

A head of the mechanical engineering department, a head of the electrical engineering department, and a graduate assistant in the mechanical engineering department of the Rutherford Technical College—The Director of Education, Education Office, Northumberland Road, Newcastle-upon-Tyne (June 3). A biochemist, a soil chemist, and a plant physiologist at the University of Bristol Department of Agricultural and Horticultural Research, Long Ashton, Bristol—The Registrar (June 4). An assistant lecturer in the Commerce Department of the Belfast Municipal College of Technology—The Principal of the College (June 9). A principal of Battersea Polytechnic, and a woman head of the Department of Hygiene and Public Health—(1) The Clerk to the Governing Body, (2) The Principal (June 13). The Bernhard Baron research studentship at the Middlesex Hospital on the anatomy, physiology or pathology of the ear, nose and throat—The Secretary of the Middlesex Hospital, W.1 (June 14). A professor of botany in the University of Sydney, N.S.W.—The Agent-General for New South Wales, Australia House, Strand, W.C.2 (June 24). A lecturer in medieval history in the Queen's University,

Belfast—The Secretary, Queen's University, Belfast (June 27). A biochemist, an assistant plant physiologist, and an assistant pomologist at the East Malling Research Station—The Secretary, East Malling Research Station, East Malling, Kent (June 30). Test assistants at the Royal Aircraft Establishment, South Farnborough, Hants (quoting A. 174). An assistant in the building trades department of the Halifax Municipal Technical College—The Principal, Municipal Technical College, Halifax. A senior physics master at Merchant Taylors' School, Crosby, Liverpool—The Head Master. Temporary Instructor Lieutenants in the Royal Navy—The Adviser on Education, Admiralty, Whitehall, S.W.1. A junior assistant chemist under the directorate of explosive research of the Research Department, Woolwich—The Chief Superintendent, Research Department, Woolwich, S.E.18.

ERRATUM.—At the end of Prof. Fritz Paneth's letter in NATURE of May 14, p. 706, on "The Transmutation of Hydrogen into Helium," for the date "Mar. 2" read "April 2."

Our Astronomical Column.

COMETS.—Comet Pons-Winnecke was an easy object for small telescopes early in May: both Dr. W. H. Steavenson and Mr. B. M. Peek noted a nearly stellar nucleus and a considerable coma. As the comet is steadily approaching both sun and earth, it should by now be quite conspicuous, but it is well to remember that while the position of comets can be predicted, their brightness is subject to capricious variations.

Dr. A. C. D. Crommelin has revised the orbit elements from observations on Feb. 25 and May 1 (by Merton), Mar. 4 (by van Biesbroeck). The period was assumed known; the other elements are:

T	1927 June 21-0730 U.T.
ω	170° 17' 15.3"
Ω	98 12 34.0
i	18 56 43.2
ϕ	43 16 22.4
log a	0.5192415 (assumed)
log q	0.0168982

Comet Grigg-Skjellerup is not likely to be so bright as Pons-Winnecke, but it is coming near the earth, so should be fairly easy to see. Its distance on June 3 is 19 million miles. Observations of position are desired.

H. Thiele has deduced elliptical elements of Stearns's comet, with a period of 9515 years, but departure from a parabola is not yet certain:

T	1927 Mar. 20-02161 U.T.
ω	10° 36' 11.5"
Ω	214 35 43.2
i	87 32 21.0
log q	0.565875
e	0.991805

Observations used were on Mar. 13, 26, April 5. It is fading slowly, but is still a fairly easy object.

Comet Comas Sola is getting rather low in the evening sky, but should be followed for as long as possible.

Ephemerides of these comets for 0^h follow; that of Pons-Winnecke is from earlier elements and will need some correction:

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Comet.	Date.	R.A.	N. Decl.	log r .	log Δ .
Pons-Winnecke	May 20	15 ^h 9 ^m 20 ^s	53° 16'	0.0532	9.4648
	28	15 21 0	54 26	0.0383	9.3716
	June 1	15 29 40	54 50	0.0320	9.3147
	5	15 42 8	55 1	0.0268	9.2485
	9	16 0 4	54 59	0.0225	9.1688
	13	16 27 28	54 19	0.0195	9.0712
Grigg-Skjellerup	May 20	7 58 5	31 33		9.3957
	22	8 9 53	35 6	9.9591	9.3757
	24	8 23 34	38 54		9.3572
	26	8 39 39	42 54	9.9656	9.3409
	28	8 58 49	47 0		9.3272
	30	9 21 55	51 6	9.9736	9.3171
	June 1	9 50 2	55 0		9.3106
	3	10 24 5	58 30	9.9820	9.3080
	5	11 4 34	61 20		9.3095
	Stearns	May 23	14 19 47	17 48	0.5715
31		14 13 31	19 32	0.5728	0.4820
June 8		14 8 17	20 57	0.5743	0.4976
	16	14 4 11	22 5	0.5760	0.5139
Comas Sola	May 24	7 36 20	31 57	0.2730	0.3741
	June 1	7 59 32	31 4	0.2790	0.3873
	9	8 22 16	29 52	0.2855	0.4004

RECENT SUNSPOT ACTIVITY.—A large group of sunspots, recently in transit across part of the sun's disc, was the first to be seen with the naked eye since last January. In the interval of four months a number of smaller groups have been seen, averaging at least six daily, but there has been a noticeable absence of very large spots which are usually fairly frequent at this time of the solar cycle. The recent group, consisting of a pair of large, roughly circular spots, began as a tiny spot seen on May 9, and its rapid growth is well shown by the following measures of area, in units of millionths of the sun's hemisphere, made at intervals of approximately 24 hours:

Date	May 9	10	11	12	13	14
Area	5	150	380	870	1000	1350

One interesting feature of the group was the invariable distance apart, 6° in longitude, preserved by the two spots; in the majority of such groups the early rapid growth is associated with a considerable drifting apart of the two chief components, so that at maximum development they are separated by at least 10° in longitude. Other details of this group are given below in the usual manner:

No.	Date on Disc.	Central Meridian Passage.	Latitude.	Max. Area.
4	May 9-17	May 11.7	17° N.	1/800

of hemisphere.