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CENTRAL HEALTH LABORATORY REQUIRED

DR. C. J. HASTINGS, medical officer of health for the city of Toronto, is reported in a Toronto daily paper as having stated that practically every city is still experimenting with methods of sewage disposal, and that none have yet been able to solve the problem satisfactorily.

"We will be just as well to sit tight and watch experiments in other cities," says Dr Hastings, "as spend money for experiments here. All the so-called better methods are still in the experimental stage."

Dr. Hastings' policy of "sitting tight" and letting others experiment, is hardly the policy that one would expect from a progressive city like Toronto, and it is not likely the policy that the Works Department of that city will take.

Nevertheless, the attitude assumed by Dr. Hastings is not quite so selfish as might appear at first glance. It is undoubtedly founded upon one kind of logic. Milwaukee and other cities have spent many thousands of dollars upon experiments, and Dr. Hastings probably feels that these cities have gone much further in their experiments than Toronto could hope to go for a considerable period, and, as those cities are still spending money for this work, more or less freely, he naturally questions the necessity of Toronto's duplicating the work when he feels that it is already in good hands and is being capably carried out elsewhere.

But is this policy of waiting for "the other fellow" to solve one's problems, the best to pursue? Why should one city spend money in conducting experiments that are of general benefit to all cities? Milwaukee, having spent a certain amount of money in sewage disposal experiments, might very properly say: "We have done our share. Let's stop spending money, and let Toronto, Montreal or some other city finish the work." Then the work would be left to that city which

had the most progressive, generous and far-sighted governing officials.

Dr. Hastings' remarks are another reminder that there should be some central bureau, or laboratory, fully equipped with funds and staff for conducting experiments in public sanitation. All problems of general application could then be referred to that bureau and properly taken care of, leaving only purely local problems to be solved by the individual municipalities. Now that the new Department of Health at Ottawa has an official and capable head in Dr. John A. Amyot as deputy minister, it is to be hoped that problems of this kind can be centralized under the direction of that department.

AN IMPROVED COST-PLUS CONTRACT

SEVERAL different forms of percentage contracts have been devised during the past few years in the United States, but a Canadian, J. A. Beatty, of the firm of Morrow & Beatty, Ltd., general contractors, Peterborough, Ont., has inaugurated a form of contract which appears superior in many respects to any other of its kind that has yet been suggested.

The Beatty plan, if it may so be called, has been tried out on a half-million dollar contract for the Southern Canada Power Co., and has resulted, says Mr. Beatty, most satisfactorily, both to the owners and their consulting engineers, and to Mr. Beatty's firm, who were the contractors.

Mr. Beatty's scheme is to charge (tentatively) a fixed fee of 20% on the estimated cost of the work and then, at the end of the job, to pay back to the owners 10% of the total cost of the work, whatever it may be. For instance, if a job were to be estimated by the contractors at a probable cost of \$500,000, Mr. Beatty would charge a fixed fee of \$100,000. When the job was finally completed, if it were found that the total cost amounted to \$550,000, Mr. Beatty would pay the owners \$55,000, leaving his firm a profit of \$45,000. If the job had only cost, say, \$475,000, he would pay the owners \$47,500, leaving a profit for his firm amounting to \$52,500.

At first glance this does not seem far different from a fixed fee with a bonus and penalty clause. Financially, it is practically no different, but it has two advantages, one of which, especially, is worthy of serious consideration.

First, it is a simpler and more clean-cut way of expressing the contractor's responsibility, and is less likely to result in disagreements or law suits. The owner knows that after he has paid or pledged himself to the fixed fee, whatever the cost of the work may be, he only has to pay 90% of it and the contractor pays 10%. In a simple arrangement of this kind, there is no room for unpleasant misunderstandings as to responsibility for cost having exceeded a certain figure. If the cost of the work be \$1,000 or \$1,000,000, the contractor pays 10%.

The second and more important advantage of the Beatty plan, the advantage that will appeal to every contractor, is its effect upon the contractor's staff.

Every man on the job knows right from the very beginning that his firm must pay ten cents of every dollar that is spent. When the contractor is not penalized until after the cost has reached a certain figure, the staff is likely to be less careful at the very beginning of the work, perhaps feeling certain that the work will not exceed the estimated cost, and that there is no need for stringent economy or for devising unique methods of saving every possible dollar; and not until the estimated cost has been reached, or nearly reached, and the work is seen to be far from completed, does the real situation impress itself upon the staff; then, when it is too late to prevent a penalty, every effort is made to finish up the job as economically as possible.

Mr. Beatty's plan prevents any laxity right from the start. The contractor and the staff know that they must pay one dollar out of the very first ten dollar bill that is spent on the work, and this direct liability is an excellent incentive to the contractor himself and to his staff to use