

R. T. SEMMES.
SHEET METAL PIPING.
APPLICATION FILED SEPT. 19, 1911.

1,017,920.

Patented Feb. 20, 1912.

Fig. 1.

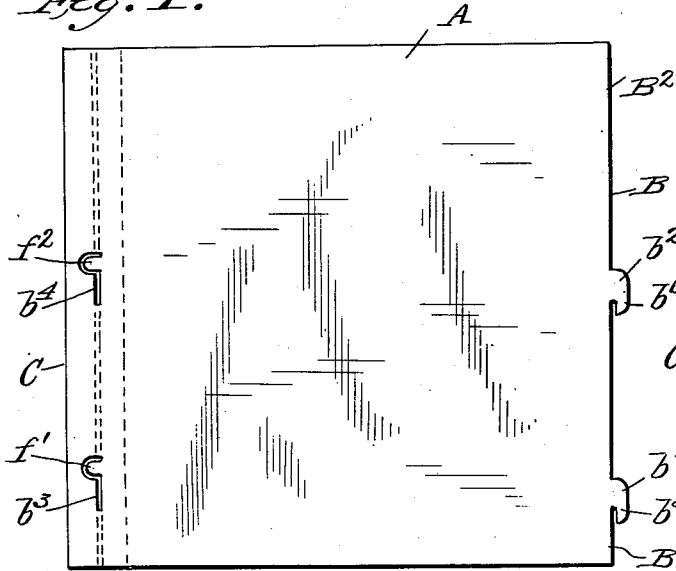


Fig. 2.

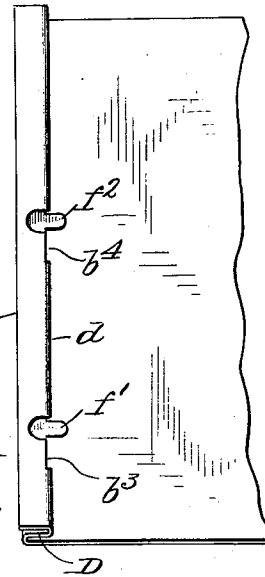


Fig. 3.

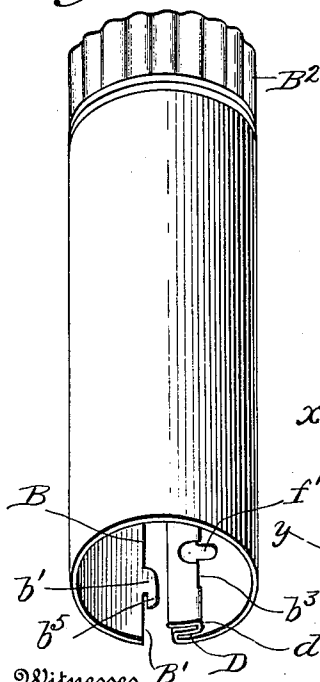


Fig. 4.

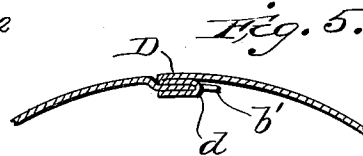
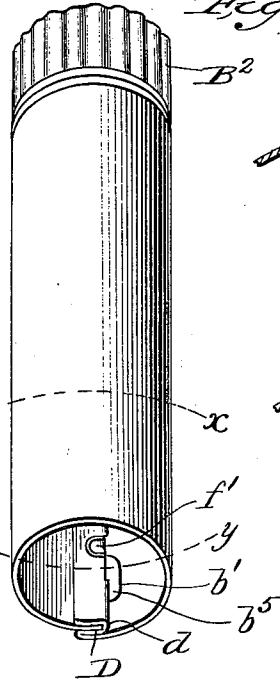
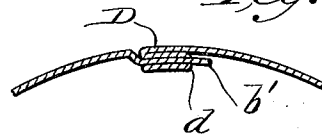


Fig. 6.



Witnesses
Katharine R. Brown.
Lucas B. Hille

By

Inventor
Raphael T. Semmes

Thomas Durant
his Attorney

UNITED STATES PATENT OFFICE.

RAPHAEL T. SEMMÉS, OF SAVANNAH, GEORGIA.

SHEET-METAL PIPING.

1,017,920.

Specification of Letters Patent.

Patented Feb. 20, 1912.

Application filed September 19, 1911. Serial No. 650,174.

To all whom it may concern:

Be it known that I, RAPHAEL T. SEMMÉS, a citizen of the United States, residing at Savannah, in the county of Chatham and State of Georgia, have invented certain new and useful Improvements in Sheet-Metal Piping; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the figures and letters of reference marked thereon.

This invention relates to sheet metal pipe, particularly stove pipes, and has for its object to provide a seam for such piping which will prevent the expansion of the bottom end of each section of the pipe and the contraction of the top end, when successive sections are fitted together.

To these ends the invention consists in certain novel details of construction and combinations and arrangements of parts, all as will be now described and the particular features of novelty pointed out in the claims.

Referring to the accompanying drawings, wherein is illustrated the preferred embodiment of the invention,—Figure 1 is a plan view of a blank of one section of a stove pipe; Fig. 2 is a detail view showing the double fold along the edge of the blank; Fig. 3 is a perspective view of a section before being closed; Fig. 4 is a perspective view of a completed section; Fig. 5 is a section on line $x-x$, Fig. 4; and Fig. 6 is a section on line $y-y$, Fig. 4.

Similar letters of reference in the several figures indicate the same parts.

In order to facilitate the fitting together of successive pipe sections to secure the proper length of piping the upper end of each section is crimped and fits within the lower or collar end of the next section. This, as will be readily understood, has a tendency to expand the collar end and to contract the crimped end of each section. To overcome this objection, according to the present invention, each section of pipe is made up from a blank A, Fig. 1, of sheet metal or other suitable material of proper size and weight, for the particular work for which the pipe is intended. On one edge B of this blank are formed or provided lugs or projections, two being shown in the drawings, which preferably are in the form

of right angled hooks b' b^2 , one of the hooks b' being located near the lower or collar end B' of the blank and the other intermediate said hook b' and the top or crimped end B² of the blank.

At the opposite side of the blank a suitable distance from the edge are two vertical slots b^3 , b^4 and above these slots two tongues f' , f^2 are formed, extending at right angles to the slots b^3 , b^4 . The blank along the edge C is bent into a double fold as shown at D, the slots b^3 and b^4 being so positioned that when the fold D is formed they will lie in the bend d of the inner fold. When the double fold is made the tongues f' , f^2 extend out from the inner fold as shown in Fig. 2. It will be noted that the hooks b' , b^2 , are not in direct line with the slots b^3 , b^4 , the ends b^5 , b^6 of the hooks extending beyond the ends of the slots b^3 , b^4 .

In making up each section of pipe the edges of the blank A are brought together, the hooks b' , b^2 , being passed through the slots b^3 , b^4 . Owing to the fact as just described that the ends or points b^5 , b^6 , of the hooks extend beyond the lower ends of the slots b^3 , b^4 it is necessary in order to pass the hooks through the slots to spring the metal of the blank to permit the ends of the hooks to clear the bottoms of the slots. After the hooks have been passed through the slots, the metal will spring back into place bringing the edges of the top and bottom of the blank in alinement and also causing the ends b^5 , b^6 of the hooks to engage the wall of the inner fold just below the bottoms of the slots b^3 , b^4 , and holding the bottoms of slots well up in the throats of the hooks. It will be noted that the upper ends of the slots b^3 , b^4 are open and lead into the space left by the cutting out of the tongues. By such a construction the hooks can be readily inserted into the slots as they may be raised above the open end of the slot to permit the ends of the hooks to clear the bottom of the slots. To close the open ends of the slots the tongues f' , f^2 , are bent down after the hooks are in place, as shown in Fig. 4, whereby any tendency of the hooks escaping from the slots is prevented.

When the edges are brought together as just described, the edge B enters between the walls of the inner fold of fold D, and lies freely therein.

From the above description it will be seen

that when the edges of the blank are locked together, any tendency to expand at the lower or collar end of the section when the crimped end of the next section is inserted
5 therein, will be resisted, while contraction at the crimped end will be resisted by the edge B abutting against the bend of the inner fold of double fold D.

While two hooks and two slots have been
10 shown and described it is obvious that only one or as many as desired could be employed. Also that while the hooks have been shown as pointing downward they could be reversed and point upward, in
15 which event the ends of the hooks would extend above the upper ends of the slots, the tongues, of course, being at the opposite ends of the slots from those in the previously described construction.

20 Having thus described my invention,

what I claim as new and desire to secure by Letters Patent, is:

1.-A pipe section having a hook on one edge, a double fold on the other having a longitudinal slot therein open at one end 25 with which the hook coöperates, and means for preventing the escape of the hook from the slot.

2. A pipe section having hooks on one edge, a double fold on the other edge hav- 30 ing longitudinal slots in the inner bend thereof open at one end with which the hooks coöperate, and tongues adapted to be bent over the mouth of the slots to prevent the escape of the hooks.

RAPHAEL T. SEMMES.

Witnesses:

ROY L. RUHL,

H. J. MENTZER.