OUR ASTRONOMICAL COLUMN.

COMET 1906*e* (KOPFF).—Circular No. 91 from the Kiel Centralstelle contains a set of elements for comet 1906*e*, calculated by Herr M. Ebell from positions observed on August 23 and 31 and September 12.

These elements give the time of perihelion as May 3·09, 1906, and from them Herr Ebell has calculated an ephemeris from which the following is taken:—

Ephemeris 12h. (M.T. Berlin).

1906	α (true) h. m.	δ (true) ° ′	1906	α (true) h. m.	δ (true) ° ′
Oct. 2	22 27	+6 30	Oct. 18	22 28	+4 58
6	22 26	+6 4	22	22 29	+4 41
10	22 26	+5 40	26	22 31	+4 26
14	22 27	+5 18			

At present the diminishing brightness of the comet is about half what it was on August 23, when its magnitude was about 11·5.

From the ephemeris it may be seen that this object is still in the constellation Pegasus, about half-way between ζ and 34 Pegasi, and is observable throughout the evening.

Observing at Rome on September 12, Prof. Millosevich found it to be a faint object having a coma which was not symmetrical about the thirteenth-magnitude nucleus.

FINLAY'S COMET, 1906*d*.—M. Léopold Schulhof continues his ephemeris for Finlay's comet in No. 4122 of the *Astronomische Nachrichten*, from whence the following abstract is taken:—

Ephemeris 12h. (M.T. Paris).

1906	α (app.) h. m.	δ (app.) ° ′	1906	α (app.) h. m.	δ (app.) ° ′
Oct. 4	7 37	+20 33	Oct. 16	8 2	+20 49
8	7 46	+20 39	20	8 8	+20 54
12	7 54	+20 44	24	8 14	+20 59

The comet, according to this ephemeris, is now in the constellation Gemini, travelling directly eastwards towards Cancer, and rises at about 11.30 p.m. It will be about one degree south of μ Cancri on October 16.

Two photographs of this comet are reproduced in the September number of the *Bulletin de la Société astronomique de France*. They were taken at the Juvisy Observatory on August 21 and 22 respectively by M. Quénisset, and show a well-marked nucleus; a rudimentary tail is also seen on the original negative. During the exposure on August 21 the comet passed over a tenth-magnitude star, the light of which was not perceptibly diminished by the interposition of the coma.

A NEW FORM OF WEDGE PHOTOMETER.—In No. 4120 of the *Astronomische Nachrichten* Herr H. Rosenberg describes, and gives a drawing of, a new form of wedge photometer which he has designed. In the ordinary photometer of the "wedge" type the observer is unable to eliminate the influence of the variation in the brightness of the general background of sky, and the eye, becoming fatigued, is unable to determine exactly the point of extinction.

In Herr Rosenberg's apparatus, however, the image of an artificial star, formed by a *constant* light source, is projected alongside the image of the natural star, and the wedge adjusted until the two images are equally bright. By adjusting the brightness of the artificial star, so that it is less than that of the faintest object which is to be examined, and determining its value in magnitudes, one may thus measure the brightness of any stars within the limits of about eight magnitudes. The error caused by the uncertainty as to the exact point of extinction is thus eliminated.

A postscript to Herr Rosenberg's description states that he finds the principle of a similar contrivance was described by Herr Müller in No. 3693 of the *Astronomische Nachrichten*, and an instrument was constructed at the Potsdam Observatory.

OCCULTATION OF A STAR BY VENUS.—In a communication to the British Astronomical Association, published in No. 9, vol. xvi., of the Journal, Dr. Downing directs the attention of amateur astronomers in Australasia to the fact that on December 9 Venus will occult the third-magnitude star β Scorpii. As it is such a rare occurrence for a planet to occult so bright a star, he gives the particulars of the occultation for Sydney, Brisbane, and Wellington in the hope that use may be made of them by observers suitably located.

RESULTS OF THE INTERNATIONAL LATITUDE SERVICE, 1902–1906.—In No. 4121 of the *Astronomische Nachrichten* Prof. Th. Albrecht discusses the results obtained by the six international latitude stations during the period 1902·0–1906·0. The variation of the position of the apparent pole is shown on a diagram, which includes the tenths of each year from 1900·0 to the beginning of the present year. The values given for the period 1902·0–1905·0 are final, but those for 1905·1–1906·0 are only provisory, although Prof. Albrecht states that they are probably correct to one two-hundredth of a second.

THE AMANA METEORITE.—An interesting description of the various meteoritic objects which fell at Amana, Iowa, U.S.A., in 1875, is given by Dr. G. D. Hinrichs in *Das Weltall* for September 15. Two plates accompanying the description show photographic reproductions of the meteorites, together with the names of the museums wherein they are now to be found. Other illustrations give charts of the locality in which these objects were discovered.

BOTANY AT THE BRITISH ASSOCIATION.

THE work of Section K was not characterised by the announcement of any discovery of very exceptional interest, nor by any sensational feature. As has been usual in recent years, an effort was made to group the papers presented so that those dealing with allied topics were taken at the same session. The whole number of papers read was not large, and no less than three morning sessions were devoted to discussion of definite topics, the proceedings being opened in each case by one or more papers giving an account of the present position of the subject to be discussed, or presenting facts and conclusions likely to lead to debate. These discussions were to some extent organised beforehand; that is to say, the members most likely to contribute usefully to the discussion of a given topic were informed of the intention to hold the discussion some time before the meeting, and were invited to contribute, abstracts of the opening papers being distributed to them as early as possible, so that they were in possession of the lines to be taken before the meeting. Such of these members as were present and had signified their willingness to speak were called upon in succession by the chairman as soon as the papers were over, the discussion being afterwards open to any member of the section. Although it is true that very good discussions often arise quite spontaneously after papers which are not expected to provoke debate, it is believed that on the whole the best results are obtained by the method of semi-organised discussion described, though it is neither possible nor desirable to limit the sectional meetings entirely to proceedings of this type.

The success of such discussions depends very largely on the selection of topics of suitable scope. On the whole the tendency is to take too wide a subject, with the result that the different speakers are apt to deal with quite distinct aspects of it, and unless the opener has the exceptional power of drawing all the threads together in his reply the impression left on hearers is liable to be somewhat inconclusive and chaotic. On the other hand, if the subject chosen is too narrow, its treatment is apt to become excessively technical, the discussion is of limited interest, and may even languish owing to a lack of sufficiently instructed specialists.

Of the three discussions at the York meeting, the first was taken on Friday morning, August 3, and was really divided into two parts. Dr. D. H. Scott opened the session. Though his title was a wide one—"Some Aspects of the Present Position of Palæozoic Botany"—considerations of time compelled Dr. Scott to limit himself to "the difficult question of the position of the ferns in the Palæozoic flora," "the difficulty arising from the accumulation of evidence showing that most of the so-called