

Manual Training Room, Creighton Street Public School, Ottawa.

## Machine Shops in Canadian Schools

Boys Learn Economy at the Lathes and Girls with the Needle.

N one of the Technical Institutes of Ontario a year ago the teacher chose an original way of getting good mechanical work out of his boys. In his institute there were fifteen classes from the various schools of the city. Ten of these he called into consultation on the best way of making something really useful to somebody else; something that a customer might appreciate. Each class chose a foreman, and the article to be made was decided upon; drawings were made and wood bought; individual parts were allotted to various boys. The result was a number of handsome Morris chairs to be presented to the principals of the

be presented to the principals of the various schools.

Twenty-three towns and cities in Ontario have technical school facilities either as separate Institutes or departments of Public and High Schools. Thousands of Canadian boys are learning how to carve wood and work in metals; thousands of girls

are learning the technique of household economy. The self-made man here and there wants to know why this is so. He remembers the time not so long ago when the Canadian boy was in preparation for becoming either a farmer or a gentleman—some sort of professional man, whether in law, medicine or theology. In his boyhood days the three learned professions graduated from the three R's learned at school. The country boy who abandoned the farm for the school almost invariably went school-teaching till he got money enough to take a course at college. His highest ambition was to be a doctor, a lawyer or a High School teacher.

Canada soon began to turn out more professional men than she needed and began exporting her graduates across the border. Hence much of the exodus. The industrial idea had not yet got hold of the schools. To prepare boys for commercial or industrial life was not considered as part of the curriculum. The first break-away from this came in the business colleges which soon led to commercial courses in High and Public Schools. Now that Canadians have become an industrial people the school authorities are widening the curriculum—to teach mechanics and domestic science.

The self-made man who learned his technique in the woods has an idea that this technical education is a fad. When he was a boy he learned to be handy by doing things; and the farm was a good place to learn technique, for the number of things a boy had to learn to do in the fields and the woods and the saw-mills of Canada was not set down in any curriculum. Any teacher who would have taught how to file a saw, to harness a horse, or to fix a pump would have lost his position at the next meeting of the trustees.

Now there are scores of teachers in Ontario who spend most or all of their time teaching boys to carve wood and work metals, and girls to cook and to sew and to manage a home. Technical education is extending its province with the expansion of the country. Towns and cities which a few years ago were merely market towns and places for merchants and retired farmers to live in, are now industrial centres with large populations devoted entirely to mechanical pursuits. Stratford, for instance, has an industrial population of nearly three thousand workers; Peterborough has as many; Berlin has more than two thousand; and this is common all over Ontario, where a generation ago the boy who lived in a town was likely to be either a clerk or a professional man.

Technical education has been put on the school curriculum in Guelph, Berlin, Stratford, Ottawa, Toronto, London, Hamilton, Cobourg, Kingston, Brockville, Brantford, Ingersoll, St. Thomas, Woodstock, Alvinston, Galt, Essex, Cornwall, Owen Sound and Sault Ste. Marie. The towns and cities which have not adopted technical education are now in a minority of population. Many thousands of dollars are being spent in teaching the boys and girls of these industrial communities the technique which they never could have learned at mother's knee or by following father. It has been discovered that the average Canadian boy has an aptitude for tools; that the boy who whittles a toy windmill or makes harness for a dog is doing the kind of thing which under expert direction he may turn to good account



Work of Boys at Essex High School.