

# SCIENCE :

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Since we last referred to Mr. Edison and his incandescent lamp, the subject has been advanced another step and the final stage of complete and unqualified success achieved; permission has been granted to the Edison Light Company, to place surface conducting wires under the streets of New York City, and in the course of the next two or three months, one large district of that city will be enjoying the full benefits of Mr. Edison's system of electrical illumination.

Taking a retrospective review of public utterances on this question during the last eighteen months, we now extend our condolence to a certain class of professed scientific experts who have maintained, from first to last, the impracticability of Edison's well-devised plans.

Never in the annals of scientific discovery has a grosser attempt been made to pervert the truth, and mislead public opinion.

As one instance among many, let us take up what is offered as a standard work of reference on this subject: "The Electric Light, its Production and Use, embodying plain directions for the working of galvanic batteries, electric lamps, dynamo-electric machines, etc.," by J. W. Urquhart, C. E., edited by F. C. Webb, M. I. C. E., M. S. T. E., London, 1880. Under the heading of "Edison's Lamps" we find "much interest has been taken in the sensational and often absurd announcements, concerning apparatus in course of perfection by Mr. T. A. Edison, of Menlo Park, New York (?), and it was in *some quarters* thought, that when he had set himself about the task of inventing an efficient subdivision of the electric light circuit, *something* would in all probability be done."

"There is little probability, however, that this lamp (the horse-shoe carbon) will prove constant. Burnt paper in various forms has been repeatedly tried be-

fore, and it is assuredly not constant, in the best possible vacuum obtainable." "We may indeed rest assured, that upon further reflection, Mr. Edison will abandon this imperfect burner" The same authors in speaking of the "Sawyer lamp," describe it as "the best incandescent lamp of this kind that has been invented."

Such being the teachings of an educational work, written by professed teachers on this subject, let them be compared with the actual results achieved, and the relative positions of the two men at this moment. Seldom has the irony of events demonstrated more forcibly that the honest work of a man is proof against the assaults of fraudulent or ignorant critics, and that the leveling influence of time always reveals the truth.

On the various attempts to imitate Edison's lamp we shall offer but a few words, for most practical inventors are usually plagued by men who endeavor to duplicate their successful inventions. If "imitation is the sincerest of flattery" we suppose Mr. Maxim is merely desirous of paying Edison a high compliment. Concerning Mr. Swan, of Newcastle, England, who professes to have perfected a horse-shoe carbon lamp, apparently identical to that of Mr. Edison's, we would draw attention to the significant fact, that in Messrs. Urquhart and Webb's work on the "Electric Light," dated as recently as April, 1880, and published in Mr. Swan's own country, not a single reference is made to the Swan electric lamp—in fact, his name does not occur in the book. This would appear to be conclusive evidence that neither Mr. Swan, nor his lamp, were known in England up to that date—unless he is included among the nameless crowd, spoken of by the authors, who had "repeatedly used burnt paper in various forms," and *who failed to secure constant results, even "in the best possible vacuum obtainable."*

### CONGRESO INTERNACIONAL DE AMERICAN-ISTAS.

We are in receipt of a pamphlet printed at Madrid, containing the official announcement of the above Congress, and instructions for those desirous of attending it. This is the fourth meeting of an International Congress for the discussion of American Archaeology, and will take place on the 25th, 26th, 27th, and 28th of September next.

The object to be attained by this body is to contribute to the progress of Ethnographical, Linguistic and Historical researches relative to the two Americas, especially for the period prior to Christopher Columbus, and to bring together such persons as are interested in such studies.

Among the delegates from the United States we notice the names of Professor Spencer F. Baird, of Washington; Professor R. B. Anderson, of the University of Wisconsin; Professor J. Putnam Duncan, of the Academy of National Sciences, Davenport, Iowa, and Albert S. Gatschet, Esq., of 304 E street, N. W. Washington, D. C., to whose courtesy we are indebted for a copy of these official instructions.