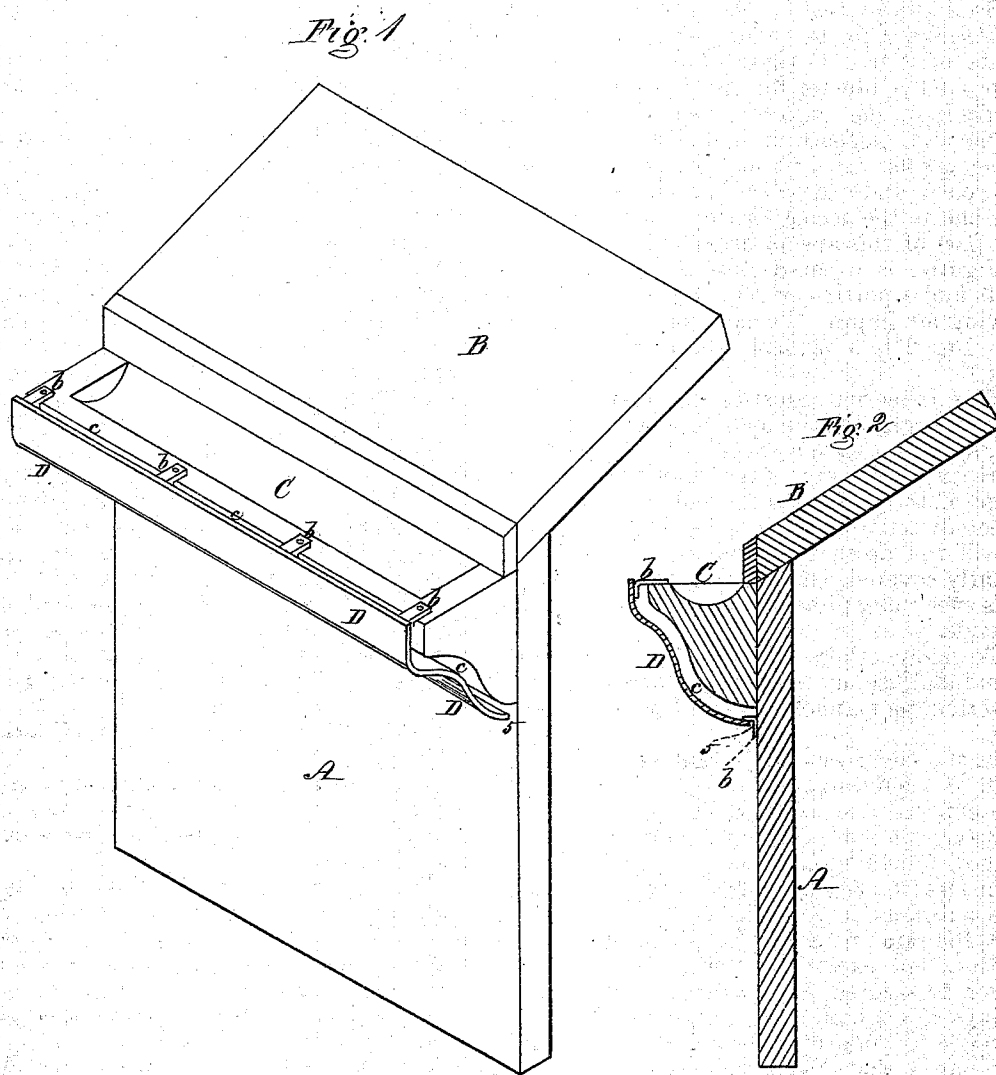


W. S. CUSHMAN.

Fire-Extinguishing Attachments to Eaves-Troughs.

No. 146,515.

Patented Jan. 20, 1874.



Witnesses:
P. Eschmacker
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UNITED STATES PATENT OFFICE

WALTER S. CUSHMAN, OF ASHEVILLE, NORTH CAROLINA.

IMPROVEMENT IN FIRE-EXTINGUISHING ATTACHMENTS TO EAVES-TROUGHS.

Specification forming part of Letters Patent No. 146,515, dated January 20, 1874; application filed July 14, 1873.

To all whom it may concern:

Be it known that I, WALTER S. CUSHMAN, of Asheville, in the county of Buncombe and State of North Carolina, have invented an improved conductor for distributing water directly from the gutter or roof of a building to the wall beneath, in order to protect the same against fire, 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 of the front wall and a portion of the roof of a building having my improved conductor applied thereto. Fig. 2 is a vertical section through the same.

This invention consists in a plate or conductor applied to the outside of the rain-gutter, so as to leave a space between the two, to receive any water which may flow over the edge of the gutter, and conduct it in a thin sheet directly onto the wall beneath, so that it will run down the same, and keep it constantly covered with flowing water, whereby it is effectually protected against fire from the outside.

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 the said drawings, A represents the front wall of a building, and B one side of the roof thereof, onto or over which water may be played from a fire-engine or pump, or allowed to flow from a stand-pipe, or perforated pipe connected therewith, or from any other source, the water, as it runs down the roof, falling into the rain-gutter C. To the outside of this gutter, and extending from one end to the other, is secured, by means of suitable fastenings b, a metallic covering-plate, D, which is made to conform to the shape of the gutter, but is placed a short distance therefrom, so as to leave a space, c, between the two, which is open at the bottom at 5, this long narrow opening 5 being situated in close proximity to the wall A. If the gutter C is composed of wood, it is protected from fire by the metallic covering-plate D.

When my improved device is to be used, the ordinary vertical pipes or conductors leading from the rain-gutter to the ground are

stopped by means of suitable valves or plugs, and as soon as the gutter C becomes filled the water overflows its outer edge simultaneously at all points, and falls into the space c, by which it is conducted in a thin sheet directly onto the wall beneath, so that it will run down over the whole surface of the same, thus keeping it constantly covered with flowing water, and effectually protecting it and the window-frames, sashes, and other wood-work connected therewith from fire or heat on the outside, to which it may be exposed. If the water were merely allowed to flow over the outer edge of the gutter instead of being conducted directly into contact with the wall, as above described, the distance of the outer edge of the gutter from the wall would prevent the latter from being kept constantly wet, and only a very limited protection would be afforded; whereas by the employment of my improved device the entire surface of the wall is continuously covered with a flowing sheet of water, a great advantage being thus gained. The outer edge of the gutter C should be level, in order to secure a simultaneous overflow of the water therefrom, and the upper edge of the plate D should be made to project sufficiently above the outer edge of the gutter C to catch all of the water as it overflows, and prevent it from running over the outside of the plate D.

My improvement may be applied to any rain-gutter, either wooden or metallic, and may be easily and cheaply applied to those already in use.

If desired, the gutter C may be supplied with water from a stand-pipe or other source, instead of receiving it from the roof; but the latter method is preferable, as the roof is thereby also protected from fire.

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

The plate D, in combination with, and arranged outside of, the gutter C, whereby I am enabled to equalize the distribution of water from the overflow of said gutter C, as set forth.

Witness my hand this 10th day of July, A. D. 1873.

WALTER S. CUSHMAN.

In presence of—

P. E. TESCHEMACHER,
C. E. HANSON.