

Cyclops, all of which are illustrated by black and white plates. The Society is to be congratulated on being able to issue this well-printed journal, which is destined to become the medium for making known zoological discoveries in China.

THE latest catalogue (No. 340) of Messrs. W. Heffer and Sons, Ltd., Petty Cury, Cambridge, gives the titles of nearly 3000 volumes dealing with mathematics, physics, astronomy, chemistry, metallurgy, anthropology, ethnology, botany, agriculture, geology, geography, medicine, physiology, zoology, and biology. It also contains a lengthy list of portraits of men of science.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A senior lecturer in science at the Notts County Technical College and School of Art, Newark—The Principal, County Technical College and School of Art, Newark (Feb. 17). A bacteriologist and pathologist under the County Borough of Belfast and Belfast Port Sanitary Authority—The Town Clerk, Belfast (Feb. 21). A technical assistant under the Directorate of Ordnance Factories of the War Office—The Permanent Under-Secretary of State for War (C.4), War Office, Whitehall, S.W.1 (Feb. 22). Temporary assistant chemists at the Government Laboratory—The Government Chemist, Clement's Inn Passage, W.C.2 (Feb. 22). A demonstrator in the Division of Bacteriology and Immunology of the London School of Hygiene and Tropical Medicine—The Secretary of the London School of Hygiene and Tropical Medicine, Keppel Street, W.C.1 (Feb. 24). A lecturer in physics at

Chelsea Polytechnic—The Principal, Chelsea Polytechnic, Manresa Road, S.W.3 (Feb. 25). A scientific assistant under the Board of Greenkeeping Research—The Director of Research, St. Ives Research Station, Bingley, Yorks. (Feb. 28). Two junior technical officers in the Admiralty Technical Pool for an Admiralty Experimental Establishment, mainly for work in connexion with acoustical and electrical apparatus—The Secretary of the Admiralty (C.E. Branch), Whitehall, S.W.1 (Feb. 28). An assistant dairy bacteriologist in the Department of Agriculture and Horticulture of the University of Bristol—The Registrar, The University, Bristol (Mar. 1). A scientific research officer in the Irrigation Branch of the Punjab Public Works Department—The Secretary to the High Commissioner for India, General Department, 42 Grosvenor Gardens, S.W.1 (Mar. 31). A farm manager and lecturer in animal husbandry and a stockman and dairy instructor at the Arab Agricultural School, Tulkarem, Palestine—The Private Secretary (Appointments), Colonial Office, 2 Richmond Terrace, Whitehall, S.W.1 (Mar. 31). A professor of physics at East London College—The Academic Registrar, University of London, South Kensington, S.W.7 (April 8). A professor of geography at Birkbeck College—The Academic Registrar, University of London, South Kensington, S.W.7 (April 10). A lecturer in petroleum production, in the Department of Oil Engineering and Refining of the University of Birmingham—The Secretary, The University, Birmingham (April 16). A reader in physics in the University of Dacca, East Bengal, India—The Registrar, the University of Dacca, East Bengal, India (April 30).

Our Astronomical Column.

Prediction of the Sunspot Curve.—Prof. Dinsmore Alter gave an address at the meeting on Jan. 1 of the British Astronomical Association, in which he described researches on the effects of the different planets on sunspot activity. The method adopted was that described by Prof. E. Brown in vol. 69 of *Mon. Not. Roy. Ast. Soc.* Prof. Brown noted that the sunspot period was not very different from the period of Jupiter; he found that by combining the tidal influences of Jupiter and Saturn he could get a curve that followed that of the observed sunspot activity very closely. His prediction of a late maximum in 1907 was fulfilled; since then the curve has been carried on to 1955, and its agreement up-to-date with the observed curve is fairly close, though the 1917 maximum is predicted too early. Later, the inner planets were introduced; since tidal action varies as the inverse cube, this partially compensates for their smaller masses; the fact of the tidal influence being appreciable is explained by the approximate equilibrium between gravitation and light-pressure at the sun's surface.

Observers' Handbook.—This annual, issued by the Royal Astronomical Society of Canada, is edited by Prof. C. A. Chant, and contains this year a useful catalogue of stars down to magnitude 3.5. It gives magnitude, both apparent and absolute, proper motion, parallax, distance in light years and radial velocity. There is a similar list for stars within 5 parsecs of the sun: the latter list has been steadily growing, and now contains 35 stars, of which only four

exceed the sun in luminosity. The one of smallest luminosity is Wolf 359, the absolute magnitude of which is 16.5, implying that its luminosity is one fifty-thousandth part of the sun's. In the list of satellites the name 'Triton' is inserted for Neptune's satellite. This very suitable name was suggested by the late M. Camille Flammarion, and is now adopted by many astronomers.

The Constant of Aberration.—The fact that aberration has an annual period introduces the difficulty of eliminating seasonal effects, due to temperature or other meteorological causes, from measures made for its determination. Mr. H. R. Morgan contributes a paper to *Astr. Jour.* No. 933, in which he deduces a value for the aberration constant from observations in declination of stars near the pole made with the 9-inch transit-circle at the U.S. Naval Observatory, Washington, between 1903 and 1925; as the stars were observed at both upper and lower culmination, the observations being made near the beginning and end of the night (at which times the aberration is almost wholly in declination), and each star was observed twice in the year at intervals of 6 months, reasons are given for believing that seasonal terms have been nearly eliminated. This conclusion is supported by the fact that different groups of stars give accordant results. The value adopted for the constant is $20.479'' \pm 0.008''$. Using Michelson's latest value for the velocity of light, the corresponding distance of the sun is 92,895,300 miles, and its parallax is $8.800'' \pm 0.003''$.