

art students by its ugliness, nor scandalize the physics classes by its contempt of the laws that govern proper construction.

There are numerous instances in which private generosity has come to the aid of the public treasury in erecting and equipping buildings for the purposes we are considering. The Worcester Mass., Free Institute was founded by John Boynton who gave the sum of \$100,000 for its endowment and support. The Hon. Ichabod Washburn belied his first name by giving it a machine shop and equipments, a sum of \$5,000 to be expended for stock, and the interest of \$50,000 to provide for contingencies. Sir Josiah Mason, of Birmingham, England, bore the entire expense of building, equipping and endowing the Mason College; while the Birmingham and Midland Institute was, in the first instance, erected entirely by private subscriptions. It is doubtful, however, whether this method of "evening up" between millionaires and the million is on the whole so directly in the line of progress as defraying these educational charges out of general taxation.

It does not seem wise, in the present state of things, to wait for the waking up of millionaires' consciences. We are in need of technical schools now, and we shall have to pay for them. There are plenty of arguments to be used in favour of the necessary expenditure. Technical education is not in its initial stage. Canada is taking hold of it in the present day as a junior member of the comity of nations, but she has plenty of examples to follow. It is certain that where a city, a state, or a nation, has expended money on technical education it has been returned to it twenty, thirty and sixty-fold. We have only to look at the work that is being done in other countries to be convinced that we can no longer allow our own ground to lie fallow.

The trades-union objection to technological institutions, so far as it exists, is founded upon the supposition that the institutes will turn out a larger

number of skilled operatives than there are openings for, and that therefore wages will fall. It is only the less intelligent who take this view, and a wider acquaintance with the subject generally dissipates it. In the countries in which technical education has made its greatest strides the trades unionists are its warm friends. They know that the possibilities of art-industry and science-industry are almost infinite, and that constant fresh developments of new materials and new ways of using them are the usual products of technical education. Moreover it is not proposed to teach special trades so much as to give general technological information and training that may be applied in any fresh situation in which the pupil may find himself.

The difficulty of finding suitable teachers for the work of technical education will be, it may be hoped, of a temporary character. There are plenty of teachers available, but teachers of the right sort are comparably few. Much of the success of this work will depend on a proper choice of instructors, and in this regard the policy of cheapness is a mistaken one. One good teacher is worth three or four second rate ones. We have in Toronto and Montreal schools of applied science which should certainly be capable of turning out those who are fitted for the work of technical instruction, while from our ranks of skilled workmen may be drawn the necessary teachers of the use of typical tools. The work of our art schools has already proved that that there is no dearth of excellent teachers in that department.

In conclusion it may be said that technical education is certainly one of the means whereby our great resources may be utilized for the common good. It is a means that has been successfully used by other countries, and where it has been tried it has never failed to improve trade and to elevate the operative class. It will be as successful in Canada as elsewhere if it is handled in an intelligent and public-spirited manner.