

Counties), Mr. S. E. Melling (Manchester and District), Dr. L. G. Paul (North-east Coast and Yorkshire), Mr. C. A. Seyler (Wales and the County of Monmouthshire), and Mr. J. H. Young (Glasgow and West of Scotland); *Censors*, Mr. A. Chaston Chapman, Sir Herbert Jackson, Prof. G. T. Morgan, and Sir Robert Robertson.

DR. PAUL RIVET publishes a bibliography of current Americanist literature in vol. xv. of the *Journal de la Société des Américanistes de Paris*. It extends to ninety pages, of which forty are occupied by entries relating to physical anthropology, archæology, ethnology, and linguistics. Dr. Rivet asks that authors should send him copies of their contributions to the subject. It is no doubt the failure to comply with this request that is responsible for the omission of work published in Britain from the bibliography. This is unfortunate, as British contributions to Americanist studies, though few in number, are as a whole of some importance.

THE London County Council has recently issued a second edition of Mr. Milligan's *Handbook to the cases illustrating adaptations for locomotion in animals*, a series that forms a characteristic and attractive feature in the Horniman Museum at Forest Hill. Apart from the cases, this booklet of 40 pages serves as a useful summary, clear and correct so far

as it goes, though it cannot hope to be complete. The omission of any reference to crabs under "Climbing" is doubtless due to the lack of a suitable specimen. Under "Creeping" allusion might be made to the use which some sea-urchins make of their jaws. In making the transition from "Parachuting" to "Flying," would it not be of interest to mention *Archæopteryx*?

AMONG a number of items of local or of general interest, the *Transactions and Proceedings of the Torquay Natural History Society for 1922-23* (vol. iv. part 1) contains a most instructive and illuminating article from the pen of Dr. R. C. L. Perkins on "The Control of Injurious Insects in the Hawaiian Islands by their Natural Enemies." The economic value of the study of entomology has in recent years received something of the recognition that is its due. But it cannot be denied that there are yet wider fields for its application. Articles such as this of Dr. Perkins perform a useful function in setting before the layman the facts and the outlines of the methods adopted in combating insect pests. They thus help to enlist the aid of public opinion in support of work on which an important part of the food supply of the world depends.

ERRATUM.—Letter on "Continental Drift and the Stressing of Africa," E. J. Wayland, December 29, 1923, p. 939, col. 1, line 27, for *features* read *fractures*.

Our Astronomical Column.

COMET OR MINOR PLANET?—An object of uncertain nature (either comet or minor planet) of magnitude 11 was discovered by Stroobant at Uccle Observatory (Brussels) on March 5 at 7^h 26.5^m G.M.T.; Right Ascension 2^h 42^m 28^s, daily motion +1^m 20^s. North Declination 16° 44', daily motion +10'. Its closeness to the ecliptic and moderate rate of motion make its planetary nature quite probable; but the discoverer's uncertainty as to its nature suggests some appearance of nebulosity.

THE PLANET SATURN.—Mr. W. F. Denning writes: "The belted aspect of the globe of Saturn, and the occasional spots and irregular markings observed, show that disturbances occur on this planet of somewhat similar character to those which frequently present themselves on Jupiter. The much smaller diameter of Saturn, however, renders certain of the phenomena beyond our recognition. At somewhat rare intervals, as in 1903, the disc of this planet becomes the seat of extensive changes, and it is then that its period of rotation may be ascertained with considerable accuracy. In 1795 William Herschel found the period 10^h 16^m, while in 1877 Asaph Hall, at Washington, determined it to be 10^h 14^m 24^s from an equatorial white spot which, however, remained visible only a short period.

In 1903 the writer computed the period as 10^h 37^m 52^s from a number of white and dark spots which remained visible during the last half of that year. This is 23½ minutes longer than the period found nearly half a century ago.

Saturn now rises at about 10 P.M., and may be well observed during the morning hours. It will soon be favourably placed for telescopic study during the evening hours, as it rises 4 minutes earlier every night. Observers should examine critically the planet's globe for signs of a repetition of the disturbances which occasioned the irregular markings detected in past years."

DISTANCES OF STARS.—E. A. Kreiken has published a memoir on "The distance of the stars in the Scutum group, and other Galactic regions," which is dedicated to the memory of Prof. Kapteyn, since it is largely based on his methods. The colours of the stars, or rather the effective wave-lengths of the light we receive from them, are found by the distances between the first order spectra that are produced by a coarse grating in front of the telescope tube. The stars go down to magnitude 14.9; the table below shows that the colour-index is a minimum about magnitude 11.5.

Mag.	Mean Colour.	No. of Stars.
Brighter than 8.9	+0.70	2
8.9 to 9.9	+0.37	3
9.9 ,, 10.9	+0.21	20
10.9 ,, 11.9	+0.16	36
11.9 ,, 12.9	+0.34	101
12.9 ,, 13.9	+0.46	480
13.9 ,, 14.9	+0.60	604

The spectral type is deduced from the colour-index by the following table, based on the work of Miss Cannon and K. Schwarzschild: B₀ -0.25, B₅ -0.16, A₀ -0.04, F₀ +0.30, G₀ +0.65, K₀ +0.90, M₀ +1.50. The distance of the cloud is separately deduced from stars of different spectral type from formulæ using the luminosity frequency curves for each type.

Stars of type B₀ to B₅ indicate 1800 parsecs for the distance (printed 3600 but altered by hand by the author); B₅ to B₉ give 1300 parsecs; A₀ to A₉ 1400 parsecs (4600 light-years), the latter being adopted as having the highest weight, but the agreement of the others is sufficiently good.

The star-density in the cloud is found to be five times the average value for the same galactic latitude.