but the yellow, purple and pinkish tinges were most general. The sunsets of the 22nd and 26th and the sunrises of the 27th, 28th and 29th were those which showed the salmon tint to the greatest advantage.

In a letter to NATURE of last week, Mr. Krohn recorded some remarkable sunsets at Madeira, while a *Daily Mail* correspondent at Bombay (June 29) writes :—"The extra-ordinary red ᵗsunsets which have been witnessed for several days past are believed to be due to Martinique dust in the upper atmosphere."

There is little doubt, therefore, that the dust is on the move, being carried by the upper air currents, and perhaps we may yet observe more brilliant effects.

WILLIAM J. S. LOCKYER.
Solar Physics Observatory, June 30.

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As one of the first, in your pages, to call attention to the import of the sunset glows in 1883, I have additional interest in noting the recurrence of similar glows during the past few days. On three nights, at least, they have been more marked than any seen by me since the eighties.

I observed the glow first on June 26, at Croydon, but it was noted at Street, Somerset, on the 24th (Tuesday last). I was there from the 27th to 29th, and saw glows each evening. On the 27th it was brighter, though less widely spread, than at Croydon on the 26th. But at Street, on the 26th, I am informed by my cousin, Mr. Joseph Clark, that it was brighter than on the 27th.

The following resemblances to the glows in 1883 may be noted :—

(*a*) The distinct interval between the sunset itself, with illuminated lower clouds, and the glow. The latter began 20 to 30 minutes after sunset.

(*b*) The detachment from the horizon.

(*c*) The shade, pink, ranging from salmon tinges (26th, due perhaps to London smoke-haze) to almost purple.

(*d*) The clear interval between a "glow" and "after-glow" about half an hour after sunset (noted on 28th and 29th).

(*e*) The "after-glow" growing as brilliant as the glow. Indeed, on the 29th it was more brilliant, and alone attracted attention from the ordinary observer.

(*f*) The strong and prolonged "counter glow" above the earth-shadow (specially noted on 28th, up to 8.50, or half an hour after sunset).

(*g*) The prolonged ruddiness along the horizon, signs still remaining on 29th at 11 o'clock.

On June 26 (Croydon) the glow arose to at least 75°; otherwise 55° or so was the extreme limit. So far the pink glows have not been observed later than about 9.10, or, say, 50 minutes after sunset. In brilliancy they cannot compare with those of 1883, but perhaps with the glows two years later.

June 30.   J. EDMUND CLARK.

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The Halos of May 1, 8 and 22.

SINCE the publication in NATURE of the letters on these three phenomena, my attention has been directed by Prof. S. P. Thompson to the "Memoire sur les Halos," by M. A. Bravais. The first of the above three halos, recorded by Prof. E. E. Barnard, is apparently new, unless the radius of one of the two circles was in reality considerably smaller than that of the other; if this was the case (which from the account seems scarcely likely) this halo might be part of the halo depicted on Plate iii. Fig. 98, and described on pp. 87, 88 and following, and of which Bravais says that the different parts are by no means always visible together.

There is no doubt that the halo described by me is sub-stantially the same as that depicted on Plate iii. Fig. 101, though it will be seen that mine has a cusp not previously described, whilst one of the mock suns given by Bravais is altogether wanting.

Lastly, the halo described by Prof. Grenville A. J. Cole will be found in the same work (Plate iii. Fig. 101), where it is interesting to note that only one parhelion is drawn, and that is the one given by Prof. Cole on the left of the horizontal diameter of the smaller circle.   T. C. PORTER.
Eton, Bucks, June 30.

Matter and Motion in Space.

MR. WILLIAM STANLEY, an American philosopher and engineer, said a few days ago that the grandest words ever uttered by any man on this planet were spoken by Lord Kelvin when he said that if all the matter in the universe were reduced to its ultimate atoms and equally divided through all space, the disturbance caused by the beating of the wing of one mos-quito would bring about everything that we find in the material universe to-day. I have written to Lord Kelvin asking him where I can find some account of this, but he denies that he ever said anything of the kind. However, as Mr. Stanley declares that it appeared in NATURE, perhaps you can put me in the way of getting a copy of the paper which contains this remarkable utterance, which, by the way, is quite true, and if Lord Kelvin did not say it, I only have to say that he might well have been the author.   HIRAM S. MAXIM.
18 Queen's Gate Place, London, S.W., June 25.

A Method of Treating Parallels.

MAY I venture to suggest through your columns a method of dealing with the theory of parallels which seems to me to possess some advantages?

Since a philosophically rigid proof of their properties may be regarded as out of the question in the present state of our knowledge, the only desideratum in laying the foundation of this important section of geometry is an axiom the truth of which shall be apparent to the mind of a beginner.

I propose that the following should be adopted, as being the property of parallels which is most prominent in matters of ordinary life, and hence to those who have not made a special study of geometry the most obvious :—"A straight line which is perpendicular to one of two parallel straight lines is perpendicular to the other."

The more general property, that parallels are equally inclined to any straight line which cuts them, follows immediately :—
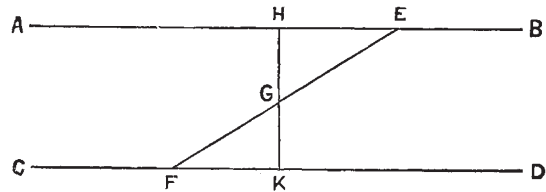
Let AB and CD be two parallels met by a third line at E and F. Bisect EF at G, and draw GH perpendicular to AB and produce HG to meet CD at K. Then HK is perpendicular to AB and CD.

Then in the two triangles GEH, GFK,

$$\text{angle EHG} = \text{FKG (right angles)},$$
$$\text{angle EGH} = \text{FGK (I. 15)},$$
$$\text{EG} = \text{GF (construction)}.$$
$$\therefore \ \text{HEG} = \text{KFG (I. 26)}.$$

Hartley College, Southampton.   S. W. RICHARDSON.

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THE FIRST FRUITS OF THE GERMAN ANTARCTIC EXPEDITION.

THE protracted voyage of the *Gauss* from the Elbe to Cape Town excited some anxiety at the time, and called forth a few comments unfavourable to the sailing power of the ship. It appears, however, that the delay was due mainly to the fact that many days were spent in carrying on oceanographical and magnetic work, although the change of programme which led to the abandonment of a visit to Ascension shows that the duration of the passage did to some extent exceed anticipations. The *Gauss*, we may recall, left the Elbe on August 15, 1901, passed the Lizard on the 20th, called at St. Vincent in the Cape Verde Islands on September 11, and reached Cape Town on November 23. The work done in various branches of science was discussed in a preliminary manner on board, and an account of it was issued in March in a paper of