

SPARKS.

The Council of Thorold, Ont., have added to their electric plant a new dynamo for incandescent lighting.

The electrolytic method of sewage disposal would, it is believed, successfully solve Toronto's sewage problem.

The New Westminster, B. C., Electric Tramway Co.'s power house contains two dynamos and a 250 h. p. engine.

The Bell Telephone Company have recently been engaged in constructing a new line between Orangeville and Warton, Ont.

The citizens of Alexandria Bay have formed a stock company for the purpose of lighting the village throughout the year by electricity.

After a hard-fought contest, the Ball and Hessler Companies have secured the order for the electric plant required to light the town of West Toronto Junction.

The Eureka Tempered Copper Company, of North East, Pa., is having to enlarge its factory facilities to enable it to keep pace with the extraordinary demand for its specialties.

The citizens of Shelburne, Ont., celebrated with brass band accompaniment the advent of the electric light upon their streets. The plant consists of 25 arc and 19 incandescent lamps, and a 9-ampere dynamo, and is owned by Dr Norton and Mr Jelly. Mr. John Anderson will be in charge.

A method of blasting by electricity has been tried in Sweden, says the *Electrical Review*, with good results. The means consist of a voltaic arc produced between two carbon rods placed parallel. When the arc is moved close to the spot to be blasted, an intense local heat is created, resulting in expansion that splits the rock.

One of the most delicate duties which the electrical man is called upon to perform is to set right the mind and money of some lay friend who rejoices in the possession of a secure position on a "ground floor," totally unmindful of the existence of a yawning cellar and perhaps sub-cellar beneath.—*New York Electrical Review*.

In his recent address before the members of the National Electric Light Association, Prof. Elihu Thomson gave the following lucid and interesting account of the building up of an arc:—Let us suppose the case of two carbons touching each other with a current passing, and that we then very slowly separate them, stopping to observe the effects. When the contact is light, before actual separation, a visible heating of the meeting ends is seen. On attaining a small separation, the space between seems filled with hot vapor, and we have a short arc where the separation is perhaps not over two or three one-hundredths of an inch. There is also noticed an active transfer of carbon from the end of the positive, and a deposition of carbon on the end of the negative carbon. This deposited carbon takes the form of a mushroom after a time and finally breaks off. Meanwhile combustion goes on at both poles and wears away the sides of the positive carbon, while the transfer of carbon wears away its tip or crater. The burning also wears away the negative at the sides, while the tip is built up by the mushroom deposit from the arc. But the cutting in of the negative finally severs the mushroom tip and it falls away. Hence, both carbons are eventually consumed.

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