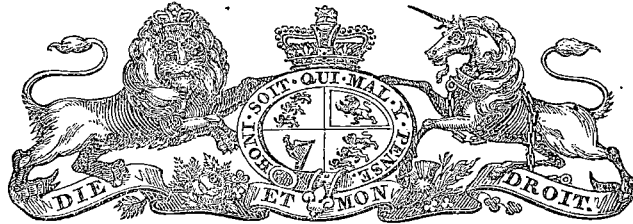


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1886.

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PARLIAMENT OF TASMANIA.

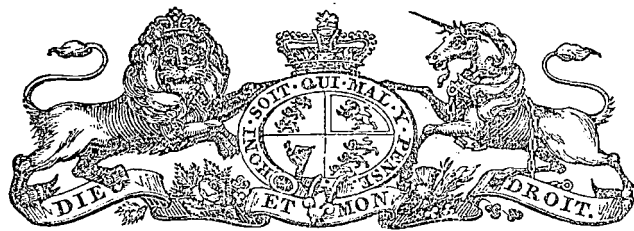
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INSPECTOR OF MACHINERY :

REPORT FOR 1885.

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



## REPORT OF INSPECTOR OF MACHINERY.

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Hobart, 31st March, 1886.

SIR,

I HAVE the honour to submit for the information of the Government the following Report for the year ending 31st March, 1886:—

### *Working of "The Machinery Act."*

So far the Act may be fairly considered to have worked well, affording decidedly beneficial results. Machinery and boilers are kept in better order, are more safely fenced or guarded off for prevention of accidents, and general confidence with regard to these matters is better established.

Three seagoing steamships have undergone their annual overhaul in Tasmania, and these vessels obtained their half-yearly certificates.

Formerly these certificates would not have been recognised in the other Colonies; but as a result of the passing of "The Inspection of Machinery Act, 1884," (48 Victoria, No. 18), by which certificates issued in Tasmania are held as valid in the other Australasian Colonies, there has been an expenditure of some hundreds of pounds in the Colony instead of elsewhere, and the fees for the certificates now bring in revenue to the Marine Board. Encouraged by the promise thus afforded of future extended operations, a Hobart firm of engineers and shipbuilders increased their plant, which originally cost £20,000, by a further outlay of £3000. This proof that an impetus has been given to trade will, without doubt, be further developed when the Act has been longer in operation. The Act has generally been very favourably received by well-informed practical men, owners of machinery, and users of steam. The only objectors (four) were of that class for whom some of the provisions of the Act were specially intended.

### *Instruments for Inspector's use.*

These have arrived from England, and are in accordance with the instructions sent for their supply. They will prove a great acquisition to the Department in testing the accuracy and efficiency of steam gauges, propellers, salinometers, boiler furnaces, flues, and the calorific power of fuels. These matters have hitherto been more or less guesswork, and accuracy of results were consequently unreliable.

### *Safety Valves.*

A clause in Machinery Act is required (similar to provision by Board of Trade for marine boilers) to ensure immunity from over-pressure upon "portable" and "stationary" steam boilers, viz., by the use of two safety valves, one of which is under the control of the attendant, and the other a locked-up spring-loaded valve of approved design, to which the attendant should not have access. This, I am of opinion, should be made compulsory at every establishment, mine, factory, or threshing plant where steam is used.

### *Examination of Candidates in Steam Marine Engineering.*

The only provision for this is a Marine Board By-law, which applies only to "Engine-drivers for steam ferry and river boats," which appears to be insufficient, as it includes no fixed standard of previous service or services, for which the candidates must produce testimonials to accord with the custom of other colonial ports.

### *Examination of Candidates for Sea Service.*

There being no legally appointed "Examiner in Steam" here, the Act relating to the Examination of Candidates for Sea Service become with regard to engineers a dead letter, in consequence of which candidates desirous to present themselves for examination were compelled to leave their vessels in order to pass the same in some other colonial port, a course involving considerable inconvenience and expense, the individual cost amounting in some instances to twenty pounds (£20). Much disappointment has been expressed by intending candidates in consequence thereof.

Appended is a Return of Inspections of Machinery made during the year ending 31st March, 1886, and Fees paid, together with a Summary of the same.

I have the honour to be,

Sir,

Your most obedient Servant,

JOHN CLARK, *Inspector of Machinery, Tasmania.*

*The Hon. the Chief Secretary, Hobart.*

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RETURN for Year ending 31st March, 1886.

Division.	Index.	Number.	Description of Inspections made and Fees paid.	Nature of Motor.			No. and Class of Boilers (Steam).		Marine.		Fees.		
				Gas.	Steam.	Water-wheel.	Portable.	Stationary.	Boilers.	Hulls and Equipment.	Unpaid.	Paid.	TOTAL.
<i>Town and Suburbs.</i>													
A	A	1	Agricultural Implement Factory .....	...	1	...	1	...	...	...	£ s. d.	£ s. d.	£ s. d.
"	B	6	Butcheries, Machinery of .....	4	2	...	...	2	...	...	...	...	...
"	"	2	Bakeries, ditto .....	1	1	...	...	1	...	...	...	...	...
"	"	5	Breweries, ditto .....	...	4	1	1	3	...	...	...	...	...
"	"	2	Bark Mills, ditto.....	...	2	...	1	1	...	...	...	...	...
"	"	1	Brick-making, ditto .....	...	1	...	...	1	...	...	...	...	...
"	"	1	Box-board cutting, ditto .....	...	1	...	1	...	...	...	...	...	...
"	C	2	Confectionery, ditto.....	...	2	...	...	2	...	...	...	...	...
"	"	1	Coach Factory, ditto .....	...	1	...	...	1	...	...	...	...	...
"	"	3	Chaff-cutting, ditto.....	2	1	...	...	1	...	...	...	...	...
"	F	5	Flour Mills, ditto.....	...	4	1	...	4	...	...	...	...	...
"	"	3	Foundries, ditto .....	...	3	...	1	2	...	...	...	...	...
"	"	7	Firewood-cutting, ditto .....	...	7	...	3	4	...	...	...	...	...
"	G	1	Gas Factory, ditto .....	1	...	...	...	...	...	...	...	...	...
"	J	4	Jam ditto, ditto .....	...	4	...	...	4	...	...	...	...	...
"	"	3	Joinery Machinery .....	...	3	...	...	3	...	...	...	...	...
"	M	5	Machinist's Workshop ditto .....	1	4	...	...	4	...	...	...	...	...
"	P	3	Printing Office ditto .....	3	2	...	...	2	...	...	...	...	...
"	S	4	Ships (Patent) for Ships, ditto .....	...	4	...	...	4	...	...	...	...	...
"	"	6	Saw-mills, ditto .....	...	6	...	2	4	...	...	...	...	...
"	"	3	Sodawater Factory, ditto .....	1	2	1	...	2	...	...	...	...	...
"	"	2	Spice Grinding, Machinery of .....	...	2	...	...	2	...	...	...	...	...
"	"	1	Soap Works, ditto .....	...	1	...	...	1	...	...	...	...	...
"	T	5	Tanneries, ditto .....	...	5	...	2	3	...	...	...	...	...
"	W	2	Wood Turners, ditto .....	...	2	...	...	2	...	...	...	...	...
"	"	3	Wool and Bale Pressing, ditto .....	...	3	...	1	2	...	...	...	...	...
"	"	1	Woollen Factory, ditto .....	...	1	...	...	1	...	...	...	...	...
<i>Marine.</i>													
B	a	9	Steamers—River .....	...	...	...	...	10	...	...	...	...	...
"	b	6	Ferry.....	...	...	...	...	6	...	...	...	...	...
"	c	2	Local (Sea) Coasting .....	...	...	...	...	2	...	...	...	...	...
"	d	3	Intercolonial (Ocean).....	...	...	...	...	8	...	...	...	...	...
C			Hulls and Equipments (Surveys).....	...	...	...	...	5	...	...	...	...	...
D			FEES—Division A, Received (paid) .....	...	...	...	...	...	...	...	177 0 0	...	...
"			"    "    Unpaid (due) .....	...	...	...	...	...	...	20 0 0	...	...	...
"			"    "    B, Received (paid) .....	...	...	...	...	...	...	...	44 0 0	...	...
"			"    "    Unpaid (due to Inland Revenue as per Machinery Act.....	...	...	...	...	...	...	30 0 0	...	...	...
"			"    "    Surveys of Hulls and Equipments.....	...	...	...	...	...	...	16 0 0	...	...	287 0 0
				13	69	3	13	56	26	5	£66 0 0	£221 0 0	£287 0 0

## ANY OTHER INFORMATION.

Division.	Number.	
E	...	Accidents from coming into contact with Machinery :—
"	8	Injuries received, slight.
"	1	Injuries received ending fatally ; name, Henry Atkins. Foot crushed by crank of steam engine at Risdon Bone Mills, 14th Oct., 1885. Remarks.— Two accidents in this mill in the same month ; date of first accident, 1st October, 1885 (trivial). Mill visited by Inspector immediately after accidents. No blame attaches to owners of mill ; all provisions of the Act with regard to safety guards, fencing off, &c. being complied with. Official inspection of this mill (otherwise) not yet made.
F	7	Proprietors instructed to fence off their machinery in accordance with the Act. Complied with.
G	2	Steam boilers found defective ; order to repair obeyed. Passed satisfactorily on inspection.
H	7	Steam gauges, ditto, ditto.
I	4	Complaints made against Act (M.I. Act, 1884). Character of complaints—objection to pay fees. Act complied with by complainants after legal notice was served upon them.
J	3	Establishments remain uninspected in Hobart. These will be inspected this month, after which the Inspector will be prepared to inspect in the country districts as the Hon. the Chief Secretary may direct.
K	...	SYNOPSIS OF OTHER DUTIES performed in obedience to instructions received from the Hon. the Chief Secretary and not hitherto reported—(for duties performed but not herein included, <i>vide</i> "Half-yearly Report of Inspector of Machinery, September, 1885") :—
"	<i>a</i>	Acting as Engineer Surveyor to Marine Board.
"	<i>b</i>	Acting Engineer Caretaker of Torpedo Boat, No. 191.
"	<i>c</i>	Special survey and detailed report made and furnished of the s.s. <i>Wakefield</i> when under offer to the Government and Marine Board for purchase.
"	<i>d</i>	Acting as Engineer Surveyor of Iron Steam Hopper Grab Dredge.
"	<i>e</i>	Various duties connected with Batteries.
"	<i>f</i>	" " Coal Hulks.
"	<i>g</i>	" " Printing Offices.

## REMARKS.

*Re FEES.**(a') Payment of Fees and Collection of same.*

Considerable loss of time (Inspector's) occurs from want of promptness on owners' part in payment of fees.

*(b') Collection by Marine Board.*

From November, 1885, fees for Marine Machinery, &c. Inspection, and Surveys of Iron Hulls and Equipments have been collected by the Marine Board, an arrangement by which the Inspector of Machinery is much assisted, a considerable saving of his time being thereby effected. The amounts £20 and £16, shown in the column of "Fees unpaid," are so placed as they are in the hands of the Marine Board for collection.

*(c') Where Fees received are lodged.*

All fees received by the Inspector to date have been paid into the Commercial Bank, Hobart, to the credit of the Hon. the Treasurer (£221 sterling).

*(d') Collection of Fees.*

The Inspector respectfully suggests that, in order to avoid the existing great waste of his time collecting fees, the same be collected in similar manner to Inland Revenue.

NOTE.—The Inspector desires to call attention to apparent clashing of Marine Board Act and Inspection of Machinery Act with regard to "Inspection fees."

*Re NOTICE FROM OWNERS.**(A) Notice to Inspector.*

The Inspector, believing that there are many owners who have not complied with the Act by forwarding notice (to the Inspector) of their machinery and its location, recommends the issue of an advertisement in the local papers calling their attention to the clause of Machinery Act, 1884, with reference thereto.

*Re TESTING AND OTHER INSTRUMENTS FOR INSPECTOR'S USE.**(A) Instruments received.*

One pair Steam Engine Indicators received from Messrs. Elliot Bros., London.

*(B) Invoice.*

Invoice of other instruments and books, as ordered from Stanley's, London, received by Government Stores Department. Goods daily expected by s.s. *Port Jackson*.

JOHN CLARK, *Inspector of Machinery, Tasmania.*

30th March, 1886.

## SUMMARY OF FOREGOING RETURN.

<i>Division.</i>	<i>Description of Information.</i>	<i>Locality.</i>	<i>No.</i>
A	Number of Stationary Steam Engines inspected .....	Hobart	56
"	" Portable ditto .....	"	13
"	" Gas Engines ditto .....	"	13
"	" Water Wheels ditto.....	"	2
B	" Steam Marine ditto .....	Hobart, Port of	32
C	" Hulls and Equipments ditto .....	"	5
"	Total number of Boilers included ditto .....	Hobart	95
"	" Inspections made.....	"	115
J	Number of Establishments using Steam uninspected .....	"	3
"	" Inspections made elsewhere .....	"	0
E	" Accidents ending fatally.....	Risdon Bone Mills	1
"	" " of slight nature .....	Hobart	8
"	Total number of Accidents.....	"	9
F	Number of Notices issued to "comply with Act" .....	Hobart	7
"	" Owners who have not complied .....	"	0
G	" Defective Boilers repaired by order .....	"	2
H	" " Steam Gauges ditto .....	"	7
I	" " Complaints made against Act .....	"	4
...	Character of complaints—Objection to pay Fees .....	"	
K	Other services rendered by Inspector of various character and importance (vide Division K) .....	"	
		£ s. d.	
*D	Amount of Fees received for Inspections (ashore).....	177 0 0	
"	" " " (afloat) .....	44 0 0	
"	" " unreceived " (ashore).....	20 0 0	
"	" " " (afloat) .....	46 0 0	
"	Total amount of Fees on all Inspections .....	£287 0 0	
"	Amount of Fees paid by Inspector into the Commercial Bank, Hobart, to the credit of the Hon. the Treasurer .....	£221 0 0	

\* NOTE.—From date of Annual Report, 20th March to 31st March, the date on which year ends, the sum of £13 was paid out of item "unreceived fees (ashore)," and placed to the credit of the Hon. the Treasurer, making the total sum paid into Bank to 31st March, 1886 (inclusive), amount to £234, and leaving £7 as amount unpaid on that item.