

IV. "On the Belts of Jupiter," in a Note addressed to the Secretary. By JOHN PHILLIPS, M.A., LL.D., Professor of Geology, Oxford. Received May 5, 1863.

Oxford, 4th May, 1863.

DEAR SIR,—The favourable position of Jupiter for scrutiny of his physical features may perhaps have already brought to the Royal Society some notice of the aspect of his belts. Whether that be so or not, I think you will readily excuse the desire I feel to lay before the Society a sketch from my equatorial, which shows the *colours* of several celestial objects more distinctly than I am accustomed to hear is the case with some other instruments of the achromatic class.

The sketch shows the usual equatorial bands*, or rather bands nearly in the usual latitudes north and south of the equator. These, to the eyes of my friends and to mine, appear not dark grey, or greyish brown, or brown, but nearly of the colour of some ochraceous sands, or the yellower parts of what is called "red" deal. Several friends to whom I have shown the planet have immediately exclaimed, "how red the bands are;" "never saw them so red before."

The bands far from the equator are not reddened, but of a grey tint a little warmed. The space between the equatorial bands, sometimes described as yellow, appears rather bright white and silvery—much the brightest part of the surface. The outer borders of the equatorial bands are not parallel, the inner borders much unequal; in one part the two bands are connected across.

Not the faintest trace of such a tint as that conspicuous in these bands appears on any part of the moon; but it is pretty nearly the tint of the supposed "land" of Mars. In fact, it was suggested to my mind that these coloured extra-equatorial belts were land, seen between white clouds, of which the brightest band was on the equator.

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* The coloured drawing sent with this letter is preserved at the Royal Society.