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#### THE ELECTRIC LIGHT.

It may be that material improvements will have to be effected in the electric light ere it can be so managed and distributed in small quantities as to be suitable for household uses. While such adaptations of the light as would meet domestic requirements are being waited for, it seems reasonably certain that, in this age of invention and discovery, we shall not have very long to wait for them, either. In the meantime it may be considered as a thing settled that the new light is already a success for the illumination of large spaces. In some of the sawmills of the Chaudiere, Ottawa, it has allowed work to be carried on by night as well as by day; and only the scarcity of logs, due to the extraordinary low water of last summer, has delayed its general adoption in the mills of that district, some of them having had to shut down altogether for want of logs before the close of the season. The *North-western Lumberman* speaks of it as undoubtedly the light of the future, and quotes from the *Scientific American* the following testimony in its favour:

"In the matter of lighting streets and open spaces electric light possesses many advantages not possessed by any other illuminating agent. The electric lamps can be placed on top of lamp posts of moderate height, as in the lighting of Broadway, New York, each electric light providing for the illumination of a space two hundred to three hundred feet in diameter; or the lamps may be placed upon towers at a considerable elevation above the ground and above adjoining buildings, as is done in Wabash, Ind., and Akron, O.; each light or group of lights providing for a general illumination over an area a mile or more in diameter. Each of these plans is perfectly practicable and successful, and both have been thoroughly tested. For the lighting of cities and towns of

moderate size, the latter plan is the most economical, and will, no doubt, be very largely adopted. The town of Wabash, Ind., was the first in the world to light its streets wholly in this way, and they find that four Brush lights, of 3,000 candle-power each, placed on an iron flag-staff on the dome of their court-house, at a height of about one hundred and thirty feet above the ground, are sufficient for the general illumination of an area from one-half to three-quarters of a mile in every direction. Some of the streets are, of course, much better lit than others, although they are not nearer to the lights, because the light is not intercepted by intervening buildings. It is stated, however, that even in the streets where no direct light falls, there is yet enough diffused light to permit of getting around without the use of other light. It is also stated that even at a distance of two miles from the lights there is a sort of general illumination produced which is of considerable value. By placing a sufficient number of powerful electric lights upon towers high enough, it is, no doubt, possible to produce an amount of light that would be practically as efficient as daylight for the lighting of all spaces within a reasonable distance of such towers. A sufficient amount of light could be thus provided to light the interior of buildings and dwellings sufficiently for all ordinary purposes. This is the plan that has been proposed for the lighting of the capitol and its surroundings at Washington."

The line of the new Welland Canal, it is stated, will next season be illuminated from end to end with the electric light, an improvement which will add at least fifty per cent. to the capacity of the canal to pass vessels through in any given period of twenty-four hours' time. The Grand Trunk Railway Company is introducing the light into its extensive workshops at Point St. Charles, with such advantages gained as are at once evident and indisputable. At Montreal the greater dispatch given to the loading and unloading of ocean steamers, through the facilities for keeping the work going both day and night, has already proved an inestimable boon to shippers. With coal and the steam engine furnishing the motive power, the electric light is still a cheap acquisition for such purposes as hurrying on the dispatch of ocean steamers—cases wherein the saving of even a little time means the saving of a good deal of money. But wherever water power is available, there the electric light may be considered almost "dirt cheap." Wherever such light as this is wanted, and where at the same time water is running to waste, the case is decided in its favour at once. The *Newcastle Chronicle*, quoted by *Wool and Textile Fabrics*, says that in the little town of Godalming, in Surrey, it has after trial since September last proved "successful in the highest degree." In this case water power is used, supplemented with steam, and the two, it is said, are made to pull together efficiently and economically.