

(No Model.)

N. R. POWERS.
SNOW GUARD.

No. 459,876.

Patented Sept. 22, 1891.

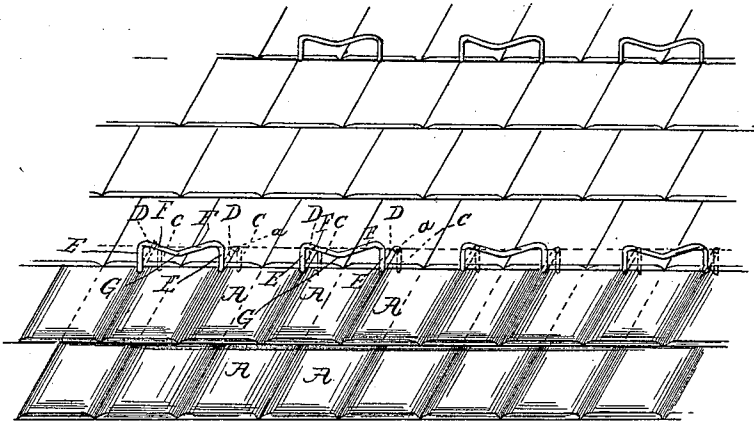


Fig. 1

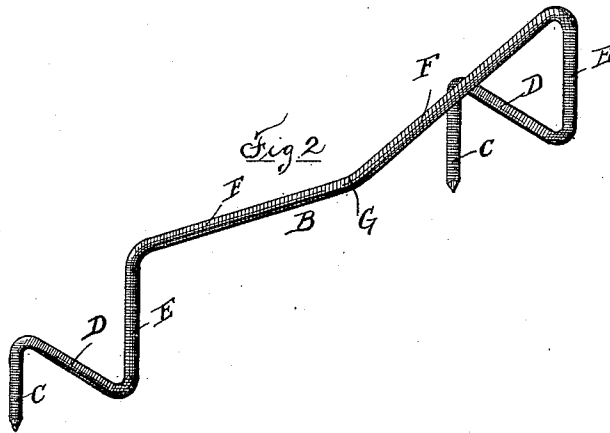


Fig. 2

Witnesses
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UNITED STATES PATENT OFFICE.

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SNOW-GUARD.

SPECIFICATION forming part of Letters Patent No. 459,876, dated September 22, 1891.

Application filed January 20, 1891. Serial No. 378,481. (No model.)

To all whom it may concern:

Be it known that I, NICHOLAS R. POWERS, of the city and county of Worcester, and Commonwealth of Massachusetts, have invented certain new and useful Improvements in Snow-Guards; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, including letters of reference marked thereon, and in which—

Figure 1 represents a perspective view of a section of a roof of a building with my invention in combination therewith, that portion of my snow-guard which extends above the slating to arrest the snow and ice only being shown; and Fig. 2 represents upon an enlarged scale a perspective view of my improved snow-guard detached for the purpose of illustrating the form of construction of the parts which enter the roofing, of those that rest upon the slate, and those that project up in a vertical position to support the snow and ice arresting portion of the guard, as will be hereinafter more fully described.

To enable those skilled in the art to which my invention belongs to make and use the same, I will now describe the invention more in detail.

The object of my invention is to provide a cheap, simple, and durable snow and ice guard that shall be within the means of all, while it can be applied in an easy and expeditious manner, and also when in place on the building will be somewhat ornamental and pleasing to the eye; and the nature of my invention consists in a single piece of wire of the desired size, bent into such shape that the ends will be adapted to be driven into the roof boarding, while rearward-bent portions are adapted to rest on two adjoining slates A under the slate the guard is designed to span and extending back by the edges thereof, with additional bent portions extending up at right angles thereto to sustain and support the central portion of the wire at a suitable distance above the slate it spans, to arrest and hold the snow and ice on the roof above it.

In the drawings the slates on the section of roof, Fig. 1, are marked A, and my snow and ice guard used in combination therewith is made from a single piece of wire, steel wire

being preferred, and of Nos. 6 or 7 wire, depending on the size of slate employed. The wire is first cut into the desired lengths, after which the ends are bent down at right angles to the central portions. Then the bent ends are bent back at right angles to the first bends, after which the ends are again bent down at right angles to second-named bends and parallel with the first-named bends and by which operations are produced the several parts marked C D E on each end of the piece of wire, leaving a central portion F F, which in this instance is bent down in the middle, forming a V-shaped center G, all as clearly shown in Fig. 2 of the drawings, and the functions of which are all important, since when put to use the ends C C are driven into the boarding to hold the device in place, and the horizontal bent portions D D serve as back extension supports for the upright portions E E, which hold and sustain the central portion G, which spans a single slate and arrests and prevents the snow and ice on the roof above and in contact therewith from sliding farther down on the roof. As the holding-points C are driven into the roof boarding, so that back projecting parts D D will each lie between the edges of two adjacent slates—that is, the parts D D will be arranged and located so that their inner sides fit against the edges of the slate A, that the central snow and ice part G spans—while their outer edges fit against the edges of the respective slates to the right and left thereof, whereby when the next course of slates A are laid the holding ends C and back-supporting parts D will be securely covered by the slates, the lower ends of the two slates forming such protection resting against the upright parts E E, one-half of one slate extending to the right and one-half of the other to the left, the joint being over the center of the slate which the central part G spans, thereby insuring a good and tight roof when the guards are in place. Those portions of the guard lettered D D and E E are made about two inches long, while the central portion G is of sufficient length to span the width of a single slate and of course will be made to conform with the width of slate used. I prefer to notch the upper ends of the slate, above which the ends C C are driven into the boarding, as indicated by

dotted lines at *a a*, Fig. 1. If it is desired to have the slate next above the upright portions *EE* lap down over the ends of the slates above which the ends *CC* are driven more than two inches, as shown by dotted lines, Fig. 1, then the portions *DD* must be made longer to give the desired space for the increase of lap. Central portion *G* being depressed in the middle in **V**-form will catch and arrest a thinner sheet of ice or snow than it otherwise would, while its stiffness is increased.

In practice, if the guards *B* are put on over each alternate slate of a course just laid and the rows alternate, as shown in the drawings, three or four rows of guards *B* will be found to answer well for ordinary roofs; but of course builders can suit their preferences, and can put on more or less and also arrange the guards as respects the slates in a different manner from that shown in the drawings.

As my snow and ice guard is designed to span only one slate, it is quite stiff and firm, although made from wire, the size of which looks quite small from the street and is not

therefore unsightly. Then, too, the form of construction is such that the manufacture is very simple and expeditious, while the ends are pointed by the operation of cutting the wire from the coil by a bevel or shear cut. The device, too, is also light and easy to handle and can be applied by any ordinary workman and with the common slater's tools.

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

In a snow-guard made from a single piece of wire, the combination, with a **V**-shaped central portion *G* for arresting and holding the snow and provided with downwardly-bent projecting supports *EE*, of horizontal forwardly-projecting portions *DD* to rest on the slate, and provided with downwardly-pointed projections *CC* to be driven into the roof boarding, all substantially as and for the purposes set forth.

NICHOLAS R. POWERS.

Witnesses:

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