schools, know nothing of workshop appliances except what they may have picked up, apart from their school work, in odd moments or vacation. Such boys should receive some instruction in the use of tools, and in the applications of arithmetic, geometry, and physics to some of the practical points of machinery and mechanic art, with less, though sufficient, attention to the mathematics of a strictly business life; and it cannot be objected that such instruction would be special and for the benefit of a few, for it would undoubtedly be interesting and valuable to all pupils, no matter what their future occupations.

In the case of higher education the same principles apply. Surely a young man who is to be engaged in practical manufacturing, say in woollen goods, sugar, boots and shoes, would derive greater benefit from devoting more of his college course to physics, chemistry, and mechanism, and less to Greek, Latin, and mental philosophy. The same remark may be made in regard to those who are to enter mercantile life; and its truth seems demonstrated by the increasing favor with which the laboratory practice and shop work in technical schools are being viewed.

It is not, however, so much with the colleges that “the new education” concerns itself, but mainly with grammar and high schools. In most of these, at present, boys are fitted only for mercantile life; and this, together with the fact that in the United States the apprenticeship system has almost entirely died out, and a boy must pick up a trade as best he can (if, indeed, his school work has not made manual labor distasteful to him), has operated to produce a superabundance of clerks and bookkeepers, while good mechanics and other skilled workmen are not always to be so easily obtained, even for higher wages, and though their chances of promotion may be greater.

It is with the idea of bettering this condition of affairs that public and private enterprises are now endeavoring to bring about the introduction of manual work into school exercises, and the establishment, in connection with industrial works, of evening classes, reading-rooms, and apprentice schools. As instances of the former may be mentioned the Manual Training Schools of St. Louis and Chicago, the Working Men's School of New York, and our school of Mechanic Arts; an excellent example of the latter is the Apprentice School of the Brooks Locomotive Works, at Dunkirk, New York. This firm takes youths of good habits and with a natural aptitude for machinery, and instructs them for three years as apprentices in its processes of manufacture, in drawing and the principles of mechanical construction, furnishing books, tuition, and use of reading-rooms gratis, paying for their services seven and a half, nine and ten and a quarter cents per hour during the first, second, and third years respectively, and offering rewards for proficiency. The general adoption of such a plan by similar firms would contribute to greatly increase the intelligence and efficiency of workmen, and to the maintenance of good-feeling between employer and employed, both of which are essential conditions to the highest success of industrial enterprises.

Experiments in this matter are now being tried in some of the Boston schools, and a law will soon be in effect empowering the school commissioners in any city in the State to test the plan, and it is to be hoped that public opinion will be favorably impressed with the undertaking.

The necessity of devising some means for running of telegraph, telephone, and electric wires through large cities other than the present overhead system grows greater each day. New wires are constantly being added to the already overloaded roof-tops of our buildings, and if the rate of increase goes on, as it probably will, in a few years serious annoyance and danger cannot very well be avoided. Perhaps the best and almost the only means which has received serious attention for obviating this evil is that of carrying the wires underground, and, though many obstacles appear in the execution of this method, it will, doubtless, prove to be the one ultimately adopted. The American Bell Tele-