

lieve in our present ignorance of the resistance of nonelastic fluids, we have been, and we still are obliged to nature for assistance, who ever, and undeviatingly adapts her means best to her ends. We see the fish with facility make its way through the liquid element: and knowing none better, and no form so good for this purpose, we wisely imitate it, as much as is consistent with the requisites of buoyancy, and those of carrying weight and sail as in a ship. We make the head acute, the shoulders full, and thence tapering away finely to the tail or rudder, we give to the water the full tide of power to act upon that instrument of steering. For buoyancy we look to the water fowl. Here we have the full round bow, the round flat bottom, where this requisite is most wanting as in the floating light-vessel, here is our model, we would plan her upon the duck principle at both ends.

I will conclude with a short essay on the model, which I conceive the best adapted for a steam-packet on the Lake, and more particularly for crossing it, the sea being generally from the East, or west. When I first undertook to get one up for this service, I naturally looked round me, not for theoretical works that I might not understand, but for practical results upon which to found my theory. And when I called a meeting of the stockholders, I read a short dissertation (of which this is a part) on the form of a steam-vessel that I conceived the most effective for Lake service as a packet, at the same time remarking, that I was not prepared to say whether my conceptions put in execution, would warrant the expense. Since when, the stock which I contributed myself, the