T. J. Harrison.

Bending Gas and Water Pipes.

No. 80,069. Patented Jul. 21, 1868.

Fig: 1.

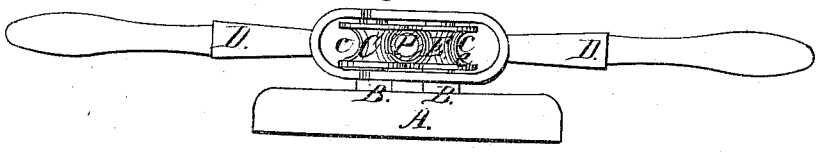


Fig: 2.

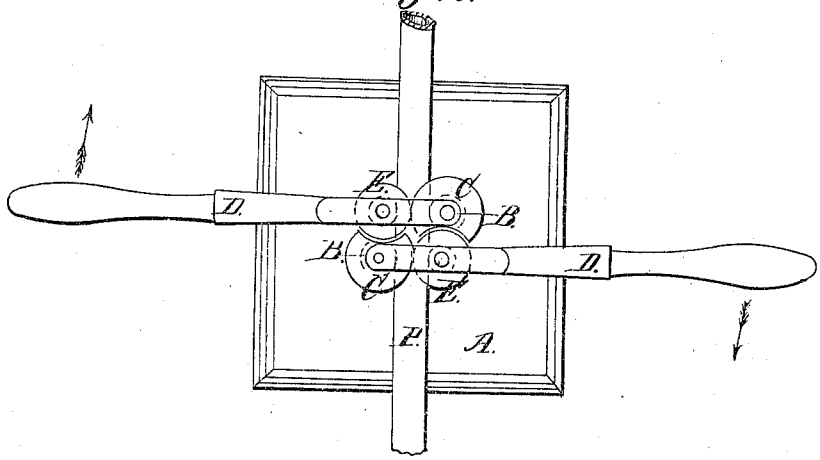
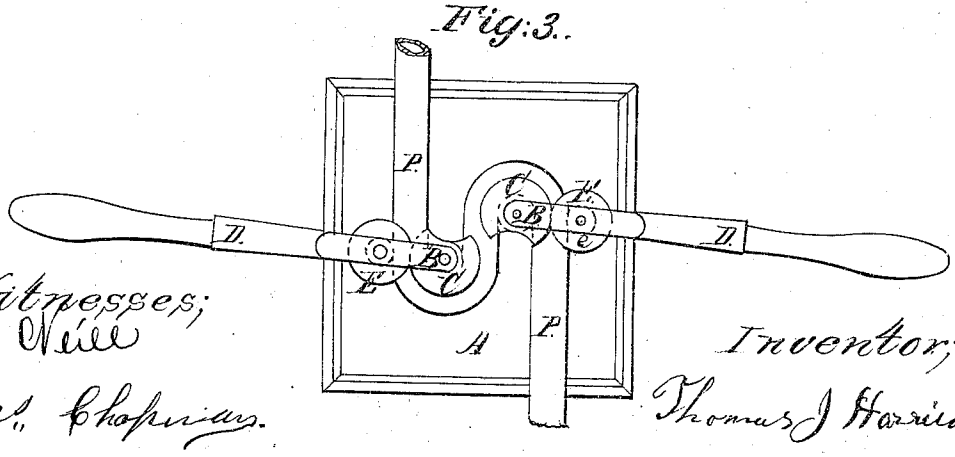


Fig: 3.



Witnesses;
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United States Patent Office.

THOMAS J. HARRISON, OF NEW YORK, N. Y., ASSIGNOR TO HIMSELF AND GEORGE ALLIN, OF SAME PLACE.

Letters Patent No. 80,069, *dated July* 21, 1868.

IMPROVED MACHINE FOR BENDING PIPE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS J. HARRISON, of the city, county, and State of New York, have invented a new and useful Machine for Bending Pipe for stench-traps and like purposes; and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, of which—

Figure 1 represents a side elevation of the mechanism employed for the purpose of carrying out my invention.

Figure 2 a top view of said mechanism.

Figure 3 shows the mechanism with the pipe bent in the form of the letter S for a stench-trap.

This invention relates to a novel device for bending pipe, and especially to wrought-iron and lead pipes when used for stench-traps and like purposes; and consists of a pair of bifurcated hand-levers pivoted on stationary formers, and having rollers pivoted in their forked ends, both formers and rollers being formed with semicircular recesses, corresponding to the contour of the pipe which they embrace, (see fig. 1,) so that as the levers are swung round the stationary formers, they carry the forming-rollers with them, bending the pipe at the same time to the desired form, as shown in fig. 3.

In the said drawings, A denotes a platform, on which are placed two posts B B, which sustain two stationary blocks or formers C C. These blocks are cylindrical, and have semicircular recesses *c c*, corresponding to the contour of the pipe P, to be bent round them, and are embraced by two bifurcated hand-levers D D, which are pivoted at their inner or forked ends on the posts B B, which sustain the stationary formers, (see figs. 1 and 2.) These levers D D also embrace two rollers E E, having recesses *e e*, similar to the recesses in the formers C C, said rollers being pivoted in the bifurcated ends of the levers, and carried round the stationary formers, with the levers as they swing round said formers, and the formers C C may rotate on the posts B B if preferred.

It is well known to persons engaged in the manufacture of pipe, that to make a piece of pipe of the form S for a stench-trap, a pattern is laid on a sheet of lead, and the piece, when cut from the pattern, hammered or swaged in concave form, and a similar piece being so prepared, both are placed together and soldered, the process consuming much time and expense, besides requiring a skilful mechanic to make good joints.

The operation of my invention is very simple, and is as follows:

I take a piece of pipe, P, of the desired diameter and length, and I place the same between the stationary formers B B and the rollers E E, (see fig. 2,) and I next take the hand-levers D D, and alternately or simultaneously force them in the direction of the arrows, when the pipe P will be bent to the form shown in fig. 3.

Instead of the hand-levers herein shown, other means may be employed to rotate the rollers E E around the stationary formers C C, and the principle remain the same.

Having described my invention, I would disclaim as new any of the specific parts herein mentioned; but

What I do claim, and desire to secure by Letters Patent, is—

The arrangement herein described of the formers C C, rollers E E, and bifurcated levers D D on the platform A, in the manner substantially as and for the purposes described and set forth.

In testimony whereof, I have hereunto set my signature, this 12th day of May, A. D. 1868.

THOMAS J. HARRISON.

Witnesses:

A. O'NEILL,

JAS. CHAPMAN.