

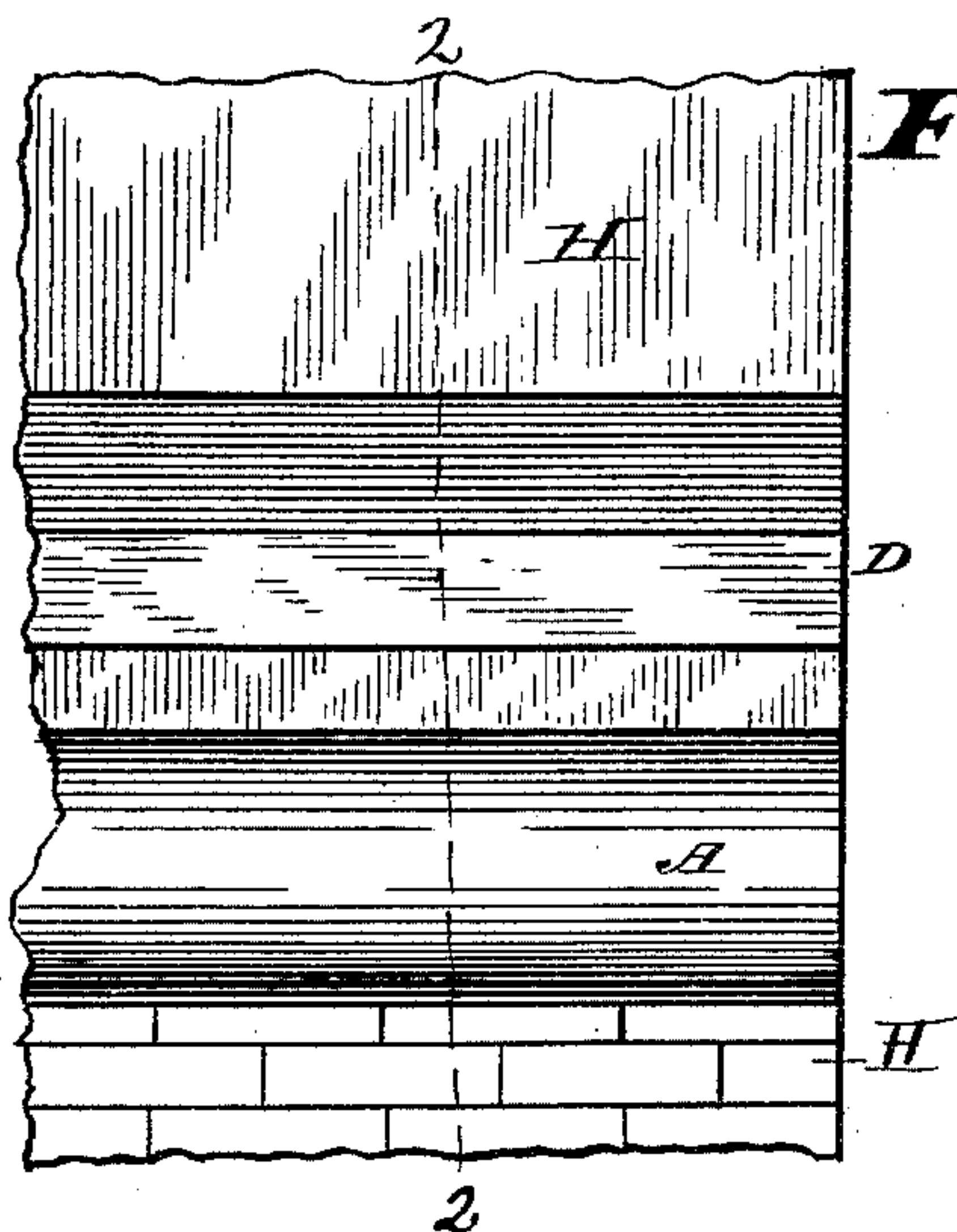
(No Model.)

H. SYMONDS.

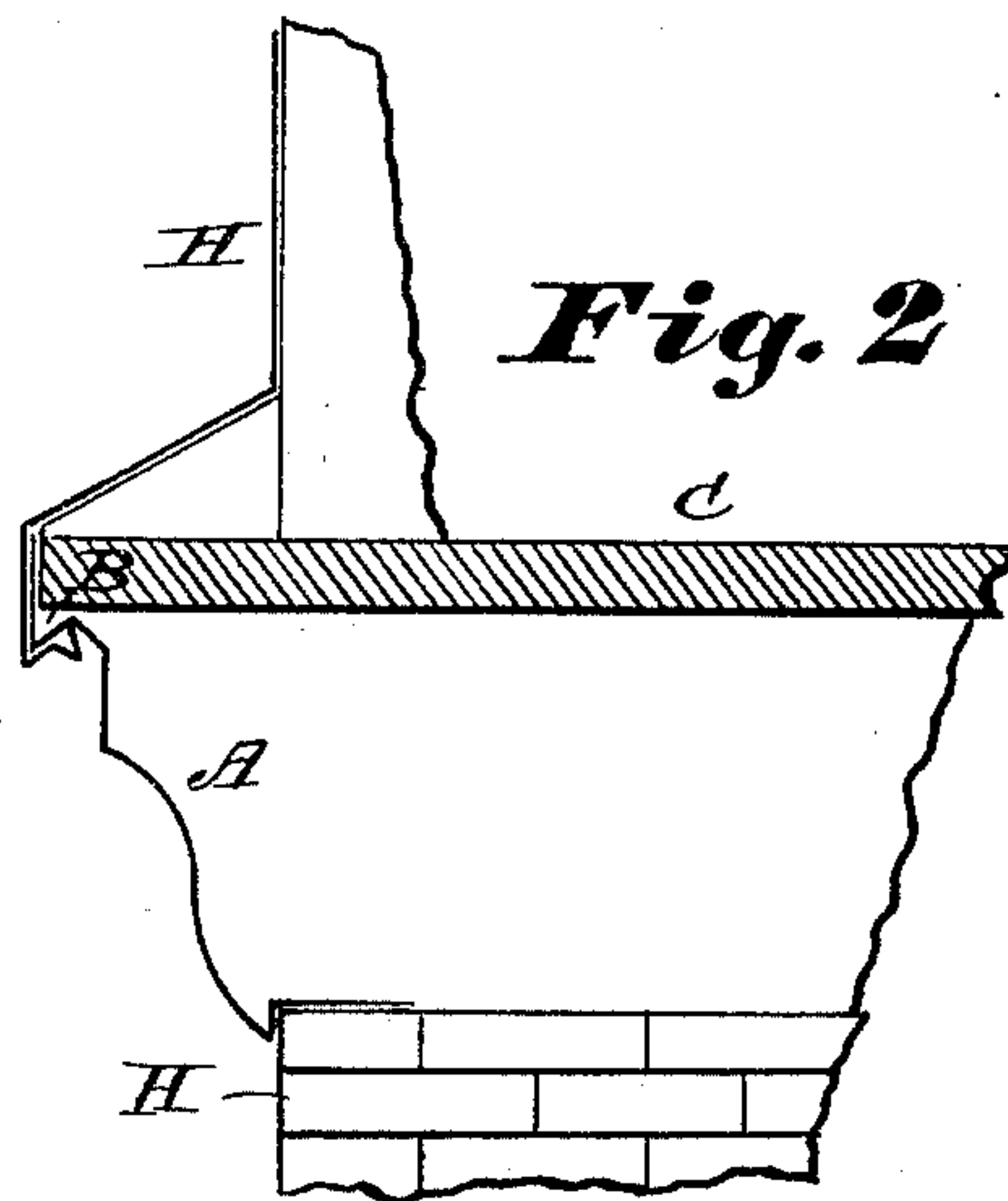
JOINT FOR CORNICES, GUTTERS, BALUSTRADES, &c.

No. 435,906.

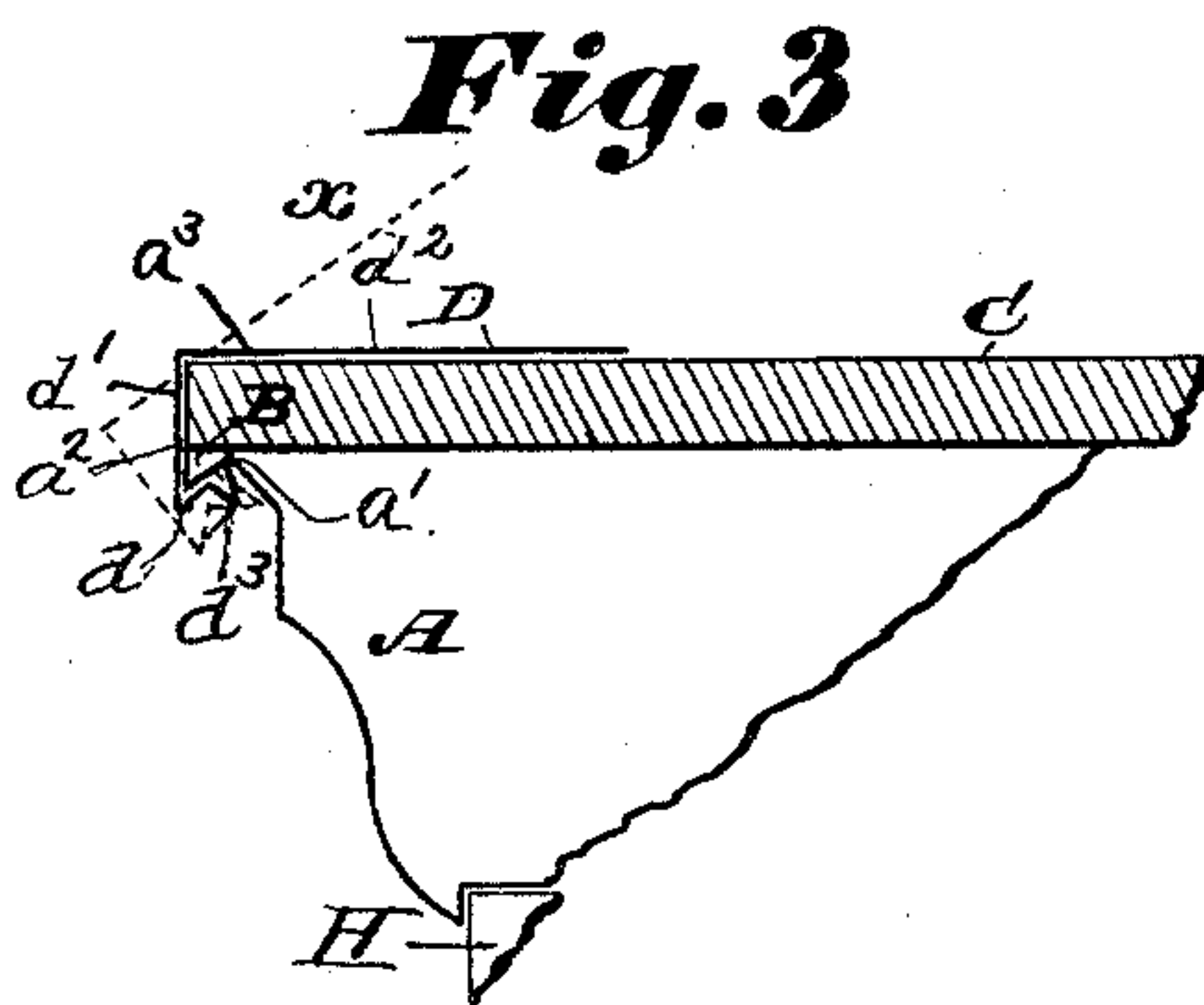
Patented Sept. 2, 1890.



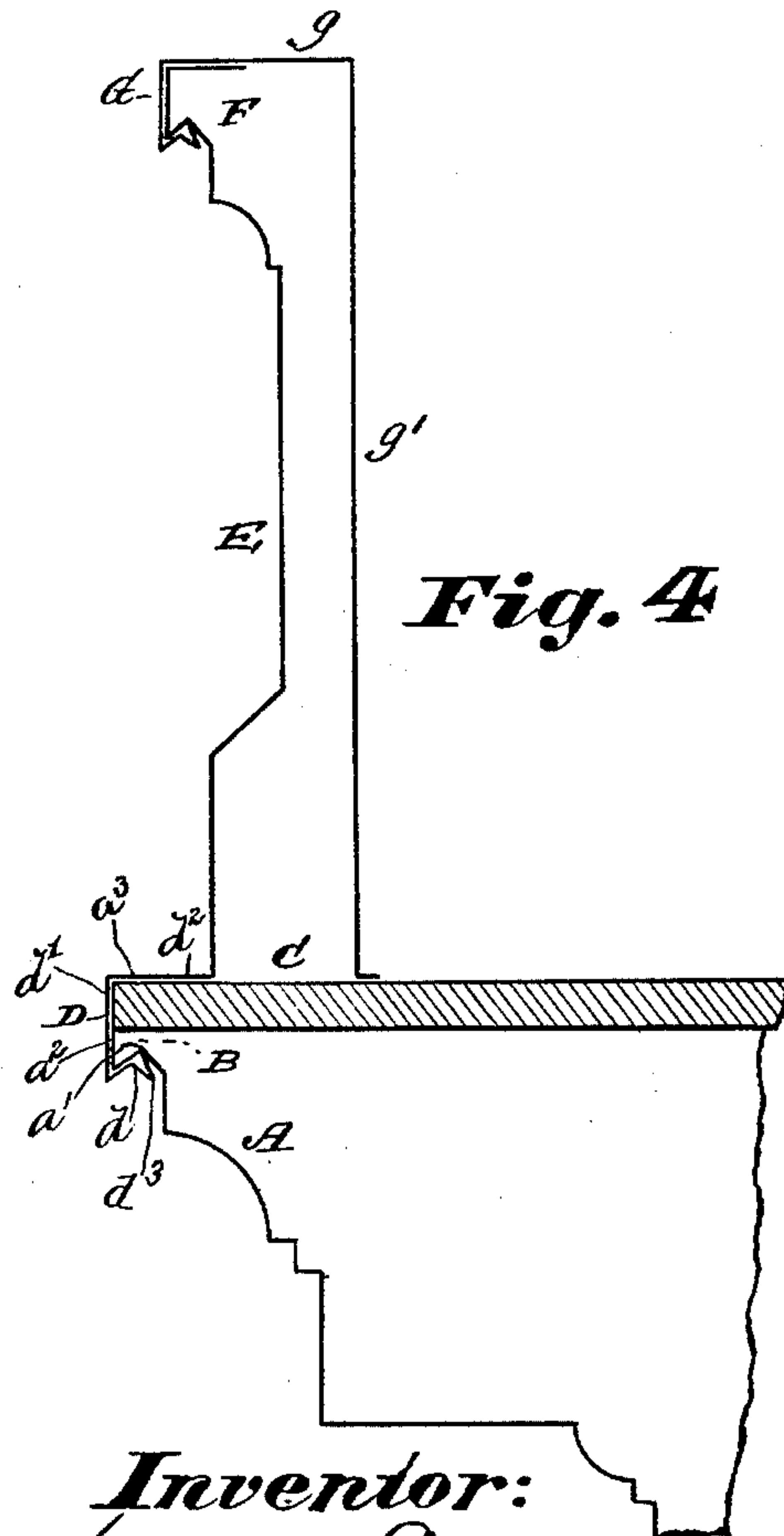
**Fig. 1**



**Fig. 2**



**Fig. 3**



**Fig. 4**

**Witnesses:**

*M. J. Lorrain*  
*J. M. Sanford*

**Inventor:**

*Herbert Symonds*  
*by C. D. Moody atty*



## UNITED STATES PATENT OFFICE.

HERBERT SYMONDS, OF ST. LOUIS, MISSOURI, ASSIGNOR TO MESKER & BRO.,  
OF SAME PLACE.

## JOINT FOR CORNICES, GUTTERS, BALUSTRADES, &amp;c.

SPECIFICATION forming part of Letters Patent No. 435,906, dated September 2, 1890.

Application filed March 9, 1889. Serial No. 302,714. (No model.)

*To all whom it may concern:*

Be it known that I, HERBERT SYMONDS, of St. Louis, Missouri, have made a new and useful Improvement in Joints for Cornices, Gutters, Balustrades, and other parts of Metallic Architectural Work, of which the following is a full, clear, and exact description.

The invention relates to improvements in the joints of sheet-metal cornices and similar structures, the objects being to make said joints readily and easily to unite the metal plates or sheets that form said cornices closely and firmly together, so that no leakage will occur between them, and to obviate double seaming, lapping, clinching, riveting, or nailing at the edges of the plates; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, in which similar letters of reference designate corresponding parts, Figure 1 represents a front elevation of a part of a building with the invention attached. Fig. 2 represents a vertical section on the line 2 2 of Fig. 1. Fig. 3 represents a similar section showing the invention applied to the roof of a building and the manner of connecting the plates. Fig. 4 represents a similar section showing two of such cornices, the upper one forming part of a balustrade.

In Figs. 1 and 2 the cornice is surmounted by a molding.

Referring to the drawings by letter, H represents the wall upon which the cornice is mounted; A and D, the upper and lower plates, respectively, that enter into the formation of the cornice, and C the roof-board. The lower plate A has its outer surface below the roof-board molded, bent, or creased into a shape usual in the lower outstanding portion of cornices of ordinary construction, as shown in the drawings, and its lower edge is secured to the top of the wall in any suitable manner. The said edge is preferably bent inward on top of the wall and downward to overhang the front of the latter.

A short distance below and inward from the outer edge of the roof-board the plate A is provided with a groove  $a'$ , V-shaped in cross-

section and parallel with said edge. The outer side of said groove inclines downward to a point vertically below the edge of the roof-board, forming the projection B, and a portion  $a^2$  then rises vertically and lies closely against said edge. A portion  $a^3$  is then bent downward and inward upon the roof-board or ceiling, (see Figs. 3 and 4,) except when the cornice is surmounted by a molding, when the portion  $a^3$  is done away with, as in Fig. 2.

D is the upper metal sheet forming part of the cornice, a portion  $d^2$  of which sheet lies closely upon the portion  $a^3$  of the plate A. Adjoining the portion  $d^2$  a portion  $d'$  of the upper plate is bent down on the portion  $a^2$  of the lower plate to the edge of the projection B, whence the plate D is bent upward, as at  $d$ , into the groove  $a'$  and rests against the inner inclined face of the projection B.

$d^3$  is a brace or strengthening-bend, V-shaped in cross-section, made at the lower edge of the plate D, with its edge resting in the angle of the groove  $a'$ , in which said brace-bend stands.

Fig. 3 shows the manner in which the plates are connected to form the cornice-joint. The plates having been bent into the described shapes, the lower plate A is secured in place to the wall and roof-board. The edge of the brace-bend  $d^3$  is then placed in the groove  $a'$ , with the part  $d^2$  of the upper plate inclining upward, as shown. The said part  $d^2$  is then forced down on the part  $a^3$  of the lower plate, bringing the parts  $d'$  and  $a^2$  together, the part  $d$  into the groove  $a'$  and the edge of the bend  $d^3$  into the angle of said groove, so that the plates are held firmly and closely together. The upper plate is then secured in place.

In Fig. 2 the upper plate rises upward to form part of a molding H, and in Fig. 4 it rises to form part of a balustrade E and a second cornice F, the plate G, with the horizontal portion  $g$  and descending portion  $g'$ , forming the other part of said balustrade and cornice.

Having thus described my invention, I claim—

1. The combination of the plate A, having the groove  $a'$ , projection B, and vertical portion  $a^2$ , and the plate D, having an upper portion  $d^2$ , a vertical descending portion  $d'$ , an



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