

Defects in Boilers and Fittings.—Four hundred and twenty defects in boilers and their fittings were discovered, of which forty-eight were dangerous. Some of these might have caused a serious accident, involving loss of life and property.

New Boilers.—There were 402 new boilers started during the year, representing a total horsepower of 5,877; of these 127 were made in the colony and 275 were imported, including the following classes: Portable, semi-portable, traction, locomotive, Cornish, Cornish tubular, vertical cross-tube, vertical tubular, multitubular, Lancashire tubular, water tubular, and marine.

Lifts and Water-driven Machinery.—There were 135 hydraulic lifts, twenty-eight lifts driven by gas, steam, electricity, &c., eight gas and hydraulic hoists and motors, 169 water-driven machinery, 238 gas engines, and twenty-four oil engines inspected during the year. In sixteen instances new ropes were ordered for lifts, two new chains, and in twenty-one cases the chains were ordered to be annealed. With reference to the water-driven machinery, gas- and oil-engines, 135 notices were given to fence and guard machinery.

Prosecutions.—A number of prosecutions has taken place during the year, which includes owners for working steam-boilers without having the proper certificate, and engine-drivers for driving and taking charge of an engine and boiler without having the proper certificate. In connection with the boiler-inspection fees, a month is given to the owner within which to take up his certificate, and an inducement is offered to him in the form of a rebate if taken up within the month, so that he not only saves money by prompt payment, but also avoids the chance of prosecution later on.

Postal and Police Authorities.—This department is greatly indebted to the postal and police authorities for the very valuable assistance rendered by the former in promptly returning schedules of fees, showing whether owners had paid or not, thus enabling us to deal at once with defaulters; and to the latter for their work, more especially connected with the non-lifting of boiler certificates, and prosecutions arising therefrom, and of persons driving engines or in charge of boilers without holding the proper certificates. In connection with the latter, I would call attention to the penalty incurred by all those who drive engines or have charge of boilers for which certificates are necessary, without holding certificates, and to the owners of such engines or boilers who employ non-certificated drivers for engines or boilers requiring certificated men to be in charge. By clause 12 of "The Inspection of Machinery Act Amendment Act, 1900," any person who, after the 1st January, 1901, acts in the capacity of engine-driver of any steam stationary engine the cylinders of which exceed 144 circular inches, or of a steam-boiler over 15-horse power, without a proper certificate, and every person who employs an uncertificated driver, are liable to a penalty not exceeding £5 for every day or part of a day during which such uncertificated driver so acts.

Accidents in Connection with Machinery.—I regret to have to report some accidents (fatal and non-fatal) to persons employed about machinery, a detailed account of which is given in returns numbered 6 and 7 attached.

Districts and Inspectors.—Several changes have taken place with regard to districts and Inspectors during the year. Mr. Jobson, who had for the long period of twenty-six years been an Inspector in the Auckland District, retired from the service on the 15th January, 1901. During all this long term of public service he bore an excellent character for impartiality, fairness, and courtesy, combined with firmness. No faulty boiler inspection or defective steamer survey can be laid to his account, and during my term as Chief Inspector I can bear testimony to the correctness of his returns and to that carefulness in detail which characterized his work all through. Altogether his loss to the department has been a great one. His place has been filled by Mr. S. Dalrymple. Mr. A. McVicar has been transferred from the Wellington District and permanently appointed to the Canterbury District. Mr. A. Morrison retired from the service in Otago, and was succeeded by Mr. A. W. Bethune, lately of the Canterbury District. Mr. A. Walker was appointed an additional Inspector in the Otago District, and Mr. A. Calvert was appointed to the Wellington District, to fill the place of Mr. McVicar. Altogether three new appointments were made, two to fill vacancies caused by Inspectors retiring from the service, and the third as an addition to the staff.

Returns.—Appended are the returns in detail, numbered from 1 to 16. (1.) Number and class of boilers inspected and fees payable on these, the machinery inspected and the fees payable thereon, and the classes and numbers of engine-drivers' certificates issued and the fees payable therefor. (2.) The different classes of work for which the boilers and machinery are used, showing the motive-power also used. (With reference to this return it should be stated that where there are more boilers than one used in the same class of work at the same works the total number of boilers is returned as one; thus, the large meat companies have, say, six boilers and six digesters boiling down—they are returned as one class only, and in the same way with other works). (3.) Return of defects found on inspection of boilers. (4.) Return of notices given to repair boilers. (5.) Return of notices given to fence dangerous parts of machinery. (6.) Return of accidents which were not fatal. (7.) Return of accident which was fatal. (8.), (9.), (10.), (11.), (12.), (13.), (14.), (15), and (16.) Names of all persons to whom certificates of service and competency have been granted during the year.

I have, &c.,

The Secretary, Marine Department, Wellington.

ROBERT DUNCAN,
Chief Inspector of Machinery.

No. 1.

(a.) RETURN showing NUMBER of LAND BOILERS and MACHINERY INSPECTED for which CERTIFICATES are ISSUED, for the Financial Year ended 31st March, 1901.

Boilers—

Stationary—Five-horse power and under, 890; 10-horse power and over 5-horse power, 490 over 10-horse power, 1,004; digesters, 200: total, 2,584.