An Iron bar, one inch square, will require a force of 3,500 pounds weight to break it, by the arm of a lever of 6 inches.

An Iron bar, 4 inches square, will require a force of 288,000 pounds weight to break it, by the above means.

An inch square bar of the best Swedes iron, 12 inches long, will weigh 3 pounds, 12 ounces.

An inch round bar of the best Swedes iron, 12 inches long, will weigh 3 pounds.

SILVER is nearly as ductile as gold. A wire of it, one tenth of an inch diameter, will sustain 270 pounds.

COPPER, though an imperfect metal, comes near to silver in point of ductility. A wire as above will support 299 pounds.

TIN is the lightest, least elastic, or sonorous of any metal. A wire as above will support 50 pounds.

LEAD is still softer than tin; a wire as above will only support 29 pounds. But those four last articles have little to do with the materials that are most generally used in building. We shall now pass on to a recapitulation of the experiments here recited, and offer some remarks thereon.

RECAPITULATION.

First, We admit that timber of the same species widely differs in various countries in its growth, strength, texture, and durability, from obvious causes: namely, soil, situation, seasons, and climate. Hence the lighter the soil, the warmer the clime, and the less exposed the situation, the quicker will be the growth of the tree, the softer and more weak the substance, the lighter and less durable the timber. While, on the contrary, the tougher the soil, the cooler the clime, and the more open and exposed the situation, the slower will be the