

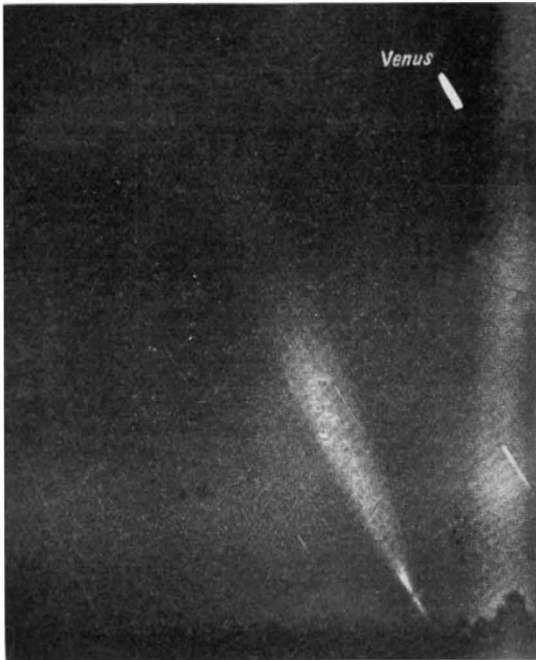
actual practice as observed in monuments. As at Avebury and Stonehenge, the avenue was added to the circle. Each stone selected has a fairly straight side, which has been utilised as an independent alignment. The avenue, as well as the tallest stone, are approximately oriented to the sun's place on St. David's Day, March 1. Three divisions of the year, and alignments to sunrise or sunset for every three weeks, are provided by the stones. The use of each stone will be found by keeping its straight side to the right. The diameter of the circle is 27 feet; the length of the avenue 54 feet; the total length of the work is 81 feet. In all such measurements, the Gorsedd rule that all extensions should be in threes, or multiples of three, was observed. The width of the avenue represents the distance, as measured on the horizon and viewed from the centre stone, between Candlemas and the equinox. True to ancient practice, the westward view of the avenue is "blocked" by a stone, which otherwise represents the fashion in Aberdeenshire circles, noticed by Sir Norman Lockyer, of placing a stone at right angles to the direction required.

JOHN GRIFFITH.

Llangynwyd, Glam.

Halley's Comet.

I DO not know if the enclosed is of any general interest or not; it is an attempt to photograph Halley's comet (as seen here) without any special apparatus. The tail was about 90° long on May 17, and probably 115° on May 18,



Halley's Comet in Pisces as seen at 5.30 a.m. on May 17 with 15' exposure.

taking the calculated position of the nucleus, which had not risen when dawn came. On May 20 (on the other side) the tail was only 15° or 20° long, but both twilight and moon interfered. It was 35° long on May 23.

JAMES MOIR.

Mines Department, Johannesburg, June 10.

Earth-current Observations in Stockholm during the Transit of Halley's Comet on May 19.

WHEN Halley's comet was passing across the sun on May 19 we took, at the central telegraph station at Stockholm, some observations of earth-currents, which were measured on two lines, Stockholm-Göteborg and Sundsvall-Stockholm. The measurements were performed from minute to minute from oh. 40m. to 3h. 45m. a.m. (mid-European time). The geographical coordinates for the three places mentioned are the following:—

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Sundsvall ...	$\phi = 62^{\circ} 23' N.$	$\lambda = 17^{\circ} 19' E.$	from Greenwich
Stockholm ..	59 21	18	3
Göteborg ...	57 42	11	58

The resistance of the line Stockholm-Göteborg was 2940 ohms, and that of the line Sundsvall-Stockholm 2336 ohms. From the current-strengths measured in milliamperes we obtain the potential differences expressed in millivolts per km. by multiplication with r/l , r indicating the ohm-resistance of the line and l the distance in km. from end to end. For calculating the components of the potential difference E.-W. (V) and N.-S. (V') we have the formulæ

$$V = 7.73i - 3.32i'$$

$$V' = 0.871i + 6.60i'$$

i and i' indicating the observed current-strengths on the Stockholm-Göteborg and the Sundsvall-Stockholm lines. The measured current-strengths proved considerably above the normal at this time of day, though by no means reaching to that of a magnetic storm. The two components, expressed in millivolts per km. (every fifteenth minute), are as follows. The potential differences are considered positive in the directions E.-W. and N.-S. :—

h. m.		V	V'	h. m.		V	V'				
0	45	...	-55.6	...	-6.3	...	2 15	...	-16.5	...	+24.6
1	0	...	-6.8	...	+2.0	...	0 30	...	-23.5	...	+12.7
0	15	...	+3.9	...	+0.4	...	0 45	...	-25.5	...	+16.7
0	30	...	-3.4	...	-9.5	...	3 0	...	-7.2	...	+1.3
0	45	...	-6.2	...	+4.2	...	0 16	...	-0.4	...	-5.6
2	0	...	-8.0	...	+15.8	...	0 30	...	-8.8	...	+10.2
							0 45	...	-16.9	...	+2.9

The greatest disturbances occurred shortly before and after 2h. a.m. : V max. = +68.1, V' max. = +56.6 millivolts per km.

D. STENQUIST.
E. PETRI.

Leptocephalus hyporoides and L. thorianus.

IN my paper "On the Occurrence of Leptocephali (Larval Murænoids) in the Atlantic West of Europe" (*Meddelelser fra Kommissionen for Havundersøgelser, Serie Fiskeri, Bind iii., No. 6, 1909, p. 12, Pl. i., Fig. 8, Pl. ii., Figs. 1-7*), I have described and figured a hitherto unknown Leptocephalus species under the name of *Leptocephalus hyporoides*, n.sp. It had escaped my attention, however, that this name had already been employed by P. Strömman in "Leptocephalids in the University Zoological Museum at Upsala," Upsala, 1896, p. 39, Pl. iv., Figs. 5-6, for another form similar in habit, but differing quite definitely in several characters, e.g. the pigmentation and position of the anus, from the form described by me. I would therefore propose that the name of the latter should be changed to *Leptocephalus thorianus*, n.sp. (after the Danish research steamer *Thor*, on the cruises of which the species in question was discovered).

JOHS. SCHMIDT.

Static Charge in Bicycle Frame

WHILE riding a bicycle recently I was overtaken by a thunderstorm, and took shelter beneath a convenient tree after propping the machine against a wall. When the rain had ceased, in the course of about fifteen minutes, I re-mounted, with my hands upon the handles in the usual manner. The handles are of composition, resembling vulcanite or a similar non-conducting material, the pedals are shod with rubber, and the leather saddle completes the insulation of the rider from the frame. Upon exchanging my grip of one of the handles for the bar, I felt the effects of a static charge which was sufficiently startling to endanger equilibrium for the moment. I do not suggest that the pneumatic tyre, which successfully insulates a vehicle from the earth, adds a new terror to locomotion, for even a timid rider in traffic would hardly be endangered, but it would be interesting to know if this phenomenon has been observed before, either on cycles or motor-cars.

ROBERT S. BALL, JUN.

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