

For country and suburban roads, where cobblestones are obtainable, they should be laid from two to three feet in width, and after being placed should have poured in the interstices hot pure asphalt. Asphalt should be used which is of the best grade, free from coal tar or any of its products, and which will not volatilize more than one-half of one per cent. under a temperature of 300 degrees Fahrenheit for ten hours. The asphalt should not flow under 212 degrees Fahrenheit and should not brittle at 15 degrees below freezing, Fahrenheit, when spread thin on glass. In all cases of brick, stone, or wood blocks laid longitudinally along the line of curb and with joints broken, said joints should invariably be filled with asphalt cement of quality above described.

### MUNICIPAL DEVELOPMENTS AT ASSINIBOIA, MANITOBA.

In *The Canadian Engineer* for September 3rd a description was given of the water and sewerage systems recently installed at Deer Lodge, in Assiniboia, a western suburb of Winnipeg. Since its publication we have been favored with some additional information respecting municipal improvements that have been made during the past several years in that locality. In this time over \$410,000 have been expended in the municipality of Assiniboia for water supply and sewerage systems, and similar work to the extent of \$500,000 is contemplated and in the process of design. During the past two years, also, pavement and bridge work has amounted to \$215,000, construction work at the present time amounting to \$170,000. Mr. G. W. Rogers is engineer for the municipality.

### DECEMBER MEETING, AMERICAN SOCIETY OF MECHANICAL ENGINEERS.

At its annual meeting in New York December 1 to 4, the American Society of Mechanical Engineers will have a session on engineering metals and their application to methods of manufacture. Steels for construction and for tools, cast-irons and alloys of copper, tin and aluminum will be particularly investigated, with a view to bringing out as a matter of common knowledge the advances that have been made in these fields up to the present time. The session will be in charge of the sub-committee on iron and steel. A number of papers will be presented.

Another session that will be most interesting is that devoted to the general subject of engineering in connection with civic administration and public service. Papers on municipal engineering and related matters will be presented, among which are noted: "Utilization of Municipal Wastes," by Irwin S. Osborn, consulting engineer to the Department of Street Cleaning, Toronto, and other cities; "Training of Municipal Employees," by H. M. Waite, city manager, Dayton, Ohio; "The Cleaning of Filter Sands," by Sanford E. Thompson, consulting engineer, Newton Highlands, Mass.; "Controlling Factors in Municipal Engineering," by M. L. Cooke, director, Department of Public Works, Philadelphia, Pa.; "The Cleaning of Public Buildings," by W. H. Ball, Chief of the Bureau of City Property, Philadelphia, Pa.; "Municipal Colleges in Germany," by C. L. King, University of Pennsylvania, etc.

The usual sessions on machine shop press, railroads, etc., will be held. The above are mentioned in particular as being of special interest to our readers.

### WAR AND ENGINEERING TRADE ABROAD.

The following interesting item on the effect of the war on European engineering trade was published in "Mechanical World" of August 28:

Of the several countries engaged in the present European conflict, it is tolerably evident that Great Britain stands to lose less by trade dislocation than any other. It is true that some of our manufacturing industries have been badly hit, but so far as the engineering trade is concerned a despondent view of the situation is by no means justified. Makers of textile machinery will probably be the worst sufferers, as the continent represents their chief outlet. But as regards general engineering the outlook is much more satisfactory. Certain branches are of course busily employed in meeting the demands of the naval and military authorities, and in these we have every reason to expect a continued period of activity. Makers of structural iron and steel should benefit by the elimination of Belgian and German competition, while, if machine-tool makers find the principal European markets closed against them, they have ample compensation in the absence of German competitors in our large home market. A further advantage we possess over continental competitors is that we are in a position to meet the requirements of colonial and neutral markets now that the western trade routes are open; and hence the present situation provides us with a unique opportunity of consolidating our position in such markets and extending our influence where possible.

The view is held in many quarters that our present trouble may be a blessing in disguise, if it only affords opportunities for recovering some of the industries which we have allowed Germany to filch from us. It is suggested that the refining of lead and other of the baser metals should again find a deal of employment in this country. Again, the manufacture of carbon twist-drills, which has drifted largely into German hands, should be recoverable if suitable plant be installed. This latter proviso is of course almost always a condition of success, and although it requires a considerable amount of courage to expend money under the present circumstances, it is tolerably obvious that those who do so will not have long to wait for their reward once the war cloud shows signs of lifting. Meanwhile, wise economy is to be commended; but the indiscriminate curtailing of business-getting organization, advertising, etc., savors of a penny-wise and pound-foolish policy, the results of which are bound to be the reverse of beneficial.

The building permits for the town of Welland during the month of August this year amounted to \$13,625, which shows a decided decrease upon the amount for 1913 of \$38,100. The building permits for the year to the end of August, total \$314,018; and in 1913, the total shown was \$356,996.

The following account has been published relative to building permits issued during the last month in the town of Galt: total estimated cost of permits issued during August, 1914, \$92,500; total estimated amount for August, 1913, \$40,565, showing an increase of \$51,935. The increase is due to the permit which has recently been issued for the construction of an armory at a cost of \$80,000.

The Bridle Belt Railway and Navigation Company propose to construct a \$50,000,000 terminal project at Seattle, Wash., the initial unit of which is to be undertaken at once at a cost of \$15,000,000. This first unit calls for the construction of two docks, each 4 stories high and 200 x 800 ft. These docks will connect with an 8-story building over Railroad Avenue, 500 x 500 ft., which in turn will connect with a 20-story 250 x 500 ft. hotel and office building facing on First Avenue. The hotel and office building will have a total depth below the First Avenue level of 10 stories, the ground floor of which will open on Railroad Avenue.