

its rupture, when the smoke became a simple cloud. The cosmic ring will experience the same fate. This nebula is not hanging in the universe alone. All space is animated by moving masses and groups of masses. Comets are darting to and fro. Distant suns are tugging steadily, even if feebly, on the parts of this ring. Somehow, in the course of ages, the balance of the ring will be destroyed. An excess of matter will be drawn to one side; and, as a consequence, all the matter will be drawn to that side. Or, perchance, the unequal attraction may set up a wobbling rotation of the ring. Then, by the laws of matter, the wobbling will increase until the ring is ruptured. That will cause all the matter to gather to the unbroken side.

Thus, from one cause or another, the ring of nebulous matter must become a sphere of nebulous matter. Its distance from the original center is the distance of the ring. This sphere moves in an orbit occupying nearly the place of the ring. This sphere rotates on an axis, and the direction of the rotation will be determined largely by the width of the ring from which it was formed, and relative velocities of the outer and inner circumferences of the ring. In this place I can not attempt to explain this matter. Suffice it to know that in most cases, the direction of the rotation would be the same as the direction of the mass in its orbit; but if the diameter of the orbit is relatively very great, the direction of rotation may be the reverse of the motion in the orbit.

This resultant spheroid is to become a planet. The residual mass continues its history as begun. By and by, another ring is detached, and in the course of ages, this also becomes a spheroid destined to become another planet. Meantime, as the disengagement of a new ring diminishes the mass of the central body, the centripetal force exerted on the first planet is diminished. The centrifugal force therefore increases its distance from the common center. This diminishes its angular velocity, and therefore the centrifugal force, and thus the centripetal and centrifugal forces become equal again—both diminished.