

10 knots per hour, and burns 20 tons of coal per day. The second vessel has a gross tonnage of 2,800 tons, was built last year, and fitted with triple expansion engines, working at a pressure of 150 lbs. per square inch. She makes a voyage to India in the same length of time as the former vessel, burns the same amount of coal, viz.: 20 tons per day, and carries 4,200 tons, or 1,200 tons more cargo with the same working expenditure."

Another case is cited, that of a mail steamer, the engines of which have been converted from ordinary compound to triple expansive, the propeller not being altered. The vessel is 3,500 tons gross register, both ship and engines having been built by one of the leading builders. She was originally fitted (in 1871) with ordinary compound engines, working at a pressure of 60 pounds per square inch. These have been altered into triple expansion engines, and new boilers have been fitted, working at 150 lbs. per square inch. The vessel still maintains her original speed, and the consumption of coal has been lessened 25 per cent. Still another mail steamer, similarly altered, burns 33 per cent. less fuel while maintaining the same speed.

It is, therefore, not too much to say that the whole carrying trade of the world has been affected by the discovery in marine engineering which we think is properly attributable to the late Wm. Elder, of Glasgow. And it is eminently proper that a statue should be erected to a man who was not only a benefactor of the world by his genius, but who was in his private life and his business surroundings—he gave employment to 4,000 men—an example of one who was at once a kind, just, gentle Christian, and a shrewd, profound, clear-headed scientist and man of business.

ELECTRIC LIGHTING.

As the lighting of streets and buildings of almost every description by the electric light is becoming so common, it is well that those using it be made aware that while, if the conditions conducive to safety are honestly observed, this is probably the safest kind of light that can be used, there are still dangers connected with the use of this light. Unfortunately it is sometimes often the case that the conditions of safety are lost sight of, and occasionally disastrous fires have been caused through electric light plant being carelessly and improperly put in. Especially has this been the case amongst our American neighbors. *The Commercial Bulletin*, of New York, in view of the frequent fires caused by this mode of lighting, advises insurance companies either to cease writing on buildings in which electric light is used, or to charge "an additional premium commensurate with the increased hazard, caused by lightning, defective installation, poor quality of material, poor workmanship, faulty insulation, use of sawdust instead of sand to absorb oil on floor, use of soft, sputtering carbons in plant because unfit for customers, and spontaneous combustion." And the *Insurance Age* expresses the opinion that the number and magnitude of the fires already

occurring are ample proof that the causes are sufficiently numerous and potent to demand attention at the hands of underwriters.

All the eight causes of fire mentioned above are incident to the use of electric light. The Canadian Fire Underwriters' Association at first required an inspection of the plant for this light to be made at the expense of the persons using it before a permit for its use was granted. This mode of procedure gave great dissatisfaction, and since the first of May last, the inspection of all electric lights is made twice a year by competent inspectors who are paid by the association. When any plant is found not to be up to the required standard the inspectors notify the party using the defective electric light, as well as the electric light companies. When any of the installations are found to be defective, they also notify the secretary of the underwriters, who communicates with the persons using the light, pointing out to them what has to be done in order to secure safety. Unless prompt measures are taken to put matters right the assured is made aware of the danger he is incurring by not having the source of danger removed.

Now that electricity is being used as a motive power, as well as for light, cities like Montreal, Toronto, Hamilton, and London should have an independent inspection made of the electric light plant used in their midst. This can only be done properly by an experienced electrician, who should be, to use the words of the *Insurance Age*, "a man of unimpeachable integrity, so great is the temptation for corporations to endeavor to purchase with money immunity from interference with their affairs by outside authorities."

NORTH-WEST INSURANCE ASSOCIATION.

The annual gathering of this association took place at Chicago on the 13th Sept. and following days. The address of Vice-president Washburn of the Home Insurance Company was an exceedingly able one. He described in a masterly manner the present state of fire insurance business in the United States. Probably no better test of its deplorable condition can be adduced than the steady decline in the price of insurance stocks during the past few years. One company after another disappears from the scene, while many others are struggling, not for profit but for existence. Several attempts have been made to remedy this state of matters by means of Tariff Associations. In 1866 a convention was held which resulted in the formation of a National Board; the necessity for such an organization was given in the following words:

"The year 1865 was so prolific of losses, that while careless, indifferent, or reckless underwriting carried with it disaster, even the most cautious and conservative underwriters were barely able to stem the current and keep the capital of the companies they represented intact and unimpaired."

Spasmodic efforts have been made ever since that time with the view of improving the business, yet the demoralization con-

tinues. The caution and conservatism displayed in underwriting after the great fires of Chicago and Boston have disappeared, and the insane competition of companies clamoring for business will still further demoralize the whole business and the insuring public. Mr. Washburn showed that the average ratio of expenses to the fire insurance companies had risen in a few years from 15 and 20 per cent. to 35 and 36 per cent., the increased and increasing taxes levied upon insurance companies—not on their profits only, as the taxes should be laid, but on their gross receipts—resulting in many cases not only in companies doing business at a loss, but in being mulcted heavily for doing this losing business. He closes his lengthy and able address as follows:

"Gentlemen of the Association of Fire Underwriters of the North-West, having thus briefly reviewed the situation as it is at present, let me remind you of your duty in the premises, and of the opportunity opened before you. You are not organized as a Tariff Association to establish rates and secure their enforcement, to adopt rules and see that they are observed. These are the duties of other organizations. Yours is the higher and wider sphere of studying and promulgating the principles that lie behind all systems of rules and rates, of making men more fit for high places in the office and the field, and of imparting to all about you a knowledge of the true basis and limits of insurance. You have accomplished much in the past in these directions; see to it that in the future you do not fall below your high privilege. It is for you to prepare the way for tariff associations and local boards, to disseminate such knowledge through the community that prejudice may be dissipated, unwise and unjust legislation averted, and the beneficent results of insurance appreciated as well as accomplished; to hasten the coming of the time when underwriting shall be universally acknowledged as one of the liberal professions, and fire insurance companies shall be recognized as public benefactors."

TRADE OF TORONTO.

We learn from the Board of Trade figures, received last evening, that the aggregate value of imports and foreign exports at Toronto for the month of September last was \$1,820,957, as compared with \$2,180,522 in the same month of the previous year. The decrease is relatively largest in exports, by reason of the falling off in wood shipments and meats. The difference in imports may be discovered by comparing the various items in the following table:—

Article.	Sept. '88.	Sept. '87.
Books and pamphlets.....	\$ 52,378	\$ 60,423
Breadstuffs (In. corn)	41,685	16,153
Coal	26,413	30,486
Drugs and medicines.....	21,445	18,486
Earthenware	15,836	22,090
Fruits, green and dried....	14,739	16,669
Glass and glassware.....	28,240	30,067
Iron and steel goods.....	116,389	121,897
Jewellery and watches....	40,955	50,222
Leather goods.....	30,066	32,791
Marble and stone.....	11,595	1,100
Musical instruments.....	17,660	20,425
Paints and colors	7,460	8,671
Paper goods.....	39,852	37,910
Provisions :	17,302	92,330
Wood goods.....	14,925	29,977
Cotton goods	50,840	68,712
Fancy goods.....	47,958	60,566
Hats and bonnets	33,367	42,143
Silk goods.....	78,616	79,501
Woollen goods.....	252,904	321,983
Total dry goods.....	\$463,685	\$572,925