

idea of electricity, in consequence of numerous obstacles with regard to the correct working of the telegraph wires along the streets of London and the Greenwich Railway to the Royal Observatory. These, however, have been overcome to the great satisfaction of the directors of the Company and the Astronomer Royal, and for the last three days the experiments have been made with the most complete success, the ball or globe dropping by the electric action simultaneously with the one at the top of the Royal Observatory, precisely at one o'clock, P. M., both balls being in fact, liberated by the same hand. It is now in active operation, and will communicate the standard time of Greenwich and London, by the different lines of railway, to all the principal ports of the United Kingdom and Scotland on the same principle, as arrangements have been made to make it one of the most complete improvements of the present day, not only as regards the time for regulating chronometers on board vessels, but the chief public clocks of the metropolis, and from one end of the country to the other. An electric dial is now being completed in the midway opposite the office in the Strand which separates the crossings, and the new lamp, or light, at the top of the post has been tested as to its power of reflection, and that dial or electric apparatus will show forth the hour, minutes, &c., both day and night, to the public.—[*Ibid.*]

Submarine Rock Blasting.—The reef rocks at Hurl Gate, New York, are in course of being blasted, and the New York *Tribune* of the 22nd ult. in describing a resumption of the process, says,—“The firing recommenced on Way’s Reef. Since then thirty-eight charges have been fired on that rock, and we hope it will be reduced to fifteen feet mean low water before the close of next week. The firing on Way’s Reef is from a battery of ten pairs of plates, placed on the metal float moored on that reef. As many as nine charges have been fired during a single tide. As soon as Way’s Reef is broken down, ‘Shell Drake Rock’ will be fired upon, until it is reduced to fifteen feet below mean low water. After that, ‘Frying Pan,’ a very dangerous rock in mid-channel, and in rapid and deep water, will be attacked, and the firing continued on that rock until it is reduced to the same depth as Pot Rock, namely, 20½ feet below mean low water. As soon as the rocks here mentioned shall have been reduced to the depths respectively stated above, operations by Messrs. Maillefert and De Raasloff, will be commenced on Diamond Reef, situate between Governor’s Island and the Battery. This is a large rock in 16 feet water. A charge containing 500 lbs. of powder will be fired on this rock. Two blasts will be made on Hallets Point, at the Gate, in which a preparation of potash will be used for blasting. The whirlpool has been entirely filled up by the debris of Pot Rock, and the smallest row boat may pass over what was once Pot Rock, at any time of tide. This great and wonderful result M. Maillefert has accomplished by the firing on the surface of the rock under water without any drilling, 284 submarine charges, containing in all 34,231 lbs. of powder, and at a cost of less than 7,000 dollars. It is a work of great importance to the United States, and in fact to the whole world, and is conducted with the greatest economy. We purchase the powder, blasting-cans, and ballast-bags with ready money, and pay M. Maillefert weekly a stipulated price for each charge fired on the rock; he furnishing the labourers employed, the wires, battery and floats. The expense of removing Pot Rock, Frying Pan, and Diamond Reef, to the depth of 20½ feet, and Way’s Reef and Shell Drake Rock to the depth of 15 feet below mean low water, will probably not exceed 15,000 dollars. The success that has attended M. Maillefert’s new mode of submarine blasting will greatly benefit the commerce of the world, will be the means of saving thousands of lives and millions of dollars in value of property; for this system of submarine blasting will be adopted in every place where dangerous rocks obstruct navigation, inasmuch as but a small sum of money is required to pay the expense, compared with what would be required under the old system. His excellency the Portuguese minister takes great interest in these operations, and he has communicated to his government the result thus far obtained at Hurl Gate. In April last the Portuguese war steamer Porto made dreadful shipwreck on a rock in the harbour of Oporto. The most influential families in that city have now obtained one of the Francis metallic life-boats, and are in hopes to obtain the services of Messrs. Maillefert and De Raasloff to remove this dangerous rock by submarine blasting. M. Maillefert has entirely recovered from the wounds he received by the disastrous explosion of a blasting-can above water, during the operations on Frying Pan, on 26th March last.”

French Researches at Nineveh.—The Minister of the Interior has received further accounts of the explorations, which are being carried on by M. Place, Consul of France at Mossul, in the ruins of Nineveh. In addition to large statues, bas-reliefs in marble, pottery, and articles of jewellery, which throw light on the habits and customs of the inhabitants of the ancient city, he has been able to examine the whole of the palace of Khorsabad and its dependencies, and in so doing has elucidated some doubtful points, and obtained proof that the Assyrians were not ignorant of any of the resources of architecture. He has also discovered a large gate twelve feet high, which appears to have been one of the entrances to the city, several constructions in marble, two

rows of columns, apparently extending a considerable distance, the cellar of the palace still containing regular rows of jars, which had evidently been filled with wine—and at the bottom of which jars there is still a sort of deposit of a violet colour. M. Place has, moreover, discovered the storehouse of pottery, containing various articles. In addition to all this, he has caused excavations to be made in the hills of Bachiccha, Karamless, Teu Leuben, Mattai, Karakock, Digan, &c., on the left bank of the Tigris, within ten leagues from Khorsabad. In them he has found monuments, tombs, jewellery, and some metals and stones. At Dgigiran there is a monument, which, it is supposed, may turn out to be as large as that of Khorsabad. At Mattai, and at a place called Barrican, M. Place has found bas-reliefs cut in solid rock; they consist of a number of colossal figures and of a series of full-length portraits of the Kings of Assyria. M. Place has taken copies of his discoveries by means of the photographic process; and has been authorized to make diggings near the palaces which the English are engaged in examining.

Prizes of the Academy of Sciences of Paris.—At the session of the 22nd of March, the prize in Astronomy, for 1852, was divided between Mr. Hind and M. de Gasparis, the former for his discovery of the new planet Irene, and the latter for that of Eunomia. The Cuvierian prize (a triennial prize and never before awarded) was given to Professor Agassiz for his Researches on Fossil Fishes.

Among the prizes offered, is one for 1854, in the department of Mathematics, as follows:—“To determine the equations of the general movements of the earth’s atmosphere, having in view the rotation of the earth, the calorific action of the sun, and the attraction of the sun and moon. The authors are desired to exhibit the concordance of their theory with the best observations on the atmospheric movements. Even if the whole question is not resolved, but some important steps are made towards its solution, the prize will be awarded by the academy. The prize is a gold medal of 3,000 francs.

There is also an extraordinary prize for 1853, on the application of steam to navigation. The prize was proposed first in 1836, and has been continued to 1838, 1841, 1844, 1848, and finally to 1853. It is offered “for the best work or memoir on the most advantageous employment of steam for steamships, and upon the best system of mechanism, ‘installation,’ stowage, and armament for such vessels.” The prize is 6,000 francs. Time, December 1, 1853.

A British Industrial University.—In course of last month it was announced in our columns that there was reason to believe His Royal Highness the Prince Consort “contemplated the foundation of a great building and establishment in which theory would be combined with practice, in the advancement of science and art, by a concentration of talent and skill.” We believe we may now state without any impropriety that in all probability the surplus of £150,000 and upwards, in the hands of the Royal Commission of the Great Industrial Exhibition of 1851, will be devoted to the foundation of an Industrial University in London, such as was long since mooted in *The Builder*. This central concentration of science and industry will ultimately be organized, with radii or branch institutions, throughout the whole country; but we scarcely think that the Royal Commissioners, as has been stated, have as yet formed any definite scheme for the establishment of such a university, although it is their known design to carry out the idea.—*Builder.*

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