

Holtton Heath—The Secretary to the Admiralty (C.E. Branch), Whitehall, S.W.1 (Dec. 15). A technical assistant at a naval establishment at Portsmouth, with a sound knowledge of high frequency electrical testing methods—The Secretary to the Admiralty (C.E. Branch), Whitehall, S.W.1 (Dec. 15). A pathologist in the General Infirmary, Salisbury—The House Governor and Secretary, General Infirmary, Salisbury (Dec. 17). A professor of mathematics in the University of Western Australia—The Agent-General for Western Australia, 115 Strand, W.C.2 (Dec. 18). A public analyst for the County of Cornwall—The Clerk of the County Council, County Hall, Truro (Dec. 22). A professor of mechanical engineering at the College of Engineering, Guindy, Madras—The Secretary to the High Commissioner for India, 42 Grosvenor Gardens, S.W.1 (Dec. 31). A lecturer in geography in the Huguenot University College, University of South Africa—The Registrar, Huguenot University College, Wellington, Cape Province (Jan. 1). An officer-in-charge of the Wood Preservation Section of the Forest Research Station, Dehra Dun, India—The Secretary to the High Commissioner for India, General Department, 42 Grosvenor Gardens, S.W.1 (Jan. 19). A director of the Tea Research Institute of Ceylon—The Director, Royal Botanic Gardens, Kew (Jan. 30). A principal of the Technological Institute, Cawnpore—

The Secretary to the High Commissioner for India, General Department, 42 Grosvenor Gardens, S.W.1 (Jan. 31). The John Lucas Walker Studentship in the pathological laboratory of the University of Cambridge—Prof. H. R. Dean, Cambridge (Feb. 19). An assistant science master with good qualifications in physics, at King Edward's School, Birmingham—The Headmaster, King Edward's School, Birmingham. An assistant in physiology in the Medical School of Dalhousie University, Halifax, Nova Scotia—Prof. A. V. Hill, University College, Gower Street, W.C.1. Junior technical officers at the Royal Aircraft Establishment for, respectively, tests and experimental work on strength of materials and aircraft components, and work in the engine experimental department—The Chief Superintendent, Royal Aircraft Establishment, South Farnborough, Hants. A temporary science mistress at the Central Foundation Girls' School, Spital Square—The Head Mistress, Central Foundation Girls' School, Spital Square, E.1. An assistant master in the physics department of the Leeds Central High School—The Director of Education, Education Department, Calverley Street, Leeds. Teachers of woodwork and metalwork under the West Riding Education Committee—The Education Department (Elementary Branch), County Hall, Wakefield.

### Our Astronomical Column.

NEW COMET.—The third cometary discovery of the year was made on Nov. 19 by Mr. Forbes, an amateur astronomer of Cape Town. It was a fairly easy telescopic object, being then estimated as of the sixth magnitude, but no tail was seen. The following observations, of which the first was noted as being only approximate, have been distributed by the I.A.U. Bureau at Copenhagen :

U.T.	R.A. 1928-0.	S.Decl. 1928-0.	Observatory.
Nov. 21-08333	12 <sup>h</sup> 8 <sup>m</sup> 30 <sup>s</sup>	21° 42' 0"	Johannesburg.
„ 24-21465	12 17 2.6	23 58 53	Algiers.
„ 24-57167	12 17 59.7	24 13 32	Lick.

The estimated magnitudes at Algiers and Lick were 10 and 7. The discordance illustrates the large personality that exists in these determinations. The Lick observer was Mr. Berman.

These observations are not well spaced for orbit determination, the second and third being only 8 hours apart. An attempt (not yet completed) indicates that the motion is direct and that the distance from the earth at the middle observation was about one unit ; perihelion appears to be already past, the distances from both earth and sun increasing. When this note appears, the comet will be inconveniently low in England, but may possibly be seen just before dawn in the south-east.

THE LEONID METEORS OF 1928.—The display this year, writes Mr. W. F. Denning, appears to have given evidence of increased activity and to have furnished some brilliant objects, if the shower was not strikingly abundant. On the morning of Nov. 16, from 2 to 3 A.M., Mr. A. King, of Ashby, Lincolnshire, found the horary rate of appearance for Leonids was 30, and he noticed several as brilliant as Jupiter. On the following morning there was a decline in activity, but at 2<sup>h</sup> 47<sup>m</sup> A.M. he observed a brilliant Leonid fireball falling from Ursa Major through Hercules. There

was an explosion at the end of its flight, and the sky was illuminated in the region where it occurred, for the object was several times brighter than Venus.

From Blackheath, London, S.E., on the night following Nov. 15, several brilliant meteors with long paths and luminous trails were casually observed. One appeared at about 11<sup>h</sup> 30<sup>m</sup> P.M., ascending some 50° in the eastern sky from the 'Sickle of Leo,' and other large and conspicuous meteors were remarked near midnight. It is evident from the descriptions of their flights that they were Leonids. It is probable that this system of meteors will exhibit more abundance in the next few years, as the ensuing maximum and the return of its parent comet (Tempel, 1866 I) are due in 1933.

DETERMINATIONS OF RADIAL VELOCITIES AT THE CAPE.—*Annals of the Cape Observatory*, vol. 10, part 8, contains radial velocity determinations not previously given in the Cape publications. The first section contains a new determination of the constant of aberration and the solar parallax from the radial velocities of stars. Using Hayford's value, 6378.388 km., for the earth's equatorial radius, and Michelson's 1926 value of the velocity of light, 299800 km./sec., then the solar parallax is given as 8.803" and the constant of aberration 20.475". The probable errors are 0.004" and 0.010" respectively. It is satisfactory to note how narrow the range of different determinations of the solar parallax has become ; it scarcely exceeds one-hundredth of a second.

The orbits of 13 spectroscopic binaries are determined, and the radial velocities of 434 stars. There are several different values found for the solar motion. When the *K*-term is taken as zero, the apex is found to be R.A. 263.6°, N. Decl. 28.8°, velocity 20.5 km./sec. An erratum on p. 11 may be noted ; the period of Sirius should be 50, not 40 years.