

Wright, in replying to a number of questions, gave the practical details of the operation of his system in Brighton; the instruments used sum up the consumer's bills without the necessity for any calculation, and could be read by an ordinary meter reader. In reply to further questions Mr Wright stated that the maximum demand was measured by a recording ammeter, which is used during the four winter months, and its maximum for that time taken as the maximum demand.

At the closing session of the convention Lieut. F. Jarvis Patten, of New York, presented his paper on "Frequency Transformation," and C. F. Scott, of Pittsburg, read his paper on "Rotaries for Transforming Alternating into Direct Current." The report of the committee on Standard Candle Power of Incandescent Lamps was also presented by James I. Ayer, Dr. Louis Bell, the chairman of the committee, not being present. This report will be found in another column.

The officers which were elected to preside over the destinies of the association during the coming year were Samuel Insull, of Chicago, president; A. M. Young, of Waterbury, Conn., first vice-president; George R. Stetson, New Bedford, Mass., second vice-president. The following were chosen as members of the executive committee: Frederick Gilbert, Boston; W. Worth Bean, St. Joseph, Mich.; Mr. Stevens, Elizabeth, N. J.; W. McLea Walbank, Montreal.

The views of Niagara Falls and its neighborhood on both sides of the river, which we give in connection with this report of the National Electric Light Association, were crowded out of our report of the Canadian Electrical Association's meeting in our July number.

#### CANADIAN ASSOCIATION STATIONARY ENGINEERS.

We report the results of the annual election in the different branches C.A.S.E., in addition to those which appeared in the July number of THE CANADIAN ENGINEER, as follows:

Hamilton—Wm. Norris, president; G. Mackie, vice-president; Joseph Ironside, recording secretary, Markland street.

Stratford—John Hoy, president; Samuel H. Weir, secretary.

Brantford—J. B. Forsyth, president; Joseph Ogle, vice-president; T. P. Igrim, Continental Cordage Company, secretary.

London—D. G. Campbell, president; B. Bright, vice-president; W. Blythe, secretary.

Guelph—H. Geary, president; Thos. Anderson, vice-president; H. Flewelling, recording secretary; P. Ryan, financial secretary; C. F. Jordan, treasurer.

Ottawa—Frank Robert, president; T. G. Johnson, secretary.

Peterborough—W. L. Outhwaite, president; W. Forster, vice-president; A. McCallum, secretary.

Brockville—Archibald Franklin, president; John Grundy, vice-president; James Aikins, recording secretary.

Carleton Place Branch No. 16—Joseph McKay, president; J. D. Armstrong, secretary.

Kincardine—Daniel Bennett, president; Joseph Lighthall, vice-president; Percy C. Walker, secretary, waterworks.

Dresden—Thos. Steeper, secretary.

Berlin—J. R. Utley, president; G. Steinmetz, vice-president; secretary and treasurer, W. J. Rhodes, Berlin, Ont.

St. Laurent—R. Drouin, president; Alfred Latour, secretary, 306 Delisle street, St. Cuneonde.

Brandon, Man., Branch No. 1.—A. R. Crawford, president; Arthur Fleming, secretary.

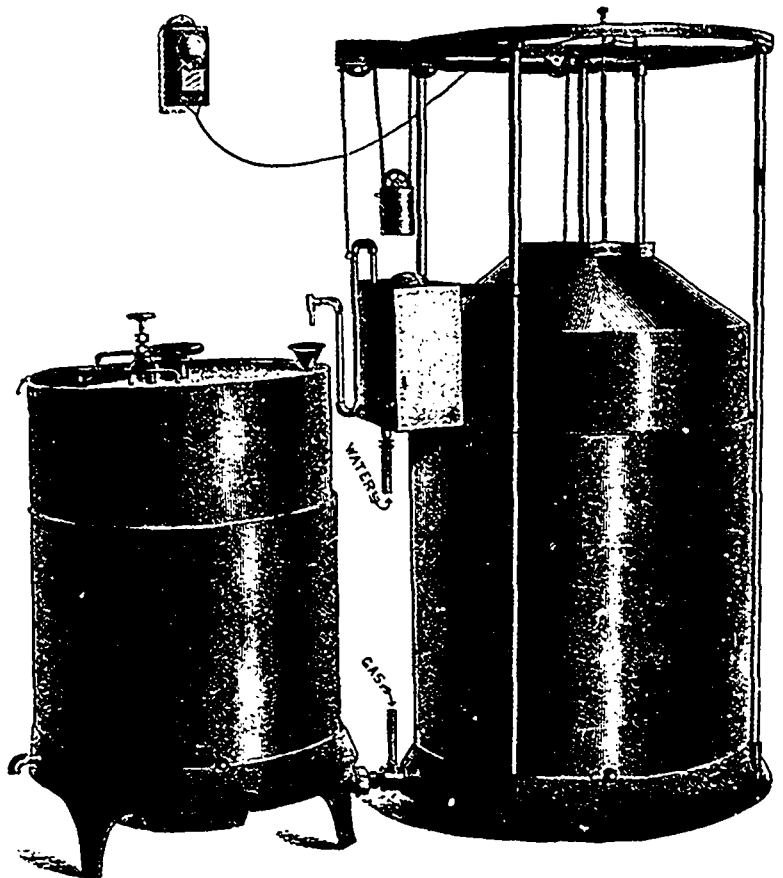
Winnipeg—G. M. Hazlett, President; J. Sutherland, rec. secretary; A. B. Jones, financial secretary.

#### A NEW ACETYLENE GAS GENERATOR.

The success of any acetylene gas generating apparatus depends largely on the regulation of its water supply to the carbide. In the machine here illustrated, the device for this purpose can be said to be both old and new; old, in being a syphon, the common principle of which has been known for ages; new, in its ingenious arrangement whereby the discharging end of the syphon can be raised above its source of supply, thereby arresting its operation without causing the water in it to "break" and run back to the supply tank, as would occur

in doing this with the old simple form of syphon; yet it has no valves or obstructions contained within it, simply a crooked piece of pipe. The secret of its operation is contained in the crook; it will be observed that the water must enter that end of the syphon immersed in the tank and pass up over the edge of the tank, then down again to near the bottom of the tank, where it again takes an upward turn, its end terminating in a spout about on a level with the top of the tank. The "U" shaped bend on the outside of the tank serves to contain sufficient water to more than counterbalance that of the column in the pipe within the tank; hence, when the discharging end of the syphon is raised above the water in the tank the lower part of the syphon outside the tank is still below it. If the discharging end of the syphon be lowered slightly below the surface of the water in the tank, water starts to run, increasing in volume as the syphon is lowered; thus a simple and efficient means is provided for regulating the supply of water, a drop or a stream being furnished as required, depending on the number of lights in use.

The illustration shows the machine in its working position, the gasometer top being at a height just sufficient to stop the flow of water from the syphon, the discharging end of which is shown as just above the water in the small tank to which it is connected; a slight lowering of the gasometer dome pulls downward on the chain, which is attached to the gasometer



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dome, and which passes over pulleys to the syphon. As the dome descends the chain is drawn around the pulleys in the weight until a small obstruction, on the chain, reaches the weight, when the latter is lifted entirely by that part of the chain below the weight, and the gasometer dome. This takes the tension from that part of the chain going to the syphon, when the latter lowers from its own weight, till its discharging end becomes lower than the water in the supply tank; water then flows from the syphon to the carbide in the generator, gas is generated, which passes to the gasometer, and the dome of the latter raises again till the obstruction on the chain passes from the weight, when the latter, exerting its weight equally on both ends of the chain, overcomes the weight of the syphon, causing it to raise till the discharging end is again above the water in the tank. The syphon is prevented from raising too high by an obstruction on the chain, which comes in contact with the pulley over which the chain passes, just above the syphon. The dome of the gasometer is guided up and down by a central rod extending from the frame above, down through a tube in the gasometer dome; the lower end of the rod is