

month before the planet was seen. As I have stated in the text, Mr. Adams and M. Le Verrier assigned to the unseen planet nearly the same position; they also assigned to it nearly the same mass; namely,  $2\frac{1}{2}$  times the mass of Uranus. And hence, supposing the density to be not greater than that of Uranus, it followed that the visible diameter would be about  $3''$ , an apparent magnitude not much smaller than Uranus himself.

"M. Le Verrier has mentioned for the new planet the name *Neptunus*; and probably, deference to his authority as its discoverer, will obtain general currency for this name."

Mr. Airy has given a very complete history of the circumstances attending the discovery of Neptune, in the Memoirs of the Astronomical Society (read November 13, 1846). In this he shows that the probability of some disturbing body beyond Uranus had suggested itself to M. A. Bouvard and Mr. Hussey as early as 1834. Mr. Airy himself then thought that the time was not ripe for making out the nature of any external action on the planets. But Mr. Adams soon afterwards proceeded to work at the problem. As early as 1841 (as he himself informs me) he conjectured the existence of a planet exterior to Uranus, and recorded in a memorandum his design of examining its effect; but deferred the calculations till he had completed his preparations for the University examination which he was to undergo in January, 1843, in order to receive the Degree of Bachelor of Arts. He was the Senior Wrangler of that occasion, and soon afterwards proceeded to carry his design into effect; applying to the Astronomer Royal for recorded observations which might aid him in his task. On one of the last days of October, 1845, Mr. Adams went to the Observatory at Greenwich; and finding the Astronomer Royal abroad, he left there a paper containing the elements of the extra-Uranian Planet: the longitude was in this paper stated as  $323\frac{1}{2}$  degrees. It was, as we have seen, in June, 1846, that M. Le Verrier's Memoir appeared, in which he assigned to the disturbing body a longitude of 325 degrees. The coincidence was striking. "I cannot sufficiently express," says Mr. Airy, "the feeling of delight and satisfaction which I received from the Memoir of M. Le Verrier." This feeling communicated itself to others. Sir John Herschel said in September, 1846, at a meeting of the British Association at Southampton, "We see it (the probable new planet) as Columbus saw America from the shores of Spain. Its movements have been felt, trembling along the far-reaching line of our analysis, with a certainty hardly inferior to that of ocular demonstration."