

# RAPID ADVANCE IN ELECTRIC LIGHTING.

## ITS EARLY HISTORY IN THIS CITY. THE BRUSH ELECTRIC ILLUMINATING COMPANY.

Within a comparatively few years the application of electricity to the manifold requirements of our advanced civilization has been wonderfully extended, and in no direction is this so apparent as in electric lighting.

As late as 1880, when the Brush Illuminating Company undertook the experimental work of lighting a certain portion of Broadway, which it did at its own expense, not charging the city one penny for the use of the lamps on that thoroughfare from Dec. 22, 1880, to May 1, 1881, it had to deal not only with many natural obstacles but also with the skepticism and prejudice of the public.

At that time the knowledge of the arc light was, of course, not new, but nothing in the way of a practical adaptation of it was considered possible, for previous to this such lights required each a separate generator—that is, consumed the entire current on its circuit—thereby involving so great a cost as to make it unavailable, and though many attempts at overcoming these difficulties had been made, they had, one and all, proved ineffectual. However, Mr. Brush, by his several inventions, succeeded not only in subdividing the electric current so that a number of lamps could be supplied by one current, but also removed another obstacle in furnishing these lamps with automatic appliances whereby the carbons are kept at a fixed distance from each other, thus regulating the power, steadiness, and brilliancy of the lights.

This company was the first in this country to attempt street lighting by electricity, and the success of the lamps which they erected in December, 1880, on Broadway, and which are in use to this day, demonstrated at once the entire practicability of the Brush system and also removed all prejudice against the use of the lights for this purpose.

In 1881 they began supplying commercial lights, and the value of the arc light for interior illumination was so apparent that the business in this direction greatly increased, many large stores and buildings being furnished with it.

The street lighting of this company has proved so highly satisfactory that its contracts with the city have been constantly extended, and it now lights Broadway above Fourteenth-street, Fifth, Fourth, and Seventh avenues, and also Fourteenth, Twenty-third, Thirty-fourth, Forty-second, and Fifty-ninth streets from river to river.

In addition to this it may be mentioned that they supply the two great lanterns in Union and Madison squares, each with an aggregate of 36,000 candle power, and that they also furnished the United States Government with the electric light plant used in the operations at Hell Gate, as well as the immense lantern at the same point, which is supplied with six lamps of 8,000 candle-power each.

They have in use in this city 1,500 lamps, as against 15 in 1880, and 215 miles of wire, extending from Battery-place to Fifty-ninth-street and from river to river and supplied with electricity from two stations, one at No. 133 West Twenty-fifth-street and the other at Nos. 204 to 208 Elizabeth-street, both owned by the company. To the Brush Company is due the credit of having originated this system of supplying electricity from a central station—the one on Twenty-fifth-street being the first of the kind ever established, and, having no precedent, they had to originate.

It may be well to remark here that the popular prejudice against overhead wires, so far as this company is concerned, is unjust, and the position of the company in this respect misunderstood. The truth is they are anxious to place their wires underground, and will do so just as soon as a successful method is developed, and experts of this company are constantly experimenting with this end in view, and as soon as the problem is solved or permission given the Brush Company to extend its overhead wires it is ready to erect, and, in fact, has already prepared plans for a new station with 5,000-horse power capacity, which, when completed, will so increase its facilities as to enable the company to furnish the light to the city of New-York as well as to its commercial patrons at a very much lower price than it can afford to do at present.

Much, too, has been said of the danger to life and property from exposed electric light-wires, but this is greatly exaggerated, there being no more danger from electricity than from any other of the great forces which we confine. Particularly is this true of the Brush system, for in it every possible precaution in the construction and insulation of its lines is adopted, and they have never yet had a man injured or a serious loss by fire resulting from the use of their light.

The Brush Electric Illuminating Company was incorporated under the laws of the State of New-York Sept. 24, 1880, with a capital of one hundred thousand dollars, which was increased in 1881 to one million dollars.

Mr. W. L. Strong has been the President ever since the incorporation, and to his knowledge and efforts is due largely the success of the company.

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