

S. R. Hathorn,

Roof Guard.

No. 106,580.

Patented Aug. 23. 1870.

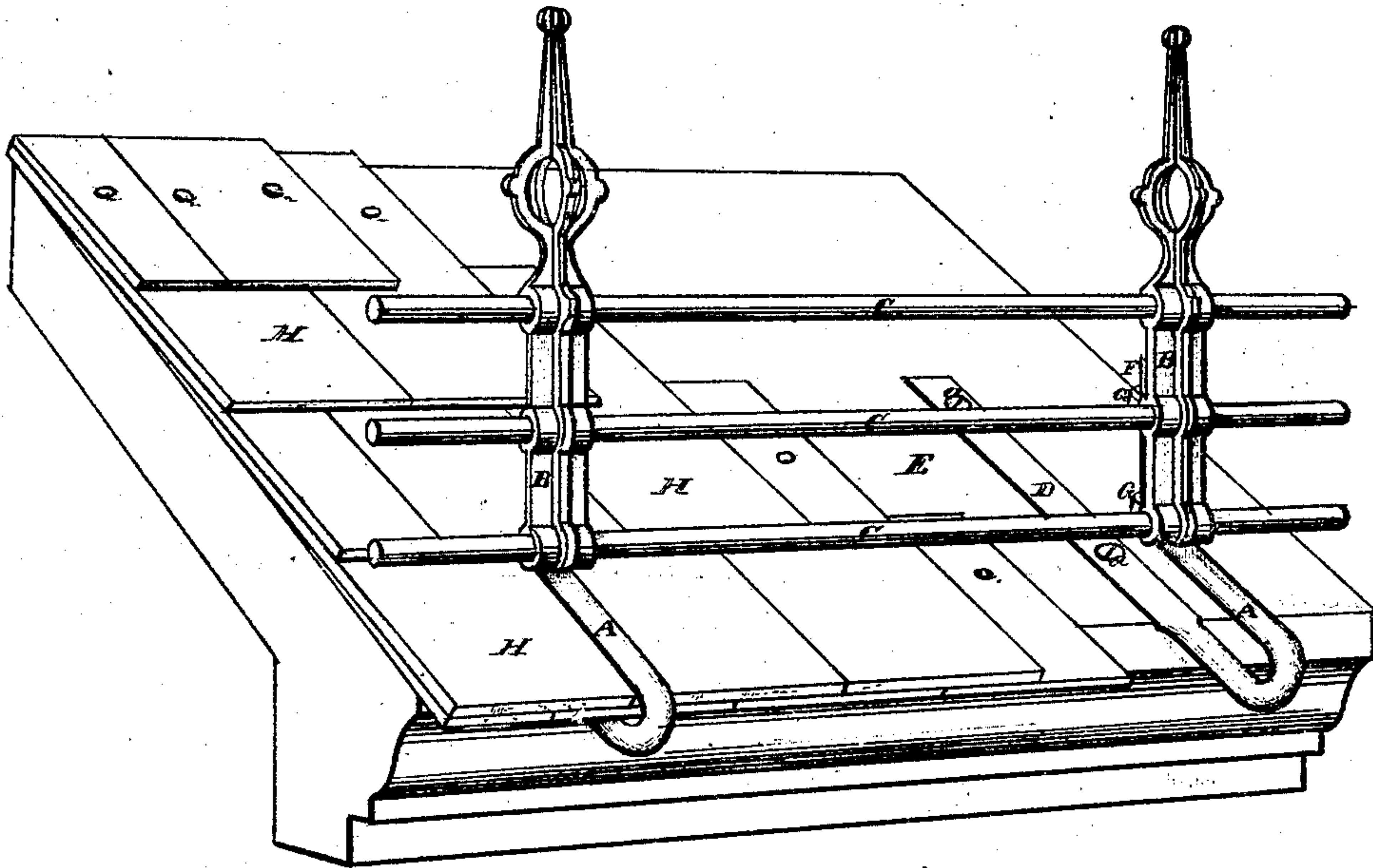


Fig. 1

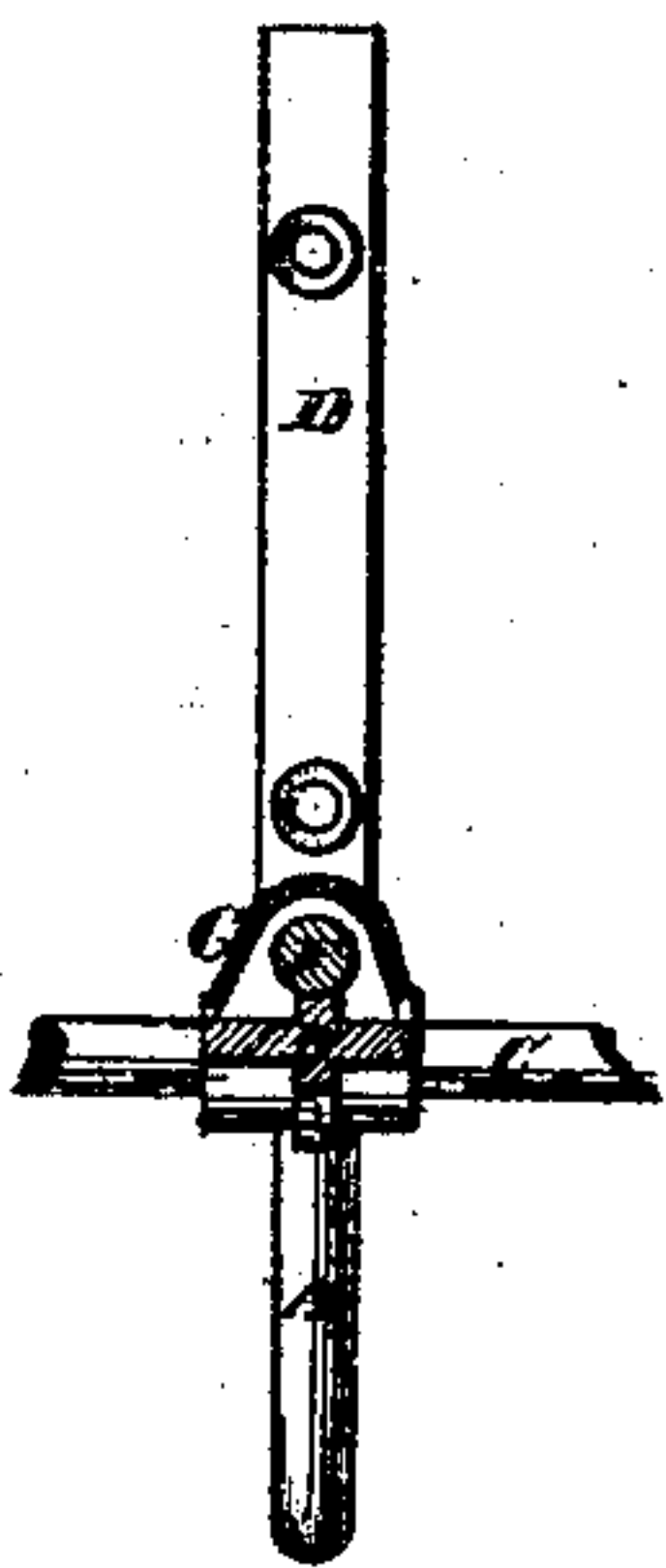


Fig. 3

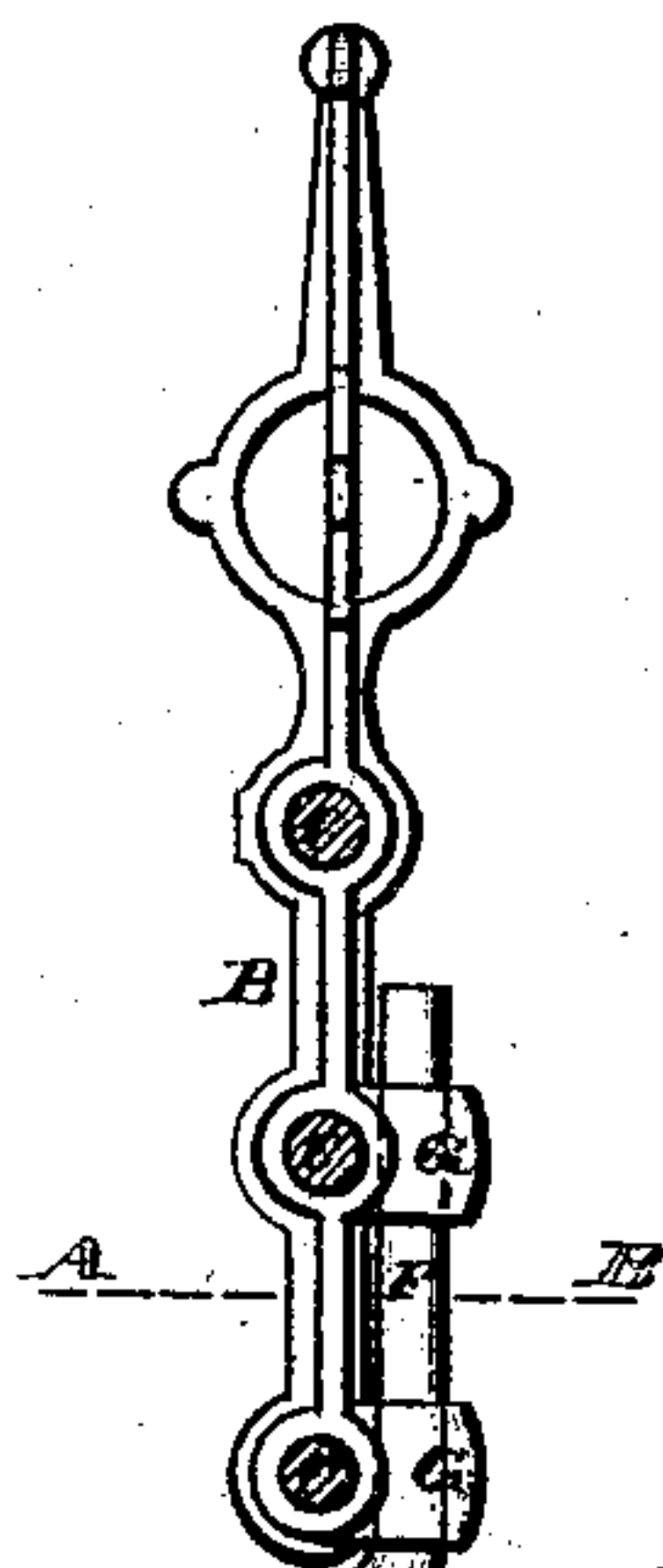
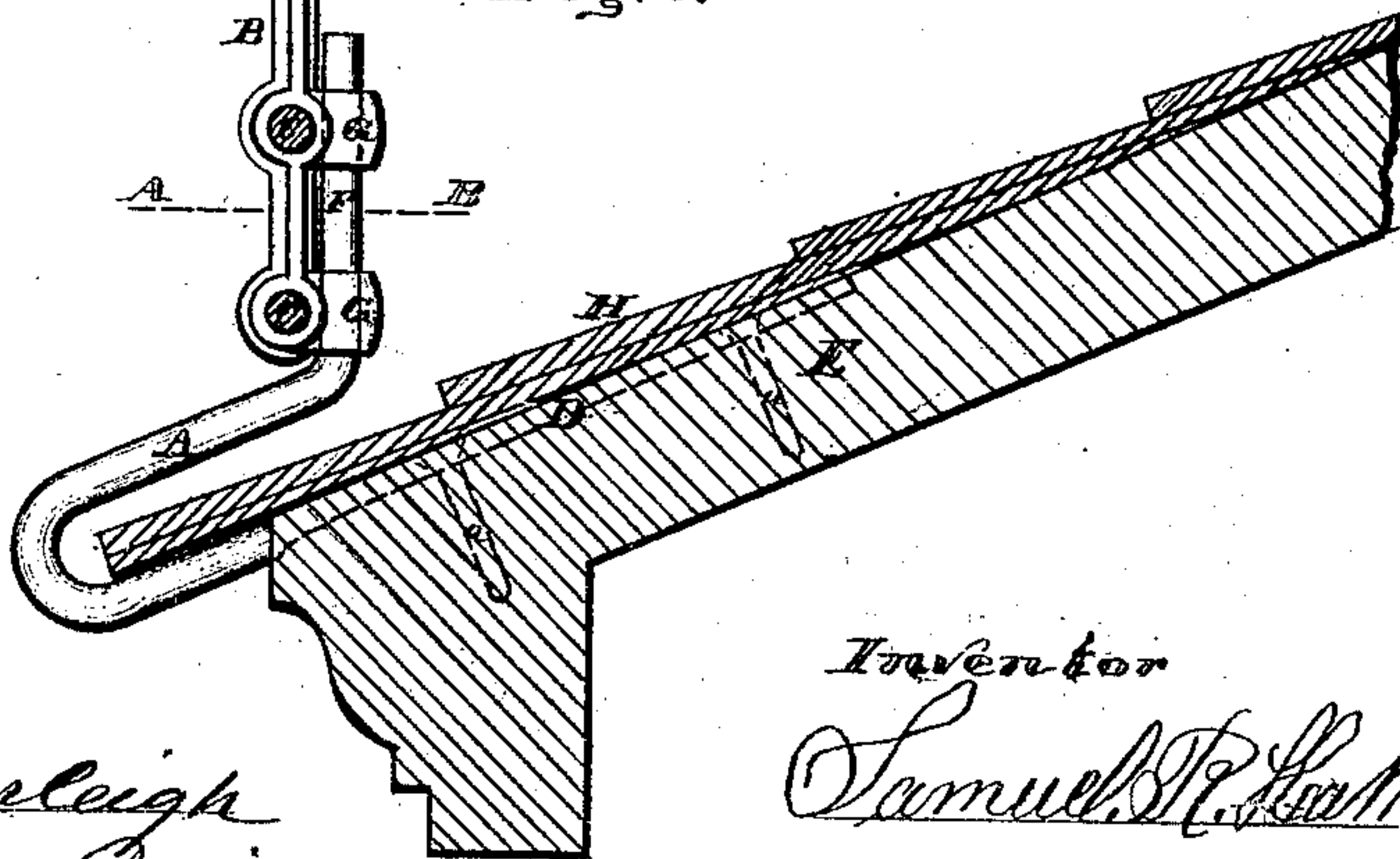


Fig. 2



Witnesses,

Chas. Burleigh
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UNITED STATES PATENT OFFICE.

SAMUEL R. HATHORN, OF WORCESTER, MASSACHUSETTS.

IMPROVEMENT IN GUARDS FOR ROOFS.

Specification forming part of Letters Patent No. **106,580**, dated August 23, 1870.

To all whom it may concern:

Be it known that I, SAMUEL R. HATHORN, of the city and county of Worcester, and State of Massachusetts, have invented certain new and useful Improvements in Snow and Ice Guards; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 represents a perspective view of my improved snow and ice guard. Fig. 2 represents a transverse section of the roof and bars, showing a side view of the supporting-standard; and Fig. 3 represents a horizontal section of one of the supporting-standards on line A B, Fig. 2.

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

The object of my invention is to provide a snow and ice guard which can be manufactured and applied to use with greater facility than the ordinary guards, and at the same time be made equally ornamental and of greater strength.

It consists of forming the standards or rod-supporting posts in two separate pieces, as hereinafter explained.

In the drawings, the parts marked A indicate the foot-bars or bases of the standards, B the uprights, and C the guard-rods.

The foot-bars A are made of wrought metal, and are, in this instance, curved near their centers, so as to pass around the lower edges of the slate or shingles H in the manner indicated in the drawings. The lower ends, D, of the foot-bars A are flattened and set into the roof-boarding E, so that their top surface will be flush with the top surface of the boarding, and they are firmly secured to the roof by means of screws, bolts, or spikes *a*, as indicated in dotted lines, Fig. 2. The upper ends, F, of the foot-bars are turned up, so as to stand in a vertical position when the bars are properly adjusted and secured to the roof, and upon said vertical ends F are arranged the uprights B, that hold the guard-rods C, sockets or rings G being formed upon the rear

sides of the uprights, which fit onto the ends F of the foot-bars A, as shown.

The uprights B are made of cast metal, and may be made with any desired style of ornaments. They are provided with suitable openings to receive and hold the guard-rods C, which latter pass through the uprights B from side to side, all of which is fully indicated in the drawings.

The foot-bars A are secured to the roof before the shingles or slates are laid, and when the roof is completed the uprights B and guard-rods C are arranged upon the foot-bars in the manner before stated.

In lieu of forming the sockets or rings G upon the outside of the uprights B, as shown in the drawings, the uprights may, if preferred, be made somewhat larger, and be cored out in the center at their lower ends, to form the sockets, in which case the vertical ends F of the foot-bars A would be arranged to fit into the openings thus formed, which could be made of any desired shape.

Any desired number of guard-rods C can be used, and the foot-bars A may, if preferred, be made so as to pass between the slates, instead of curving around their lower edges, and may be made of round, square, or other shaped bars of metal, as desired.

By constructing the supporting-standards in two pieces, as herein described, their manufacture is greatly facilitated, while a much more serviceable guard is produced, inasmuch as the lower portion or foot-bars, being made of wrought metal, can be easily forged into shape from bars of the proper size, and when made of wrought-iron great strength is obtained, and they can readily be bent to fit roofs of any degree of inclination or pitch upon which it is desirable to use them. Then, again, the uprights B, being of cast metal, can be made highly ornamental, and that, too, at a comparatively small cost, as only one pattern is required for the different angles of roofs, whereas with the ordinary standard, if made from cast metal, a separate pattern is required for each degree of inclination, and if made of wrought metal their cost is greatly increased.

The parts of my improved guard, being

smaller and lighter, are more convenient to handle, and can be put up with less labor than the ordinary guard, and when accidentally broken can be easily repaired.

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

The combination, with the wrought-metal

foot-bars A, of the ornamental uprights B, when said parts are connected together by sockets or rings, substantially as and for the purpose herein set forth.

SAMUEL R. HATHORN.

Witnesses:

CHAS. H. BURLEIGH,
ALBERT E. PEIRCE.