

## APPENDIX F

### REPORT OF THE CHIEF INSPECTOR OF MACHINERY.

The CHIEF INSPECTOR OF MACHINERY to the UNDER-SECRETARY for PUBLIC WORKS.

SIR,—

Office of Chief Inspector of Machinery, 31st May, 1895.

I have the honour to submit my third annual report on the working of "The Inspection of Machinery Act, 1882," during the financial year ended 31st March, 1895.

The number of boilers inspected, and for which certificates were issued during the year, was 2,750, being eighty-four less than in the previous year. Ninety-three boilers were found on inspection to be in a dangerous state, and 452 more or less defective.

During the year 159 new boilers have been put to work, seventy-eight of which were imported and eighty-one made in the colony, this being twenty-four less imported and two more colonial-made than in the previous year. On the 31st March there still remained about seventy boilers uninspected.

The total nominal horse-power of boilers inspected during the year amounts to the respectable sum of 31,332.

There have been 2,896 inspections of machinery and 164 inspections of digesters also made during the year. The inspections in connection with lifts and machinery are now practically up to date.

It is pleasing to report that no explosions to boilers, or accidents to life or limb in connection with boilers, have occurred during the year. This is a satisfactory and convincing proof of the advantage and safety afforded by compulsory inspection of boilers as carried out in New Zealand.

When comparing the number of explosions and persons killed in some of the sister colonies, where a similar number of boilers are employed as in New Zealand, I find they have on an average one explosion to every 315 boilers in use, and one person killed to every 350 boilers in use annually. Our results, when compared with these, stand out very favourably, and show what a thorough and compulsory system of inspection can achieve. In Great Britain, for the year ended June, 1894, the number of explosions was 104, causing the death of twenty-four persons, and injuring fifty-four others.

I regret having to report fourteen accidents to persons in connection with machinery during the year, a decrease of one in comparison with last year. Two accidents terminated fatally (against six last year), and in twelve cases the injuries were more or less serious. Both the fatal cases were purely accidental, and at the inquests verdicts of accidental death were returned in each case, no blame being attributable to any one.

Three accidents were caused by manipulating and tampering with belts while machinery was in motion. The Inspectors, when inspecting factories, &c., where machinery is used, are always drawing the attention of those in charge of machinery to the danger involved in attempting to manipulate belts while machinery is in motion, but where carelessness and want of thought exist such accidents will occur.

The other accidents are of the usual class, not being preventible by inspection or protection, they having occurred through neglect, carelessness, indifference, or were the result of pure accident.

It will be observed that the number of boilers found on inspection to be dangerous, and also those that are more or less defective, are increasing every year, owing to boilers in the colony becoming older. This entails more rigid and careful inspection, and extensive repairs. This repair-work, as well as new work under construction and surprise visits to factories, occupies a considerable portion of the Inspectors' time, and, although unremunerative, is a very important part of their duties, requiring the closest supervision.

It is satisfactory to report that the system of issuing all certificates from head office continues to work smoothly. The fees are paid more regularly and with less inconvenience than formerly. On the 31st March the outstanding fees were at the lowest possible limit. In a few cases where default in payment has been made I have found it necessary to ask the assistance of the Police Department, and I have to acknowledge the ready assistance and co-operation of that department, which has always had the desired effect.

There is a small decrease in the number of boilers at work during the year, principally due to the almost total suspension of the flax-milling industry and, with the present low price ruling for hemp, I do not see any immediate prospect of improvement in this trade.

The dairying industry has made further developments, and called into requisition a considerable number of steam plants during the year, and, although at present the price obtainable for dairy produce is not encouraging, I have great hopes of this industry's future extension, and of dairy produce becoming one of our principal exports.

The first step towards having all land engines and boilers in charge of competent and certificated drivers has been attained, the Legislature during last session having amended the Inspection of Machinery Act so as to require all drivers of locomotives and traction-engines to hold certificates. This, in my opinion, is a movement in the right direction, as it will afford greater safety to employes and more economy in working to the steam user. This will not be accomplished all at once, for there are a considerable number of drivers at present who will be entitled to certificates of service.