

Palmerston has voted in favor of purchasing the electric plant by the town.

The town of Bruce Mines, Ont., is getting plans for a water and light plant.

A new telephone company is seeking incorporation for Ottawa and Carleton County.

The town of Lachine will soon call for tenders for a 1,500,000 gallon electric pump. Dupont & Leduc, C.E., of Montreal, are the engineers.

Alcohol has been found to be a good substitute for oil in oil engines. Where a cheap grade of alcohol can be produced, as in Cuba, Brazil and the Philippine Islands, and where it has not to pay an excise duty, it will prove to be a cheap fuel.

The direct economy of electric over oil lighting in mills, etc., is small. The indirect advantages are, however, great. Breakdowns are largely due to inattention. It is impossible to properly watch machinery without ample light, hence the less breakdowns. A broken-down machine can be more readily repaired where there is ample light to work in. Stoppages are responsible for serious increases in the cost of mining and milling.

Dr. G. A. Peters, commanding officer of the Toronto Mounted Infantry, has invented an electric target. It is divided into sections, each electrically connected with an annunciator or dummy target, close to the marksman, and the impact of the bullet on any section of the target is announced by the dropping of a disc on the corresponding section of the annunciator. There is also an apparatus called the challenge-board, by which the working of the conducting wires and the annunciator can be tested and discs disturbed by a shot, restored by the pressing of a button.

Ernest Karl Gruhn, a German, has been granted a patent for the telechirograph, a device which transmits over an ordinary telephone wire a written message in the handwriting of the sender. The same amount of amperage and the same intensity of voltage of current as is used in the telephone will serve for the telechirograph. Any current which will transmit the sound waves of the voice in speaking will equally transmit the muscular pressure of the hand in writing or drawing. A third or return wire is necessary to complete the circuit for the vertical and horizontal motion currents.

Winnipeg has three offers to supply electrical power—from Great Falls on the Winnipeg, from Lac du Bonnet on the same stream, and from Keewatin. There is a strong feeling, however, in favor of a municipal plant, and the Assiniboine might be used for this. Some years ago a survey was made by J. T. Fanning, C.E., who estimated the cost of the latter for 10,000-h.p., at \$399,000. The rental of 2,500-h.p. at \$10 per horse-power per annum, would return an interest of 5 per cent. on the cost of this proposed work. The cost of steam power in Winnipeg is about \$100 per horse-power per annum.

Miller Reese Hutchison, whose invention of the acousticon, the electrical device whereby the deaf are enabled to hear, resulted in his being presented with a gold medal by Queen Alexandra of England, has a new invention, a dry storage battery of practical size, which solves a problem which has long puzzled electricians, and opens up a wider field than ever for the application of electricity to motive power. From a battery measuring only three inches high by two and a half wide, and one-half an inch thick, a current of thirty-five amperes and six volts can be secured on a short circuit. By a special device, also, the battery can be recharged from an ordinary electric lighting circuit or from the regulation bluestone cells. It is well adapted for blasting work where the blasts are ignited by an electric spark. The batteries now used for such purposes are nearly ten times as large and very heavy. The Hutchison battery weighs but six ounces, and can be carried in the pocket like a cigarette case, to be used at any time by the blast foreman. With one charging it will run a miner's lamp twelve hours. In the latter instance it obviates the danger of fire damp explosions and gives a cheaper and better light. The battery in larger size can be used for automobiles.

Engineers of the French army are using successfully between the islands of Martinique and Guadeloupe, a wireless telegraph system of their own inventing.

The Ernest S. Harrison Co. has been awarded the contract for supplying the machinery and electrical supplies for the Killarney, Man., Electric Light and Power Company.

The foundation of one of the water wheels at the Electric Light plant, at Magog, gave way, allowing one of the wheels to drop about three inches, resulting in the smashing of all the wooden cogs in one of the gears.

A new power house is being built by W. A. Kribs, at Preston, for the Preston & Berlin Railway. It will be of brick, 48 by 104 feet, with a 100-foot chimney. It will have room for three engines and five boilers. Car barns and a station will also be erected.

Thos. A. Edison has been appointed to the board of technical engineers of the Marconi Wireless Telegraph Company of America, and has acquired an interest therein as a stockholder. Mr. Edison expressed the utmost confidence in the Marconi system.

Owing to the fact that it will not be possible to obtain power from Niagara for at least two years, the Toronto Railway Co. has decided to increase the power plant so as to give from 6,000 to 10,000 additional horse-power to meet the growing traffic of the road.

Work on the St. Therese dam and power house, about eight miles below St. Johns, Que., has been discontinued. It was an adjunct to the Chambly dam and power house, which some time ago gave way and is now being repaired. Chambly, meantime, gets its power from Shawinigan.

J. Moriarty, patrolman for the Guelph Electric Light & Power Co., had a narrow escape recently. While adjusting a light the current was turned on and he received a charge of 2,000 volts. The resistance caused the plug to be blown out and saved his life. His hands where he grasped the wire were badly burned.

Joseph Poirier, a lineman employed by the Montreal Light, Heat and Power Company, was badly burned by coming in contact with a live wire while working on a pole. He fell across the wires and hung there unconscious till the Fire Brigade was summoned with a ladder to take him down. One of his fingers was burned off.

Personal.

John H. Dickson, of Kingston, an engineer for years in the employ of the St. Lawrence River Navigation Co., is dead.

James Quigley, of Kingston, has been recommended for appointment as engineer at the Royal Military College, in place of the late Michael Madden.

Rolland Prefontaine, C.E., son of Hon. R. Prefontaine, since graduating at McGill University, has gone to continue his studies in engineering in Europe.

John M. Brinker, who built the Gorge railway at Niagara, at a cost of about a million dollars, and who first proposed the Pan-American Exposition at Buffalo, is dead.

John W. Rutherford, C.E., of New York, one of the most successful builders of waterworks plants in the United States, died in California. He at one time lived in Galt.

J. Ferns, who has been in the employ of the Montreal Fire Department for thirty-six years, has been promoted to be assistant superintendent of the Fire Alarm Department.

Prof. Rutherford, professor of experimental physics at McGill University, has been elected a fellow of the Royal Society for his great research work in his branch of science.

Major Villiers Sankey, city surveyor, Toronto, has been appointed district intelligence officer for No. 2 military district, in connection with the new corps of Guides organized for militia service.

George H. Waring, at one time chief engineer on the Prince Rupert, and also on the Prince George, running on the Bay of Fundy, is now chief engineer of one of the Standard Oil Company's steamers running to China.