

insurance managers, the first and foremost of which is the fact that we have as superintendent of insurance a gentleman who is acknowledged on all sides to be perfectly competent for his position, and, being a gentleman, is not likely to be swerved from his straight line of duty by fear or favor; consequently, it is only fair to give him a chance of doing that which he may deem to be lawful and right in any matter concerning the financial affairs of our companies. We shall confess ourselves very much mistaken if he also does not deem his duty to his country best fulfilled by strengthening rather than destroying our moneyed institutions: but this consideration is his prerogative, and we shall leave to him the opportunity of acting as he may deem most fitting his position and responsibilities.

The second is that there are many errors in practice common to all the companies; these are our lawful game: an elimination of them will result to the general good of the community as well as of the companies. These are as rife amongst the foreign companies as the home ones; indeed are generally copied by our home ones from the foreigners,—(we use foreign in the sense defined by the Insurance Acts of the Dominion Parliament). Chief amongst all these errors and offences are general carelessness and recklessness.

The third reason is that a desire seems to be inherent in the hearts of all the legislators on this continent to enact laws such as will most certainly drive from our midst every insurance company worthy of the name, and to throw the profession of insurance into the grasp of those who, having nothing to lose, care not what laws are enacted; against all such legislation it is our right to protest, whether it be local, provincial or general.

The fourth is that every day sees some so-called improvement launched into general use, and that nearly all such improvements prove to mean increased danger of destruction by fire. So, therefore, when our friends have anything to say concerning the solvency of any company, we simply say "that is the business of the Superintendent of Insurance;" when they complain of the high rates, we tell them there is plenty of competition, "try another company," and when of ridiculously low rates, which they aver must ruin the companies, "that is the business of the stockholders."

If they can shew us any danger to the companies in general we are always ready to afford them every assistance in averting it; if any malpractice, in condemning it;

if any improvement, in recommending it; if any oppressive enactment, in resisting it; independent of all which, we, on our own account, as mercantile and financial as well as insurance journalists, are always and at all times ready to assail every species of carelessness, as we know that ninety per cent. of our fire losses result from culpable carelessness, and that this general carelessness is largely owing to the recklessness of the fire insurance companies in their acceptance of risks without proper surveys and guarantees, as to the preservation of the property from easily avoidable destruction.

#### STEEL RAILS.

The purchase of a large quantity of steel rails by the Government has been blamed by the Opposition and defended by its supporters, but by both there is one question of interest which merits consideration in view of future operations.

The requirements of our trans-continental railway will necessitate the purchase from time to time of a large quantity of steel rails, sufficient to encourage the establishment of works for that manufacture within our own territory. A company like the Pennsylvania Steel Works Co. near Harrisburg, Pa., could readily be formed out of steel companies already existing in the country, and we may cite as one the Steel Company of Canada, Londonderry, Nova Scotia. The Harrisburgh Co. has a capital of \$2,000,000, and manufactures 45,000 tons of rails annually, employing 1500 men, who, with the miners and coke manufacturers, would represent a very large population; only half the iron comes from the immediate neighborhood of the works, and the rest is carried a considerable distance to the mills.

Now we do not see any occasion to blame the Government for omitting to offer the rail contracts to this or any other company, but we do think that the country has in it enough energetic men to undertake, with the great facilities for using the coal and iron ore in close proximity to our water ways, a continuous contract for producing steel rails at the lowest prices obtainable in England, and while making a good profit maintain a large industrial population.

The following extracts from an article in the *New York Sun* will give a general idea of this great industry.

"Visiting Baldwin for the purpose of learning what we can about the manufacture of steel rails, we first survey a huge pile of pig iron, containing at the present time 15,000 tons. About 33 per cent. of the metal used is iron manufactured in western Pennsylvania from Lake Superior

ore, about 20 per cent. of it is made at Baldwin, about 40 per cent. comes from anthracite furnaces in the neighborhood of the works, and the balance is spiegel-eisen from Germany or other countries in Europe. Spiegel-eisen, or mirror-iron, contains 80 per cent. of iron, 12 per cent. manganese, 5 per cent. carbon, and 3 per cent. of other elements."

After a description of the Bessemer department, in which, when the iron is perfectly decarbonized, the spiegel-eisen or mirror-iron is used to introduce the exact proportion of carbon which converts it into steel, the writer mentions the blast furnaces.

"There are two blast furnaces connected with the steel works. One of these has been in operation two years; the other is just finishing and will be blown in soon. Both have brick stacks with iron casing. No. 1 has a stack 61 feet high and 14 feet base. No. 2 has a stack 65 feet high and 16 feet base. Each furnace has two nests of boilers with six in each nest. There are three engines with 84-inch blowing cylinders and 48-inch stroke of piston. The hot ovens of both furnaces are Kent's patent, and the hoist for taking the stock to the top of the furnace is Hartman's air-hoist."

"The ores used are Staten Island and New Jersey magnetites, with a very small proportion of hematite from Blair county, Pa., and the product is Bessemer pig iron, of which the furnace now in blast makes from 35 to 40 tons per day. Considerable attention is paid to roasting the magnetites, tracks being so arranged that the ore is handled but once. Both coke and anthracite coal are used, sometimes separately and sometimes mixed. Very pure limestone is obtained from hills in the immediate vicinity."

"The open-hearth department consists of two six-ton Siemen-Martin or open-hearth steel-melting furnaces. They are of the latest and most approved form, and the first of their kind erected at Bessemer steel works in this country. They utilize the scraps of the forge and the rail mills. The scraps are dissolved in a bath of melted pig iron, and the carbon is burnt off by the oxygen of an iron ore, instead of by the free oxygen of the air, as in the Bessemer process. Recarbonization is effected by the use of spiegel-eisen and ferro-manganese. From gas made in Siemen's producers these furnaces obtain the highest degree of heat used in metallurgy. The product is about 22 tons of steel every 24 hours."

"A blooming mill is now in process of erection. It has a 36 inch roll train (said to be the largest in the world) for rolling