(No Model.)

J. M. DAVIDSON & W. H. FLENDER.

SHEET METAL PIPE.

No. 450,142. Patented Apr. 14, 1891.

Fig. 1.

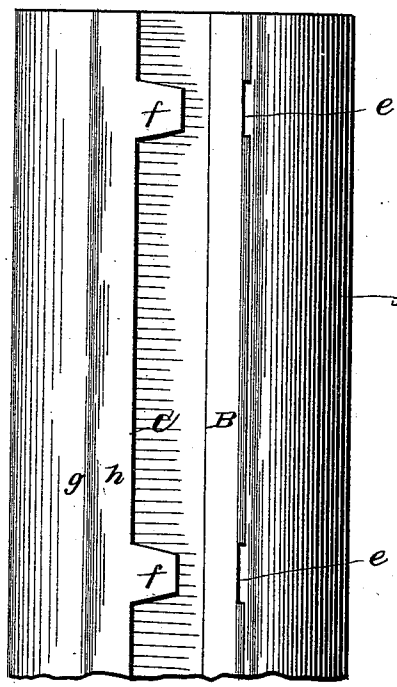


Fig. 2.

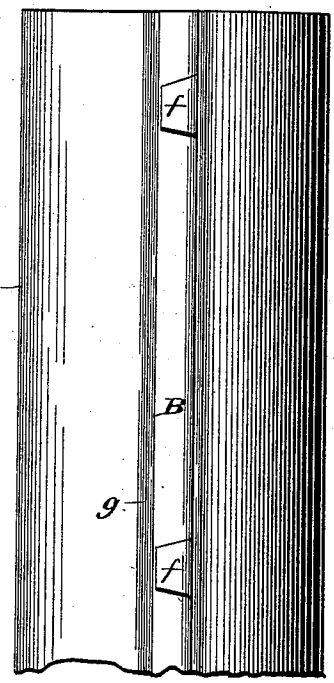


Fig. 3.

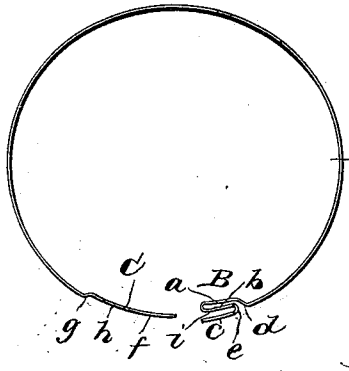
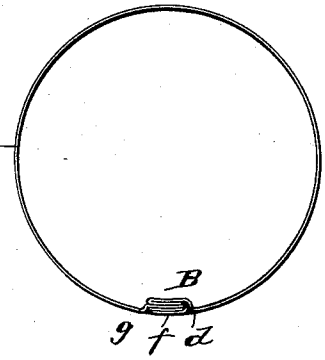


Fig. 4.



Witnesses

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UNITED STATES PATENT OFFICE.

JOHN M. DAVIDSON AND WILLIAM H. FLENDER, OF ALLEGHENY, PENNSYLVANIA; SAID FLENDER ASSIGNOR TO SAID DAVIDSON AND G. W. REEP, OF SAME PLACE.

SHEET-METAL PIPE.

SPECIFICATION forming part of Letters Patent No. 450,142, dated April 14, 1891.

Application filed June 6, 1890. Serial No. 354,495. (No model.)

To all whom it may concern:

Be it known that we, JOHN M. DAVIDSON and WILLIAM H. FLENDER, citizens of the United States, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Sheet-Metal Pipes; and we 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.

Our invention relates to sheet-metal pipes, such as stove-pipe or water-conductors, and has for its object an improved construction of the seam, whereby the pipe may be nested for shipment (thus economizing space) and readily put together and the seam secured at any place where it is desired to use the pipe without the use of special machinery or tools for the purpose.

The invention will be hereinafter described, and particularly pointed out in the claims.

In the accompanying drawings, which form part of this specification, Figure 1 represents a side elevation of a joint of pipe with our improved seam unclosed; Fig. 2, a similar view with the seam closed; Fig. 3, an end view of Fig. 1, and Fig. 4 a similar view of Fig. 2.

Reference being had to the drawings and the letters thereon, A indicates a joint of pipe made of sheet metal and provided on one of its edges B with a double fold, in which are the members *a b c* and an offset or bend *d*. In the fold formed by the members *b c* are apertures *e e*, with which the tongues *f*, projecting from the opposite edge C engage. The edge C enters the recess formed in the edge B by the folds *b c*, and thus forms a tight seam, which will prevent the escape of a fluid or liquid. An offset or bend *g* is formed at the base of the member *h* on the edge C of a depth corresponding with the thickness of the member *c* on the edge B, which with the bend *d* in the edge B, forms a plain smooth external surface of the pipe.

To make the seam in the pipe the tongues *f f* are inserted in the apertures or slots *e e*, and the member *h* in the space *i* between the members *b c* until the parts are seated in each other, when the tongues *f f* are bent back over the fold on the edge B and the seam securely locked. The seam thus formed may be opened at any time desired by simply bending the tongues *f f* back into their original position and separating the parts. The double fold on the edge is formed easily and readily in a "brake," and the tongues *f f* are cut by a suitable stamp.

When it is desired to pack a quantity of the pipe for shipment, the seams are left open and any desired number of joints "nested."

The pipe thus constructed can be put together at its edges and secured by unskilled persons and by the use of such tools as are usually found in every house or place of business.

Having thus fully described our invention, what we claim is—

1. A joint of sheet-metal pipe having a fold the length of the joint on one edge provided with slots in the bend of the fold, an unbroken opposite edge the length of the fold, and tongues projecting from said opposite edge, constructed to enter said slots and be bent back over said fold, substantially as described.

2. A joint of sheet-metal pipe having a double fold the length of the joint on one edge provided with slots in the bend of one of the folds, and the opposite edge constructed to enter the space between the members of said fold throughout its length and provided with tongues to enter said slots and to be bent back over the fold, substantially as described.

3. A joint of sheet-metal pipe having a double fold the length of the joint on one edge, an offset, and slots in the bend of one of the folds, and an unbroken edge having tongues thereon and an offset, substantially as described.

In testimony whereof we affix our signatures in presence of two witnesses.

J. M. DAVIDSON.
W. H. FLENDER.

Witnesses:
A. FRASER LEGGATE,
W. C. SLAUGHTERBECK.