

notes, that I did not imagine there was anything unusual in the circumstance. The voice is a shrill "chirp," and the whole body and tail vibrate simultaneously with its utterance.

Madras, July 9

SURGEON

### Halo

WITH reference to the very interesting remarks which Prof. Silvanus Thompson makes in this week's NATURE on the "halo" observed by me on the 16th as appearing over Dalkey Hill, I ask leave to give the correct bearing of the direction in which it was seen,  $L. 35^{\circ} S.$  I may further remark that I never have seen anything similar in this country, though I had continuous occasions of observing halos in the Bay of Biscay from the coast. They seemed to be connected with dominating easterly winds there.

The weather during the week has been rainy and the temperature low for the season.

J. P. O'REILLY

Royal College of Science for Ireland, Dublin, July 28

### OUR ASTRONOMICAL COLUMN

THE SPECTRUM OF WELLS' COMET.—Dr. B. Hasselberg, of the Observatory of Pulkowa, in a letter to Prof. Tacchini, dated June 30, describes his spectroscopic examination of this comet, the results of which he shows to be of a very exceptional character. The observations were made on the nights of June 4, 5, and 7. The brightness of the nights at Pulkowa in the summer had influenced unfavourably his spectroscopic observations of the great comet of 1881, and the position of Wells' Comet was also a disadvantage, so that he had not expected a prominent spectrum, and the more because observations by Prof. Tacchini and Dr. Vogel at the commencement of April did not promise much. His surprise was therefore the greater on finding a very bright and extended continuous spectrum of the nucleus, with an excessively strong yellow line, of which the micrometrical measures proved the perfect identity with the yellow line of sodium, line D of the solar spectrum. This was a result altogether new in cometary spectroscopy, and the more noteworthy because at the same time there were no traces of the three ordinary bands of the spectrum. It is confirmed by Dunér, Bredichin, and Vogel. In the middle of May, on the contrary, Vogel's observations show that the three bands were then present, though faint, while of the sodium line there was not the least trace. It is therefore necessary to conclude that during the last fortnight of this month the spectrum of the comet had changed in a manner of which the history of the science furnishes no precedent. Dr. Hasselberg then explains his views of the *modus operandi* of these changes, and concludes:—"Je crois, donc, que dans le cas actuel, la chaleur solaire n'a joué autre rôle que de faire évaporer le sodium contenu dans la comète, et que les phénomènes lumineux et spectraux observés ont été provoqués et entretenus principalement par des décharges électriques mises en jeu sous l'influence du soleil."

This comet is again under observation in Europe. Prof. Julius Schmidt observed it at Athens as early as July 4; he gives his daylight observations in detail in No. 2447 of the *Astron. Nach.*, but the excellent meridian observations made at Albany, U.S., render them of less importance than might otherwise have attached to them.

OCCULTATION OF A STAR BY JUPITER.—The star 4 Geminorum, which has usually been considered a seventh magnitude, but is 7.4 in the *Durchmusterung*, will be occulted by the planet Jupiter, on the morning of November 8, the phenomenon being favourably observable at the observatories of the United States. The apparent place of the star at the time, according to the "Greenwich Catalogue" for 1864, is in R.A. 6h. 3m. 25s. 59, Decl.  $+ 23^{\circ} 0' 57''$ . 8, and at conjunction in R.A. Nov. 7, 14h. 12m., Washington M.T. it will be 5" south of the centre of the planet according to Leverrier's position. Assuming the accuracy of the places, the immersion may be observed in this country.

NOVA OPHIUCHI, 1848.—Prof. Holder obligingly writes from the Washburn Observatory, University of Wisconsin, on July 22:—"In your note of May 4, 1882, you ask for an estimate of the magnitude of the *Nova* of 1848, whose position is (for 1880.0) R.A. 16h. 52m. 47s. N.P.D.  $102^{\circ} 42'$ . I looked for this object on July 18, and found it by help of your allineations with three stars which I had copied in my observing list, but I

had, however, no note of its magnitude. There are three faint stars near it.—

1. Mag. 13 in  $p = 25^{\circ} \pm$
2. ,, 13.5 in  $p = 160^{\circ} \pm$
3. ,, 14 in  $p = 270^{\circ} \pm$

The *Nova* itself is between 12.5 and 3.0 mag. according to my estimate, and has no colour.

This estimate proves that no very sensible change has taken place since 1875.

SCHROETER'S OBSERVATIONS OF MARS.—Prof. Bakhuisen announces the publication of Schroeter's "Areographische Beiträge zur genauern Kenntniss und Beurtheilung des Planeten Mars," a work which he had designed to publish himself, and had nearly completed at the time of his death, in 1816. The manuscripts and copper plates were in the possession of H. Schroeter, of Linsburg, near Nienburg on the Weser, a grandson of the astronomer, and Prof. Bakhuisen having heard, through Dr. Terby, of Louvain, in December, 1874, that he had some intention of disposing of them to a scientific institution, took measures to obtain them for the Observatory at Leyden; the authorities in that University favourably received the application made to them, and provided the necessary funds for the purchase, and early in 1876 the Observatory was in possession of the manuscripts of the "Areographischen Beiträge," with fourteen copper plates belonging thereto. The publication has been undertaken by the firm of E. J. Brill, of Leyden. Two-thirds of the work appear to have been twice revised by Schroeter himself, so that the greater part of it is issued in the state which it was designed that it should be by the author. Prof. Bakhuisen mentions in his "Prospectus" that he had newly reduced Schroeter's observations for the position of the axis of Mars, and found its longitude and latitude  $352^{\circ} 59'$  and  $60^{\circ} 32'$ , which is in nearer agreement with Oudemann's reduction of Bessel's few measures than with the recent determination of Schiaparelli.

### KOREAN ETHNOLOGY

AT a recent interview with Mr. Charles Marvin, M. Semenoff, vice-president of the Russian Geographical Society, remarked that "every annexation in Central Asia is a source of satisfaction to our scientific men. Fresh fields are opened up for research, and all this must naturally be of interest to persons devoted to science." Some such thoughts will probably have occurred to most ethnologists on hearing that Korea has at last broken through the barriers of exclusiveness and concluded commercial treaties both with England and the United States. Foreigners will doubtless for some time be restricted to the three treaty ports thrown open on the eastern and southern coasts, and to Seoul, the capital, where British and American political agents will reside. But the opportunities thus afforded of studying the interesting inhabitants of this region cannot fail to be gradually extended, until the whole peninsula becomes accessible to scientific exploration. Meantime a few notes on the ethnical relations of the people to their neighbours will probably be acceptable to the readers of NATURE.

The term *Korea*, now applied to the whole peninsula, was originally restricted to the northern state of *Korié*, the Chinese and Japanese forms of which were *Kaoli* and *Korai* respectively. With the fusion of *Korié*, *Petsi*, *San-kan*, *Kudara*, and all the other petty states into the present monarchy about the end of the fourteenth century, the name of the northern and most important of these principalities was extended by Japanese writers to the whole country, while the monarchy itself, at that time subject to China, took the official Chinese title of *Chaosien* (Tsiosen), or "Serenity of the Morning," in reference to its geographical position between the continent and Japan, the "Land of the Rising Sun." For the inhabitants themselves there seems to have been no recognised general name, although those of the southern division were commonly designated in Japanese history