(the 4358 A. group of the mercury arc), and Fig. 2 the spectrum of the light scattered in quartz, where the positions of the new lines are marked by arrow heads.

The wave-lengths of the longest radiations from quartz determined from these and other photographs are 118μ, 94μ, 78μ, 48·5μ, 37·4μ, and 21·5μ. Some of these have been overlooked by Landsberg and Mandelstam (*Comptes rendus*, July 9, 1928) and by I. R. Rao (*Ind. Jour. Phys.*, vol. 3, part I., August 1928), who have recently studied the Raman effect in quartz, apparently owing to the insufficient resolving power of their instruments.

K. S. KRISHNAN.

210 Bowbazar Street,
Calcutta, Aug. 16.

Recent Developments on Jupiter.

A GREAT revival of activity in the equatorial and south tropical regions of Jupiter has recently set in, and the developments are so rapid and the phenomena presented so interesting that it seems desirable to direct the attention of telescopic observers to what is in progress. The revival began by the appearance of a dark spot in the latitude of the south edge of the south equatorial belt and in longitude 127° (system II). It was observed in the early morning of Aug. 13 by Mr. B. M. Peek, and it quickly began to show marked activity. The extension in the *preceding* direction (which has recently become much accelerated) has reached at the time of writing as far as longitude 20°, and the disturbance in this part is composed of a series of bright spots and dark peaks and areas. They are mainly in the latitude normally occupied by the south equatorial belt. On the *following* side of the origin of disturbance a number of small dark spots, which appear to have been successively ejected, are travelling along the south component of the south equatorial belt, rather like beads on a string, in the direction of increasing longitude at the enormous rate of about 5° per day! This corresponds to a rotation period of about $9^h\ 59^m$, which would seem to be unprecedented so far as our knowledge of the planet goes.

These remarkable objects are rapidly approaching the Great Red Spot, the *preceding* end of which is now in longitude 303° ± and in nearly the same latitude. One of them—if it still exists—must have already reached the Red Spot, but unfortunately it faded just before conjunction. It is important to find out what exactly happens at such times, and it is hoped that observers will keep a careful watch on the planet at this exceptionally interesting juncture. It is fortunate that the prolonged spell of fine weather has made it possible to piece together a fairly complete record to date of the remarkable developments now in progress.

THEODORE E. R. PHILLIPS.

Headley Rectory,
Epsom, Sept. 18.

Correlation.

IN NATURE of Aug. 4, p. 171, Mr. Gheury de Bray comments upon a graphic method which I described. In his glance at my letter Mr. de Bray appears to have missed the first sentence, which states that the method is "For the determination of a linear function of X approximating to Y for a range of corresponding values (X, Y)."

In my example, 1·00 is the mean deviation of Y from the function (40 − 3X)/5. From the function 9·25 − 0·75X, which Mr. de Bray's glance shows to be a far better solution, the mean deviation is 1·17.

A. F. DUFTON.

Greenbank, Garston, Herts, Aug. 8.

Is the mean deviation of any use at all for the present purpose? In many cases this criterion does not discriminate between an infinity of graphs, each of which will suit equally well (by this criterion, that is) the given points? Take, for example, the four points at the corners of a rectangle. The graph may coincide with the two long sides, with *any* line parallel to these and situated between them, with the two diagonals, or with *any* line passing through the centre and cutting the short sides! In each case the mean deviation from the function will be the same! Is that a criterion at all?

A practical physicist will take the graph which passes most evenly among the points. His criterion is therefore a double one: (1) the points will 'pair off,' the points of each pair being on either side of the graph at apparently the same distance from it; (2) the maximum deviation shall be as small as possible. The first criterion gives a mean deviation zero, *taking the signs into account*. This would only give for the graph a choice of positions coinciding with *any* line through the centre cutting the small sides. The lines parallel to the long sides are eliminated, except one. The second criterion eliminates all the other lines except the longitudinal axis, which is the best graph.

M. E. J. GHEURY DE BRAY.

40 Westmount Road,
Eltham, S.E.9.

Designation of the C.G.S. Unit of Acceleration.

DR. NORMAN CAMPBELL, in his recent book, "Measurement and Calculation," laments the absence of a name for the C.G.S. unit of acceleration, and the phrase "centimetres per second per second" is certainly clumsy. I am not aware if any names have hitherto been proposed, but I venture to put forward tentatively the claim of 'gal,' for Galileo. It has the merit of brevity, and also of recalling, like the names of the electrical units, the work of a great pioneer in the experimental investigation of the subject.

E. S. KEEPING.

University College of Swansea,
Singleton Park,
Swansea, Aug. 10.

Wing Dimorphism in Weevils.

IN a reference which appeared in NATURE of July 28, p. 144, to my paper on the inheritance of long and short wings in the weevil, *Sitona hispidula* (*Trans. Roy. Soc. Edin.*, vol. 55, part 3, No. 27), a statement occurs which it is desirable to correct. It is stated in the note that evidence from breeding indicates that the abnormal condition of the wing muscles in long-winged weevils is inherited, probably as a Mendelian recessive. The latter part of this sentence is inaccurate, for it was the character normally developed wing muscles which I suggested might be inherited as a Mendelian recessive.

DOROTHY J. JACKSON.

North Cliff,
St. Andrews,
Fife, Sept. 13.

Selective Association in Kittens.

MY cat has four kittens; two of them are black and white, and two are black. They are only three weeks old now, but from the beginning they have always been in two pairs according to their colour. Is there any reasonable explanation for this?

RUSSELL.