

element discovered by Professor Crookes among the rare earths. To this the name monium is given; it was discovered by spectro-photography, its lines standing almost at the extreme end of the ultra-violet rays, and hence only visible on the photographic plate. Its atomic weight is apparently about 118. The address concluded with a short reference to the work of the Society of Psychical Research of which also Professor Crookes is President.

J. L. H.

CURRENT NOTES ON METEOROLOGY.

THE MEAN ANNUAL RAINFALL OF THE GLOBE.

IN the *American Journal of Science* for January, 1882, Loomis published the first chart of the mean annual rainfall of the globe, which has, since then, remained the accepted standard of the world. The annual amounts of rainfall were divided into five groups, and the chart was colored in five shades of blue to indicate rainfalls of (I) less than 10 inches, (II) 10 to 25 inches, (III) 25 to 50 inches, (IV) 50 to 75 inches, and (V) over 75 inches. The data at Loomis' disposal were far from complete. A revised edition of the map was published in 1889, the classification of the rainfalls remaining the same, but five different colors being used to indicate these classes, instead of the five shades of blue employed on the original map. During the years that have elapsed since Loomis' map was published, there has been a large increase in the number of rainfall observations from all parts of the world, and the vast body of material now available has been utilized by Supan in the construction of new rainfall maps. Supan's first publication, 'Die Vertheilung des Niederschlages auf der festen Erdoberfläche,' appeared a few months since (*Ergänzungsheft* No. 124, *Petermann's Mittheilungen*), and his second, 'Die jährlichen Niederschlagsmengen auf den Meeren,' has

just appeared in the same journal (VIII, 1898, pp, 179-182). These articles are of great value. They give us revised charts of the mean annual and the seasonal rainfall over the lands, and also the first chart that has ever been published of the mean annual rainfall over the oceans. These are all based on the latest and best data obtainable, and will doubtless remain the standards for many years. The varying amounts of rainfall, grouped into six classes, are indicated by different colors, the heaviest rainfall being shown in blue, and the lightest in yellow.

SYMONS' BRITISH RAINFALL.

MR. SYMONS' annual volume on 'British Rainfall' for 1897 contains a noteworthy article on the 'Mean Annual Rainfall in the English Lake District,' which is a continuation of articles on the rainfall of parts of the same region, published in the volumes for 1895 and 1896. The area under discussion in the present paper embraces about 650 square miles. Records from 147 stations have been utilized, and the aggregate number of yearly records dealt with is 1,612. Two maps accompany the article, an excellent orographical map of the Lake district, and a map showing the mean annual rainfall of the district. Mr. Symons now has 3,318 rainfall observers, truly an imposing number in the little territory of the British Isles, and a body of workers which, under able leadership, is gathering a most valuable store of material. And this material, be it said, is being constantly put to use.

NOTES.

THE annual report on the 'Rainfall in South Australia and the Northern Territory in 1896,' by Sir Charles Todd, Government Astronomer of South Australia, contains an account of the great 'heat wave' of January, 1896. This 'heat wave' was one of exceptional severity. At Gundabooka Sta-

tion, on the River Darling, the mean temperature for twenty-four days, from January 1 to January 25, was 120° in the shade. The cause of the protracted hot spell was the persistence of monsoonal conditions over the interior during the month, with weak gradients and light winds, there being no depressions of sufficient energy to drive the cool southerly winds inland.

THE seventh annual bibliographical number (for 1897) of the *Annales de Géographie* contains the usual short notes on climatological and meteorological publications issued during that year.

R. DE C. WARD.

HARVARD UNIVERSITY.

CURRENT NOTES ON ANTHROPOLOGY.

ON INSPIRATION.

THE curious phenomenon of trance, voluntary or involuntary, plays the leading rôle in the ethnology of religions. In it all faiths have their origins, and by it most are sustained. A phase of it is known to psychologists as 'suggestion,' but this does not exhaust its aspects. Undoubtedly, both a physiology and a philosophy lie behind its superficial manifestations.

Some striking examples of it among the Slavic peoples are given in the 'Archiv für Religionswissenschaft' (Bd. I., Heft, 3) by Dr. Krauss, of Vienna. They are not surpassed by the Yogin of India or the high-priest of Nagualism, and have been studied by scientific observers.

That wholly exceptional, really inexplicable physical powers are obtained in the 'Yogâ' none can deny; and that equally anomalous psychical faculties are developed under its influence is just as certain. We still await a sympathetic, clear, unbiased study of this pregnant topic.

RELICS FROM THE ULOA VALLEY.

THE Uloa Valley opens into the Gulf of Honduras about Puerto Cortes. Attention

was first directed to its archæological remains about 1888 by a German planter, Mr. E. Wittkugel, who opened a number of mounds and made a large collection of pottery, etc. In 1896 and 1897 Mr. George Byron Gordon conducted explorations there under the direction of the Peabody Museum, Cambridge. His results have appeared in the *Memoirs of the Museum*, Vol. I., Nos. 4 and 5. It is amply illustrated, and presents a clear and succinct narrative of the work. The art-remains plainly show the influence of Mayan culture; but there is a residuum which, in the opinion of both Professor Putnam and Dr. Seler (whose report may be found in the 'Verhand. der Berliner Anthropol. Gesell.' 1898, p. 133), should be assigned to some other people.

In the same cover with Mr. Gordon's report on the Uloa Valley is his brief statement about cave exploration near Copan. The results were somewhat negative, not indicating extreme antiquity, though signs of a special art-development were not wanting.

D. G. BRINTON.

UNIVERSITY OF PENNSYLVANIA.

SCIENTIFIC NOTES AND NEWS.

A PRICE-LIST of the reprints of the papers of the late Professor E. D. Cope has been drawn up, and can be secured from Mrs. E. D. Cope, Haverford College, Haverford, Pa. Owing to Professor Cope's method of work and untimely death many of his important contributions to science exist only in these reprints, and the list should be secured by all those interested in paleontology, zoology and psychology.

WE are sorry to learn that the editor of *Natural Science* feels compelled to discontinue the editing of the journal after December. He is prepared to hand it over to any competent man of science who will relieve him of all responsibility and continue it as an independent journal. Students of the natural sciences are under very great obligations to the editor of *Natural Science*, whose desire to remain anonymous during the continuance of the journal