

(No Model.)

W. C. CRONMEYER.
LOCK FOR SHEET METAL PIPES.

No. 564,147.

Patented July 14, 1896.

Fig. 1.

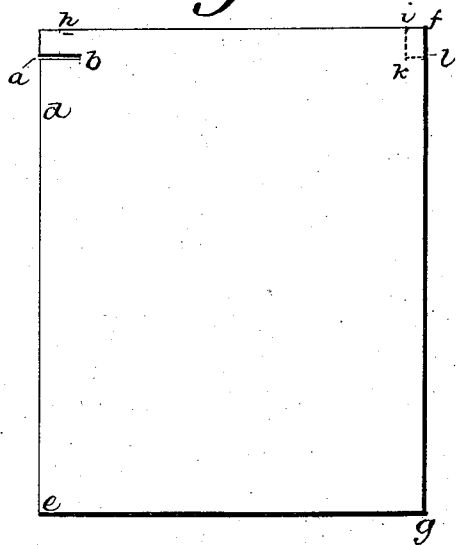


Fig. 2.

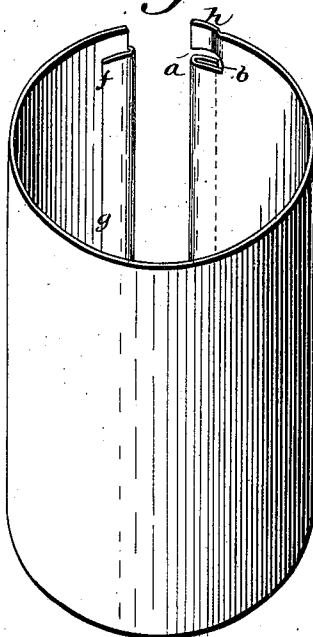


Fig. 3.

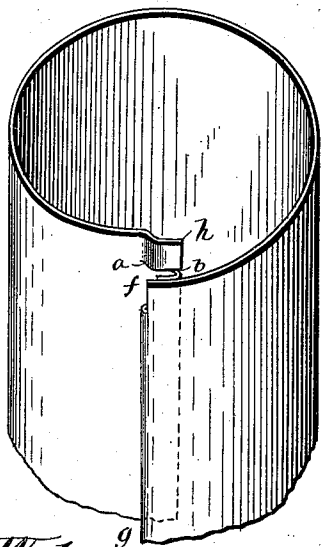
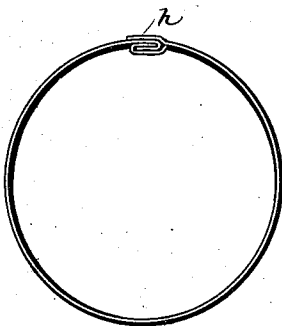
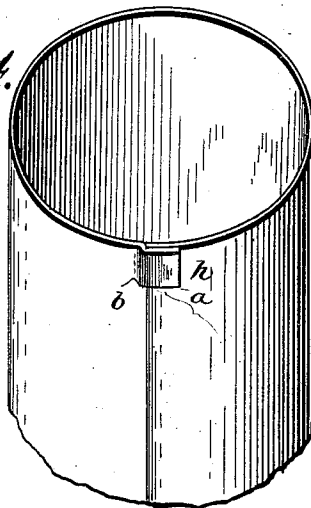


Fig. 4.



Witnesses:

J. B. McGirr.
J. D. Danell.

Fig. 5

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UNITED STATES PATENT OFFICE.

WILLIAM C. CRONEMEYER, OF VERSAILLES, PENNSYLVANIA.

LOCK FOR SHEET-METAL PIPES.

SPECIFICATION forming part of Letters Patent No. 564,147, dated July 14, 1896.

Application filed March 20, 1896. Serial No. 584,122. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM C. CRONEMEYER, a citizen of the United States, residing in Versailles township, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Locks for Sheet-Metal Pipes; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has relation to lock-seams for sheet-metal pipes, and has for its object the provision of a novel form of lock which may be readily and simply constructed out of and as a part of the sheet metal from which the pipe is formed without waste of material, which may be readily operated to lock up the end of the seam of the pipe, and which will prevent the end of the pipe on which it is formed from collapsing when adjacent sections of the pipe are joined together.

My invention consists in the novel construction, combination, and arrangement of parts hereinafter described and claimed.

In the accompanying drawings, illustrating my invention, Figure 1 is a plan view of a flat sheet of the metal from which the pipe is to be formed. Fig. 2 is a perspective view of the same sheet formed up, but with the seams unjoined. Fig. 3 is a perspective view showing the pipe in the position assumed when the folded edges have been joined and before locking. Fig. 4 is a perspective view showing the complete section of the pipe ready for use. Fig. 5 is an end view of the finished pipe-section shown in Fig. 4.

In forming my improved lock I take the flat sheet of metal shown in Fig. 1 of the drawings and cut a slit *a b* near the upper corner of that side which is to form the outward-turned edge of the pipe. I then fold the edge *d e* of the sheet outwardly from the slit *a b* to the bottom of the sheet and fold the edge *f g* of the sheet inwardly, and then form up the sheet to the cylindrical or other desired shape, and then bend the tang or tongue *h*, which is left between the slit *a b* and the upper edge of the sheet, twice at right angles, or substantially so, so that the tongue *h* will project upon the outside of the inwardly-turned edge *f g* when the pipes are

joined together, as shown in Fig. 5. If necessary or desirable, a portion of the inwardly-turned edge *f g* is cut off on the dotted line *i k l*, so as to give a sharp bearing edge for the tongue *h*.

When the sheet has been formed up, as described, to the shape shown in Fig. 2, the inwardly-turned edge *f g* is slipped over the outwardly-turned edge *d e*, so as to lock with the outwardly-turned edge, the pipe being skewed, as shown in Fig. 3, so that the tongue *h* is above the adjacent edge *f g*, and the pipe is then straightened, bringing the tongue down over and outside the edge *f g* to the position shown in Figs. 4 and 5 and completing the locking of the seam. The peculiar shape of the tongue is such that it opposes a shoulder to the adjacent inwardly-turned edge *f g*, and also embraces the edge, so as to prevent the locked edges from disengaging or collapsing when in service.

The pipe-lock constructed as described is cheap, adding little or nothing to the cost of manufacture. The operation of locking up the pipe is effected without trouble, and the lock described constitutes a simple and effective fastening device for the end of the seam and obviates the employment of rivets or other devices for preventing collapse of the adjacent joined ends of the pipe-sections.

Having described my invention, I claim—

A section of stovepipe made from a sheet of metal having a transverse slit *a b* cut near one of its ends, forming a tongue *h*, which is bent twice at right angles, the longitudinal edge of the sheet wherein said slit is cut being bent or beaded outwardly as at *d e* and the other edge bent or beaded inwardly as at *f g* to form an interlocking joint the slit *a b* being cut deeper than the width of the bead *d e* and the parts being so arranged that when the longitudinal edges interlock, the shoulder of the tongue *h*, will oppose the inwardly-turned edge of the sheet and the projecting portion overlap said edge on the outside, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM C. CRONEMEYER.

Witnesses:

DANIEL STRATTON,
WM. SIEBER.