ever drawing nearer and nearer, until suddenly out goes the little star. The instantaneous disappearance of an occulted star is one of the most interesting features of the phenomenon, and is a standard proof of the non-existence of an atmosphere on the moon. For, were our satellite surrounded with an envelope of air, it is manifest that the star would lose its light gradually (owing to the interposition between us and it of the lunar atmosphere) before it was actually blotted out of sight by the dark body of the moon. Instead of this, the star shines with its accustomed brightness right up to the last second, and disappears with startling suddenness, to reappear on the other side of the moon in a manner equally abrupt. The time of an occultation varies with circumstances. If the central portion of the moon comes square between us and the star, it takes about an hour, but the star may disappear behind the moon at any angle, or the moon may just graze it — sometimes escape it by a hair's breadth, in which case the phenomenon is known not as an occultation, but as a "close approach." I wish I could convey to you the sense of importance which invests an amateur when he has successfully observed the occultation of a star or planet by the moon. The 40-power eye-piece is commonly the best for occultations, as it enables you to view the whole of the advancing limb of the moon, as well as the intervening space between it and the star.

But we must pass on. Jupiter is, perhaps, the easiest of all planets for the amateur observer. There is a charm about him which no possessor of a telescope can resist. You turn your three-inch glass upon him with a power of 110, and a great white globe floats into view attended by four satellites of a golden hue.

The first thing that strikes you about Jupiter is his oblate form. He is quite perceptibly flattened at the poles and correspondingly bulged out at his equator. This is due to his swift rotation. Jupiter turns on his axis in 10 hours — about two-fifths of the time our earth takes to rotate, and as he is immensely larger than our globe, it follows that a point on his surface, par-