The foregoing article having been written by the cele­brated Professor John Robison, it has been thought proper to reprint it exactly as it left his hands, with the addition of one or two notes explanatory of circumstances which the lapse of time has rendered obscure. This course has been adopted chiefly out of deference to the high authority of the author, which must render it a measure of questionable propriety to retouch, or otherwise alter, or try to improve, an essay which, at the time it was written, must have been considered as complete. But the interests of the readers of this Encyclopædia have also, it is believed, been considered in this matter, since any additions or interpolations made in an article composed with the care which marks every thing from the pen of Professor Robison, might so mate­rially have altered the texture of the fabric, as to divest it of much of its beauty as well as utility. We have, indeed, the means of knowing that the article, as it stands, has been of extensive practical utility ; and every admirer of simple, and at the same time vigorous writing, clear and straight to the purpose, must be well pleased to know that no attempt has been made to improve a style which is matchless.

At the same time it is manifest, upon a moment’s reflec­tion, that even the most general view of such an art as Sea­manship, written more than forty years ago, cannot possibly include many things which it is material should be advert­ed to. This science, as it may now fairly be called, has greatly advanced within that period. With the improve­ments which have been mode in most other departments of industry and knowledge, the public are more or less fami­liar, and great pains have been taken throughout this work to extend that familiarity by such popular explanations as shall not only be intelligible to general readers, but be use­ful to those whom pleasure or business inclines to go deep­er. But the art or science of Seamanship, call it which we please, has certainly been too much kept out of sight of late years ; and it is the purpose of this Appendix to supply, in a brief space, the deficiency complained of by many per­sons, whose habits entirely unfit them for gaining the know­ledge for themselves, and yet, who are perfectly competent to understand, as well as to appreciate, the value of such information, when stated in clear language.

Most other sciences may be studied with effect in the closet. An amateur astronomer, for example, or a chemist, furnished with good instruments, and having confidence in the skill and good faith of the leaders in the particular walk of knowledge to which his taste inclines him, may, by adopt­ing their results, pursue the same paths with almost cqual profit, and perhaps with more pleasure than those who take all the labour, and incur all the responsibility. But there is no royal road of this sort, by which an amateur sailor can investigate the results of seamanship, the mysteries of which, to be fully understood, must be studied afloat, at sea, in all weathers, and in every climate.

All the world, however, knows that the results of nau­tical skill and exertion are not the same as they used to be. A voyage to India and back, in former times, occu­pied a couple of years, or more; it is now currently done in nine months, even by ordinary merchant vessels, including the time taken to unload and reload their cargoes. In for­mer days, the scurvy struck down half the crew of every ship which made a long voyage, and was even fearfully pre­valent in the navy; now the disease is almost unknown. The numbers of all kinds of ships afloat have enormously in­creased, and the war of the elements by which they were formerly assailed is no less violent than it was; but assuredly a far smaller proportion of vessels are now driven on shore than were formerly wrecked. The comforts, too, of travelling by sea, in the articles of provisions and water, are all essentially improved; and, finally, the security, as well as the happiness of all persons on board, whether passengers or crew, has been marvellously augmented by the general establishment

of a better system of discipline than was known in bygone days ; whilst many old manipulations of seamanship are so modified by new contrivances, that if old Benbow, or even Kempenfelt, were to arise from the dead, he would scarcely know how to handle his ship.

It may not be without use, and it certainly must be in­teresting, to those who have not studied such things person­ally, to see by an example how scientific seamanship is made to triumph over that groping and blundering method of navigating ships which is technically known by the name of the “ rule of thumb.” If we take a globe, and trace on it the shortest route, by sea, to India, and then fancy that such must be the best course to follow, we shall be very much mistaken. And yet this is very much what our an­cestors actually did, till time, and repeated trials, and mul­titudinous failures, gradually taught them where to seek for winds, and how to profit by them when found. According to the “ rule of thumb” sailing, a ship had only to steer from England to Madeira, pass the Canaries and Cape de Verds, and then to make a direct course to the Cape, and thence to India. On trial, however, this experiment al­ways failed ; for on getting near the equator, a series of calms and squalls put a slop to this straight-line scheme, and the mariners of old were then forced to toil along the coast of Africa, or were driven towards that of the Brazils, and very often they came back in utter hopelessness. Now- a-days, the exact spot where the north-east trade wind, which prevails in the northern Atlantic, ought to be parted with ; in what district the calms and variables are most easily managed ; over what degree of longitude on the equa­tor the ship should pass ; and, finally, in what place the south-east trade wind of the southern Atlantic is to be found, and how it is to be made most use of when found ; are all matters of such familiarity to the really qualified na­vigator, that they scarcely occupy his thoughts, but are act­ed upon as matters of coursc, and, unless some unforeseen accident occurs, absolutely ensure the success of his voy­age. The line he follows, however, is by no means the straight one which an ill-informed person would naturally have chalked out for him to follow, ignorant of the impos­sibility of pursuing it.

The modern navigator, by not seeking to husband the south-east trade wind too much, but by freely “ flanking” through it, sweeps past the coast of Brazil, and by boldly dashing down into pretty high south latitudes, is certain, or almost certain, of finding there such a vein of westerly wind, as amply compensates for the apparent roundabout he has made in his course. In like manner, after passing the Cape, which to the old navigators was truly a “ Cabo de tor- mentos,” instead of vainly trying to reach India, by steer­ing straight through the Mozambique channel, the scienti­fic navigator, disregarding the increase of distance, main­tains his position in a high latitude, and sails resolutely along a parallel of latitude, with the wind in his poop, till he has obtained such a degree of easting, that, on hauling up to the northward, and making for the south-east trade wind, he enters that mysterious aerial current on such terms as ensure his making it serve his purpose. If, however, he be timid or impatient by nature, and not duly instructed by ex­perience, he will be very apt to haul up too soon to the northward, from not liking to run, as it appears, so far past his port. The consequence will be, that when he encounters the south-east trade-wind, he will find, that instead of its being fair, it is blowing in his teeth, and he will have to run back again to the southward to borrow a little more easting from the westerly breezes which prevail there.

Be it observed, however, that the above instructions would lead a seaman into great error, were he to make the rule absolute ; for, at certain seasons of the year, that is, when the sun is far to the north of the line, and the south-west monsoon blowing in the Indian ocean, his course from the