

restraining his impulses, and holding himself to the perpetual round of small details, — without, in fact, submitting to his drill. But the perpetual call on a man's readiness, self-control, and vigor which business makes, the constant appeal to the intellect, the stress upon the will, the necessity for rapid and responsible exercise of judgment, — all these things constitute a high culture, though not the highest. It is a culture which strengthens and invigorates, if it does not refine, which gives force, if not polish, — the *fortiter in re*, if not the *suaviter in modo*. It makes strong men and ready men, and men of vast capacity for affairs, though it does not necessarily make refined men or gentlemen."

This view is confirmed by the fact that the useful occupations are mutually dependent, and each plays into the hands of the other. The mechanic aids the philosopher, and the philosopher aids the mechanic. The farmer renders essential service to the statesman, and the statesman helps the farmer. The miner in his El Dorado at the west assists the faithful teacher at the east, and the teacher in turn assists the miner. Thus human labors interlace each other, and are bound together in one bundle of weal or woe. It may be said of the useful arts and sciences, as of the members of the body, "whether one member suffer, all the members suffer with it; or one member be honored, all the members rejoice with it." A single illustration will make this point still clearer. The astronomer is as far removed from the ordinary pursuits of life, apparently, as any scholar or scientist who can be named. To the superficial observer he appears to be