

for about $2\frac{1}{2}$ days it shines with constant intensity; thereupon it begins to decline and in approximately $4\frac{1}{2}$ hours sinks to its minimum of brightness; then it becomes gradually brighter until after $4\frac{1}{2}$ hours more it has re-attained its full brilliancy. This behavior is explained by the supposition that Algol is accompanied by a dark star and that their movements are such that a partial eclipse occurs every 69 hours. Pickering has succeeded in calculating, upon the assumption that the dark star as a whole intercepts the rays of Algol, the approximate sizes, velocities, and orbits of these two stars, one of which is quite invisible. Many similar phenomena lead to similar conclusions regarding other variable stars.

It is apparent that such dark bodies, whether extinct suns or planets, represent another stage in celestial evolution. Their past histories may be various, for there is still room for much doubt as to the manner of formation and origin of planets, but at any rate all are probably derived from luminous stars or planets through the process of cooling, with its accompanying crust formation. Like their earlier forms, they must therefore be made up of matter as we know it, since when a heavenly body puts on a crust, it does not change the