

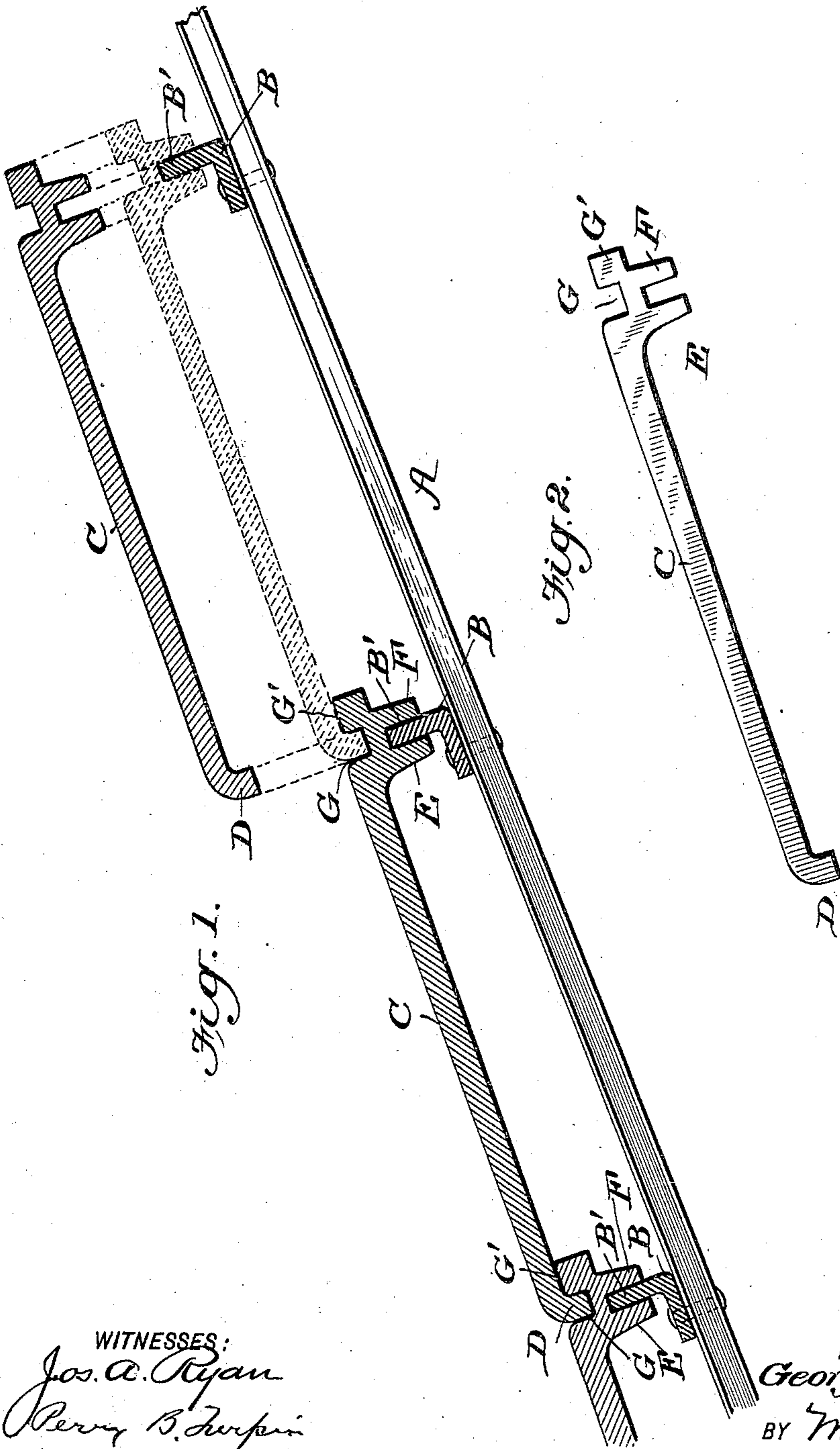
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Patented Dec. 10, 1901.

G. P. HEINZ.
ROOFING TILE.

(Application filed Apr. 8, 1901.)

(No Model.)



WITNESSES:
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UNITED STATES PATENT OFFICE.

GEORGE P. HEINZ, OF CHICAGO, ILLINOIS.

ROOFING-TILE.

SPECIFICATION forming part of Letters Patent No. 688,641, dated December 10, 1901.

Application filed April 8, 1901. Serial No. 54,961. (No model.)

To all whom it may concern:

Be it known that I, GEORGE P. HEINZ, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have made certain new and useful Improvements in Roofing-Tiles, of which the following is a specification.

My invention is an improvement in roofing-tiles, and has for an object to provide a novel construction and combination of parts whereby the tile when applied to the roof will be automatically fastened or held in place by the special construction of the tile, it being so formed as to grip the purlin and clamp itself firmly thereon.

The invention consists in certain novel constructions and combinations of parts, as will be hereinafter described and claimed.

In the drawings, Figure 1 is a longitudinal section of a portion of the roof embodying my invention, two of the tiles being shown in place and the uppermost tile being shown as when being applied to or removed from the roof; and Fig. 2 is an enlarged side view of one of the tiles.

The roof-frame A and the purlins B may be of the ordinary construction, the latter being provided with the upright wing B', which is formed for clamping by the lugs on the under side of the tile at the upper end of the latter. The tile C may be formed on its outer side in the usual or other suitable form and is provided on its under side at its lower end with a depending rib D, which may extend from side to side or for only a portion of the width of the tiling, as may be desired. Lugs E and F are arranged on the under side of the tile C near the upper end of the latter and project parallel with the rib D and preferably are made longer than said rib and are spaced apart a proper distance to fit comparatively snugly on opposite sides of the upright wing B' of the purlin B. When so applied, the lug E fits below and the lug F above the said rib D and so closely thereto that if the lower end of the tile be raised the lugs E and F will grip or clamp the purlin B. In such operation it will be noticed that the lower edge or end of the lug F will bind against the upper side of the purlin and the upper portion of the lug E at the face thereof adjacent to the lug F will be pressed tightly against by the upper end of

the wing B' of the purlin B, thus clamping the tile firmly in position. In the outer face of the tile near its upper end I provide transversely a groove at G to receive the transverse rib D on the lower end of the next upper tile. This groove G is preferably arranged in line above the space between the lugs E and F, so that the weight and pressure of the lower end of the tile will be transmitted through the tile upon which it rests directly to the purlin. This is preferred, because it avoids strains on the tile, and thus reduces the danger of breakage. By preference the upper face of the tile above the groove G is slightly depressed at G' with respect to the portion of the tile below said groove, so the upper tile can fit closely down upon the next lower one, and thus avoid too abrupt a joint, as will be understood from the drawings.

By the described construction it will be seen that the lugs E and F, which in practice are usually made about one inch long, will operate to clamp or grip the iron purlins and operate to prevent the tile from slipping off, as when the lower end of the tile is raised such operation causes the lugs to bind firmly upon the purlin, so the tiles cannot be slipped out of place. At the same time it will be noticed from the position of the uppermost tile in Fig. 1 that the tile can be readily placed upon the roof and that when the lowermost tile is secured they can be put on in succession, it being only necessary to apply each tile in the direction of its ribs D and lugs E and F, and that when the several tiles are applied and the upper one secured the series of tiles will be firmly held in place.

It will be noticed that by my invention I avoid the necessity of separate fastenings for the tiles and construct them so they operate to hold themselves firmly in place upon the roof.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A roofing-tile provided on its under side near its upper end with depending lugs spaced apart and arranged to fit on opposite sides of a purlin and to clamp the same when the lower end of the tile is tilted, such lower end of the tile being formed to fit a meeting tile, substantially as set forth.

2. A tile, substantially as described, provided on its under side at its upper end with upper and lower lugs spaced apart and adapted to fit and bind on opposite sides of a purlin, said tile being also provided at its upper end in its outer face with a transverse groove, and having at its lower end a depending rib formed to fit such groove in a meeting tile, substantially as set forth.

3. A roofing-tile having on its under side at its upper end depending spaced-apart lugs adapted to bind on opposite sides of a purlin, and having in its outer face near its upper end a transverse groove whose upper wall is depressed relatively to that portion of the tile below such groove, the tile being also provided on its under side at its lower end with a transverse rib to fit such groove in a meeting tile, substantially as set forth.

4. The combination of the purlin, having an upright wing, and the tile provided on its under face at its upper end with ribs adapted

to fit and bind on opposite sides of the said wing, substantially as set forth.

5. The combination, substantially as described, of the purlins having upright wings, the tiles having on their under faces near their upper ends depending lugs formed to fit and clamp above and below the purlin-wing, and also provided in their outer faces with transverse grooves in line with the space between the depending lugs, and having at their lower ends depending ribs to fit in such grooves in the meeting tiles, substantially as set forth.

6. A roofing-tile provided on its under side with depending lugs spaced apart and arranged to fit on opposite sides of a purlin and to clamp the same when the lower end of the tile is tilted substantially as set forth.

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