

American Philosophical Society, at Philadelphia, organized an excellent system of observations, which we now know to have been fully as successful, perhaps more so, than the majority of those made on other continents, owing mainly to the advantages of air and climate. Among the observers was the celebrated Rittenhouse, to whom is due the distinction of having been the first American astronomer whose work has an important place in the history of the science. In addition to the observations which he has left us, he was the first inventor or proposer of the collimating telescope, an instrument which has become almost a necessity wherever accurate observations are made. The fact that the subsequent invention by Bessel was quite independent, does not detract from the merits of either.

Shortly after the transit of Venus, which I have mentioned, the War of the Revolution commenced. The generation which carried on that war, and the following one which formed our constitution and laid the bases of our political institutions, were naturally too much occupied with these great problems to pay much attention to pure science. While the great mathematical astronomers of Europe were laying the foundation of celestial mechanics their meetings were a sealed book to everyone on this side of the Atlantic, and so remained until Bowditch appeared, early in the present century. His translation of the *Mécanique Céleste* made an epoch in American science by bringing the great work of Laplace down to the reach of the best American students of his time.

American astronomers must always honor the names of Rittenhouse and Bowditch. And yet, in one respect, their work was disappointing of results. Neither of them was the founder of a school. Rittenhouse left no successor to carry on his work. The help which Bowditch afforded his generation was invaluable to isolated students who, here and there, dived alone and unaided into the mysteries of the celestial motions. His work was not mainly in the field of observational astronomy, and therefore did not materially influence that branch of the science. In 1832 Professor Airy, afterward Astronomer Royal of England, made a