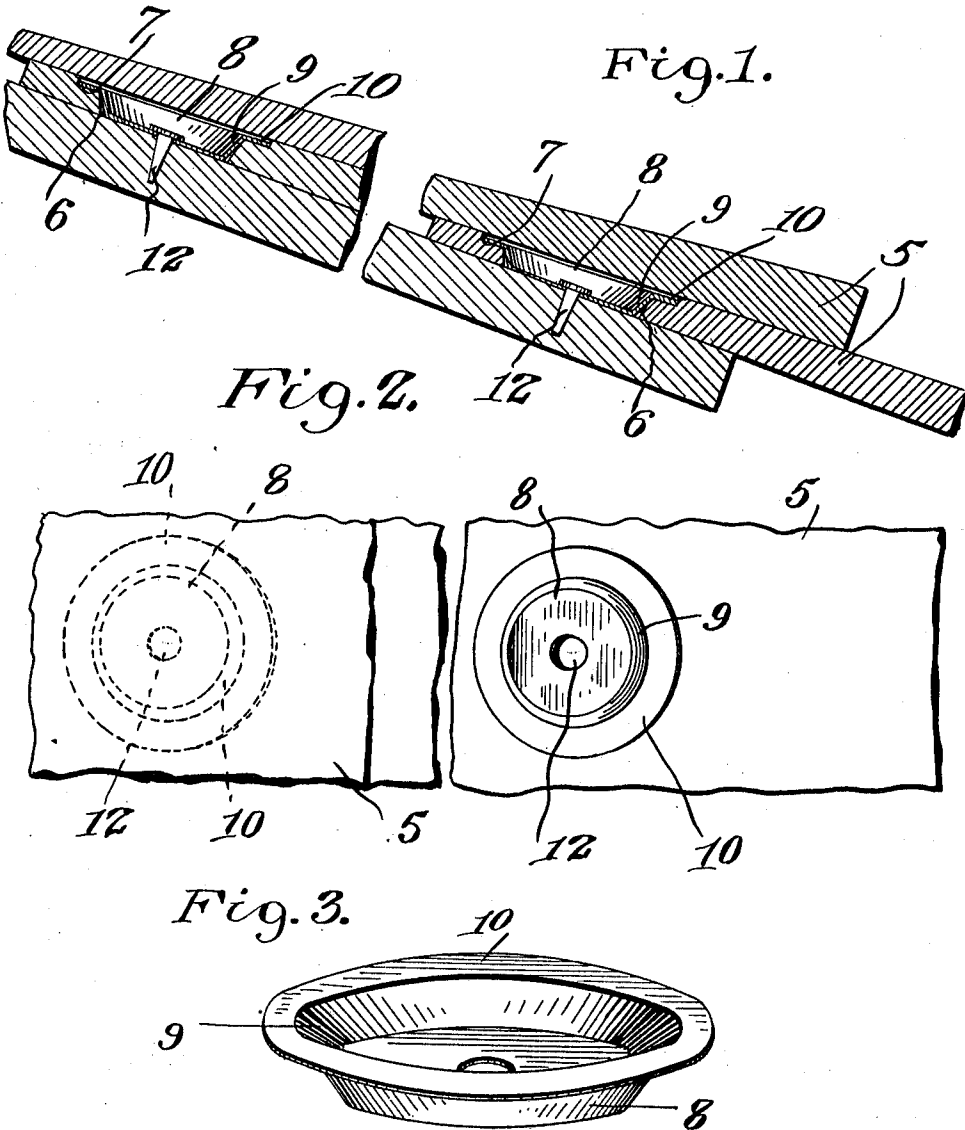


C. S. PERRY.
SHINGLE FASTENER.
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1,031,368.

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Witnesses:-

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UNITED STATES PATENT OFFICE.

CHARLES S. PERRY, OF ST. ELMO, TENNESSEE.

SHINGLE-FASTENER.

1,031,368.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, CHARLES S. PERRY, a citizen of the United States, residing at St. Elmo, in the county of Hamilton and State of Tennessee, have invented certain new and useful Improvements in Shingle-Fasteners, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to certain new and useful improvements in fastening devices for securing shingles or roofing tile which are usually made of concrete, terra cotta, or other plastic material.

The device has for its object to provide means whereby the shingles may be secured to the roof sheathing without danger of cracking or breaking the tile.

A further object is to provide a cap adapted to be positioned in an opening adjacent to one end of the tile and disposed below the upper surface thereof, said cap having a central aperture through which a securing nail is driven.

A still further object is to provide means for securing the shingles in position, said securing means being covered and entirely hidden from view by the next adjacent course of shingles.

With these and other objects in view, the invention consists of the novel construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawing, in which—

Figure 1 is a longitudinal section through a fragment of a roof showing the shingles secured thereto by my improved fastening device; Fig. 2 is a top plan view; and Fig. 3 is a detail perspective view of the fastening.

The present invention is devised with a view to providing convenient means for securing a shingle or tile formed of concrete, terra cotta, or similar plastic material, to the roof or other surface upon which it is laid. Owing to the brittle nature of such tiles it is almost impossible to drive nails or other fasteners through the plastic material without breaking and crumbling the same. By means of the device hereinafter described and illustrated in the accompanying drawing I completely overcome this great difficulty and provide a fastener which while extremely simple in form and inexpensive to manufacture is peculiarly efficacious in use.

In the drawing 5 indicates the shingles

or tile which are disposed upon one another in regular courses which is the usual manner of shingling roofs. Each of the shingles is provided centrally and adjacent to the reduced end thereof with an opening 6 which as shown in the drawing is of circular form and the wall thereof extends downwardly and inwardly at an inclination. This opening is enlarged at the upper surface of the tile to provide a shoulder 7. Within this opening and upon the shoulder 7 my improved fastening cap 8 is disposed.

The cap 8 is formed from a single sheet of metal and is bent downwardly to provide a circular shallow body portion, the circumscribing wall of which is downwardly and inwardly inclined as shown at 9 at a slightly greater angle than the wall of the opening 6. This cap is preferably circular in plan and is provided with a lateral circumscribing flange 10 at the upper edge of the body portion thereof. This flange is seated upon the shoulder 7 and when in position in the shingle the upper surface of the flange is positioned below the surface of the shingle. When the next course of shingles is laid they will extend below and completely cover the fastening cap. After the cap is placed in the opening 6 it is secured to the sheathing of the roof by means of a nail or other suitable securing member 12. In this manner the cap and the shingle are securely held against movement. The shingles 5 are of the usual form and gradually taper from end to end, the thinner end being disposed upon the roof sheathing and the thicker end being lapped upon the thin end of the adjacent course of shingles and disposed over the securing caps.

It will be noted upon reference to Fig. 1 that the inclination of the wall of the opening 6 in the shingle is different from that of the tapered portions 9 of the cap, so that a downwardly widening annular space is formed between the wall of the cap and the wall of the opening in the shingle or tile. It will be also noted that the bottom of the cap lies directly on the roof or other base so that no portion of the shingle or tile is interposed between the bottom of the cap and the base and hence the nails 12 may be driven into the base and their heads caused to bear on the inner sides of the bottoms of the caps without exerting stress on the shingles or tiles and hence entirely avoid danger of breaking them as the blows on the nails are not directly communicated to the tiles

but are taken up by the caps, independently of the tiles.

Having thus described the invention, what is claimed is:

5 A structure embodying a base, a plastic tile on the base provided with a downwardly tapered opening extending entirely there-
through from its upper to its lower side and
having a countersink at its upper side, and
10 a sheet metal cap comprising a downwardly tapered wall in said opening and inclining
at an angle to the wall of said opening so
that a space is formed between the wall of
the cap and the wall of the opening, a bot-
15 tom bearing directly on the base and having

an opening, and a flange at the upper, larger side of the wall and fitting in the countersink of the tile, and a headed securing member driven into the base, through the opening in the bottom of the cap, the head of said securing member bearing on the bottom of the cap, the depth of the countersink in the tile being at least equal to the thickness of the flange of the cap. 20

In testimony whereof I hereunto affix my signature in the presence of two witnesses. 25

CHARLES S. PERRY.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."