

W. M. Smith,

Cotton Bale Tie.

No. 99,964.

Fig. 1.

Patented Feb. 15. 1870.

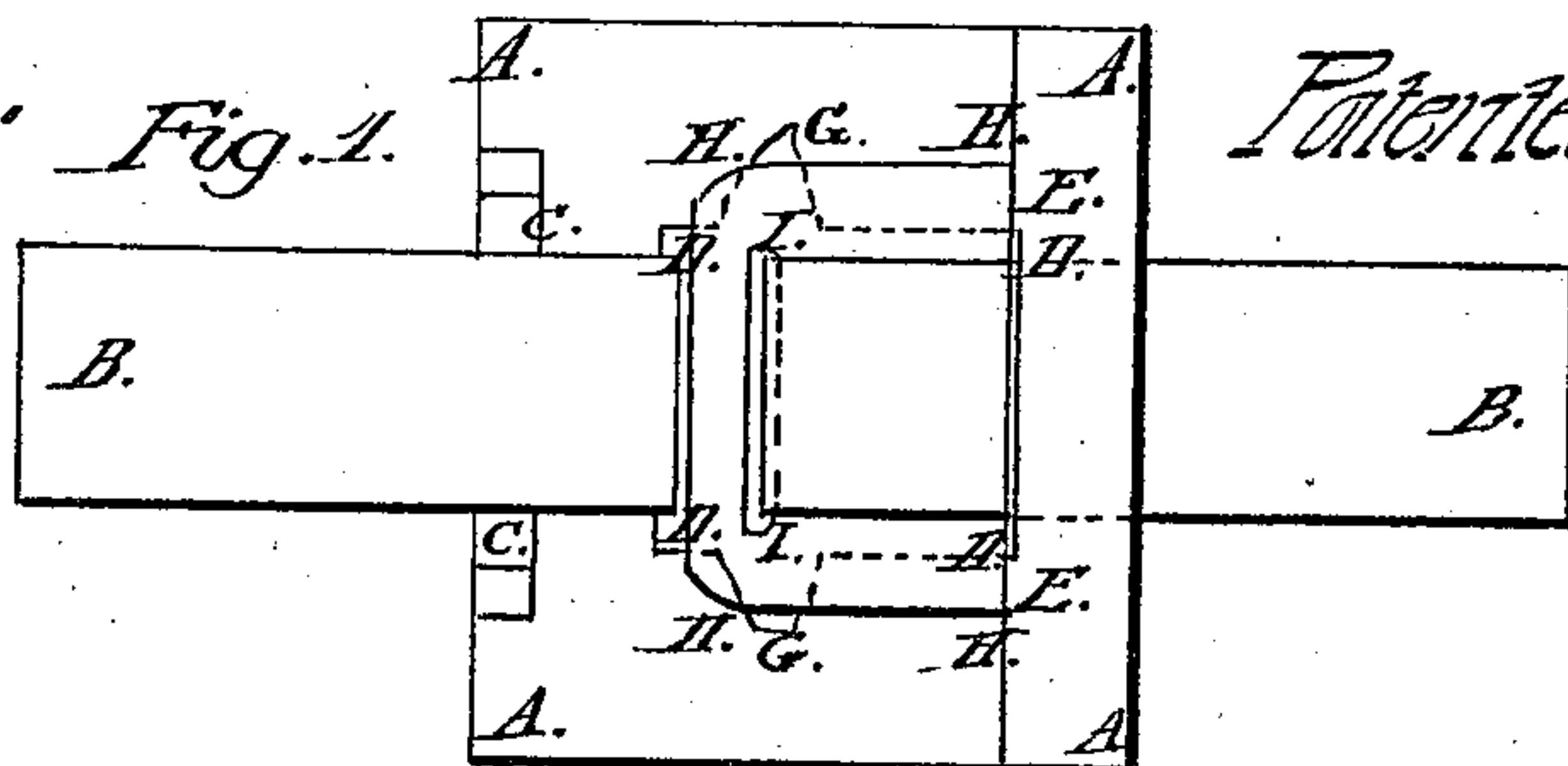
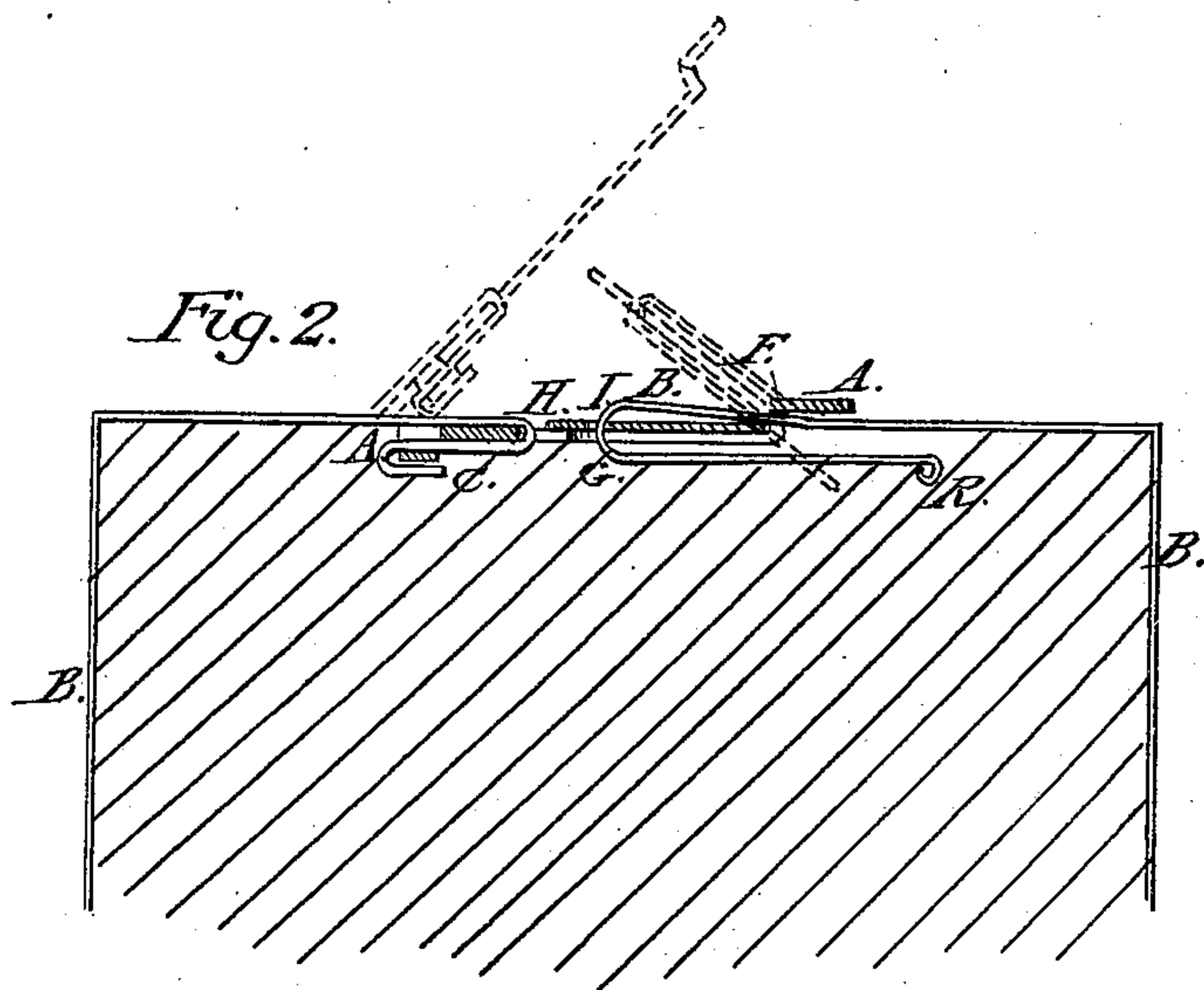


Fig. 2.



Witnesses:

G. Matney
D. Ballauf

Inventor:

William M. Smith

United States Patent Office.

WILLIAM M. SMITH, OF AUGUSTA, GEORGIA.

Letters Patent No. 99,964, dated February 15, 1870; antedated February 10, 1870.

IMPROVEMENT IN COTTON-BALE TIES

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, WILLIAM M. SMITH, of Augusta, in the county of Richmond, and State of Georgia, have invented a new and improved Cotton-Bale Tie, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings making a part of this specification, in which—

Figure 1 is a plan or top view of the tie when united.

Figure 2 is a vertical section of the same.

Similar letters of reference where they occur in the different figures denote like parts in all the drawings.

A cotton-bale tie to be valuable should in its structure combine economy, strength, simplicity, and facility in its adjustment, with perfect security against the accident of parting asunder when properly applied in fastening together the ends of iron bands around cotton-bales.

I will now proceed to describe my invention with reference to the drawings, that others skilled in the art of manufacturing the class of improvements to which this belongs may make and use the same.

A A A A represent the four corners of the larger one of two pieces, properly adjusted and uniting the two ends of the iron band B B as applied in binding cotton-bales.

It should be made of iron near an eighth of an inch thick, by one and three-quarters square, and, when manufactured, should be fastened on one end of the band B B by bending the same around the narrow depressed strip cut from the upper end of the piece A A A A, as represented by the incision C C, in figs. 1 and 2.

D D D D represent the four corners of an oblong angular hole, cut in the center of said piece, with V-shaped notches in each side of the same, as represented by G G.

E E represent a short angle or shoulder at the lower edge of said piece, which forms the seat for the smaller piece when the two are united.

H H H H represent the four corners of the smaller piece properly adjusted, and showing the tie united with the lower corners of the smaller piece, interlocked with and resting upon the shoulders E E of the larger piece A A A A.

Said smaller piece is made of the same character of iron as the larger one, and has a uniform surface, with a hole cut near the top edge of the same, of sufficient width and length only to admit the insertion of the iron band intended to be used in combination therewith, represented by I I.

The length of the smaller piece should at the lower corners nearly equal the distance between the extreme points of the two V-shaped notches G G cut in each side of the oblong hole D D D D made in the larger piece, and from these lower corners slightly shorten to the two upper ones, which should be rounded off to facilitate its insertion and passage to its seat or resting

place E E, formed in the angled edge of the piece A A A A.

Its width should be sufficient to allow its rounded corners to pass slightly beyond and rest against the upper inner corners of the V-shaped notches G G, as represented in fig. 1.

The width and length of the oblong angular hole D D D D should be cut to suit the width of the iron bands to be inserted therein, and the width of the smaller piece H H H H, as represented in fig. 1, by the dotted lines and letters D D D D.

To apply this cotton-tie in uniting the ends of iron bands around cotton-bales, the same must be adjusted as indicated by the two pieces drawn in red; in fig. 2.

The smaller piece H H H H is then passed from the under side of the upper and larger one, through the V-shaped notches G G to its resting place on the shoulders E E of the larger one A A A A.

It will readily be seen that the peculiar shape of the oblong angular hole in the piece A A A A freely admits the smaller piece to stand perfectly erect upon its edge on the shoulders E E, and thereby supported in that position without pressure on either side from the band fastened therein, which adjustment secures a greater strength in the combination than could otherwise be done with the same amount of metal.

It is of the utmost importance that the upper corners of the smaller piece H H H H should be considerably rounded, and the oblong angular hole D D D D should have the notches G G of a V-shape, as represented in the various figures, in order that the rounded top of the piece H H H H may, when being united with the piece A A A A, guide itself quickly through the hole D D D D to its resting place on the shoulders E E.

Without this peculiar structure of the two parts last designated, it would be impossible to unite the tie as quickly as if constructed as described.

Having thus fully described my invention and shown how it operates,

What I claim as new, and desire to secure by Letters Patent, is—

1. An improved cotton-bale tie, consisting of piece A A A A with its oblong angular hole D D D D, V-shaped notches G G, depressed incision C C, and shoulders E E, substantially as and for the purposes herein set forth.

2. The combination of the piece A A A A, with the piece H H H H having its upper corners rounded as shown, and the hole I I, substantially as and for the purposes herein set forth.

3. The band B when provided with the curled end R, and attached to the plates A A A A and H H H H, substantially as and for the purposes herein set forth.

WILLIAM M. SMITH.

Witnesses:

G. MATHYS,

D. BALLAUF.