

(No. 27.)



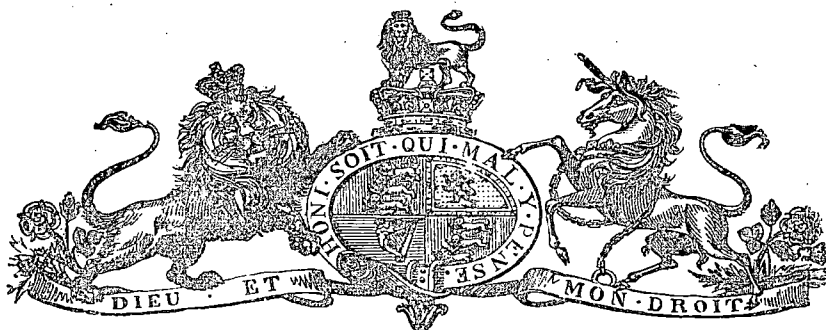
1888.

PARLIAMENT OF TASMANIA.

INSPECTOR OF MACHINERY:

REPORT FOR 1887.

Presented to both Houses of Parliament by His Excellency's Command.



Office of Inspector of Machinery, Hobart, 23rd February, 1888.

SIR,

I HAVE the honor to submit for the information of the Government the following Report for the year ending 31st January, 1888:—

Working of the Machinery Act.

This Act has now been in force three years, and where applied the results have proved generally beneficial and satisfactory.

I would suggest the following amendments:—

Certificates of Inspection.

A Clause making it compulsory for owners, agents, and users of machinery and steam boilers to be in possession of a Certificate of Inspection, or in default to be liable to a fine under "Police Regulations."

Safety Valves.

A Clause similar to the provisions contained in the Board of Trade Regulations respecting marine boilers (see last Report); also making it compulsory that all steam boilers should have, in addition to the usual valves, cocks and fittings, a test-cock for trying the water, and a cock for the Inspector's test-gauge.

Yachts and Small Steamers.

A Clause to the effect that the hulls, boilers, and machinery of every ferry-boat or other small craft propelled by steam shall be inspected, and fees charged.

Collection of Fees.

Some other method of collecting fees than that at present adopted would effect a great saving of the Inspector's and Assistant's time now taken up by the performance of this duty. This would require an alteration in the 36th Section of the Act, Part IV.

Examination for Drivers of Locomotive, Portable, and Stationary Engines.

It is the expressed desire of many steam users and machinery owners, where human life is at stake, (as in the working of steam boilers), that those who are in charge,—viz. engine-drivers and stokers,—should be compelled to pass an examination of competency to undertake such a position, without entailing hardship on anyone. This would secure a more intelligent class of men, and would add much to public safety. I would strongly recommend the insertion of a Clause to this effect.

A system of Government registration and granting Certificates of competency would be attended with beneficial results to those in charge as well as to the owners of machinery and the public generally, as it would give them some kind of recognised status. The granting of Certificates to this class of men has been tried with marked success in America, France, Germany, and some of the neighbouring Colonies.

Technical Schools being now established, will be a great inducement to these men to embrace the advantages thus offered, thereby leading the way in a practical manner to obtaining a highly trained class of engineers, engine-drivers, and keepers. To meet all requirements three classes of Certificates would be granted according to qualifications--viz., 1st., 2nd, and 3rd Class Certificates--and the issue of such Certificates should be provided for in the Act.

A Clause much required in both the Machinery and Marine Board Acts.

It shall be the duty of an engineer or engine-driver when he assumes charge of the machinery and boilers of any steam vessel to forthwith thoroughly examine the same; and if he finds any part thereof in bad condition, caused by neglect or inattention on the part of his predecessor, he shall immediately report the facts to the Inspector of Machinery, who shall thereupon investigate the matter; and if the former engineer or engine-driver has been guilty of culpable negligence, the Inspector of Machinery shall suspend his Certificate and report the same to the Honorable the Chief Secretary.

Construction of Boilers.

A Clause in the Machinery Act making it compulsory that all boilers hereafter constructed shall have a plate or plates of sufficient size affixed to the boiler, having stamped thereon the tensile strength of boiler plate, the name of maker, and the place and date of construction.

Violation of the Act.

There has been only one case brought under notice; viz., the owner of a small steamer having engaged an engineer not possessing the requisite qualifications in accordance with the above-named Act.

Overloading Safety Valves.

There have been three cases brought under notice, but these were all immediately remedied on notice being given of the highly dangerous nature of such a proceeding.

Examination of Engineers in Steam Marine Engineering.

The passing of the Bill to amend "The Merchant Ships Officers Examination Act, 1878," and the appointment of an Examiner in Steam to the Board, is much appreciated by all sea-going Engineers and others.

Three candidates have passed successfully, and many others signify their intention to present themselves for examination.

Examination for Drivers of Marine Engines.

The Hobart Marine Board have passed a By-law relative thereto. See Part VII., *Gazette*, January 17th, 1888.

Mining Machinery.

Many mining managers, engineers, and others interested in mining machinery have expressed themselves in favour of the annual machinery inspection being undertaken by this Department.

Fees received.

All fees received by the Department, viz., £224, have been paid into the Commercial Bank, Hobart and Launceston, to the credit of the Hon. the Treasurer (Inland Revenue).

Assistant Inspector.

This appointment has given entire satisfaction, many inspections having been made that were formerly omitted, and fees amounting to £137 have been received and duly paid into the Commercial Bank, Launceston.

Books and Instruments.

An additional supply of books and instruments will be required for the year 1888-9 for the efficient management of the Department, and specially for those connected with the examination in steam marine engineering.

RETURN of Inspections, &c. made during the Year ending 31st January, 1888.

<i>Description of Information.</i>	<i>Office.</i>	<i>No.</i>	<i>Total.</i>
Machinery having boilers connected therewith, portable	Hobart	29	36
	Launceston	7	
" " stationary	Hobart	12	53
	Launceston	41	
Boilers not having machinery connected therewith	Hobart	3	5
	Launceston	2	
Machinery worked by gas	Hobart	...	2
	Launceston	2	
" water-power	Hobart	4	6
	Launceston	2	
Marine steam engines and boilers	Hobart	76	92
	Launceston	16	
Iron hulls and equipments	Hobart	4	4
	Launceston	...	
Accidents ending fatally	Hobart	...	
	Launceston	...	
" of slight nature	Hobart	2	2
	Launceston	...	
Proprietors of machinery instructed to securely fence off.....	Hobart	4	6
	Launceston	2	
Steam boilers found defective	Hobart	4	6
	Launceston	2	
" condemned.....	Hobart	2	4
	Launceston	2	
Gauges tested and found defective.....	Hobart	6	12
	Launceston	6	
Steam vessels under inspection	Hobart	20	32
	Launceston	12	
Establishments using steam and other machinery remaining uninspected throughout the Colony, approximately	200
Amount of fees paid for inspections above (marine excepted)	£	s. d.	280
" unpaid due to Inland Revenue (as per Machinery Act)	224	0 0	
Total amount of fees paid on all inspections (marine excepted)	£249	0 0	
" paid by Inspector into Commercial Banks, Hobart and Launceston, to the credit of the Hon. the Treasurer (Inland Revenue)	224	0 0	

SYNOPSIS of other Duties performed, in obedience to Instructions received from the Hon. the Chief Secretary.

Engineer and Iron Shipwright Surveyor to the Hobart Marine Board.
Various consultations by the Lands and Works Department *re* Dredger, &c.
Various duties as Consulting Mechanical Engineer for the Defence Department.
Various duties for the Government Printing Office.
Examiner in Steam to the Board of Examiners under "The Merchant Ships Officers Examination Act."
Examiner of Marine Engine Drivers for the Hobart Marine Board.
Supervising the construction of Machinery s.s. *Tarinna*.
Assisting Mr. Batchelor (Locomotive Superintendent Tasmanian Government Railways) inspecting and reporting upon Tasmanian Main Line Railway Plant.
Inspecting Target Castings.
Inspecting and reporting upon Steam Machinery under offer to the Government.
Examining plans and specifications of Machinery Patents, and reporting upon same, for the information of the Hon. the Attorney-General.

Remarks.

Re Establishments throughout the Colony remaining uninspected.—In all probability there are many boilers, &c. still at work, which, if examined by competent Inspectors, would be found defective in what experience has proved to be necessary for safety. I am fully aware it is the wish and instructions of the Government that the duties of the Department shall be carried out with the strictest regard to economy combined with efficiency; but as the clerical and other duties have been and are greatly increasing, I would respectfully suggest that further assistance may be granted. It is not necessary that the assistant should be a certificated engineer, but one who would be competent to assist in the clerical work and the inland inspections. One well qualified for these duties could be obtained at a very moderate salary. Such an appointment I estimate would increase the returns from £300 to £400 per annum.

I have the honor to be,

Sir,

Your obedient Servant,

JOHN CLARK,

Government Inspector of Machinery.

The Hon. the Chief Secretary.