F. O. ROGERS.

ROOF FENDERS.

No. 185,137. Patented Dec. 5, 1876.

Fig. 1.

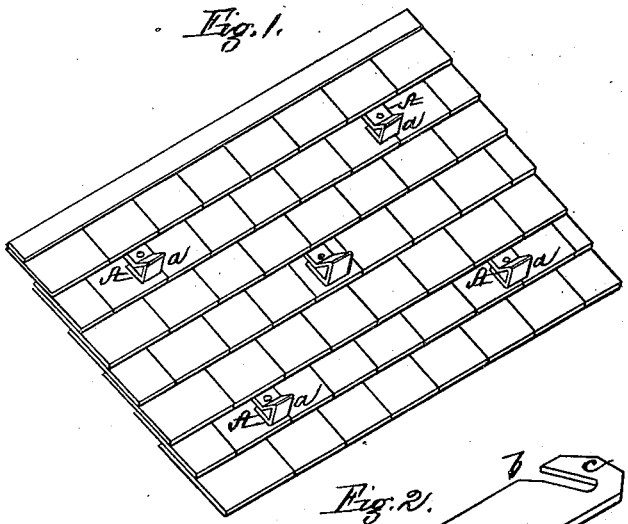


Fig. 7.

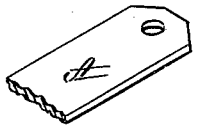


Fig. 2.

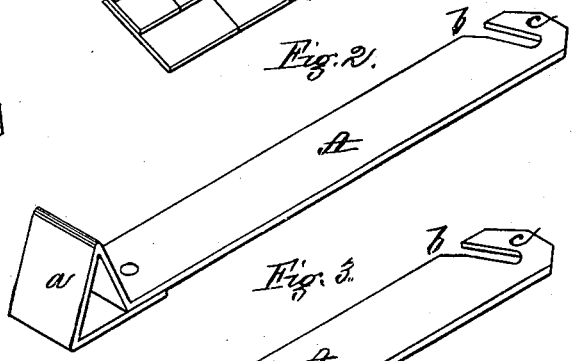


Fig. 3.

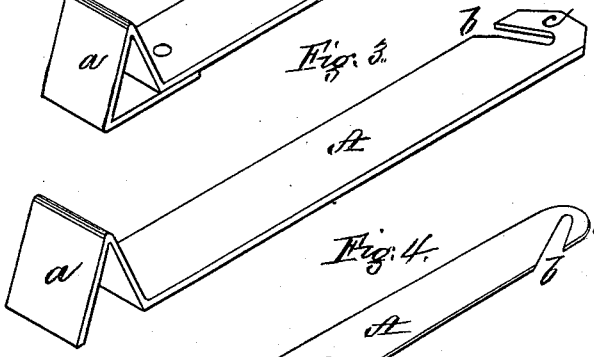


Fig. 4.

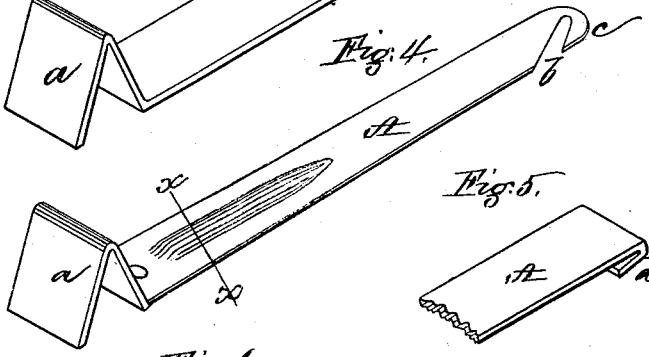


Fig. 8.

Fig. 5.

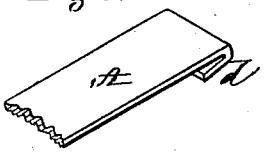
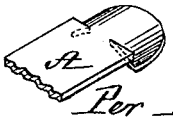


Fig. 6.



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UNITED STATES PATENT OFFICE.

FREDERICK O. ROGERS, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN ROOF-FENDERS.

Specification forming part of Letters Patent No. **185,137**, dated December 5, 1876; application filed November 20, 1876.

To all whom it may concern:

Be it known that I, FREDERICK O. ROGERS, of Boston, in the county of Suffolk and State of Massachusetts, have invented a Device for Preventing Snow-Slides from Roofs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a perspective view, representing a portion of a roof with my device for preventing snow-slides applied thereto. Figs. 2, 3, 4, 5, 6, and 7 are views representing different forms of my said device. Fig. 8 is a section on the line *x x* of Fig. 4.

To provide a simple, efficient, and inexpensive means by which snow can be retained upon a roof until melted, and thereby prevented from sliding off in a mass and endangering the life or limbs of the passer-by, is the object of my present invention, which consists in a strip of metal or other suitable material provided with a projection or ledge, which serves as a bar for arresting the descent of the snow, and at or near its upper end with a hook, clasp, or other means for securing it in place under the slate or other covering of the roof, the said device being readily applied either to a new roof or to any already covered, and forming an effectual stop or shelf, against which the snow rests, and by which it is retained until it becomes melted and flows off in streams, as desired, the accidents, damage, and inconvenience resulting from the sliding of snow from roofs not provided with guards or arresters being thereby avoided.

To enable others skilled in the art to understand and use my invention, I will proceed to describe the manner in which I have carried it out.

In Figs. 1, 2, and 3, A A represent thin strips of galvanized metal or other suitable material, each having its lower end bent, as shown, so as to form a V-shaped projection, *a*, the upper end of each of the strips shown in Figs. 2, 3, and 4 being provided with an angular open slot, *b*, a hook, *c*, being thus formed, which, when the strip A is pressed up under a slate or shingle, can be caught on one of the nails, by which it is secured in place, and thus held securely in the position seen in Fig. 1, the V-shaped projection serving as a stop or guard for the snow to rest against, and by which it is retained until entirely melted, the sliding of the snow from the roof, and the accidents and damages resulting therefrom, being thus avoided.

I prefer to place these guards about two feet apart in rows, each guard of a row being located in a line half-way between two contiguous guards of the next row, either above or below it; but they may be otherwise arranged, if desired.

Instead of forming a hook, *c*, by cutting a slot, *b*, at the upper end of the strip, the upper end of the strip may be bent under, as seen in Fig. 5, thus forming a hook, *d*, which is intended to catch over the upper edge of a slate when forced up under the slate placed over and above it.

Another form of hook, also intended to catch over the upper edge of a slate, is shown in Fig. 6, and in Fig. 7 is shown a strip provided with an aperture near its upper end, through which a nail is intended to pass at the time of applying the slate or other covering to the roof. I prefer, however, to provide the strips with hooks formed as shown in Figs. 2, 3, and 4, for the reason that they can be detached without removing the slates.

Instead of forming the strip with its V-shaped projection in one and the same piece, the shank may be of thin metal, slightly crowning at its lower end, and the projection may be of thicker metal, either cast or wrought, riveted or soldered thereto, see Fig. 4.

The above-described guard will be found particularly useful in locations where it is desired to utilize the water produced from the melting of the snow, as it is thereby retained, and the water allowed to run into a cistern.

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

The strip A, provided with a ledge or projection, *a*, and a hook, aperture, or other means of securing it in place upon a roof, substantially as and for the purpose set forth.

Witness my hand this 16th day of November, A. D. 1876.

FREDERICK O. ROGERS.

In presence of—

P. E. TESCHEMACHER,

N. W. STEARNS.