uses the term Höhenkrankheit rather than Berg-krankheit. This seems a reasonable change. The latter word really includes only the physiological effects experienced by mountain climbers, while the former includes all the effects of diminished pressure, whether noted by mountain climbers, who are still on terra firma, or by aëronauts, who are carried above the surface of the earth in the car of a balloon.

R. DEC. WARD.

HARVARD UNIVERSITY.

## SCIENTIFIC NOTES AND NEWS.

Professor E. E. Barnard of the Yerkes Observatory, University of Chicago, sailed from New York on December 9th for England. He intends to arrange for a lens for the Bruce photographic telescope.

PROFESSOR EDWARD ORTON, JR., has been appointed state geologist, of Ohio, to succeed his father, the late Dr. Edward Orton. Professor Orton served as an assistant on the Ohio Survey, studying the distribution of the coal measures, and later prepared the excellent reports on the clay and clay industries of the State which were published in Volumes V. and and VII. of the Geological Survey of Ohio and in the Reports of the National Brick Manufacturer's Association. Since 1894 he has been the director of the department of clay-making and ceramics in the Ohio State University in which is given the only four-year course in ceramics in this country. This appointment ensures the continuance of the excellent work in economic geology which has characterized the later Geological Reports of Ohio.

DR. JOKICHI TAKAMINE, of the University of Tokio, Japan, known for his researches on digestive ferments, is at present on a tour of inspection of the larger educational institutions of the United States. He has been sent by the Japanese government to examine the scientific work and methods of American universities.

THE New York Herald has received a cable-gram stating that M. Daniel Osiris has given a large endowment to the Institute of France to provide a triennial prize of 100,000 fr. to be awarded for a great scientific discovery or work

of art. Surgical or medical discoveries are to be especially considered.

Professor Dr. Förster of the Mülhausen Gymnasium has received a call from the Dutch Government to geological research in Sumatra. He will be absent about one year and a half.

SIR WILLIAM MACCORMAC, the eminent British surgeon, who it will be remembered volunteered his services at the seat of war in South Africa, arrived at Cape Town on November 20th.

THE Special Board for Biology and Geology, of Cambridge University, have adjudged the Walsingham medal for 1899, to H. H. W. Pearson, B. A., Gonville and Caius College, for his essay entitled 'The Botany of the Ceylon Patanas,' and a second Walsingham medal to J. Barcroft, B. A., Fellow of King's College, for his essay entitled 'The Gaseous Metabolism of the Submaxillary Gland.'

Mr. W. F. Cooper, Clare College, Cambridge University, has been nominated by the Special Board for Biology and Geology to occupy the University table at the Zoological Station at Naples until February 1, 1900.

Dr. L. A. BAUER, on October 25th, was the guest of the Royal Geographical Society of St. Petersburg. At the close of the meeting he exhibited various maps relating to the magnetic survey of the United States and Alaska in general, and of the special magnetic survey of Maryland.

Mr. Henry P. Walcott, of Cambridge, has been elected president of the Massachusetts Forestry Association.

THE death is announced of Professor Francis Guthrie at the age of sixty eight. He was for many years professor of mathematics in the South African College, and made valuable contributions to the botany of South Africa.

Professor P. Knuth died at Kiel on October 30th, at the age of forty-five years. He was well known for his researches on cross-fertilization.

WE also regret to learn of the death of Professor R. Yatube, the Japanese botanist.

In accordance with the German custom the former pupils of Dr. William H. Welch, pro-

fessor of pathology in the Johns Hopkins University, will mark the occasion of his twentyfifth year as teacher and investigator, by dedicating to him a volume of their scientific contributions. Some seventy-five students have undertaken investigations under Dr. Welch's leadership and nearly half of these will contribute to the volume. Dr. F. P. Mall is the secretary of the committee of publication and to him communications and subscriptions should be addressed. The committee of publication consists of: A. C. Abbott, University of Pennsylvania; L. F. Barker, Johns Hopkins University; Wm. T. Councilman, Harvard University; Simon Flexner, University of Pennsylvania; W. S. Halsted, Johns Hopkins University; A. C. Herter, University and Bellevue Hospital Medical College, New York; Wyatt Johnston, McGill University; F. P. Mall, Johns Hopkins University; Henry F. Osborn, Columbia University, New York; Walter Reed, Army Medical Museum, Washington, D. C.; Geo. M. Sternberg, Surgeon General's Office. Washington, D. C.

At the approaching meeting of the American Society of Naturalists, which will be held at New Haven on December 27th and 28th, a lecture will be given on Wednesday evening by Professor A. E. Verrill on 'The Geology and Natural History of the Bermudas.' Afterwards there will be a reception to members in Alumni Hall. The speakers in the discussion on 'The Position that Universities should take in regard to Investigation' will include Professors Thomas Dwight, R. H. Chittenden, William B. Scott and Joseph Jastrow. The address of the president, Professor W. G. Farlow, will be given, as we have already stated, on Thursday evening.

The Royal Society held its anniversary meeting on November 30th. In accordance with custom the president, Lord Lister, delivered an address in which he paid special attention to inoculation against the plague. The leading officers were reelected, except that Dr. T. E. Thorpe was elected foreign secretary and the medals were conferred as already announced. The Council in its annual report referred especially to the preliminary conference on an International Association of Scientific Acade-

mies, the proposed International Catalogue of Scientific Literature, and the National Physical Laboratory. The annual dinner was held in the evening and speeches were made by Lord Lister, Lord Rayleigh and others.

THE American Chemical Society, on petition of those of its members who reside in Michigan, is now establishing a local section for that State. The headquarters are to be in Ann Arbor, and the meetings are to be held alternately in Detroit and at the University of Michigan.

The inauguration of Professor geistl. Rath Dr. Bach as Rector of the University of Munich, took place on November 25th. His address was entitled 'Verhältniss von Bildung und Arbeit.'

THE memorial lecture established by the Liverpool Society of Chemical Industry in memory of Dr. Ferdinand Hurter, was given for the first time by Professor C. Lunge, of Zurich, whose subject was 'Impending Changes in the General Development of Industry and particularly in the Alkali Industry.'

MR. CHARLES VERNON BOYS, F.R.S., is to deliver the annual course of Christmas lectures, specially adapted to young people, at the Royal Institution this year. He has chosen as his subject: 'Fluids in Motion and at Rest.' The lectures, which will be six in number, will commence on Thursday, December 28th, at three o'clock.

It is proposed to hold an International Congress of Tuberculosis in May, 1901.

Nature states that the budget of the German Imperial home office includes an item of 15,000 Marks for the International Catalogue of Scientific Literature.

THE New York Board of Estimate has refused the request of the New York Zoological Society for an additional appropriation of \$7,500 and the Mayor has refused to reconsider the question.

THE subjects proposed by the Boston Society of Natural History for the Walker prizes in 1900 are (1) Stratigraphy and correlation of the sedimentary formations of any part of New England; (2) A study in paleozoic stratigraphy and correlation.

THE New York Zoological Society has issued a Popular Official Guide to the New York Zoological Park as far as completed, with maps, plans and illustrations. It contains a brief account of the Society, its origin and aims; tells how to reach the Park, describes the general topography of the grounds and the animals it now contains. There is much information concerning the range, size and habits of the animals, their former abundance or present scarcity, and the accompanying illustrations are very good.

A TELEGRAM has been received at the Harvard College Observatory from Professor Kreutz at Kiel Observatory, stating that a planet of the tenth magnitude was discovered by Charlois Dec. 4a.377 Greenwich Mean Time in R. A.,  $4^h.37^m.56^s$  and Dec.  $+14^\circ.13^\prime$ .

Daily motion in R. A. 
$$-14'$$
" Dec.  $+4'$ 

A TOPOGRAPHICAL map of Greater New York, 24 x 28 feet in size, and costing about \$10,000, is being prepared for the Paris Exposition. It is expected that the map will subsequently be placed in the New York Public Library.

THE corals collected by the Beal-Steere Expedition and given to the University of Michigan have been mounted and permanently shelved in the museum. The collection includes several hundred specimens taken from the Pacific Ocean near the Philippine Islands and the island of Formosa. As far as possible each specimen has been placed in the position in which it originally grew.

WE learn from the British Medical Journal that of the three members of the Malaria Commission which proceeded to British Central Africa in the early part of the year, two, Messrs. Christophers and Stephens, have returned. Dr. Daniels remains for a further term in Central Africa. We understand that Messrs. Christophers and Stephens will almost at once proceed to the West Coast of Africa, in the first instance to Sierra Leone, where there should be no lack of material for studies both in malaria and in blackwater fever. Hitherto the work of the Commission has been hampered by lack of clinical material. It is easy to understand how, in the scanty and scattered European population of British Central Africa, although blackwater fever is the most frequent cause of death, such a concentration of cases as would best suit the purposes of the Commission might be difficult to effect. In the larger and more concentrated European populations to be found in West Africa it is to be hoped that in this respect the conditions will be more favorable to the work of the Commissioners.

REUTER'S AGENCY is informed that Dr. Carl Peters, in a letter dated Umtali, October 13th, just to hand, announces that during the rainy season, when practically no prospecting work was possible, he intended to come to England. He adds: "I expect to arrive about the middle of December, accompanied by Umtete, the brother of the famous chief Macombe. I am leaving my staff out here. One mining engineer and a trader are left at the Fura station, near the Zambesi, and also at the Inyanga station, near Umtali. I am in first-class health, but am feeling a little run down in consequence of the marching, exploring, irregular food, etc. I have evidence that can prove we have really discovered the Fura of the old reports." In explanation of this, Reuter's Agency is informed that Dr. Carl Peters's expedition was mainly based on an old atlas published in Amsterdam in 1705, with French text, the author being unknown. In this atlas it was stated that "near this place (south of the Zambesi and near the river Manzoro, now Mazoe) is the great mountain of Fura, very rich in gold, which some people regard as a corruption of the Ophir." This view was also held by the Portuguese writer Couto, who was quoted by Theodore Bent in his 'Ruined Cities of Mashonaland.' With regard to Fura, Couto said: "The richest mines of all are those of Massapa, from which the Queen of Sheba took the greater part of the gold which she went to offer to the Temple of Solomon, and it is Ophir, for the Kaffirs call it Fur and the Mons, Afur." Dr. Peters states that no traveler had visited this region within the last 200 years. He has now rediscovered ancient ruins of Semitic origin, including fortifications and what he regarded as a temple or storehouse. The whole region is practically uninhabited. He also claims to have found distinct traces of ancient gold working there.