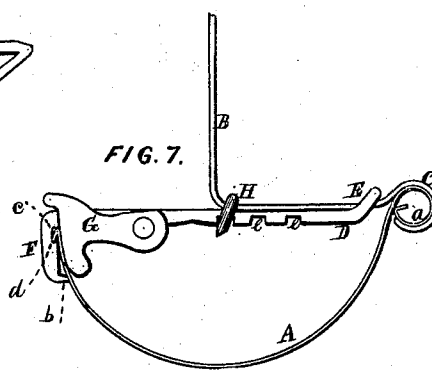
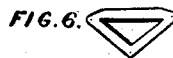
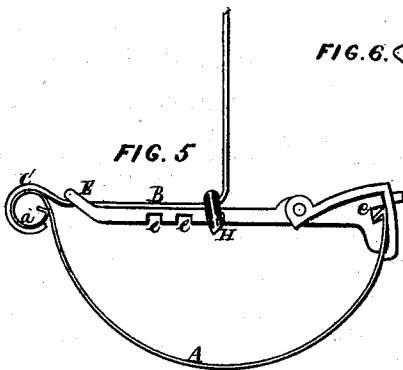
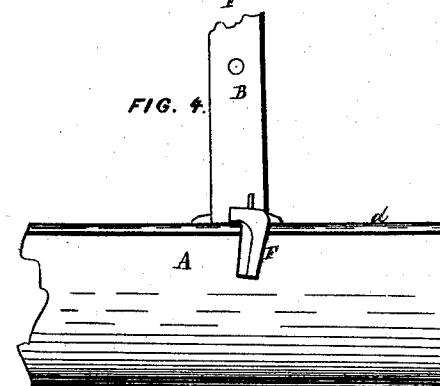
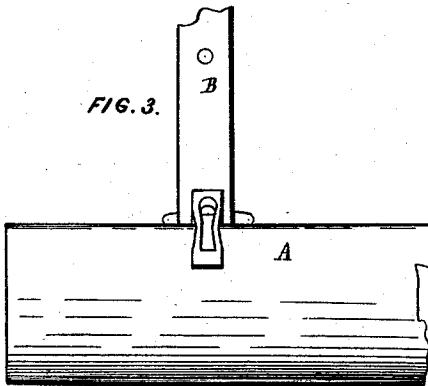
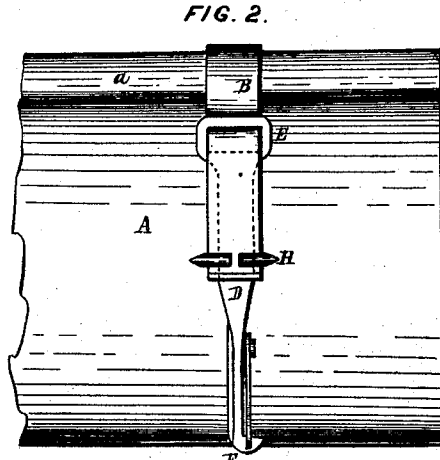
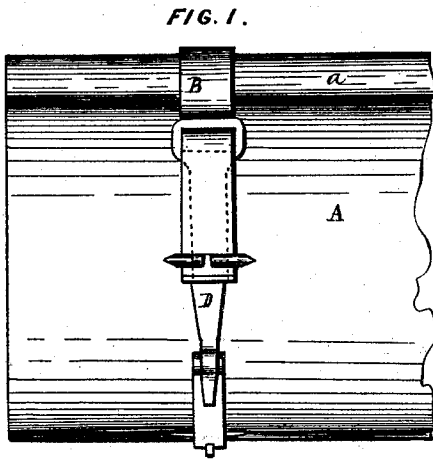


J. P. ABBOTT.
EAVES-TROUGH HANGER.

No. 171,253.

Patented Dec. 21, 1875.



WITNESSES.

Wm. Parker
Chas. H. Hille

INVENTOR.

J. P. Abbott
Per. Burridge & Co.
attys.

UNITED STATES PATENT OFFICE.

JONATHAN P. ABBOTT, OF CLEVELAND, OHIO.

IMPROVEMENT IN EAVES-TROUGH HANGERS.

Specification forming part of Letters Patent No. **171,253**, dated December 21, 1875; application filed November 20, 1875.

To all whom it may concern:

Be it known that I, JONATHAN P. ABBOTT, of Cleveland, in the county of Cuyahoga and State of Ohio, have invented a certain new and Improved Eaves-Trough Hanger; and I do hereby declare that the following is a full, clear, and complete description thereof, reference being had to the accompanying drawings making a part of the same.

Figures 1 and 2 are plan views of the eaves-trough and hangers. Figs. 3 and 4 are side views of Figs. 1 and 2. Figs. 5 and 7 are end views of Figs. 1 and 2. Fig. 6 is a detached section.

Like letters of reference refer to like parts in the several views.

This invention is a device for attaching eaves-troughs to buildings, and which device is adjustable, so that it can be made to fit different size troughs.

A more full description of the invention is as follows: The eaves-trough referred to may be of the ordinary shape and size in use, and which is represented at A in the drawings. The trough is attached to the roof by a hanger, consisting of the strap B, one end of which is turned into a hook, C, to clasp the bead *a* along the outer edge of the trough, and whereby said edge is suspended. D is a bar, in one end of which is formed a loop or ring, E, through which the strap B passes, and whereby the bar and strap are secured to each other. On the opposite end of the bar alluded to is a finger, F, the lower end of which is turned inward toward the bar, forming a nib or point, *b*, as will be seen in Fig. 7. On the inside of the finger, near its junction with the bar, is cut a notch or gain, *c*, in which to receive the turned-down edge *d*, whereby that side of the trough is suspended from the bar. To prevent said edge *d* from springing out from the gain *c* is the purpose of the button G, pivoted to the side of the bar, and so arranged in respect to the trough as to be on the inside thereof, while the finger F is on the outer side, against which the free end of the button crowds the side of the trough, and prevents the turned-down edge referred to from slipping from the gain in the finger, and which, at the same time, crowds the side of

the trough against the point *b*, which forms a dent therein, that assist in holding the inner side of the trough in its connection with the bar, as will be seen in Fig. 7. While the outer end of the strap B is held in connection with the bar the middle part of the same is confined thereto by a ring, H. A detached view of said ring is shown in Fig. 6. The application of the ring to this end will be readily understood on examination of the drawings.

In the under edge of the bar referred to are cut notches or gains *e*, in one of which the ring is lodged, and thereby prevented from slipping. The practical purpose of the gains is to admit of the adjustment of the bar to different size troughs. In the drawing the bar and strap are represented as attached to the smallest size troughs. Three sizes are all that are in ordinary use.

To adapt the hanger to a size larger than that shown the ring is removed and the strap pushed through the loop E. This is done before the strap is bent upward. The ring is then put on, and lodged in one or the other of the gains *e*, as the size of the trough may warrant, which when done, the strap is then bent upward to any angle that the pitch of the roof may require, and to which it is made fast.

It is important, in hanging eaves-troughs, that the line of suspension be in the middle (transversely) of the trough, so that it may be equally balanced; hence, the necessity of shifting the ring from one notch or gain to another in adjusting it for a particular width trough, so that the point of suspension shall be in the middle, as aforesaid. The suspending-strap is always straight when the hanger is being fitted to the trough; hence the bar and strap can be easily extended across the trough, which, as a consequence, will bring one of the gains *e* nearer the middle, while the gain in which the ring is lodged, as shown in the drawing, passes beyond the center.

In using gains and the ring for the adjustment of the hanger to different size troughs, I avoid making holes in the strap, whereby to rivet or bolt it to the bar; hence I retain the full strength of the metal at the point where it is subjected to the greatest strain. Fig. 5

represents a modification of the button and finger F G.

Instead of the ring H being used, lugs may be formed on either side of the bar, which, when the strap is laid thereon, can be turned over and down upon the strap, thereby holding it firmly upon the bar, as does the ring.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The bar D, gains or notches *e*, and ring H, in combination with the strap B, in the

manner as described, and for the purpose set forth.

2. Finger F, gain *e*, point *b*, and button G, in combination with the bar D and trough A, substantially in the manner as described, and for the purpose set forth.

JONATHAN P. ABBOTT.

Witnesses:

J. H. BURRIDGE,
E. M. MARTIN.