Vot., XIII.-No. IV.

TORONTO, CANADA, DECEMBER, 1889.

Price, 10 Cents

ELECTRICAL,

Mechanical and Milling News,

POBLISHED ON THE FIRST OF EACH MONTH BY

CHAS. H. MORTIMER,

Office, 14 King Street West,

TORONTO, - - CANADA.

ADVERTISEMENTS.

Advertising rates sent promptly on application. Orders for advertising and 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 the advertiser, but to insure proper compliance with the instructions of deadvertiser, requests for change should reach this office as early as the wild day 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 summ, 50 cents for six months. The price of subscription may be remitted 5 currency, in registered letter, or by postal order payable to C. H. Martimer. Please do not send cheques on local and unless 25 cents added for cost of discumt. Money sent in an acceptable letters must be eat senders' fish. The sending of the paper may be considered as evidence that we received the money.

wheriptions from all foreign countries, embraced in the Gene, all P and Union will be accepted at \$1.25 per annum.

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

When ordering change, always give the old us 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, nechanical and inilling interests.

THE present is an era of great Exhibitions, the greatest and most successful of which has just closed in Paris.

MEETING of delegates from the various branch es of the Canadian Association of Stationary Lugineers is shortly to be held to adopt means to assist the passage of a bill through the Legislature for the accessing of engineers.

THERE are a number of articles in the line of electrical supplies at present imported from the United States which we believe could be manufactured as profit in Canada. Among these might be mentioned authors and glass globes for arc and incandescent lamps.

URING the last month, two of our most important and esteemed advertising patrons, leading business men in their respective lines of manufacture in the city of Montreal, have been compelled to ask the indulgence of their creditors. We refer to Messrs. A. W. Morris & Bro., manufacturers of bags, cordage, etc., and the Hibbard Electric Manufacturing and Supply Co. The causes leading up to the suspension of these firms have been given in the daily papers. It is our hope and belief, as we believe it to be that of the business world, that these gentlemen will be able to effect such an adjustment of their affairs as will allow them to resume business on a sound basis.

LOSE observers of events will have noticed that a large amount of American capital has found its way into investments in Canada during the last few years. The pur hase by an American syndicate of the elebrated Kakabeka Falls, containing 480 acres, and the water rights to the Kaministiquia river near Port Arthur, for manufacturing purposes, is a reminder of this fact. With the increase of wealth and the filling up of the opportunities of profitable investment in the

United States, will come a constantly increasing amount of American capital seeking investment in Canada, and assisting in the development of the Dominion. Following these investments will also come the increase in population which is our principal requirement.

HE placing of electric light and telephone wires. 1 under-ground, which has lately been commenced in Toronto, will in time lead to a great deal of trouble in several directions unless a change in methods is decided upon. At present each company puts down its own conduit. A pursuance of this system will result in a network of underground conduits, the putting down and repairing of which will necessitate centinual tearing up of the streets and make it impossible for the city to maintain good roadways. There is little doubt that it will also lead to conflicts involving questions of right and authority between the various companies using the streets. The present is a proper time for the authorities of Canadian cities to consider the whole question of the best method of conducting electricity. If it is decided that the proper place for electric wires is underground, then we believe it will be found cheaper and far more satisfactory in the end, to provide underground subways of sufficient dimensions to accommodate all the electric light and telephone wires that may ever be required to be used. The underground problem must ultimately resolve itself into this; therefore by taking a comprehensive grasp of the situation at the present time, endless expense and annoyance will be avoided in the future.

HORTLY after the frightful disaster at Johnstown, Pa., a few months ago, we made enquiries to learn whether there existed in Canada any system of Governmental inspection of dams and reservoirs. We were informed that no prevision had been made for such inspection and no necessity existed for making such provision, as there were no towns in Canada so situated as to be in danger of being wastroyed by the breaking away of any existing dams or reservoirs. While not altogether satisfied with this assurance, we refrained from pointing out, as we had intended to do, the necessity for guarding life and property from possible danger from floods. The calamity which followed the breaking away of McClellans flouring mill dam above the village of Alton, early on the morning of Nov. 13th, emphatically proclaims that the necessity does exist for the regular inspection of embankments confining large bodies of water. We believe there are other towns and villages similarly situated to Alton, where the lives and property of the citizens depend upon the strength of an embankment. The Government would do well to provide for the competent inspection of such structures at proper intervals. There should likewise be a lesson in the recent disaster for mill owners. It should lead them to so strengthen their dams that they will be capable of resisting the greatest pressure that the swelling of the streams by heavy rainfalls may impose upon them. The safety of their own property and the lives and property of others forbids that they should be negligent in this matter.

THE prosperity of the City of Toronto, depends to a very important d gree, as does that of most cities, upon the number and importance of her manufacturing establishments. Such establishments give employment to large numbers of mechanics, the expenditure of whose wages is an important factor in the maintenance of the city's commercial interests. These facts should lead the city to deal liberally with manufacturers, instead of imposing upon them burdens in the shape of excessive taxation which must have the effect of driving them out of the city entirely. We regret to

observe that the Toronto municipal authorities appear to be pursuing a course which must to a very large extent have this result. Manufacturers are loudly complaining of the amount of taxes which they are compelled to pay for the privilege of carrying on business in the city. More than one important enterprise has already been removed to outside points, and others are talking of doing likewise. Many manufacturing concerns were attracted to Toronto by its exceptional shipping facilities. The keen competition for business between the Canadian Pacific and Grand Trunk railways has resulted, however, in giving a number of towns shipping facilities equal in every way to those of Toronto. These towns are offering large inducements to secure the removal of Toronto manufacturing concerns. Not only do they offer exemption from taxation for long periods, but supplement the same in some instances with substantial cash bonuses. As we have said, these inducements have been sufficient in several instances to secure the removal from Toronto of important manufacturing enterprises, and there are not wanting indications to show that unless the taxation on manufactories located in Toronto is lightened, the exodus will continue. This is a question of vital interest to the city, and the council should lose no time in adopting such measures as will retain for Toronto the position it has gained as a manufacturing center.

DESPATCH from Blenheim, Ont., conveys the A information that an indignation meeting of farm .s has been held there to protest against the system of buying wheat by tester inaugurated by the Dominion Millers' Association. After a good deal of speech-making, the substance of which has not been made public, it was unanimously resolved to form a joint stock company with a capital of \$50,000 for the purpose of building and operating a \$20,000 mill. In the absence of a full report of the meeting, we have been vainly trying to imagine upon what foundation the farmers in question base their fault finding against the millers' association. Is there any fairer method of buying wheat than by weight? Is there any fairer method of determining the leight than by means of a tester the correctness of which must be certified to by a Government inspector? Is it not an equitable system which provides that the farmer who brings to market the heaviest and the cleanest wheat should receive a higher price than one whose wheat is short in weight and full of extraneous substances. We can only account for the opposition to a system so obviously just by supposing that the farmers present at this meeting are in the habit of bringing to market wheat that is both under weight and under quality. We cannot bring ourselves to regard the \$20,000 mill project as other than a game of "bluff" designed to frighten the millers into returning to the old order of things. If such be the object, its failure s a foregone conclusion. On the other hand, if the farmers have really determined to embark in the milling business, they are deserving of sympathy rather than censure. Evidently "they know not what they do," but we can safely promise them that they "shall know hereafter." Meanwhile, we hesitate to resume the responsibility of assuring them that the knowledge will not be purchased at too dear a price. In the face of the fact that men who have been trained to the milling business are at their wits end to learn how they may make any profit from the business, how can these mexperienced farmers hope to make a success of their proposed venture? Considering that the prices at present paid by millers for wheat are from five to ten cents above the export value and the selling prices in St. Louis and other American wheat centres, how do these farmers propose to further increase the price and yet find sale for their flour? Let us candidly tell them