

face currents in the Pacific Ocean are influenced, generally, in a similar way, by the sun's power, as those

a short time ago, I observed an essay, written by Mr. Waix, of the Royal Society of Stockholm, to explain this cause. It is ingenious, but not quite satisfactory, because his facts are at variance with each other. Mr. Waix computes that "the water, which is received annually into the Mediterranean, by the straits, and from the Nile, and all the rivers which fall into the Black Sea, and flow through the strait of Constantinople, cannot raise its surface less than *thirty feet* : and the annual evaporation to lower it about *forty-four feet*." He then says that "if the Mediterranean had lost annually, since it first existed, this quantity of water, by evaporation, it would, long before now, have been reduced to a vast mass of indurated salt." And yet, he adds, "in the many thousand years, since this sea has been known, this metamorphosis has not taken place, but even its waters, as far as we know, are not become more salt." He therefore feels himself obliged to give up evaporation, and "seek some other expedient to get rid of its *redundant waters*." What redundant waters? Has he not computed the evaporation to be sufficient to lower its surface 44 feet, and its supply through the strait of Gibraltar, and the Dardanelles, as well as by all the rivers, which flow into it, as only sufficient to raise it annually 30 feet? Thus, so far from there being any redundancy of water in the Mediterranean, an annually increased supply would be required, and not an expedient to get rid of what he himself proves it cannot have. The expedient he has recourse to, however, is a double current, which he first proposes to *ascertain* with all possible exactness, and then to reconcile it to the laws of hydrostatics. As a proof (to him) of the existence of this *under current*, from east to west, out of the Mediterranean (which he assumes to be saltier and heavier), he mentions (and others have repeated it) a story of a "Dutch transport vessel having been beaten to pieces by a French ship of war, in the middle of the strait of Gibraltar, between Tariffa and Tangier; the wreck of this vessel, with some casks, and other *light things*, appeared, after some days, on the surface of the water, four English miles to the west, towards the Spanish sea." Mr. Waix then observes, "If the direction of the current were the same at the *bottom*, as on the surface, from west to east, these wrecks could not have *raised themselves*, against the current, so as to swim at top." If we may here assume that Mr. Waix believed, that this wreck, with the casks and other