

Book of Trades, or Library of Useful Arts, The Plumbing

The book of Trades was published in 1807 with the intent of furnishing school children with an understanding of the various trades they would be confronted with when they left school, quite often after finishing the eighth grade, or when they became sixteen. In this day and age, our educational system plus our ability to disseminate information, makes books like this a curiosity rather than a learning tool. During the first half of the nineteenth century however, the information contained within these pages could have been of paramount importance to youths who did not aspire to follow in their parents' footsteps.

There are 23 different trades, or crafts covered in this small volume, all but three of which could have been of interest to local youths. The three that are excluded all pertain to seafaring or trades peculiar to maritime pursuits.

Some of these crafts seem to be completely different from those having the same name today; take for example the trade of a plumber:

"The business of the plumber consists in the art of casting and working of lead, and using it in buildings. He furnishes us with a cistern for water, and with a sink for the kitchen; he covers the house with lead, and makes the gutters to carry away the rain-water; he makes pipes of all sorts and sizes, and sometimes he casts leaden statues as ornaments for the garden." [All of the houses in Colebrook Center used to be supplied with water from the Rockwell spring, situated some 3,000 feet south of the village on the hill behind the Thompson property next to the church. Originally when laid in 1785 or 86, three foot sections of wooden pipe was used, but sometime between 1815 and 1820, a plumber by the name of Ward was hired by the Rockwells to employ the latest technology for moving water from one location to another. He set up shop in the basement of the parsonage, where he turned large sheets of lead into one-inch pipe.

This lead pipe, several thousand feet in length, continued to supply water to the entire village, including the Center School, until the 1950s.]

"The plumber also is employed in making coffins for those who are to be interred out of the common way. And besides these departments in his trade, the modern plumber makes no small share of his profits by fitting up patent water-closets. Of these there are many different kinds, and but few inventions in modern days have answered so well to the patentees of these. [In other words, once interior plumbing became available, it didn't take long before the majority of people began using the old outhouse for purposes other than what it had been built for. One of my uncles converted his into a functional smoke house.]

"The chief articles in plumbery consisting in sheets and pipes of lead, we shall briefly describe the processes of making them.

In casting *sheet-lead* a sort of table, or mould, is used, about four or five feet wide, and sixteen or eighteen feet long; it must slope a little from the end in which the metal is poured on, and the slope must be greater in proportion to the thinness of the lead wanted. The mould is spread over with moistened sand about two inches thick, and made perfectly smooth by means of a piece of wood called a *strike*. At the upper end of the mold is a pan of a triangular shape. The lead, being melted, is put by means of ladles into this pan; and when it is cool enough, two men take the pan by the handle, (or else one of

them lifts it by a bar and chain fixed to the beam in the ceiling,) and pour it into the mould, while another man stands ready with the *strike* to sweep the lead forward, and draw the over-plus into a trough ready to receive it. The sheets being thus cast, it remains only to roll them up or cut them to any particular size.”

“If a cistern is wanted, they measure out the four sides, and form any figures intended to be raised on the front in the sand, and cast as before; the sides are then soldered together, after which the bottom is soldered in.

Pipes are cast in a kind of mill, with arms or levers to turn it. The moulds are of hollow brass, consisting of two pieces, about two feet and a half long, which open and shut by means of hinges and hooks. In the middle of these moulds is placed a core or round solid piece of brass or iron, somewhat longer than the mould. This core is passed through two copper rundles, [small round objects, like spokes of a ladder] one at each end of the mould, which they serve to close; to these is joined a little copper tube two inches long, and of the thickness of the intended leaden pipe. These tubes retain the core exactly in the middle of the cavity of the mould, and then the lead is poured in through an aperture in the shape of a funnel. When the mould is full, a hook is put into the core, and, turning the mill, it is drawn out, and the pipe is made. If it is to be lengthened, they put one end of it in the lower end of the mould, and the end of the core into it, then shut the mould again, and apply its rundle and tube as before, the pipe just cast serving for a rundle, etc. at the other end. Metal is again poured in, which unites with the other pipe, and so the operation is repeated till the pipe is of the length required.”

“Large pipes of sheet-lead are made by wrapping the lead on wooden cylinders of the proper length, and then soldering it up the edges.

In this country [the original text was written in Great Britain for use there.] it is not infrequent that the business of glazier, plumber, and painter is united under the same person; but the plumbing trade is of itself, in London, reckoned a very good one for the master. The health of the men is often injured by the fumes of the lead. Journeymen earn about thirty shillings a week [a little over \$7.00]; and we recommend earnestly to lads brought up to either of the before mentioned trades, that they cultivate cleanliness and strict sobriety, and that they never, on any account, eat their meals, or retire to rest at night, before they have well washed their hands and face.