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THE FEASIBILITY OF TEACHING TRADES IN CONNECTION WITH OUR PUBLIC SCHOOLS.



IN a country where our industries are rapidly growing and will soon be broadcast over the land; where the agricultural and manufacturing interests are the mines from which she must draw her wealth and build up her power, is it not time that the teaching of trades should form a distinct branch of education in our public schools? With more of the Kindergarten in our educational method, children may have a readier grasp of technical principles, and there may be much greater animation in the learning than is now often the case. Whatever there is in knowledge, capable of being taught by sight and touch and research into properties, should be taught demonstratively, and for children the indigestible subjects of history, rhetoric, and grammar may well be spared until the years of maturity. With greater attention to this range of instruction in our elementary schools, there can, in addition, surely be instituted in our industrial centres, large and well-equipped technical schools, supported with illustrative apparatus and scientific instruments, and above all, placed in charge of capable teachers with enthusiasm as well as ability for their work. It would be impossible to carry out in these schools, in an applied manner, the higher education which we desire to see operative in the workshop. If, as in France, masters with large factories giving employment to hundreds of employées, would form technical schools of their own, for their apprentices or young workmen, they would in the end be gainers. But in whatever way technical instruction is given, the lesson must be made attractive. Teaching is only dull in incompetent hands, and machinery must be provided for practical purposes. Let there be some inducement held out to the young mechanic, even if it go to the length of giving him higher wages or a reward, or giving him a spare hour provided he devotes it to his trade or school. He would be worth more to his master, and eventually prove a superior workman. When the young

mechanic is at his trade one may reasonably feel assured that he will not change it aimlessly, and that a special technical education is not thrown away upon him. If by such well-directed endeavours anything may be done to raise the artisan in capacity and skill and to dignity in his labour the effort is well worth making.

We are, in this country, entirely devoid of system, other than the negligent rule of thumb. There is no training, no technical education for young mechanics; they are not taught to know the reason of the methods they are directed to follow, that the principles underlying practice are not only too much ignored, but that masters and foremen are themselves too commonly very imperfectly acquainted with the principles; that the knowledge of tools and their scientific use, and why they are most serviceable in certain shapes, is little imparted; that, in short, the boy is not carried onward in his work, so as to become a more intelligent and better workman than the man whom he will eventually succeed. In Germany, France and Switzerland, marked progress has been made in the establishment of schools which enable the boy, as it were, to carry himself through the school to his trade without experiencing any abrupt cessation of mental application on the commencement of physical toil. The education of a youth is adapted to his life, and in some instances, he is even made a competent workman before he leaves school. There are apprentice schools, and there are schools preparatory to apprenticeship, and there are institutions for "technical instruction to the apprenticeship of a regular factory or workshop, or to the apprentices of some industry." The result of this educational effort abroad—associating the training of the hand with the training of the mind—has been very encouraging. It has perceptibly benefitted the industries to which the system has been applied. We are warned that we shall never take our place in the race for superiority unless we try something of the kind, and it is time that our attention was drawn most strongly to it.

So far the establishment of Mechanics' Institutes in this country has been a complete failure, and the Government grant, of \$400 per annum to each, may be said to be entirely thrown away. The mechanics, as a body, take little interest in these institutions, and they are mainly frequented by non-mechanical men. There is nothing in connection with these institutions in Canada that is attractive to the working mechanic, and he feels