

T. F. STEVENSON.

MANUFACTURE OF LEAD TRAPS.

No. 176,372.

Patented April 18, 1876.

Fig. 1.

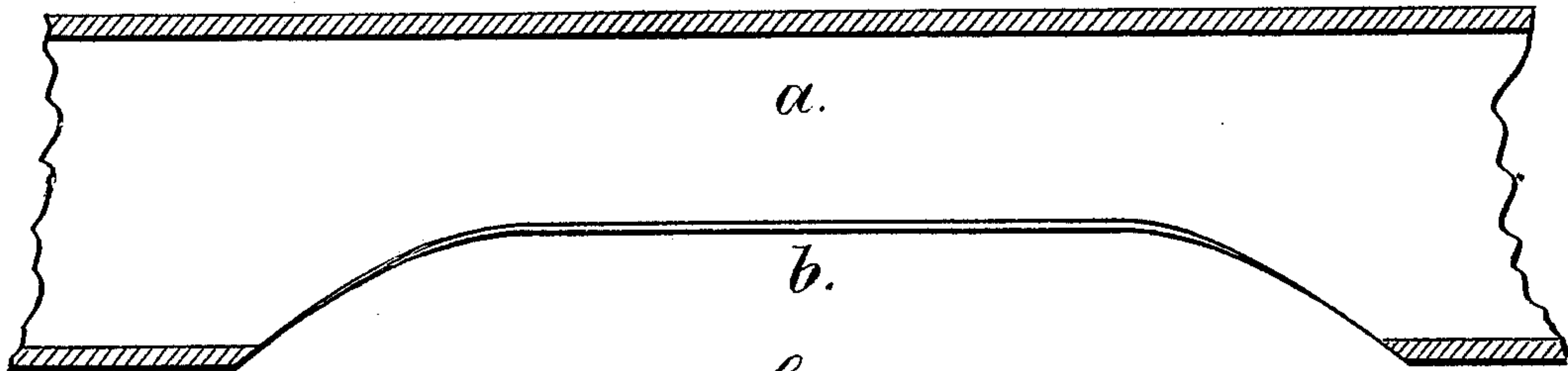


Fig. 2.

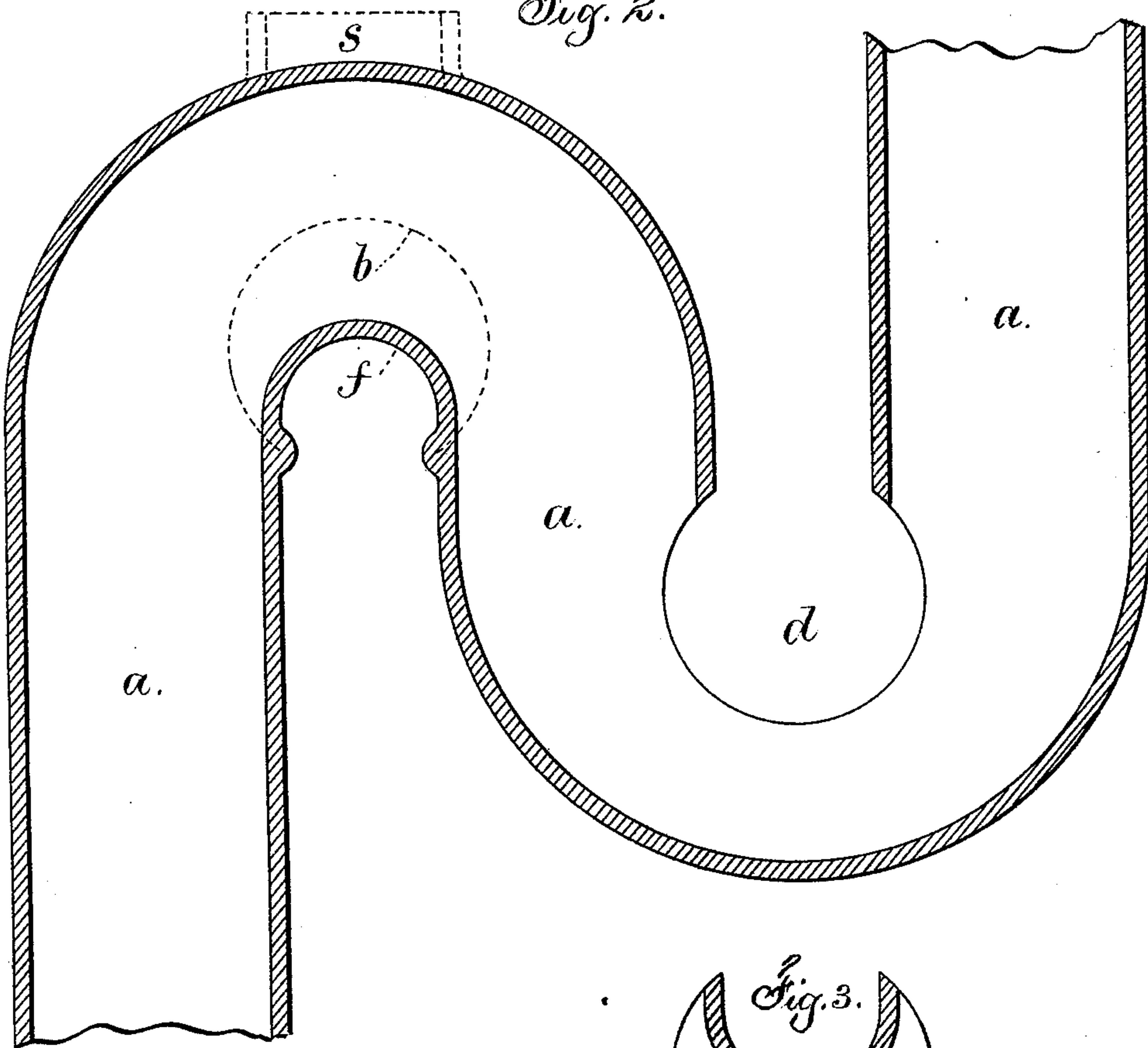
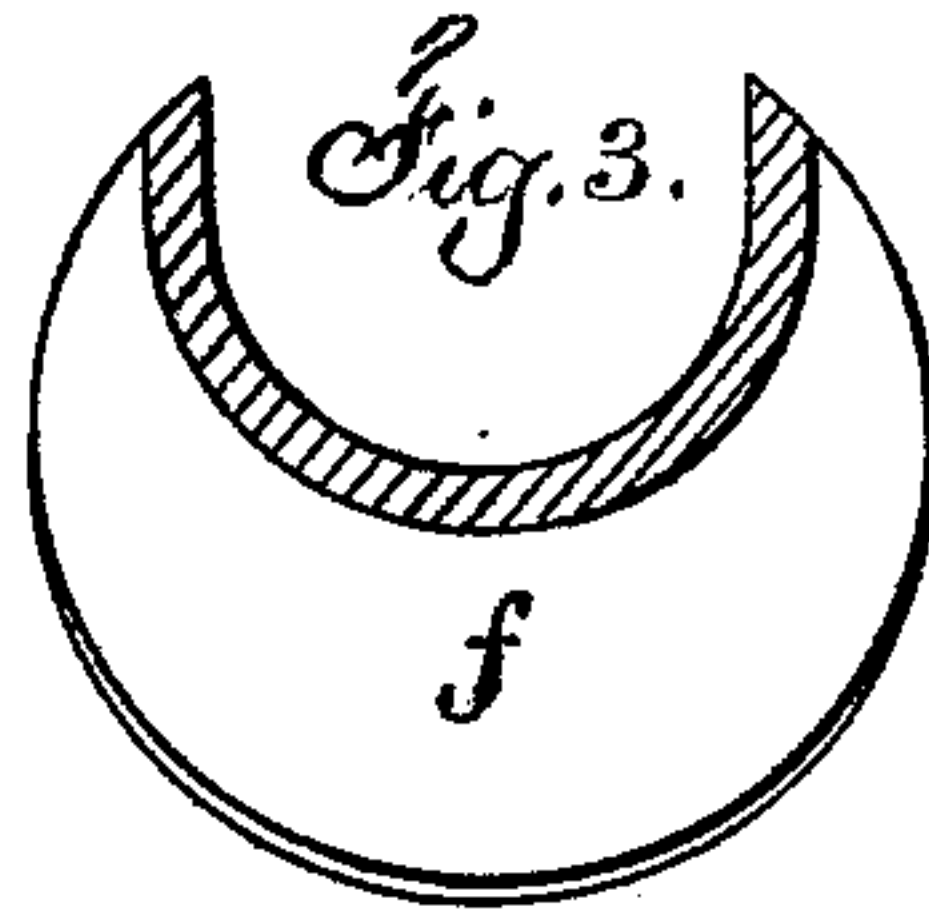


Fig. 3.



Witnesses,

Chas. H. Smith
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Inventor.

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per Lemuel W. Perrell atty

UNITED STATES PATENT OFFICE.

THOMAS F. STEVENSON, OF BROOKLYN, NEW YORK.

IMPROVEMENT IN THE MANUFACTURE OF LEAD TRAPS.

Specification forming part of Letters Patent No. **176,372**, dated April 18, 1876; application filed January 15, 1876.

To all whom it may concern:

Be it known that I, THOMAS F. STEVENSON, of Brooklyn, in the county of Kings and State of New York, have invented an Improvement in Lead Traps and Bends, of which the following is a specification:

It is well known that lead pipe manufactured by hydraulic pressure is the strongest and most dense form in which such lead pipe can be made; that it is easily bent and very smooth; that it is free from flaws and not liable to split.

Efforts have been made to produce lead traps and bends from pipe of this character, but the metal is generally reduced in thickness at the outer part of the curve, where it is exposed to the principal strain or wear, and rendered unnecessarily thick in the inner part of the curve.

My invention relates to the mode of manufacturing traps and bends from ordinary lead pipe. I effect the same by opening the lead pipe at the side that forms the smaller curve of the bend, then bending the pipe around to the shape intended, and giving the same a perfect form within a mold by pressure applied by suitable tools introduced at the opening in the pipe, and then applying a cap-piece to said opening and uniting the edges by solder or otherwise. By this construction the trap or bend possesses all the qualities of the ordinary lead pipe, and the cap-piece is applied at the inner side of the bend, where it is protected and not liable to be injured.

The interior of the trap is smooth and free from roughness that causes obstructions to remain therein, and the pipe is as thick as usual upon the exterior of the bend, and in many instances this mode of manufacture increases the thickness of the metal.

In the drawing, Figure 1 shows a piece of pipe cut out ready to be bent. Fig. 2 shows the trap sectionally with one of the cap-pieces inserted, and Fig. 3 shows the cap-piece sectionally.

The pipe *a* is of the proper size, and when two bends are to be made in it portions of the metal are removed at opposite sides, but if only one bend is to be made it will only be necessary to open the pipe at one side.

In Fig. 1 the metal is shown as removed at *b* to form one of the bends shown in Fig. 2, and in this Fig. 2 the second bend is shown with the metal removed at *d*.

The opening at one side of the pipe allows the same to be easily bent around into any desired curve without undue strain upon the metal, because the edges of the metal at the opening are free. The curvature of the pipe is rendered accurate by a concave mold, into which the pipe is placed and pressed by any suitable tools inserted within the opening at the inner portion of the bend.

The act of bending the pipe partially closes the opening, so that the cap-piece *f* is not as large as the piece that has been cut out of the pipe, and I remark that the edges of the pipe at the opening may be dressed up to any desired shape for receiving the cap-piece, and the cap-piece may be shaped as a segment of a bent tube or otherwise to fit the opening, and the edges of the cap-piece are to be secured to the edges of the pipe by solder or by burning the parts together.

A recess for a trap-screw may be pressed up from the pipe (as seen by dotted lines at *s*, Fig. 2,) before the cap-plate is attached.

I claim as my invention—

The method herein specified of making traps or bends by opening the pipe at the inner side of the curve and then bending the pipe to shape and closing said opening with a cap-piece, as set forth.

Signed by me this 7th day of January, A. D. 1876.

THOS. F. STEVENSON.

Witnesses:

GEO. T. PINCKNEY,
CHAS. H. SMITH.