

promotions are the following:—Mr. H. M. Gardner, senior assistant conservator, to be conservator of forests, Kenya Colony; Mr. L. P. Henderson, agricultural instructor, Federated Malay States, to be superintendent, Agricultural Department, Nigeria. Mr. G. N. Sale, assistant conservator of forests, Cyprus, to be director of forests, Mauritius; Mr. D. Stevenson, deputy conservator of forests, British Honduras, to be senior assistant conservator of forests, Northern Rhodesia.

A SHORT catalogue (No. 6) of books, mainly of botanical and zoological interest, has reached us from Mr. J. H. Knowles, 92 Solon Road, S.W.2.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—A full-time lecturer in electrical engineering in the Leicester College of Technology—The Registrar, College of Technology, Leicester (Jan. 31). A resident librarian at the Liverpool Medical Institution—The General Secretary, Medical Institution, Liverpool (Feb. 4). A principal of the Kirkcaldy High and Technical School—The Education Offices, Kirkcaldy (Feb. 9). A junior technical officer in the design section of an Admiralty Establishment at Portsmouth—The Secretary of the Admiralty (C.E. Branch), Whitehall, S.W.1 (Feb. 9). A research assistant in agricultural economics and a student assistant in agricultural economics in the Department of Agriculture of the University of Leeds—The Registrar, The University, Leeds (Feb. 11). An

assistant in pathological chemistry in the University of Cape Town—The Secretary, Office of the High Commissioner for the Union of South Africa, South Africa House, Trafalgar Square, W.C.2 (Feb. 26). A bacteriologist in the department of agriculture of the Irish Free State—The Secretary, Civil Service Commission, 33 St. Stephen's Green, Dublin, C.2 (Mar. 19). A senior lecturer in psychology in the Rhodes University College, Grahamstown—The Secretary, Office of the High Commissioner for the Union of South Africa, Trafalgar Square, W.C.2 (April 1). Civilian education officers in the Royal Air Force Educational Service—The Secretary, Air Ministry, Gwydyr House, Whitehall, S.W.1. An assistant master, to teach physics and mathematics, at the Guildford Junior Technical School—The Clerk to the Governors, Technical Institute, Guildford. A Government chemist for Fiji—The Private Secretary (Appointments), Colonial Office, 2 Richmond Terrace, Whitehall, S.W.1. Short-service officers in the Royal Air Force—The Secretary, Air Ministry, Kingsway, W.C.2. Aircraft apprentices in the Royal Air Force—The Royal Air Force, Gwydyr House, Whitehall, S.W.1. A junior assistant (male) under the Directorate of Radiological Research, Research Department, Woolwich—The Chief Superintendent, Research Department, Woolwich, S.E.18. An assistant civilian experimental officer for a Governmental Experimental Establishment—The Secretary, R.E. Board, 14 Grosvenor Gardens, S.W.1.

Our Astronomical Column.

NEW COMET: SCHWASSMANN-WACHMANN, 1929*a*.—Prof. A. Schwassmann and Dr. A. Wachmann discovered a very remarkable comet on Nov. 15, 1927, at Bergedorf Observatory. They have now found a second comet; the following details have been communicated in a telegram from the I.A.U. Bureau, Copenhagen: Time of observation, Nov. 17^d 22^h 21.9^m U.T.; R.A. 5^h 40^m 32^s; N. Decl. 20° 30'; daily motion - 28^s, N. 3'; magnitude 11. The comet is close to the ecliptic, and was doubtless discovered, like the other one, in the course of the photography of minor planets that is carried on at Bergedorf. If the motion continues slow, there ought to be no difficulty in picking the comet up by Jan. 25, the moon being then out of the way at the beginning of the night.

RECENT SOLAR ACTIVITY.—A large group of spots crossed the sun's disc between Jan. 11 and 23. The spots were in stream formation with a large leader spot when seen on Jan. 16, but when next observed on Jan. 19, the group had altered considerably and the spots were breaking up. No magnetic disturbance was registered at Greenwich about the time of central meridian passage of the group. Besides this group there was another group, somewhat smaller, about 60° of longitude eastwards and on the other side of the equator. Particulars of position and area of the two groups are as follows:

No.	Date on Disc.	Central Meridian Passage.	Latitude.	Max. Area.
1.	Jan. 11-23	Jan. 17.4	7° N.	1/800 } of hemi-
2.	Jan. 16-28	Jan. 21.8	11° S.	1/1200 } sphere.

Sunspot activity during 1928 was considerable. Notes on about a dozen large groups, each seen for at least two or three days as a naked-eye object, were

given in NATURE at their times of occurrence. According to a report in *Jour. Brit. Astron. Assoc.* for December 1928, the mean daily area of spots for the year was about 1250 millionths of the sun's hemisphere, as compared with 1058 for 1927 and 1262 for 1926. The maximum of the present cycle is therefore not sharply defined as was that in 1917 of the preceding cycle. The curve for mean areas gives for the present cycle a double peak in 1926 and 1928, whilst the curve plotted from the average daily number of spots, irrespective of size, gives a rather indefinite maximum centring about 1927, although the top of the peak seems to have been reached in 1928. It may be anticipated that the sun's activity will show signs of a decline during 1929.

MARS.—Few results for the present apparition of Mars have yet been published; Dr. W. H. Steavenson has noted the reappearance of a broad, oblique, dark marking sloping upwards to the right, south of Pandora Fretum. *L'Astronomie* for December contains some beautiful drawings made at the 1926 opposition by M. E. M. Antoniadi with the 0.83 m. refractor at Meudon. There is some trace of the above oblique band shown on them. He notes that in the regions enjoying summer there is a tendency for yellowish veils, which he ascribes to clouds of fine sand raised from the desert regions, to dim the surface markings. The darker markings showed a great variety of tints; red, green, blue, violet, and brown all appear in his descriptions. Solis Lacus was green in September 1926, greenish grey in November, and brown in December. This marking appears to have expanded in the north-south direction as compared with former years.