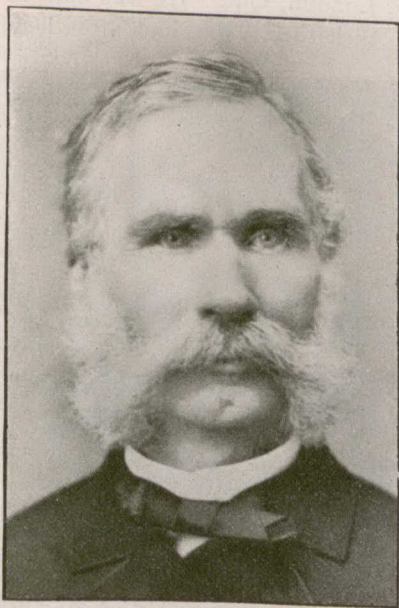


PLUMBING, OLD AND NEW.

WE are pleased to be able to present to readers of the CANADIAN ARCHITECT AND BUILDER the accompanying portrait of one of the oldest plumbers on this continent, Mr. N. McNeil, of Kingston, Ont., together with some particulars from his pen of the changes which he has witnessed during his long connection with the trade. Mr. McNeil, who is still in business in Kingston, and recognized as being fully abreast of the times, writes as follows:—

Although I have very little time at my disposal, at your request I will give you a hurried sketch of what the plumber trade was as I knew it nearly sixty years since. I commenced my seven years' apprenticeship to the trade in 1839; the indentures, fully and honorably discharged, with the signatures of the interested parties, lie before me.

Plumbers in those days were true to name—from "plumbum, plumber, a worker in lead." Lead, nothing but lead! We made our sheet lead, for which purpose



MR. N. MCNEIL, Kingston, Ont.,
A Veteran Canadian Plumber.

we had two casting frames, a large and a smaller one. We made lead pipe from 2-inch upwards—2½, 3-inch, etc., for pumps of steam engines, etc.; the seams were wiped. In the case of pipe of the above sizes for chemical works, we burned the seams. The pipe was filled with sand; one man poured lead in the seam from his ladle, another man or boy with a small stick as he poured felt for the smooth sand inside. Small sizes of lead pipe as we now know it, also sheet lead, were made in Liverpool under a patent. There was no lead pipe nor sheet lead as we see it made in Scotland—both were brought from Liverpool. Two or three years after this Messrs. Newton, Yeats & Co. started to draw lead pipe and sheet lead in Glasgow.

The art of working sheet lead is comparatively unknown to the plumber in America, as there is no roofing done here. We do not now make our soil pipe bends; at that time we made lead soil pipe, waste pipe, bends, traps, etc.

At the time I speak of the D trap was the trap in use everywhere for closets, sinks, etc. I saw several lots of D traps made as shop work. The S trap was just introduced as a new thing, and as we knew he was a good hand who could make a neat 4-inch S trap, by and by we got to make them off a solid block. Our

old friend the Dan closet was in general use, and long anterior to this date. At this time there sprung up a rival in Brama's patent valve closet; it was expensive, and its action uncertain; the ship closet of the present day is a modification of it. The Brama closet soon died out, and left the Dan closet, with all its faults, the general favorite. When speaking of this closet I may remark that my former apprentice, William Smith, of San Francisco, made some improvements in the manufacture of the Dan closet, which he patented. Presently he had to fight in the law courts for the protection of his patent with a wealthy New York firm. Smith afterwards invented the syphon jet closet, and before he could reap the reward of his labors he was again drawn into litigation, which left him without a dollar. On the completion of his apprenticeship in my shop in Kingston, he wrought at the trade in Chicago, then went to San Francisco and commenced manufacturing, and thus became identified with that city. When I revisited Glasgow in 1883 I saw Shanks' syphon tank used as a wash-out. Some time after my return I fitted up the first wash-out or National closet, and we are now elaborating that principle.

To return to my younger days again, when a comparatively young apprentice I was sent to the Highland Society's School to repair a water closet. This closet was fitted up in a small space under the pitch of a stair, with little or no head room. The tank, with ball cock, etc., was on a level with the closet. I was so taken up with the odd affair that I made a rough sketch of it, which I retain till this day. Zane's sanitary closet is, as it were, an exact copy of it, the only improvement being that it is made portable. About the same time I repaired a closet at a way station on the Wishaw & Coltness Railway, now a part of the Caledonian Railway system. That closet had a standpipe at the back which served the purpose of a tank to wash out the closet. The Felly self-acting closet, or Malcolm's closet tank, are on the same principle. Now, while it is quite likely that the idea was new to the party who got up the Zane closet, and likewise new to those who got up the Felly tank, nevertheless new ideas in plumbing work have been introduced in America which were very old and in general use in the Mother Country. As an illustration, the Unique bath, or basin waste, was old and in general use when I entered the trade. The valve and valve pipe, with overflow on same, with valve pull and plate on top, made the finish with the lever of hot and cold cock on either side. Those supplies were soldered on to the sides of the valve pipe. I fitted up baths on that principle in the Commercial Bank, Kingston, and in the Commercial Bank, Belleville, early in the fifties.

With the introduction of brass pipe at a reasonable price, those fixtures have been got up in a portable form. How slow we are in introducing new schemes after all, and with all our activity! I conveyed out to and fitted up in the Gartnavel Lunatic Asylum, Glasgow, one of the first, if not the very first, needle bath. It was made of copper pipe in the shape of a cone, perforated with fine holes towards the inside. The pipes were fixed in a vertical position, bent in towards the top. That was in 1844 or 1845.

But this must suffice. Although the plumber of today may have lost much of the cunning or art of working lead, he has to contend against a hidden law of nature that did not appear to trouble those of a former generation. The architect and the plumber, as practical