

classified under 20 headings. The whole list covers 95 pages and is followed by an index of 6 pages.

THE Cambridge Instrument Co., Ltd., is issuing convenient sized booklets describing the latest types of instrument which the firm produces. Booklets Nos. 3 and 4 are devoted to direct current and alternating current instruments respectively. Wherever possible, sensitivity data accompany the descriptions, and will prove helpful to intending purchasers. The figures given are not necessarily the best, but are those which can be easily obtained. A new form of Duddell oscillograph is described. It is easily portable and enables three simultaneous records to be obtained although only one source of light and one camera are required. Another novelty is the Campbell frequency meter. It should be of value in telephone work, as it enables accurate measurements of frequencies between 180 and 4000 cycles per second to be made. The condition of balance is indicated by silence in a telephone, and the frequency is found by multiplying the reading on the scale by a simple factor, depending on which of the five ranges is used. Various types of apparatus suitable for telephone engineers are made, and electrical engineers will be interested in the fault localiser, the lightning conductor bridge, and the Epstein testing square.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned: a lecturer in mathematics and mechanics at the Stockport Technical School—The Principal (June 24). Three assistant inspectorships in connexion with agricultural, dairying, and horticultural education and research (two with practical experience in agriculture and who have specialised in dairying, and one who has specialised in horticulture)—The Secretary, Ministry of Agriculture and Fisheries, 10 Whitehall Place, S.W.1 (June 29). An assistant chemist at the Fruit and Vegetable Preservation Research Station of the University of Bristol, at Campden, Glos.—The Registrar, University, Bristol (June 29). A microscopist at the Technological Research Laboratory of the Indian Central Cotton Committee, Bombay—The Secretary, Indian Central Cotton Committee, 25 Wodehouse Road, Fort, Bombay (July 5). An assistant in biology at University College, Galway—The Secretary (September 18). Assistant entomologists under the Sudan Government—The Controller, Sudan Government London Office, Wellington House, Buckingham Gate, S.W.1. Keeper of the laboratory of the Royal Horticultural Society at Wisley—The Director, R.H.S. Gardens, Wisley, Ripley, Surrey.

Our Astronomical Column.

ORKISZ'S COMET.—Prof. Banachiewicz and his assistants have made a careful study of the orbit of this comet, using 80 observations extending from April 3 to May 27.

T	1925 April 1.4782 G.M.T. (new)
$\omega$	$36^{\circ} 9' 15''$
$\Omega$	$318 \quad 3 \quad 11$
$i$	$100 \quad 0 \quad 46$
log $q$	0.04595

Actually they give the elements not in the above form, but in *Cracovians*, a name that they have given to the direction cosines of the major and minor axis of the orbit, and the normal to the orbit plane. It is shown that some of the computations are simplified by using this form. No appreciable deviation is found from a parabola, so identity with the comet of A.D. 1500 is excluded. The following outline ephemeris is given:

	R.A.	N. Decl.
June 4.	6h 15 <sup>m</sup> 57 <sup>s</sup>	81° 38'
July 6.	10 10 15	60 57
Aug. 7.	10 54 24	47 49
Sept. 8.	11 23 55	40 11

THE KODAIKANAL OBSERVATORY IN 1924.—The report of the Kodaikanal Observatory for the year 1924 emphasises the importance of this observatory for solar work. Photographs on a scale of 8 inches to the sun's diameter were taken on 328 days. Monochromatic images of the sun's disc in K light were obtained on 329 days, prominence plates on 290 days, and photographs of H $\alpha$  disc plates on 294 plates. Three important features are brought out on the last-mentioned plates, which appear to be typical of sunspot disturbances. An account of these was recently presented to the Royal Astronomical Society by Dr. T. Royds. They are (1) a bright ring round the sunspot; (2) outside this a dark flocculus more or less extensive; and (3) between the dark flocculus and the coarse r $\acute{e}$ seau of the general undisturbed surface of the sun there is a bright surround consist-

ing of bright patches larger than in the general r $\acute{e}$ seau, interspersed by dark features sometimes suggestive of the spot vortex. The study of these phenomena is being continued. The sunspot activity showed a steady increase since the previous year, the approximate mean latitudes of the spots being 23°.7 in the northern hemisphere and 24°.9 in the southern. In the laboratory a series of comparisons of the solar spectrum with arc spectra was obtained for subsequent measurement for displacement of the solar lines.

SPECTROSCOPIC PARALLAXES.—It is interesting to note that the Stonyhurst College Observatory has published its first paper on spectroscopic parallaxes (*Monthly Notices R.A.S.*, vol. 85, p. 444), and the author, the Rev. H. Macklin, gives the values for 30 stars. He explains that as only stars not fainter than about the third or fourth magnitude gave spectra intense enough for this purpose with the Stonyhurst instruments, sufficient material is not yet available for more than a preliminary examination. The intensity-differences between the lines are measured by a wedge, the method adopted by the Norman Lockyer Observatory. At the latter observatory the luminosities and spectroscopic parallaxes of 1025 stars of types Fo to Mb, and 200 stars of type B, have already been published, the last 100 B-type stars appearing in the same issue of the *Monthly Notices*.

NEW LUNAR MAP.—Mr. H. Percy Wilkins has in preparation a lunar map of 200 inches in diameter in sheets of 22 x 30 inches. The detail is taken from all published drawings and notes, namely, Weinck, Elger, Gaudibert, Goodacre, Schmidt, and photos from Paris, Lick, Yerkes, and Mount Wilson. Objects down to half a mile in diameter are included. The sheets will be issued separately, so that any one requiring, say, the sheet containing Plato can have it without the others.