to purchase a property at Teddington near to the National Physical Laboratory, to be used as its research station and laboratories. It is hoped that the premises will be ready for occupation by the end of March. A Technical Advisory Committee has been appointed to consider and draw up the preliminary programme of research, and a second member of the technical staff has been appointed, namely, Dr. J. O. Cutter.

APPLICATIONS are invited for the following appointments, on or before the dates mentioned:—An assistant master to teach engineering science in the day junior Technical and Evening Technical Schools, Truro—The Principal, Technical Schools, Truro (Jan. 28). A secretary to the Royal Asiatic Society—The Secretary, Royal Asiatic Society, 74 Grosvenor Street, W.1 (Jan. 29). A lecturer in machine drawing and design in the department of engineering, University College, Nottingham—The Registrar (Jan. 31). An assistant editor of British Chemical Abstracts—B (Applied Chemistry)—The Secretary, Bureau of Chemical Abstracts, 46 Finsbury Square, E.C.2 (Feb. 4). A principal of the Teachers' Training College and professor of education in the University of Western Australia—The Agent-General for Western Australia, Savoy House, Strand, W.C.2 (Feb. 10). A test assistant at the Royal Aircraft Establishment for general assistance to the scientific staff of the wind tunnel section of the Aerodynamic Department—The Chief Superintendent, R.A.E., South Farnborough, Hants. (Reference No. A. 142).

Our Astronomical Column.

COMETS.—Mr. Blathwayt, who discovered his first comet a year ago, has now found a second one, which is of the ninth magnitude, being the brightest comet that has been in sight for several months. The place of discovery is Braamfontein, near Johannesburg, and the position on Jan. 13 at 1^h $28 \cdot 0^m$ is given as R.A. 15^h 44^m 0^s, S. Decl. 29° 46, daily motion $+ 12^s$, S. 50'. The comet is too far south for observation in England, but may come northward later.

Prof. J. Comas Sola, of Fabra Observatory, Barcelona, has discovered an object of doubtful character (comet or minor planet). Its place on Jan. 10 at 0^h $30 \cdot 0^m$ U.T. was 8^h 19^m 20^s, N. Decl. 2° 22, daily motion $- 1^m$ 28^s, S. 18, magnitude $12 \cdot 4$. If it is a minor planet, it must have a fairly small mean distance and a high inclination, so that it is an object of interest in any case.

Dr. A. C. D. Crommelin has deduced the following orbit of comet 1926 f. (Comas Sola) from photographic observations by G. Merton and F. J. Hargreaves on Nov. 10, Dec. 3, Dec. 24:

$$T = 1927 \text{ Mar. } 22 \cdot 1992 \text{ U.T.}$$
$$\left. \begin{array}{l} \omega = 38° \ 27' \ 30''\cdot8 \\ \Omega = 65 \ \ 36 \ \ 29\cdot2' \\ i = 13 \ \ 45 \ \ 40\cdot0 \\ \phi = 35 \ \ \ 5 \ \ 39\cdot5 \end{array} \right\} 1926\cdot0$$
$$\log q = 0\cdot248639$$
$$\text{Period} = 8\cdot51645 \text{ years.}$$

These elements indicate a close approach to Jupiter in May 1912, and are therefore compatible with the suggestion of identity with Spitaler's comet 1890 VII. Very large perturbations are required to make this possible, the aphelion distance having increased from $5\cdot08$ to $6\cdot568$, which latter is $1\frac{1}{4}$ units beyond the orbit of Jupiter.

EPHEMERIS FOR 0^h.

	R.A.	N. Decl.	$\log \triangle$.
Jan. 24	2^h 39^m 46^s	18° 40'	$0\cdot148$
Feb. 1	2 49 52	20 26	$0\cdot166$
„ 9.	3 2 10	22 14	$0\cdot183$

The comet should be readily observable until May, which would be six months after discovery. It remains within a few degrees of Mars for some time.

THE MINOR PLANETS.—Prof. H. N. Russell gives in the *Scientific American* for January an interesting summary of our present knowledge on this subject. Keen visual scrutiny revealed 300 planets between 1847 and 1891; then the photographic method was introduced and led to a great increase in the rate of discovery, more than 1800 discoveries having been announced between 1891 and 1926. At present, 1046 planets have been well observed and have received permanent numbers; about 1000 more are known to exist, but their orbits are only roughly determined.

The search cannot be pronounced a waste of time, if only for the fact that it led to the discovery of Eros, which gives such an excellent means of determining the solar parallax. Albert, Alinda, and Ganymede resemble Eros in travelling partly within the orbit of Mars. The group of six Trojan planets, which make equilateral triangles with Jupiter and the sun, give an example in the heavens of a solution of the 3-body problem which Laplace had announced from theory more than a century earlier. Dr. Baade's remarkable asteroid Hidalgo, the orbit of which extends from Mars to Saturn and is more eccentric than many cometary orbits, also presents interesting features, and raises some puzzling questions in cosmogony.

It is satisfactory that international co-operation in observing the minor planets, which broke down during the War, is being established afresh. Prof. M. Wolf's first photographically discovered planet was lost for some thirty years, and was then recovered in America, though it needed a long series of observations to establish the identity.

SATELLITES OF MARS.—These satellites offer some interesting problems, owing to their close proximity to Mars, with resulting shift to their orbit planes, due to the planet's oblateness. There is also the possibility of some alteration of the mean motion of Phobos as a reaction of tidal friction. Hence the series of measures made in 1924 with the 26-in. equatorial at the United States Naval Observatory, Washington, by A. Hall, E. C. Bower, and Miss E. A. Lamson (*Astr. Jour.*, No. 873) is of interest. The corrections to the mean daily motions are:

	Deimos.	Phobos.
Hall	$- 0\cdot000060°$	$+ 0\cdot000099°$
Bower	$- 0\cdot000107°$	$+ 0\cdot000097°$

The deduced values of the reciprocal of the mass of Mars are:

	Deimos.	Phobos.
Hall	3,108,500	3,157,100
Bower	3,127,200	3,212,100

Giving Deimos double weight, owing to the larger arc subtended by its orbit, the weighted mean is 3,140,100. Thus the observed value of the mass is nearly 2 per cent. smaller than the accepted value, rather a large difference.