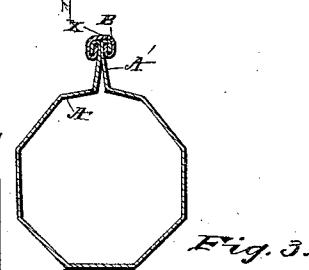
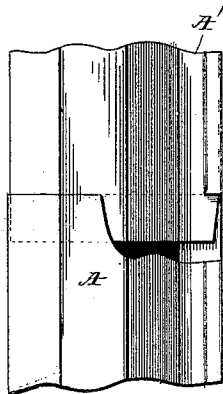
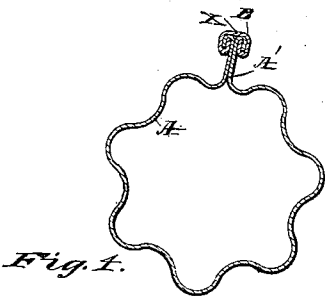
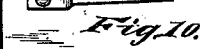
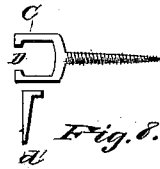
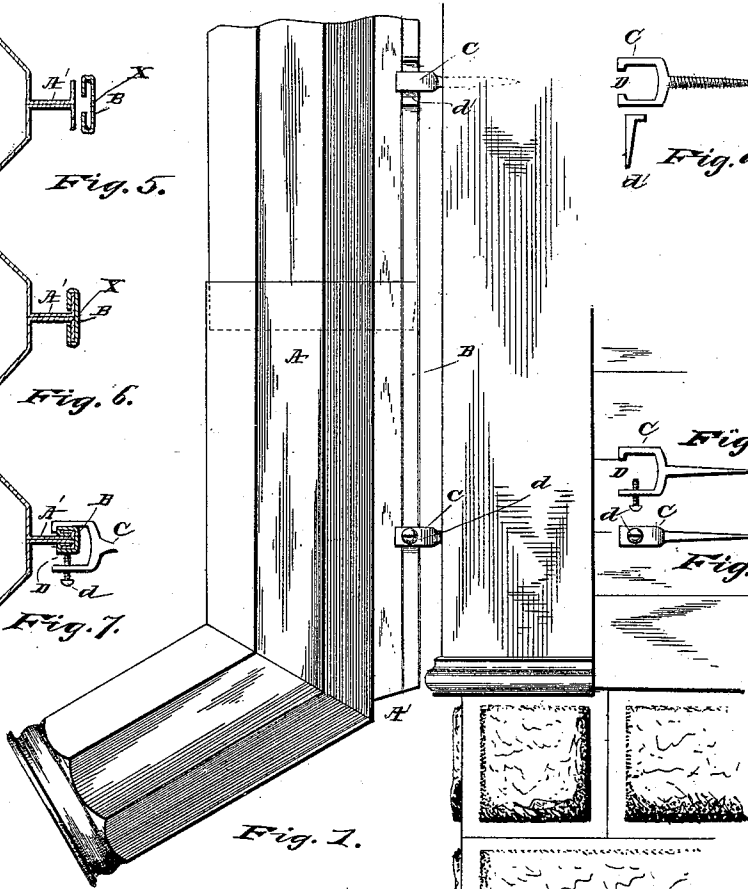
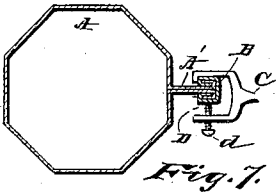
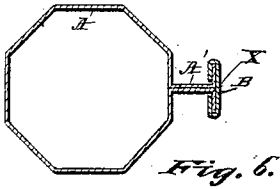
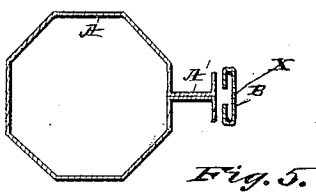


(No Model.)

T. C. BELDING.  
WATER CONDUCTOR PIPE.

No. 433,882.

Patented Aug. 5, 1890.



WITNESSES:

*E. H. Law*  
*W. H. Smith*

INVENTOR

*Thomas C. Belding*  
BY *Bond & Wise*

ATTORNEY S

# UNITED STATES PATENT OFFICE.

THOMAS C. BELDING, OF CANTON, OHIO, ASSIGNOR TO THE CANTON STEEL ROOFING COMPANY, OF SAME PLACE.

## WATER-CONDUCTOR PIPE.

SPECIFICATION forming part of Letters Patent No. 433,882, dated August 5, 1890.

Application filed September 6, 1889. Serial No. 323,203. (No model.)

*To all whom it may concern:*

Be it known that I, THOMAS C. BELDING, a citizen of the United States, residing at Canton, in the county of Stark and State of Ohio, have invented certain new and useful Improvements in Water-Conductor Pipes; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters of reference marked thereon, in which—

Figure 1 is a view showing a portion of the water-conductor pipe properly attached to a building. Fig. 2 is a side elevation of a portion of the pipe, showing a part of the pipe broken away to illustrate the joint. Fig. 3 is a transverse section of the water-pipe, showing the same expanded. Fig. 4 is a transverse section of a water-pipe, showing its side flange properly formed and its cap attached. Fig. 5 is a transverse section of the pipe, showing the outer edges of its flanges bent at right angles and the cap detached. Fig. 6 is a similar view showing the cap attached. Fig. 7 is a similar view showing the flange-seam properly formed and a support or stay properly attached. Fig. 8 is a detached view of a support or stay, showing a screw-threaded shank and its securing-wedge. Fig. 9 is a detached view of a support or stay, showing a nail-shank and its securing-screw. Fig. 10 is an edge view of a support or stay.

The present invention has relation to water-conductor pipes; and it consists in the peculiar construction hereinafter described, and particularly pointed out in the claim.

Similar letters of reference indicate corresponding parts in all the figures of the drawings.

In the accompanying drawings, A represents the water-pipe, which may be of any desired form in cross-section, and is provided with the side flanges A'. A portion of the outer edges of the side flanges A' are bent at right angles to themselves, at which time the cap B is slipped over the right-angled portions, as illustrated in Fig. 6, said cap B being slid or slipped endwise over said right-angled portions, at which time the right-angled portions of the flanges A', together with the cap B, are bent against the flanges A', as

illustrated in Figs. 3, 4, and 7, thereby forming beads upon each side of the flanges, and at the same time securely and firmly locking the cap B to the flanges A'.

For the purpose of forming an even joint, the cap B extends only to within a short distance of one end of each section, as illustrated in Fig. 2, and the flanges A', extending beyond the cap B, are inserted between the flanges A' of the adjacent section, the end of the section provided with the shortened cap, being slipped into the adjacent section until the ends of the cap B meet, as illustrated in Fig. 1.

For the purpose of attaching the pipe-sections A together, one end of the flanges A' are tapered, as shown at D', Fig. 2, and the cap B extended only to the beginning of the tapered portion D', thereby leaving said tapered portions D' in such a position that they can be easily entered between the flanges A' at the opposite end of the adjoining section A.

It will be seen that by my peculiar construction of the seam proper a bead or hem will be formed upon each side of the completed seam, thereby enabling me to securely attach the support or stay upon either side of the seam proper.

In attaching the supports or stays C to the walls of a building it frequently happens to be very inconvenient to attach to one side of the seam proper, and thereby rendering it almost impossible to attach the supports or stays to seams having a bead or hem only on one side of the seam.

In the drawings, two classes or kinds of supports or stays are shown—one having the screw *d* for securely attaching the stay to the seam, the other kind of stay being securely attached by means of the key or wedge *d'*.

It will be understood that the openings D should be large enough to receive the completed seam.

It will be seen that by uniting the flanges A' at their outer edges the pipe A will be free to expand in the event water becomes frozen in said pipe, the flanges A' parting, as illustrated in Fig. 3. It will also be seen that the strain of the cap B will come at the point X when the pipe is expanded, said point being at a place where no sharp bend of the

cap is required, thereby rendering said cap less liable to become broken by reason of frequent or many expansions.

5 It will be seen that by my peculiar construction of the seam, a pipe can be constructed which will be water-tight without the use of solder, thereby enabling pipes to be constructed of material which will not admit of being soldered.

10 Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

The combination of the pipe-sections A, pro-

vided with the standing flanges A', having beads formed upon the outer portions of said flanges, the cap B, folded with said standing flanges A', and the tapered portions D', located below and extending beyond the cap B, substantially as and for the purpose specified. 15

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses. 20

THOMAS C. BELDING.

Witnesses:

E. G. LANE,

F. N. BOND.