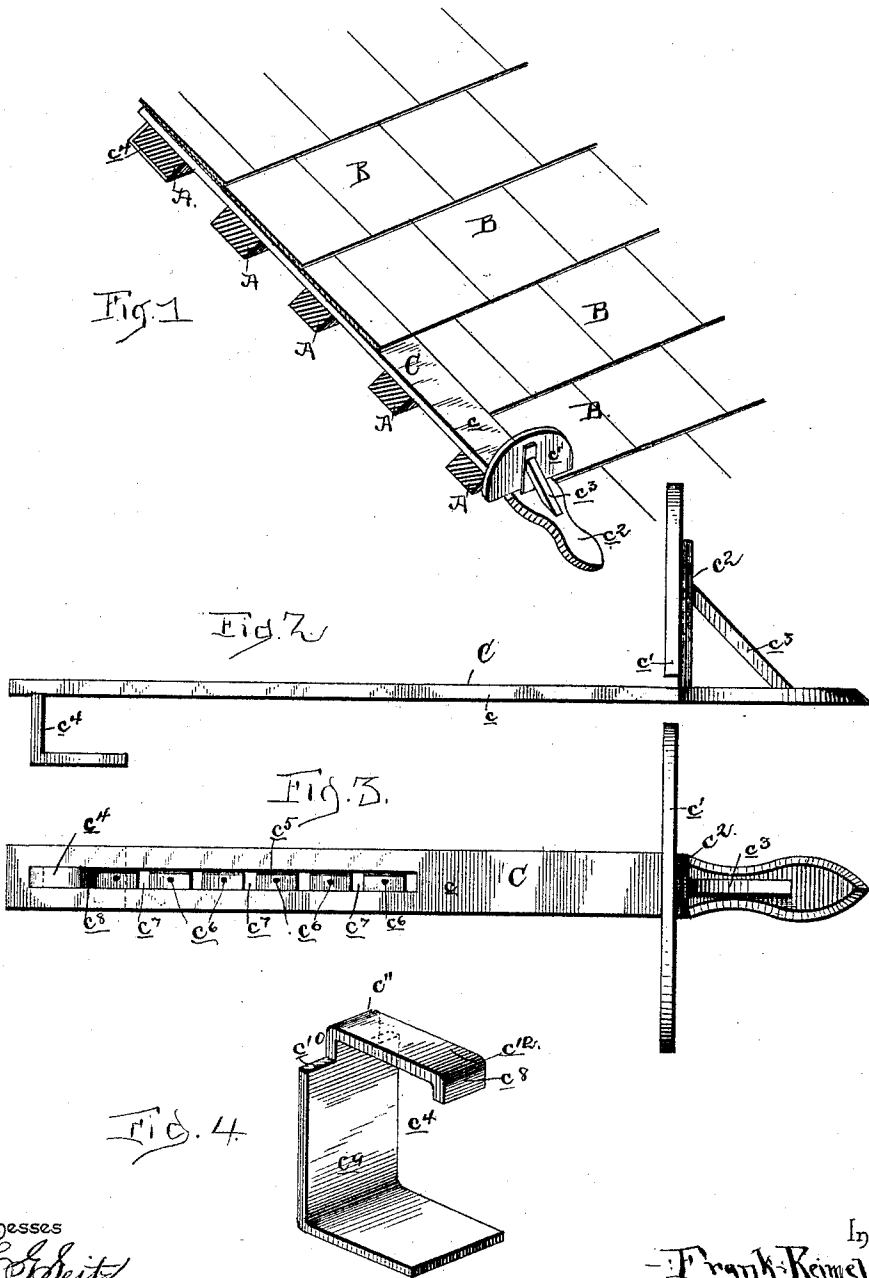


(No Model.)

F. REIMEL.
SNOW GUARD.

No. 463,235.

Patented Nov. 17, 1891.



Witnesses

W. E. Smith
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By his Attorneys,

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UNITED STATES PATENT OFFICE.

FRANK REIMEL, OF EAST BANGOR, PENNSYLVANIA.

SNOW-GUARD.

SPECIFICATION forming part of Letters Patent No. 463,235, dated November 17, 1891.

Application filed March 21, 1891. Serial No. 385,866. (No model.)

To all whom it may concern:

Be it known that I, FRANK REIMEL, a citizen of the United States, residing at East Bangor, in the county of Northampton and State of Pennsylvania, have invented a new and useful Snow-Guard, of which the following is a specification.

My invention is an improvement in snow-guards and fenders designed for use upon the slanting roofs of buildings for the purpose of retaining the snow upon the roof until it melts, and to prevent any sudden slide of the snow from the roof to the ground below, whereby it might cause injury to persons or property or obstruct a path.

Heretofore it has been customary to fasten one end of a strip of metal to the roof and bend the other up and broaden it in order to form a snow-guard, or braces have been attached to roofs at intervals and boards or other solid guards fastened to the braces; but both of these methods are objectionable, as the strip of metal, which is bent and fastened to the roof, is liable to weaken by bending and to give way under even a moderate strain, whereas the solid guards are liable to cause injury by backing up half-melted snow and forming pools of water upon the roof, which will leak through and stain the ceiling.

The objects of my invention are to provide a snow-guard which will correct the defects previously found in such devices, which may be attached to any kind of roof, and which will be cheap, artistic, and durable.

With these objects in view the invention consists in the various novel details of construction and in the combination of parts, hereinafter fully described, and more particularly pointed out in the claims.

In the drawings in which I have illustrated my invention, and in which like letters of reference indicate corresponding parts, Figure 1 is a perspective view of a roof, showing my snow-guard in position. Fig. 2 is a side elevation of my improved guard. Fig. 3 is a plan view of the same, and Fig. 4 is a detail view of one of the parts.

In the drawings, the letter A designates rafters or laths, which are covered by roofing B.

C designates my improved snow-guard, which is composed of the elongated metallic strip or foot-piece c , the snow-guard proper

c' , the support c^2 therefor, and the brace c^3 . A hanger or clamp c^4 is used in some cases to fasten the foot-piece c to the laths A. The foot-piece c has a longitudinal groove c^5 in its upper surface, and at the bottom of this groove is provided with a series of circular perforations c^6 to receive screws or nails; and a series of rectangular openings c^7 , arranged at equal distances from each other to receive the arm c^8 of the clamp c^4 .

The snow-guard c' may be of any convenient size or shape and may be made of any durable material, and the same is true of the support c^2 and the brace c^3 , and while I intend to use them in ornamental shapes and of handsome material this is not essential to their function.

The clamp c^4 is formed of a flat piece of metal bent at a right angle c^9 and having its upper portion reduced to form the shoulders c^{10} , and the reduced portion or arm c^8 bent to form another angle c^{11} , approximately right, on the same side as the angle c^9 , the said reduced portion being bent once more near its end c^{12} . This construction is given the clamp c^4 to enable its reduced portion or arm c^8 to fit in the groove c^5 , which is of depth sufficient to receive it, its shoulders c^{10} abutting against the under side of the foot-piece c , its reduced portion or arm c^8 passing upward through one of the rectangular openings c^7 , the bent end c^{12} of said reduced portion extending down into another opening c^7 , and the body portion of the clamp c^4 embracing one of the laths A.

The advantage of my snow-guard is that it is adjustable to fit different lengths of slate and also accommodate itself to the varying positions of the laths or rafters. It will of course be understood that the foot-piece c is inserted between the layers of slate, so that it may be fastened to the laths, &c., and that where the said foot-piece is secured by the clamp c^4 it may not be necessary to further fasten it by nails or screws passed through the perforations c^6 , and vice versa.

It is to be understood that the snow-guard c' , the support c^2 therefor, and the brace c^3 may be integral or made separate and secured together, as shown in the drawings; but it should be observed that however the parts may be constructed it is of advantage to elevate the snow-guard c' about an inch above

the roof, so that the water from melted snow may run between them.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a snow-guard, the combination, with the foot-piece and the guard proper rising from the lower end thereof, of the clamp adapted to detachably engage over a rafter, and means for adjustably connecting said clamp and foot-piece, substantially as described.

2. In a snow-guard, the combination, with the foot-piece provided in its upper face with a longitudinal groove through whose bottom is a series of rectangular openings and the guard proper rising from the lower end of the foot-piece, of the clamp having its lower end bent forwardly and its upper end reduced to form an arm which is bent forwardly and then downwardly near its tip, said arm being of a

size to pass through and engage two of said openings and to lie in said groove, substantially as described.

3. In a snow-guard, the combination, with the foot-piece provided in its upper face with a longitudinal groove through whose bottom is a series of nail perforations and rectangular openings, and the guard proper rising from the lower end of the foot-piece, of the clamp having its upper end reduced to form an arm which is bent forwardly, said arm being of a size to pass through and engage said openings and to lie in said groove, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

FRANK REIMEL.

Witnesses:

W. R. GRUBBS,

WILLIAM ROBERTS.