

separate meteorites ; there seems indeed to be no other explanation offered to account for the low densities as compared with the volumes, although, if the nebular hypothesis be true, we would scarcely expect to find the outer planets formed of elements of as great specific density as the inner ones. It may be worthy of remark that when La Place proved the system of Jupiter to be *stable*, there was nothing known or suspected of other satellites, or rings of matter. Perhaps the question of stability would bear re-investigation, more especially as the tidal theory would seem opposed to the possible stability of any system of bodies revolving about a primary. Jupiter rises now about 8 o'clock, and is retrograding ; his greatest angular diameter will be about 46' on Nov. 17th at opposition. Observers of particularly keen eyesight have sometimes recorded seeing the planet as a clearly defined disc with the unaided eye.

Venus, now evening star, is rapidly approaching the "half-phase," and increasing in brilliancy. It may assist the observer to find the planet in the day time, by noting that the meridian passage on Oct. 10th occurs at 2h. 42m. p.m., being one minute later each day following ; her altitude on the 10th is 25° increasing about 15' daily.

Saturn emerging from the sun's rays may be seen in the November morning twilight, the ring presenting the beautiful spectacle of 12° elevation.

The very general interest taken in observations of the aurora ought in the end be productive of some important results. The coincidence of its appearance and the solar rotation has been much discussed ; some dispute it altogether, and certainly coincidences at all times are to be viewed with suspicion ; Commander Ashe, of Quebec, has recently written on the

contrary side of the question, and is very emphatic in his denial of any immediate connection between the aurora and the sun's rotation period. It does seem that if we are ever to have a thoroughly satisfactory explanation of the phenomenon it is scarcely likely to be attained by simply recording the times of appearance and its beauty. It is probably the physicist armed with the spectroscope and polariscope, who will give us the most information. But if even there is no other result than that of bringing amateurs into the field for the study of celestial phenomena, a great work will have been accomplished by Dr. Veeder, who has been to very great pains in arranging for systematic series of observations. The interest of amateur astronomers is being very well looked after by the publishers of "Astronomy and Astro-Physics," who have just issued the first number of a periodical which has been named "Popular Astronomy." It contains an article of great interest on "Jupiter's Comet Family" by Mr. W. W. Pagne, illustrated by a diagram showing the orbits of all comets known to be in any way connected with the giant planet. The "Capture" theory is discussed, and the conclusion reached that the weight of evidence is in its favour.

It certainly does seem quite probable that as the solar system moves through space, many erratic bodies might come within its sphere of attraction and be permanently connected with it.

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Past question, every experience is serviceable to us.—*Low Wallace.*

A man is never so on trial as in the moment of excessive good fortune.—*The Same.*

It is never a shame not to know, only a shame not to learn.—*C. R. Robinson.*