

unproductive without culture. The mind is improved by observation and reading, which makes it familiar with the best models of practice, and enables it to profit by the improvement of others.

The science teaches the laws and proportions of inorganic matter—as of rocks, earths, manures, &c., &c.; of organic matter, as animals and vegetables; of their structure, food and uses; and the agency of heat, water, air, light and electricity, in their development and maturity; the employment and adaptation of these matters for the best uses of man. It contradicts the experience of ages and the labours of nations upon these interesting subjects, and makes them subservient to our wants and our comforts. The science is a collection of facts and leading truths, illustrated in practice and confirmed by experience.

Land and labor are the legitimate sources of public wealth. The first, to be productive, must be cultivated; and the labor of doing this is abridged by the culture of the mind, which guides its operations.

Without agriculture there is no wealth. Gold and silver are not wealth—they are its convenient representatives. Commerce produces no wealth—it simply exchanges it. Manufactures and the arts re-combine it.—Agriculture is the prolific mother of wealth. The rest simply handle it when produced and delivered into their hands. The earth itself, originally, spontaneously produces wherewith to keep the race of man from starving—only whilst he is making ready to till the soil. Without it he soon degenerates into a wild animal, living here and there in small squads, a little superior to the other beasts of prey. The earth breeds savages.—Agriculture breeds enlightened nations. It breeds houses and ships, temples and seminaries; it breeds the manufactory; sculpture, painting and music are its offspring. It would be folly to speak of the existence, or

beauty, or power of any of these things, without agriculture.

The pulpit, the professor's chair, the scientific laboratory, the tripod, the library, the ship, the trip-hammer, the loom and the anvil—all would go down in one generation. It is by the superabundant produce and stability of agriculture that all things exist. Nor gold, nor silver, nor diamonds could replace it. The state of husbandry, in any country, is the test of its enlightenment. The thermometer of civilization rises and falls as drives the plow. "You must send the plow," exclaimed a man who had travelled all over Christian missionary ground in heathen lands. A barbarian nation needs but to be plowed up—deep, subsoiled, continued, sowed, planted, and the inevitable harvest will be an enlightened empire. A practical, working agricultural society will dig barbarism and mental and physical and spiritual poverty out of a nation, as effectually as any powerful grubbing machine will "shake out" the stubborn stumps.

A few centuries ago, a learned writer describes the times in these words: "Rude were the manners then; the man and wife ate out of the same trencher; a few wooden-handled knives, with blades of rugged iron, were a luxury for the great; candles were unknown. One, or at most two, mugs of brown earthenware, formed all the drinking apparatus in a house. Rich gentlemen wore clothes of unlined leather. Ordinary persons scarcely ever touched flesh meat. In noble mansions, a little corn seemed wealth."

This is history. Any one of our neighbours, if compelled now to live as the highest and wealthiest of mankind lived in those days—such a neighbor would excite our sympathies. We would consider him as good as starving; would carry in gifts to supply his wants, and start a subscription among our friends to feed and clothe him.

A few hundred years ago, and all