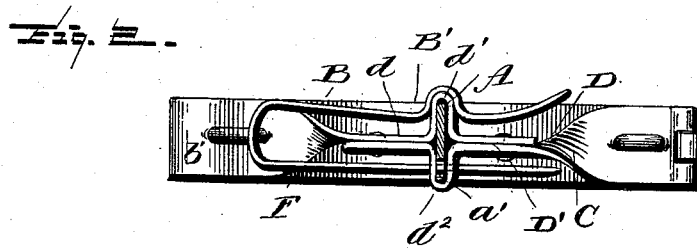
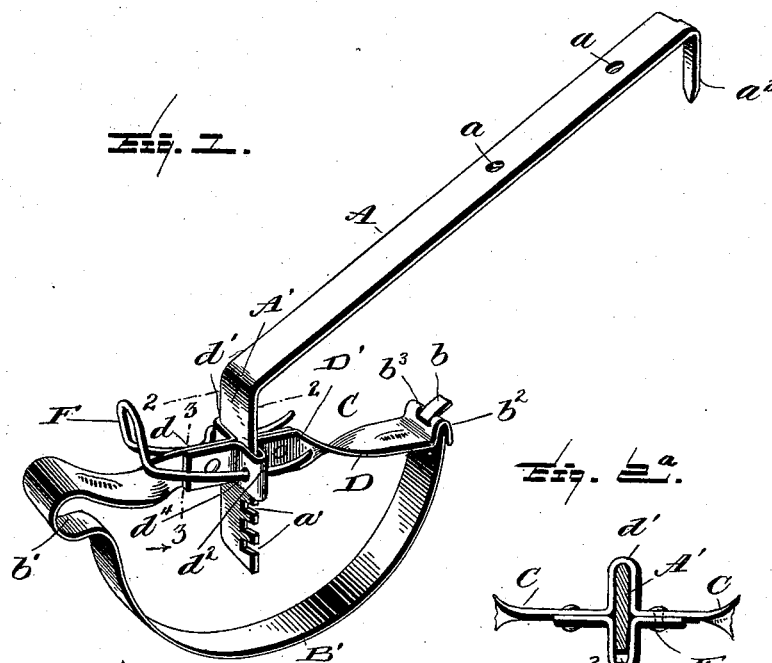


(No Model.)

D. SOAMES.
EAVES TROUGH HANGER.

No. 523,243.

Patented July 17, 1894.



Witnesses:
L. C. Mills.
E. A. Bond

Inventor:
David Soames
by E. B. Stocking
Attorney

UNITED STATES PATENT OFFICE.

DAVID SOAMES, OF EAST JORDAN, MICHIGAN.

EAVES-TROUGH HANGER.

SPECIFICATION forming part of Letters Patent No. 523,243, dated July 17, 1894.

Application filed March 22, 1894. Serial No. 504,641. (No model.)

To all whom it may concern:

Be it known that I, DAVID SOAMES, a citizen of the United States, residing at East Jordan, in the county of Charlevoix, State of Michigan, have invented certain new and useful Improvements in Hangers for Eaves-Troughs, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in hangers for eaves troughs, and it has for its objects among others to provide a simple and cheap hanger by which the trough may be easily and quickly secured in position and rendered vertically adjustable, with means for securely holding the parts in their positions.

Other objects and advantages of the invention will hereinafter appear and the novel features thereof will be specifically defined by the appended claims.

The invention is clearly illustrated in the accompanying drawings, which, with the letters of reference marked thereon, form a part of this specification, and in which—

Figure 1 is a perspective view of my improvements. Fig. 2 is a cross section on the line 2—2 of Fig. 1, looking downward. Fig. 2^a is a sectional detail of a modification which will be more particularly hereinafter referred to. Fig. 3 is a vertical section on the line 3—3 of Fig. 1, looking in the direction of the arrows.

Like letters of reference indicate like parts throughout the several views.

Referring now to the details of the drawings by letter, A designates the strap provided with holes *a* for the reception of the screws or other means employed for securing it to a roof, said strap having one end extended vertically as seen at A' and this vertical portion is formed upon one edge with a plurality of teeth *a'* as seen in Figs. 1 and 3. The other end of this strap is provided with a prong *a*² as shown in Fig. 1 designed to be driven into the roof in the usual way. This strap may be of any suitable material and of any desired length.

B is the hanger; it comprises the substantially semi-circular portion B' to embrace and correspond with the curvature of the bottom of an eaves trough, this curved portion being

provided at one end with a lip or tongue *b* for a purpose which will hereinafter appear.

At the opposite end the hanger is formed with a loop or equivalent device *b'* as seen in Fig. 1 to receive the bead or roll on the trough. The cross-bar C of the hanger is provided at the end opposite this loop with a vertical transverse recess *b*² formed by the upward bending of the metal and the downward extension of the end as seen in Fig. 1, and in the upper wall of this recess is formed a slit or opening *b*³ as shown in Figs. 1 and 2 into which the lip or tongue *b* on the curved portion of the hanger is designed to engage, the upper end of the lip or tongue being turned outward at an angle as seen in Fig. 1 to secure the trough and hanger together after the latter has been placed over the former. This cross-bar may be formed in a variety of ways; I have shown two; in Figs. 1 and 2 it is formed of the two pieces one of which is integral with and an extension of the curved portion of the hanger and which is twisted to form the vertical portion *d* which has a lateral bend to form the loop *d'* as seen in Figs. 1 and 2, while the remaining portion of the cross-bar is formed of a piece of metal D having at one end the loop *b*² or recess and the other end twisted to form the vertical portion D' which is formed with a lateral bend to form a loop *d*² opposite the loop *d'* as seen in Figs. 1 and 2, the parallel portions being riveted or otherwise secured together upon opposite sides of the loops as shown and the two loops being located centrally of the cross-bar and adapted to receive the vertical toothed portion of the strap as shown.

Instead of forming the cross-bar in the manner just described, in which the ends of the two parts of the cross-bar overlap, I may sometimes form it as seen in Fig. 2^a in which the hanger has a continuous cross portion with the one vertical loop and the opposite loop is formed in a short piece E which is riveted to the main portion; the result is the same as in the construction first described.

The loop *d*², or, it may be the one upon the opposite side, is provided with a hole *d*⁴ extending therethrough in the direction of the length of the cross-bar, and adapted to receive one leg of a spring-wire locking pin F which is shown in position in Figs. 1, 2 and 3.

In operation, the hanger is placed upon the trough with the loop b' receiving the bead or roll upon the trough; the strap is secured to the roof with its vertical toothed portion entered in the double loop $d' d^2$ and the same is then locked in its adjusted position by means of the spring-wire key or locking pin F one leg of which is passed through the hole d^4 in one portion of the loop and its other leg is formed with a lateral bend or loop f as shown in Figs. 1 and 2 which springs over the opposite loop of the cross-bar and locks the parts in position, the leg which passes through the hole in the loop engaging one of the teeth of the vertical portion of the strap as shown. By withdrawing the locking-pin the parts may be separated or the hanger adjusted up or down as circumstances may require.

Modifications in detail may be resorted to without departing from the spirit of the invention or sacrificing any of its advantages.

What I claim as new is—

1. The combination with a strap with a toothed vertical portion, of a hanger having a cross-bar with a loop to receive said toothed portion, and a spring wire locking key arranged lengthwise of the cross-bar with one leg passed through the loop and the other leg engaging the opposite edge thereof, substantially as specified.

2. The combination with the strap having a

toothed portion, of the hanger having a cross-bar with a vertical transverse loop to receive said toothed portion, and a spring key one leg of which is provided with a lateral bend, substantially as and for the purpose specified.

3. The combination with a strap having a vertical toothed portion, of a hanger having a cross-bar with a vertical transverse loop to receive said toothed portion, with a horizontal hole in one side of the loop, and a spring-wire locking pin having one leg passed through said hole and the other formed with a bend to engage the opposite side of the loop, substantially as specified.

4. A hanger for eaves troughs, comprising a curved portion and a cross-bar in one piece with locking means at the junction of one end of the cross-bar and curved portion, and the cross-bar formed centrally with a vertical portion with transverse vertical loop with opening to receive a key, substantially as shown and described and a spring locking key having one leg passed through said opening and the other engaging the opposite vertical edge of the loop.

In testimony whereof I affix my signature in presence of two witnesses.

DAVID SOAMES.

Witnesses:

R. REUB. GLENN,
GEO. G. GLENN.