

MUNICIPAL DEPARTMENT

NOTES ON SPECIFICATIONS FOR CAST IRON AND GAS PIPES.*

C. A. MEISSNER, Londonderry, Nova Scotia.

Another point which is equally uncalled for is the weight limit. You will note that the specification submitted calls for a variation of 5 per cent., which is a fair, honest limit, yet we constantly meet with those which allow only 2 per cent. up or sometimes 2 to 2½ per cent. variation up or down. This is, perhaps, practicable in a large works having a wide scope of customers of all different descriptions, but for the work that is demanded in these provinces, it is unjust, unfair, and unwise, as it forces the manufacturer to charge a higher price or to loose on a large percentage of the pipe made for this particular town. Every engineer who has any practical knowledge of manufacturing castings or pipe, knows how difficult it is to cast such work within such narrow limits; and where is the use of it? What difference does it make to the town to give the pipemaker a little more leeway, when the average is sure to be the same, as there will always be as many pipe above as below the average figure? And surely a few lbs. weight more or less with the average water pressure of the small systems, is not going to make the slightest practical difference in strength, particularly on a fairly heavy pipe. If a town goes in too closely for economy and orders too light a pipe, then it does not want the variation below what is probably the safety limit, but then it should allow a little more leeway upwards. This thing always reacts on the town, as it will ultimately

* Paper Read before Canadian Mining Association.

have to pay a higher price for such unnecessary restrictions.

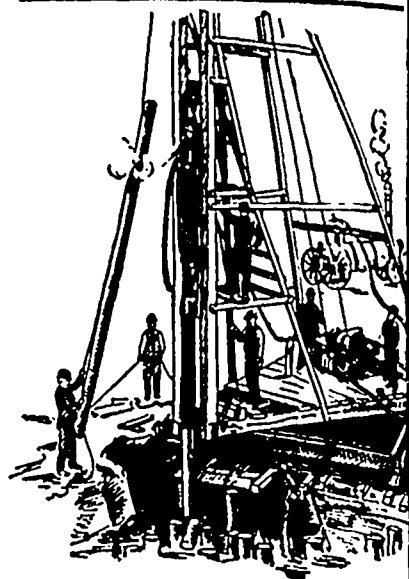
Another point that I would warn against is putting in too small a pipe for economy's sake. This is a very natural error and one frequently indulged in by small towns, and yet it is one that has invariably caused trouble and ultimately much greater expense to the citizens than would have been the case had a larger pipe been put in at first. A town should always look ahead. It is not only the present or certain individuals that have to be taken into account, but the general good, and I think there is a tendency to exaggerate individuality and to forget that it should subserve to public good, for if not, then that which is praised as strong individuality and insistence on personal rights, may become a nuisance and a serious detriment to the public good.

This question of too small pipe at the start is beginning to be fully appreciated, and when carefully considered will no doubt be avoided by future systems.

The question of testing pipe is also one that frequently is misunderstood by towns and engineers, and hence looked upon with suspicion. Pipe manufacturers, as a rule, try to honestly give their patrons good and reliable pipe; it is their interest to do so. For their own protection, therefore, they adopt a certain system, arrange all their labor and appliances accordingly, and in any well managed plant this system is followed out until it becomes mere matter of routine. So it is with testing pipe. There is a certain number of men employed to clean, tar, test and weigh the pipe. They have a certain routine to go through, and there is no reason for them to shirk any part of the work, in fact they must follow the various steps rigidly or they at once confuse their work of the department. All the work is recorded and regulated so that it soon becomes an almost automatic action to put the pipe into the hydraulic press, apply proper pressure, tap the pipe with the hammer and take it out. Each man has his station, and their fellow-labourers would see to it that each one did his particular share of the work, aside from the head

tester's, and superintendent's, constant supervision. Besides, the men picked out for testing are usually employed for their special reliability.

(To be Continued.)



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