

THE CANADIAN ARCHITECT AND BUILDER

PLUMBERS' WORK, PAST AND PRESENT.*

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It would certainly be interesting to consider, in the light of present-day practice, the methods adopted by the plumbers of old in the centuries that are gone, but in that case the subject of my paper should have been that of "Plumbers' Work, Ancient and Modern"; so for the purpose of setting out with a clear understanding of my intentions, I propose to confine my comparisons to those of my own experience and recollections during the past thirty years.

And to prevent misconceptions of any remarks that I may hereafter make, let it be understood that I propose dealing with the subject entirely from a plumber's point of view. By that I mean that, while I fully recognize and appreciate the many improvements that have taken place during the above period from a public health point of view, I look forward with pleasure to the discussion that will follow upon this proposition, viz.:—That the progress made has been prejudicial to the plumber as a craftsman, and that the whole of the benefits from such progress and improvements have been to the benefit of the public.

From a purely trade point of view, then, are these improvements to be regretted? In reply I would say, with all the emphasis possible, certainly not! If these improvements have made life any easier, or have added anything to the sum total of human happiness, we as plumbers have no right to regret that we as a trade have suffered; and considering how small a proportion we are of the people, we must stand aside, and if necessary "go to the wall," if by doing so we can in any way make those of our day and generation the better for it.

This gives rise to another thought:—Have we as a trade been fully alive to the fact that, owing to the more modern methods of manufacture, &c., the work to be done by the operative has been constantly reduced? Have we done all that we might have done to add other branches to our trade when we saw so many slipping away from us? My own opinion is that in this respect we have been somewhat lax, and we have only ourselves to blame for the position we now find ourselves in.

But I must not dwell upon this further, or my allotted time will be taken up before I approach the subject proper. I must therefore leave it with you for further elucidation in discussion.

ROOF WORK.

The first call upon the plumber in the construction of a building is when the roof is ready, and here we find a marked difference. Much lighter lead is used, and far less of it. We find valley tiles, hip and ridge tiles used in place of lead, and zinc has become a keen competitor with lead for valleys, gutters, bays and dormers. Parapet gutters, lead hips and ridges are practically a thing of the past—not that this can be attributable to the fault of the plumber or architect, but to the present-day demand for cheaply-built premises, also to the construction of concrete and asphalt flat roofs, which has removed the necessity for lead flats.

The old way of lining eaves gutters (made of wood)

with lead, and rain-water down pipes made of lead, has been entirely superseded by the extensive use of cast-iron. Lead rain water heads, and the covering of finials, gargoyles, and other ornamental finishes, has been reduced to a minimum by the use of those made of cast-iron or terra-cotta. So that it will be seen that the quantity of plumbers' work in connection with the external work of a building has been very much reduced in the period I have mentioned.

WATER SUPPLY.

The question of how the building should be supplied with water is the next consideration.

To-day all we have to ask is "Where is the main?" and then to run our pipes from the prescribed point to the various fittings we have to supply. But it was not always so. In the days before the advent of constant supplies at a sufficiently high pressure, many things had to be taken into consideration, such as the method of supply, whether from some higher point by gravitation or from the more frequent source of wells. Was it to be an ordinary pump or a lift and force pump? Was it to be a deep well pump, or was it to be supplied from rain-water storage tanks? Then the sizes and positions of the storage tanks, the rising main to them, the supply pipes from them—all this meant a great deal of work for the plumber, and in this connection the plumbers have been great losers, and the public have benefited materially.

When one realizes how difficult it is to-day to find work in a plumber's shop when work is quiet, one is forcibly reminded of the days that are gone. One can remember, when there was nothing else to go on with, the old story of, "Make up a few pumps," the burning up of the barrels, the fitting-in of copper chambers, making the spouts and the casting of the taper box-pieces; and how careful we were told to be when, as boys, we had to hold the iron bar in the sand mould, ready to swish it around, smartly and regularly, so as to get the box-pieces of an even thickness; and how, if it was successfully accomplished, our mate took all the praise, but when it turned out of uneven thickness, how the boys had to bear all the blame!

And, again, who does not remember, when the taper box-pieces were superseded by the spindle valve, how a quietness as still as death had to reign in the workshop while the valve was being fixed level in the tail pipe ready for wiping? The making of cup-leathers, the leathering of boxes, the casting and leathering of the clacks—to say nothing of the sundry journeys to the blacksmith's to see if the iron work was ready—all this has gone never to return.

The young plumber of to-day can have no conception of the amount of work the plumber had to do in connection with deep well pumps, both of the long barrel pattern and the short barrel which are fixed in the wells; the fitting of the suction and rising main pipes, the fixing and repairing of the pumping gear, sometimes involving the use of many intricate cranks and cog wheels. This was always attended to by the plumbers. He was the mechanical engineer of these jobs, and the existence of such arrangements added considerably to the plumbers' work.

The change in internal fittings has been very marked also. Instead of the well-made H.P. taps that we have now, we then had to deal with plug taps made of the

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