

J. H. BELL.
 ROOFING CLEAT.
 APPLICATION FILED MAR. 15, 1910.

981,362.

Patented Jan. 10, 1911.

FIG. I.

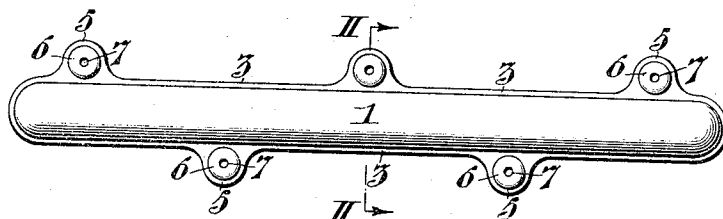


FIG. II.

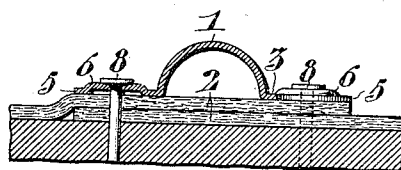


FIG. III.

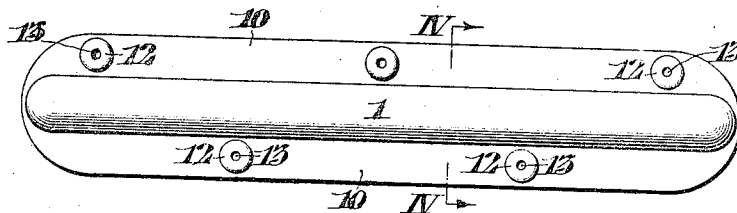
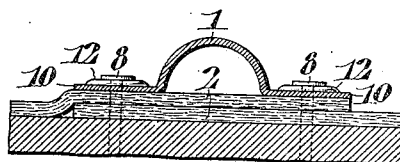


FIG. IV.



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ROOFING-CLEAT.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JAMES H. BELL, of Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Roofing-Cleats, whereof the following is a specification, reference being had to the accompanying drawings.

The invention relates to new and useful improvements in roofing cleats, and more especially to the class of elongated roofing cleats which are adapted to receive a plurality of securing nails.

An object of the invention is to provide means for laterally strengthening a roofing cleat of this character.

A further object of the invention is to provide a roofing cleat of this character, which shall be so constructed as to prevent the accumulation of water under the cleat, which through the expansion upon freezing, will loosen the cleat.

These and other objects will in part be obvious and will in part be hereinafter more fully described.

In the drawings, which show by way of illustration one embodiment of the invention, Figure I, is a plan view of a roofing cleat, embodying my improvements. Fig. II, is a cross sectional view of the cleat, taken on the line II, II, in Fig. I, showing the position of the cleat relative to the overlap of the roofing material. Fig. III, is a plan view of a modified form of my invention. Fig. IV, is a cross sectional view, similar to Fig. II, and taken on the line IV, IV, in Fig. III.

A roofing cleat constructed in accordance with my invention, is preferably made of sheet metal, and may be stamped therefrom, or rolled, or made in any other desired manner. Said cleat consists of a body portion, which is elongated, so as to cover a considerable area of the roofing material. As herein shown, the roofing cleat is provided with an arched section 1, which is preferably semi-circular in cross section, as shown in Fig. II. The arched section, as shown in Figs. I, and II, extends substantially throughout the entire length and width of the body portion of the cleat, leaving a small flat marginal edge 3, which engages a roofing material, and firmly clamps the same throughout the entire extent of the

cleat. As a means for securing the cleat to the roof or other object to which it is to be attached, I have provided a plurality of projecting lugs 5, which are formed integrally with the body portion of the cleat. As shown in Fig. I, said projecting lugs are disposed longitudinally upon opposite sides of the arched section 1, and are staggered relative to each other. Each of the projecting lugs 5, as clearly shown in Figs. I, and II, is provided with an aperture 7, through which the securing nail is to be driven. Surrounding each of said apertures 7, is an upwardly dished portion 6. When the headed nail, or other fastening device 8, is driven firmly into the roof or other object to which the cleat is to be attached, the dished portion 6, is collapsed, as shown at the right in Fig. II, which will cause the projecting lug to be firmly seated against the roofing material. The tendency of the dished portions to return to their normal position, will not only cause the projecting lugs to firmly grip the roofing material, but will also cause the entire clamping edge 3, of the cleat to be brought into firm gripping contact with the roofing material.

In Figs. III, and IV, I have shown the flat side edges of the cleat 10, as extended from the arched section 1, sufficiently so as to receive the securing nails. The extended portions 10, are provided with a plurality of apertures 13, as herein shown, which, on the opposite sides of the arched section, are staggered relative to each other. Surrounding each aperture 13, is a dished portion 12, which is similar to the dished portion 6, shown in Figs. I, and II, and secures precisely the same function. It will be noted that in each instance the securing nails are passed through the cleat at a point adjacent the arched section, and not through the arched section itself, and therefore the arched section may be one solid integral structure, which increases the lateral strength of the cleat and prevents all possible chance of water leaking under the cleat, which might fill the arched section, and through the expansion on freezing, loosen the cleat from the roof, or other object to which it is secured. Furthermore, it will be noted that by forming the cleat with the arched section, I am able to construct my cleat of comparatively light cheap metal,

with a maximum capacity to resist bending strain in the expansion and contraction inherent in the roofing materials to which they are to be applied, at the region of the overlap.

In Figs. II, and IV, I have shown the overlap sections 2, of roofing material, which are secured by my improved cleats. It will be obvious that a plurality of cleats are to be used in securing the material to the roof, said cleats being disposed end to end along the overlap sections.

It will be obvious that minor changes in the details of construction and proportion of the parts may be made, without departing from the spirit of my invention.

I claim:—

1. A roofing cleat comprising a metallic body portion having a section thereof arched, whereby said cleat is laterally strengthened, and having apertures located in said body portion adjacent said arched section for receiving a securing means.

2. A roofing cleat comprising a metallic body portion having a section thereof arched, whereby said cleat is laterally strengthened, and having apertures located in said body portion adjacent said arched section, for receiving the securing means, said body portion being upwardly dished around each aperture.

3. A roofing cleat comprising an elongated metallic body portion, having an arched section extending substantially throughout the entire length of said cleat, and having apertures formed in said body portion adjacent each side of said arched

section, said body portion being upwardly dished around each aperture.

4. A roofing cleat comprising an elongated metallic body portion, having an arched section extending substantially throughout the entire length of the cleat, said body portion having apertures formed therein adjacent each side of the arched section, said apertures being staggered relative to each other, on opposite sides of said arched section, and said body portion being upwardly dished around each aperture.

5. A roofing cleat comprising an elongated metallic body portion having a section thereof arched, whereby said cleat is laterally strengthened, said body portion including laterally projecting lugs, having apertures formed therein, each of said lugs being upwardly dished around said aperture.

6. A roofing cleat comprising an elongated metallic body portion having an arched section extending substantially throughout the entire length of the cleat, said body portion having a laterally projecting lug arranged on each side of said arched section, and staggered relative to each other, each of said lugs having an aperture formed therein, and an upwardly dished portion surrounding said aperture.

In testimony whereof, I have hereunto signed my name, at Philadelphia, Pennsylvania, this twelfth day of March, 1910.

JAMES H. BELL.

Witnesses:

C. BRADFORD FRALEY.

E. L. FULLERTON.