

must be also instructed in the principles of art. For if he have only to follow the drawings of a special designer, he will follow them much more intelligently if his eyes be trained by artistic tuition. There are also decorators, plasterers, stonecutters, cabinet-makers, goldsmiths, silversmiths and a tribe of others to whom art-teaching is indispensable. So that our technological school will have to devote attention to this branch. It will have been begun in the public schools by a due attention to drawing and modelling, by the surrounding also of the scholars by some of the best examples of art, such as is being attended to by our League of School Art. Here again it may be well to introduce a word emphasizing the need that great and constant attention be given to drawing for all pupils. As a means of expression it is needed by everybody; for those who will follow ornament as a business it is indispensable, as it is also for engravers, illustrators and many other artificers.

No better example need be given as to the importance of art-teaching than is afforded by the action of the British Government after the Great Exhibition of 1851 had shown that Great Britain was behind France and other nations in this particular. "When Great Britain found herself outstripped at the Crystal Palace Exhibition," says Dr. MacArthur, "she faced the music at once, and established the South Kensington Museum with its annexed art schools at an expense of six million dollars." There are now 200 art schools in England where 30,000 people receive instruction; and the progress is still more remarkable in the way of general education, for there are not less than 4,200 schools where drawing is taught, and where nearly 1,000,000 pupils are instructed in drawing and design. What was the result? Mr. Nichols supplies the answer in his statistics of British importation from France. From 1847 to 1856 it appears that thirty-five per cent. of the French exportations were of art industry, and from 1856 to 1868 they scarcely amounted to sixteen

per cent., a decrease in twelve years of more than one-half. Now, during the first period France was nearly ten per cent. ahead of Great Britain, but during the second period, that is from 1856 to 1868, the export of British products in which art was required exceeded in value those of France 505,000,000 francs, and with a greatly increased value in her total exportations her art products were twelve per cent. more. In other words, while this kind of industry had increased in Great Britain 442,000,000 francs, it had decreased 68,000,000 in France. It is the custom of a certain school of artists to sneer at South Kensington instruction, but these are facts which appeal to practical men.

I come now to the consideration of the technical education that it is desirable to give to operatives already engaged in the pursuit of industrial art. This is the field that is at present worked by the Toronto Technical School, the Ontario School of Art and Design, and the various other art schools already established in Canada. It is a very important field, and it is one that is highly necessary to take into account, seeing that in the past we have to some extent neglected technical education in our primary and secondary schools. There are as a consequence thousands of young men and women earning their living as operatives who have had no chance of acquiring that technical knowledge that they would undoubtedly find useful to them in their various pursuits. It is due to them that they should have the means of obtaining it. The necessities of the situation point to evening classes. What they want is art-teaching, instruction in scientific theory and mechanical drawing. They want also the very best of teachers—second-rate ones are of no avail. It takes a far more capable instructor to teach a class of men who have "got out of the way" of learning than it does to teach a class of boys or girls in school. These men want to learn chemistry, and physics, and mechanics; and a Faraday with his wonderful inductions and his