to make the necessary arrangements ; Dr. A. B. Rendle is acting as honorary treasurer, and Mr. F. T. Brooks, 31 Tenison Avenue, Cambridge, and Dr. T. F. Chipp, Royal Botanic Gardens, Kew, are honorary secretaries of the Congress.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned :—A teacher of woodwork and geometry at the Walthamstow Technical College—The Clerk to the Governors, 1 Selbourne Road, E.17 (Mar. 12). An assistant master for mathematics and science at the Acton and Chiswick Polytechnic Junior Technical School—The Principal, The Polytechnic, Bath Road, Chiswick, W.4 (Mar. 16). A principal and head of the metallurgical department of the County Technical College, Wednesbury—The Director of Education, County Education Offices, Stafford (Mar. 23). A full-time teacher of engineering subjects at the Shrewsbury Technical College—The Secretary to the Committee of Management, Guildhall, Shrewsbury (Mar. 27). A biochemist and a proto-zoologist at the Medical Research Institute in Nigeria —The Private Secretary (Appointments), Colonial Office, 2 Richmond Terrace, Whitehall, S.W.1 (Mar. 31). Inspectors of agriculture under the Department of Agriculture and Forests of the Sudan Government— The Controller, Sudan Government, London Official, Wellington House, Buckingham Gate, S.W.1 (April 7). A professor of organic chemistry in the Central College, Bangalore, University of Mysore — The Registrar, University of Mysore, Mysore, India (April 25). A junior assistant in the Research Department, Woolwich (under the directorate of Explosive Research)— The Chief Superintendent, Research Department, Woolwich, S.E.18.

ERRATUM.—In NATURE of Mar. 3, p. 315, col. 2, lines 20 and 24, it was stated that Prof. A. V. Hill had calculated that the Woolworth Building in New York could be climbed in eight seconds, and that it had been done in nine seconds. These times should be eight minutes and nine minutes respectively.

Our Astronomical Column.

COMETS. — After the discovery of Reinmuth's comet, an examination was made of earlier plates taken at Königstuhl, with the result that the following position of the comet was derived : Jan. 29·10757 U.T.; R.A. 9^h 23^m 35^s·6; N. Decl. $17°$ $41'$ $19''$; from this position, combined with those of Feb. 22 and 25, Dr. A. C. D. Crommelin has derived the following elliptical orbit (the position for Feb. 22, on revision of measures, was given as 9^h 15^m 7^s·5, N. Decl. $21°$ $44'$ $55''$) :

$$
\begin{array}{lrrr}
T & 1928 \text{ Feb. } 1\cdot6502 \text{ U.T.} \\
\omega & 9° & 26' & 37'' \\
\Omega & 124 & 53 & 11 \\
i & 8 & 0 & 16 \\
\phi & 30 & 2 & 13 \\
\log a & 0\cdot5701080 \\
\log q & 0\cdot2685923 \\
\text{Period} & 7\cdot164106 \text{ years.}
\end{array}
$$

with Ω, i, ϕ bracketed as $1928\cdot0$.

The following ephemeris is for 0 h. U.T. :

	R.A.	N. Decl.	log r.	log Δ.
Mar. 8	9^h 14^m 31^s	$23°$ $8'$	0·2748	9·9889
16	9 16 44	23 31	0·2778	0·0132
24	9 20 54	23 35	0·2814	0·0402

The orbit does not closely resemble that of any comet in the catalogues, but there is a distant resemblance to that of Denning's comet, 1894 I. It is of interest that the aphelion point of the above orbit lies close to the perihelion point of comet Schwassmann-Wachmann, and the two comets were close together in the middle of 1924, if the orbit of Reinmuth is near the truth ; it represents within $2\frac{1}{2}''$ an observation made at Milan on Feb. 28.

Mr. James Young obtained a photograph of Encke's comet, Feb. 6·7708 U.T., from which he derives the following position : R.A. 22^h 49^m $54\cdot5^s$, N. Decl. $0°$ $18'$ $55''$. This gives Feb. 19·829 for the date of perihelion, which is 3 hours later than Matkiewicz's predicted date, Feb. 19·6984, rather an unexpectedly large discordance. The acceleration of this comet, which formerly attracted so much attention, seems to have completely died away. This renders it difficult to explain the acceleration by resisting medium, as such a medium could scarcely have been present in the last century and absent now.

Mon. Not. Roy. Astro. Soc. for January contains reproductions of the drawings of Skjellerup's comet by Mr. Chidambara Aiyar on Dec. 15, when it was about 2° from the sun.

THE DRAYSON PARADOX.—This paradox had its sole basis in a carelessly written paragraph in Sir J. Herschel's " Outlines of Astronomy." It asserts that the pole of the equator moves around a centre that is 6° distant from the pole of the ecliptic, so that the obliquity varies between $23\frac{1}{4}°$ and $35\frac{1}{2}°$; the ice-ages are asserted to have occurred at the epochs of maximum obliquity. Drayson also erroneously claimed that the proper motions of stars were merely an effect of this movement of the earth's axis.

The observational evidence against the Drayson theory, and its lack of a dynamical basis, have been frequently brought before the public during the last half-century, but it still claims adherents. Mr. A. H. Barley, its principal advocate, has recently brought out a pamphlet, " The Ice Age " (W. E. Baxter, Ltd., Lewes, Sussex), in which the old assertions of Drayson are repeated, and the further claim made that the very small errors in the predictions concerning the recent solar eclipse (spoken of as ' serious errors ' in the pamphlet) were due to the non-acceptance of Drayson's views. The argument here is a repetition of that used by Mr. E. J. Stone in several papers between 1883 and 1892 ; he ascribed the errors of Hansen's lunar tables to a change in the ratio of mean to sidereal time, brought about by the substitution of new solar tables in the *Nautical Almanac*. He was correct in asserting that some such change took place, but he multiplied its effect by 365 ; Sir G. Airy showed in a letter to the *Observatory* in May 1883 that sidereal time, from the manner in which it was derived, could not be in error by the amount that Stone asserted.

Prof. de Sitter discussed the errors of the lunar tables in NATURE of Jan. 21, p. 99, and gave the evidence in favour of the conclusion that they are due to small variations in the earth's rate of rotation, not to changes in the direction of its axis.