

logical and Biological (Dr. Kathleen Blackburn and Dr. Allan), Mathematical (Mr. Colborne and Mr. Miles), Applied Science (Dr. Morrow and Dr. Baker), Philosophy (Dr. A. Robinson and Mrs. Alderson), Archaeological and Historical (Dr. J. Wight Duff).

WE are informed by Messrs. Ernest Benn, Ltd., that Lady Bell is editing the letters of Gertrude Bell, which will be published, probably in two volumes, during the course of 1927.

THE latest catalogue (No. 146) of Messrs. Dulau and Co., Ltd., 34 Margaret Street, W.1, gives particulars of nearly 1300 volumes on zoology, botany and gardening, agriculture, geology, palæontology and mineralogy. Copies can be had free from the publishers.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant in the Engineering School, Trinity College, Dublin—The Registrar (November 29). An assistant master, with qualifications in mathematics, at the Government High School, Nassau, Bahamas—C.A. (T.), Board of Education, Whitehall, S.W.1. For Scottish candidates (T.), Scottish Education Department, Whitehall, S.W.1 (December 6). An officer for research work and a professor of pathology at the Punjab Veterinary College, Lahore—The Secretary to the High Commissioner for India, 42 Grosvenor Gardens, S.W.1 (December 10). Chief designer, designer, chief testing engineer, and first assistant

testing engineer at Admiralty Engineering Laboratory, West Drayton—Secretary of the Admiralty (C.E. Branch), Whitehall, S.W.1 (December 13). An instructress in fruit and vegetable preservation, and housemistress of one of the hostels of the Swanley Horticultural College for Women—The Principal of the College, Swanley, Kent (December 15). A bacteriologist in the Department of Agriculture of the Irish Free State—The Secretary, Civil Service Commission, 33 St. Stephen's Green, Dublin (December 16). A principal of the University College of Wales, Aberystwyth, in succession to the late Principal J. H. Davies—The President of the College (D. Davies, Esq., M.P.), Plas Dinam, Llandinam, or The General Secretary, University College, Aberystwyth (January 31). A pathologist at the Cancer Hospital to conduct investigations in the effects of radiation on malignant and normal tissues and body fluids—The Secretary, Cancer Hospital, Fulham Road, S.W.3. A government analyst for the Public Health Department, Southern Rhodesia—The Secretary, High Commissioner for Southern Rhodesia, Crown House, Aldwych, W.C.2. A keeper of the laboratories of the Royal Horticultural Society at Wisley—The Secretary, Royal Horticultural Society, Vincent Square, S.W.1. A temporary assistant in the Research Department, Woolwich, under the Directorate of Explosives Research—The Chief Superintendent, Research Department, Woolwich, S.E.18. An agricultural chemist at the Kirton Agricultural Institute—The Principal, Kirton Agricultural Institute, near Boston, Lincs.

### Our Astronomical Column.

COMET COMAS SOLA.—It appears fairly certain from the first ten days' observations of this comet that it is a periodic one, of Jupiter's family. The following orbits are by Mr. G. Merton and Dr. A. C. D. Crommelin respectively:

T=1927, March 2:316 U.T.	1927, March 24:940 U.T.
$\omega=24^{\circ} 58' 20''$	$37^{\circ} 0' 18''$
$\Omega=68 \quad 8 \quad 14$	$65 \quad 24 \quad 50$
$i=11 \quad 50 \quad 54$	$14 \quad 0 \quad 4$
$e=0.41065$	$0.53380$
$\log q=0.26526$	$0.26290$
Period=57.525	$77.789$
Equinox=1926.0	1926.0

The elements bear some resemblance to those of Spitaler's Comet, 1890, VII.:  $\omega$  for that comet was  $13^{\circ} 20'$ ;  $\Omega$   $45^{\circ} 6'$ ;  $i$   $12^{\circ} 51'$ ;  $\log q$  0.2596; period 6.4 years. It has not been seen since that apparition. Observations of the present comet are expected to continue for several months, which should decide the question of identity.

BRITISH TELESCOPES.—We have pleasure in directing attention to a recent publication entitled "Astronomical and Optical Instruments" which has been issued by Sir Howard Grubb, Parsons and Company, largely for the purpose of describing and illustrating the resources and equipment of the Company's new optical works at Newcastle-on-Tyne. The contents of the publication consist of a series of four short articles on (1) the development of optical instruments for astronomy and astrophysics; (2) the British optical industry; (3) the history of Sir Howard Grubb, Parsons and Company; (4) the new optical works of the Company at Walker Gate, Newcastle-on-Tyne. The articles are very attractively written, and are well illustrated with a number of clear reproductions. Of special interest are the plans of sectional elevation of the 45-ft. dome and the 41-inch

refractor, and two photographs showing the framework of the dome and its rising floor now under construction at the works. Reference to this large telescope and to the optical works in general was made in NATURE of September 4, p. 340. The list on pages 44-45 of some of the principal large astronomical instruments made by the firm since it was founded by Thomas Grubb is eloquent testimony to the debt which astronomy, in particular, owes to these noted makers of telescope objectives and instruments.

EARLY ARABIAN ASTROPHYSICS.—More than 90 pages of volume 56/57 of the *Sitzungsberichte der Phys.-Med. Soz. Erlangen* are devoted to a presentation of the contents of an early Arabic treatise on the Light of the Moon by Al Hazen, with comments by the translator, Dr. Karl Kohl, of the University of Erlangen. Al Hazen, or al Hasen Ibn al Haitham, was born at Basra but spent most of his life in Egypt. He incurred the displeasure of the Calif al Hakim by the failure of his scheme for preventing the flooding of the Nile and had to conceal himself until the death of the Calif in 1020. He then returned to Cairo, where he died in 1038. His book begins with a short account of contemporaneous knowledge as to the light of the moon; he then shows that phases and eclipses necessitate a spherical moon, goes on to describe his own apparatus and observations, shows that neither transmission nor reflection (according to the laws of ordinary reflection) can explain the light, and concludes, therefore, that the moon is self-luminous, the sun imparting by means of its rays the power of self-luminosity. The original treatise appears to be in the India Office, but we have been unable to find any statement as to how it became available for translation.