Why Municipal Unions Should Have a Centralizing Bureau and Clearing House of Information

By CHARLES A. MULLEN *

(Continued from last issue.)

24. **Officials will trust Union:** One advantage of such an organization as this is that, if it is well managed by its members cities, the officials of each will feel that it is a place where they can secure general municipal information based on the actual experience of other cities and not having a commercial bias. Such information is difficult to secure today; and the result is that gold brick men do quite a business with municipalities, continuing to sell to other cities articles the claimed values of which make a plausible story, but that have already been tried out and found wanting. But, do not think that I am disparaging the business acumen of public officials in the above statement; many large business houses invest in the same attractive commodity.

25. **Professional services used:** The "Canadian Engineer" of October 23rd, in its editorial column, shows grave concern about what it thinks the Quebec Municipalities are about to do; but I am sure its attitude is based on a misconception of the plan. To me, it seems that more and not less professional services will be employed because of the existence of this Union. Cities will learn from their own representatives at headquarters,—whom, as I said before, they will have reason to trust,—just when and to what extent professional services are a good investment for them. Today, they do not know, and have not a sufficiently unbiased and trustworthy source of information; and they frequently go without rather than risk employing some shyster. As I said before, with this Union in the field, the way of the shyster will be hard. Also, the way of the responsible, conservative engineer, who takes his profession seriously, will be made easier. His services will be more fully appreciated and sought after by members of the Union who know definitely, through their clearing house, the quality of services he has rendered elsewhere.

26. **Not spending false Economy:** In these days, there are not more cities so narrow-minded as not to employ a proper engineering staff, but I have in mind one in Ontario whose former council thought it did not need to consult a waterworks expert when embarking upon an extensive project in this line. It required the poorly paid and overworked City Engineer to plan the work and supervise the construction; in other words, to "go it alone" in the expenditure of about a quarter of a million dollars. The waterworks were completed; but the quantity of water expected, or anything like the quantity, has never materialized. The City Engineer, overworked and underpaid, had overlooked a factor that an experienced specialist in waterworks engineering would have considered from the very start. The City had saved money; but at what a cost and waste of the municipalities' funds.

27. **Union demand more engineers:** Any engineer who has thought for an instant that the formation of this Union means the employment of less engineers, after the fashion of business consolidations, will dismiss this matter from his mind when he reads the resolution of this body, passed this morning, petitioning the Provincial Government to employ a large enough engineering staff so that provincial municipal matters will not longer be delayed because there are not enough qualified engineers in the provincial employ to give these matters prompt attention. The human race is far too much given to seeing bugaboos; the cultivation of a taste for rainbows would be far more beneficial to the health and happiness of the community as a whole and to individual professions separately.

28. **Worth while service not free:** I am quite sure that it was also a misunderstanding which led the "Canadian Engineer" to remark about the doubtful value of "free" engineering or other professional services. The Union will be paid for by its supporting member municipalities through memberships, as far as its general work is concerned; and each city will probably pay extra for special services rendered. We have never heard the engineers complain when several private corporations formed a Union of Trust and amalgamated their engineering staffs, and such combinations are far more destructive of individual initiative and competition among engineers than the Union of Quebec Municipalities could ever hope to be. This Union should have, and, I believe, once it is properly understood, will have, the hearty support of the entire engineering profusion. It will encourage courageous engineering practice when it is based on a sound knowledge of the present state of the art and a clear vision of the reasonable possibilities of the future, but it will also probably curb the number of engineering "pulp dreams."

29. **Energies applied at wrong place:** One good which the engineering profession should get out of the formation of this Union is the better application of the energies of its members. Today, many engineers are forced to undertake several different lines of work in order to make a living, and other engineers in the same district must do the same. Now the only engineer who has a right to say that he knows all there is to be known about all the many branches of engineering is the young man from the University on whose diploma the ink is not yet dry. Right after that, he should begin to acquire special knowledge in some one branch and special ignorance in most of the others; that is, he should rapidly acquire the knowledge of the extent of his ignorance in the other branches.

30. **The age of specialization:** The medical profession offers possibly a better illustration of what I have in mind than my own. There is the family doctor, and the specialists. If your family doctor offered to cut out your appendix, would you let him? Then why require your city engineer to design and construct a municipal power plant? The city engineer needs his specialists as well as does the family doctor. They are necessary to his proper functioning. One of the most famous Canadian engineers in Canada, in speaking of a special line of engineering, said to me: "Why I don't know anything at all about it." Could you have secured such an admission from the young graduate, or would the young city engineer have held his job after making it?

31. **Engineers who take a chance:** I have one particular case in mind where a firm of engineers undertook a piece of work in which they certainly were not specialists. The contract was let; and, not having an intimate knowledge of the subject, these engineers left it to the contractor to do the work in accordance with his own theories, which happened not only to be based on a limited experience and wrong, but were known by all specialists in that line to be wrong. The work, after one year, now shows signs of failure. It is bad enough to have to follow defective principles when it is not possible to follow the correct ones; it is inexcusable to do so through ignorance of those principles which have been proven correct in practice and are generally accepted among the specialists in that field of engineering.

32. **Five years is long enough:** An engineer has no right to trust a contractor in any matter connected with his professional work whatsoever. That is just what he is paid not to do. I do not mean by this that every contractor is either a thief, a scoundrel or a fool,—that would not be true,—but when I tell you, for instance, that not long ago one of the leading paving contractors said to me: "You people want to build pavements to last forever. We guarantee ours for five years, and that is long enough for any pavement to last," possibly you will agree with me that the contractor's psychology is not always such as to make him a satisfactory guardian of the public's interest. I was a contractor myself once; and I know. The man in question, however, was not a Quebec contractor; I have met some of the highest calibre contractors I have ever known right here in the City of Montreal.

33. **Five years is not enough:** Now five years is not enough for an expensive type of so-called permanent pavement to last. On the average street, it should just be getting into good condition for a long run at that time, the local defects having come to light and been repaired, and the pavement merely in the early prime of its life. Some asphalt pavements which I know, and asphalt is a comparatively inexpensive type, are already twenty, thirty, and even over forty years old, without having known much maintenance expense in the time, and still being in serviceable condition. Some pavements are scattered through many cities. Any engineering work should be so designed and constructed that the result desired will be achieved at the lowest possible relative cost, all things being considered from the owner's viewpoint, especially when that owner is the public.

(To be continued.)

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