ture or movements of living creatures conveniently. It should be of real assistance in the study of numerous small forms of animal life under natural conditions.

MESSRS. CHARLES GRIFFIN AND CO., LTD., have published the twenty-fourth annual issue of the "Year-book of the Scientific and Learned Societies of Great Britain and Ireland." The work is, as usual, compiled from official sources, and according to the title-page provides a record of the work done in science, literature, and art during the session 1906–7 by numerous societies and Government institutions. It is surprising to find, however, that in connection with the British Association, the only information in the book is confined to the proceedings of the York meeting in 1906, and no mention is made of the Leicester meeting in August last. Under societies concerned with geography, the Geographical Association is not included, though its membership is now nearly 650, and it has branches in various parts of this country and in South Africa. But notwithstanding such defects, which can be remedied easily in the next issue, the compilation should continue to be of real assistance as an index to British scientific associations and their work.

A LIST of publications of the Carnegie Institution of Washington, already issued or in the press, has just been received; and it reminds us of the very useful work the institution is doing by the publication of monographs on many scientific subjects of wide and deep interest. About ninety of these memoirs have been published, and most of those containing contributions to natural knowledge have been described in the columns of NATURE. Among the works now in the press, we notice an atlas of the Milky Way, E. E. Barnard; dynamic meteorology and hydrography, V. Bjerknes and J. W. Sandström; the rotation period of the sun, as determined by the motion of the calcium flocculi, G. E. Hale; inheritance in canaries, C. B. Davenport; supplementary investigations of infra-red spectra, W. W. Coblentz; and botanical features of North American deserts, D. T. MacDougall. The publications are sold at a nominal price, and a list can be obtained upon application to the Carnegie Institution of Washington, Washington, D.C., U.S.A.

OUR ASTRONOMICAL COLUMN.

RETURN OF ENCKE'S COMET (1908*a*).—A telegram from the Kiel Centralstelle announces that Encke's comet was found by Prof. Wolf on January 2.

Its position at 6h. 14·5m. on that date (Königstuhl M.T.) was R.A. = 23h. 3m. 16s., dec. = 1° 19′ N., and its magnitude was 13·0.

The following is an abstract from the ephemeris given in No. 4222 of the *Astronomische Nachrichten*:—

Ephemeris 0h. (*M.T. Berlin.*)

1908	α (app.) h. m.	δ (app.) ° ′	log *r*	log Δ
Jan. 11 ...	23 8·8 ...	+2 21·9 ...	0·2829 ...	0·3461
,, 19 ...	23 17·4 ...	+3 7·8 ...	0·2617 ...	0·3477
,, 27 ...	23 27·1 ...	+4 3·1 ...	0·2385 ...	0·3469
Feb. 4 ...	23 38 1 ...	+5 7·5 ...	0·2130 ...	0·3435

At present the comet is apparently passing through the constellation Pisces towards Aries, and sets nearly due west at about 10 p.m. The calculated time of perihelion passage is April 30, not February 22, as stated in our last issue.

SATURN'S RINGS.—No. 4222 of the *Astronomische Nachrichten* (p. 361, December 18, 1907) contains further notes on the recent appearance of Saturn's rings.

The Rev. T. E. R. Phillips states that on many occasions since the middle of October he has seen the ring clearly, as an extremely fine line of light on each side of the planet, with his 12¼-inch Calver equatorial. This line was not always uniformly luminous, but appeared continuous except on November 8, when an interruption on the following side was suspected. He believes the present visibility of the ring to be due to the sunlight passing through the Cassini division and illuminating the edge of the second ring, which is the brightest part of the system.

Dr. Lau gives the results of a number of micrometer observations of the minor axis of the rings, for position-angle, from September 3 to 28, 1907, and shows the differences between the observed and the Nautical Almanac values. The rings were seen on October 2 at 0·2h., but were invisible on October 3 at 23·1h.

THE SPECTRA OF TWO METEORS.—Using a prismatic camera made up of a Voigtländer euryscope, of 50 mm. aperture and 300 mm. focal length, with a 45° crown-glass prism placed before it, M. Blakjo, of the Moscow Observatory, obtained the spectrum of a meteor on May 11, 1904; with another camera an ordinary trail photograph was obtained at the same time. Encouraged by this chance fortune, M. Blakjo directed his cameras towards the Perseid radiant on August 12 of the same year, and was fortunate enough to secure a second meteor spectrum.

In the first case the meteor was of about the first magnitude, and of a yellow colour, and the spectrum consists of fine lines, of which, by an ingenious method of comparison with the hydrogen lines shown in the adjacent stellar spectra, M. Blakjo determined the approximate wave-lengths to the number of thirteen.

The second meteor was equally bright and of a pure green colour; during the second half of its flight it was considerably brighter than at first, and this increase of brightness increased the number of lines shown in the spectrum; the wave-lengths of ten certain and three doubtful lines were determined, and on comparison it was found that the emission spectra of the two meteors are entirely different from each other.

In the spectrum of the first meteor, the calcium lines H and K are the brightest, and are accompanied by the line at λ 4227; magnesium and potassium are also apparently represented. Helium is apparently the outstanding feature of the spectrum of the second meteor, the lines at λλ 3819·8, 3888·8, 3964·9, 4026·3, and 4121·0 being represented. M. Blakjo accounts for the pure green colour of this object by the presence of the thallium line at λ 3775·9 in its spectrum (*Astrophysical Journal*, vol. xxvi., No. 5, p. 341, December, 1907).

THE CONSTANCY OF WAVE-LENGTHS OF SPECTRAL LINES.—The importance of the constancy of wave-length of spectral lines in astronomical, as in terrestrial, spectroscopy leads Prof. Kayser to discuss the question in No. 3, vol. xxvi., of the *Astrophysical Journal*. He points out that Exner and Haschek based some of their recent evidence for variation on differences obtained by students in his laboratory, and states that, in his opinion, these differences were probably due to errors of the standards employed rather than to any real variability of wave-length. Prof. Kayser also adduces evidence, based on the recent work of Dr. Pfund and of Prof. Fabry, in support of his view that "the question of the constancy of the wave-lengths is finally settled."

NEW CHEMICAL LABORATORIES AT ABERYSTWYTH.

THE Edward Davies chemical laboratories at the University College of Wales, Aberystwyth, which were formally opened on November 1 by Mr. Asquith (see this vol., p. 22), have been erected at a cost of 23,000*l.* by Mr. David Davies, M.P., his mother and sisters, to the memory of the late Mr. Edward Davies, J.P., and have been handed over to the governing body of the University College of Wales. The laboratories are under the direction of Prof. J. J. Sudborough, and have been in use since the opening of the present session on October 2.

The laboratories form a separate block of buildings about half a mile distant from the college, and are erected in local stone with Grinshill dressings. On the first floor are two large laboratories (50 feet by 40 feet), each con-