

THE ELECTRICAL MECHANICAL AND MILLING NEWS

Vol. XIV.—No. IV.

TORONTO AND MONTREAL, CANADA, JUNE, 1890.

Price, 10 Cents
\$1.00 PER YEAR

ELECTRICAL, Mechanical and Milling News,

PUBLISHED ON THE FIRST OF EACH MONTH BY

CHAS. H. MORTIMER,

Office, 14 King Street West,

TORONTO, — — CANADA.

Temple Building, Montreal.

ADVERTISEMENTS.

Advertising rates sent promptly on application. Orders for advertising should reach this office not later than the 25th day of the month immediately preceding our date of issue.

Changes in advertisements will be made whenever desired, without cost to the advertiser, but to insure proper compliance with the instructions of the advertiser, requests for change should reach this office as early as the middle of the month.

SUBSCRIPTIONS.

The ELECTRICAL, MECHANICAL AND MILLING NEWS will be mailed to subscribers in the Dominion, or the United States, post free, for \$1.00 per annum, 50 cents for six months. The price of subscription may be remitted in advance, in registered letter, or by postal order payable to C. H. Mortimer. Please do not send cheques on local banks unless 25 cents is added for cost of discount. Money sent in unregistered letters must be at sender's risk. The sending of the paper may be considered as evidence that we received the money.

Orders from all foreign countries, embraced in the General Postal Convention, will be accepted at \$1.25 per annum.

Subscribers may have the mailing address changed as often as desired.

When entering change, always give the old as well as the new address.

The Publisher should be notified of the failure of subscribers to receive their papers promptly and regularly.

EDITOR'S ANNOUNCEMENTS.

Correspondence is invited upon all topics pertinent to the electrical, mechanical and milling interests.

OUR MONTREAL OFFICE.

In order to further extend the influence of this journal, keep *en rapport* with everything of interest pertaining to the particular industries of which it is the representative within the Dominion, and serve in the most effectual way the interests of our subscribers and advertisers, we have established a permanent office in the city of Montreal. It is located in the Temple Building on St. James street, and being in the heart of the business portion of the city, is convenient of access. We shall be glad to welcome there old acquaintances as well as any new ones. All enquiries relating to the editorial or business departments of the paper, presented personally or by letter at our Montreal office, will receive prompt attention.

THE people of Newfoundland are seeking to obtain the sympathy and moral support of Canada in their controversy with regard to the treaty rights of the French fishermen. The delegates who recently laid the case of Newfoundland before the commercial organizations of Canada, very properly received assurances in the direction indicated. Canada would do well, however, not to let her sympathy go the length of inviting Newfoundland to the Dominion. It is not long since the people of the colony were said to be averse to becoming a part of the confederation, but there are indications that she is now willing to come in, if by so doing she can rid herself of her present difficulty. In addition to the fact that Newfoundland, apart from her fisheries, is an unproductive country, Canada already has quite enough territory and national problems enough to contend with without adding thereto. Let the energies of the Canadians be devoted to the development of their present possessions.

THE demand for electric lighting apparatus on the part of Canadian town and city municipalities has been to a large extent supplied, and the manufacturers of electric plant are beginning to turn their attention to other fields. The part which electricity is destined to play in the manufacturing world is fully understood, and the last few weeks have witnessed the formation of several electric power companies. Within a very few years at the most, electric power will be used for an almost infinite variety of purposes in the industrial establishments of this country. There remains also a wide field for the introduction of the electric light in our mills and factories.

THE people of the West Indies will take a practical step towards the development of trade between that country and the Dominion of Canada by sending an exhibit of their products to the Toronto Industrial Exhibition next September. Our manufacturers should not forget the exhibition to be held in the city of Jamaica in January, 1891. They will be serving their own interests as well as those of the country at large by sending suitable exhibits there. In this connection it may be mentioned that exhibitors at this exhibition are not required to pay any rent for the space they occupy, and too horse power is provided free of charge. If water, gas or steam is required, for showing machinery in motion or for other purposes, the rate of speed required must be made known. Exhibitors must provide their own countershafting, pulleys, and steam-pipe connections.

OUR Montreal contemporary, the *Insurance Chronicle*, refers to an instance in which it is alleged that hose hung on the wall of a public institution for fire protection purposes, burst in a dozen places when it was sought to be used for sprinkling the lawn, and the manufacturers on being asked for an explanation, coolly replied that this quality was simply an ornamental article made to hang up in factories to satisfy insurance requirements. Our contemporary expresses the opinion that "this is about the kind of security belonging to more than half the fire extinguishing appliances found in factories and public institutions." We should regret to believe that so far as factories are concerned the condition of things is as bad as represented. That too much carelessness obtains with respect to providing and maintaining efficient apparatus for fighting fire, is beyond question. If the insurance companies were in the habit of insuring property beyond its value, or even to the extent of its value, the owners of mills and factories might in some instances rest content with a pretence of satisfying insurance requirements. Seeing that at least one-third of the loss in case their premises are destroyed must fall upon their own shoulders, the condition of their fire-extinguishing appliances should never be to them a matter of doubt.

THE Committee appointed by the Legislature of the State of New York to investigate the dangers of electricity, has presented its report. After having examined a large number of persons occupying prominent positions in the electrical field, the Committee arrives at the conclusion that it is not possible for the Legislature to form satisfactory rules and regulations for an industry which is not only highly technical, but constantly developing and presenting new conditions, rendering rules proper this year possibly obsolete next year. There should, however, be some form of supervision by properly qualified State or local authorities over the commercial use of electricity, analagous to the supervision now exercised over steam boilers. Regulations should be framed with competent expert advice

and entrusted to authorities who have power to modify them so as to meet the changing conditions which the rapid growth of the industry constantly brings about. There are two questions upon which the Legislature might properly act by providing: First, that no electric light or power current of over 250 volts pressure be allowed to enter any building; second, that after, say Jan. 1, 1892, no overhead conductors carrying currents for lighting or power purposes be allowed in any city of the State having a population of 125,000 persons or over, and that the local authorities in the various cities coming under this description, in the absence of any State authority, be empowered and directed to make proper provision for the burial of such wires. The Committee make the important statement that most of the sixteen persons killed by electricity in New York City were employees of electric companies; in the majority of cases death resulted from contact with continuous currents used for arc lighting, the primary cause of the fatalities having been due to carelessness on the part of the electric companies in using poorly insulated or badly arranged conductors, and in neglecting other precautions required for safety.

THE question is frequently asked, "Has the time gone by when wheat can be regarded as intrinsically worth one dollar per bushel?" This is not intended to apply to a time of scarcity from bad crops or other causes, but to times when there is a fair average crop on this continent. We are of the opinion that in the not distant future wheat will again be worth a dollar a bushel. The reasons for this belief are not wanting. Recent low prices of 70 to 80 cents per bushel are the result of world-wide overproduction. The idea that wheat was the money-making crop, led the farmer to turn his attention too much to the raising of that cereal, as more recently the farmers of some Ontario counties have done with barley. After years of low prices for wheat, rendering its production unremunerative, necessity compelled our farmers to turn their attention to other branches of agricultural industry. Out of that necessity has come our great cheese, fat cattle, peas and barley productions. Notwithstanding the largely increased land areas placed under cultivation during recent years in the Canadian Northwest as well as in the Northwestern States of the neighboring Republic, the total wheat acreage on this continent is not increasing in proportion to the population. This fact will have a significant bearing upon future prices. We are aware that India and other countries which a few years ago cut no figure in the world's markets, are now our competitors for breadstuff orders in Great Britain. It should not be forgotten, however, that this competition began when the equivalent here of wheat prices in the British markets, was upwards of \$1 per bushel. It is now admitted that with English wheat 30 to 32 shillings per quarter (90 to 96 cents per bushel in England) wheat growing in India can not be made remunerative. In Great Britain the wheat acreage is decreasing, and as we have said, on the continent of America the increase of acreage is not keeping pace with the increase of population. In view of all these circumstances, the presumption is reasonable that the law of supply and demand will in the near future tend to increase the price of wheat. These, however, are not the only causes operating to bring about this result. The depression in trade in Great Britain during the former part of the last decade, by which millions of artisans were put upon part time, undoubtedly reduced to a considerable extent the consumption of bread per capita. Now that an improvement in trade has set in, consumption will go up again. It is not a truism that cheapness in price always means increased consumption. As an illustration of this, a poor man once said to the