(No Model.)

B. F. CALDWELL.

STOVE PIPE.

No. 354,390. Patented Dec. 14, 1886.

Fig. 1.

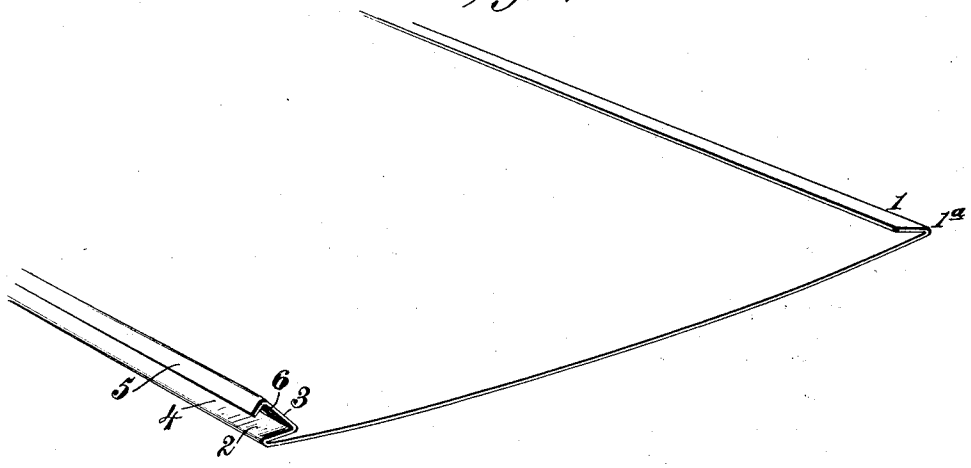


Fig. 2.

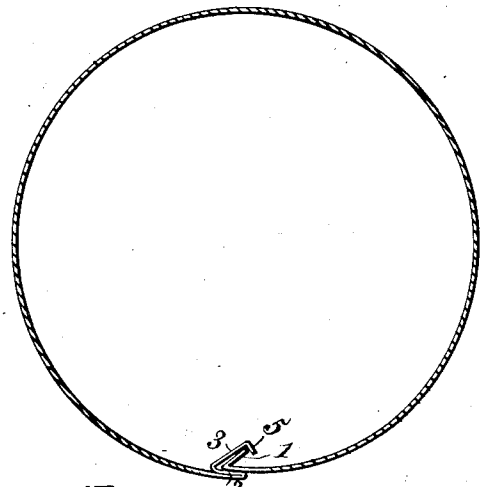
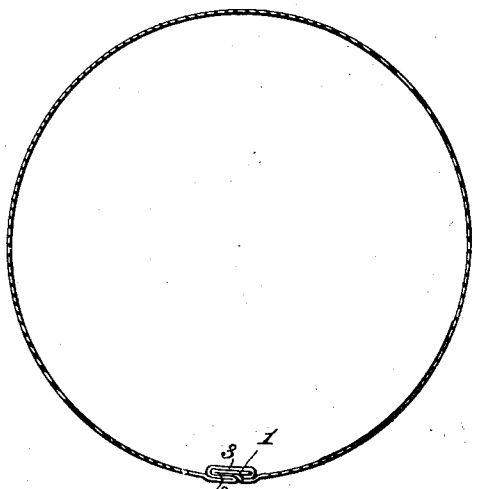


Fig. 3.



Witnesses.
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UNITED STATES PATENT OFFICE.

BENJAMIN F. CALDWELL, OF WHEELING, WEST VIRGINIA.

STOVE-PIPE.

SPECIFICATION forming part of Letters Patent No. 354,390, dated December 14, 1886.

Application filed July 10, 1886. Serial No. 207,692. (No model.)

To all whom it may concern:

Be it known that I, BENJAMIN F. CALDWELL, a citizen of the United States, residing at Wheeling, in the county of Ohio and State of West Virginia, have invented new and useful Improvements in Stove-Pipes, of which the following is a specification.

This invention relates to the manufacture of stove-pipes, and has for its object to provide a stove-pipe having a novel and efficient connecting joint or seam for the longitudinal edges of the blank.

To such ends the invention consists in the features and construction hereinafter described and claimed, reference being made to the accompanying drawings, in which—

Figure 1 is a perspective view of a blank for a section of stove-pipe having its edges bent and formed according to my invention for making the interlocking connecting joint or seam. Fig. 2 is a transverse sectional view of the blank brought into stove-pipe form and having the edges folded and in position prior to the folds being compressed to complete the connecting joint or seam, and Fig. 3 a similar view showing the folds compressed and the connecting joint or seam complete.

In the manufacture of stove-pipes which are cylindrical or of other form in cross-section the sections are composed of rectilinear blanks of sheet metal having their longitudinal edges interlocked to form a connecting-seam. This has been effected by various joints prior to my invention; but I have devised a simple construction of the longitudinal edges of the sheet metal pipe-blank, whereby after the blank is brought into pipe form the peculiar locking joint or seam can be completed at any time by simply pressing the folds thereof together by means of any suitable implement.

Where no solder or brazing is employed to complete the seams or joints in ordinary stove-pipes, they are sometimes completed by employing separate fastening devices passing through the folded edges of the pipe-sections, or by folding and slotting one edge and providing the other edge with tongues passing through the slots and bent down.

Instead of soldering or brazing or using separate fastenings or tongue-and-slot connections, I employ the construction which I will now describe in detail.

One longitudinal edge of the sheet-metal blank is bent to form a flange, 1, standing at an acute angle to the blank to form what might be termed a "V-shaped edge," 1ª, and the opposite longitudinal edge of the blank is first folded upon itself to form a strip or flange, 2, parallel, or approximately so, to the body of the blank and in contact therewith, constituting an edge of two thicknesses, such strip or flange being then bent outward obliquely, as at 3, to constitute a V-shaped recess, 4, with the edge of the oblique strip or bend 3 formed into a pendent flange, 5. The blank so formed is brought into cylindrical or pipe form and the V-shaped edge 1ª entered into the V-shaped recess 4 in such manner that the flange 1 is approximately parallel to the oblique bend 3, and the edge of said flange 1 bears against the base or angle 6, forming the flange 5 on the oblique bend, all as shown in Fig. 2. The parts are now in proper position to be pressed together, and thereby interlocked, which can be accomplished by any suitable contrivances, such as a mandrel and pressing-rollers. In pressing the bends and flanges together the flange 5 of the oblique bend 3 passes under the flange 1 and between it and the body of the blank at one edge, and the oblique bend 3 is pressed down with the flange 1 into a plane substantially parallel to the plane of the pipe-section, the whole constituting a lock joint or seam which cannot be separated except by extraordinary force.

The blanks having their edges constructed as described, and shown in Fig. 1, can be kept in stock and the pipes subsequently produced by the method set forth of bringing the folded parts together; or the V-shaped edge of the blank may be introduced into the V-shaped recess 4, when the parts will be temporarily held by the edge of the flange 1 bearing against the base or angle 6 of the flange 5 on the oblique bend 3, after which the parts can be pressed together at any time to complete the lock-joint.

Having thus described my invention, what I claim is—

As an article of manufacture, a stove-pipe

having the interlocking joint or seam herein described, the same consisting in having a fold, 1, at one edge resting upon a fold, 2, at the other edge and between such fold, and a strip or bend, 3, having a flange, 5, extending around and under the fold 1, substantially as described.

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

BENJAMIN F. CALDWELL.

Witnesses:
P. H. MOORE,
WM. H. STELLE.