KIII. No. V.

TOP INTO, CANADA, JANUARY, 1890.

Price, 10 Centa Si,00 Per YEAR

ELECTRICAL, Mechanical and Milling News, POSTISHED ON THE FIRST OF EACH MONTH BY

CHAS. H. MORTIMER,

Office, 14 King Street West,

TORONTO, CANADA.

ADVERTISEMENTS

enising rates sent promptly on application. Orders for advertising all reach this office not later than the 25th day of the month immediate rating our date of issue.

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

SURSCRIPTIONS.

The East Ale Al. Mechanical and Milling News will be mailed to others in the Dominion, or the United States, port free, for \$1.50 per specials for six months. The price of subscription may be remitted mency, in registered letter, or by postal order payable to C. H. that for that of discount. Money sent in unregistered letters must Renders risk. The sending of the paper may be considered as evit that we received the money.

hariftens from all foreign countries, embraced in the General Postal

will be accepted at \$1.25 per annum.

beniers may have the mailing address changed as often as desired. The ordering change, always give the old as well at the new address. De Put! See should be notified of the failure of subscribers to receive opers for amptly and regularly.

EDITOR'S ANNOUNCEMENTS.

preferre is invited upon all topics pertinent to the electrical, ancal at 1 milling interests

I that at Ottawa an admirable sheathingpap seeing manufactured from sawdust. Saw I me. . If be glad to see the rise of many such fac-🖎 a — antioduction of any other method of turning profit is account the 20 per cent, of waste which the r-dust the at present represents.

Now list issue we pointed out the opening in Canaly for a manufactory of carbons. We are sed arm that during the last month Chicago completed arrangements for establishing that is ry at Peterborough. The new concern is peted: be in operation in February.

> aglish exchanges give particulars of a strike slish operative millers. In Canada there of miliers, the peculiarity of which in the is its spasmodic character, but which seems city well sustained and gathering strength that may possibly compel some action to be · forthcoming session of Parliament.

> cance of our purpose to maintain for this high standard of typographical excellence, 19 Ms MECHANICAL AND MILLING NEWS new year improved in appearance as the use of an outfit of new type. We would nstrumental in helping our subscribers to use of speciacles to the latest date possible.

Ari al Review would make a hero of James spectibe telegraph, operator who perished in are in the Irilane building at Minneapolis. dd serve no important purpose by remaining ag building beyond the time when he might d his escape, his conduct appears foolhardy nable rather than heroic, especially when it cred that a wife and children were dependent or support.

HE death of Mr. Bull is announced at Minne-1 apolis. We have been wondering whether this is the gentleman who had a hand in inducing Canadian millers to pay \$1.20 per bushel for wheat a year ago that they have since found out was worth considerably less than a dollar. If so, it may be some consolation to his friends to know that he is beyond the reach of the Canadian miller's wrath.

N England and the United States there are a number I of electrical institutes, associations and clubs, the existence of which has done not a little to stimulate electrical interests and inventions. The number of persons interested in the various applications of electricity throughout Canada, should now be sufficient to make the organization of a Canadian electrical society both possible and profitable. Who will be first to move for the accomplishment of this object?

MIE electrical transmission of power is daily assuming more importance. The present outlook is one of great promise. The use of electric motors is to-day large and widespread. Motors can be found in all parts of Canada on both arc and incandescent circuits, doing various kinds of work, and not only is the quantity of power delivered on the increase, but the motors themselves are becoming larger and larger, until now a motor of 15 or 25 horse power, or even more, running from a central station, is no longer a matter for special comment.

R. Geo. Robertson, late vice-president of the St. IVI John Board of Trade, is addressing the Boards of, Trade of the various cities throughout the upper provinces on the subject of increased trade with the West Indies. He states that Canadion cotton, flour and other products would find a market in the West Indies, while if Canadian millers would desire it, the West Indian Steamship Company would pass their representative for the first trip to and from the islands, and the same offer would hold good to the representative of any other important industry.

R. Thos. A. Edison, the well-known electrical inventor, has been examining the Canadian iron, copper and phosphate mines, with a view to their development by his new electrical invention, which it is claimed will at a moderate cost extract these minerals and place them upon the market. Mr. Edison, in an interview, stated that his invention would extract 12 per cent, ore with profit, and that he had been surprised to find that mines of such richness as those in the vicinity of Madoc containing, as they do, at least 65 per cent. of mineral, had not been developed long ago.

T no time during the past five years has there been greater activity in the electric lighting field than prevails to-day, but the industry is still in the early stages of growth, as a department offering legitimate and lucrative employment for capital. What we mean is, that there is very little left of the early speculative fever, and that the erection of new plants and consolidation of old ones, occupies the energy of all the leaders in the business. There were periods when it looked as if the scrambling and gambling would utterly wreck the business, but it was pulled through depression and disaster by its own inherent vitality, and stands now one of the most inviting arenas for brains, labour and money to enter.

HE citizens of Toronto have reason to complain of the expensiveness and lack of efficiency of the telephone service of that city. The cost of a telephone

in Toronto, where one company controls the service, is \$50 per year. In Montreal, where the service is divided between two rival companies, the price is exactly half this amount. From this fact must be inferred that the profits of the Toronto company are abnormally large, and consequently that the citizens are paying about double the proper price. Added to this disadvantage is the fact that the service, as compared with that of Montreal, for instance, is most inefficient. In this connection, we are informed that a rival company will shortly enter the Toronto field. Its advent will assuredly be hailed with delight by the thousands of telephone users of the

WELL-KNOWN farmer named J. K. Little, in A conversation with a reporter at London, Ont., is credited with having said: "I brought a load of wheat to the city this morning and sold it to Mr. Hunt. His tester made the weight 57 lbs. I took a sample to Mr. Plewes, who declared it 60 lb. wheat. I then went to Mr. Saunby, and his apparatus told 59 lbs. I make this statement on my own responsibility, and it just goes to show how much rehance can be placed on the graintesters. Both Mr. Saunby and Mr. Hunt used the regulation Government tester." We would suggest that the officers of the Dominion Millers' Association should personally investigate these complaints of farmers regarding the unreliability of grain testers. The millers are as much interested as the farmers in knowing that every tester bearing the Government stamp has been correctly adjusted, and may be depended on to show a just record. The testers having undergone inspection at the hands of Government inspectors, should be reliable. If they are not reliable, the inspectors have not properly discharged their duty, and the Government should be made aware of the fact. If the machines are capable of making a wrong record, disadvantage is as liable to result to the miller who buys the wheat as to the farmer who sells it. Let a comparison be made between a sufficient number of these *esters to prove their reliability or otherwise.

7 E believe that we are correct in saying that not a single death has thus far occurred in Canada from contact with electrical currents. This fact speaks well for the character of the electrical work done on the streets of our towns and cities, and the care exercised by those in whose hands is the management of electric lighting. The interests of our electrical companies are closely connected with the maintenance of such a satisfactory record. It should be the object of all interested in the successful applications of electricity to insure in every way possible against the possibility of danger from its use. The superiority of electricity above any other illuminant is so great, that nothing can prevent it from ultimately coming into general use. This result might, however, be considerably retarded should the electrical companies neglect to throw every possible safeguard around its use. Much injury has in our opinion been done electrical interests in the United States by the attempts of some of the electrical journals to pooh-pooh the statements of those who complain of the dangers of the electric currents. It would be far more sensible on the part of these journals to frankly admit that high-tension electric wires are dangerous unless properly protected, and to suggest that the electric companies should set themselves to assist in devising methods for removing the existence of such danger. In Toronto recently a deputation of underwriters waited upon the Mayor to urge that legislation be obtained empowering the Council to compel the electric companies operating within the city to limit the voltage of currents passing through their wires, and the appointmont of an inspector to see that the insulation of the