G. H. BABCOCK, Dec'd.

F. B. & J. B. CLARKE, J. A. HUBBARD & W. M. STILLMAN, Executors.

TILE ROOFING. Patented Apr. 10, 1894. No. 517,832. Witnesses Chas Hanimann. E. Mae Eutee

> THE NATIONAL LITHOGRAPHING COMPANY, WASHINGTON, D. C.

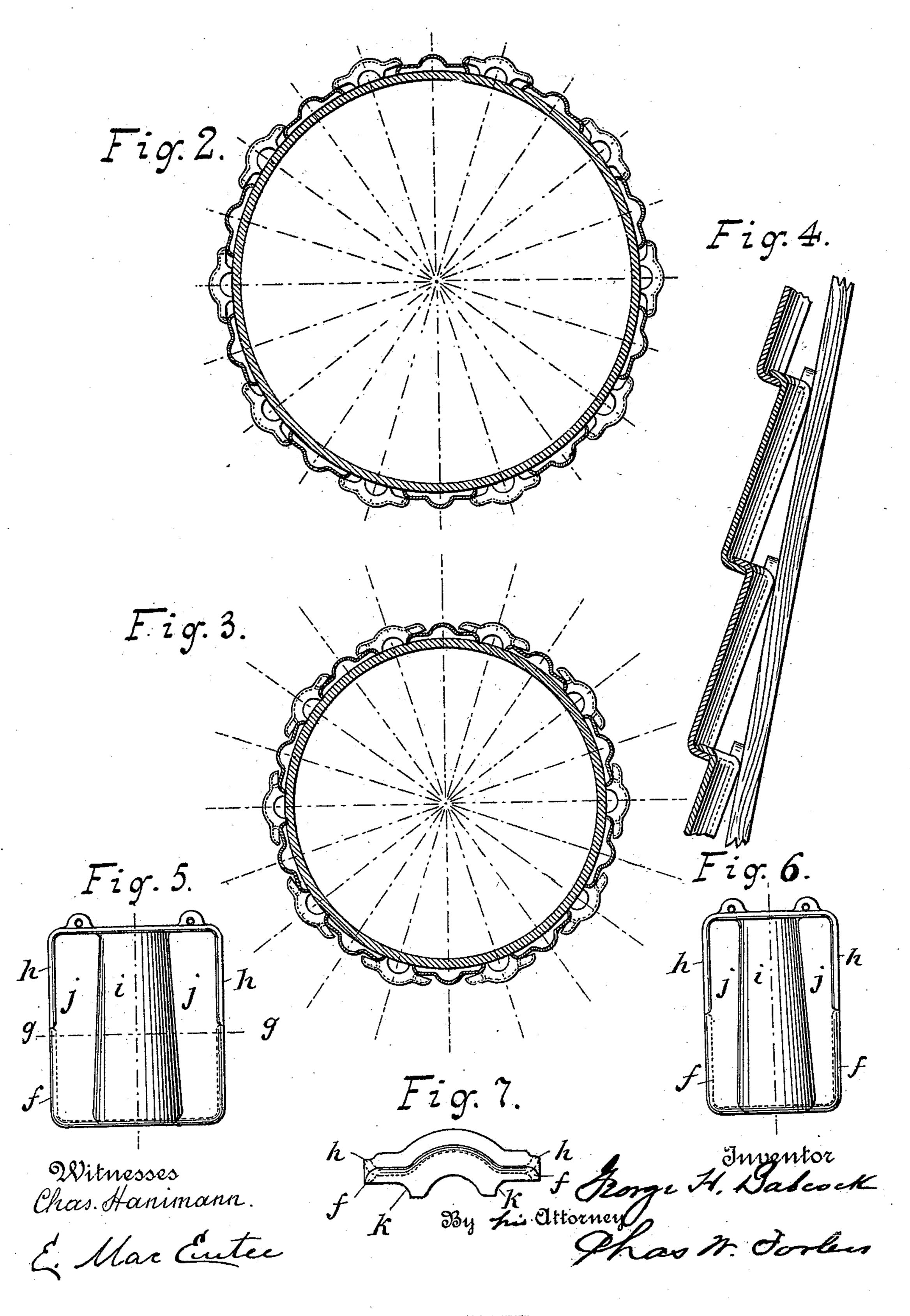
G. H. BABCOCK, Dec'd.

F. B. & J. B. CLARKE, J. A. HUBBARD & W. M. STILLMAN, Executors.

TILE ROOFING.

No. 517,832

Patented Apr. 10, 1894.



United States Patent Office.

GEORGE H. BABCOCK, OF PLAINFIELD, NEW JERSEY; FRANCIS B. CLARKE, J. BENNETT CLARKE, JOSEPH A. HUBBARD, AND WILLIAM M. STILLMAN EXECUTORS OF SAID GEORGE H. BABCOCK, DECEASED.

TILE ROOFING.

SPECIFICATION forming part of Letters Patent No. 517,832, dated April 10, 1894.

Application filed March 3, 1893. Serial No. 464,481. (No model.)

To all whom it may concern:

Be it known that I, GEORGE H. BABCOCK, a citizen of the United States, residing at Plainfield, in the county of Union and State of New Jersey, have invented certain new and useful Improvements in Tile Roofing, of which the

following is a specification.

The purpose of this invention is to reduce to the minimum the number of different sizes of itles required to cover a conical roof; and said invention consists in a series of interlocking tiles, wherein the units or members are laterally adjustable upon one another, to embrace different circumferences in the conical roof, while preserving the number of tiles included in a circle and preserving their individual lateral dimension for a considerable number of tiers in the order of laying.

The herein described tiles are vertically aligned in the order in which they interlock, and being convexed in the center, form, when assembled upon a conical roof, lines of relief converging from the base toward the apex of the cone, producing a highly ornamental effect. The feature of lateral adjustability aforesaid, is adapted to preserve perfect uniformity of convergence in the said lines of relief. Owing to the small number of different sized patterns required, economy is effected in molding and laying the tiles by reason of uniformity and infrequent change of selection.

Heretofore it has been necessary, in order to preserve the converging alignment of the tiles upon a conical roof, to manufacture especially therefor as many different patterns of tile as there are tiers in the entire covering.

The herein described invention is so adapted that whether the circular series composed to of a given number of tiles have a maximum or a minimum circumference, the weather joints will be maintained.

It will be obvious that what is herein stated with reference to tiling for conical roofs is applicable also to roofs having the form of conical segments.

Referring to the accompanying drawings in which similar characters of reference indicate corresponding parts in each view: Figure 1, is a perspective elevation showing a tiled roof

constructed according to my invention; Fig. 2, a horizontal section at a, a, Fig. 1; Fig. 3, a horizontal section at b, b, Fig. 1. Fig. 4, represents a vertical section enlarged, taken at x-x, Fig. 1; Fig. 5, a face view of a single tile 55 of one dimension of pattern; Fig. 6, a face view of a single tile of another dimension of pattern; and Fig. 7, a bottom end view of Fig. 5.

The invention herein described may be 60 practiced with the use of various forms of tiles, but the form herein illustrated is more especially adapted for carrying out said invention. This form consists in that substantially as represented in Figs. 5, and 7, of ap- 65 proximately rectangular form, having a downward flange f, extending about half its perimeter below its axial line g, g, and an upward flange h, above its axial line extending the remainder of its perimeter, whereby it is 70 adapted to interlock with adjacent similar tiles, as appears in Fig. 1; and also having at its center, a raised or relieved portion forming a conical segment i. At either side of the conical segment i, and upon the flat por- 75 tions j, j, of the tile, the overlapping flanges f, of the adjacent tiles form laterally movable weather joints.

In Fig. 2, in which a series composed of a given number of tiles are assembled in a large 80 circle, the joints on the surfaces j, are extended to the maximum, while in Fig. 3, wherein the same number of tiles of a similar dimension are assembled in a small circle, the said joints upon the surfaces j, appear as 85 contracted to the minimum; the cut out parts k, k, Fig. 7, allowing of the range of adjustment. By means of such adjustability in the weather joints a dimension of pattern such as indicated in Fig. 5, for instance, may be 30 used for several tiers upon the conical roof, shown in Fig. 1, commencing at the level a, a, until a considerably higher level, say at b, b, is reached, when the next dimension of tile of marked difference, as in Fig. 6, is used 95 in laying from b, b, to c, c, d, d, and e, e, without affecting the uniform convergence in the vertical alignment of the tiles as they appear in Fig. 1, when the roof is completed.

According to the extent of lateral adjust- 100

ability provided in the design of tile adopted, a less or greater number of different sizes may be used to fill the roof. The minimum of contraction in the laterally adjustable 5 joints of the dimension of tile represented in Fig. 5, is equal in fitting capacity to the maximum of expansion in the laterably adjustable joints of the next dimension of tile, in

Fig. 6, in the order of laying.

When two or more vertical series of tiles are placed together, as in Fig. 1, so that the tiles of one series overlap at or about the middle of the lengths of the adjacent series, the planes of the interlocking edges of the 15 said one series lie intermediate to the planes of the interlocking edges of the next; the range of adjustment in the movable joints being limited only by the form, or possibly the entire width of the tile, should the same 20 have a flat surface.

I claim as my invention—

1. A tiling for conical roofs, consisting of the herein described series of interlocking tiles wherein units or members are laterally adjustable upon one another whereby; sev- 25 eral tiers of varying circumferences are composed of differently adjusted tiles of uniform lateral dimension.

2. The herein described roofing tiles, adapted when assembled in overlapping vertical 30 series, to overlap at or about the middle of the lengths of the adjacent vertical series, provided with adjustable joints at those edges which in one said series lie in planes intermediate to the planes of the edges in 35 the other said series.

GEO. H. BABCOCK.

Witnesses:

CHAS. W. FORBES, E. MACENTEE.