(No Model.)

J. M. HESS.

Eaves Box.

No. 233,677. Patented Oct. 26, 1880.

Fig 1

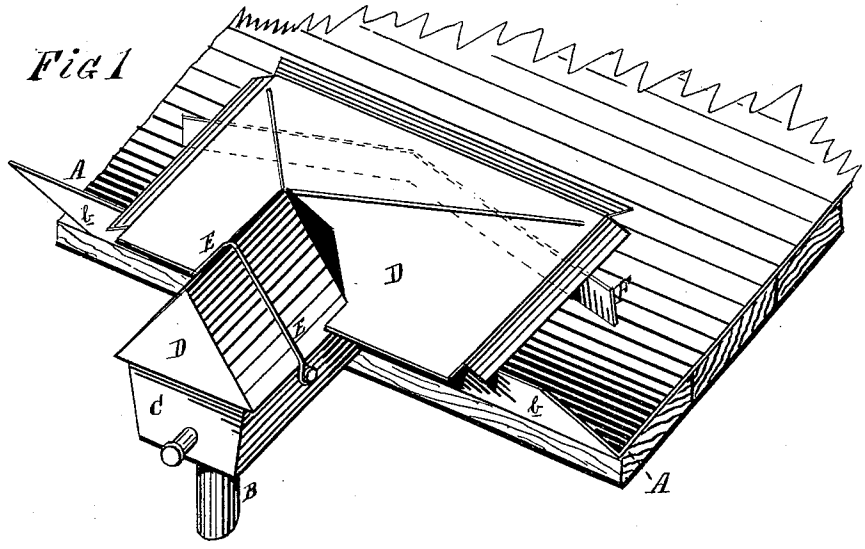


Fig 2

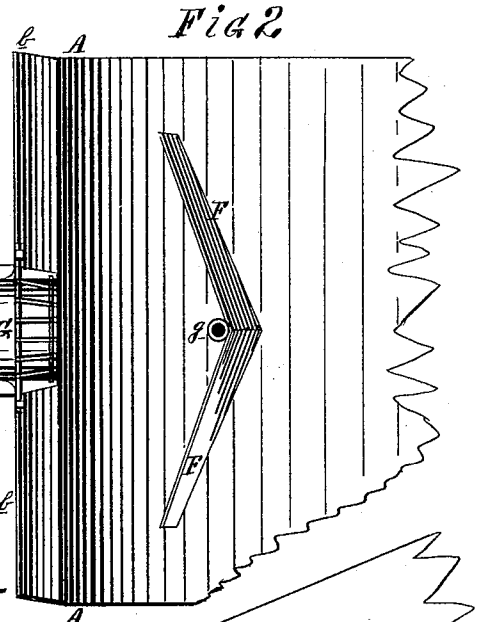


Fig 4

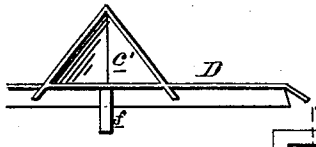


Fig 3

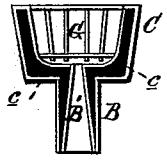
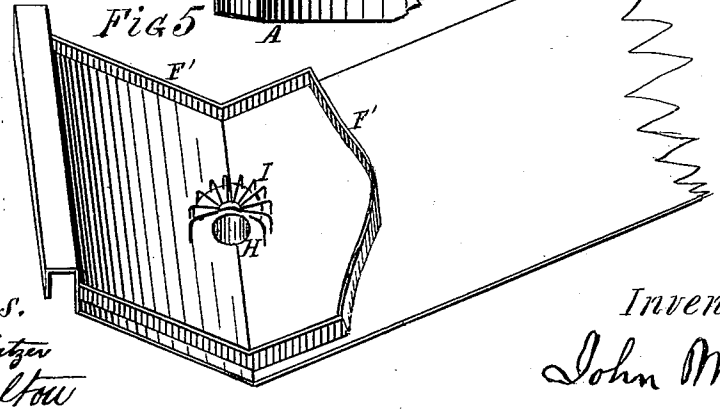


Fig 5



Witnesses.

Theo. L. Nintzel

Henry Thalton

Inventor.

John M. Hess

N. PETERS, PHOTO-LITHOGRAPHER, WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN M. HESS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO CHARLES H. MINTZER, OF SAME PLACE.

EAVES-BOX.

SPECIFICATION forming part of Letters Patent No. 233,677, dated October 26, 1880.

Application filed March 19, 1880. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. HESS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Eaves Gutter and Box, of which the following is a specification.

My invention relates to an eaves gutter or channel and an eaves-box extending out from the gutter and connected with the upper end of the conductor-pipe, through which the water descends to the ground.

The object of my improvements is to prevent the upper orifice of the conductor-pipe from becoming clogged or frozen during the winter season, or becoming choked up with sticks, gravel, or other refuse matter liable to accumulate on the roof and in the eaves-gutter. These objects I attain by the devices fully illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of a covered eaves-box and a portion of a roof and eaves-gutter. Fig. 2 is a plan view of the same with the cover removed. Fig. 3 is a transverse section of the eaves-box on a line, *a b*, of Fig. 2, and Fig. 4 is a cover for same. Fig. 5 is a perspective view of an eaves-gutter and upper orifice of the conductor-pipe with the cover removed.

The eaves gutter or channel A A, Figs. 1 and 2, is formed by turning up the edges *b* of the sheet metal at any suitable angle. Leading out from the eaves-gutter, and connected with the upper end of the conductor-pipe B, is an eaves-box, C, Figs. 1, 2, and 3, the sides and bottom of which are made double to form an air-chamber, *c*. This box and a portion of the eaves-gutter are inclosed by a cover, D, Figs. 1 and 4, which is held in position by a wire hook or hooks, E, on the sides of the box, and a small post, *f*, Fig. 4, secured on the under side of the cover, which passes into a socket, *g*, (shown in Fig. 2,) by which means the cover may be readily removed when necessary.

That portion of the cover D which incloses the box C is made of a triangular or any proper shape to form an air-chamber, *c'*, as shown in Fig. 4. This air-chamber and the chamber *c* around the sides of the box may be packed with felt or any suitable material, to prevent the intense cold penetrating the box. The upper part of the conductor B, where it is attached to the bottom of the eaves-box, is also arranged to prevent freezing up by means of an interior tapering pipe, B', Fig. 3, around which felt or other material is packed.

A snow-guard, F, (shown in Figs. 1 and 2,) is secured to the roof opposite to the entrance of the box and a short distance back of the eaves-gutter, to prevent the snow from sliding down and banking up around the orifice of the conductor-pipe, and a hinged grating, G, (shown in Figs. 2 and 3,) is placed across the entrance of the box, to prevent sticks, gravel, or other refuse matter from passing into the box.

It will be observed on referring to Fig. 1 that the cover D effectually prevents the snow from blowing down and drifting into the eaves-box, while at the same time sufficient space remains underneath the cover where it projects over the eaves-gutter for the water to pass off.

In the eaves gutter constructed as shown in Fig. 5 of the drawings the upper orifice, H, of the conductor-pipe opens directly into the gutter, and is protected by a wire grating, I. A guard, F', is also extended around the orifice and raised sufficiently high to prevent melted pitch or gravel from passing into the orifice. A cover of any suitable shape may be employed to keep the orifice clear of snow.

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

1. In combination with the conductor-pipe B and eaves-gutter A, a covered eaves-box, C, arranged to prevent snow or ice accumulating around the upper orifice of the conductor-pipe, substantially as specified.

2. The combination of the eaves-box C, cover D, air-chambers *c* and *c'*, conductor-pipe B, tapering pipe B', and eaves-gutter A, substantially as and for the purpose described.

3. The combination of the eaves-box C, cover D, hook E, post *f*, socket *g*, and eaves-gutter A, substantially as shown and described.

4. The combination of the eaves-box C, cover D, conductor-pipe B, and hinged grating G, substantially as specified.

JOHN M. HESS.

Witnesses:
THEO. F. MINTZER,
HENRY F. WALTON.