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THE

STEAMBOAT INSPECTION ACT, 1882,

BEING THE

ACT OF THE PARLIAMENT OF CANADA

45 VICTORIA, CHAPTER 35.

WITH AN INDEX.



OTTAWA:

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1882.

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45 VICTORIA.

CHAP. 35.

An Act to amend and consolidate the Acts respecting the inspection of Steamboats, and the examination and licensing of Engineers employed on them.

[Assented to 17th May, 1882.]

FOR the greater security of life and property on board steamboats navigating the waters of the Dominion of Canada, or owned or registered in the Dominion of Canada, and departing from or arriving at any port or place in the Dominion of Canada: Her Majesty, by and with the advice and consent of the Senate and House of Commons of Canada, enacts as follows:—

Preamble.

EXTENT AND APPLICATION OF ACT.

1. This Act may be cited for all purposes as "*The Steamboat Inspection Act, 1882*," and shall extend and apply to the whole Dominion of Canada, including Manitoba and the North-West Territories and Keewatin.

Short title and extent of Act.

2. This Act shall be construed as being passed in amendment of the Act thirty-first Victoria, chapter sixty-five, intitled "*An Act respecting the Inspection of Steamboats, and for the greater safety of passengers by them*," as amended by the Acts thirty-second and thirty-third Victoria, chapter thirty-nine; thirty-sixth Victoria, chapters seven and fifty-three; thirty-seventh Victoria, chapter thirty; fortieth Victoria, chapter eighteen, and forty-fourth Victoria, chapter twenty-one, which are hereby superseded and repealed (except as hereinafter provided) with every other Act, enactment or provision inconsistent with this Act,—and as being a consolidation of the amendments hereby made with those portions of the said Acts which are herein re-enacted, and of such Orders in Council made under them as are herein incorporated, all which shall be construed as declaratory of the existing law: and all appointments made and all things lawfully done under the provisions of law then in force, shall remain valid,

Construction, and effect of Act as an amendment of former Acts, 31 V., c. 65, 32, 33 V., c. 39, 36 V., c. c. 7 and 53, 37 V., c. 30, 40 V., c. 18, 44 V., c. 21.

Appointments, &c., continued.

unless and until it is otherwise ordered by or under this Act, and all proceedings commenced under them may be continued and completed, as if this Act had not been passed, only the amendments hereby made having effect as new law.

Interpretation of terms.

3. In this Act the word "steamboat" includes any vessel used in navigation or afloat on navigable water, and propelled or movable wholly or in part by steam; the word "owner" includes the lessee or charterer of any such vessel; and the word "year" means the calendar year, commencing on the first day of January, and ending on the thirty-first day of December.

Exceptions from application of Act.

4. This Act shall not apply to steamboats belonging to Her Majesty the Queen, nor to steamboats registered in Great Britain and Ireland or in any foreign country, and plying between any port or place in the Dominion of Canada and any port or place outside of the Dominion of Canada:

Partial exceptions.

2. And all steam yachts, used exclusively for pleasure or private use without hire or remuneration of any kind, all tug boats, all steamboats carrying freight only (hereinafter called freight boats) and under one hundred and fifty tons gross, and all steamboats used only for fishing purposes or the carrying of fish, and under one hundred and fifty tons gross, and steam dredges and elevators or vessels of like kind, shall be exempt from the requirements of this Act, except as regards the inspection of their boilers and machinery, to which they shall be subject at least once in each year, and oftener if required, under the same provisions and penalties for neglect as other steamboats, and except also as to the obligation to carry one lifebuoy hereinafter imposed on all steamboats.

Governor in Council may bring certain steamboats under the Act.

5. The Governor in Council may direct that any steamboat not registered in the Dominion of Canada, but employed in the Dominion of Canada in carrying mails, passengers or troops, shall be subject to the provisions of this Act.

APPOINTMENT AND QUALIFICATION OF INSPECTORS.

Appointment of inspectors of boilers and machinery.

6. The Governor in Council shall, from time to time, appoint at each of such places, and to act respectively within such local limits, as he may find advisable, within the Dominion of Canada, a skilled person or skilled persons competent to inspect the boilers and machinery employed in steamboats, who shall not be interested in the manufacture of steam engines, boilers or other machinery belonging to steamboats, and whose duty it shall be to make such inspection as hereinafter prescribed, and to give to the owner or master two of the certificates of such inspection,—and also a skilled person or skilled persons competent to inspect the hulls and equipment of steamboats, who

And inspectors of hulls and equipment.

shall not be interested in the building or construction of hulls of steamboats, or of any article or thing hereinafter mentioned as part of the equipment required by this Act for steamboats, or properly belonging to or connected with such equipment according to the intent of this Act, and whose duty it shall be to make such inspection, and to give triplicate certificates of such inspection :

2. In this Act the expression "boilers and machinery" includes the steam engine or engines, and every part thereof or thing connected therewith, employed in propelling the steamboat, and any donkey or pony engine used on board, and the boiler or boilers for supplying steam thereto, and the furnaces, chimneys, flues, safety and blow-off valves, gauges, braces, stays, pipes, steam pumps, and all other apparatus and things attached to or connected therewith or used with reference to any such engine or under the care of the engineer; and the expression "hull and equipment" includes the hull and every part thereof, masts, sails and rigging when the steamboat carries them, life-boats and other boats and the tackle and apparatus for lowering or hoisting them, the apparatus, other than steam fire engines, for preventing or extinguishing fires, anchors and cables, windlasses and capstans, fire buckets, compasses, axes, lanterns, and all other articles and things necessary for the navigation and safety of the steamboat and not under the care of the engineer; the word "Inspector" in any provision in the following sections means a person appointed to inspect the "boilers and machinery" of steamboats, when and so far as such provision applies to anything included in that expression, or a person appointed to inspect the "hulls and equipment" of steamboats, when and so far as the provision applies to any thing included in the expression last mentioned; the word "boiler" means a boiler of or intended for a steamboat, and includes boilers when the steamboat has more than one, and the word "boilers" means "boiler" when she has only one, and the word "hull" includes the equipment unless the context is inconsistent with such construction: and the word "certificate" means one of the duplicates or triplicates of the certificate given by the Inspectors or Inspector, as the case may be.

Further interpretation of terms.

"Boilers and machinery."

"Hull and equipment."

"Inspector."

"Boiler."
"Boilers."

"Hull."

"Certificate."

7. No person shall be appointed an Inspector of boilers and machinery of steamboats unless nor until he has passed a satisfactory examination before the Board of Steamboat Inspection, as to his knowledge on the subject of boilers and machinery of steamboats, and the working of the same; or an Inspector of the hulls and equipment of such vessels, unless he has passed a satisfactory examination as to his competency for the office, before a board of three practical ship-builders to be appointed by the Governor in Council, or is a certified surveyor of a recognised society for the classification

Examination of inspector of boilers and machinery.

And of inspectors of hulls and equipment.

of shipping ; nor shall he be appointed an Inspector for either purpose unless he has received from the chairman of the Board, or from the said practical shipbuilders (as the case may be) a certificate in writing that he has satisfactorily passed such examination, or is a certified surveyor as aforesaid :

Proviso: as to existing inspectors.

2. Provided always, that all Inspectors appointed before the passing of this Act shall continue in office as Inspectors of boilers and machinery until removed under this Act :

Oathsofoffice.

3. Every such Inspector, before entering upon his duties as such, shall take and subscribe an oath, before any person duly authorized to administer an oath, well, faithfully and impartially to execute the duties assigned to him by this Act.

Board of Steamboat Inspection.

8. The Inspectors shall form a Board, to be called the " Board of Steamboat Inspection," of whom the Governor shall name the chairman ; three of the members shall form a quorum, and the chairman shall have the right to vote, and in case of an equal division he shall also have a casting vote ; and the minutes of the proceedings of the Board shall be kept by him :

Duties, proceedings and rules of Board.

2. The Board shall meet at least once every year at such place as they may agree upon, and may make rules and regulations for their own conduct, and for the uniform inspection of steamboats, the selection of ports of inspection, and granting licences to engineers, and for such other purposes as may be necessary under this Act, and may, from time to time, repeal, alter or add to such rules and regulations or make others in their stead ; and such rules and regulations shall come into force after they have been approved by the Governor in Council, but not before ; and copies of the minutes of the proceedings of the Board, certified by the chairman, shall be transmitted to the Minister of Marine and Fisheries ; provided that such rules and regulations made before this Act comes into force shall remain in force until repealed or amended under it :

Subject to approval.

Proviso, as to present rules.

Provision respecting inspectors of hulls in certain parts of Canada, or in case of vacancy.

3. Provided always, that in the Provinces of Manitoba and British Columbia, and in the North-West Territories and the District of Keewatin, the Minister of Marine and Fisheries may, if, and when he sees fit, dispense with the appointment of an Inspector of hulls and equipment ; and in such case and in case of the non-appointment of such Inspector in any Inspection District, or of vacancy in the office therein, the said Minister may, by Departmental Order, assign the duties of such Inspector to the Inspector of boilers and machinery, or such other person as he may temporarily employ, who shall then and so long as such order remains in force, have

all the powers and perform all the duties hereby assigned to the Inspector of hulls and equipment, under the like obligations and like penalties in case of default; the forms of certificate being altered to suit the case.

INSPECTION GENERALLY.

9. The chairman of the Board of Steamboat Inspection may, at any time, inspect or examine the hull, boiler and machinery of any steamboat, and if he suspects any Inspector of having neglected his duty in relation to such steamboat, he may call a meeting of the Board to investigate the case; and the result of every such investigation shall forthwith be communicated in writing to the Minister of Marine and Fisheries, for the information of the Governor in Council.

Neglect of duty by Inspector to be reported by chairman.

10. The master or owner of every steamboat liable to inspection under this Act, shall cause the boiler and machinery and the hull and equipment thereof, to be inspected at least once every year, and shall deliver to the chief officer of Customs at the port where such inspection is made, or at which such steamboat shall arrive next after such inspection, where it has not been made in such port, one of the certificates thereof; and for every neglect to cause such inspection to be made, and a certificate thereof to be delivered to the proper officer of Customs, such master or owner shall incur a penalty of four hundred dollars, and such steamboat shall be liable for the same and chargeable therewith; and every such certificate unless sooner revoked, shall be good for a period of twelve months from the date thereof, or for such less period as may be stated by the Inspector in the certificate.

Inspection to be made at least yearly.

Certificates of inspection.

Penalty for neglect.

11. The master, owner or engineer of every steamboat, or the person in charge thereof, shall at the earliest opportunity after the occurrence of any event whereby the hull, or the machinery, or boiler thereof, or any part of any or either of the same, is in any material degree injured, strained or weakened, report such occurrence to the Inspector by whom the same was last inspected, or to the proper Inspector at the port or place where the steamboat is, or first arrives after such event occurs; and in case of omission to give such notice the owner of the steamboat shall forfeit to Her Majesty two hundred dollars for every day during which such omission continues; and if the injury be to the machinery or boiler or any part of the same, the license of the engineer shall be revoked.

Subsequent injury to hull or machinery to be reported.

12. Any Inspector may, at all times when inspecting, visiting or examining any boilers and machinery or the hull of any steamboat, ask of any or all of the owners, officers or engineers of such steamboat, or other person on board

Officers of steamboat to answer questions.

Penalty for refusal. thereof and in charge or appearing to be in charge of the same, or of the boiler or machinery thereof, such pertinent questions concerning the same, or concerning any accident that may have happened thereto, as he may think fit; and every such person shall fully and truly answer every such question so put to him respectively, to the best of his knowledge and ability; and every person refusing to answer or falsely answering such question or preventing any such inspection or obstructing any Inspector in the same, shall, by so acting, incur a penalty of forty dollars.

Certificate of registry to be exhibited. 13. Any Inspector of Steamboats is hereby empowered to demand of the owner or master of any steamboat being inspected by him, the production of the certificate of registry of such steamboat; and it shall thereupon be the duty of such owner or master to produce and exhibit the same to such Inspector.

Owner to pay certain expenses of examination. 14. When the Inspector finds it necessary to open up the hull of a vessel for the purpose of examining her condition the expense incurred thereby shall be chargeable to the owner of such vessel.

Inspection of machinery in motion: free passage of inspector. 15. The Inspector may require that the engine and machinery under inspection by him, be put in motion; and any Inspector shall be carried free of expense on any steamboat which he shall desire to inspect while under way, and during such period as may be necessary for such inspection, and for his return to the port at which he embarked on such steamboat for such purpose, or for his disembarkation at any port at which such steamboat touches on her voyage.

Certificate of inspection of hull and equipment. 16. If the Inspector who inspects any steamboat in the manner required by this Act, approves the hull and equipment of such steamboat, he shall sign a certificate according to the form A in the schedule of this Act, and triplicates of such certificate, signed by the Inspector of hulls and equipment shall be delivered by him to the Inspector of boilers and machinery for the same district, who, if he has then inspected and approved the boilers and machinery of the steamboat and has also satisfied himself that the certificate of the Inspector of hulls and equipment is true and correct as to the said equipment and as to the number of passengers the steamboat may lawfully carry, and as to all the particulars mentioned in the said form, and that the equipment is sufficient and in accordance with the requirements of this Act, shall sign the certificate in triplicate and deliver two of such triplicates to the owner or master of the steamboat,—who shall deliver one triplicate to the chief officer of Customs as aforesaid, and the other he shall cause to be posted up, framed and protected by glass, in some conspicuous part of the steamboat for the information of the

And of boilers.

To be signed by both inspectors.

public; and the Inspector of boilers and machinery shall retain the other triplicate for the purposes of this Act: Disposal of triplicate certificate.

2. Except that if the steamboat is one of which the boiler and machinery only is subject to inspection under this Act, the Inspector of boilers and machinery shall sign a certificate in the form B in the said schedule, in duplicate, and deliver the duplicates to the master or owner of the steamboat, who shall deliver one to the chief officer of Customs and cause the other to be posted up in some conspicuous part of the steamboat for the information of the public: Certificate of inspection of boilers and machinery only.

3 Any matter in dispute arising under this or any other sections of this Act, between an Inspector or the Board of Inspection and the master or owner of any steamboat, and also any dispute between an Inspector or the Board of Inspection and an engineer, may be referred by either party to the Minister of Marine and Fisheries, who shall finally decide the same: Decision of disputes in certain cases.

4. Each inspector shall keep a register of the inspections and certificates made and granted by him, in such form and with such particulars respecting them as the Inspection Board shall from time to time require, and shall furnish copies thereof to the Board when required. Register of inspections.

INSPECTION OF BOILERS AND MACHINERY.

17. Any Inspector may, whenever he deems it necessary so to do, and some one of them shall at least once in every year, subject the boiler of every steamboat to a test by hydrostatic pressure, and shall satisfy himself by examination and experimental trials, that such boiler is well made, of good and suitable material; the limit of such pressure shall not exceed one hundred and fifty pounds to the square inch in the case of a boiler made of iron plates, or one hundred and ninety pounds to the square inch in the case of a boiler made of steel plates; and the owner of the steamboat shall provide the necessary hand-pump and apparatus for such test, to be worked by the crew of the steamboat; and no Inspector shall make or deliver to the owner or master of any steamboat, any such certificate as is mentioned in the sixteenth section of this Act, without having first subjected the boiler of such steamboat to such test by hydrostatic pressure: Testing of boilers by hydrostatic pressure. Limit of test. Essential to obtaining certificate.

2. Before subjecting a boiler to a test by hydrostatic pressure, it shall be opened up for inspection, the man-hole doors and mud-plates removed, and the outside and inside of the boiler cleaned, the furnace grates removed and the furnace swept out clean, so that satisfactory and efficient inspection can be made: when bulkheads are so placed as to prevent a close examination of the plates of the boiler, they Proceedings before testing by hydrostatic pressure.

shall be removed. The owner or master of the steamboat shall see that these requirements are complied with before applying for inspection ;

Defects to be made good.

In any case in which the test is not satisfactory, the defects must be made good and the boiler re-tested satisfactorily, before a certificate shall be granted ; and—

Boiler to be lifted if necessary.

When the outside of the bottom of a boiler cannot be otherwise perfectly inspected, the boiler shall be lifted for inspection once at least in every four years ;

Maximum working pressure for new iron boilers.

3. In subjecting boilers made of iron plates to the hydrostatic test aforesaid, the Inspector shall assume one hundred pounds to the square inch as the maximum pressure allowable as a working power for a new boiler forty-two inches in diameter, made of the best refined iron, at least one-quarter of an inch thick, in the best manner and of the quality herein required,—and shall rate the working pressure of all iron boilers, whether of greater or less diameter, according to this standard ; and in all such cases the test applied shall exceed the working pressure allowed, in the ratio of one hundred and fifty pounds to one hundred, using the water in such tests at a temperature not exceeding sixty degrees Fahrenheit ;

Ratio of test to working pressure.

Maximum working pressure for new steel boilers.

4. In subjecting boilers made of steel to the hydrostatic test aforesaid, the Inspectors shall assume one hundred and twenty-five pounds as the maximum pressure allowable as a working power for a new boiler forty-two inches in diameter, made in the best manner, of the best quality of steel plates, at least one-quarter of an inch thick, with all the rivet holes drilled in place, the plates being then taken apart and the burrs removed, the longitudinal seams in the shell being fitted with double butt steel straps cut across the grain of the plate, and each of five-eighths the thickness of the plates they cover, and all the seams being at least double-riveted and having at least seventy per cent. of the strength of the solid plate, and all the flat surfaces stayed in the best manner and all the seams double-riveted,—and they shall rate the working pressure of all steel boilers so made, whether of greater or less diameter, according to this standard ; and in all such cases the test applied shall exceed the working pressure allowed for such boilers in the ratio of one hundred and ninety pounds to one hundred and twenty-five pounds, using the water in such tests at a temperature not exceeding sixty degrees Fahrenheit ;

Ratio of test to working pressure.

Working pressure allowed may be reduced.

5. But if the Inspector is of opinion that any boiler, whether made of iron or steel plates, by reason of its construction or material, will not safely allow so high a working pressure as that hereinbefore specified for each such description of boiler respectively, he may, for reasons to be stated

specifically in his certificate, fix the working pressure of such boiler at less than two-thirds of the test pressure :

6. And these rules shall be observed in all cases, unless the proportion between such boilers and the cylinders, or some other cause, renders it manifest that their application would be unjust, in which case the Inspector may depart from these rules if it can be done with safety ; but in no case shall the working pressure allowed exceed the proportion hereinbefore mentioned, as compared with the hydrostatic test :

Discretion allowed to Inspector as to working pressure.

7. The external working pressure to be allowed on circular furnaces and flues subjected to such pressure, when the longitudinal joints are welded or made within a butt strap, shall be determined by the following formula :—

Determination of external working pressure on flues. &c.

The product of 90,000 multiplied by the square of the thickness of the plate in inches,—divided by the length of the flue or furnace in feet plus 1, multiplied by the diameter in inches,—will be the allowable working pressure per square inch in pounds,—provided it does not exceed that found by the following formula,—

Formula.

The product of 8,000 multiplied by the thickness of the plate in inches, divided by the diameter of the furnace or flue in inches, will be the allowable working pressure per square inch in pounds,—

Formula.

The length of the furnace to be used in the first formula being the distance between the rings if the furnace is made with rings ; and that one of the two formulæ which gives the lowest pressure being the one by which the Inspector shall be guided :

Length, how understood.

8. On flat surfaces the allowable working pressure shall not exceed six thousand pounds to each effective square inch of sectional area of the stays supporting it. The pressure to be allowed on plates forming flat surfaces shall be that found by the following formula :—

Allowable pressure on flat surfaces

$$\frac{C \times (T+1)^2}{S-6} = \text{Working pressure in pounds per square inch, where—}$$

T—Thickness of plate in sixteenths of an inch ;

S—Surface supported in square inches ;

C—100 ; but when the plates are exposed to the impact of heat or flame, and steam only is in contact with the plates on the opposite side, **C** is to be reduced to 50 :

Interior condition of boiler to be ascertained.

9. In order to satisfy himself as to the strength and condition of a boiler, the Inspector may, if he deems it necessary, order holes to be cut in it, and may also demand that such information be furnished him as to the interior construction of the boiler as will enable him to judge correctly of its strength:

Use of drift pins forbidden.

10. In no case shall a certificate be granted for a boiler when drift pins have been used in bringing the holes in the sheets together:

Openings in shells of boilers.

11. Man-hole openings must be stiffened with compensating rings of at least the same effective sectional area as the plate cut out, and in no case shall such rings be of less thickness than the plates to which they are attached; all openings in the shells of cylindrical boilers shall have their short axes placed longitudinally:

Stays to crown sheet of boilers.

12. When bars or angle irons are used for sustaining the crown sheet of the furnace of a boiler, three-fifths of the working pressure allowable upon the crown sheet, shall be sustained by hanging stays from the shell of the boiler attached to the crown sheet:

Safety valves to donkey boilers.

13. Donkey boilers on steamboats shall be provided with two safety-valves, one of which may be locked up:

Reduction required in working pressure for single riveted shells.

14. Boilers in which the longitudinal seams in the cylindrical shell are single riveted, in place of double riveted, shall be subject to a reduction in the working pressure allowable for a boiler made in the best manner (as prescribed by sub-sections three and four of this section), and the limit of pressure in boilers so made shall not exceed eighty pounds to the square inch in place of one hundred pounds or one hundred and twenty-five pounds, as mentioned in sub-sections three and four of this section.

Mark or name of maker of plates to be stamped on them.

15. No boiler made and placed on board after the passing of this Act shall be made of boiler plate, whether iron or steel, which has not been stamped with the mark or name of the maker thereof; and no certificate shall be granted with respect to any boiler made wholly or in part of plate not so marked: and before a certificate shall be granted with respect to any boiler, a declaration on oath by the maker of the boiler, stating the name of the maker of the plates, their quality, and the quality of all materials used in the construction thereof, shall be furnished to the Inspector, which oath may be taken before any Justice of the Peace in Canada, or before a Notary Public, and certified under his official seal, if taken out of Canada: Provided always, that in any case where such declaration on oath by the maker of the boiler cannot be

Maker or quality of plates, sworn to.

Proviso: in case of decease of maker.

obtained owing to the death of the maker, or from other cause deemed sufficient by the Inspector, the affidavit of two practical boiler-makers who shall examine the boiler and report upon the quality of the materials in it and its workmanship and strength, shall, if satisfactory to the Inspector inspecting the boiler, be deemed sufficient in lieu of such declaration by the maker of the boiler :

2. During the construction of every boiler made in Canada, the maker of such boiler shall notify the Inspector of the district in which it is being made, that it is open to his inspection, and shall, at all times during such construction, allow the Inspector access to such boiler :

Inspector to be notified of construction of new boiler

3. No boiler or pipe shall be approved which is made in whole or in part of bad material, or is unsafe in its form, or dangerous from defective workmanship, age, use or any other cause.

Bad material or form not allowed.

SAFETY VALVES, STEAM GAUGES, ETC.

19. Every Inspector, when inspecting, visiting, or examining the boiler or machinery of any steamboat, shall satisfy himself that the safety-valves attached thereto are of suitable dimensions, sufficient in number, well managed and in good working order, and only loaded so as to open at or below the certified working pressure ; and he may, if he thinks proper, order and cause one or more of such safety-valves, which together shall be of sufficient dimensions to discharge all the steam the boiler can generate, and of such construction as he approves, to be locked up and taken wholly away from the control of the engineer when the steam is up ; but this provision does not imply that the engineer is not to have access to the safety-valves when the steam is not up, but on the contrary he shall see that they are kept in working order, and the master of the steamboat shall see that the engineer has access to them for that purpose, and keeps them in proper working order :

Examination of safety valves.

One or more to be taken from control of engineer when steam is up.

Proviso.

2. The boiler-cocks and valves attached to the boilers, shall be substantially made, and in no case shall they be attached to the boiler by screwing into the plate, unless, as an additional security, nuts and flanges be used in addition to such attachment :

Attachment of cocks and valves to boiler.

3. No valve, under any circumstances, shall at any time be so loaded, or so managed in any way, as to subject a boiler to a greater pressure than that allowed by the Inspector at the then last inspection thereof :

No valve to be overloaded.

4. The lock-up valves shall be of a construction, approved by the Board of Steamboat Inspection ; such valves to be tested and proved by an Inspector before use ;

Lock-up valves.

and no Inspector shall grant a certificate to any steamboat unless the boiler, or each boiler, if more than one, of such steamboat be provided with two safety-valves, one of which shall be locked up and one open :

Lift and openings of valves:—
lifting gear, &c.

5. Every safety-valve made or placed on board after the passing of this Act, or attached to a boiler made after that time, must have a lift equal to at least one-fourth of its diameter ; the openings for the passage of steam to and from the valve must each have an area not less than the area of the valve, as shall also the waste steam pipe, and the valve box must have a waste water pipe ; if the lever of a lever safety-valve is not bushed with brass the pin must be of brass,—iron and iron working together must not be allowed ; every such safety-valve must be fitted with lifting gear so that it can be worked by hand either from the engine-room or the fire-hold, or by the master or person in charge on deck ; every such safety-valve must be so attached to the boiler that the valve chest shall be as close to the boiler as possible.

Area of locked safety valves.

20. The area of any locked safety-valve or the joint areas of any locked safety-valves to any boiler made or placed on board after the passing of this Act, shall not be less than half a square inch for each square foot of grate surface in or under the boiler.

When engine is stopped safety-valve to be opened, and steam pressure reduced.

21. Whenever the engine of any steamboat is stopped for any purpose, the engineer, or the master or person in charge of such steamboat, shall open the safety-valve so as to keep the steam in the boiler down to ten pounds below the pressure limited by the Inspector's certificate if the engine be a high pressure engine, and to five pounds below the pressure limited as aforesaid if the engine be a low-pressure engine, under the penalty of two hundred dollars for every contravention of this provision.

Steam gauge to be exposed to view of passengers.

22. In a conspicuous and easily accessible place, in each steamboat, there shall be a steam gauge properly constructed and open to the view of all passengers and others on board such steamboat, and showing at all times the true pressure of the steam in the boiler thereof.

Penalty for concealing or tampering with gauge.

23. And if any master or engineer of any steamboat at any time allows the pressure of steam, to which the boiler of such steamboat is subjected, to exceed that limited by her certificate, or alters or conceals or otherwise deals with the said steam-gauge, so as to prevent the real pressure of steam from being seen and ascertained by any passenger, he shall thereby incur a penalty of two hundred dollars for every such offence.

24. The steam-gauge required by this Act to be open to the view of all passengers and others on board any steamboat, shall be that known as "The Bourdon Gauge," or shall be of such construction and shall be put in such place and position, as the Inspector inspecting, visiting or examining such steamboat shall, from time to time, direct.

Bourdon gauge to be used.

25. Each boiler of every steamboat shall be provided with a suitable water-gauge, capable of showing the water level within each boiler at all times: And all steamboats navigating in brackish or salt water, shall be provided with surface blow-off valves, such as are commonly used on board sea-going steamboats.

Water-gauge and surface blow off valves.

SAFETY BILGE INJECTION-PIPE.

26. Every steamboat carrying passengers and having a condensing engine, shall be provided with a bilge injection valve and pipe of suitable dimensions, leading from the floor frames of the steamboat into the condenser of the engine.

Bilge pipe with valve connecting with condenser.

BOATS AND LIFE PRESERVERS TO BE CARRIED BY STEAMERS.

27. No steamboat of the registered tonnage of one hundred tons or upwards shall depart by sea from any port or place within the Dominion of Canada, or depart from any port or place, on either of the Lakes Memphremagog, Ontario, Erie, Huron, Simcoe, or Superior, or on the River St. Lawrence, or on the River Ottawa, or St. John, or on any lake or river in Manitoba, British Columbia, or the North-West Territories, or the District of Keewatin, which is at any place on the route of such steamer more than one mile in width, with passengers, without having on board or attached to such steamboat, one good and sufficient life boat made of suitable metal, fire-proof, with air-tight metallic compartments at the ends and sides, (except as hereinafter provided) according to the directions of the Inspector, capable of sustaining, inside and outside, fifty persons, with life-lines attached to the gunwale at suitable distances, or having on board two good and sufficient life boats, with air-tight metallic compartments as aforesaid, each capable of sustaining inside and outside thirty persons, with life-lines attached to the gunwales at suitable distances, and in either case with sufficient oars and other suitable tackle:

Life-boats on sea-going or lake-going steamboats.

Description of boat and its appurtenances.

2. The life boat required to carry fifty persons may be considered of sufficient capacity if made of the following dimensions:—

Dimensions of life-boat for fifty persons.

Length of keel, twenty-two feet; breadth of beam from metal to metal, five feet six inches; depth from top of keel to top of gunwale at bottom of row-lock, two feet nine inches:

For thirty persons.

The life boat required to carry thirty persons may be considered of sufficient capacity if made of the following dimensions :—

Length of keel, eighteen feet ; breadth between metal and metal, five feet two inches ; depth from top of keel to top of gunwale, two feet two inches.

Inspector may direct as to build of life-boats carried.

28. Notwithstanding anything to the contrary contained in the immediately preceding section, the life boat or life boats on board of or attached to any steamboat on any of the voyages of such steamboat, may have air-tight metallic compartments at the sides only, or at the ends only, or shall have them at both ends and sides, according to the directions of the Inspector by whom such steamboat was last inspected.

Other boats to be carried.

29. No steamboat of any registered tonnage whatever shall depart by sea from any port or place in the Dominion of Canada, or depart from any port or place on any of the lakes or rivers mentioned or referred to in section twenty-seven, with passengers, without having on board or attached to such steamboat, a good, suitable and sufficient boat, or good, suitable and sufficient boats, in good condition and properly equipped,—every such boat to be provided with not less than six oars, and other necessary tackle, and to be of sufficient capacity to carry not less than twelve adult persons, exclusive of the crew of such boat, and to be of not less than seventeen feet length of keel ; and the number of such boats to be in the following proportion to the registered tonnage of such steamboat, that is to say :—

Number of for each vessel.

For every steamboat of less than fifty tons, one such boat ;

For every steamboat of fifty tons and upwards, but less than one hundred tons, not less than two such boats ;

For every steamboat of one hundred tons and upwards, but less than three hundred tons, not less than two such boats, in addition to the life boat above required ;

For every steamboat of three hundred tons and upwards, not less than three such boats, in addition to the life boat above required :

Provision as to care and management of boats and their protection.

All such boats shall be hung in separate davits, with lowering apparatus complete and ready for instant lowering : Provided, that in any case where any such steamboat carries two life boats one of the other boats may be carried on the hurricane deck

without davits. The boats shall be kept in good condition, water-tight and ready for immediate use, and masters of steamboats shall detail their crews and exercise them in lowering and handling the said boats at least once a month. When wood is used as fuel in the boilers of high-pressure steamboats, the covers for the said boats shall be made of wood covered with zinc. And every boat shall have the name of the steamboat to which it belongs and of her port of registry legibly painted on her bows and stern :

Name of steamer to be on her boats.

Provided, that no steamboat employed chiefly in the carriage of freight, when carrying not more than twenty-five passengers, shall be required to have on board or attached to such steamboat more than two boats in addition to a life boat.

Proviso: as to freight steamboats.

30. Provided, that the Minister of Marine and Fisheries may authorize the use in individual specified cases, of boats of different dimensions from those specified in sections twenty-seven, twenty-eight and twenty-nine of this Act ; and upon such authorization being granted, it shall be sufficient that boats of the dimensions specified in such authorization be provided and carried on the steamboat to which such authorization relates.

Minister of Marine may authorize special boats in special cases.

31. Every steamboat employed in the carriage of passengers which shall be used in the navigation of rivers, or inland navigation only, except as specified in sections twenty-seven and twenty-nine of this Act, shall carry not less than two good boats, provided with four oars each, and of sufficient capacity to carry not less than twelve persons with safety, besides the crew, except steamboats confined to the navigation of the River St. John, above Fredericton, the waters in the District of Muskoka, the County of Victoria and the County of Peterborough, in the Province of Ontario, and the waters of the Ottawa River, and its tributaries above the city of Ottawa, or of lakes or rivers not exceeding one mile in width at any place on the route of such steamboat, which shall carry one good boat of the size and provided as aforesaid ; and except also steamboats of less than fifty tons register which shall carry one good boat of the size and description, and provided in the manner approved of, in each case, by the Inspector : Provided always, that steamboats not exceeding one hundred and fifty tons register shall not be required to carry more than one good boat of the capacity above mentioned.

Boats to be carried by steamers employed in inland navigation carrying passengers.

Small steamboats under 50 tons.

Proviso.

32. Every steamboat to which the twenty-seventh and twenty-ninth sections of this Act apply, shall be provided with sufficient means for lowering from on board safely and

Boat lowering apparatus.

expeditiously each boat required by the said sections to be on board of or attached to such steamboat, on each occasion on which such boats are so required to be on board of or attached to the same :

Davits.

2. Three davits properly constructed and placed shall be considered sufficient for lowering two boats.

Freight steamboats ; boats to be carried by and equipment of.

33. Every steamboat not employed in the carriage of passengers, and every steamboat to which the twenty-seventh, twenty-eighth, twenty-ninth, thirty-first, thirty-fifth and thirty-eighth sections of this Act do not apply, shall at all times, when the crew thereof is on board, be provided with and have on board or attached to such steamboat in some convenient place a good, suitable and sufficient boat, or good, suitable and sufficient boats, in good condition and properly equipped, and provided with oars in sufficient number and other necessary tackle, and of sufficient capacity to carry all the crew of such steamboat, and with sufficient means for lowering such boat or boats from on board safely and expeditiously, and also a life-preserver for each one of the crew, and also a number, in due proportion to that of the crew, of good and sufficient fire buckets, of metal, leather or other suitable material, and axes and lanterns, to the satisfaction of the Inspector.

Life preservers, buckets, &c.

Ferry-boats and tug-boats.

34. Sections twenty-seven, twenty-eight, twenty-nine, thirty-one, thirty-five and thirty-eight shall not apply to ferry-boats or tug-boats plying elsewhere than on the River St. Lawrence.

Life preservers.

35. Every sea-going steamboat and every steamboat on any of the lakes or rivers specified in the twenty-seventh and twenty-ninth sections of this Act, or navigating any bay or bays or arm or arms of the sea in connection with the Dominion, employed in the carriage of passengers, shall be provided with and shall carry on board on every voyage life-preservers as follows, namely :— Each and every such steamboat of the registered tonnage of two hundred tons and upwards, shall be provided with two hundred life preservers ; and each and every such steamboat of the registered tonnage of less than two hundred tons shall be provided with not less than three life preservers for every five tons register ; and each steamboat carrying passengers on rivers or inland navigation, except on the lakes and rivers specified in section twenty-seven, of the registered tonnage of two hundred tons and upwards, shall be provided with not less than one hundred life preservers, and each such steamboat as last aforesaid, of less than two hundred tons register, with not less than fifty life preservers ; and all such life preservers shall be made of the size and material approved of by the Inspector, and shall be fitted with shoulder straps and fasten-

Number of.

Size and material of.

ings suitable for securing the same around the body, under the arms; and each such preserver shall have a buoyancy of sixteen pounds, and shall at all times be kept in some convenient and accessible places in the staterooms or on the deck of such steamboat, under cover and in readiness for the use of passengers; and no steamboat shall proceed to sea or on any voyage without being fully provided in compliance with the requirements of this section: **Provido:** always, that the maximum number of such life preservers required on any steamboat shall not exceed two hundred. But in any steamboat, as to which the boat capacity, and the number of life preservers, together fall short of the number of passengers she is allowed to carry by her certificate, such deficiency shall be supplied by a number of wooden floats, each equal in buoyancy to one cubic foot of seasoned white pine, equal to the number of passengers and crew not provided for in the boats or with life preservers. **maximum number of life preservers.** **Wooden floats for unprovided passengers.**

2. Provided always, that notwithstanding anything in the next preceding sub-section, no steamboat employed chiefly in the carriage of freight, when carrying not more than sixty passengers, shall be required to be provided with or carry on board on any voyage, more than one life-preserver for each passenger, and one life-preserver for each of the crew then on board of such steamboat. **Provido: as to freight boats.**

36. A cork jacket, with shoulder straps and waist lines for fastening the same around the body, shall be the form of life-preserver to be used on passenger steamboats. **Life-preservers to be cork jackets.**

37. Every steamboat registered in Canada, or to which this Act applies, shall carry at least one life buoy with a proper heaving line attached, in some convenient place where it can be easily got at for use in case of accident requiring it: **Life buoys.**

But the Governor in Council may, at any time, order and direct that the other provisions of this Act shall not, or shall not for any time specified in the order, in so far as such provisions extend to the carrying of boats and life-preservers, apply to any ferry-boat specially mentioned in such Order in Council, and the Governor in Council may order and direct that such other provisions as he may deem advisable with respect to the carrying of boats and life-preservers on such ferry boat, shall be applicable to and shall be enforced in respect of such ferry boat. **Provido: as to ferry boats.**

PRECAUTIONS AGAINST FIRE.

38. Except as hereinafter provided, every steamboat employed in the carriage of passengers, whether by sea, bay, **Fire buckets on passenger boats.**

lake or river navigation, of more than one hundred and fifty tons gross, shall be provided with and have on board, in some convenient place, not less than twenty-five sufficient fire buckets of metal or leather, five axes, and six good and sufficient lanterns approved of by the Inspector: Provided always, that passenger steamboats of more than seventy-five and less than one hundred and fifty tons gross shall not require to be provided with and have on board more than twelve fire buckets, and that passenger steamboats of seventy-five tons gross and under, and steam-tugs under one hundred and fifty tons gross, shall not be required to be provided with and have on board more than six fire buckets.

Proviso
limiting
number.

Further
precautions
against fire.

39. Suitable and safe provision shall be made throughout the steamboat to guard against danger from fire; and no combustible material liable to take fire from heated iron, or any other heat generated on board any steamboat in and about the boilers, pipes or machinery, shall be placed at less than six inches distant from such heated metal or other substance likely to cause ignition; and further, when wood is so exposed to ignition, it shall, as an additional preventive, be shielded by some incombustible material, in such manner as to allow the air to circulate freely between such material and the wood: and metallic vessels or safes shall be provided and kept in some convenient place to receive cotton-waste, hemp, and other inflammable substances, which are in use on board:

Proviso:
Inspector may
authorize
deviations
from usual
requirements.

2. Provided however, that when the structure of the steamboat is such, or the arrangement of the boiler or machinery is such, that the requirements aforesaid cannot, without serious inconvenience or sacrifice, be complied with, the Inspector may allow deviations from the said requirements, if in his judgment it can be done with safety:

Inflammable
matter.

3. But inflammable matter, when carried on any steamboat, shall invariably be stowed away as far as possible from the boiler, and from places where its ignition is possible:

Uncovered
lights not
allowed.

4. No fire nor any lighted lamp, candle or other artificial light by which fire may be communicated, shall be allowed in any stateroom of any passenger steamboat, nor in the steerage thereof unless in a locked and glazed lantern.

Force pumps
and hose.

40. Every steamboat carrying passengers shall have at least three double-acting forcing pumps, with chambers at least four inches in diameter, two to be worked by hand, and one by steam, if steam can be employed independent of and not worked by the main engine, otherwise, all three by hand,—one whereof shall be placed near the stern, one near the stem, and one amidships, each having a suitable well-fitted hose of

at least two-thirds the length of the steamboat, kept at all times in perfect order, clear of freight or other obstructions, with hose coupled and ready for immediate use; each pump and coupling shall be provided with a hose-wrench chained to the same, and each of the said pumps shall be supplied with water by a pipe connected therewith, and passing through the side of the steamboat, so low as to be at all times in the water when the boat is afloat :

Hose wrenches.

2 Provided, that in steamboats not exceeding two hundred tons gross (that is engine-room included) two of such pumps (one of which may be the steam-pump) may be dispensed with, and in steamboats of over two hundred tons, but not exceeding five hundred tons gross, one of such hand-pumps may be dispensed with; but in these cases the hose shall be of such length as to reach easily to every part of the steamboat; and in steamboats where only one pump is used, such pump shall be placed where directed by the Inspector :

Proviso: as to vessels not exceeding 200 tons.

3. And in cases where an iron tube or tubes equal in diameter to the hose carried by the steamboat, connected with a force-pump or pumps, and extending at least one-half of the length of the steamboat, is or are fixed under the hurricane deck thereof, and provided with nozzles placed at distances of not more than thirty feet from each other or from either end of the steamboat, to which nozzles the hose carried by the steamboat can be readily attached, it shall not be necessary that the hose should be of greater length than will be sufficient to reach from some one of such nozzles to either end of the steamboat. Each nozzle shall be provided with a stop valve or stop cock, so that one or more of such hose attachments may be used, as may be required :

If there are fixed iron tubes along deck with nozzles.

4. In steamboats under one hundred tons gross, one steam pump of suitable size, or if steam cannot be employed, one force-pump of suitable size worked by hand, shall be sufficient :

Vessels under 100 tons.

5. In steamboats not exceeding two hundred tons gross requiring only one pump, such pump shall be placed aft, unless the space forward is kept free to admit of ready access to the pump and hose, in which case the pump may be placed forward.

If only one pump, it is to be placed aft. Exception.

4H. Every steamboat of more than sixty tons, registered tonnage, carrying passengers, shall also be provided with a steam pony pump that may be used as a fire-engine, to be worked independently of the main engine; such steam pony-pump shall be placed on the main deck of the vessel, as near as possible to the engine room, convenient to the control of the engineer; and in all cases the pump hose shall be coupled to the pony and hand fire-pumps, ready for immediate use in case of fire.

Steam pony-pump.

Hose to be coupled.

Means of escape from lower to upper deck.

42. Every steamboat carrying passengers on the main or lower deck, shall be provided with sufficient means convenient to such passengers for their escape to the upper deck, in case of fire or other accident endangering life.

Printed notice to be posted up stating number of boats, pumps, buckets, &c. and with instructions as to fitting life-preservers, &c.

43. On board every steamboat carrying passengers there shall be placed in some conspicuous place, accessible to all the passengers, a copy of this Act, and in every cabin, stateroom and in other conspicuous places about the vessel, a printed paper to be provided and filled up by the owner or master of the steamboat, showing the number of boats, with their capacity, and also the number of fire-buckets, axes and life-preservers and floats on board of such steamboat, and the method of adjusting such life-preservers to the body, and a statement of the places where such buckets, axes and life-preservers are kept. The name of the steamboat shall be painted or stamped on all the boats, fire-buckets and floats, axes and life-preservers

Name of vessel painted on boats, &c.

Regulations as to carrying chemical fire extinguishers.

44. The Governor in Council may, from time to time, make, alter or repeal rules and regulations requiring steamboats to carry chemical or other fire extinguishers, and prescribing the number of such fire extinguishers to be carried by steamboats of different sizes and classes respectively; and such rules and regulations being published in the *Canada Gazette*, as required by this Act, shall, while in force, have effect and be enforced by the Inspectors and others as if made under this Act, and any contravention thereof shall be punishable as an offence against this Act.

ENGINEERS

Examination of engineers by the Board.

45. Any person claiming to be qualified to perform the duties of an engineer in steamboats, shall apply for a certificate to the Board of Inspection, who shall examine, or shall cause an Inspector or Inspectors to examine and report upon the applicant and the proofs that he produces in support of his claim; and any such examination may be upon oath, which any Inspector may administer; and if upon full consideration the Board of Inspection are satisfied that his character, habits of life, knowledge and experience in the duties of an engineer are all such as to authorize the belief that the applicant is a suitable and safe person to be entrusted with the powers and duties of such a station, the said Board of Inspection shall give him a certificate to that effect under the hand and seal of the Chairman, specifying the grade for which he has been found qualified; and the said certificate, except that of a first-class engineer, shall, subject to the above conditions, be renewed yearly, or oftener if applied for, and may be so renewed by the Chairman in the interim between the meetings of the Board; and for every such certificate the applicant shall pay the sum of five dollars,

May be on oath.

Certificate if found qualified.

Renewable yearly.

Exception.

Fees thereon.

and for every renewal five dollars, which shall be paid to the Receiver General, as part of the Consolidated Revenue Fund : Provided, that if the report of the Inspector or Inspectors certifying the fitness of an applicant, be made at a time when the Board of Inspection is not sitting, it may be sent by such Inspector or Inspectors to the Chairman or to the Deputy-Chairman of the Board, who may thereupon grant a certificate to the applicant to be in force only until the then next meeting of the Board ; and the fee paid by him shall not be returned if he does not then obtain a certificate from the Board, but if he obtains it he shall not pay any further fee therefor :

Provision if the Board of Inspectors is not sitting when an applicant is found qualified.

2. But the license of any such engineer may be revoked by the said Board upon proof of negligence, unskilfulness or drunkenness, or upon the finding of a coroner's inquest; and may also be revoked by the Board for any other cause, provided such other cause be deemed sufficient by the Minister of Marine and Fisheries, and certified as such by him :

Revocation of license for cause.

3. It shall not be lawful for any person to keep watch as engineer on any passenger steamboat or on any freight steamboat over one hundred and fifty tons gross, who does not hold a certificate either from the Board or from the Chairman as provided by this Act :

Passenger boats or freight boats over 150 tons must have certificated engineers.

4. It shall not be lawful for any person to act in the double capacity of engineer and master on any steamboat.

Engineer and master must not be same person.

46. Engineers shall be classified according to the following grades :—

Grades of engineers.

- 1st Class Engineers,
- 2nd Class Engineers,
- 3rd Class Engineers :

A first class engineer shall be qualified to take charge of any steamboat :

Qualifications of first class engineer.

2. A second-class engineer shall be qualified to take charge of any freight steamboat, or of any other steamboat, except a sea-going passenger steamboat of more than one hundred nominal horse power :

Second class.

3. A third class engineer shall be qualified to take charge of any passenger steamboat of less than thirty nominal horse power, or of any freight steamboat except a sea-going steamboat of more than one hundred nominal horse power :

Third class.

4. Persons who hold certificates as first-class assistant engineers, or limited certificates as competent to take charge of passenger steamboats for the year 1882, may, at any time

Certain existing certificates may be exchanged.

after the passing of this Act, exchange them for certificates as third-class engineers on payment of a fee of five dollars which shall be paid to the Receiver General as part of the Consolidated Revenue Fund.

Engineer on passenger boat or freight boat over 150 tons must be licensed.

Penalty for contravention.

Proviso: when vessel deprived of engineer.

47. It shall not be lawful for any person to employ another as engineer, or for any person to serve as engineer, on any passenger steamboat, or on any freight steamboat of over one hundred and fifty tons gross, unless the person serving or employed as engineer is licensed by the said Board, for the grade in which he is to be employed, except as herein provided; and any person so offending shall incur a penalty of one hundred dollars: Provided however, that if a steamboat leaves a port with a complement of engineers, and on her voyage is deprived of their services, or the services of any of them, without the consent, fault or collusion of the master, owner or any one interested in the steamboat, the deficiency may be temporarily supplied until others licensed can be obtained.

Rules for the guidance of Inspectors of Steamboats examining Engineers.

Qualification of third class engineer.

48. No person shall be qualified for a third-class engineer's certificate who is not over twenty-one years of age or who has not served an apprenticeship of not less than three years in a marine steam engine shop, and been employed on the making and repairing of such engines,—or, if he has not served such apprenticeship, he must prove that he has been employed for not less than three years as a journeyman mechanic in some workshop, on the making and repairing of such engines; in either case, he must also have served one calendar year in the engine room of a steamboat as engineer on the watch; or he must have served four years at least in the engine room of a steamboat as engineer on the watch: he must be able to give a description of boilers, the methods of staying them, and the requisite strength of their several parts, and must know the means of repairing them; he must know the method of lining the engine, setting the eccentrics and adjusting the slides or valves, and also the cause of any derangement and the means of remedying it; he must write a legible hand and understand the first five rules of arithmetic:

Qualifications of second class engineer.

2. A second-class engineer shall have the qualifications of a third-class engineer with not less than two years' experience as such in the engine room of steamboats of not less than thirty nominal horse-power, as engineer on the watch:

Qualification of first class engineer.

3. A first-class engineer shall have the qualifications of a second-class engineer, with not less than three

years' experience on one or more steamboats of not less than one hundred nominal horse-power: he must be competent to calculate the thickness of plates required for a boiler of given dimensions and construction to carry a fixed pressure of steam, and also the dimensions and construction of the boiler and thickness of plates being given, the pressure that it may be allowed to carry: he must be able to calculate the strength of its stays, connections, joints and other parts, and the tensile and crushing strength of the materials used in its construction: he must be able to calculate the required capacity of the feed-pump, the area of the safety-valve for a boiler of given dimensions, and the power of the engine from a diagram of its working, and to define the position of the crank and eccentrics as indicated by diagram: he must know the relative volumes of steam and water at different temperatures and pressures, the chemical constituents of coal, its heating and mechanical equivalents, and the quantity of air required for its combustion; he must be competent to make a working drawing of any part of an engine, and explain the operation of the engine or any of its parts in connection with the whole: he must be conversant with surface condensation and the working of steam expansively.

49. Any engineer who feels himself aggrieved by any order, or act of an Inspector may, within two weeks thereafter, appeal therefrom to the Board of Steamboat Inspection, or to the Chairman when the Board is not sitting, who shall submit the case to the Board at its next sitting; and the Board may confirm, modify or disallow such order or act; and any other person who feels himself aggrieved by any order or act of an Inspector, may, within two weeks thereafter, appeal therefrom to the Minister of Marine and Fisheries, who may confirm, modify or disallow such act or order.

Engineer aggrieved may appeal to Board or its chairman.

Any person may appeal to Minister of Marine when aggrieved by Inspector.

INSPECTION FEES.

50. The owner or master of every steamboat in the Dominion of Canada, shall pay, yearly and every year, a rate or duty fixed by the Governor in Council, and not exceeding ten cents for every ton gross which such steamboat measures; and the owner or master of every passenger steamboat exceeding one hundred tons gross, shall pay an inspection fee of eight dollars for each inspection made imperative by this Act; and the owner or master of any passenger steamboat of one hundred tons and less, or of any other steamboat, shall pay an inspection fee of five dollars for each inspection made imperative by this Act:

Inspection fees, scale of.

2. And for the purposes of this section every ton of the gross tonnage of a steamboat shall be reckoned and no

No deduction for machinery when calcu-

ating tons
for fees.

allowance or deduction shall be made for the space occupied by the engine room :

Fees to be
paid to chief
officer of
customs.

3. The amount of such rate or duty and inspection fee or fees, shall in each case be paid to and received by the chief officer of Customs, at some one of the ports in the Dominion of Canada, who shall account for and pay over the same to the Receiver-General for the Consolidated Revenue Fund, at such times and in such manner as the Governor in Council may, from time to time, direct.

Inspector's
certificate
not to be
granted
before fees
paid.

51. No Inspector shall make or deliver a certificate respecting any steamboat under this Act, unless the receipt of a chief officer of Customs for the rate or duty payable in respect of such steamboat for the then current year, has been produced and shown to him, nor unless he is satisfied, by careful examination, that all the conditions and requirements of this Act have been fulfilled and complied with, by and in respect of such steamboat ; and every Inspector shall report to some chief officer of Customs any case of omission to pay such rate or duty, or of omission to apply for such inspection as aforesaid, for more than one year from the date of the then last inspection, or of refusal to submit to inspection at any time, which in any way or at any time comes to his knowledge.

Inspectors to
report to
chief officer
of customs,
omissions to
pay duty, &c.

Certificate or
receipt may
be demanded
from owner
of vessel.

52. Each chief officer of Customs shall demand of the owner or master of every steamboat which he may have reason to think has not been inspected as required by this Act, or in respect of which he may have reason to think the rate or duty mentioned in section fifty of this Act is due and unpaid, the exhibition of the receipt and certificate in that behalf, appertaining to such steamboat ; and if such receipt and certificate as aforesaid, to his satisfaction, are not produced, then such Chief Officer shall seize and detain such steamboat until the same are produced and exhibited, and any penalty incurred and lawfully imposed in respect of such steamboat under the provisions of this Act, has been paid in full ; and in default of payment, such Chief Officer shall sell such steamboat for the payment of such rate or duty or penalties, in the usual manner, and shall deal with the proceeds as if the penalties were incurred for violation of the Customs laws.

Vessel may
be detained,
seized and
sold on failure
to pay
penalty.

Proceeds,
how dealt
with.

PASSENGERS.

Number of
cabin and
steerage
passengers
allowed to be
prescribed in
certificate.

53. The Inspectors shall, in their certificate, prescribe the number of cabin or steerage or other passengers, that may be carried by any steamboat inspected by them having regard to the dimensions or tonnage thereof, or both, or otherwise howsoever,—subject to appeal to the Minister of Marine and Fisheries, whose decision shall be final ; and if such decision

differs from that of the Inspectors, they shall alter their certificate accordingly.

54. Every Inspector may at any time visit, within the limits assigned to him, any steamboat, and inspect and examine the same, and if he considers such steamboat unsafe or unfit to carry passengers, he shall report thereon to the Minister of Marine and Fisheries, who may direct that such steamboat shall not be used or run until permitted by the Inspector, who shall have made such report, or by order of the said Minister; and any steamboat run or used in contravention of an order of the Minister shall be liable to forfeiture and to seizure by the chief officer of Customs at any port, and to sale, in the same way and under like provisions, as goods liable to forfeiture for non-payment of duties.

Inspector may visit any steamer and may report to Minister that she is unfit for passengers.

Penalty for running contrary to order of Minister.

55. The master or owner of any steamboat in which a greater number of passengers than that allowed by her certificate is at any time carried shall be guilty of an offence against this Act and shall, for each such offence, incur a penalty not exceeding five hundred dollars and not less than fifty dollars, to be recovered and appropriated in the manner provided by section sixty-six of this Act.

Penalty for carrying more passengers than allowed by certificate.

56. The master or person in charge for the time being of any steamboat who shall wilfully or negligently at any time allow to be carried on board such steamboat, a greater number of passengers than that permitted by her certificate, shall be guilty of a misdemeanor; and upon conviction thereof shall be imprisoned for two years in a penitentiary, or for a less term in any other prison or place of confinement, or shall be subject to a fine not exceeding five hundred dollars, or shall suffer both fine and imprisonment within the above defined limits, as the court may order.

Punishment of master allowing more passengers to be carried than allowed by certificate.

57. No tug-boat shall be employed to tow any barge, or any boat, bateau, scow or undecked vessel having passengers on board, unless such vessel has been inspected by an Inspector of hulls and equipment, and by him certified as provided in the Schedule C, hereunto annexed, to be fit and properly equipped to carry passengers on the waters on which she is so towed; and no such vessel shall, while so towed, have on board a greater number of passengers than she is certified as being fit to carry safely; and for any contravention of this provision, the master and the owner of the tug-boat, and the owner and person in charge of such barge, boat, bateau, scow or vessel carrying such passengers, shall each incur a penalty not exceeding two hundred dollars and not less than twenty dollars, to be recovered and appropriated in the manner provided in section sixty-six aforesaid.

Barge, scow, &c., used to carry passengers when being towed must be certified as fit.

Penalty for contravention.

MASTS AND SAILS—AND GANG-BOARDS.

Regulations
as to carrying
masts and
sails.

58. It shall be lawful for the Minister of Marine and Fisheries, from time to time, by regulations to be made, repealed or altered by him from time to time, and to come into force as provided by the eighth section of this Act, with respect to regulations made by the Board of Inspection, to require that all or any description of steamboats above sixty tons registered tonnage, carrying passengers on the sea coasts of the Dominion or on all or any of the waters of the Dominion, with the exception of that portion of the St. Lawrence between Quebec and Kingston, and of the river connecting Lakes Erie and Huron, and of the waters between Kingston and the head of the Bay of Quinté, and the rivers in the Provinces of Nova Scotia and New Brunswick, and the tributary rivers flowing into the River St. Lawrence, or the lakes west of Quebec, and of any rivers or lakes not exceeding one mile in width on any part thereof on the route of such steamboats, respectively, shall, at all or any seasons of the year, be provided with a mast or masts, and sail or sails, suitable for such steamboats, and to prescribe the dimensions of such mast or masts, and sail or sails respectively.

Gang-boards.

59. Every steamboat or vessel carrying passengers shall be provided with good and sufficient gang-boards, protected at the sides in a suitable manner against danger to passengers from falling overboard; and the master of such steamboat or vessel shall, on stopping at any wharf or landing place, cause a gangboard to be firmly secured to the vessel for the safe and convenient transit of passengers; and he shall cause to be affixed to such gangway (in the night time) good and sufficient lights.

Lights to be
affixed at
night.

Lights on
wharves.

60. The owner or occupier of every such wharf or landing-place, shall also (in the night time) cause to be shown conspicuously, on such wharf or landing-place, and at every angle or turn thereof, during the whole of the time that any steamboat or vessel is approaching the same or stopping thereat, a good and sufficient light.

Definition
of night.

61. For the purposes of the two next preceding sections of this Act, the night shall be deemed to extend from one hour after sunset till one hour before sunrise, at all seasons of the year.

Penalty for
infringement
of sections
59, or 60.

62. Any person commanding or having charge of any steamboat, schooner or other vessel, navigating the waters of Canada, and any owner or occupier of a wharf or landing place, who offends against the fifty-ninth or sixtieth section of this Act, shall be liable to a penalty of twenty dollars and costs, and in default of payment to imprisonment for

a period of not more than twenty days, unless such penalty and costs are sooner paid.

63. The owner or owners of any steamboat or other vessel, or the owner or occupier of any wharf or landing place, the person commanding or in charge of which neglects to comply with the provisions of the fifty-ninth or sixtieth section of this Act, shall be liable for all damages sustained by any person or persons from any accident arising from non-compliance with the provisions of this Act, or during such time as the provisions of this Act are not complied with—such damages to be recoverable at law, before any of Her Majesty's superior courts of common law in the Province in which such accident happens.

Liability for damages arising from non-compliance with sections 59 or 60.

MISCELLANEOUS PROVISIONS.

64. If any damage to any person or property is sustained in consequence of the non-observance of any of the provisions of this Act, imposing any duty on the owner or master of any steamboat, the owner shall, in all civil proceedings, and the master or other person having charge thereof shall, in all proceedings, whether civil or criminal, be subject to the legal consequences of such default:

Owner or master of vessel liable for wilful default for non-observance of this Act.

And any inspector wilfully, or through any culpable negligence of duty, making or confirming any false statement in any certificate under this Act shall thereby incur a penalty of two hundred dollars.

Penalty for Inspector giving false certificate.

65. Except when otherwise specially provided, for every contravention in respect of any steamboat in the Dominion of Canada, on any one voyage or trip thereof, of any provision in this Act, or in any Order in Council made under it, the owner or master thereof shall incur a penalty of not more than two hundred and not less than twenty dollars; and any Inspector of steamboats is hereby empowered to detain any steamboat on board or in respect of which the provisions of this Act have not been fully complied with, or of which the boilers or machinery or the hull, by reason of any injury or other cause, have, in his opinion, become unsafe; and in case any such Inspector gives notice in writing to any chief officer of Customs that any of the provisions of this Act have not been fully complied with in respect to any steamboat, such chief officer of Customs shall not grant any clearance, coasting licence or other document for such steamboat, unless nor until he receives the certificate in writing of such Inspector, to the effect that such provisions have been fully complied with in respect to such steamboat.

Penalty in non-provided cases under this Act.

Inspector may detain the vessel.

Clearance to be withheld in case of non-compliance with provisions of this Act.

66. All penalties incurred under this Act may, when other provision is not made in the case, be recovered with

Recovery of penalties

by summary proceedings.

costs in a summary manner under the Act thirty-second and thirty-third Victoria, chapter thirty-one, in the name of Her Majesty, by any Inspector or by any party aggrieved by any act, neglect, or omission, on the evidence of one credible witness, who may be the prosecuting Inspector himself, before any Judge of a County Court, Judge of the Sessions of the Peace, Stipendiary or Police Magistrate, or two Justices of the Peace; and in default of immediate payment of such penalty, such magistrate or justices may commit the offender to gaol for any period not exceeding three months, unless such penalty be sooner paid; and one moiety of all penalties recovered under this Act shall be paid to the Receiver-General, and shall be by him placed to the credit of the Consolidated Revenue Fund, and the other moiety shall belong to the informer unless he is the prosecuting Inspector,—in which case the whole shall be paid to the Receiver-General for the said Fund.

Imprisonment in default of payment.

Application of proceeds of penalties.

Investigation into causes of accidents involving loss of life.

67. The Governor may, whenever he thinks fit, order an investigation to be made by any person or persons to be appointed for that purpose, into the cause of any accident involving loss of life on any steamboat, and the person or persons so appointed may summon witnesses and compel their attendance before him or them by the same process as courts of law, and may administer oaths and examine witnesses touching the cause of such accident, and report thereon to the Governor.

Yearly report of Board to Minister of Marine.

68. The Chairman of the Board of Steamboat Inspection shall, at the end of each calendar year, furnish the Minister of Marine and Fisheries with a report of the proceedings of the Board, and a return of all steamboats inspected, and of all penalties collected under the provisions of this Act:

Monthly returns by Inspectors.

2. And each Inspector shall make monthly returns to the Chairman of the said Board of all steamboats inspected by him, their tonnage and power, with general descriptions of their machinery and hulls, and a statement of the fees collected upon the same.

When Act shall come into force.

69. The foregoing provisions of this Act shall come into force and take effect on, from and after the first day of September in the present year, one thousand eight hundred and eighty-two; except that any appointment or arrangement for carrying out this Act may be made before the said day to take effect on and after it.

SCHEDULE A.

Certificate for a steamboat to carry passengers, or a freight steamboat of or over 150 tons gross.

Having examined the hull and equipment of the steamboat (*name*) of _____ whereof _____ is (or are) owners, and _____ is master, on this _____ day of _____ A.D. 18 _____ .

The particulars of her gross and register tonnage, as shewn on her certificate of registry, being as follows:—

	Tons
Tonnage under tonnage deck.....	
Houses on deck (<i>naming them</i>)	
Total gross tonnage.....	
Deduct for engine room	
Register tonnage.....	

I, (*Inspector's name*) Inspector of hulls and equipment, do hereby certify that her hull is in all respects staunch, seaworthy and in good condition for navigation, that the equipment of the vessel throughout is in conformity with the requirements of "*The Steamboat Inspection Act, 1882,*" the said steamboat having on board, properly placed and in good order for immediate service:—

(*Number*) boats having a carrying capacity for _____ persons; _____ life boats having (together) a carrying capacity for _____ persons; _____ life preservers; _____ wooden floats; _____ fire buckets; _____ axes; _____ lanterns; _____ chemical fire extinguishers, and one life buoy having a proper heaving line attached: And I declare it to be my deliberate conviction, founded on the inspection I have made, that the said steamboat, as regards her hull and equipment, may be employed on the waters hereinafter specified, without peril to life from any imperfections of or in materials, workmanship or arrangement of the several parts, or from age or use.

And I, (*Inspector's name*) Inspector of boilers and machinery, do hereby certify that the engine, boiler and machinery of the said steamboat are sufficient and suitable to authorize her being lawfully employed in the carriage of passengers, (*or as a freight boat, or as a ferry boat, as the case may be,*) without hazard to life on the route on which she is to be placed as hereinafter mentioned; that the engine of the said steamboat is of _____ nominal horse power, and that her boiler can carry with safety _____ pounds of steam pressure per square inch, and no more:—

And we further certify that the said steamboat is permitted to run on the waters between (*here insert the places between which the steamboat is to be employed in running, and the season or period of time during which she may be so employed, and for which the certificate is granted*) and that she is adapted and fit to carry (*here insert the number*) passengers and no more, (*as the case may be.*)

Date (*of time
and place.*)

A. B., Inspector of hulls
and equipment.

C.D., Inspector of boilers
and machinery.

SCHEDULE B.

Certificate for a freight boat under 150 tons gross, or a tug boat, fishing boat, or pleasure yacht, steam dredge, or elevator, or like vessel.

Having examined the boiler and machinery of the steamboat (*name, or as the case may be*) of _____ whereof _____ is owner (*or are owners*) and _____ is master, on this day of _____ A.D. 18 _____.

The particulars of her gross and register tonnage, as shewn on her certificate of registry, being as follows:—

	Tons.
Tonnage under tonnage deck.....	
Houses on deck (<i>naming them</i>).....	
Total gross tonnage.....	
Deduct for engine room.....	
Register tonnage.....	

(*If not registered omit this statement of tonnage.*)

I, (*Inspector's name*) Inspector of boilers and machinery, do hereby certify that her engine, boiler and machinery are sufficient for a freight boat under 150 tons (*or as the case may be*) and may be so used without hazard to life; that the engine of the said (*steamboat*) is of _____ nominal horsepower and that the boiler of the said (*steamboat*) can carry with safety _____ pounds (*here insert number of pounds*) per square inch of steam pressure, and no more:—and that she is provided with one life buoy, having a proper heaving line attached and so placed as to be ready for immediate use when required.

Date (*time and place.*)

C. D., Inspector of boilers
and machinery.

SCHEDULE C.

*Certificate for a barge, boat, bateau or scow, to carry passengers
in tow of a tug steamboat.*

I, (*Inspector's name*) Inspector of hulls and equipment, having examined the barge, boat, bateau or scow, (*as the case may be*), of which is owner and is master (*or the person in charge*) on this A.D. 18 , do hereby certify that the said vessel is fit, safe and properly equipped in all respects to carry passengers in tow of a tug boat, on the waters (*here describe the locality on which she is to be employed*) and that she is provided with one life buoy having a proper heaving line attached, and so placed as to be ready for immediate use.

Date (*time and place.*)

A. B. Inspector of hulls
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PREPARED BY R. J. WICKSTEED, BARRISTER.

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