

turns away from its first position. Now this is what really happens; and thus the revolution of the Earth in absolute space is experimentally proved.

In subsequent experiments, M. Foucault has used the rotation of a body to prove the same thing. For when a body rotates freely, acted upon by no power, there is nothing to change the position of the axis of rotation in absolute space. But if the position of the axis remain the same in absolute space, it will, in virtue of its relative motion, change as seen by a spectator at any spot on the rotating Earth. By taking a heavy disk or globe and making it rotate on its axis rapidly, the force of absolute permanence (as compared with the inevitable casual disturbances arising from the machinery which supports the revolving disk) becomes considerable; and hence the relative motion can, in this way also, be made visible.

Mr. De Morgan has said (*Comp. to Brit. Alm.* 1836, p. 18) that astronomy does not supply any argument for the earth's motion which is absolutely and demonstrably conclusive, till we come to the Aberration of Light. But we may now venture to say that the experiments of M. Foucault prove the *diurnal* motion of the Earth in the most conclusive manner, by palpable and broad effects, if we accept the doctrines of the science of Mechanics: while Aberration proves the *annual* motion, if we suppose that we can observe the places of the fixed stars to the accuracy of a few seconds; and if we accept, in addition to the doctrines of Mechanics, the doctrine of the motion of light with a certain great velocity.

CHAPTER III.

SEQUEL TO COPERNICUS.

English Copernicans.

PROFESSOR DE MORGAN has made numerous and interesting contributions to the history of the progress and reception of the Copernican System. These are given mainly in the *Companion to the British Almanac*; especially in his papers entitled "Old Arguments against the Motion of the Earth" (1836); "English Mathematical and Astronomical Writers" (1837); "On the Difficulty of Correct