GENERAL STATUTES

OF

MINNESOTA

1913

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number where disease shall be found, the number of colonies treated, cured and destroyed, an itemized expense account of his deputies, and such other information as he may deem important to the state and of value to the art of apiculture. This report shall be printed by the state printer and copies thereof sent by the state inspector of apiaries to the members of the Minnesota bee-keepers' association and to all in the state who may apply for it. He shall also keep a record of all apiaries and the location thereof in which contagious or infectious disease shall be found within the last year of his office and turn the same over to his successor. ('11 c. 311 § 13)

4736. Oath and bond—The state inspector of apiaries shall take the usual oath of office and give bonds in the sum of two thousand dollars for the faithful discharge of his duties. ('11 c. 311 § 14)

CHAPTER 31

INSPECTION OF STEAM VESSELS AND BOILERS

- 4737. Inspectors—Appointment—In the month of January in every oddnumbered year the governor shall appoint a board of inspectors, consisting of
 one resident of each senatorial district, except that where there is more than
 one senatorial district in any county there shall be but one inspector in such
 county. Such inspectors shall inspect all steam boilers in use in the state,
 not subject to inspection under the laws of the United States and not hereinafter excepted, and examine and grant certificates of license to steam engineers intrusted with the management of steam boilers, except those in heating plants in private, residences. They shall examine and license all masters
 and pilots on inland waters of the state, as nearly as may be according to the
 regulations provided by the laws of the United States. Each shall hold office
 for the term of two years, commencing February 1, unless sooner removed
 by the governor. Annually on or before January 31 each shall render a report to the secretary of state, containing a detailed statement of the number
 of inspections made and licenses issued, the amount of fees received therefor,
 and the amount of disbursements of their offices. The secretary of state
 shall include in his biennial report a summary of such report. (2168)
- 4738. Who eligible—Every boiler inspector shall be a man of good moral character, and qualified by experience in the construction of steam boilers, and shall have had at least ten years' actual experience in operating steam engines and boilers. He shall not be directly or indirectly interested in the manufacture or sale of boilers or steam machinery, or in any patented article required or generally used in the construction of engines or boilers. (2169) 77–355, 79+1038.
- 4739. Deputy inspectors—Each boiler inspector may appoint one or more deputies, who shall possess the same qualifications and have the same authority as are prescribed for inspectors in § 4738. Each such deputy, before entering upon the duties of his office, shall take and subscribe the oath required by law, and file the same with the secretary of state. (2170)
- 4740. Meetings—Rules—Violations—In February of each year said inspectors shall meet as a board, at the capitol in St. Paul, and establish regulations for the inspection of vessels and boilers, and for the performance of their other duties. They shall prescribe regulations for the inspection of the hulls, machinery, boilers, steam connections, fire apparatus, life-saving appliances, and equipments of all vessels propelled in whole or in part by steam and navigating the inland waters of the state, which shall conform as near as may be to the requirements of the United States in similar cases, and when approved by the governor such regulations shall have the force of law. They shall designate the number of passengers that each steam vessel may safely carry, and no such vessel shall carry a greater number than is allowed by the inspector's certificate. Any owner, master, or other person violating any regulation prescribed by said board shall be guilty of a misdemeanor. (2171)

- 4741. Neglect to secure inspection—Every owner, lessee, or other person having charge of steam boilers, or any boat propelled in whole or in part by steam, not subject to inspection under the laws of the United States, shall cause the same to be inspected at least once each year by the boiler inspector; and every such owner, lessee, or person in charge who shall raise steam or operate such boilers and machinery without such inspection shall be guilty of a misdemeanor. (2172)
- 4742. Inspection by request—Certificate—Posting—On the written application of its owner, lessee, or manager, the inspector shall inspect the hull, boiler, machinery, and equipments of each vessel and boiler subject to inspection under this chapter, once at least in each year, and shall satisfy himself that every such vessel is of a structure suitable for the service in which it is to be employed, has suitable accommodations for passengers and crew, and is in proper condition to be used in navigation with safety to life, and that life-preservers, floats, pumps, hose, anchors, and other things necessary to insure safety have been provided. When the inspection has been completed and the inspector approves the vessel and its equipments throughout, he shall make, subscribe, and file with the secretary of state a verified certificate of the facts found, and deliver a copy thereof to the owner or master, who shall post it in a conspicuous place on such vessel. He may collect a fee of ten dollars for inspection of each vessel of fifty tons burden or over, and five dollars for each of a less tonnage. (2173)
- 4743. Examination of master and pilot—License—Said inspector shall examine all masters and pilots of such steam vessels as to their qualifications and fitness, and, if found trustworthy and competent to perform the duties of master or pilot, he shall issue a certificate authorizing them to act as such on such inland waters of the state as are designated therein. He shall also make such regulations for the navigation of any such vessel as will permit the same without danger to life or property. He shall revoke the license of any master, pilot, or engineer found under the influence of intoxicating liquor when on duty, or otherwise disregarding any prescribed regulation. He may collect a fee of one dollar for the examination of, and issuing a license to, a master or pilot, and one dollar for the biennial renewal of the same. Every owner, lessee, or pilot violating any provision of this section or § 4742 shall be guilty of a gross misdemeanor, and punished by imprisonment in the county jail for not more than sixty days, or by fine of not less than one hundred dollars nor more than two hundred dollars, or by both. (2174)
- 4744. Inspection—Such inspectors shall inspect all steam boilers and steam generators before the same shall be used, and all such boilers at least once each year thereafter. They shall subject all boilers to hydrostatic pressure or hammer test, and ascertain by a thorough internal and external examination that they are well made and of good and suitable material; that the openings for the passage of water and steam respectively, and all pipes and tubes exposed to heat, are of proper dimensions and free from obstructions; that the flues are circular in form; that the arrangements for delivering the feed water are such that the boilers cannot be injured thereby; and that such boilers and their steam connections may be safely used without danger to life or property. They shall also ascertain that the safety valves are of suitable dimensions, sufficient in number, and properly arranged, and that the safety valve weights are so adjusted as to allow no greater pressure in the boilers than the amount prescribed by the inspector's certificate; that there is a sufficient number of gauge cocks, properly inserted, to indicate the amount of water, and suitable gauges that will correctly record the pressure of steam; and that the fusible metals are properly inserted so as to fuse by the heat of the furnace whenever the water in the boiler falls below its prescribed limit; and that provisions are made for an ample supply of water to feed the boilers at all times, so that in high-pressure boilers the water shall not be less than three inches above the top of the fire surface; and that means for blowing out are provided, so as to thoroughly remove the mud and sediment from all parts when under pressure of steam. (2175)
- 4745. Tests—In subjecting high-pressure boilers to the hydrostatic test, the inspector shall assume one hundred and twenty-five pounds to the square

inch as the maximum working pressure allowable for new boilers forty-two inches in diameter, double riveted, and made in the best manner, of plates one-fourth of an inch thick and of good material; but he shall rate the working power of all high-pressure boilers according to their strength compared with this standard, and in all cases the test applied shall exceed the working power allowed in the ratio of one hundred and sixty-five to one hundred and ten. In subjecting low-pressure boilers to hydrostatic tests, he shall allow as a working power for each new boiler a pressure of only three-fourths the number of pounds to which it has been so subjected. If any inspector is of opinion that any boiler will not safely allow so high a working pressure, he may, for reason specially stated in his certificate, fix the pressure at less than the test pressure. No boiler or steam pipe, nor any of the connections therewith, which are made wholly or partly of bad material, or of cast iron, or which are unsafe from any cause, shall be approved. But this shall not be construed to prevent the use of any boiler or steam generator not constructed of riveted iron or steel plates, when the inspector is satisfied by evidence that such boiler or generator is equal in strength to, and as safe from explosion as, boilers of the best quality, constructed of riveted steel or iron plates.

- 4746. Imperfect construction—Every person who shall construct a boiler or steam pipe of iron or steel plates known to be faulty or imperfect, or shall drift any rivet hole to make it come fair, or who shall deliver any such boiler for use, knowing it to be imperfect in its flues, flanging, riveting, bracing, or in any other of its parts, shall be guilty of a gross misdemeanor, and punished by a fine of two hundred dollars, one-half of which shall be paid to the in-(2177)former.
- Special examination—In addition to the annual inspection, the inspectors at any time, when in their opinion such examination shall be necessary, shall examine all boilers which have become unsafe, and notify the owners or operators of any defect, and what repairs are necessary; and such a boiler shall not thereafter be used until so repaired. Every person operating any such boiler who fails to comply with the inspector's requirements shall be guilty of a misdemeanor, and also liable for damages to persons or property resulting therefrom. (2178)
- Fusible plug—Every steam boiler shall be provided with a fusible plug, of good banca tin, inserted in the flues, crown sheet, or other parts of the boiler most exposed to the heat of the furnace when the water falls below the prescribed limits. (2179)
- 4749. Duties of owners and engineers—Every owner or manager of a steam boiler shall allow inspectors full access to the same, and every engineer operating the same shall assist the inspector in his examination and point out any known defect in the boilers or machinery in his charge. No person shall be intrusted with the operation of any steam boiler or steam machinery who has not received a license so to act, which license shall be renewed biennially. Every person who shall violate any provision of this section shall be guilty of a misdemeanor, and punished by a fine of not less than ten dollars nor more than fifty dollars. (2180)

See note under following section.

4750. Classification and qualifications of engineers—Engineers shall be divided into four classes: (1) Chief engineers; (2) first-class engineers; (3) second-class engineers; (4) special engineers.

- To entitle them to licenses they shall be qualified as follows:

 1. A chief engineer shall be at least twenty-one years of age, be of such habits and have had such experience as to justify the belief that he is competent to take charge of all classes of steam boilers and steam machinery, and before receiving a license he shall take and subscribe an oath that he has had at least five years' actual experience in operating such boilers and machinery.
- 2. A first-class engineer shall be at least twenty-one years of age, be of such habits and have had such experience as to justify the belief that he is competent to take charge of all classes of steam boilers and steam machinery.

of not more than three hundred horse power. Before receiving a license he shall take and subscribe an oath that he has had at least three years' actual

experience in operating such boilers and machinery.

3. A second-class engineer shall be at least twenty-one years of age, be of such habits and have had such experience as to justify the belief that he is competent to take charge of all classes of steam boilers and steam machinery of not more than one hundred horse power. Before receiving a license he shall take and subscribe an oath that he has had at least one year of actual experience in operating such boilers and machinery.

experience in operating such boilers and machinery.

4. A special engineer, upon examination, shall be sufficiently acquainted with the duties of an engineer as to justify the belief that he can be safely intrusted with steam boilers and steam machinery of not more than thirty

horse power. (2181)

The provisions with reference to classification, qualification, and licensing are not self-contradictory and unconstitutional (103-331, 115+167, 123 Am. St. Rep. 332).

- 4751. License—Revoked, when—Whenever complaint shall be made by any person against an engineer holding a license that, through negligence, want of skill, inattention to duty, or violation of any provision of this chapter, he has permitted his boiler to burn or otherwise become in bad condition, the inspector who granted his license, upon satisfactory proof of such negligence, shall revoke the same. Any engineer aggrieved by such revocation may appeal to the board of inspectors, whose decision in the case shall be final. (2182)
- 4752. False certificate—In making the inspection of boilers, machinery, or steam vessels, the inspectors may act jointly or separately, but shall in all cases verify the certificate of inspection. Every inspector who shall wilfully certify falsely regarding any steam boiler or its attachments, or the hull and equipments of any steam vessel, or who shall grant a license to any person to act as engineer, master, or pilot contrary to the provisions of this chapter, shall be guilty of a felony, and be punished by a fine of not less than fifty dollars nor more than five hundred dollars, or by imprisonment in the state prison for not more than one year, or by both. In addition to such punishment, he shall forthwith be removed from office. (2183)
- 4753. Certificate of inspection—Posting—Fees—After examination and tests, if the inspector shall find any steam boiler or generator safe and suitable for use, he shall deliver to the secretary of state a verified certificate, in such form as the board of inspectors shall prescribe, containing a specification of the tests applied and the working power allowed, a copy of which the inspector shall furnish to the owner of the boiler or generator, who shall post and keep the same in a conspicuous place on or near such boiler or generator. The inspector shall be entitled to a fee of three dollars for the inspection of each single boiler and its steam connections, and two dollars for each additional boiler when connected and inspected at the same time, payable on delivery of the certificate. The fee for an engineer's license, and for each biennial renewal, shall be one dollar, which shall accompany the application. (2184)
- 4754. Disposal of fees—All fees collected by inspectors under this chapter shall be retained by them as full compensation for their services, and be divided among them as determined at the annual meeting of the board of inspectors. (2185)
- 4755. Exemptions—The provisions of this chapter shall not apply to railroad locomotives, to locomotive engineers employed by railroad companies, or to boilers insured by insurance companies and certified by their authorized inspectors to be safe. (2186)

Exemptions do not render law unconstitutional (65-453, 68+77). Steam plants in dwellings and business blocks (94-207, 102+452).