

Folk-lore), Miss J. L. Weston. *Messrs. Constable and Co., Ltd.*, announce "Physiology and the Nation's Needs," edited by Prof. W. D. Halliburton, containing essays by Dr. M. S. Pembrey, Prof. D. Noël Paton, and the editor on, respectively, "Physical Training and the Open-air Life," "Physiology in the Study of Disease," and "Physiology and the Food Problem." They also promise "Elementary Plane Trigonometry," H. E. Piggott.

MESSRS. DULAU AND CO., LTD., 34 Margaret Street, W.1, have issued a Catalogue (No. 80) of nearly six hundred works on Diatomaceæ, Botany, Horticulture, Agriculture, Natural History, Geology, Palæontology, Voyages and Travels, Astronomy, Physics and Mechanics which will doubtless appeal to many readers of NATURE. It can be obtained upon application.

OUR ASTRONOMICAL COLUMN.

HELIOCENTRIC GROUPING OF PLANETS IN DECEMBER.—The astrologers have been amusing themselves and alarming the timid by predicting violent cosmic convulsions as the result of the planetary grouping on December 17. The actual position is sufficiently interesting to warrant a note. During the five days December 13 to 17, six of the eight major planets will be within a range of 26° in heliocentric longitude, while Uranus will be in the same line on the other side of the sun, the earth alone standing out. In the following list the two longitudes given refer to noon on December 13 and 17 respectively:—Mercury, 130° to 154°; Venus, 135° to 143°; Earth, 79° to 84°; Mars, 152° to 154°; Jupiter, 129°; Saturn, 155½°; Uranus, 331°; and Neptune, 130°. There were similar scares when the four giant planets were all near perihelion together. We may safely predict that they will be as baseless now as they were then.

COMETS.—Finlay's periodic comet passed perihelion about October 15.38. It was a fairly conspicuous object in November, and observations are numerous. It will be much fainter in December, but an ephemeris (for Greenwich midnight) may still be of use:—

| | R.A. | N. Decl. | R.A. | N. Decl. | |
|--------|----------|----------|----------|----------|-------|
| | h. m. s. | ° ' " | h. m. s. | ° ' " | |
| Dec. 5 | 1 33 59 | 13 14 | Dec. 13 | 2 7 12 | 16 52 |
| 7 | 1 43 7 | 14 20 | 15 | 2 14 13 | 17 28 |
| 9 | 1 51 41 | 15 18 | 17 | 2 20 47 | 17 56 |
| 11 | 1 59 42 | 16 9 | 19 | 2 26 56 | 18 17 |

Schaumasse's periodic comet is also fading, but more slowly. Ephemeris for Greenwich midnight:—

| | R.A. | S. Decl. | R.A. | S. Decl. | |
|--------|----------|----------|----------|----------|------|
| | h. m. s. | ° ' " | h. m. s. | ° ' " | |
| Dec. 5 | 14 9 36 | 2 2 | Dec. 13 | 14 33 13 | 3 52 |
| 7 | 14 15 38 | 2 30 | 15 | 14 38 54 | 4 17 |
| 9 | 14 21 35 | 2 58 | 17 | 14 44 31 | 4 42 |
| 11 | 14 27 27 | 3 25 | 19 | 14 50 3 | 5 6 |

Messrs. Braae and Fischer Petersen announce that their supposition that comet 1919b (Brorsen-Metcalf) has made two revolutions since 1847 is not correct; its true period is 72.1 years.

FALL OF A METEORITE IN AMERICA.—The daily papers report that on the night of November 27 last a large meteorite descended into Lake Michigan, and that the object was seen before its fall by many persons over a wide extent of country. If this event is fully corroborated, it seems quite possible that the meteorite may have been a fragment of Biela's lost comet, like the Mazapil meteorite of November 27, 1885, on which date there occurred a great shower of ordinary meteors.

The earth passed through the orbit of Biela's comet

on that occasion, and must have been very near, if not involved in, the denser portion of the material forming the remains of the comet. The latter had a periodic time of revolution amounting to about 6½ years, and if we add five periods to the last return near the end of 1885 we arrive at the present time, so that a display of meteors was rendered quite probable. However, no very conspicuous shower occurred, though from reports sent in by various observers for the period November 19-25 a few meteors, including several of special brilliancy, were recorded from the right direction in Andromeda. In all, seventeen paths appear to be conformable to this shower, and the radiant is indicated at 29°+44° near the star γ Andromedæ.

On the same night, at 9h. 50m., that the meteorite is said to have fallen in America, a fireball was seen at Bristol descending slowly in the north-eastern sky, but the atmosphere was very hazy and few stars were visible. Observations of this object from other places would be valuable.

ANNIVERSARY MEETING OF THE ROYAL SOCIETY.

THE anniversary meeting of the Royal Society was held on Monday, when the report of the council was presented and the president, Sir J. J. Thomson, delivered an address. In the evening fellows and their guests dined together at the Royal Palace Hotel, Kensington, this being the first anniversary dinner since 1913. The assembly received with much satisfaction the announcement of the president that the Prince of Wales is to be admitted a fellow of the society early next year.

The report of the council is largely occupied with an account of the origin and constitution of the International Research Council and the related National Research Council. It is hoped that the British Government will consent to make the annual contribution required from countries forming part of the international organisation, in order to place the Council on a sound financial basis. The report refers also to the increased need of financial assistance for the promotion of research in pure sciences and to developments of the National Physical Laboratory under Sir Richard Glazebrook's directorship. The names of the new officers and council were announced in NATURE of November 13 (p. 295).

In his presidential address Sir Joseph Thomson referred to the retirement of Sir Alfred Kempe (treasurer) and Dr. Schuster (secretary) and to the invaluable services which these officers have rendered to the society. He also announced with regret that the assistant secretary, Mr. R. Harrison, has been obliged to resign his office owing to ill-health. The subjoined extracts are from the president's address.

Einstein's Theory.

I cannot pass over without notice the remarkable result that was announced at our first meeting this session: that the observations made at the eclipse of May 29 showed that light was deflected, when passing close to the sun, by an amount which, within the somewhat wide limits of the experimental error, agreed with that predicted by Einstein.

The deflection of light by matter, suggested by Newton in the first of his Queries, would in itself be a result of first-rate scientific importance; it is of still greater importance when its magnitude supports the law of gravity put forward by Einstein, a law which has explained the long-standing difficulty of the motion of the perihelion of Mercury.

On Einstein's law the velocity of light passing