

gaps in serials occasioned by the breakdown of exchanges during the War period and the satisfaction of definitely ascertained wants—but a certain amount of forwarding and reciprocal exchange work was also undertaken. We read, for example, of 400 volumes of German classics being forwarded to Berlin. During the year under review gifts of books and periodicals valued at 1500*l.* were received by the Committee and sent abroad. The work of this Committee deserves increased support.

A USEFUL list of 138 atlases, maps, and books of geographical interest has just reached us from Mr. F. Edwards, 83A High Street, Marylebone, W.1. Its number is 480, and it supplements Catalogue 475—"Old Time Cartography." It can be obtained free upon application to the publisher.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—Two laboratory assistants in the biochemical department of the Low Temperature Research Station, Cambridge—The Superintendent of the Station, Downing Street, Cambridge (April 24). An assistant bacteriologist at Queen Mary's Hospital for Children, Carshalton, for research work on acute rheumatism in children—The Clerk, Metropolitan Asylums Board, Victoria Embankment, E.C.4 (April 26). A principal of the South Staffordshire

Mining Schools—The Director of Education, County Education Offices, Stafford (April 27). An assistant inspector under the Ministry of Agriculture and Fisheries, in connexion with agricultural and horticultural education and research—The Secretary, Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1 (May 3). A lecturer in charge of the Economics and Commerce Department of University College, Southampton, and an assistant lecturer in geography in the same institution—The Registrar (May 3). A probationer naturalist and a technical assistant under the Fishery Board for Scotland—The Secretary, Fishery Board for Scotland, 101 George Street, Edinburgh (May 9). A male assistant superintendent of traffic (Class II.) in the London Telephone Service, and a male assistant traffic superintendent in the Provinces, G.P.O.—The Secretary, Civil Service Commission, Burlington Gardens, W.1 (June 2). A director of the Amani Institute, Tanganyika Territory—The Private Secretary (Appointments), Colonial Office, 38 Old Queen Street, S.W.1 (August 1). Two temporary research assistants under the Foot-and-Mouth Disease Research Committee—The Secretary, Foot-and-Mouth Disease Research Committee, Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1. A director of research for the Linen Industry Research Association—The Secretary, Research Institute, Lambeg, Belfast.

Our Astronomical Column.

ENSOR'S COMET.—Mr. S. Seliwanow, of the Observatory of the Russian Society Mirovédiéni, Leningrad, writes to say that the Society organised an ascent in a captive balloon on the night of February 22-23 in which he took part. He passed low clouds at a height of 350 metres; above them the air was clear. Using a powerful binocular, the comet was located after a twenty minutes' search south-west of ϵ Equulei. It appeared as a dim indistinct spot 8' to 10' in diameter, of about the fifth magnitude. The time was 3^h 22^m U.T., the height 700 metres. A faint tail, 20' long, was suspected. A later ascent by G. A. Langé and B. W. Okunev confirmed these results.

Search was made with a 175 mm. refractor on March 6 and 7 without result.

Dr. W. H. Steavenson notes that these results, combined with his own, appear to fix the collapse of the comet's light as having occurred between February 23 and 28.

A slide from the Bergedorf photograph of March 16 was shown at the meeting of the Royal Astronomical Society on April 9. It showed a tail 30' in length, forking into two branches about 20' from its eastern extremity. The tail made an angle of 80° with the radius vector.

BRILLIANT SOLAR OUTBURST.—At the meeting of the Royal Astronomical Society on April 9, Mr. Evershed showed some spectroheliograms of the sun taken by Dr. Royds at Kodaikanal on Feb. 22, which indicated that an extremely brilliant chromospheric outburst occurred over a sunspot during the course of the observations. It was photographed both in hydrogen and calcium light. Some similar outbursts in the past were referred to, including that observed by Hodgson and Carrington in 1859, another

observed by Young in 1872, and one observed by Mr. Evershed in Kashmer. Mr. Evershed suggested that the outburst resembled on a small scale those that occurred in novæ. There was the same reversal of lines, and the same indication of rapid radial motion. On some of the occasions quoted, magnetic fluctuations have been observed simultaneously with the outburst; he suggested that the magnetic traces should be examined on this occasion. Mr. Newton noted that there was a large magnetic disturbance on February 23, and promised to examine the record of the preceding day.

MEASURES OF THE SUN'S DIAMETER.—The facts that the curve of sunspot activity bears some resemblance to the Cepheid light curve, and that a widely held explanation of the variability of the latter stars is that their diameters pulsate, render it quite a pertinent inquiry whether any similar pulsation can be detected in the sun's diameter. G. Armellini, in *Astr. Nach.*, No. 5419, describes a research of this kind made at the Campidoglio Observatory, Rome, from 1877 to 1900, some six hundred measures being made each year by three different observers. The method of projection on a white screen was employed. The mean horizontal semidiameter of the sun for the whole series is 961".18, agreeing with that used for the bright limb in the "Nautical Almanac" (but not with that of Auwers, corrected for irradiation, which is 959".63). The measures when plotted by annual means lie on a sinuous curve with maxima in 1878 (961".46) and 1891 (961".76), minima in 1886 (961".00), and 1897 (960".70). The fluctuations are large enough to suggest a real change, but the period dealt with is too short to assert with confidence that it is connected with the sunspot variation. Results for the years following 1900 are promised shortly.