

for the prosthesis room, and a demonstrator for the conservation room of the Cairo Dental School—The Director, Dental School, Ministry of Education, Cairo (Sept. 1). An assistant lecturer in mechanical engineering at the Bradford Technical College—The Principal, Technical College, Bradford (Sept. 5). An adviser in agricultural zoology and a research assistant for soil survey work in the department of agriculture of the University College of North Wales—The Secretary and Registrar, University College (Department of Agriculture), Memorial Buildings, Bangor (Sept. 10). A professor of dentistry

in the University of Otago, New Zealand—The High Commissioner for New Zealand, 415 Strand, W.C.2 (Sept. 15). An assistant lecturer in physics in the University of Manchester—The Registrar, The University, Manchester (Sept. 20). An assistant lecturer in economics at Auckland University College, New Zealand—The High Commissioner for New Zealand, 415 Strand, W.C.2. A junior assistant physicist, under the directorate of radiological research of the Research Department, Woolwich—The Chief Superintendent, Research Department, Woolwich, S.E.18.

Our Astronomical Column.

CONJUNCTION OF JUPITER AND URANUS.—These two planets reach opposition next month, and are now observable well before midnight. They have been in high declination for many years (six and forty-two respectively) and have now returned to the equator. On Aug. 19 Uranus is 49' due north of Jupiter, so it is an easy opportunity to identify the former planet. It is visible to the naked eye in a clear sky with acute sight, if one knows exactly where to look.

MAXIMUM OF MIRA.—This remarkable variable star is due to attain its maximum at the end of September; as it will then be nearly opposite to the sun, the conditions for observation will be very favourable. It is already visible to the naked eye, but it is not high enough for convenient observation until after midnight. It will be interesting to compare Mira with neighbouring stars during the next few weeks, and to note its gradual increase in light. The star attains the second magnitude at some maxima, the third at others.

SKY ILLUMINATION DURING THE TOTAL SOLAR ECLIPSE OF JUNE 29.—It has been observed in several eclipses that the recovery of light at the end of totality appears to be far more rapid than its decline at the beginning of it. Miss Catherine O. Stevens, writing from 3 Heron Court, Richmond, Surrey, refers to the total solar eclipse of June 29 in particular, and ascribes the effect to the fact that the shadow cone pierced the atmosphere at an angle so acute that it reached the atmosphere vertically above any locality in advance of its arrival at the place itself, and so caused a good deal of gloom before totality. Allusion has already been made to this effect in NATURE of July 9 in explanation of the fact that the descent of darkness and return of light at Colwyn Bay happened some seconds before the actual beginning and end of totality. It may also have had an effect in causing the return of light to be more rapid than its withdrawal, but in this case the effect ought to be reversed at an evening eclipse, the withdrawal being more rapid than the return. Such an effect is seldom if ever noted. It was certainly not the case at the afternoon eclipse at Algiers in 1900, but in that case the air was so transparent that atmospheric effects would be much less conspicuous.

COMETS.—No further news of Gale's comet has come to hand, and it is to be feared that the object has been lost. It is, however, possible that unreported observations have been made in the southern hemisphere.

Senhor Mello e Simas has published some researches on the conjectured identity of Comet Comas Sola with 1890 VII (Spitaler). He has carried the position of the former back to 1912, when it made a near approach to Jupiter, and finds that it was about four astronomical units from the position of the latter, brought

up from 1890, with perturbations by Jupiter up to 1901. He concludes that the two comets are not identical, but this cannot yet be considered as definite; Spitaler's comet was a difficult object in 1890, and the observations were neither numerous nor very exact. It is, therefore, quite possible that its accepted period is sufficiently in error to permit of the two comets being identical. The orbit of comet Comas Sola is much better known, since this has been well observed under favourable conditions for more than half a year; it would seem, therefore, to be the safer course to start from this end, and work back with different assumed periods, to see whether any of them would fit with Spitaler.

L'Astronomie for August contains an article by Mme. Flammarion on comet Pons-Winnecke, with reproductions of two photographs taken by M. F. Quenisset on June 23. The comet appears as a large nebulousity, some 25' in diameter, slightly extended to the north, that is, towards the sun. The nucleus was of mag. 9. On June 26-27 a tail 1° long was photographed, in P.A. 230°. The comet was easily visible to the naked eye as a small white transparent cloud, not unlike the Andromeda nebula.

Dr. G. Merton has obtained the following photographic observation of comet Grigg-Skjellerup:

July 5-96768 U.T., R.A. (1927-0) 17^h 19^m 38-76^s, N. Decl. 39° 36' 27-5".

He gives the following continuation of the ephemeris (0^h):

	R.A.	N. Decl.	log <i>r</i> .	log Δ.
Aug. 20.	18 ^h 31 ^m 8 ^s	12° 22-7'		9-9290
24.	18 36 12	10 49-7	0-2261	9-9563
28.	18 41 19	9 23-2		9-9830
Sept. 1.	18 46 29	8 3-1	0-2454	0-0090

Search ephemeris for Schaumasse's Comet (from *B.A.A. Jour.*, March 1927, p. 240):

PERIHELION, SEPT. 27-0.				
0 ^h U.T.	R.A.	N. Decl.	log <i>r</i> .	log Δ.
Aug. 22.	8 ^h 18-9 ^m	21° 25'	0-1022	0-3206
30.	8 51-6	20 31	0-0898	0-3121
Sept. 7.	9 24-7	19 13	0-0798	0-3055
15.	9 57-7	17 33	0-0728	0-3007
23.	10 30-5	15 34	0-0693	0-2982

PERIHELION, OCT. 5-0.				
Aug.	R.A.	N. Decl.	log <i>r</i> .	log Δ.
22.	8 ^h 0-5 ^m	21° 21'	0-1165	0-3174
30.	8 32-7	20 41	0-1022	0-3071
Sept. 7.	9 5-6	19 39	0-0898	0-2978
15.	9 38-7	18 14	0-0798	0-2911
23.	10 11-7	16 29	0-0728	0-2863

The comet will be low in the north-east just before dawn. It is very desirable to find the comet this year, as the circumstances will be more unfavourable for observation at the next return in 1935.