

(No Model.)

F. E. SAGENDORPH.  
METALLIC SHINGLE.

No. 370,417.

Patented Sept. 27, 1887.

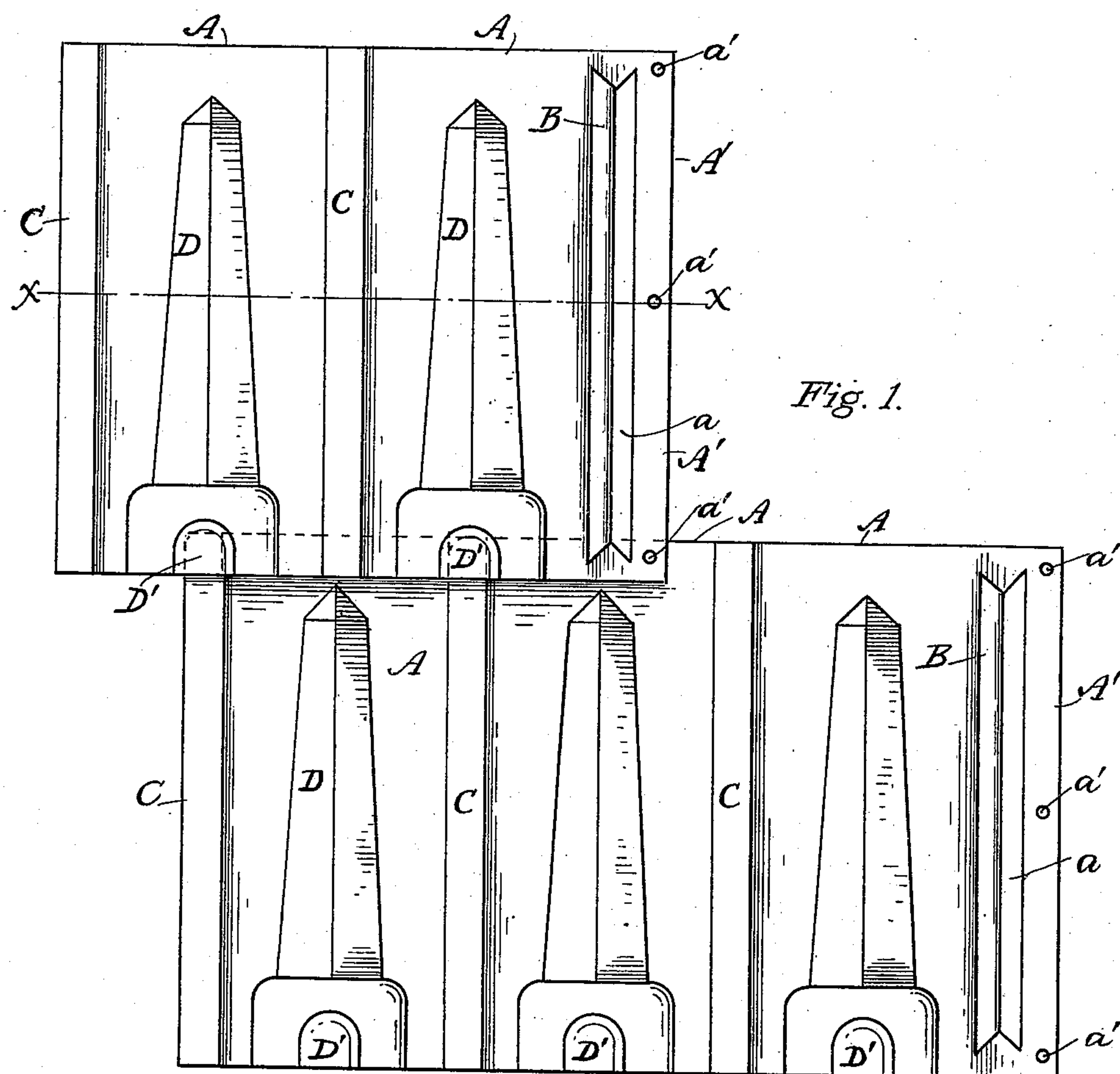


Fig. 1.

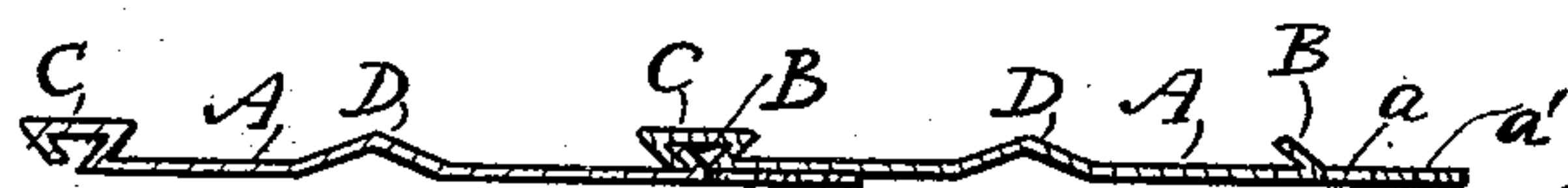


Fig. 2.

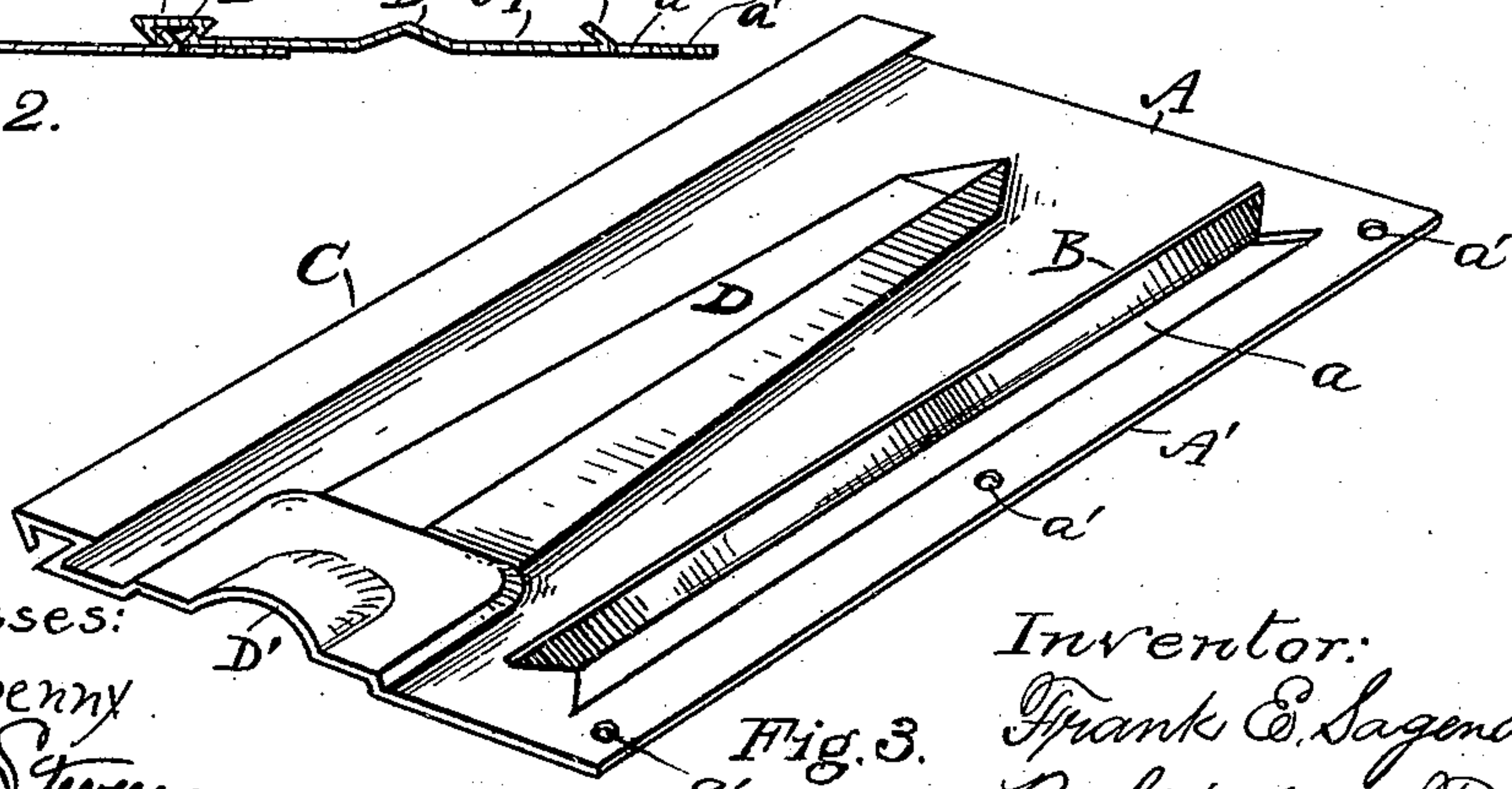


Fig. 3.

Witnesses:  
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By Girdley & Fitch  
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# UNITED STATES PATENT OFFICE.

FRANK E. SAGENDORPH, OF CHICAGO, ILLINOIS, ASSIGNOR OF ONE-HALF  
TO E. STARR LLOYD, OF SAME PLACE.

## METALLIC SHINGLE.

SPECIFICATION forming part of Letters Patent No. 370,417, dated September 27, 1887.

Application filed July 12, 1887. Serial No. 244,056. (No model.)

*To all whom it may concern:*

Be it known that I, FRANK E. SAGENDORPH, of Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Metallic Shingles, of which the following is a description, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a face view of a series of shingles representing two courses. Fig. 2 is a sectional view thereof upon the line *x x*, Fig. 1, and Fig. 3 is a perspective view of one of my improved shingles.

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

My invention relates to metallic shingles; and my object is to produce a shingle having telescoping joints so constructed as to securely and effectively attach the shingles to each other, and at the same time to produce water-proof joints and to make provision for nailing the shingles so that the nail-heads may be covered and protected. I accomplish said object in the manner hereinafter more particularly described and claimed.

A in the drawings represents my improved shingle. Upon one side I form a slot, *a*, from which a portion of the metal is bent over upon itself, forming a flange, B, which lies in a plane preferably oblique to that of the body of the shingle, as clearly shown in cross-section in Fig. 2. This leaves a strip of metal, A', upon one side of the shingle to serve as a fastening, as hereinafter stated. Upon the opposite side of the shingle is formed a dovetailed flange, C, of such shape that the flange B may slide within or telescope therewith. The strip A' upon the edge of the shingle is perforated at *a'*, and thereby serves as a fastening, into which nails may be driven to attach the shingle to the roof. A portion of the shingle, as D, is stamped in relief, the raised part commencing preferably at a point near the top and expanding in width until it reaches the bottom. Another part, D', at the bottom is raised somewhat higher for the reception of the flange C, which forms the outer portion of the seam in breaking joints upon the next course below, as clearly shown in Fig. 1. In laying said shingles the first one is nailed through the perforations *a'*, while the dovetailed flange C of the next shingle is

slid downwardly upon the flange B. This plan is followed in all the courses, and as the joints are broken it permits the raised portion D' to overlap the upper end of the seam or joint below. The raised part D also directs the flow of water to the sides of the shingle, and it flows upon the shingles below at points where there is no joint. The water upon one side of the shingle upon which the flange B is placed is brought into contact with said flange, and thereby prevented from penetrating the roof. I have shown the raised portion D in the form of an obelisk; but it is obvious that said form may be varied so long as its function is maintained. I construct the flange B of such a length that its upper end may be covered and protected by the overlapping of the shingle above.

It will thus be seen that a roof shingled in this way is rendered water-proof, while the nails by which each shingle is attached are covered and protected by the next adjoining shingle.

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

1. A metallic shingle provided with the perforated strip A' and flange B upon one edge, whereby said strip may form a cleat for attaching the shingle to the roof to be overlapped and covered by the next adjoining shingle, substantially as and for the purposes set forth.

2. A metallic shingle provided with a flange near one of its outer edges, cut from the body of the shingle and overlapped upon said body, and an inwardly-turned flange, as C, upon its opposite edge, substantially as and for the purposes set forth.

3. A metallic shingle provided with flanges B C, strip A', and a centrally-raised portion formed to deflect the rain in its descent toward the outer edges of the shingle, substantially as described.

4. The combination, in a metallic shingle, of the strip A', flanges B and C, with a centrally-raised portion widened at the bottom, substantially as and for the purposes specified.

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Witnesses:

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