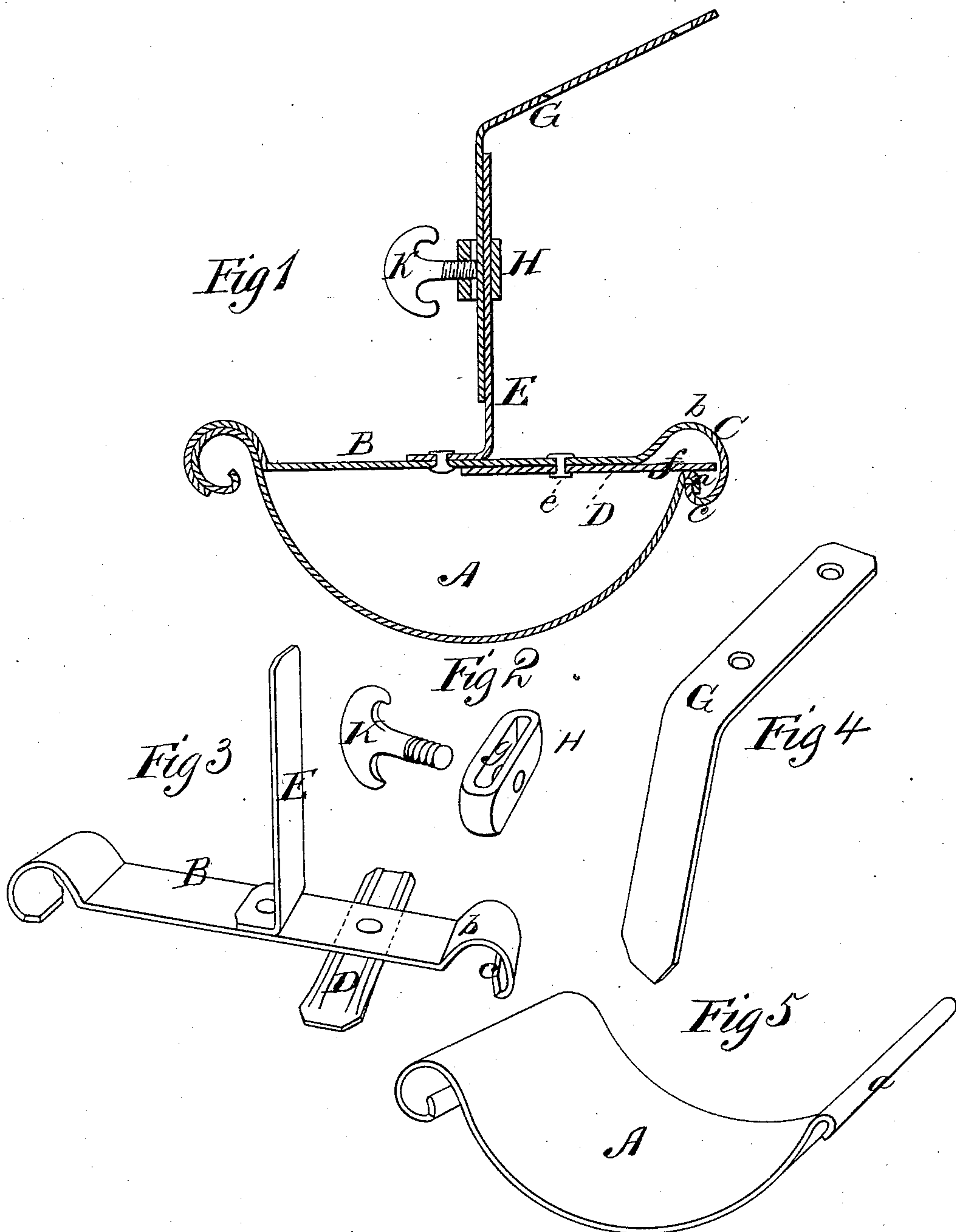


J. K. SHIPLEY.
EAVES-TROUGH HANGER.

No. 181,731

Patented Aug. 29, 1876.



WITNESSES
Villette Anderson.
F. J. Masi

INVENTOR
Joseph. K. Shipley
E. W. Anderson
ATTORNEY.

UNITED STATES PATENT OFFICE.

JOSEPH K. SHIPLEY, OF ASHLAND, OHIO, ASSIGNOR TO LOUIS JEFFERSON SPRENGLE, OF SAME PLACE.

IMPROVEMENT IN EAVES-TROUGH HANGERS.

Specification forming part of Letters Patent No. 181,731, dated August 29, 1876; application filed April 13, 1876.

To all whom it may concern:

Be it known that I, JOSEPH K. SHIPLEY, of Ashland, in the county of Ashland and State of Ohio, have invented a new and valuable Improvement in Eaves-Trough Hangers; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a vertical transverse section of my improved hanger applied; and Figs. 2, 3, 4, and 5 are details of the hanger and trough.

This invention has relation to hangers for eaves-troughs; and it consists in the construction and novel arrangement of the concave scroll-bend on the inner end of the horizontal bar, adapted to engage with the outwardly-turned lip of the inner edge of the trough, and the pivoted latch-bar under the horizontal bar, having its end projecting across the scroll-bend of said bar, and bearing on the inner edge of the trough; also, in the band-sleeve connection, having a threaded perforation for the reception of a thumb-screw to secure the hanger-band and eaves-band together, and provide for the ready adjustment or disconnection thereof, as herein-after fully shown and described.

In the accompanying drawings, the letter A designates the eaves-trough, having both its outer and inner edges bent outwardly, so that there will be no crevices within its hollow to afford a lodgment for vegetable matter or soil of any kind. The inner edge is turned down to form a lip, *a*. B represents the horizontal bar of the hanger, having its outer end bent in the usual form, to engage with the outer scroll of the hanger. The inner end of the bar is likewise bent in scroll form, rising at first upward from the bar, as shown at *b*, and being then carried around in a downward direction, terminating in a hook, *c*, which is turned upward to engage with the down-turned inner lip *a* of the

trough. The concavity of the scroll-bend C at the inner end of the horizontal bar is mainly above the level of the bar.

D represents a latch-bar, which may be economically made of sheet metal or thin plate, corrugated longitudinally to give it strength, and which is pivoted under the inner end of the transverse bar B, as shown at *e*, sufficient distance between the pivot *e* and shoulder *b* being allowed for a secure bearing. The end *f* of the latch projects from the shoulder *b* across the concavity of the scroll C in the direction of a chord of the arc, its termination being in line with, and beyond, the edge of the hook *c*.

E represents the hanger-band, which is bent in elbow form, and riveted to the horizontal bar B, its vertical branch extending upward for connection with the depending end of the eaves-band G. This is effected by the coupling H, which consists of a small block of metal, having a vertical slot, *g*, of sufficient capacity to hold the bands. The exterior wall of the slot is made of sufficient thickness to receive a female screw-thread, and the bands are secured without cutting apertures through them by means of a set-screw, K.

This construction enables the residents of a house to adjust the inclination of the troughs, or disconnect them from the eaves, with facility.

The trough is connected to the horizontal bar by first entering the outer edge in the outer end of said bar, and then revolving the trough inward and upward until the inner lip rises into the concavity of the scroll C, whereby it is stopped, and falls into position, with its outwardly-turned lip engaged with the hook *c* of the scroll. The latch is then turned to bring its projecting end across the scroll, and upon the upper surface or bend of the lip, securing the engagement, the latch-bar being hidden beneath, and protected by, the covering horizontal bar of the hanger.

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

1. In combination with the arms G E, secured, respectively, to the roof and to the

eaves-trough hanger B, the slotted coupling-block H, slotted to receive the said arms, and a clamp-screw, K, substantially as specified.

2. The hanger-bar B, having its inner end C bent in scroll form, first upward, and then curved downward, and terminating in an upward hook, c, and the latch-bar D, pivoted under said bar B, and extending across the concavity of the scroll C, substantially as specified.

3. The combination, with an eaves-trough having the outwardly-bent inner lip a, of the

hanger-bar B, having the scroll end C, with hook c, and protected latch D, substantially as specified.

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

JOSEPH K. SHIPLEY.

Witnesses:

H. T. GRINNELL,
ALLEN THOMAS.