

(No Model.)

M. A. & J. H. JACKSON.
ROOFING TILE FASTENING.

No. 464,503.

Patented Dec. 8, 1891.

Fig. 1.

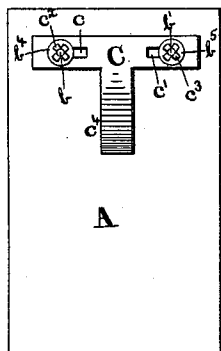
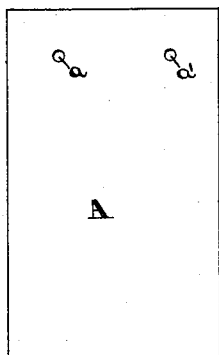


Fig. 2.

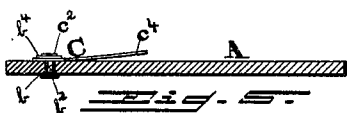
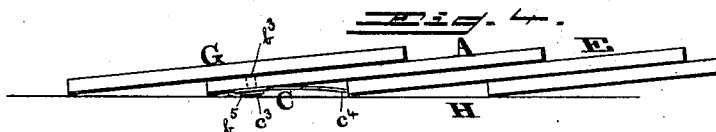
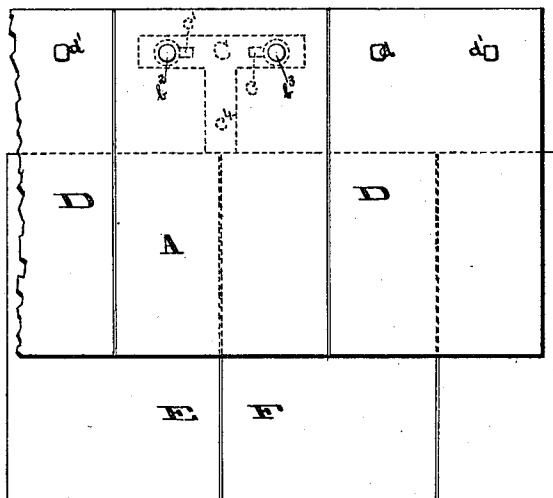


Fig. 3.

Fig. 4.



WITNESSES

John Killingworth
Oliver N. Hissom

INVENTORS

Mark Aspholm Jackson
By their Attorney,
Amos Powell.

UNITED STATES PATENT OFFICE.

MARK A. JACKSON AND JOHN H. JACKSON, OF PHILADELPHIA, PENN-
SYLVANIA.

ROOFING-TILE FASTENING.

SPECIFICATION forming part of Letters Patent No. 464,503, dated December 8, 1891.

Application filed April 8, 1891. Serial No. 388,120. (No model.)

To all whom it may concern:

Be it known that we, MARK A. JACKSON and JOHN H. JACKSON, citizens of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Roofing-Tile Fastenings, of which the following is a specification.

Our invention has relation to roofing-tiles, and has for its object to provide novel, simple, and efficient means whereby the same may be secured in the normal positions on the roof.

Heretofore when a tile has become displaced from any cause it has been found impossible, owing to the fact that the nail-holes therein are near their upper corners and therefore covered by the superimposed tiles, to replace it without disturbing all those in the courses above, the same being vitrified and so hard and brittle as to prevent the punching of holes therethrough between the joints of the overlapping tiles without breaking and rendering them wholly unfit for use.

Our invention contemplates the obviation of these difficulties by the provision of a spring-tongue secured to the upper end of the under side of the tile to be replaced and projecting outwardly at its lower free end, such tile being simply thrust into place beneath and without disturbing the tiles in the course next above until said free end clears the upper edges of the tiles in the course next below and springs outwardly so as to engage with such edges, thus operating as a spring-catch and preventing the slipping downward of and permanently securing the replaced tile against accidental displacement.

In the accompanying drawings, which illustrate the details of our invention, Figure 1 is a plan view of an ordinary vitrified tile. Fig. 2 is a like view of a tile with our improvements applied thereto. Fig. 3 is a plan view of the tiles laid in courses with our improved fastening secured to one of them and appearing in dotted lines, and Fig. 4 is an edge view of the same. Fig. 5 is a vertical longitudinal section of a tile with the improvements secured thereto.

A represents a tile of the ordinary shingle pattern, having the usual nail-holes *a a'* formed therein during the process of manu-

facture, and which, for the purposes of our invention, are adapted for the reception of the rivets *b b'*, which rivets are preferably tubular, although not necessarily so, and have their heads *b² b³* abutting against the outer side of said tile.

C is a spring metal T-shaped plate having the slots *c c'* in its head or cross-piece, which allow for variations in the distances between the nail-holes in tiles of different makes, secured to the upper part of the under side of the tile A by the passage of the ends of the rivets through said slots and the bending of such ends over onto the washers *b⁴ b⁵*, as shown at *c² c³*, the lower free end or leg *c⁴* of said plate being bent outwardly, and is of a length determined by the extent of weather exposure desired for the tile, the same operating as a spring tongue or catch.

D E F G represent other tiles similar to the tile A, having nail-holes therein for the passage of the nails *d d'* into the sheathing H, whereby said tiles are secured in position on the latter. Obviously when the tile A is thrust upwardly between the tiles D E F G the leg *c⁴* will be forced by its contact with the outside of the tiles E F into close relation with the tile to which it is attached until its end clears the upper edges of said tiles, when it will be free to spring out again into its normal position, where it engages with said edges and prevents the slipping downward of the tile A. The tendency of the leg being always from the tile obviates all danger of the same becoming disengaged and the tile accidentally displaced. At the same time, if it be desired to remove the tile for any purpose, the same can readily be accomplished by thrusting a long thin blade, as a "ripper," beneath the tile and inserting the end thereof beneath the spring-tongue, then drawing downwardly, disengaging the leg and allowing the tile to slip out unimpeded.

While we have shown our improvements as being applied to a flat tile, the same can of course be applied to a tile of any other shape in cross-section—for instance, a "Spanish" or curved tile—it being only necessary to change the shape of the head of the plate C to conform to the shape of the tile to which it is to be applied, the leg in all cases operat-

ing in the same manner; also, while such improvements are primarily designed for use on tile, the same are as readily applicable to roofing-slates without necessitating any change therein, dispensing with the occasion for punching a hole in the center of the replaced slate opposite the joint of the overlapping slates for reception of the nail and placing a strip of tin over the latter to carry off the drip from above.

What we claim as our invention is as follows:

1. A roofing-tile having a flat spring-tongue secured thereto and projecting at its free end from the plane of the side of the tile to which it is fastened, said free end being adapted to assume a position in close relation with said side when said tile is thrust between the adjacent tiles and springing outwardly when it clears the upper edges of the subjacent tiles, with which edges said free end engages.

2. A roofing-tile having secured thereto a spring-metal plate provided with slots and a depending leg, through which slots pass the plate-fastenings, said leg at its free end projecting from the plane of the side of the tile

to which it is secured and being adapted to assume a position in close relation with said side when said tile is thrust between the adjacent tiles and springing outwardly when it clears the upper edges of the subjacent tiles, with which edges said free end engages.

3. A roofing-tile having secured thereto a spring-metal T-shaped plate having transverse slots therein, through which slots and the tile pass fastening-rivets, the leg of said plate at its free end projecting from the plane of the side of the tile to which it is secured and being adapted to assume a position in close relation with said side when said tile is thrust between the adjacent tiles and springing outwardly when it clears the upper edges of the subjacent tiles, with which edges said free end engages.

In testimony whereof we have hereunto set our hands this 3d day of April, A. D. 1891.

MARK A. JACKSON.
JOHN H. JACKSON.

Witnesses:

R. DALE SPARHAWK,
WM. H. POWELL,