

(No Model.)

W. C. BERGER.  
SHEET METAL ROOF.

No. 435,960.

Patented Sept. 9, 1890.

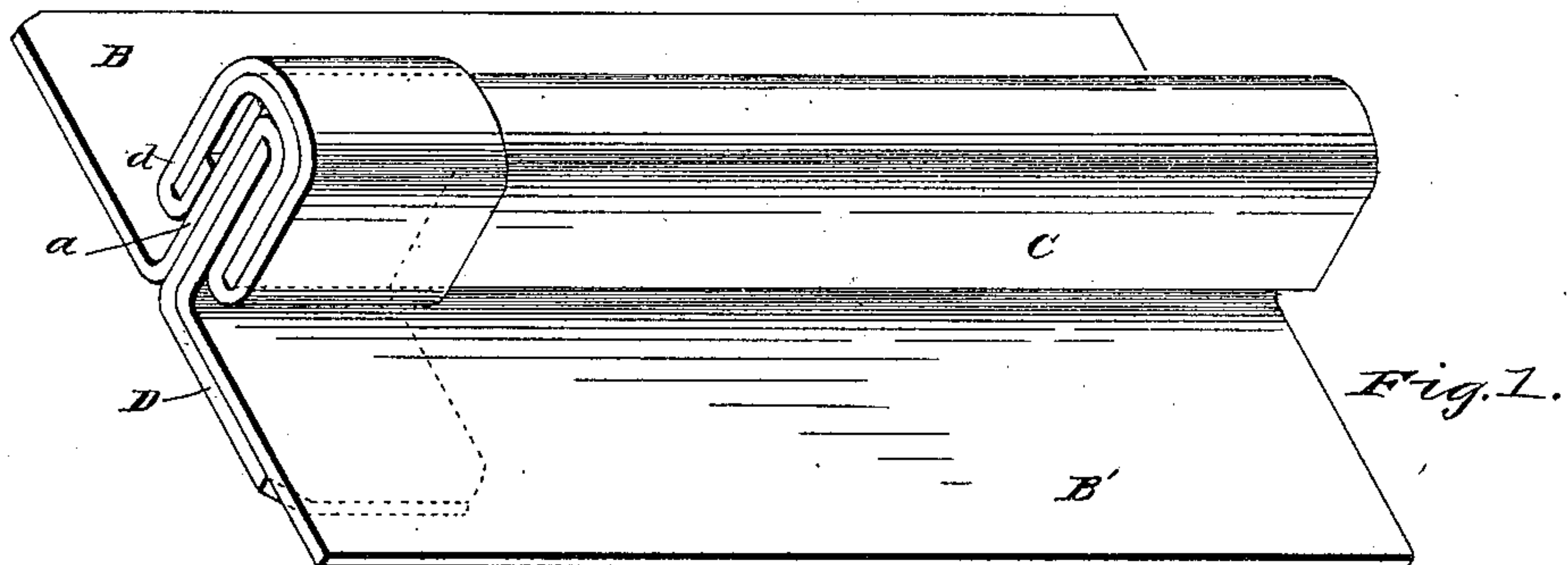


Fig. 1.

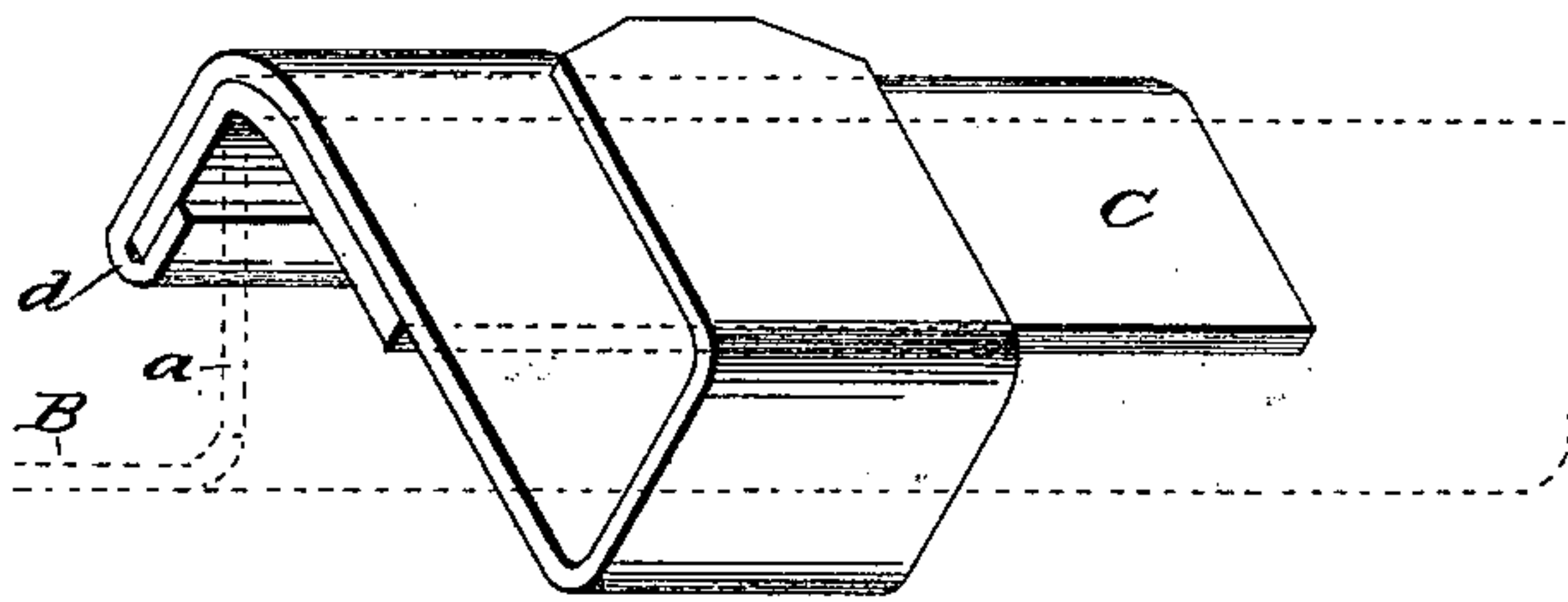


Fig. 2.

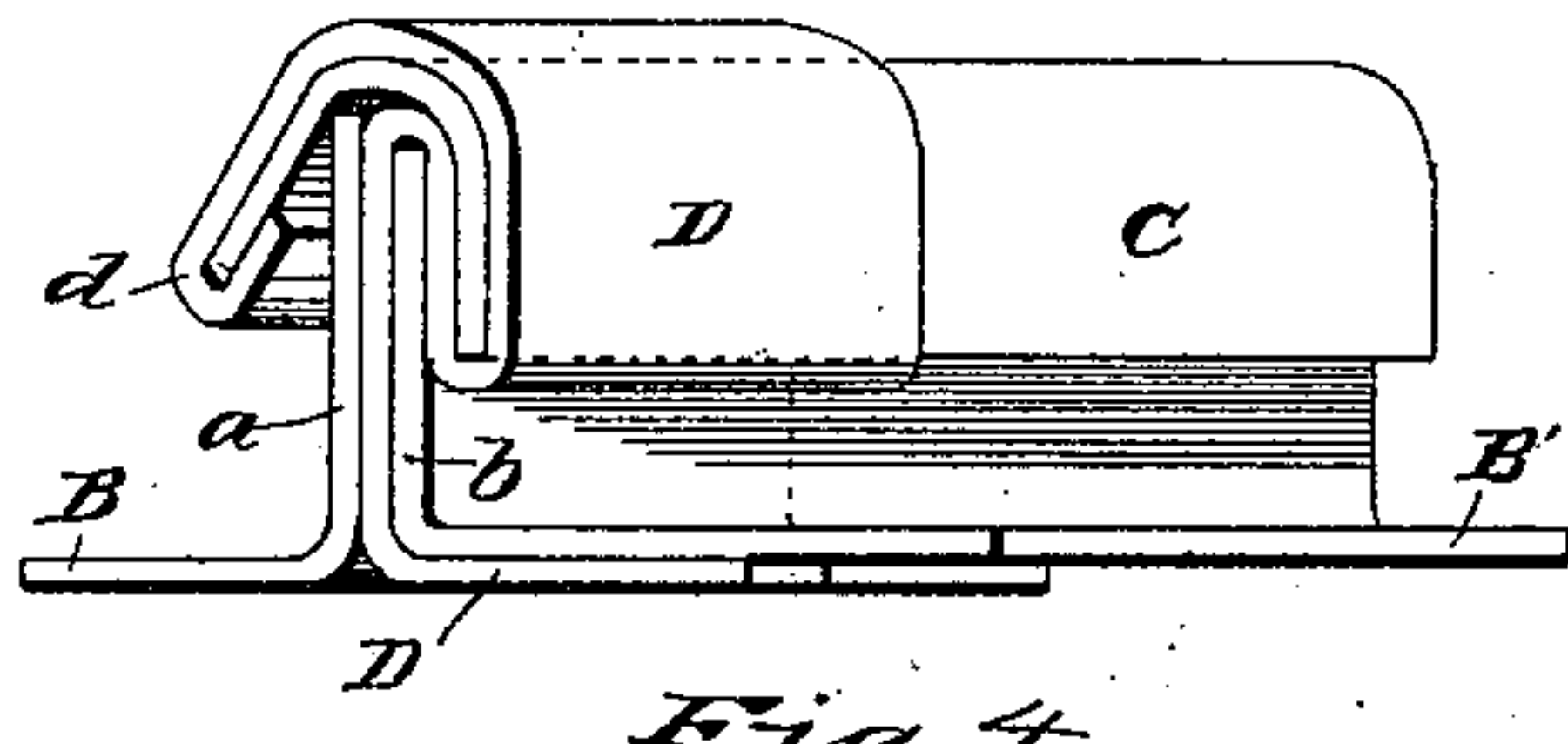


Fig. 4.

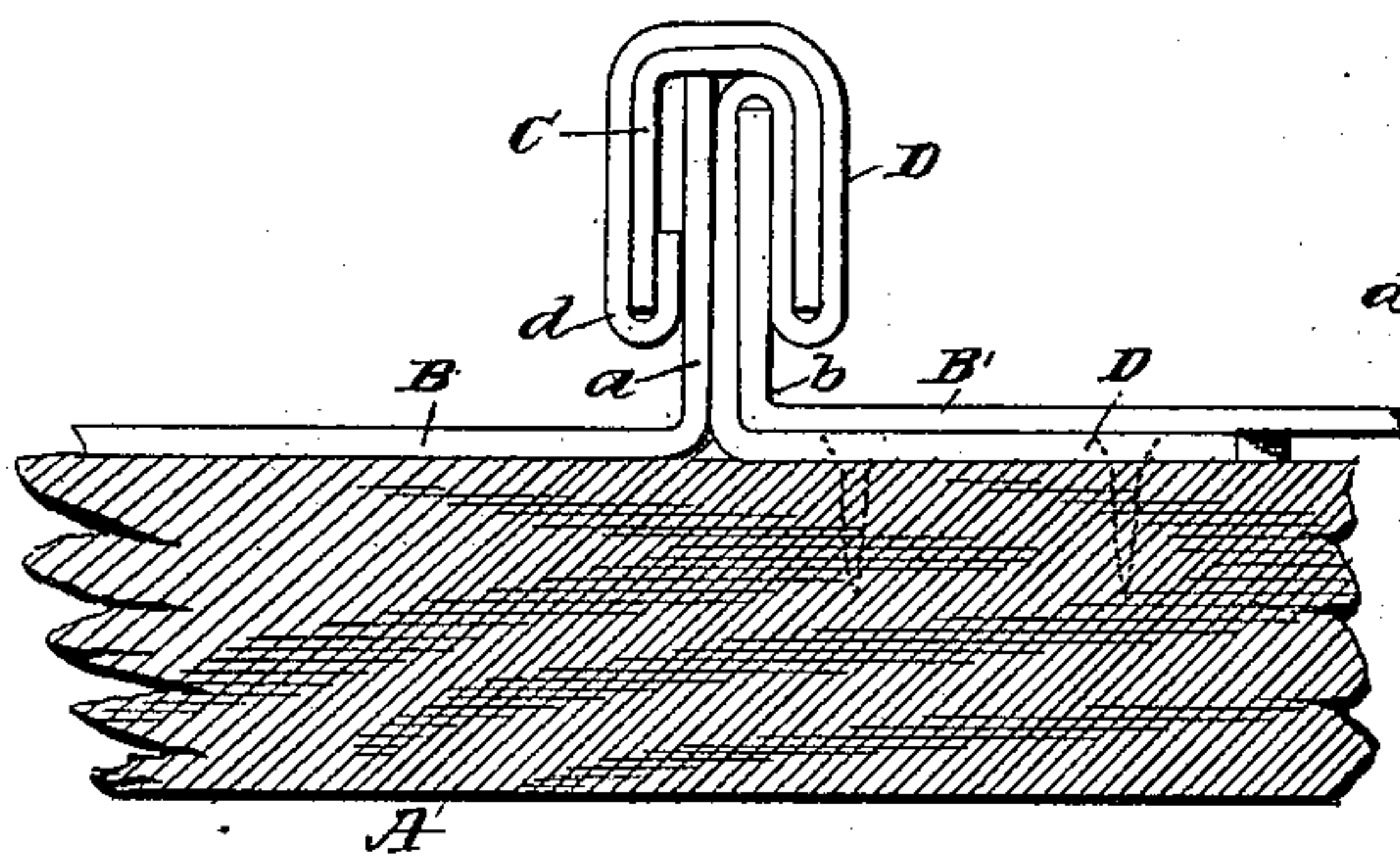


Fig. 5.

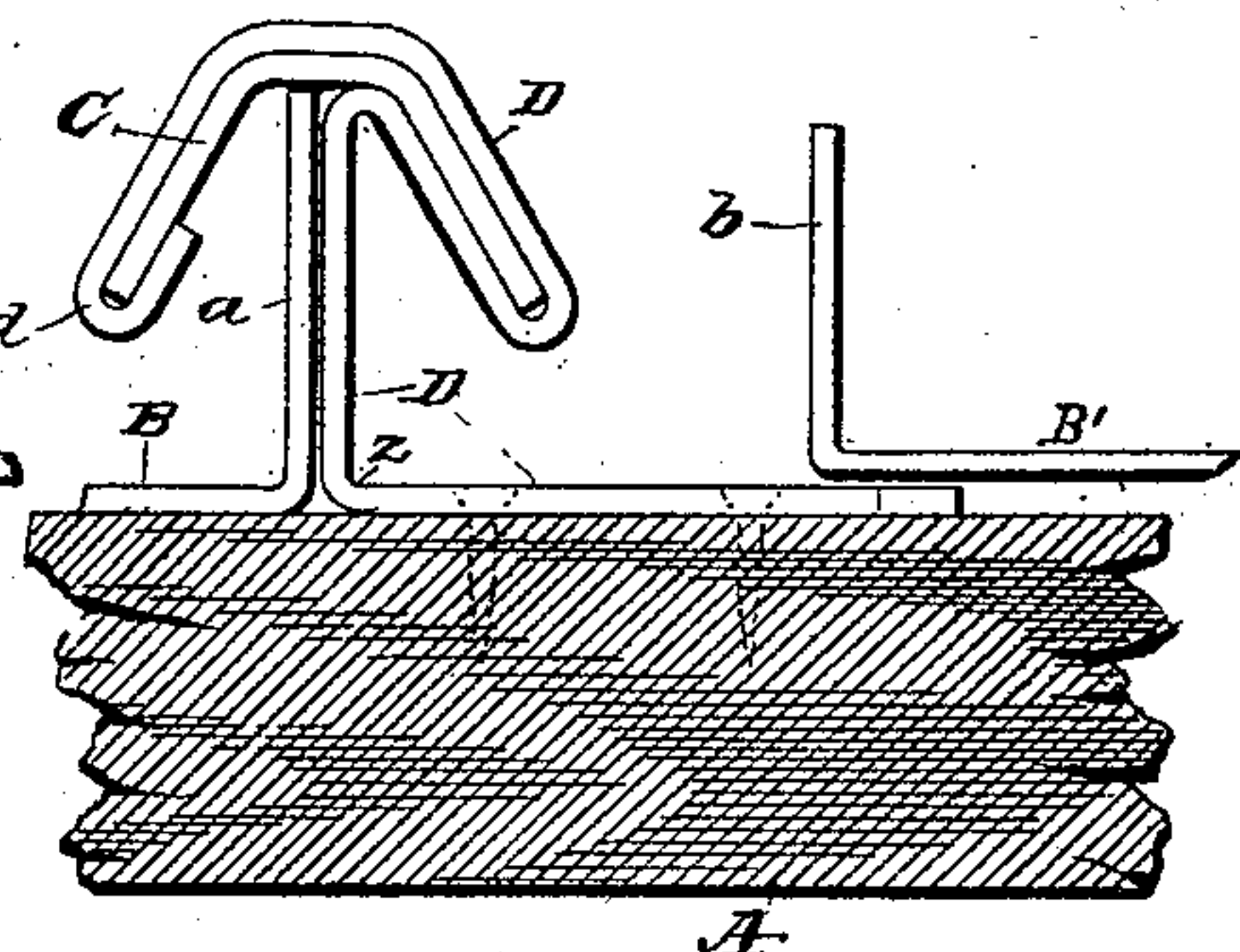


Fig. 3.

WITNESSES:

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# UNITED STATES PATENT OFFICE.

WILSON C. BERGER, OF CANTON, OHIO.

## SHEET-METAL ROOF.

SPECIFICATION forming part of Letters Patent No. 435,960, dated September 9, 1890.

Application filed December 20, 1889. Serial No. 334,393. (No model.)

*To all whom it may concern:*

Be it known that I, WILSON C. BERGER, a citizen of the United States, and a resident of Canton, county of Stark, State of Ohio, have  
5 invented a new and useful Improvement in Sheet-Metal Roofs, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, making part of this specification.

10 My invention relates to improvements in metal roofs, and particularly to roofs having standing seams; and it consists in providing a cap to cover and to embrace the seam, and an anchor, one end of which is secured to the  
15 lath or sheeting, the other passed over and under the cap.

The object is to provide a method of securing sheet-metal roofing to a foundation of lath or sheeting and to form the joint without the  
20 use of expensive tools.

With these ends in view my invention consists in certain features of construction and combination of parts, as will be hereinafter described, and pointed out in the claims.

25 Figure 1 of the accompanying drawings is a view in perspective of a portion of metal roofing, illustrating my invention. Fig. 2 is a similar view, showing the cap with the anchor folded about one edge and over the top portion of the cap. Fig. 3 is an end elevation or  
30 view of the seam, showing the anchor bent to embrace both edges of the cap and secured to the sheeting, the vertical flange of the sheet metal on left-hand side in position. Fig. 4 is  
35 a perspective showing the anchor, as before stated, with the flange of both sheets of metal in position and the cap closed down on the right-hand side. Fig. 5 is an end view or elevation showing the completed seam.

40 Similar letters of reference indicate corresponding parts in all of the figures of the drawings.

Heretofore it has been customary in the use of many of the well-known forms of roofing  
45 to send with each shipment of roofing an expensive set of tools, without which the roof could not be laid, involving a large outlay of money for such tools, as well as the cost of freight to and from the factory. In the use  
50 of the form of roofing hereinafter described all such expense is avoided, as the roof may

be put on or laid by the use of the most common or ordinary tools found in every village or on every farm.

A represents the sheeting upon which the  
55 metal sheets B B', having upturned or flanged edges *a b*, are laid and secured in the following manner: The sheet B is placed in position, as shown in the drawings, the cap C and anchor D, as shown in Fig. 2, are placed over  
60 the flange *a* and the anchor bent in under the cap and down against the flange *a* and turned out at right angles at *z* and secured to the sheeting, as shown in Fig. 3. The metal sheet B' is then placed in position, the flange *b* resting  
65 against the anchor and under the anchor and cap, as shown in Fig. 5, after which the anchor and cap are closed down compactly together over and against the flanges *a* and  
70 *b*, as shown in Fig. 5, thus completing the seam, which may be done by the use of a tinner's mallet and a block of wood. The block placed against one side of the seam is held against the cap while the other side is  
75 driven down, after which the block is placed on the finished side and the other or unfinished side closed in, completing the seam, as shown in Fig 5.

The advantage gained in having the end *d*  
80 of the anchor bent around so as to rest between the sheet B and the cap is that not only a water-tight joint is formed, but the said end is prevented from being forced away from the cap through any cause—as, for example, by a workman treading upon the joint,  
85 which would have a tendency to force the joint either to one side or the other. In the event of the workman treading on that side of the joint adjacent to the sheet B' the effect would be to clamp the cap and anchor more firmly together, while should the pressure be exerted  
90 upon the opposite side the end *d* referred to will be held securely in place, which would not be the fact were the end *d* of the anchor simply turned down against the cap, as in ordinary cases.

Another advantage attained in the hereinbefore-described construction is that the free  
end *d* of the anchor may be released from the edge of the cap and turned back to allow of  
100 the removal of the cap and the sheets B and B' for repair or alteration, as may be desired.

Having thus fully described the nature and object of my invention, what I claim, and desire to secure by Letters Patent, is—

1. The combination, with the sheeting A, of  
5 metal sheets having their edges flanged upwardly for joining together, a cap to embrace and cover said upwardly-turned flanges, and an anchor having one of its ends secured to said sheeting under one of said metal sheets,  
10 the other end portion bent up under and over and under said cap to secure said cap over the upturned flanges of said metal sheets and the said metal sheets to the said sheeting, substantially as described, and for  
15 the purpose set forth.

2. The combination, with metal sheets B and B', having their edges flanged upwardly, of a cap to cover and embrace said edges and an anchor having one of its ends secured below one of said sheets and passed upwardly  
20 between and over one of said flanges and down under and about and under said cap, substantially as described, and for the purpose set forth.

In testimony whereof I have hereunto set  
my hand this 6th day of December, A. D. 1889.

WILSON C. BERGER.

Witnesses:

W. K. MILLER,

CHAS. R. MILLER.