

only some of the corners of the planks were chipped off during the removal. The most dangerous part of the work was the fixing of the poles which supported the cradle immediately beneath the principal dome.—These extended beyond the gallery 35 feet, and great skill and caution were requisite in fixing as well as in removing them; for had the slightest slip occurred, no power could have prevented them falling through into the church. During the period the scaffold was up, the lead work of the upper dome was repaired.

London Athenæum, Nov. 1848.

*Description of a Lunar Rainbow.* By J. F. W. HERSCHEL.

Yesterday evening at 6h. 40m. P. M., I had the gratification of witnessing, for the first time, the rare and beautiful phenomenon of a lunar rainbow in all its perfection. The moon, (full on the 11th, at 1h. 30m. A. M.,) was near the eastern horizon, shining brilliantly through a considerable clear opening in the otherwise generally and densely clouded sky. A light, drizzling, and very uniform rain was falling with a gentle wind from the N. E. The arch, very nearly a semi-circle, was perfect in every part; apparently much better defined and somewhat narrower than the solar rainbow, (circumstances easily accounted for.) Its span also appeared somewhat less, which of course was only an illusion. Though much brighter than I could have expected a lunar rainbow to appear, (the effect, no doubt, of the very dark background of cloud against which it was projected,) it exhibited scarcely any color: barely enough to assure the spectators that the *order* of color was as in the solar bow—a faint ruddy tinge being sensible on the outer, and a still fainter bluish hue on the inner side;—affording a striking illustration of that singular law in the physiology of vision, that the perception of color is not developed unless under a certain amount of the stimulus of light. For example, colors are not distinguishable in the prismatic spectrum formed by the light of putrescent shell-fish or rotten wood.

Not only was the primary bow thus fully developed. The exterior or secondary rainbow was also visible; not indeed conspicuously, so as to attract attention unlooked for, but quite unequivocally, and at its proper distance from the primary. To become sensible of its existence, it was necessary to *keep the eye wandering*. Neither were traces wanting of the supernumerary arcs which form so conspicuous an appendage to the inner edge of the solar rainbow in certain contingencies. They were indicated by a perceptible streakiness fringing the internal border of the arc, though to say whether more than one streak existed was not possible.

The southern leg of this fine arch was evidently formed within a few hundred yards of our station; as, on ascending to the roof of my dwelling house, it was seen on the hither side of some trees at that distance. When first seen it was perfect, and continued so for six or eight minutes, when clouds obscuring the moon put an end to it. I will only add further, that the impression produced by the spectacle was of that peculiar, solemn, and unearthly kind which, once experienced, remains ever after ineffaceable.

Ibid.