

1881:—"On the Jail Fever, from the earliest Black Assize to the last recorded outbreak in recent times." The essays to be sent in on or before June 30, 1881. The Council have decided to grant the sum of 20*l.* to the writer who may gain the "Howard Medal" in November, 1881.

THE additions to the Zoological Society's Gardens during the past week include a Sykes's Monkey (*Cercopithecus albicularis*) from West Africa, presented by the Officers of the Royal Yacht; a Green Monkey (*Cercopithecus callitrichus*) from West Africa, presented by Mr. A. Haynes; a Rhesus Monkey (*Macacus erythraeus*) from India, presented by the Rev. J. Saunders, B.A.; a Two-toed Sloth (*Choloepus didactylus*) from Demerara, presented by Mr. G. H. Hawtayne, C.M.Z.S.; an Egyptian Jerboa (*Dipus agyptius*) from Egypt, presented by Major Money; a Common Trumpeter (*Psophia crepitans*) from Demerara, presented by Mr. J. Stovell; two Silver Pheasants (*Euplocamus nycthemerus*) from China, presented by Miss C. Hallett; an Indian Gazelle (*Gazella bennetti*) from India, deposited; an Ursine Dasyure (*Dasyurus ursinus*) from Tasmania, a Common Wigeon (*Mareca penelope*), a Grey Plover (*Squatarcola helvetica*), a Knot (*Tringa canutus*), a Greenshank (*Totanus cadidris*), British, a Horned Ceratophrys (*Ceratophrys cornuta*) from Santa Marta, purchased.

OUR ASTRONOMICAL COLUMN

THE COMETS OF 1812 AND 1815.—We learn from M. Schulhof, of the Bureau des Longitudes, Paris, that in conjunction with M. Bossert he has undertaken a rigorous investigation of the orbit of the comet of 1812, which Encke showed to have a period of about seventy years, and which will consequently be again approaching its perihelion. M. Schulhof hopes to complete the calculations early in the ensuing year. He has discovered a series of original observations by Blanpain at Marseilles, which he considers to be amongst the best, if not the best series that are available; the original observations by Lindenau have also been received, but unfortunately nothing is to be found of the long series by Zach and Triesnecker. From the manuscripts preserved at Paris some corrections have been applicable to the results as printed. To this we may add that Flaugergues' differences of right ascension and declination from his comparison stars are published in the fifth volume of Zach's *Correspondance astronomique*. These observations of Flaugergues' at Viviers, and those made at Paris as they appear in the first folio volume, were reduced several years since by Mr. W. E. Plummer, now of the University-observatory, Oxford, and from three very carefully formed normals he deduced a period of revolution about a year and a half shorter than that assigned by Encke in *Zeitschrift für Astronomie*, t. ii., so that the comet may now be expected at any time. At the instance of Prof. Winnecke sweeping ephemerides have been prepared by M. Mahn of Strassburg. It is however M. Schulhof's intention, on the completion of his investigation of the orbit, to furnish observers with ephemerides similar to those which have led to the re-discovery of several lost planets.

An able calculator at Vienna has nearly finished a new discussion of the observations of the comet of 1815 (Olbers' comet), which, according to Bessel's researches, is due at perihelion in February, 1887. This result may be materially changed by the more complete reduction of such series of observations as we possess in their original form, and a recomputation of the perturbations, with more accurate values of the planetary masses than were available at the date of Bessel's work.

CERASKI'S CIRCUMPOLAR VARIABLE STAR.—From the estimated magnitudes of Schwed and Carrington, and Mr. Knott's epoch of minimum given in NATURE last week, the most probable period appears to be 2.49085*d.*, to be reckoned from 1880, October 23.4672 Greenwich mean time. While the telescope is turned towards Ceraski's star, it may be suggested that Lalande 1013.4 in Cassiopeia should receive attention; at present we have the discordant estimates 10*m.* and 5*m.* of Lalande, 1790 September 29, and 1797 November 10 respectively, and 7.7 in the *Durchmusterung*; the star is 6*m.* on Harding's Atlas, and is not found in Fedorenko's catalogue, or

in Argelander's zones; its position for 1880 is in R.A. oh. 33*m.* 22*s.*, N.P.D. 38° 46' 8".

THE LONGITUDE OF THE CAPE.—We understand that arrangements are being made for the telegraphic connection of the Royal Observatory, Cape of Good Hope, with Aden, which has already been connected with Greenwich, Mr. Gill taking an active part in the operation. The next desirable work of this kind will be the connection of an Australian observatory with the observatory at Madras, which is well-determined with reference to Greenwich.

GEOGRAPHICAL NOTES

COL. PREJEVALSKY writes from "Houi-de-Tin, plateau of the Hoang-ho, May, 1880." Having packed up and sent off all his collections to Alashan, he left his camp, 25 versts from the town of Donkyr, on March 20, to reach the Hoang-ho, 83 versts from Donkyr. Here the Yellow River turns abruptly from north-east to east, at the small valley of Gomi, inhabited by Tungut cultivators, and forming the extreme point of the habitable lands of the Hoang-ho. The river here is pretty wide, and has a very rapid current. The banks are wooded, with here and there pretty clumps of poplars and weeping willows. The river here is 8,000 feet above sea-level. After ten days at Gomi, Prejevalsky's party resumed their route. From Gomi the journey along the Hoang-ho was very difficult, the banks being deeply cut by steep ravines, which can only be noticed when close upon them. A stream usually flows at the bottom of these ravines, which are bordered by trees and wild arbutus. As soon as ever the party touched the Si-Fan territory a horseman appeared and, telling them they would soon be murdered, disappeared—a threat happily not realised. Indeed the Si-Fan became so reconciled to the presence of the intruders as to sell them butter and sheep. At 130 versts from Gomi they found in the ravines bordering the river vast forests frequented by innumerable birds, especially blue pheasants. The second local rarity was rhubarb, which was met with in prodigious quantities. The old roots of this plant reach colossal proportions. One of these roots, taken at hazard, weighed 26 lb. The mouth of the Churmys, an affluent of the Hoang-ho, was reached 130 versts below Gomi, by the course of the river. Having examined the country for a distance of 40 versts, Prejevalsky was convinced that it was impossible to cross the enormous chain of mountains which extends along the Yellow River, the summits of which are lost in the clouds. Gaping ravines are met with at every verst, and there is not the least trace of vegetation, and therefore no forage for animals. He decided to return to Gomi. Thence he went to Houi-De, 60 versts on the south bank of the river, and sent his interpreter to Sinin to inform the local authorities that Prejevalsky wished to reach the mountain regions of eternal snow. The Amban of Sinin informed Prejevalsky that it was impossible to allow him to proceed to the Koko-nor, or to penetrate further into Houi-De, where there was a revolt of the Tunguts. Prejevalsky decided to spend the month of June where he was, exploring the fauna and flora, and afterwards go north towards Cheibsen, where he would remain during July, and complete his explorations in the mountains. The weather, he says, was detestable, cold and wet, with the thermometer sometimes 12° below zero C. He had collected 250 specimens of plants, 500 species of birds, and many of fish. The geography of the country traversed had, moreover, been observed and noted, astronomical, barometrical, and thermometrical observations made, and sketches taken of the various types of natives. He doubts much whether the Hoang-ho makes the enormous curve represented in maps; he did not observe any such curve in the 250 versts explored by him. He expected to reach Alashan about August 20.

IN the Geographical Society's *Proceedings* for November Mr. C. R. Markham supplies a brief but lucid account of Lieut. Schwatka's expedition to King William Land, and of the previous state of our knowledge respecting the remains, &c., of the Franklin Expedition, and he arrives at the conclusion that we have gained but little by this last attempt to obtain information beyond that gathered by Sir L. McClintock. Lieut. Schwatka's journey, however, he considers to have been a most remarkable one, and in some respects without a parallel. Dr. Christison follows with a paper descriptive of a journey made some twelve years ago to Central Uruguay. The geographical notes are numerous this month, and furnish much useful information, especially in regard to Africa. Under the head of "Corre-