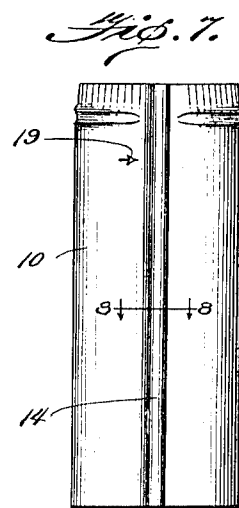
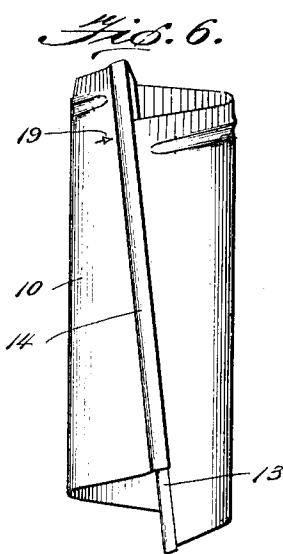
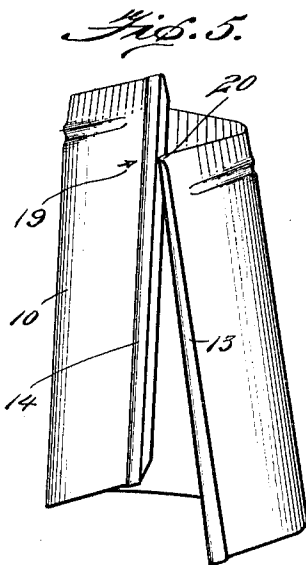
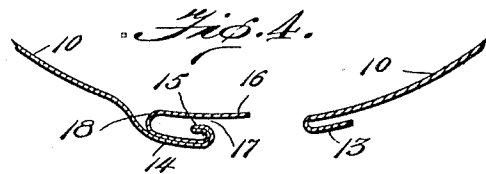
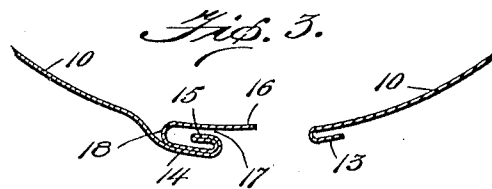
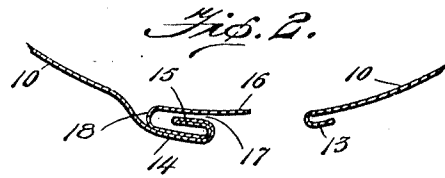
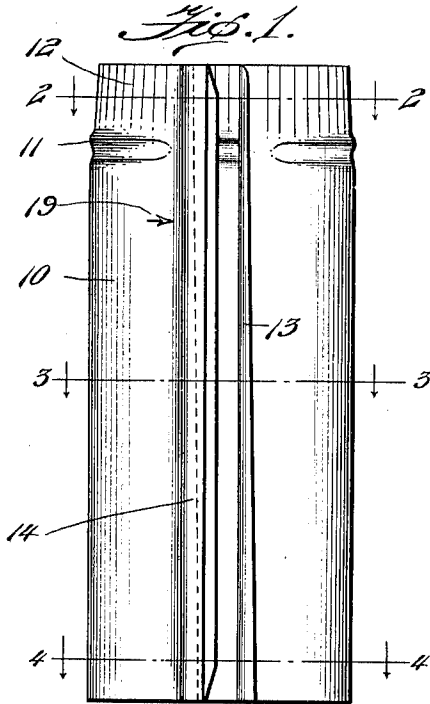


B. D. FUDGE.
SHEET METAL PIPE.
APPLICATION FILED JAN. 2, 1913.

1,061,739.

Patented May 13, 1913.



Witnesses
B. M. Offutt,
B. M. Kent

Fig. 8. *Benjamin David Fudge*
by *Frederic Freeman Watson & Co.*
Attorneys

UNITED STATES PATENT OFFICE.

BENJAMIN DAVID FUDGE, OF BAINBRIDGE, GEORGIA.

SHEET-METAL PIPE.

1,061,739.

Specification of Letters Patent.

Patented May 13, 1913.

Application filed January 2, 1913. Serial No. 739,840.

To all whom it may concern:

Be it known that I, BENJAMIN D. FUDGE, a citizen of the United States, and resident of Bainbridge, Decatur county, Georgia, have invented certain new and useful Improvements in Sheet-Metal Pipe, of which the following is a specification.

This invention relates more particularly to stove pipes and has for one of its objects the provision of a pipe section which may be conveniently nested with similar sections for the purpose of making a more compact arrangement for transportation.

A further object of the invention is to provide a pipe section the edges of which may be readily interlocked by an unskilled person and when so interlocked form a pipe which is generally similar to the pipe sections commonly used and in which it is impossible to disengage the interlocked edges without unbending the same.

Other objects and the features of novelty will be apparent from the following description taken in connection with the accompanying drawings of which—

Figure 1 is an elevation of a pipe section embodying my invention, the interlocking edges of the section being disengaged and slightly separated; Fig. 2 is a transverse section on the line 2—2 of Fig. 1; Fig. 3 is a transverse section on the line 3—3 of Fig. 1; Fig. 4 is a transverse section on the line 4—4 of Fig. 1; Fig. 5 is a perspective view showing the pipe section in the position where the edges are about to be interlocked; Fig. 6 is a perspective view of the pipe section with the edges interlocked and before the edges have been moved relatively in a longitudinal direction for the purpose of completing the pipe; Fig. 7 is an elevation of the completed pipe; and Fig. 8 is an enlarged detail section on line 8—8 of Fig. 7.

Referring to the drawings it will be observed that the pipe consists of the usual rolled up sheet 10 having at one end the usual circumferential bead 11 and the longitudinal crimps 12. As shown in Figs. 1 to 4, one edge of the sheet 10 is turned back upon itself to form the hook or flange 13, the free edge of which is inclined or wedge-shaped longitudinally of the pipe so that the hook at the line 2—2 is much shorter than at the lines 3—3 or 4—4. The opposite longitudinal edge of the sheet is doubled as shown at 14 in Figs. 2, 3 and 4 and the doubled edge is turned back upon itself to

form the hook or flange 15 which is adapted to be interlocked with the hook 13. The free edge of the hook 15 is inclined or wedge-shaped longitudinally of the pipe and oppositely with respect to the inclined edge of the hook 13 so that the hook is considerably longer on the line 2—2 of Fig. 1 than on the lines 3—3 and 4—4. The single edge 16 of the doubled portion of the sheet is turned back upon the doubled portion as shown in Figs. 2, 3 and 4 and so arranged with respect to the hook 15 as to provide a space 17 slightly narrower than the hook 13 so that when the latter is forced through this space into interlocking engagement with the hook 15 the end 16 will be sprung inwardly to a slight extent and when the hooks are in interlocking relation the end 16 will assume its normal position and prevent the edges of the sheet from being separated. It will also be observed that the bend 18 forms a stop for the hook 13 in the operation of interlocking the hooks. The end 16 also overlies the interlocked hooks on the interior of the pipe and thus provides a smooth interior finish.

It will be observed from Figs. 2, 3 and 4 that the hook 13 is slightly longer at each of the lines 2—2, 3—3, and 4—4, than the space between the end of the hook 15 and the bend 18 so that when the pipe is completed, as shown in Fig. 7, the hooks cannot be disengaged without being moved relatively endwise so as to bring the hook 13 to a position where this space is wider. In assembling the pipe section it is therefore necessary to move the edges relatively endwise to a position where the space between the end of the hook 15 and the bend 18 will permit the insertion of the hook 13. For this purpose a suitable indicating mark 19 may be provided on the pipe and the end 20 of the hook 13 brought into registration with this mark, as shown in Fig. 5. The edges of the pipe sections are then forced together as shown in Fig. 6, in which position the hooks 13 and 15 are interlocked, and then moved relatively endwise to the position shown in Fig. 7, which completes the pipe.

As will be readily understood from the foregoing description, the interlocked edges cannot be separated after they have been once pressed together, to the position shown in Fig. 6, without bending the end 16 back to a position permitting the hooks to be disengaged, and therefore my improved pipe

section when once assembled, is a permanent structure the same as the ordinary pipe sections which have a closed seam for joining the longitudinal edges.

5 Having thus described my invention, what I claim is:—

1. A sheet metal pipe section having on its longitudinal edges interlocking hooks the free longitudinal edges of which are relatively inclined longitudinally of the pipe, 10 for the purpose described.

2. A sheet metal pipe section having its longitudinal edges formed with hooks adapted to be interlocked and the free longitudinal edges of which are reversely inclined 15 longitudinally of the pipe, for the purpose described.

3. A sheet metal pipe section having its longitudinal edges reversely turned to form hooks adapted to be interlocked, and extending continuously from end to end of the section the free edges of the hooks being oppositely inclined longitudinally of the pipe, for the purpose described.

25 4. A sheet metal pipe section having one of its longitudinal edges turned back upon itself to form a hook and its other longitudinal edge doubled, said doubled edge being turned back upon itself to form a hook 30 adapted to be interlocked with the first mentioned hook, and the single edge of the

doubled portion being turned back on the inside of the pipe toward said first mentioned hook to overlie the hooks when the latter are interlocked.

5. A sheet metal pipe section having one of its longitudinal edges turned back upon itself to form a hook which is tapered longitudinally of the pipe, and its other longitudinal edge doubled and turned back upon 40 itself and tapered oppositely of the first mentioned hook and adapted to be interlocked therewith, and the single edge of the doubled portion being turned back to prevent disengagement of said hooks.

6. A sheet metal pipe section having turned oppositely wedge-shaped interlocking edges extending from end to end of the section, and means for holding the edges in interlocked relation.

7. A sheet metal pipe having interlocking longitudinally tapering hooks on its longitudinal edges, and means preventing disengagement of said hooks by a collapsing force applied to the pipe.

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

BENJAMIN DAVID FUDGE.

Witnesses:

J. A. WATSON,
B. M. KENT.