site of the ancient Lake Moeris in Egypt have been so fruitful that the Egyptian government has taken the matter in hand, and it is believed, that, by a small expenditure, the surplus waters of Bahr Yussef can be directed into the now dry depression. Preliminary surveys are in progress to determine the practicability and expense of restoring a state of things very exactly described by Herodotus, Strabo, and Pliny, as having existed in past ages.

Ancient Arabic inscription in the Sahara.— Le Chatelier furnishes an account of what may prove to be an important inscription in an artificial cavern at Timissao, near the wells and on the right bank of the wady of the same name, in the Sahara. The wady, coming from the south, turns here toward the west. Its banks are of conglomerate, in two horizontal beds, separated by a bed of gray schist in vertical layers. These schists have been dug out for a distance of over two hundred feet, forming a sort of gallery fifteen feet wide and six or seven feet high. The inner wall of the gallery is occupied by an inscription in Tifinakh lettering, the characters incised, and painted with red ochre. A more modern inscription in Arabic is simply painted on the roof. At the further end are some archaic incised figures on the wall, including those of five horses. The accounts seem to be truthful, though derived from the natives; and, if so, the deciphering of the inscriptions would be of great interest.

ASTRONOMICAL NOTES.

Eclipse of the sun, 1886, Aug. 28–29.—A bill has been introduced in congress, by Mr. Thomas of Illinois, to enable the secretary of the navy to fit out an expedition to observe the total eclipse of the sun which occurs on the 29th of August next. The sum of ten thousand dollars is appropriated for defraying the expenses of the expedition; and the secretary is authorized to detail a naval vessel to transport the party to a point near Benguela, on the west coast of Africa, almost the only seaport which is near the central line of totality. The bill was introduced in the house of representatives on the 11th of January, but has not yet come up for consideration A similar bill introduced in the senate has been favorably reported by the committee on naval affairs. It will be remembered that this eclipse is of rather more than ordinary interest on account of the long duration of totality, — $4^m\ 41^s$ near Benguela. Another interesting circumstance has been noticed by Dr. Herz of Vienna, in the fact that at totality two stars, 47ρ Leonis and 49 Leonis, are close to the sun, the latter within the corona. It is suggested, that, by means of measurements upon these two stars, something may be learned in regard to the refracting power of this peculiar atmosphere of the sun. The total phase will be visible in the West Indies; but the sun will not be in a good position for observation. According to *Nature*, at Carriacou, the largest of the Grenadine Islands, totality commences at $19^h\ 11^m\ 45^s$ local mean time, and lasts $3^m\ 21^s$; the sun's altitude being 20°.

Comet 1886 . . . (*Barnard*). — According to an ephemeris published by Mr. H. V. Egbert of the Dudley observatory, we may look for this comet to become quite a bright object during the early morning-hours in the latter part of May. Mr. Egbert's calculation shows that the comet on the 20th of May will be 360 times as bright as it was when discovered by Mr. Barnard, Dec. 3. Its position will be R. A., $2^h\ 53^m$; decl., + 20° 26′; that is, it will appear above our horizon about an hour before the sun.

ST. PETERSBURG LETTER.

THE last number (9) of the Journal of the Russian physico-chemical society contains an elaborate paper, by K. Kraewitch, on the relation between the elasticity and density of the air in a rarified condition. His experiments on the velocity of sound show, that at a temperature of 17.5° C., the velocity decreased from 330 metres, at a pressure of 761 millimetres, to 171 metres, at a pressure of 2.6 millimetres. At a pressure of 280 millimetres, the velocity is about the same as the mean air pressure; but it diminishes rapidly below 280 millimetres. He concluded that gases below this pressure do not obey the Boyle-Mariotte law.

At the general meeting of the physico-chemical society in December, the coming eclipse of Aug. 18, 1887, was discussed. Prof. S. P. Glasenap showed a map on which the path of the total eclipse was marked. As it traverses an immense extent of Russia from Kiev to south-eastern Transbaikalia, and appears also on the shores of the great ocean at Possiet harbor, and as a total eclipse will not appear in Russia for thirty-six years after 1887, he concluded that the best use should be made of the opportunities offered by the eclipse to study different problems relating to solar physics. Prof. N. G. Egoroff followed with a communication on the corona and the opportunities offered by the eclipse for its study. The last paper was by Prof. A. Woeikof, on the meteorological side of the question. Observations on the amount of cloud prevalent in the region show a cloudiness of about 51; that is, half the sky is