

(No Model.)

C. C. MOORE.
EAVES TROUGH.

No. 460,982.

Patented Oct. 13, 1891.

FIG. 1.

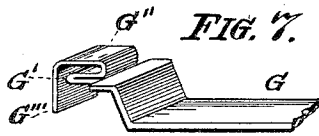
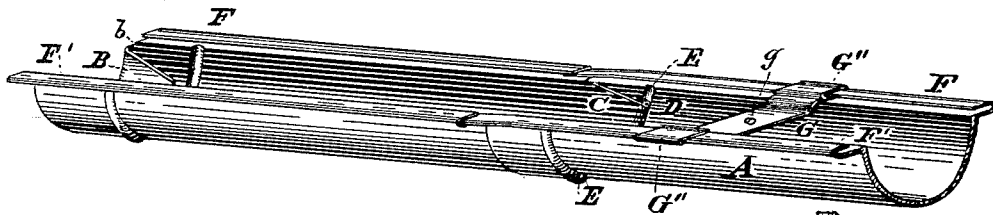


FIG. 2.

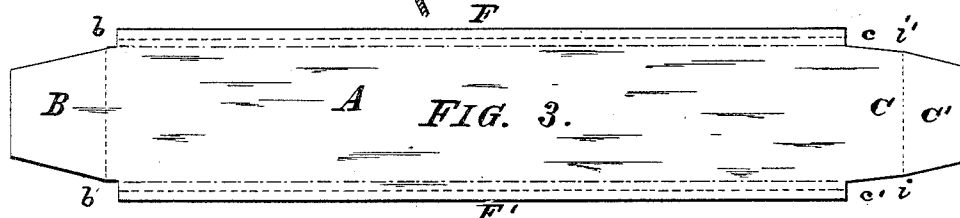
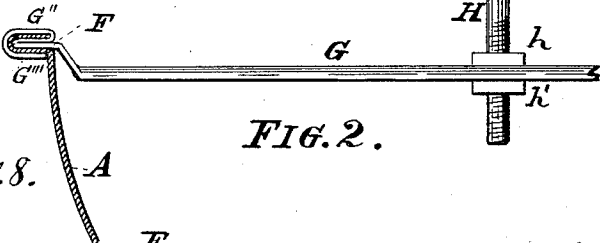


FIG. 4.

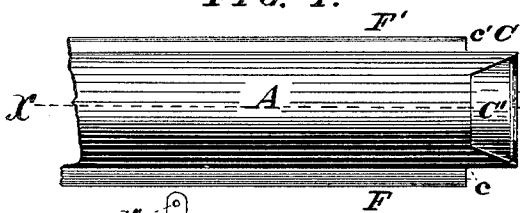


FIG. 5.

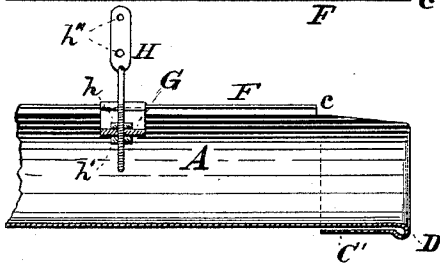
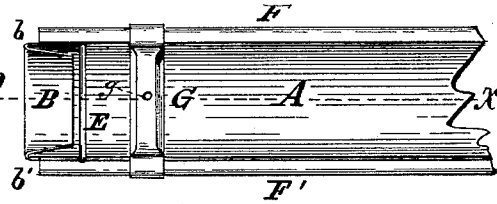
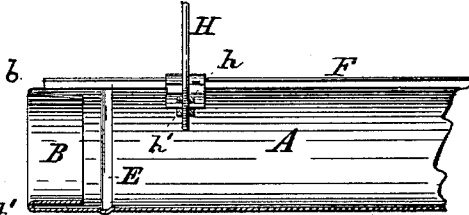


FIG. 6.



Witnesses:

Al. Stark
Centie S. Stark.

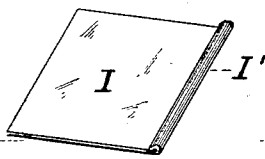


FIG. 9.

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UNITED STATES PATENT OFFICE.

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EAVES-TROUGH.

SPECIFICATION forming part of Letters Patent No. 460,982, dated October 13, 1891.

Application filed January 15, 1891. Serial No. 377,820. (No model.)

To all whom it may concern:

Be it known that I, CHARLES CLINTON MOORE, of Lancaster, in the county of Fairfield and State of Ohio, have invented certain new and useful Improvements in Sectional Eaves-Troughs; and I do hereby declare that the following description of my said invention, taken in connection with the accompanying sheet of drawings, forms a full, clear, and exact specification, which will enable others skilled in the art to which it appertains to make and use the same.

This invention has general reference to improvements in sectional eaves-troughs; and it consists, essentially, in the novel and peculiar combination of parts and details of construction, as hereinafter first fully set forth and described, and then pointed out in the claims.

In the drawings already mentioned, which serve to illustrate my said invention more fully, Figure 1 is a perspective view of an eaves-trough constructed in accordance with my invention. Fig. 2 is a transverse section of a portion of the same, showing the brace as applied to the eaves-trough. Fig. 3 is a plan of a blank from which the eaves-trough is formed. Fig. 4 is a bottom, and Fig. 5 a top, plan of two adjacent sections. Fig. 6 is a longitudinal sectional elevation of the same in line x of Figs. 4 and 5. Fig. 7 is a perspective view of a portion of the brace, and Fig. 8 a bottom plan of the same. Fig. 9 is a perspective view of a plate used in forming the blank into the trough.

Like parts are designated by corresponding letters of reference in all the figures.

The object of this invention is the production of a convenient and serviceable sectional eaves-trough, which may be readily put together and attached to a building and quickly removed when desired.

To accomplish this object, I construct this eaves-trough, substantially, from a blank A, of proper length and width, having on one end notches b b' and a tapering tongue B, and on the opposite end similar but longer and tapering notches c c' to produce a tapering portion C, terminating in a tapering tongue C', the entire blank being made up from a sheet of tin, zinc, galvanized iron, or other suitable metal, or formed from several sheets of tin

properly grooved and soldered together in the well-known manner. This blank I first "hook" along its longitudinal edges F F'— that is to say, to fold them upon themselves. I then also hook or double the tongue B on the line b b' , turning said tongue upward and backward, and finally bend the tongue C' along the line i i' downwardly, leaving a space of several thicknesses of the metal employed between the tongue C' and the blank A and not quite as much between the tongue B and the said body A. I now place a blank I (shown in Fig. 9) into the space between the tongue C' and the body A, said blank being somewhat wider than the width of the tongue C' at its widest part and provided with a beaded edge I', locating the beaded edge I' close to the bend of the tongue. By means of a suitable tool I then depress the tongue C' behind the bead I', so as to form a corresponding bead D, Figs. 1, 4, and 6, on said tongue. At a suitable distance from the tongue B, I form a groove E in the blank A, arranging the same so that its distance from the bend of the tongue B is equal to the distance from the end of the tongue C' to said bead D. I now form the entire blank into the semicircular contour usual with eaves-troughs and gutters, which will complete the section ready for attachment to a duplicate section by causing the downwardly-bent tongue C' of one section to engage the inwardly-bent tongue of the next succeeding section, when the bead D on said tongue, engaging the groove E in the body A adjacent to the tongue B, will lock these ends together and make a joint which will not ordinarily leak water if the eaves-troughs are hung at a proper inclination, as shown in Fig. 1. To now further secure the sections together and at the same time to afford means for suspending the eaves-troughs from the eaves of a building, I use braces G, which are constructed of iron and have each on both ends return-bends G', (see Fig. 7,) which pass into the hooks F F', are then upwardly and outwardly turned at G'', and finally downwardly bent at G''', thus passing over the hooked edges F F', and which are, after the eaves-trough is placed into position, clinched upon said hooked portions, as shown in Fig. 2, thereby securely embracing the opposite sides of the eaves-trough

and preventing them from spreading as well as from closing upon each other. In the center of each brace G there is a hole *g*, through which is passed the screw-threaded end of a rod H, which by means of nuts *h h'* above and below retain the eaves-trough in position, said rods H being flattened at their upper ends and perforated with holes *h''*, through which nails or screws may be passed to secure the rods H to the eaves of the building. By properly adjusting these nuts the eaves-trough sections may be properly brought in line. One of these braces will be placed over the adjoining sections, thereby locking the two ends together.

It will now be observed that by composing the eaves-trough of sections and securing them together by means of interlocking joints and the braces, as described, I am enabled to manufacture the sections on a large scale and to sell them to the consumer or builder, who may apply them without the aid of solder and without assistance from a tinner, thereby considerably reducing the first cost of the sections and the expense connected with their attachment to a building.

When the braces G are being made from sheet metal, I prefer to form their longitudinal edges with a hem *g'*, as shown in Fig. 8, which will materially strengthen them and make them otherwise more serviceable.

Having thus fully described my invention, I claim as new and desire to secure to me by Letters Patent of the United States—

1. An eaves-trough composed of interlocked sections, each having longitudinal hooked edges and on one end a downwardly and backwardly bent tongue provided with a bead, and on the opposite end an inwardly-bent tongue engaging the opposite tongue on the next succeeding section, and a groove wherewith engages the bead on the downwardly-bent tongue, as and for the object stated.

2. In an eaves-trough, a blank A, having on one end notches *b b'* and a tapering tongue and at the other end tapering notches *c c'* to form the portion C and a tapering tongue C', said blank being folded along its longitudinal edges and adapted to be formed into a semicircular contour, as and for the object stated.

3. In an eaves-trough, the combination, with the gutter having the hooked longitudinal edges, as described, of a brace having on each end the return-bend G', the upwardly and outwardly bent portions G'', and the downwardly-bent portions G''', the latter being inwardly bent to engage the hooked edges F F' of the eaves-trough on their under side, as and for the purpose stated.

In testimony that I claim the foregoing as my invention I have hereto set my hand in the presence of two subscribing witnesses.

CHARLES CLINTON MOORE.

Attest:

A. J. VORYS,
B. M. PUGH.