules, the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, may authorize a smaller number of sets of davits to be fitted, provided always that this number shall never be less than the minimum number of open boats of the first class required by the rules.

Restriction.

In case of long boats.

If a large proportion of the persons on board are accommodated in boats whose length is greater than fifty feet, a further reduction in the number of sets of davits may be allowed exceptionally, if the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, is satisfied that the arrangements are in all respects satisfactory.

Tests required.

In all cases in which a reduction in the minimum number of sets of davits or other equivalent appliances required by the rules is allowed, the owner of the vessel in question shall be required to prove, by a test made in the presence of an officer designated by the Supervising Inspector General, that all the boats can be efficiently launched in a minimum time.

Conditions.

The conditions of this test shall be as follows:

First. The vessel is to be upright and in smooth water.

Second. The time is the time required from the beginning of the removal of the boat covers, or any other operation necessary to prepare the boats for lowering, until the last boat or pontoon raft is afloat.

Third. The number of men employed in the whole operation must not exceed the total number of boat hands that will be carried on the vessel under normal service conditions.

Fourth. Each boat when being lowered must have on board at least two men and its full equipment as required by the rules.

The time allowed for putting all the boats into the water shall be fixed by the Board of Supervising Inspectors, with the approval of the Secretary of Commerce.

MINIMUM NUMBER OF DAVITS AND OF OPEN BOATS OF THE FIRST CLASS—MINIMUM BOAT CAPACITY.

Davits.

Number required.
Basis of computation.

The following table fixes, according to the length of the vessel—

(A) The minimum number of sets of davits to be provided, to each of which must be attached a boat of the first class in accordance with this section.

(B) The minimum total number of open boats of the first class, which must be attached to davits, in accordance with this section.

(C) The minimum boat capacity required, including the boats attached to davits and the additional boats, in accordance with this section.

Table.

Registered length of the ship (feet).	(A) Minimum number of sets of davits.	(B) Minimum number of open boats of the first class.	(C) Minimum capacity of lifeboats.
			Cubic feet.
100 and less than 120.....	2	2	980
120 and less than 140.....	2	2	1,220
140 and less than 160.....	2	2	1,550
160 and less than 175.....	3	3	1,880
175 and less than 190.....	3	3	2,390
190 and less than 205.....	4	4	2,740
205 and less than 220.....	4	4	3,330
220 and less than 230.....	5	4	3,900
230 and less than 245.....	5	4	4,560
245 and less than 255.....	6	5	5,100
255 and less than 270.....	6	5	5,640
270 and less than 285.....	7	5	6,190
285 and less than 300.....	7	5	6,930
300 and less than 315.....	8	6	7,550
315 and less than 330.....	8	6	8,290
330 and less than 350.....	9	7	9,000
350 and less than 370.....	9	7	9,630
370 and less than 390.....	10	7	10,650
390 and less than 410.....	10	7	11,700
410 and less than 435.....	12	9	13,060
435 and less than 460.....	12	9	14,430
460 and less than 490.....	14	10	15,920
490 and less than 520.....	14	10	17,310
520 and less than 550.....	16	12	18,720
550 and less than 580.....	16	12	20,350
580 and less than 610.....	18	13	21,900
610 and less than 640.....	18	13	23,700
640 and less than 670.....	20	14	25,350
670 and less than 700.....	20	14	27,050
700 and less than 730.....	22	15	28,560
730 and less than 760.....	22	15	30,180
760 and less than 790.....	24	17	32,100
790 and less than 820.....	24	17	34,350
820 and less than 855.....	26	18	36,450
855 and less than 890.....	26	18	38,750
890 and less than 925.....	28	19	41,000
925 and less than 960.....	28	19	43,880
960 and less than 995.....	30	20	46,350
995 and less than 1,030.....	30	20	48,750

When the length of the vessel exceeds one thousand and thirty feet, the Board of Supervising Inspectors, with the approval of the Secretary of Commerce, shall determine the minimum number of sets of davits and of open boats of the first class for that vessel.

EMBARKATION OF THE PASSENGERS IN THE LIFEBOATS AND RAFTS.

- Facilities for embarkation. Suitable arrangements shall be made for embarking the passengers in the boats, in accord with regulations by the Board of Supervising Inspectors, with the approval of the Secretary of Commerce.
- Ladders for rafts. In vessels which carry rafts there shall be a number of rope or wooden ladders always available for use in embarking the persons on to the rafts.
- Number and arrangement of boats. The number and arrangement of the boats, and (where they are allowed) of the pontoon rafts, on a vessel depends upon the total number of persons which the vessel is intended to carry: *Provided*, That there shall not be required on any voyage a total capacity in boats, and (where they are allowed) pontoon rafts, greater than that necessary to accommodate all the persons on board.
- Proviso.*
Limit. At no moment of its voyage shall any passenger steam vessel of the United States on ocean routes more than twenty nautical miles offshore have on board a total number of persons greater than that for whom accommodation is provided in the lifeboats and pontoon life rafts on board.
- Passenger ocean vessels. Additional lifeboats. If the lifeboats attached to davits do not provide sufficient accommodation for all persons on board, additional lifeboats of one of the standard types shall be provided. This addition shall bring the total capacity of the boats on the vessel at least up to the greater of the two following amounts:
- Total capacity required.
- (a) The minimum capacity required by these regulations;
 - (b) A capacity sufficient to accommodate seventy-five per centum of the persons on board.
- The remainder of the accommodation required shall be provided, under regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce, either in boats of class one or class two, or in pontoon rafts of an approved type.
- Passenger vessels near shore. At no moment of its voyage shall any passenger steam vessel of the United States on ocean routes less than twenty nautical miles offshore have on board a total number of persons greater than that for whom accommodation is provided in the lifeboats and pontoon rafts on board. The accommodation provided in lifeboats shall in every case be sufficient to accommodate at least seventy-five per centum of the persons on board. The number and type of such lifeboats and life rafts shall be determined by regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce: *Provided*, That during the interval from May fifteenth to September fifteenth, inclusive, any passenger steam vessel of the United States, on ocean routes less than twenty nautical miles offshore, shall be required to carry accommodation for not less than seventy per centum of the total number of persons on board in lifeboats and pontoon life rafts, of which accommodation not less than fifty per centum shall be in lifeboats and fifty per centum may be in collapsible boats or rafts, under regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce.
- Proviso.*
Modification May 15 to September 15. At no moment of its voyage may any ocean-cargo steam vessel of the United States have on board a total number of persons greater than that for whom accommodation is provided in the lifeboats on board. The number and types of such boats shall be determined by regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce.
- Ocean-cargo steam vessels. At no moment of its voyage may any passenger steam vessel of the United States on the Great Lakes, on routes more than three miles
- Vessels on Great Lakes.

offshore, except over waters whose depth is not sufficient to submerge all the decks of the vessel, have on board a total number of persons, including passengers and crew, greater than that for whom accommodation is provided in the lifeboats and pontoon life rafts on board. The accommodation provided in lifeboats shall in every case be sufficient to accommodate at least seventy-five per centum of the persons on board. The number and types of such lifeboats and life rafts shall be determined by regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce: *Provided*, That during the interval from May fifteenth to September fifteenth, inclusive, any such steamer shall be required to carry accommodation for not less than fifty per centum of persons on board in lifeboats and pontoon life rafts, of which accommodation not less than two-fifths shall be in lifeboats and three-fifths may be in collapsible boats or rafts, under regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce: *Provided further*, That all passenger steam vessels of the United States, the keels of which are laid after the first of July, nineteen hundred and fifteen, for service on ocean routes, or for service from September fifteenth to May fifteenth on the Great Lakes on routes more than three miles offshore, shall be built to carry, and shall carry, enough lifeboats and life rafts to accommodate all persons on board, including passengers and crew: *And provided further*, That not more than twenty-five per centum of such equipment may be in pontoon life rafts or collapsible lifeboats.

At no moment of its voyage may any cargo steam vessel of the United States on the Great Lakes have on board a total number of persons greater than that for whom accommodation is provided in the lifeboats on board. The number and types of such boats shall be determined by regulations of the Board of Supervising Inspectors approved by the Secretary of Commerce.

The number, types, and capacity of lifeboats and life rafts, together with the proportion of such accommodation to the number of persons on board which shall be carried on steam vessels on the Great Lakes, on routes three miles or less offshore or over waters whose depth is not sufficient to submerge all the decks of the vessel, and on all other lakes, and on rivers, bays, and sounds, shall be determined by regulations of the Board of Supervising Inspectors, approved by the Secretary of Commerce.

All regulations by the Board of Supervising Inspectors, approved by the Secretary of Commerce, authorized by this Act, shall be transmitted to Congress as soon as practicable after they are made.

The Secretary of Commerce is authorized in specific cases to exempt existing vessels from the requirements of this section that the davits shall be of such strength and shall be fitted with a gear of sufficient power to insure that the boats can be lowered with their full complement of persons and equipment, the vessel being assumed to have a list of fifteen degrees, where their strict application would not be practicable or reasonable.

CERTIFICATED LIFEBOAT MEN—MANNING OF THE BOATS.

There shall be for each boat or raft a number of lifeboat men at least equal to that specified as follows: If the boat or raft carries twenty-five persons or less, the minimum number of certificated lifeboat men shall be one; if the boat or raft carries twenty-six persons and less than forty-one persons the minimum number of certificated lifeboat men shall be two; if the boat or raft carries forty-one persons and less than sixty-one persons the minimum number of certificated lifeboat men shall be three; if the boat or raft carries from sixty-one to eighty-five persons, the minimum number of certificated lifeboat men shall be four; if the boat or raft carries from eighty-six to one

Proviso.
Modification May 15
to September 15.

Full complement re-
quired for vessels.

Limit of pontoons,
etc.

Cargo steam vessels
on Great Lakes.

Regulations for
shore routes, etc.

Transmittal of regu-
lations to Congress.

Exemption of davit
requirements in spe-
cific cases.

Certificated lifeboat
men.

Number required.