

probably in the same region of the sky, has not yet been recovered. The planet which was named *Scylla*, and of which only four observations could be obtained at Pola and Berlin in November, 1875, will probably be difficult to detect again, since the observations, though inadequate to furnish elements with any pretensions to accuracy, sufficiently prove that the inclination of the orbit to the ecliptic must be pretty large. In case any one of our readers should be disposed to examine this point further, we subjoin the four observed positions reduced to longitude and latitude :—

	Greenwich mean time.	Longitude App. E1.	Latitude North.
1875, November	8 <sup>h</sup> 61 <sup>m</sup> 57 <sup>s</sup> ...	48° 5' 2" ...	1° 58' 41" ...
" "	9 <sup>h</sup> 42 <sup>m</sup> 47 <sup>s</sup> ...	47 54 13 ...	2 6 28 ...
" "	22 <sup>h</sup> 56 <sup>m</sup> 05 <sup>s</sup> ...	44 54 44 ...	3 53 18 ...
" "	23 <sup>h</sup> 44 <sup>m</sup> 69 <sup>s</sup> ...	44 43 41 ...	4 0 7 ...

VARIABLE STARS.—Dr. Weiss, Director of the Imperial Observatory at Vienna, announces several new variable stars. One is Lalande 28607, which varies from 7.0 to 8.8 in a period not differing much from four months; this star is further to be noted for its large proper motion,  $\Delta\alpha = -0.080s.$ ,  $\Delta\delta = -0".35$ . He also confirms variation in the neighbouring double star Lalande 28590, which had been suspected by Struve. Further, the stars in the *Durchmusterung*, +17°, Nos. 2510 and 2511, are found to be variable, the former from 8.0 to 10.0 in rather over eleven months, and the latter, also to the extent of about one magnitude, in a somewhat shorter period, about 9½ months.

M. Ceraski, of the Moscow Observatory, also finds variation in the star, which appears thus in the *Durchmusterung*: mag. 9.2, R.A. 21h. 9m. 25s., Decl. +67° 49' 5".

GEOGRAPHICAL NOTES

THE Council of the Royal Geographical Society have presented a remarkable memorial "to H.M. Commissioners of the University of Oxford, to those of Cambridge, and to the Governing Bodies of either University." The burden of this memorial is that steps ought to be taken for the establishment of professorships of geography in the two universities. The memorial points out forcibly and justly the ignorance of geography in its highest sense, in this country, where it is commonly confounded with mere topography. The Council of the Society, we are pleased to see, show that they possess an adequate conception of the position which geography ought to occupy, and which, indeed, it does occupy in the Universities of Germany, Switzerland, and France. We have often repeated that geography is really the meeting-place of all the sciences, and this is the idea which the Council endeavour to enforce upon the Commissioners and governing bodies of the universities. They show, how, to have an adequate knowledge of geography it is necessary to know something of both the biological and physical sciences, and be able to trace the mutual influence of man and his surroundings. The duties of such a professor as the Council desire to see appointed, the memorial states, would be first, to promote the study of scientific geography, and secondly, to apply geographical knowledge in illustrating and completing such of the recognised university studies as require aid. It is suggested, also, that he might deliver at least one annual discourse on some subject of geographical research. The memorial rightly states that there is no country that can less afford to dispense with geographical knowledge, but we doubt if the number of members of the Geographical Society is any evidence that we have a greater natural interest in the subject than other people. Certainly we ought to have, for our interests are as wide as the world; and as

the memorial states, it would not be difficult to cite instances in which these interests have been seriously compromised by a want of geographical knowledge. Thus, that as a nation, we are far behind, both in our conception and in our knowledge of geography in its highest sense there can be no doubt, but whether this state of things is to be remedied by the founding of professorships of geography at Oxford and Cambridge is another question, which at present we cannot discuss. It appears to us at first sight as if it were beginning at the wrong end. Moreover, is not geography in its highest sense really only a branch of physiography, and would not the want in our university education be most effectually met by a professorship, or perhaps a lectureship, on that subject? At all events we are grateful to the Geographical Society for drawing attention to the importance and comprehensiveness which geography has assumed on the Continent, and to the lamentable want of interest in the subject which exists in this country.

ON the suggestion of the Bishop of Salford a committee has been formed in Manchester for establishing a Society of Commercial Geography. Mr. Armitage, the Bishop of Manchester, Mr. Arthur Arnold, Mr. Hugh Mason, Mr. Slagg, Mr. J. E. Taylor, and others, have joined the committee. We suggested some time ago the utility of forming such societies in our chief commercial centres, and we hope the example of Manchester will soon be followed by our principal seaports. That Manchester stands in need of some education in geographical matters was evidenced by the ignorance of African geography shown at the recent meetings to promote the formation of a railway from Zanzibar to the Lake Region. Similar societies have been found of great service in France. Might it not be well, however, if other towns form similar societies, that some common organisation be formed, and perhaps a common journal be published?

FROM the new Yellow Book of the Chinese Maritime Customs we gather some notes respecting the island of Hainan, the port of which, Kiungchow, has been recently opened to foreign trade. So far it has certainly not proved a commercial Eldorado, but what the real capabilities of the island are it is difficult to judge so long as the greater part remains a *terra incognita* to foreigners. This much, however, may be said in its favour, that it possesses an advantage over many islands of its size, viz., a large navigable river by which access may be gained to the interior, and which partially obviates the necessity for good roads. From the *Kiungchow Record* it appears that gold, silver, copper, tin, and loadstone are found in different parts of the island, but no mention is made of coal. The author of the report we allude to knows that peat exists, and samples of carbonate of copper have been shown him by natives. The number of different kinds of grain and other produce enumerated in the Chinese work referred to as growing in Hainan is surprising, and includes many varieties of rice, millet, Barbadoes millet, wheat, barley, beans, peas, sugar-cane, sesamum, ground-nut, taro, and yam. Of medicines (according to the Chinese pharmacopœia) exported the following are the chief items :—*Ai-fên*, a kind of camphor, obtained from the aborigines and said to be distilled from the leaves of the *Artemisia moxa*, *ho-hsiang*, stalks and leaves of *Betonica officinalis*, bitter cardamoms, cardamoms, the berries of *Abrus precatorius*, the stalks of *Dendrobium ceraia*, and tortoise-shell rind.

THE March number of the organ of the Geographical Society opens with the paper "On the Road to Merv," read at a recent meeting by Sir H. Rawlinson, which now appears, enriched with valuable notes, and illustrated by a map of the Turkoman Steppe and Northern Khorassan. Mr. C. R. Markham's paper "On the Basin of the Helmund, Western Afghanistan," is also published, accompanied by a well-executed map of the region. The Zulu-

land bibliography and cartography, which have been compiled with much care, will be found very useful at the present time, but it is to be regretted, perhaps, that a map of the country was not added. The geographical notes include accounts of M. Oshanin's further explorations in the Pamir, and of the Loochoo Islands. There is also an obituary notice of M. Nicholas de Khanikoff.

THE Archbishop of Algiers has received a detailed journal of the experiences of the French missionary expedition on its way to Albert and Victoria Nyanza, and Lake Tanganyika, which he has promised to communicate shortly to *Les Missions Catholiques*. When published in that periodical, it will be accompanied by a map of Equatorial Africa, prepared from original sources of information by Père Charmetant, under whose auspices the expedition started from the east coast.

AT the last meeting of the Society of Commercial Geography at Paris, M. Reclus communicated his report on the exploration of the Isthmus of Darien, conducted under the orders of Lieut. Wyse.

IN the *Bulletin* of the Lyons Geographical Society, which has just been issued, M. Luciano Cordeiro, the learned Secretary of the Lisbon Geographical Society, contributes a second instalment of his papers on the first explorations of Central Africa, and the Portuguese doctrine of African hydrography in the sixteenth century.

NEWS has lately been received by the German African Society from Dr. Buchner, a traveller recently sent out to West Africa. He proposed to leave Loanda towards the end of December for Dondo, on the Quanza, where Major Mechow is delayed by illness.

THE just received *Boletín* of the Madrid Geographical Society for October last contains a lecture by D. Francisco de Paula Arrelaga, on the physical geography of the sea. Also papers on Afghanistan, on Bulgaria, and other eastern countries by Sr. D. Saturnino Giménez, and an account of a journey to Morocco in 1800 by a Spanish Commission.

THE enterprise of Mr. James Gordon Bennett in preparing two vessels for arctic exploration, the one to proceed by way of Spitzbergen and the other by Behring Straits, is already well known to our readers. The steamer *Jeannette* has been assigned to the Behring Straits' service, and is, we understand, already in San Francisco. A bill has been introduced into Congress by Mr. Wood authorising the Secretary of the Navy to accept this vessel and take charge of her. The bill provides that it is to be fitted up with any material on hand, and authority is given to enlist the necessary crew and to provide the naval officers; and the expense, at least the pay of the men, will be subsequently refunded by Mr. Bennett. It is not improbable that this vessel will be made useful in the search for and relief of the *Vega*, Prof. Nordenskjöld's steamer.

#### NOTES

WE announce with the greatest regret the sad news, just received by telegraph, of the death of Prof. W. K. Clifford at Madeira. We can do no more this week than barely announce this national loss.

THE Emperor of Austria has bestowed upon Dr. Meyer, the director of the Royal Zoological Museum of Dresden, the well-known New Guinea traveller, the order of the Iron Crown.

THE death is announced at Berlin of the well-known chemist, Prof. Sonnenschein. He had reached the age of sixty-two.

THE Council of the Society of Arts have appointed Mr. H. Trueman Wood, Secretary, in the place of the late Mr. P. Le Neve Foster.

ACCORDING to the *Kreuz Zeitung*, Prof. Virchow intends, on the close of the current semester, to accept an invitation of Dr. Schliemann to join him in some excavations at Troy.

THE Italian Ministry of Agriculture, Industry, and Commerce

offers a reward of 3,000 lire to the author of the most complete and best monographic essay on the structure, the vital functions, and the diseases of the acid fruits, or species and varieties of the genus *Citrus* and kindred genera, provided that the said work, by a sufficient collection of original observations and experiments, should succeed in furnishing an important addition to the present knowledge concerning such subjects, and thereby supply a scientific criterion for the improvement of the cultivation of these acid fruits and for the cure of their diseases. The date for sending in the works competing for the said prize is fixed for the end of May, 1881. Essays by Italians, or by foreigners written in Italian, are admissible to the competition; but if written in another language they must be accompanied by an Italian translation. The essays sent in for competition are to be sent to the Ministry of Agriculture, Industry, and Commerce, with the superscription, "Competition for the Prizes for the best Essay on the genus *Citrus*," and they must be distinguished by a motto, to be given also in a sealed cover containing the name and address of the author.

IT is intended to make a special effort to issue the Report of the Sheffield Meeting of the British Association at an early date after the meeting. To enable this to be done the Council request that all Reports and Abstracts of all Papers intended to be read in the Sections, may be sent to the Assistant-Secretary not later than July 15, in order that, if approved of by the Organising Committees, they may be put in type before the Meeting. Authors who comply with this request, and whose Papers are accepted, will be furnished *before* the Meeting with printed copies of their Reports or Abstracts. No Report, Paper, or Abstract can be inserted in the volume unless it is in the Assistant Secretary's hands *before the conclusion of the Meeting*.

DR. BOTTOMLEY has called the attention of the Manchester Literary and Philosophical Society to an interesting copy of the "Principia" of Newton. In addition to being an impression of the first edition, it contains the autograph of Edmund Halley. It was a present from Halley to the Abbot Nazari. Nazari was the editor of a scientific journal at Rome from 1668 to 1681. The following is the entry in Halley's hand-writing:—

Illustrissimo Dno  
Dro Abbati Nazario  
Romæ humillime offert  
Edm. Halley.

Subsequently the book was in the possession of Dr. Dalton, and its value is enhanced by his autograph.

M. STEPHAN has been elected a Corresponding Member in the Astronomical Section of the Paris Academy, in place of the late Dr. Hansen, of Gotha.

WE have received one or two letters on the subject of migration of birds, referred to in Col. Donnelly's letter in *NATURE*, vol. xix, p. 289. Mr. H. Cecil thinks that the most hopeful way of carrying out Col. Donnelly's proposal would be through our consuls. "If a tabular sheet, noting in separate columns the points to observe—drawn up, say, by Mr. A. R. Wallace—were printed on thin paper and transmitted to our consuls abroad, with a request that they would fill them up and remit them to *NATURE*, my impression is that few would decline. In cases where the consul himself had not the inclination or the time accurately to fill in the paper, he could generally command the services of some one who could. This need in no way interfere with the independent notes of which your correspondent speaks." Mr. Cecil thinks that any funds required could easily be got by subscription. Mr. Allen Harker, of Gloucester, thinks that a student of migration has rather an *'embarras de richesses* to contend with than a want of data. "The researches of Midden-dorf," he writes, "or the admirable work of Dr. Palmen, 'Om foglarnes flyttningsvägar,' reviewed in *NATURE*, vol. xv. p. 465, would furnish your correspondent with much of the