(No Model.)

# T. DAVIDSON.

## STOVE PIPE OR OTHER SHEET METAL CYLINDER.

No. 437,981. Patented Oct. 7, 1890.

Fig. 1

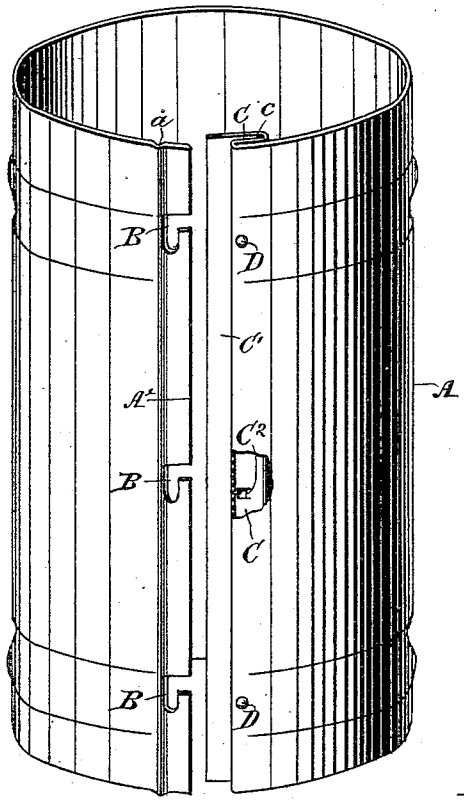



Fig. 5

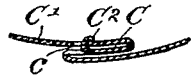



Fig. 3




Fig. 4

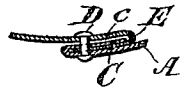
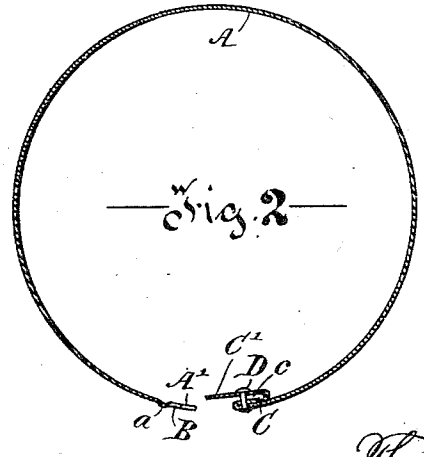



Fig. 2




Witnesses
Will. P. McFeat.
Fred. J. Sears.

Inventor
Thomas Davidson
By his Attorney
Raiffy. Lyons

THE NORRIS PETERS CO., PHOTO-LITHO., WASHINGTON, D. C.

# UNITED STATES PATENT OFFICE.

THOMAS DAVIDSON, OF MONTREAL, CANADA.

## STOVE-PIPE OR OTHER SHEET-METAL CYLINDER.

SPECIFICATION forming part of Letters Patent No. 437,981, dated October 7, 1890.

Application filed June 28, 1890. Serial No. 357,148. (No model.) Patented in Canada June 10, 1890, No. 34,504.

*To all whom it may concern:*

Be it known that I, THOMAS DAVIDSON, of the city of Montreal, in the District of Montreal and Province of Quebec, Canada, have invented certain new and useful Improvements in Stove-Pipes or other Sheet-Metal Cylinders, (for which I have already obtained Letters Patent of the Dominion of Canada, No. 34,504, bearing date June 10, 1890;) and I do hereby declare that the following is a full, clear, and exact description of the same.

This invention relates specially to the means by which the meeting edges of a sheet-metal blank bent into the shape of a cylinder, as in the case of a stove-pipe, are joined together, so that the several lengths shaped but still remaining open at the junction of their meeting edges, may be nested together for shipment, so as to occupy the least possible space, and when required, these meeting edges can easily be joined so as to form the complete length ready for use. I propose to effect this by forming on one edge of the blank one, two, or more suitable slots. The other edge of the pipe is formed into a double fold inside, either in the substance of the pipe itself or by the addition of a separate strip, a rivet in both cases passing through the thicknesses of the material and being riveted on the outside surface, so that when the other edge of the length enters between the folds of this folded edge these rivets can be slipped into and locked in the slots.

Instead of using a rivet as the locking device I may employ a tongue formed by cutting it out of the sheet-iron of the folded part, putting it through a slot in the return fold and fixing it on the other side by bending it over.

For full comprehension of the invention, reference must be had to the annexed drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a length of stove-pipe embodying my invention, with the edges apart; Fig. 2, a sectional plan view of same; Fig. 3, a detail section of the junction of the edges; Fig. 4 a similar detail of modification, showing separate pieces forming part of fold; and Fig. 5 a like figure showing tongue-locking device.

Like symbols indicate the same parts.

A is the body of the metal forming the length of pipe, and *a* a projecting ridge, which may be formed on it at the distance from one edge A′ of the depth of the fold on the other edge of the blank, and in the substance of the metal between such ridge and the edge proper are cut one, two, or more suitably-shaped slots B. The other edge is formed into a double fold C C′, the latter part C′ projecting far enough to form a double lap when the edges are brought together and to guide and facilitate the entrance of the other edge into the fold or pocket *c* between C and C′, and D D are rivets passing through these and the metal of A, and serving, when passed into the slots B, to lock the edges together and form a perfect length of pipe, the edge A′ lying between the folds C C′ in the pocket *c* and the latter C′ being behind the edge A′.

In the modification shown in Fig. 4, the fold C is shown in combination with a separate folded strip E, and all secured together by the rivets D D, the whole acting precisely in the same way as the construction shown in Fig. 3.

In Fig. 5 and where the shell is broken away in Fig. 1 is shown how the fastening may be effected without the rivet, $C^2$ being a tongue struck up from C and passed through a slot in the fold C′. It will be seen that by this construction, which affords a very simple and effective way of joining the edges together and completing the pipe, several lengths can be "nested" together and thereby the shipment of it facilitated.

It will of course be understood that although I have in the foregoing alluded more particularly to stove-pipes, the invention is applicable in all cases in which a cylinder is made of sheet metal. It will also be seen that the several lengths of pipe making up a chimney-connection can be fastened together in precisely the same way that the edges of the individual lengths are secured.

On one end of the section of pipe may be formed, as before described, a seat or seats comprehending any desired portion of the circumference of the lower end of the pipe-length into which the edge of the end having the smaller diameter can be introduced, rivets connecting these to the pipe. The entering-edge has formed in it, as hereinbefore set

forth, slots into which the rivets can enter and be locked by turning either of the lengths.

What I claim is as follows:

1. A stove-pipe or other cylinder-blank having one edge formed into a double fold so as to afford a seat for the other edge, a stud, studs, or transverse locking devices carried by or formed in such fold, and slots formed in the introduced edge in which such studs lock, all as herein set forth, and for the purposes described.

2. A stove-pipe length having inside one end two or more lengths of fold forming seats or pockets and connected to pipe by rivets and corresponding slots formed in the other end, all as and for the purposes herein set forth.

THOS. DAVIDSON.

In presence of—
WILL. P. MCFEAT,
FRED. J. SEARS.