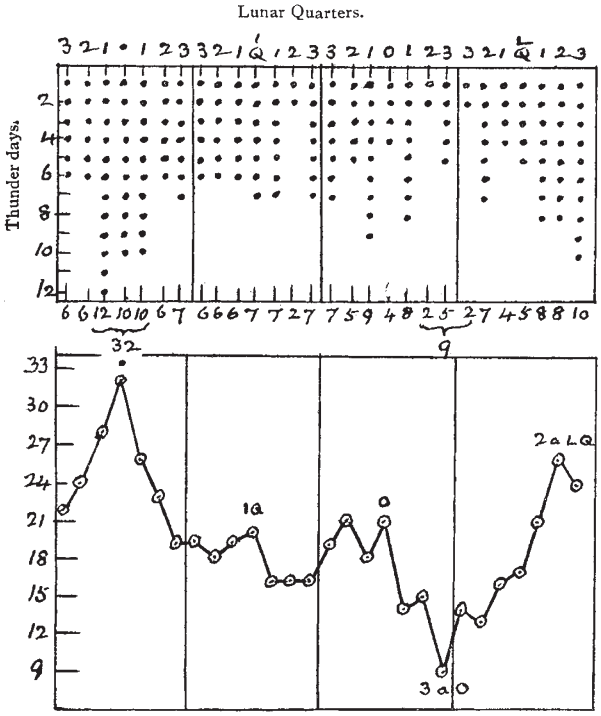
The Moon and Thunderstorms.

IT is known that several meteorologists have affirmed a connection between thunderstorms and the lunar phases. In his recent admirable "Lehrbuch," Dr. Hann appears to favour this idea somewhat, and he gives some account of researches on the subject (p. 662).

I do not remember to have seen the Greenwich data treated from this point of view. It might, therefore, interest your readers to see how days on which thunder was heard at Greenwich in the last thirteen years (summer half) are distributed in the week about new moon, about first quarter, &c. This is shown in the diagram, where each dot represents one such day. The number of dots in each case is given below; and in the curve, each point represents the sum of three consecutive members of this series.



It will be seen that the extremes come about new moon (maximum) and about midway between full moon and last quarter (minimum). While the three-day group commencing with second after full moon had 9, that about new moon had 32—nearly four times as many.

This curve might be usefully compared with that, similarly obtained, for wet days (or days with 0·5 in. or more) at Greenwich, in twenty-four years (given in NATURE of August 29, 1901).

Arranging those 182 days by weeks and reckoning percentages, we have :—

	Week about New Moon.	1st Qr.	Full Moon.	4th Qr.
	57	41	40	44
Per cent. ...	31	23	22	24

The latter figures may be compared with those given in Hann's work for

	N. M.	1st Qr.	F. M.	4th Qr.
Kremsmünster (Wagner)	26·4	27·4	20·9	25·3
Aix la Chapelle (Polis) ...	26·9	27·5	21·5	24·1
Batavia (van d. Stok) ...	27·4	24·5	24 2	23·9

All agree in showing a larger percentage about new moon than about full moon, and in the two earlier phases than in the two later. The values for Kremsmünster and Aix are for much longer periods, and it is possible that a larger induction for Greenwich might bring out still closer agreement. The grouping by weeks, in the case of Greenwich, seems hardly to do justice to the contrast presented. It may be well, further, to remember that a 26-day period in thunderstorms, corresponding to the sun's rotation, has been affirmed.

Sidmouth, February 6. ALEX. B. MACDOWALL.

Progressive Variation in the Malayan Peacock-Pheasant.

IN looking over the specimens of this species (*Polyplectrum bicalcaratum*) in the Indian Museum, I have come across a most interesting skin of an adult male, showing variation in the direction of greater ornamentation. Normally, this peacock-pheasant has ocelli only on the wings and tail and the upper part of the back; but in the present specimen several of the black-speckled buff feathers of the back, immediately below the ocellated region, have clusters of the small spots richly glossed with green like the ocelli, the rest of the black speckling of the feather remaining normal. The green specks are always near the end of the feather, in the position occupied by the ocelli. Furthermore, this bird has the long under-tail-coverts decorated near the tip of the outer webs with a not very bright green-glossed ocellus, the inner webs merely showing black patches, such as are normal on both webs of these feathers in other specimens. Thus this individual presents on the upper surface a variation which might be advantageous in sexual selection, and beneath a similar enhancement of beauty which could hardly be of any use, since the Polyplectrons show off in an attitude which prevents any display of the under-tail-coverts. It is therefore interesting as showing how the beauty of a species might be enhanced both with and without the assistance of preferential mating on the part of the females.

F. FINN.

Indian Museum, Calcutta, January 30.

The Inheritance of Mental Characters.

FURTHER discussion of this subject (*cf.* p. 245) should perhaps be postponed until the appearance of Prof. Pearson's detailed paper. Possibly, however, it may be permissible to discuss briefly Prof. Pearson's reply to my criticism.

(1) As to the possibility of proving the "soul" factor to be a reality, I would say that it may be possible some day to estimate very exactly the value of the other two factors (heredity and environment), and it will be significant if there is then found to be a residuum not accounted for. This line of reasoning is not new; compare A. R. Wallace, "Darwinism," chap. xv.

(2) It seems to me very likely that the correlation between the mental characters of brothers would be less than between the physical, if only the factor of heredity were considered. It does not follow from this that the mental characters are less inherited, taking the race as a whole, but only that they are less evenly inherited, so that the true measure of inheritance could only be determined by studying a number of successive generations. I tried to set this forth in the paragraph which Prof. Pearson says he cannot understand.

(3) There are, however, other disturbing influences. Even at birth, we must believe that we have not the simple product of heredity, as has been well explained lately by Prof. Ewart (*Sci. Trans.* Roy. Dublin Soc., October 1901, p. 366). Again, the several faculties do not mature at the same age, so that statistics based on children "in public schools, high schools, secondary and primary schools of all classes" cannot be strictly comparable, nor does it seem possible, in the case of mental traits, to make definite allowance for age, as can be done with more or less accuracy in the case of physical characters.

T. D. A. COCKERELL.

East Las Vegas, New Mexico, U.S.A., February 1.

ICELAND.[1]

FEW parts of the earth's surface possess so strange a fascination, at once attractive and repellent, as that large island which, away to the north-west of Europe, stands between the Atlantic and the Arctic Ocean. Its language and literature, its connection with the northern mythology, the antiquity and continuity of its annals, and its quaint customs and traditions have given it a special place in the history of nations. The strange aspect of its surface and climate—the home of frost and fire, the scene of some of the most colossal volcanic eruptions which man has ever witnessed, the site of vast snow-fields and glaciers, a region shaken with earthquakes, devastated by

[1] "Geological Map of Iceland." By Th. Thoroddsen. Surveyed in the years 1881–1898. Edited by the Carlsberg Fund. (Copenhagen, 1901.)