a wealthy citizen of Philadelphia gave $2,500,000 for the establishment of a mechanical school for boys; another has given $1,500,000 for an industrial college for women; and in most of our universities various branches of science are taught in connection with mechanical training, but such schools are much more numerous in Europe. Fifteen years ago Germany alone had five hundred schools for the training of scholars in the practical application of scientific and mechanical knowledge. Such schools that teach how to unite the work of the *thinking brain* with that of the *working hand*, tend to lift labor out of the sphere of mere mechanical drudgery and to give it rank among those we now call learned professions.

We sometimes forget how much applied scientific knowledge combined with mechanical skill has done for the world. It is estimated that the force of steam applied to mechanical work is equal to the labor of 1,000,000,000 men. More than the whole number of people on the globe, counting women and children. Atkinson estimates that the wealth created by the self-binder has already been equal to that of the national debt; and Whitney's cotton-gin has added untold millions to the wealth of the nation. The Bessemer process of making steel rails has cheapened transportation beyond computation, and yet the application of scientific knowledge is but yet in its infancy, and dates back *scarcely beyond the memory of living men.* Not long since a man of scientific attainment stood in my yard and pointed to a wind-mill, and said: "There is the power that we shall use in generating electricity, which we shall store up and use to light and warm our houses, do our cooking, run our farm machinery, and do a hundred things for which we now tax our muscles." We may say that it was a mere stretch of imagination, but bread has already been baked by electricity, and machinery has been run forty miles away from where the power was generated. Surely great is the power of scientific knowledge, but equally important is the skill that can apply it, and the teaching of both must form a part of the coming system of education.

A wise man was once asked what a boy should be taught, and answered, that which he was to practice when a man. The field of knowledge grows broader and broader, and no one, no matter