Water goes out with the Reflux, than comes in with the Flux; for all the time the Flux of the Sea repels the fresh Stream, the fresh Stream is filling the River jointly with the Flux of the Sea; and what ever Quantity of Water came down the River in the time of the Flowing of the Sea, so much greater Quantity goes out with the Reflux, than comes in with the Flux. This is one Reason why the Stream of the Tide runs stronger out of than into Rivers. There is another Reason why a strong Inset doth not carry much Sand and Gravel into a River, and is this, The greatest Force where the Stream is not obstructed (but can run strait) is near the Middle of the River, and this Force gradually diminishes toward the Shore, where is little or no Stream; so that what Sand, Gravel, &c. is raised by the Stream, it subsides towards the Shores, and in Eddies of Points, &c. till the Reflux remove it downwards toward the Sea; and the Reflux being stronger than the Flux, it forces the Sand, Gravel, &c. further downwards than the Flux can carry it upward: This is the principal Reason why Rivers keep so well open where much Ballast is cast.

We are not without Instances of there being very good Harbours, that have little or no Land Water to assist the Reflux in keeping the Entrances open; and yet the Entrances are sufficiently deep for the largest Ship of War to sail into or out of such Harbours, but then the Receiver within is very large: *Portsmouth* Harbour is an Instance and Proof of this; it receives very little Land Water, and is a good Harbour for our largest Ships of War, notwithstanding the large Sands that lye before that Harbour's Mouth. I think this cannot be accounted for any better Way, than the Reflux is not impeded so much in its Course to Sea, as the Flux is in running into the Harbour; therefore the Re-