

THREE Agricultural Inspectors are required for the Agricultural Department, Iraq. Candidates should be honours graduates of a British university, holding a diploma in agriculture, or possessing similar qualifications. The persons appointed will be responsible for work mainly in connexion with cotton development, and there are opportunities for original research in agricultural economics. One of the selected candidates may be appointed Assistant Director of Agriculture at headquarters. It is therefore desirable that at least one of the candidates appointed should have had experience of editorial work in addition to other qualifications required.

MISS C. F. ELAM has been appointed to the research fellowship in metallurgy, of the value of 500*l.* a year for five years, given by the Worshipful Company of Armourers and Brasiers in the City of London, and awarded through the Royal Society. Miss Elam was a student of Newnham College, Cambridge, and has been engaged in research work on the properties of metallic crystals with Prof. H. C. H. Carpenter at the Royal School of Mines for the past few years. She also investigated the method of distortion of aluminium crystals in tension, in conjunction with Prof. G. I. Taylor, at the Cavendish Laboratory, Cambridge,

and the results of this investigation formed the subject of the Bakerian Lecture of the Royal Society for 1923.

THE Council of the Royal Society of Arts has awarded the Society's Silver Medals for papers read before the Society during the past session as follows: (*Ordinary Meetings*)—Sir Frank Baines, "The Preservation of Ancient Monuments and Buildings"; Sir Richard A. S. Paget, Bt., "The History, Development, and Commercial Uses of Fused Silica"; Major-Gen. Sir Fabian Ware, "Building and Decoration of the War Cemeteries"; Mr. Frank Hope-Jones, "The Free Pendulum"; Brig.-Gen. Sir Henry Maybury, "The Victoria Dock District and its Roads"; Mr. T. Thorne Baker, "Photography in Industry, Science and Medicine"; Mrs. Arthur McGrath (Rosita Forbes), "The Position of the Arabs in Art and Literature." (*Indian Section*)—Brig.-Gen. H. A. Young, "The Indian Ordnance Factories and Indian Industries"; Sir Richard M. Dane, "Manufacture of Salt in India." (*Dominions and Colonies Section*)—Prof. C. Gilbert Cullis, "A Sketch of the Geology and Mineral Resources of Cyprus"; Sir Frederick Lugard, "The Mandate System and the British Mandates."

Our Astronomical Column.

ENCKE'S COMET.—This is the best known of all the short-period comets, and has been observed at every return for the last century. L. Matkiewicz has taken charge of the computations regarding it that were carried on for a long period by the late Prof. Backlund. He notes that a marked change in the mean motion took place in 1918, similar to that in 1904. Since observations in 1921 were confined to a fortnight, it is very desirable to observe the comet over a long arc at the present return. Its detection in July is possible, and it should certainly be found before the end of August.

The following elements, which include perturbations by Jupiter only, are from *Astr. Nachr.* 5298:

T	1924 Oct. 31, 429 G.M.T.
ω	184° 43' 43" } 1924.0
Ω	334 37 33
i	12 30 21
ϕ	57 48 28
μ	1074".092

EPHEMERIS FOR GREENWICH MIDNIGHT.

	R. A.	N. Decl.		R. A.	N. Decl.
July 16.	2 ^h 46 ^m 37 ^s	24° 30'	July 28.	3 ^h 14 ^m 57 ^s	27° 9'
"	20. 2 55 46	25 20	Aug. 1.	3 25 16	28 8
"	24. 3 5 10	26 14	"	5. 3 36 17	29 8

Values of $\log r$, $\log \Delta$ on Aug. 1: 0.2294, 0.2268.

The comet is a morning object, rising 5 hours before the sun in mid July.

TOTAL LUNAR ECLIPSES.—An article by W. J. Fisher in Brit. Astron. Assoc. Journal for May gives useful hints on the observation of total lunar eclipses. These phenomena were for long regarded as of little scientific value. Then opportunity was taken to improve our knowledge of the moon's diameter by making numerous observations of occultations at the darkened limb. Afterwards it was recognised that study of the illumination of the eclipsed moon gave useful information on the average transparency of the air in the regions for which the moon was in the horizon. A map of the circumstances of the eclipse of Aug. 14 next (partly visible in England) makes it

easy to locate these regions for every phase of the eclipse. They lie to a considerable extent over Europe, Africa, and South America, so that direct meteorological observations will be available for comparison with those given by the eclipse.

It is suggested that spectroscopic observations with a large lens and short focus might be made during totality; also the use of screens of various colours might enable more exact determinations to be made of the colours of various parts of the disc. The study is an easy and attractive one for amateur observers.

REPORT OF THE BERGEDORF OBSERVATORY.—This Observatory is carrying on an active programme of work in various fields under its director, Prof. R. Schorr. A second appendix to his "Eigenbewegungs-Lexikon" has just appeared, containing 1248 new proper motions, mostly of stars from magnitudes 6 to 9 and Right Ascensions from 0^h to 2^h; the astrographic and other recent catalogues have been used in preparing it.

The meridian work at the Observatory includes the re-observation of stars in Rümker's Catalogue, of which a revision was recently published.

Dr. Baade uses the reflecting telescope for the photography of minor planets and comets; the comet found by him in 1922 was followed until the early months of 1924. The very interesting planet 944, found by him, which travels all the way from the orbit of Mars to that of Saturn, has received the name "Hidalgo," after the Mexican hero; this is in recognition of the warm reception given to the German Eclipse Expedition to Mexico in September 1923. Masculine names are given only to minor planets with exceptional orbits, such as Eros and the Trojans.

Prof. Schorr is further engaged on the great "Geschichte des Fixsternhimmels," which contains a summary of all meridian work on the stars from 1750 to 1900. The first 2 hours have already appeared. This work was begun by Ristenpart at Berlin, but was interrupted by his departure to South America, where he died.