

Society a complete diagram of the disk of the sun at the time, and copies of the photographic records of the variations of the three magnetic elements, as obtained at Kew, and pointed out that a moderate but very marked disturbance took place at about 11^h 20^m A.M., Sept. 1st, of short duration; and that towards four hours after midnight there commenced a great magnetic storm, which subsequent accounts established to have been as considerable in the southern as in the northern hemisphere. While the contemporary occurrence may deserve noting, he would not have it supposed that he even leans towards hastily connecting them. "One swallow does not make a summer.")

Mr. Carrington regrets having omitted previously to communicate the following passage in a letter from M. Schwabe, dated March, which is plainly intended for others as well as himself:—“The remarks and drawings of *Jupiter* in the *Monthly Notices* by Dawes, Murray, and Lassell, have much interested me, as I also have long followed the changes which take place in his bands. Although none of the observations in the *Monthly Notices* coincide in time with those which I have obtained, yet I recognise a good accordance in general, especially in the two figures given by Sir W. Murray.* Yet I do not find indicated in those two figures, that, as I observe, the whole surface of *Jupiter* is covered with delicate parallel dark lines, which are the most conspicuous in the dark belts. The most delicate ones are to be found in the bright equatoreal zone, the zone of Schroeter, in the middle of which, or on the equator itself, they appear rather more distinctly, although this middle line is not always there. . . . In the figures of the *Monthly Notices* there are representations of bright round beads which I do not observe under that character. My impression is that I see longish bright places between the above-named parallel lines, in which, or through which, the bright surface of the planet is discernible. I much wish to learn whether Messrs. Dawes, Murray, or Lassell, or either of them, see also those delicate parallel lines. The large and almost black spots which were seen a short time ago, also dissolved into similar but much broader and darker parallel lines. . . .”

On a curious Appearance seen in the Sun.

By R. Hodgson, Esq.

“While observing a group of solar spots on the 1st September, I was suddenly surprised at the appearance of a very brilliant star of light, much brighter than the sun’s surface,

* Lassell (?).—Ed,

16 *Astronomer Royal, Observations of Small Planets.*

most dazzling to the protected eye, illuminating the upper edges of the adjacent spots and streaks, not unlike in effect the edging of the clouds at sunset; the rays extended in all directions; and the centre might be compared to the dazzling brilliancy of the bright star α *Lyræ* when seen in a large telescope with low power. It lasted for some five minutes, and disappeared instantaneously about 11.25 A.M. Telescope used, an equatorial refractor 6 inches aperture, carried by clockwork; power, a single convex lens, 100, with a pale neutral-tint sun-glass; the whole aperture was used with a diagonal reflector.

“The phenomenon was of too short duration to admit of a micrometrical drawing, but an eye-sketch was taken, from which the enlarged diagram* has been made; and from a photograph taken at Kew the previous day, the size of the group appears to have been about $2^m 8^s$, or (say) 60,000 miles.

“The magnetic instruments at Kew were simultaneously disturbed to a great extent.

“Nov. 11, 1859.”

Results of the Meridional Observations of Small Planets; Occultations of Stars by the Moon; and Phenomena of Jupiter's Satellites, observed at the Royal Observatory, Greenwich.

(Communicated by the Astronomer Royal.)

Hebe (6).

Mean Solar Time of Observation.			Apparent R.A.	Apparent N.P.D.
		<small>h m s</small>	<small>h m s</small>	<small>o ' "</small>
1859, Oct.	3	13 7 54.5	1 56 42.67	104 44 20.57
	19	11 54 13.9	1 45 54.83	107 26 37.50
	26	11 21 36.8	1 40 48.24	108 4 20.58
	29	11 7 45.5	1 38 44.34	108 13 25.82

Psyche (10).

Mean Solar Time of Observation.			Apparent R.A.	Apparent N.P.D.
		<small>h m s</small>	<small>h m s</small>	<small>o ' "</small>
1859, July	4	13 35 45.8	20 25 52.01	106 32 45.99
	7	13 21 57.8	20 23 51.43	106 41 11.19
	12	12 58 40.2	20 20 12.82	106 56 29.95
	13	12 53 58.2	20 19 26.59	106 59 52.42
	19	12 25 34.8	20 14 37.89	107 20 12.86
Aug.	2	11 18 52.5	20 2 56.40	108 10 42.11
	27	9 25 2.0	19 47 21.15	109 27 51.29
	31	9 8 2.9	19 46 5.45	109 36 54.74
Sept.	10	8 27 25.6	19 44 47.04	109 54 25.76

* This well-executed diagram was exhibited at the meeting, and excited much interest. It may still be seen at the Apartments of the Society. R. G.