a star hardly of the sixth magnitude—invisible, therefore, or but barely discernible to the ordinary unassisted eye; and it would require four hundred such suns concentred into one to send us the light which that superb star actually does; supposing none lost or extinguished in traversing so enormous a distance: a journey which it would take more than twenty years to accomplish! We speak here only of the proportion between the *lights* of the two bodies; but this can give no indication of that between either their magnitudes or their *weights* or masses, since the *intrinsic* splendour of the surface of the one may, for anything we can tell, exceed that of the other in any proportion. As to the proportion between the masses, however, a very unexpected prospect of being able to ascertain it ere many years shall have elapsed; and even of forming something like a rude estimate of it already, has quite recently opened to us: the history of which may serve to show what persevering industry will accomplish in apparently the most hopeless lines of inquiry.

(35.) Sirius, as the most conspicuous of the stars, has been watched by all astronomers with the utmost assiduity as the principal of the great landmarks of their science; the chief of their list of "fundamental stars;" those to which every observer of necessity resorts to test the stability of his instruments; the rates of his clocks; and every condition which gives precision to his observations. It has long been known, like most and probably all the other stars, not to be absolutely fixed in the heavens; but subject to what we have above described