as soon as decision to have the work done had been reached.

Too frequently a council decides one meeting to call for tenders and instructs the city clerk to have tenders in hand by the next council meeting. We have in mind one Canadian municipality that allowed only a couple of weeks for tenders for an engine, and then calmly waited for eighteen months for its delivery; and another municipality that allowed less than two months for the preparation of plans and bids on a job amounting to over a million dollars, and then took over ten weeks to decide which of two bidders should be awarded the contract.

This is a matter of equal importance to buyers and sellers, as bidders often submit figures high enough to protect themselves against all risks, when they are not allowed sufficient time to investigate carefully and to figure accurately and closely.

## REPORT ON CITY ARCHITECT'S DEPARTMENT, TORONTO.

Last week Judge Denton's report on the City Architect's Department was made public. It is the result of a lengthy investigation, and careful probing into the affairs of the department has brought out strong vindication of the popular belief that much inefficiency and lack of discipline pervaded the system under which it operated.

During the three months of the inquiry 179 witnesses were examined, 2,614 typewritten pages of evidence taken and 170 exhibits filed and considered.

The report recommends a complete reorganization of the department into a separate branch of civic government to be known as the "Department of Buildings." Its jurisdiction and powers are fully enumerated and show considerable increase over the present system. The head of the department, according to the recommendation in the report, should be called the Superintendent of Buildings.

"He should be the best man available. He should not only have the necessary practical and technical knowledge of the work of the department, but should possess the necessary administrative ability to reorganize and systematize the department and to introduce such reforms as will put an end for all time to come of the conditions at present existing."

The official disclosure of many inconsistencies renders it almost inconceivable that the present condition of affairs will be permitted to continue. Obviously, the department is one of the most important in the administration of civic affairs. There is every need for a superintendent possessing (1) technical ability that may be relied upon for accuracy and dispatch in engineering and architural details; (2) executive ability to reorganize and resystemize the department in order to make it efficient, reliable and up-to-date; (3) practical knowledge of the factors representative of the owner, the engineer, the architect, the contractor, the city and the building by-law; (4) disciplinary powers such that the practices which the present department has tolerated will immediately, without modification, cease.

Further, the responsibilities of this office are such as to require a man who will rigidly adhere to the belief that his is a department that cannot permit an invasion of foreign forces in the carrying out of its duties for the protection of life and property.

## LETTERS TO THE EDITOR.

## Artesian Water in Manitoba.

Sir,—For many years, in fact almost ever since Winnipeg has been a city, it has depended for its water supply on wells sunk through the impervious layer of boulder clay which underlies the city into a bed of porous limestone, from which water rises in great abundance. From these wells the city has been able to obtain a plentiful supply of water which, while containing a slight amount of mineral matter, is absolutely free from any hurtful bacteria, or from organic germs of any kind.

Probably no city on the continent has such a secure supply of sterile water as Winnipeg, but the city council has evidently decided that the supply is not sufficient and cannot be sufficiently increased to keep pace with the rapid growth of the population, and therefore it is said to be making arrangements to bring water from Lake of the Woods in an open aqueduct, and to take all the chances of the introduction of impurities which such a method of obtaining water necessarily entails.

Before stepping down from a safe and sterile water supply to one which may not always be safe and pure, it would be worth while to make every possible endeavor to increase the flow of pure water from the present wells.

The porous limestone into which these wells are sunk, and from which the water rises, extends to the north and west beneath a layer of boulder clay, and rises to the surface in a number of places in the country between lakes Winnipeg and Manitoba at elevations varying from about fifty to one hundred and fifty feet above the level of the prairie at Winnipeg. The rain falls on these bare rocky areas, as well as on the adjoining clay-covered country, but instead of flowing away in rills and streams, as it does on the clay-covered country, it at once sinks into the porous limestone and flows through this limestone southward and eastward until it finally reaches the surface either in the large springs north of Winnipeg or through the wells at the city of Winnipeg itself. The quantity that flows from these springs and wells is therefore largely limited to the amount of the rain-fall on those portions of the surface where the porous limestone is uncovered. Where it is covered, as it is in many places, most of the water derived from the rain either stands in small lakes and evaporates from the surface, or drains off towards Lake Winnipeg or Lake Manitoba by the many little streams which unwater the

The underlying porous limestone through which the water percolates on its way from the exposed areas northwest of Winnipeg to the wells in Winnipeg is a magnificent natural filter which is protected from contaminating influences throughout the populated parts of Manitoba by a thick covering of impervious boulder clay. No other city on the continent is provided by nature with such a filter, and no city could afford to duplicate it. When nature has provided such a magnificently covered filter as this great bed of porous limestone to clarify and purify the water used by its people, those people cannot afford, with due regard to their own health and welfare, to disregard it.

It may be that the supply of water, obtained from the wells sunk into this natural filter basin, is insufficient for a city of the size to which Winnipeg will certainly grow, but it would be well to determine, if the fact has not yet been determined, whether such insufficient supply is the fault of the inefficiency of the natural filter, or whether; as is much more likely to be the case, it may