readers while they are still warm and pulsing. We trust that those engineers who are mainly interested in waterworks, structural or other problems, and but incidentally interested in roads, will be indulgent this week. Their turn to monopolize an issue with their particular specialty soon may come again as in the past.

PERSONALS

J. W. SHACKLETON has been appointed city engineer of Chatham, Ont.

ALEX. McKinnon, town engineer of Glace Bay, N.S., has resigned to accept a position in the State of Ohio.

STACEY H. OPDYKE has been appointed manager of the water sterilization department of the Northern Electric Co., Limited, Montreal. Mr. Opdyke has been in touch



for a number of years with the treatment of water for various purposes. He is a graduate of Purdue University, and was formerly with the sales and engineering departments of the Dearborn Chemical Co. Mr. Opdyke's connection with the Northern Electric Co. is the result of that company's having recently secured the sole agency for Canada for the R.U.V. Co., New York. The latter concern are manufacturers ultra-violet - ray

water sterilizers, of which a few small installations have already been made in Canada for industrial purposes. Mr. Opdyke intends to endeavor to introduce the R.U.V. system for municipal water sterilization in Canada, a fairly large municipal plant having been recently installed at Henderson, Kentucky, with good bacteriological results.

D. DARRACH, Schomberg, Ont., has been appointed engineer on grading work for the county roads in York County, Ont.

Col. C. N. Monsarrat, chairman of the board of engineers, Quebec Bridge, has been appointed consulting railway engineer to the Dominion Government, succeeding the late Sir Collingwood Schrieber. The offices of the board of engineers, Quebec Bridge, will be removed from Montreal to Ottawa, where its work will be completed.

A. B. Manson, city engineer of Stratford, Ont., has received an appointment as lieutenant in the C.E.F. Engineering Corps. Mr. Mason, after graduating, spent a year in land survey work in the Northwest and a year and a half in railway construction with the Canadian Northern and the Mond Nickel Co. He has been in charge of the city engineering department in Stratford for the past six years.

Captain Fred. HARCOURT, formerly harbor engineer at Port Arthur, has been appointed assistant commander of labor units in France. Captain Harcourt, who is a son of Hon. Richard Harcourt, of Welland, graduated with honors from the University of Toronto in 1900. He went overseas in December, 1915, with the 94th Battalion and was promoted captain and adjutant prior to leaving for England. After acting as adjutant of the Canadian pioneer training depot for a time, he went to France in January, 1917.

GEO. A. McNamee, of Montreal, who is secretarytreasurer of the Canadian Good Roads Association, which held its annual meeting last week, was born August 20th, 1884, at Montreal. He was educated at the Archbishop's Commercial Academy and the Montreal Business College. After four years' clerical work in the traffic manager's office of the Richelieu & Ontario Navigation Co., he entered the employ of the Montreal Tramways Co., later becoming assistant to the secretary-treasurer. He was elected secretary-treasurer of the Automobile Club of Canada at its inception in 1905, and resigned from the Tramways Co. in 1912 to give more time to the club's affairs, as a million-dollar club house, garage and office building was contemplated. This scheme was abandoned, however, owing to the war, but may be taken up again after the war. He has organized two road congresses in Montreal and one each in Toronto, Ottawa and Hamilton.

ASPHALT PAVEMENTS

(Continued from page 450)

Medium sand for asphalt paving is one in which there is a decided predominance above the percent. required in the model grading of those sized grains that will pass a standard 40-mesh and be held on a standard 80-mesh sieve. The requirement of the model grading for medium sand is 43 per cent.

Coarse sand for asphalt paving is one in which there is a decided predominance above the percent. required in the model grading of those sized grains that will pass a standard 10-mesh and be held on a standard 40-mesh sieve. The requirement of the model grading for coarse

sand is 23 per cent.

Medium-fine and medium-coarse are the terms applied to sands in which there is a decided predominance above the percentums required in the model sand grading for two of the sand grades. This quite frequently occurs, and it is in such cases that the standard grading is sometimes sufficiently approximated by the mixing of two instead of three separate sands.

Very fine sand is objected to by many on the ground that it usually makes an unstable mixture. In asphalt paving parlance, very fine sand is that which will pass a 200-mesh sieve but which is not fine enough to be considered dust or filler material. With some of the very finely pulverized fillers that are available to-day, we doubt

if this objection is good.

Very fine sand is not filler, however, which was pointed out in a paragraph above, and it must not be allowed to be considered as such in meeting the standard or model grading for sheet asphalt paving mixture. If there is a serious amount of this 200-mesh sand in the sand aggregate, it should be added to the fine or passing-80-mesh-held-on-200-mesh material and deducted from the 200-mesh material in the mixture to make sure that the model requirement for 200-mesh material is properly met with inorganic dust filler material. Some specifications, very unfortunately, do not provide for this contingency.

(To be concluded in the next issue.)