

The Tides of the Coast of Ireland have been examined with great care by Mr. Airy. Numerous and careful observations were made with a view, in the first instance, of determining what was to be regarded as "the Level of the Sea;" but the results were discussed so as to bring into view the laws and progress, on the Irish coast, of the various inequalities of the Tides mentioned in Chap. iv. Sect. 9 of this Book.

I may notice as one of the curious results of the Tide Observations of 1836, that it appeared to me, from a comparison of the Observations, that there must be a point in the German Ocean, about midway between Lowestoft on the English coast, and the Brill on the Dutch coast, where the tide would vanish: and this was ascertained to be the case by observation; the observations being made by Captain Hewett, then employed in a survey of that sea.

Cotidal Lines supply, as I conceive, a good and simple method of representing the progress and connection of *littoral* tides. But to draw cotidal lines across oceans, is a very precarious mode of representing the facts, except we had much more knowledge on the subject than we at present possess. In the *Phil. Trans.* for 1848, I have resumed the subject of the Tides of the Pacific; and I have there expressed my opinion, that while the littoral tides are produced by progressive waves, the oceanic tides are more of the nature of stationary undulations.

But many points of this kind might be decided, and our knowledge on this subject might be brought to a condition of completeness, if a ship or ships were sent expressly to follow the phenomena of the Tides from point to point, as the observations themselves might suggest a course. Till this is done, our knowledge cannot be completed. Detached and casual observations, made *aliud agendo*, can never carry us much beyond the point where we at present are.

Double Stars.

Sir John Herschel's work, referred to in the History (2d Ed.) as then about to appear, was published in 1847.¹⁰ In this work, besides a vast amount of valuable observations and reasonings on other subjects

¹⁰ *Results of Astronomical Observations made during the years 1834, 5, 6, 7, 8, at the Cape of Good Hope, being the completion of a Telescopic Survey of the whole Surface of the visible Heavens commenced in 1825.*