

(No Model.)

J. BAIRD.
SNOW GUARD.

No. 529,774.

Patented Nov. 27, 1894.

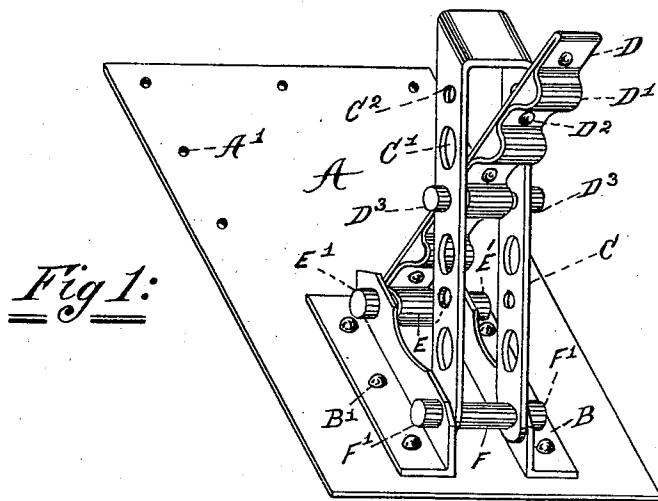
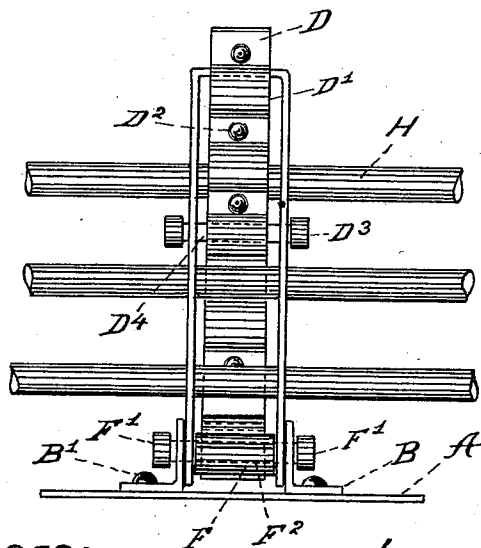


Fig 2:



WITNESSES:

Richard A. Healy
Am M Drew

INVENTOR:

John Baird
By John F. Kerr
Atty-

UNITED STATES PATENT OFFICE.

JOHN BAIRD, OF PATERSON, NEW JERSEY.

SNOW-GUARD.

SPECIFICATION forming part of Letters Patent No. 529,774, dated November 27, 1894.

Application filed August 24, 1894. Serial No. 521,202. (No model.)

To all whom it may concern:

Be it known that I, JOHN BAIRD, of the city of Paterson, in the county of Passaic and State of New Jersey, have invented certain new and useful Improvements in Snow-Guards, of which the following is a full, clear, and exact description, such as will enable others skilled in the art to which it appertains to make and use the same.

The invention relates to improvements in that class of snow guards in which rods or pipes are employed which rods and pipes are supported by standards.

The object of my invention is to provide a snow guard which may be adjusted or made to suit the pitch of any roof, and which from its simplicity of construction, strength and the ease with which it is changed to suit any pitch will obviate the necessity of having snow guards made especially for roofs of different pitches.

The invention consists in the peculiar construction and combination of parts shown in the accompanying drawings which form a part of this specification and set forth in the claims.

In my improved snow guard I employ an adjustable standard which is pivotally secured at its base and an adjustable pivotally secured brace provided with loops to admit bolts which pass through the sides of the standards and through any of said loops in order to secure said brace to said standard. I employ an ordinary metal plate which takes the place of a slate or shingle, and which is secured by nails or screws or other suitable means at its upper end to the roof. At the bottom of said plate and to it I secure two angle iron sides. The standard, which is the shape of an inverted U is provided with holes in its sides to receive the guard rods or pipes, and its ends are secured between said angle plates by means of a bolt passing through said angle plates and ends. The ends of said standard are kept apart by means of a quill or thimble which is placed between them and through which the securing bolt also passes. As many of these bolts and thimbles may be passed through the sides of the standard as may be desired for the purpose of strengthening the standard. The adjusting brace or bracket is formed by bending a piece of metal

on itself in order to form the loops for the adjusting bolt and an eye for the swinging end of the adjusting brace is formed by the bending of the two ends of the bracket metal. The swinging end of the adjusting bracket fits snugly between the said angle plates and is secured pivotally to them by means of a bolt which passes through the vertical sides of the angle plate and through said eye as shown in the drawings.

For the purpose of forming a strong guard for snow on pitched roofs the standards through which the pipes or bars pass are maintained in a perpendicular position by passing a bolt through the standards and through the particular loop of the adjusting bracket, which will attain the object. It is thus obvious that my snow guard may be adjusted to various degrees of pitch which advantage has not to my knowledge been hitherto attained. It is also obvious that by the peculiar construction of my standard and extension brace or bracket great strength is obtained.

In the drawings Figure 1 is a perspective view of my snow guard. Fig. 2 is a front elevation showing guide pipes or bars passing through the standard.

—A— is the base plate; —B—, the angle iron sides which are secured to the base plate by bolts or rivets —B'—.

—C— is the inverted U shaped standard.

—C'— are the holes in the same for the guard tubes and —C²— are the holes in the same for the adjusting bolts.

—D— is the adjusting bracket.

—D'— are the loops formed to receive the adjusting bolt.

—D⁴— is the adjusting bolt; —D³—, the nut securing the adjusting bolt and —D²— are rivets securing the loops.

—E— is the eye formed by the two thicknesses of the bracket plate. —E'— is the securing nut of bolt passing through said eye and angle plates.

—F— is a quill or thimble of bolt —F²—.

—F'— are nuts of the bolt —F²— and —F²— is the pivot bolt of standard and —H— are the guard rods or pipes.

The standards and pipes are made of wrought iron and are calculated to hold back

a pressure of at least six tons to each standard when placed five feet apart and securely fastened to the roof. The standards may be painted black or galvanized according to taste. The construction of the standard—C—

5 secures great strength and at the same time allows snow to pass through in melting.

My snow guard is thus cheap, simple and durable and calculated to accomplish the object for which it is designed.

10 Having thus fully described the nature, construction, and operation of my invention, what I claim, and desire to secure by Letters Patent, is—

15 1. A snow guard consisting of a metal base plate, angle iron side plates secured to said base plate, an adjustable brace or bracket pivotally secured to said angle iron plates an
20 inverted metal U shaped standard pivotally secured to the other ends of said angle iron side plates, the said adjustable brace having loops and the free end of said adjustable brace passing through said standard, said standard
25 being provided with openings for an adjusting bolt and an adjusting bolt adapted to pass through openings in standard and loop in adjusting bracket, all constructed substantially

as shown and described and for the purpose specified.

2. In a snow guard a base plate in combination with a standard pivotally secured thereto and a brace or bracket pivotally secured thereto and means for securing said brace and standard for the purpose specified. 30

3. In a snow guard an inverted U shaped metal standard, a metal base plate which is secured to the roof, said metal standard being pivotally connected at its lower end to said base plate, openings through sides of standard for guard pipes or rods, pipes or rods passing through said openings in standard and a brace pivotally secured to the above mentioned base plate and adapted to be secured to said standard at different points throughout its length for the purpose of holding said standard (when secured to the roof) in a perpendicular position and at a greater or less angle with said base plate (according to the pitch of the roof), as shown and specified. 45

JOHN BAIRD.

Witnesses:

EMMET O'BRIEN,
WILLIAM BENNETT.