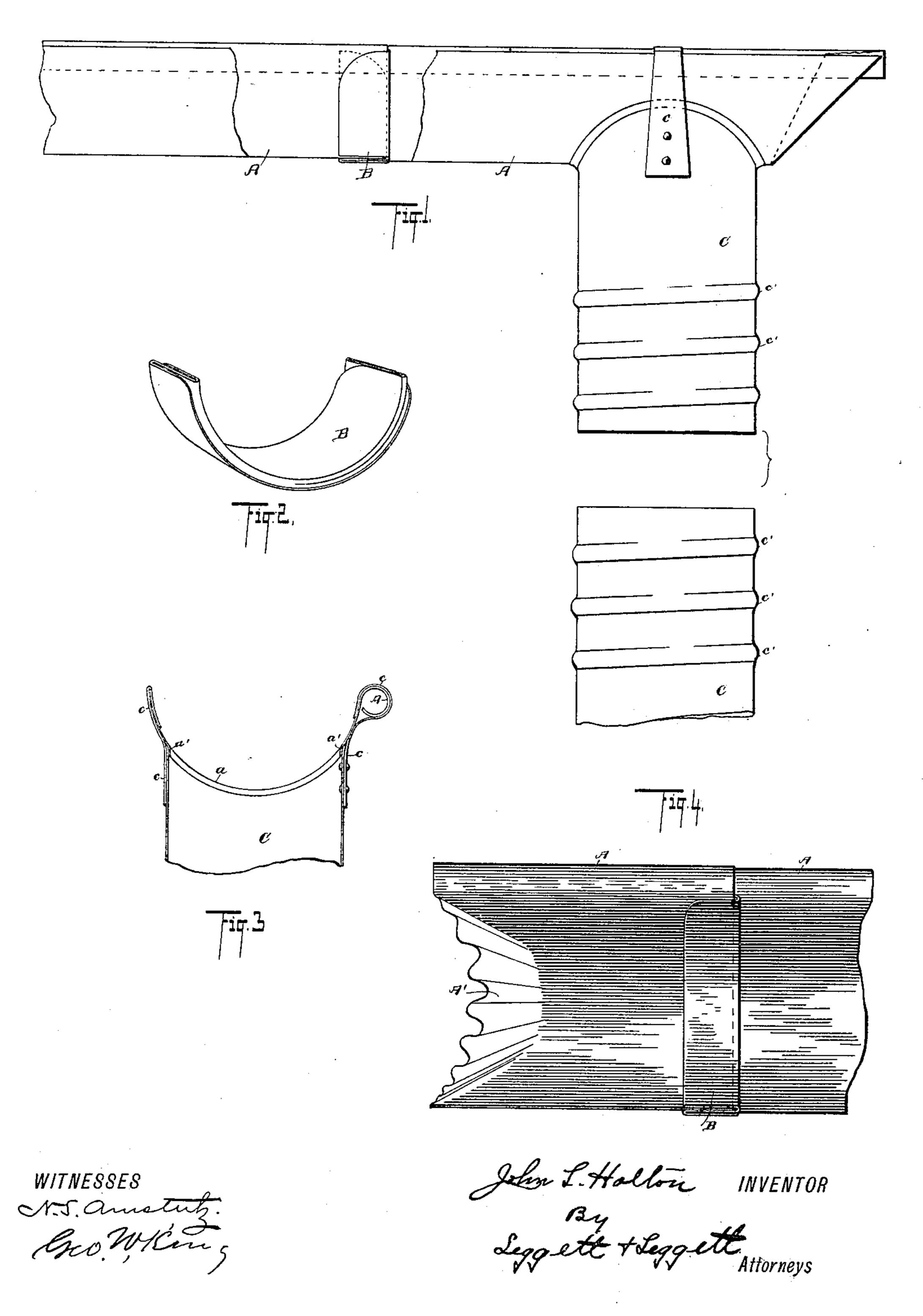
(No Model.)

J. L. HOLTON.

EAVES TROUGH.

No. 362,836.

Patented May 10, 1887.



N. PETERS, Photo-Lithographer, Washington, D. C.

United States Patent Office.

JOHN L. HOLTON, OF NEW LISBON, OHIO.

EAVES-TROUGH.

SPECIFICATION forming part of Letters Patent No. 362,836, dated May 10, 1887.

Application filed October 30, 1886. Serial No. 217,608. (No model.)

To all whom it may concern:

Be it known that I, John L. Holton, of New Lisbon, in the county of Columbiana and State of Ohio, have invented certain new and 5 useful Improvements in Eaves-Troughs; and I 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 pertains to make and use the same.

My invention relates to improvements in metal eaves troughs and leaders in which the troughs are made in suitable lengths and coupled by means of metal strips bent in reverse directions and doubled back, forming folds 15 to receive the opposing ends of the troughs, the same forming a tight joint without soldering. End pieces for the trough are provided having a corrugated end, forming a transverse head made from the body of the trough. A 20 discharging-orifice is made in the bottom of the trough, with the edges around the orifice flanged downward, and the end of the leader is made to embrace the said flange. The leader is held in place abutting the under side of the 25 trough by means of hook-fastenings, the same consisting of metal strips secured to the leader and bent over the edges of the trough. The leaders are made insuitable lengths, and screwthreaded for engaging each other, the threads 30 being struck up, the object being to provide eaves troughs and leaders made up in suitable lengths for shipment, and that may be kept in stock and put up without soldering or requiring skilled labor.

In the accompanying drawings, Figure 1 is a side elevation of an eaves trough and leader embodying my invention, portions being broken away to show the construction. Fig. 2 is a view in perspective of the coupling used 40 in connecting the different sections of trough. Fig. 3 is an elevation in transverse section through the center of the leader. Fig. 4 is a plan view showing more especially the manner of crimping the troughs at the ends thereof 45 to form the heads.

A represents sections of eaves-troughs. These are made up in suitable lengths, and such of the sections as are designed for ends of the trough are crimped at one end or corrugated, sub-

stantially as shown in Fig. 4, forming a trans- 50 verse head made from the body of the trough. Strips of thin sheet metal, usually about four inches (more or less) in width and long enough to reach approximately around the under side of the trough, are bent lengthwise and in re- 55 verse directions, and folded down close, and then bent lengthwise to fit the curvature of the trough, forming couplings B. (See Fig. 2.) The opposing ends of the trough are firmly pressed (by hand) into the folds of the coup- 60 ling, the section of trough on the side toward the leader entering the lower fold of the coupling. In this manner a tight joint is formed without soldering, and the joint at any time may be drawn apart for repairs or other pur- 65 poses. Usually, short pieces of trough are provided for attaching the leader, and these short pieces may be inserted at any of the joints of the trough, of course using the coupling B. A discharging-orifice, a, is made in 70 the bottom, and the edges thereof are flanged downward at a'.

C represents the leader, that is made to fit over the flange a' and abut the under side of the trough. Strips of metal c are secured to 75 the upper end of the leader, and these, when the parts are in position, are bent over the edge of the trough, (see Fig. 3,) forming hooks that hold the leader in position. The leaders are made up in suitable lengths, and screw. 80 threaded for engaging each other, the lower end of a piece entering the upper end of the next lower piece, and the threads thereof being struck up, as shown at c', Fig. 1.

With the construction shown no soldering 85 or skilled labor is required in putting up these troughs and leaders. The goods may be manufactured in quantities and shipped, and kept in stock for the retail trade, and furnished to consumers at a greatly-reduced cost.

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What I claim is—

1. The combination, with eaves troughs made in section, of the coupling B, made to receive the opposing ends of the trough-sections, and arranged substantially as described.

2. The combination, with eaves troughs made in section and coupled, substantially as indicated, of end pieces for the trough, the same

having transversé heads formed by crimping metal from the body of the trough, substan-

tially as set forth.

3. The combination, with an eaves trough 5 having a discharging-orifice and depending flange around the same, of a leader made to embrace the said flange and secured by hooks to the trough, said leader being made in sections screwed together, substantially as de-10 scribed.

In testimony whereof I sign this specification, in the presence of two witnesses, this 28th day of July, 1886.

JOHN L. HOLTON.

Witnesses: CONRAD HUNE, F. H. COLMAN.