

cause of permanent union. The period indeed requisite for the due consolidation of the uniting medium is very different; the solder becoming fixed in a few seconds, the mortar requiring some hours, perhaps days, for its consolidation: but, in the end proposed, there is no essential difference; for the mortar, if originally tempered well, and well applied, as firmly unites the stones, as solder the metals: so that mortar might be called a slowly acting solder; and solder, an extemporaneous or quickly acting mortar.

It would appear a paradox, if not an absurdity, to affirm abruptly that a liability to rapid decay is among the most important properties of any substance in general use: and yet this may be truly affirmed of iron. For though, in one sense, its liability to rust diminishes the value of this useful metal, because it is consequently almost impossible to preserve it very long in an entire state; yet, indirectly, this property, though detrimental to individuals, is beneficial to the community: for, in the first place, the presence of iron ore is so general, and its quantity so abundant, that there is no probability of any failure in its supply: and, in the next place, numerous branches of trade are kept in continued employ, both in working the ore, and in meeting the constantly renewed demand for implements made of iron, owing to the rapid corrosion of this metal.