of chances with their reputation to save themselves a few extra dollars, but was perfectly willing to buy the best reputation at any cost whatever with city money. One good engineer on the bureau staff, keeping in touch with the field, would soon detect and expose such malpractices as these.

Many cities are to-day repating the mistakes made by other cities, and thereby learning through their own costly experience what they might much more cheaply know from the dearly bought experience of other municipalities. I have in mind one city in particular which is now going ahead with a certain type of paving work which was tried out and abandoned in other places many years ago. It thinks it has discovered something new.

## Suggests Visiting Engineering Specialists

What we need is a clearing house for knowledge and experience, where a city may inquire about what has been done elsewhere and what were the results. The Union of Quebec Municipalities promises to furnish such a clearing house for this province, and I believe the results will be most gratifying. A step still further would be advisable; and it may be practical at some future date to have a staff of visiting engineering specialists go around and see what the cities are doing in the way of following wrong practices without

even suspecting it themselves.

Another service that may be facilitated by the union is the exchange of expert operators between the different cities. This fall, the city of Charlottetown, Prince Edward Island, which has installed a municipal asphalt plant, needed some expert laborers for operation. We appealed to Mr. Doucet, the director of public works, and to Mr. Blanchard, his engineer of roads, of the city of Montreal, and they were glad to go out of their way to accommodate a small city in a sister province. Montreal men went to Charlottetown, and did their work so well that Charlottetown now knows what kind of a public works department Montreal has. What was arranged in this case would be done much more frequently between cities who are members of the same union.

All of the foregoing shows very clearly the need of the bureau or clearing house for information which it is proposed to establish in connection with this union. Not only can the experience of one Quebec city be made available, in fact be reported to all the other Quebec cities, but, if the organization falls into very active hands, much valuable information can be secured from the outside municipalities and supplied to the proper official in each of the Quebec municipalities. Such a bureau need not wait until it is requested for information which some city finds it needs; it can go out into the highways and byways and seek out information which will be of benefit to its member cities but of which they do not happen to have even heard.

While we do not all want to be alike, economy and efficiency certainly demand that we do be alike in most things where there is no good reason, practical or artistic, for being different. Some advantage will accrue from a sort of interchangeability of parts, even to municipalities; and I think much can be done by this union towards a sane amount of

standardization.

## Standardization of Municipal Equipment

If three cities are using different models of a given machine which each is building or buying, why should not the representatives of these three cities get together, decide, if they can, which machine is the best, or possibly design a new one which will be a composite of the three and superior to all, and adopt that as a standard until something new develops? The street railways of North America have standardized the rails they use, for instance; and it is standardization like this which I have in mind. Such standardization might also be made to operate in favor of Canadian manufacturers, whenever possible, without appreciable loss to the cities.

Just now, the commission-manager form of government, with proportional representation, has the centre of the municipal stage. My study of the subject finds me very much in favor of this type of machinery for city government; but I would very much like to know what a committee appointed

by the Union of Quebec Municipalities, from among their own members, would say about it. After careful study, this committee would either recommend this type of commission-manager charter for Quebec municipalities, would offer some improvement upon or amendment thereof, or would reject it as not so satisfactory for Quebec as the present type of charters. At least, we would get action upon such a matter; and it would not be left for a few public-spirited men to spend their leves going from one city to another recommend-

ing this change.

There are, of course, a certain number of persons and interests in every community who prefer things-as-they-are. Some of these folk are just too lazy to move in a new direction; others are securing special privileges under the present order and fear they may lose them during the change. There are a certain number of business firms selling to cities, a certain number of contractors doing business with cities, who do not want any bureau of information which may tell their customer cities how badly they are being over-reached. The job holders who do not want any new-fangled ideas which will mean more work may also be relied upon to speak against any such innovation as a municipal union which means business; but I am confident that most municipal employees will respond to the call for more efficient organization with alacrity.

As far as the firm of which I am a member is concerned, we believe the formation of this union can produce nothing but good for us, for we think it will mean a greater appreciation on the part of the member municipalities of the value of the kind of work we do. Moreover, if the day ever comes when the union thinks it necessary to municipalize us, or any part of us, and a workable plan is forthcoming, there will be no opposition on my part. I believe in municipal ownership up to the hilt; a municipally owned municipal league and all that may logically grow out of it.

Representatives of the Dominion and Manitoba governments conferred last week with delegates from the United States, who visited Winnipeg, on the problem of prevention of floods in the Red river valley. Large areas of Manitoba, Minnesota and North Dakota are flooded every spring from that river's overflow, and seeding operations are delayed. Schemes were suggested which the United States representatives declared would mean a saving of \$100,000,000 during the next thirty years.

J. G. Sullivan, formerly chief engineer for the C.P.R.; J. C. Holden, C.P.R. district engineer; B. Stewart McKenzie, consulting engineer; and W. P. Brereton, city engineer, all of Winnipeg, Man., have advised the Greater Winnipeg Water Board that in order to prevent gradual disintegration of the Shoal lake aqueduct, it is necessary to underdrain the section in which the conduit is exposed to the action of water heavily charged with alkali. John Woodman, consulting engineer, disagreed and gave his opinion that the aqueduct is quite safe from alkali action. The engineers had been called in by the board to express their opinions as to what should be done in connection with an underdrainage scheme submitted by Chief Engineer Chace and which will involve an expenditure of from \$300,000 to \$400,000.

Speaking at the evening session of the United Farmers' convention, December 17th, at Massey Hall, Toronto, Hon. Mr. Biggs, Ontario minister of public works, said that the government proposes to abolish statute labor. He suggested aid for township roads, using the revenue received from auto licenses for this purpose, and giving special consideration to the poorer townships which are not in a position to help themselves, by setting aside \$2,000,000 for loans to them, repayable in five-years without interest. Mr. Biggs stated that the federal government has allotted \$6,000,000 to the province of Ontario for provincial highways, and he thought that the Ontario government should avail itself of the full amount and "construct 1,600 miles of provincial county roads." "I would say," he continued, "that we do not intend to build any hard-surface roads at any place, unless the cost of building them is less than a macadam road."