

it is still sufficiently bright for observation when viewed with our larger telescopes; and, as far as I am aware, there are no published ephemerides later than March 27. To remedy this want, I subjoin places calculated from the elements of Dr. Palisa for Greenwich mean midnight for the period during which the moon will be absent.

	R.A.			Decl.	Log
	h.	m.	s.		
April 13 ...	2	52	34	+36° 54' 6"	0.0183
„ 15 ...	2	51	2	+37 3' 2	0.0222
„ 17 ...	2	49	36	+37 12' 3	0.0265
„ 19 ...	2	48	12	+37 20' 6	0.0311
„ 21 ...	2	46	52	+37 28' 6	0.0360
„ 23 ...	2	45	35	+37 36' 4	0.0412

JOHN I. PLUMMER

Orwell Park Observatory, April 11

### Sunspots

IN the summary in regard to solar activity in 1886, published in NATURE for March 10, p. 445, it is stated that, during the period from October 31 to December 12, "on six days only out of the forty-two could there be discovered on the sun any trace even of a spot, and on those days only one tiny spot could be seen." As observed in this locality, there were formed, in the midst of the faculae which came into view on November 14, one spot on November 15 and two spots on November 16; all having disappeared on November 18, when observation again became possible. On December 8 the first of a group of spots which made a complete transit across the sun's surface appeared. On December 9 this group consisted of three spots, which persisted until the 13th at least, gradually increasing in size. A period of sunspot minimum is best adapted in certain regards to the study of the relations of solar outbursts to magnetic and auroral phenomena; hence precision at such times, in reference to details of the character here indicated, is not unimportant.

Lyons, N.Y., March 30

M. A. VEEDER

### Ozone

MY attention has been drawn to a letter in your issue of January 13 (p. 248), respecting the production of ozonised air for respiration in pulmonary complaints. I beg to inform "W. H." that there is at present no convenient electrical apparatus devised for use in a room, that would electrify the air with sufficient power to be of much service. A simple plan for obtaining ozone in small quantities is to mix very gradually three parts of strong sulphuric acid with two parts of permanganate of potash in a jam-pot, and place the vessel under the bed. Ozone will be given off from this mixture for some weeks.

I should be glad to hear the experiences of "W. H." inhaling ozonised air "just sensible to the smell," as I am of opinion that this strength of ozone is rather too great.

Your correspondent is misled in supposing that the Engadine hotels possess appliances for ozonising the air of corridors, &c. It is only the Maloja Kursaal which has adopted my device for this purpose. The electric current used is taken off from one of the dynamos used for lighting. A short description of the plan is given in the third edition of my "Alpine Winter," p. 84.

Upper Engadine

A. TUCKER WISE

### Electrical Discharges in the Doldrums

I QUITE agree with the Hon. Ralph Abercromby as to the continuous electrical discharges in the doldrums; so is there a continuous discharge of rain. I do not, however, agree with him in thinking that the electrical discharges are in any way directly connected with earth-currents. I should say they are due to electrical discharges on the top of the shower clouds, unaccompanied by thunder. It would be interesting to know if travellers in the centres of Africa and South America have observed this phenomenon there.

DAVID WILSON-BARKER

### Green Light at Sunrise and Sunset

MR. R. T. OMOND, of the Ben Nevis Observatory, in NATURE of February 24, p. 391, asks whether the cause of the

green colour at sunset at sea is the sun shining *through* the water? This cannot be the cause, for I have many times observed this colour at sunrise behind the mountains Madonie or Copo Zaferano, which, from the Observatory, appear higher on the sea horizon than the sun's disk. That is to say, the phenomenon occurs when, for the observer, the sun is entirely above the marine horizon, and no part of the disk can shine through the water.

Palermo Observatory

A. RICCÒ

[This is a well known and obvious effect of atmospheric refraction.—Ed.]

### A Sparrow chasing Pigeons

"E. A. C." inquires in NATURE of last week (p. 536), whether any of your readers have observed the sparrow chasing pigeons. This habit of the sparrow is very common; I have myself often observed it, and I apprehend that few who keep pigeons have not frequently seen such attacks. The pugnacity of the sparrow did not appear to me to be the result of any previous quarrel with the pigeon, as I never saw the former attack the latter except on the wing, and always from underneath.

Chirbury, Beckenham, Kent, April 12 J. JENNER WEIR

### A Question for Chemists

Is it known that a mixture of glycerine and permanganate of potassium will take fire spontaneously immediately after being mixed? If so, I should be glad of any reference to the fact.

Bradford

WM. WEST

### THE PARIS ASTRONOMICAL CONGRESS

THE International Congress called together by the French Government to take steps to obtain a photographic chart of the heavens was opened on Saturday at the Observatory of Paris, and, from the information which has reached us so far, it would seem that its labours are likely to have a result of the highest importance for the science of this and succeeding centuries. The following Directors of Observatories are already in Paris, or are expected: if half of them really come, there will be such a meeting of astronomers as has rarely been seen:—

Baillaud, Toulouse Observatory	Perry, Stonyhurst
Bakhuyzen, Leiden	Peters, Clinton (U.S.A.)
Beuf, La Plata	Pujazon, San Fernando
Christie, Greenwich	Rayet, Bordeaux
Cruls, Rio de Janeiro	Russell, Sydney
Donner, Helsingfors	Schoenfeld, Bonn
Dunér, Lund	Struve, Pulkowa
Folie, Brussels	Tacchini, Rome
Gill, Cape Town	Thiele, Copenhagen
Gylden, Stockholm	Trépied, Algiers
Krueger, Kiel	Vogel, Potsdam
Oom, Lisbon	Weiss, Vienna

Besides these Directors of Observatories, and of course all the astronomical members of the Institute, there are other astronomers, such as Messrs. Common and Roberts from our own country, and Messrs. Lohse (from Germany), Winterhalter (from Washington), and Hasselberg (from Pulkowa), whose presence is most important.

The French Government, the Academy of Sciences (with Dr. Janssen as President), and Admiral Mouchez (the Director of the National Observatory of Paris), seem to have done all in their power to facilitate the labours, and even to provide for the comfort, of the various delegates and others representing the various nationalities; and at the opening ceremony in which the Institute and Government are doing all they can was evidenced by the fact that the address which was delivered by M. Bertrand, the eminent mathematician, on behalf of