

same observation holds good with reference to the tools of the most necessary arts of life. How great would be the inconvenience, and how increased would be the labour of the carpenter, or the smith, or the mason, if, instead of wood, the handles of his implements were of iron ! Nor are substances of vegetable origin of less importance, or less generally employed, in many of the higher arts of life. Examine the structure of a man of war—its hulk, of oak ; its masts, of fir ; its sails and ropes, of flax ; its caulking, of tow and of tar. All is of vegetable origin from the top-mast head to the keel itself. With the exception indeed of the iron which is occasionally used in the construction, no metallic substance is necessarily employed ; for the copper sheathing, though highly useful, is certainly not necessary.

It would require volumes to describe all the economical uses to which vegetables are applied. How many important trades arise from this source. How many families, now existing in opulence, originally derived their surnames from their occupation, and that occupation connected with vegetable materials ; for instance, Cooper, Carpenter, Dyer, Tanner, Turner, Wheeler, Weaver, Barker, Hayward, Gardener, Cartwright, Miller, Fletcher, Bowyer !

And then, to answer the various purposes to which they are to be applied, how widely do