

nouncement that Canada and Germany had come to a new understanding in matters of trade, export and import, is of unusual interest just now to engineers and engineering firms in Canada.

The tariff war between Germany and Canada has been in progress since 1903, Germany penalizing Canada when Canada offered Britain a preference by placing on Canadian produce the maximum tariff; Canada retaliating by placing a surtax of $33\frac{1}{3}$ per cent. against imports from Germany; i.e., a tax of $33\frac{1}{3}$ per cent. above the tax imposed on goods entering Canada from countries other than Great Britain.

Canada is now on the German favored list and the German surtax is removed. This announcement, coming as it does just when so many Canadian public works, power schemes, hydraulic development and sanitary improvement undertakings are nearing perfection will doubtless delay matters for some time.

The domestic and export trade of Great Britain has been for the last few years very dull, the British manufacturers, looking for a new outlet, undertook to develop Canadian trade. Under the protection and preference offered by Canada and in competition with Canadian firms they have secured a number of Canadian contracts.

A new element now enters into the calculations in reference to the purchase of many classes of machinery and supplies required by Canadian engineering firms.

The Germans have been for years producing goods of a first class quality. Their labor and raw material are cheap. They are well supplied with technical men and their entrance into the Canadian field will augment the already keen competition which now exists between Canadian and British firms for Canadian business.

THE RAILWAY AND THE RURAL DISTRICT.

Somehow the impression has got abroad that the railways have been and are being built for the good of the cities and the city population. In matters of railway legislation the rural members find it good politics to always oppose the railways, adding restrictions to their charters, sometimes forgetting that the railways have done as much as any other one agency to increase land values.

Railways never make any pretence at being philanthropic institutions, and before they will venture into new territory they must be reasonably sure of returns. In the great Canadian West land could be had for the asking—the railways came and the land value increased by leaps and bounds.

Why should not the railways receive some returns because of this increase in value?

The New York Central Railway is now preparing to conduct an interesting experiment in one of the older-settled districts of New York State. They are securing three farms along their line of railway in different localities. By proper management this railway hopes to show how the production of the farm may be largely increased; how by the growing of certain crops and by careful packing and direct shipping the returns per acre from farm land will be greatly increased.

Such an object lesson will interest the farmer and the railway, will increase the traffic, both ways, on the railroad, and incidentally it will also increase the revenue.

A great cry is heard to-day as to the cost of living and the part the cold storage companies play in this increase. The engineer, by improving and directing transportation facilities, can lessen the cost to the consumer and yet increase the producers' selling price.

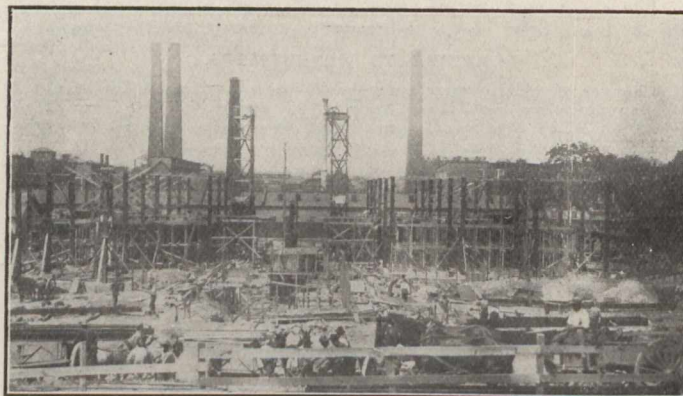
EDITORIAL NOTES.

Mr. James P. Murray, of the Canadian Manufacturers' Association, speaking at the Engineering Society of the University of Toronto dinner, referred very pointedly to the necessity of industrial educational training. The race for industrial supremacy is going to be keen. It will be won by a nation of trained men.

RAISING LABOR EFFICIENCY BY RIVALRY.

Every workable device for increasing the efficiency of labor is of importance to the contractor, and there is, therefore, considerable suggestive value in the experience of the Aberthaw Construction Company, of Boston, with the competitive working of labor gangs engaged in similar work on the same job. The Aberthaw Company has for years past used this device for stimulating labor whenever the circumstances of a construction job made a friendly rivalry between gangs possible. The most striking results of the system, however, were obtained in the recent construction of twin buildings for the Winchester Repeating Arms Company, at New Haven, Connecticut.

The work consisted of two buildings lying side by side, and connected by a middle structure which provided toilet



General View.

rooms, elevators, and a passage-way between the two wings. With the exception of a steel-frame, plaster walled storage room to go on the roof of one of them, the wings were precisely alike, each 300 ft. by 60 ft., two stories high with columns spaced 20 by 24 feet and built heavily enough to allow of the later addition of two more stories. The interior had flat slab concrete floors built on the Turner mushroom system supported by steel columns. There was a tunnel running under both buildings.

The amount of work involved in each building was carefully estimated, and a dividing line was drawn 6 ft. 8 in. on one side of the centre of the connecting corridor so as to mark off two equal jobs; two foremen who were to be put in charge of the two buildings agreed, after seeing the estimates, that the division was an absolutely fair one. They snapped up a cent for choice of sides. The two competing gangs were given duplicate equipment, the foremen were al-