

SCIENCE :

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JOHN MICHELS, Editor.

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SATURDAY, NOVEMBER 12, 1881.

The distribution of honors at the French Electrical Exhibition is very gratifying to the pride of the American people, as the American exhibitors have relatively carried off a large share of the prizes.

Edison has maintained the prestige of his country, and asserted the integrity and value of his wonderful series of electrical inventions, by *alone* receiving a "diploma of honor" for the electric light. This high mark of distinction he shared in other departments with the United States Signal Office, the Smithsonian Institution, the United States Patent Office, and Messrs. Graham & Bell.

Gold medals were awarded to the Anglo-American and Brush Electric Light Companies, the United States Electric Lighting Company, Elisha Gray and Taintor. Silver medals to Bailey & Puskas, Conolly Brothers & MacTighe, Dolbear, Eccard, Electric Purifier Company, Hubbard Pond Indicator Company, Western Electric Manufacturing Company, Western Electric Light Company and the Electro-Dynamic Company. Bronze medals to Messrs. Chavat, Cumming and Dion, the Hoosac Tunnel Company, the Trinitro Glycerine Works, Partz, Photo-Relievo Company, Whitehouse, Mills & Williams.

That Mr. Edison, with the whole world competing, and with every system represented, should receive from such a critical committee this special recognition and honor, as the inventor of the most perfect system of electrical illumination, appears to decide this point in a decisive manner. The practical application of this system on a scale which will astonish the world, is near at hand. The immense dynamo machines designed for use to illuminate a district in New York City with Mr. Edison's perfected lamps have been placed in position, and the mass of details connected

with placing wires and fittings are nearing completion. Soon the word will be given that all is ready, and Mr. Edison will probably enjoy a triumph to which all his previous successes will be insignificant.

Mr. Edison must experience some regret that he was unable to be present at Paris, and in person receive the congratulations which would have been showered upon him, but we understand that he was most worthily represented by Mr. Charles Batcheler and Mr. Otto Moses, whose courtesy and indefatigable exertions have been fully recognized in some of our Parisian exchanges.

AN instrument was lately described in a French journal, which was invented for the purpose of detecting oleomargarine as against pure butter.

This instrument discriminated between the specific gravities of the two substances. Shortly after the announcement of the making of this instrument, a report was spread in the daily papers, that the slight difference of density between oleomargarine and butter, was insufficient for this purpose.

A correspondent writes as follows on this subject: "The report that no difference of density is of any use in distinguishing oleomargarine from butter, is very easily disposed of, as the density of oleomargarine is 0.915 and the density of butter is 0.925. One will float at 15 C. in alcohol 53 $\frac{3}{4}$ per cent., and the other in alcohol 59 $\frac{1}{4}$ per cent. I mean by floating that the butter or oleomargarine will neither rise nor sink, when placed in the alcohol. If placed in the middle it will neither go to the top nor bottom, except very slowly. Of course there are persons who cannot distinguish between 0.915 and 0.925 specific gravities, and who cannot make an observation at a fixed temperature, but it is unreasonable to expect that any process can be satisfactory to such persons."

SCIENTIFIC ASSOCIATIONS IN WASHINGTON.

The three societies at the metropolis, the Philosophical, the Anthropological, and the Biological, all reorganized in October under very favorable auspices. A short account of their proceedings is given below:

PHILOSOPHICAL SOCIETY OF WASHINGTON.—Three papers were read, one on Geology, by G. K. Gilbert, which our correspondent did not hear; a communication on Fog-signals, by Prof. Johnson, of the Light-house Board, and a paper on the Best Methods of Calculating the Solar Parallax, by Professor Harkness, of the National Observatory. Mr. Johnson's remarks were an account of investigations made the last summer upon the refractions of sound, in pursuance of the experiments set on foot by Professor Henry. The inquiries were prosecuted mainly in Newport harbor and its vicinity. The facts set forth were of great interest to scientific men and of great practical value to the mariner. Professor Harkness, who is a very ready speaker, gave the Society an explanation of the various methods employed in calculating the distance of the sun and the planets, inclining to prefer the transit observations as yielding the best