with the compass, either in the athwartship line or in the fore-and-aft line, according to circumstances. "The polar-magnet-deviation" may be corrected at *any given place* by a magnet or magnets, but the magnets thus applied at one place will not always correct the deviation in another magnetic latitude. For it appears that this deviation arises partly from a magnetism inherent in the materials of the ship, not changing with the change of magnetic position, and partly from the effect of terrestrial magnetism upon the ship's iron. But the errors arising from both sources may be remedied by adjusting, at a new locality, the positions of the corrective magnets.

The inherent magnetism of the ship, of which I have spoken, may be much affected by the position in which the ship was built; and may change from time to time; for instance, by the effect of the battering of the waves, and other causes. Hence it is called by Mr. Airy "sub-permanent magnetism."

Another method of correcting the errors of a ship's compass has been proposed, and is used to some extent; namely, by *swinging* the ship round (in harbor) to all points of azimuth, and thus constructing a *Table of Compass Errors* for that particular ship. But to this method it is objected that the Table loses its value in a new magnetic latitude much more than the correction by magnets does; besides the inconveniences of steering a ship by a Table.