corresponding to the sun-spot minimum in 1878 may, perhaps, be connected, as in the case of the four months' curve, with the rainfall. A smoothed curve of humidity for September rises, I find, to a high maximum in 1880. The June humidity curve does the same, and if it be therefore asked, why we should not have a similar failure in that month's curve, I would invite attention to the fact that the rise to the maximum in the humidity curve for June is a rapid one from the absolute minimum (reckoning from 1858) in 1876; while the rise in September is

predicted time, given in Marth's ephemeris (*Monthly Notices*, March 1891), is 5h. 32'6m., so that the spot was 10'4m. late, and this means a decided slackening in its motion of rotation during the present apparition. On August 7, 1891, I saw the spot pass the central meridian at 11h. 32m., or only 2'3m. after the time indicated in Marth's ephemeris. In the interval of 5 months, during which 362 rotations were performed, the mean period has been 9h. 55m. 42s., which is nearly 1 second greater than the rotation period of this marking as observed here during

more gradual from an absolute minimum in 1870. Thus, the wave in June corresponding to the sun-spot minimum in 1878 might be regarded as but partially formed, the growing humidity, or rainfall, presenting its normal culmination.

However this may be (and I do not press these suggestions), it has seemed to me desirable to submit the coincidences presented in the diagram (which I have difficulty in thinking wholly fortuitous, and which are quite in harmony with the general view enunciated by Köppen) to minds more competent to estimate their nature rightly.

A. B. M.

The Red Spot on Jupiter.

ON January 4 last, at 5h. 43m., the red spot on Jupiter was estimated to be on the central meridian of the planet. The

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any previous opposition. In 1890 I determined the period as 9h. 55m. 40'2s., which differed very slightly from that derived from my observations in 1887, 1888, and 1889. It now appears, however, that a marked retardation has occurred, and it remains to be seen whether this will be maintained until the close of the apparition.

The spot continues to be a fairly conspicuous object, and it retains its oval outlines, but it is not nearly so dark and definite as it was in the years from 1878 to 1881.

Bristol, January 10.

W. F. DENNING.

The Implications of Science.

DR. MIVART complains that in my last letter I merely affirmed without arguing. This is in a measure true as, to