

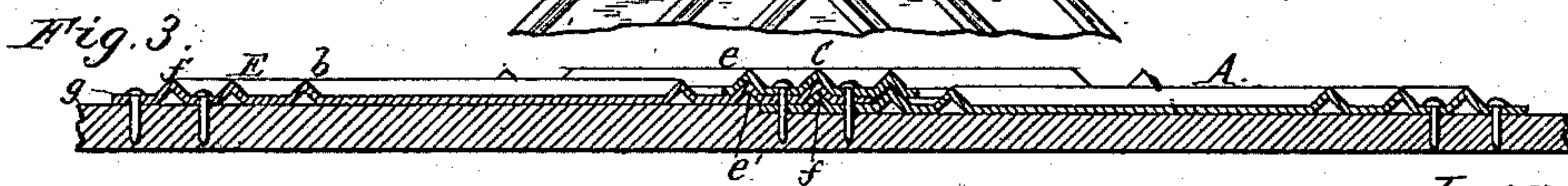
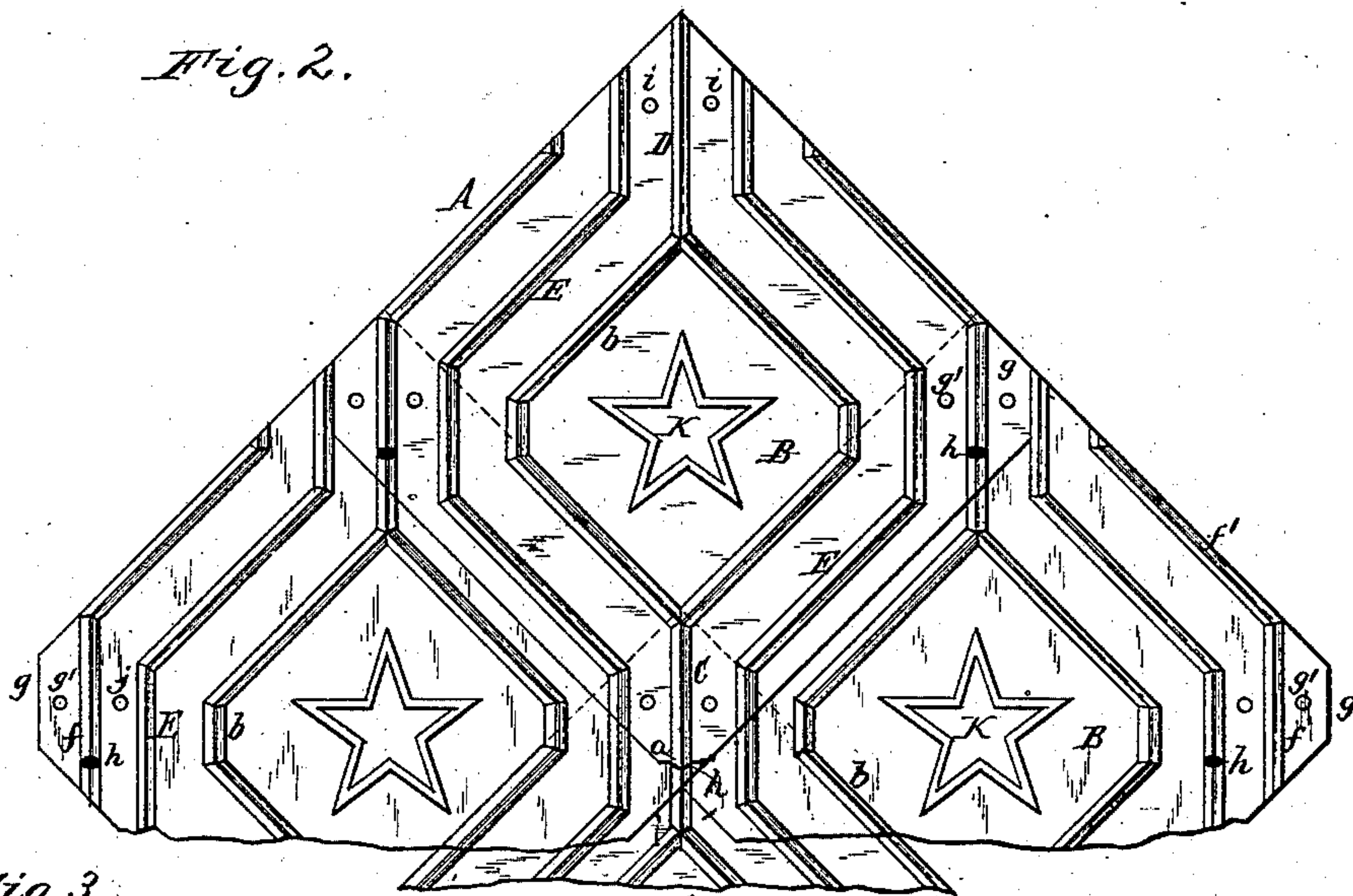
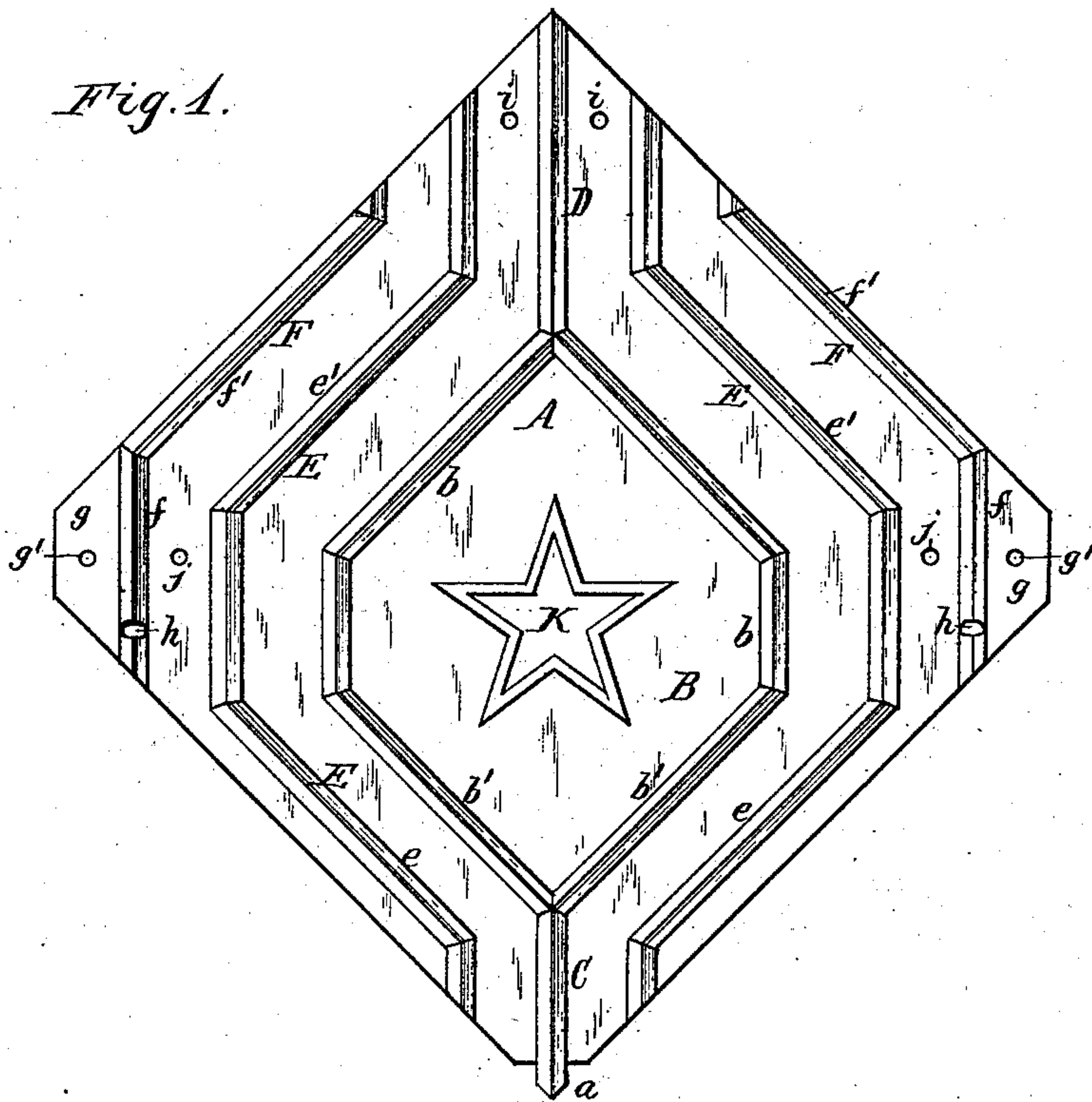
(No Model.)

L. H. MONTROSS & J. C. WEST.

METALLIC SHINGLE.

No. 294,256.

Patented Feb. 26, 1884.



Geo. E. Pitman.

Theo. L. Poppe.

*Witnesses.*

L. H. Montross

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By Wilhelm Bornet.

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# UNITED STATES PATENT OFFICE.

LEVI H. MONTROSS AND JOHN C. WEST, OF SIMCOE, ONTARIO, CANADA,  
ASSIGNORS OF ONE-THIRD TO JAMES PEACHEY, OF SAME PLACE.

## METALLIC SHINGLE.

SPECIFICATION forming part of Letters Patent No. 294,256, dated February 26, 1884.

Application filed November 23, 1883. (No model.)

*To all whom it may concern:*

Be it known that we, LEVI H. MONTROSS and JOHN C. WEST, of Simcoe, in the county of Norfolk, in the Province of Ontario, have  
5 invented new and useful Improvements in Metallic Shingles, of which the following is a specification.

This invention relates to an improvement in that class of shingles which are constructed of  
10 sheet metal and provided with raised ribs, whereby the shingles are stiffened and interlocked with each other.

The object of this invention is to produce a shingle which is stiffer than those heretofore  
15 used without any increase in the weight of the metal employed, and which is more securely interlocked with the adjoining shingles, and by which the joints are better guarded against snow or rain than heretofore.

Our invention consists, to these ends, of the improvements in the construction of the shingle, which will be hereinafter fully set forth, and pointed out in the claims.

In the accompanying drawings, Figure 1 represents a top view of our improved shingle.  
25 Fig. 2 represents a view on a reduced scale of a number of our improved shingles laid along the eaves of the roof. Fig. 3 is a cross-section in line *x x*, Fig. 2, on an enlarged  
30 scale.

Like letters of reference indicate like parts in the several figures.

The body A of the shingle is square, or nearly so, and arranged with two corners in the vertical central line of the shingle. The lower  
35 corner of the shingle is provided with a lip, *a*, which serves to secure the lower corner to the adjoining lower shingles.

B represents a plane field or plate occupying the middle portion of the body A, and enclosed by a raised rib, *b*, having approximately the form of a square, and arranged with its sides parallel with the corresponding sides of the body A.

45 C is a raised vertical rib extending from the lower corner of the rib *b* to the lip *a*, the latter being formed out of the lower portion of the rib C by cutting away the sides of the latter and of the adjoining portions of the body A.

D represents an upright raised rib extending from the upper corner of the rib *b* to the upper corner of the body A.

E E are raised ribs arranged on opposite sides of the central ribs, *b*, C, and D, and arranged parallel therewith—that is to say, the  
55 upper and lower portions of the ribs E are arranged parallel with the ribs C and D, and the intermediate portions of the ribs E are arranged parallel with the adjoining portions of the rib *b*. The body of the shingle is furthermore provided with outer raised ribs, F,  
60 arranged outside of the ribs E. The lower portions *f* of the ribs F are arranged vertically, while their upper portions *f'* extend along the upper edges of the shingle. The  
65 body A of the shingle extends beyond the vertical portions *f* of the ribs F, forming ears or lips *g*, provided with nail-holes *g'*.

*h* are openings or perforations formed in the vertical portion *f* of the ribs F, near their lower  
70 ends, and adapted to receive the point *a* of the next higher shingle.

In laying these shingles on the roof, as represented in Fig. 2, the vertical portion *f* of the rib F rests on the vertical portion *f* of the  
75 rib F of the next adjoining shingle, and both rest on the vertical rib D of the shingle next below. The ear *g* of one shingle rests on the body A between the ribs F and E of the adjoining shingle. The openings *h* in the two  
80 ribs *f f*, resting one upon the other, coincide, and the rib C of the next higher shingle rests on the ribs *f f*, and the point *a* passes through the openings *h* in both ribs and engages under the lower rib, thereby firmly securing the  
85 lower end of each shingle in place. As the openings *h* are formed in the crowns, ridges, or raised portions of the ribs *f*, and do not extend down to the body of the shingle, water is prevented from entering through the  
90 openings. The body A is provided at its upper end, on opposite sides of the rib D, with nail-holes *i*, and between the ribs *f* and E with nail-holes *j*, all of which are made somewhat larger than the nails, in order to permit  
95 the shingles to move slightly in expanding and contracting. The lower portions *b'* of the rib *b* rest upon the marginal portions *f'* of the



ribs F of the two shingles next below, and the lower portions *e* of the ribs rest upon the upper portions *e'* of the ribs E of the shingles next below, thereby forming tight joints 5 between the several shingles and unobstructed waterways. The side corners of the central square rib *b* are made blunt and parallel with the upright portions of the ribs E and F. The square rib *b* stiffens the body of the shingle considerably in all directions, and the ribs 10 E and F, arranged parallel therewith, materially augment the rigidity of the shingle.

In constructing the shingle the body is first cut out, the holes *h* and nail-holes are then 15 stamped through the same, and finally the ribs are stamped into the body.

The center field, B, may be provided with a raised ornamental figure, K, if desired.

We claim as our invention—

1. A metallic shingle having its body A provided with a central plane portion, B, inclosed by a rib, *b*, and ribs C and D, extending downwardly and upwardly from the lower 5 and upper corners of the rib *b* to the lower and upper corners of the body A, substantially as set forth.

2. A metallic shingle having its body A provided with a central plane portion, B, inclosed by a rib, *b*, ribs C and D, extending down-

wardly and upwardly from the lower and up- 30 per corners of the rib *b* to the lower and upper corners of the body A, and upright ribs, E E and F F, arranged on opposite sides of the central rib, *b*, substantially as set forth.

3. A metallic shingle having its body pro- 35 vided with a central plane portion, B, inclosed by a rib, *b*, a rib, D, extending upwardly from the upper corner of the rib *b*, a rib, C, extending downwardly from the lower corner of the rib *b*, and provided with a lip, *a*, and outer 40 ribs, F, having openings *h*, substantially as set forth.

4. A metallic shingle having its body provided with a central plane portion, B, inclosed by a rib, *b*, a rib, D, extending upwardly from 45 the upper corner of the rib *b*, a rib, C, extending downwardly from the lower corner of the rib *b*, and provided with a lip, *a*, outer ribs, F, having openings *h*, and plane ears *g*, arranged outside of the ribs F, substantially as 50 set forth.

Witness our hands this 15th day of November, 1883.

L. H. MONTROSS.  
JOHN C. WEST.

Witnesses:

JOHN O'HEARN,  
WILLIAM G. LEAR.