

### LEGISLATION REGARDING STEAM BOILERS.

The Bill now before the Ontario Legislature for the inspection of steam boilers seems to be a very comprehensive measure.

The provisions of the Act are to apply to all steam boilers used for the purpose of supplying power for mechanical or manufacturing purposes, but do not apply to railway locomotives or steam-hat boilers, nor to boilers used merely for heating buildings. Portable and traction engine boilers and pulp boilers are included under the Act. A number of skilled persons, being practical engineers, are to be appointed inspectors, whose duty it shall be to inspect and test all boilers, and certify as to the steam pressure at which they may be safely worked.

The Act prescribes certain restrictions as to the manufacture of steam boilers, and provides for efficient safety-valves, steam-pressure gauges, low-water detectors, &c., being connected to every boiler. Every boiler is also to have attached to it, in a conspicuous place, a removable metallic plate, bearing the maker's name, date of manufacture, and safe steam pressure.

Every new boiler, before leaving the maker's premises, must be tested by water pressure in the presence of an official, who shall examine the boiler and certify to the safe steam-pressure.

This latter clause is likely to be objected to by the makers of portable engines, on the ground that it would unduly impede them in their business to have to wait the convenience of a government official every time a boiler was completed, and surely in such cases, where a great number of boilers are being made of precisely the same design and of the same materials, some arrangement might be made which would meet all reasonable requirements for the public safety, and at same time not hamper the maker in pushing on his work.

If the makers were to submit plans and specifications of the boilers for approval of the chief inspector, and agree to subject every boiler as made to the required hydrostatic test, and keep a register of the same; and also have their establishments open for visits of the inspectors at all times, the necessary amount of supervision could be obtained, and full liberty left for as much "push" as any manufacturer could desire.

The Act further provides for inspection of the boilers while in use, and for a hydrostatic test, at intervals of five years.

Any inspector finding a boiler in dangerous or unsatisfactory condition, has power to stop its use, or limit the pressure, until the needed repairs have been made—but provision is made for appeal against any such decision to the chief inspector. In case of an explosion resulting in the death of any person, the owner has to notify the chief inspector, whose duty it is to examine the remains of the boiler, and if possible determine the cause of the accident. It would be better if this inquiry were made into the cause of every explosion, and not limited to cases where death occurred.

The Act also provides, that all persons performing the duties of an engineer in charge of stationary or portable steam engines, must be holders of a license from the Government Inspectors. This license may be cancelled at any time for negligence, un-

skilfulness or drunkenness, and must be renewed at intervals of five years.

The Act also provides that boilers, under the regular inspection of any duly authorized boiler inspection and insurance company, are exempt from inspection of the Government officials, but must otherwise conform to the requirements of the law. This plan has been tried in Germany for a number of years, and has been found to work exceedingly well, and to diminish the cost to the country of maintaining efficient and regular inspection.

As a whole, this Act ought to meet with the hearty support of all manufacturers. Portable engine builders should endeavour to get some such arrangement made as we have suggested. In event of an explosion of any boiler made by them, their competitors could not then denounce the boiler as being unskilful in design, and of poor material and worse workmanship.

### THE FACTORY COMMISSION REPORT.

From the Report of the Factory Commission, last week placed before Parliament, it appears that the investigation came none too soon. In some factories, children in great numbers are employed, and the demand for them is all the time becoming greater. The consequence is that very many children are growing up wholly uneducated, not a state of things for us to feel proud of. The long hours of work are trying to healthy men, much more so to women and children. Female labour is extensively employed, far more than people generally have any idea of. The inclination is a prevailing one with young girls to seek work in shops and factories rather than domestic service; and this tendency is all the time increasing, too. In 465 factories visited, the Commissioners found that the following were employed:—

	Males.	Females.
Children under 10 years.....	101.....	69.
Children from 10 to 14.....	1,265.....	823.
Adults.....	26,308.....	12,735.
Married....		321.
Unclassified, 1,885.		
Total.....	43,511.	

Of the married women, only 52 actually work in the shops, the rest take the work to their own houses.

There are 377 factories working over 57 hours per week; 11 working day and night; 167 working 60 hours; and 37 over 60 hours. The horse-power of all the factories visited aggregates 23,506, of which 15,807 is from steam and 7,699 from water.

The Commissioners recommend the adoption of factory laws something like those of England and the State of Massachusetts, and say that, according to their information, these laws are working well on both sides of the Atlantic. They find many of the large mills in Canada where the leading points in the factory acts have already been voluntarily adopted by the proprietors, though no law as yet compels them to do so. And they notice that in such mills the operatives are always of a superior class, a fact which the public generally will be glad to hear of. These large factories, too, have all suitable arrangements and conveniences for the workers—another