A. J. NELLIS.

Cotton-Bale Ties.

No. 149,949. Patented April 21, 1874.

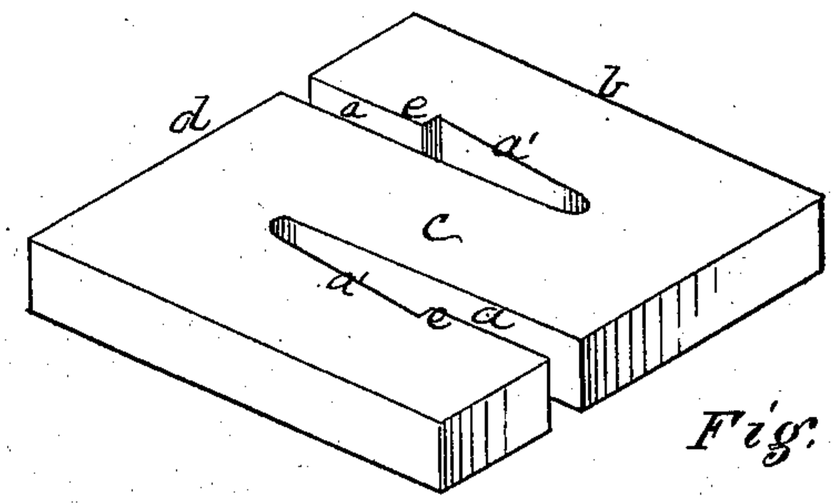

Fig. 1.

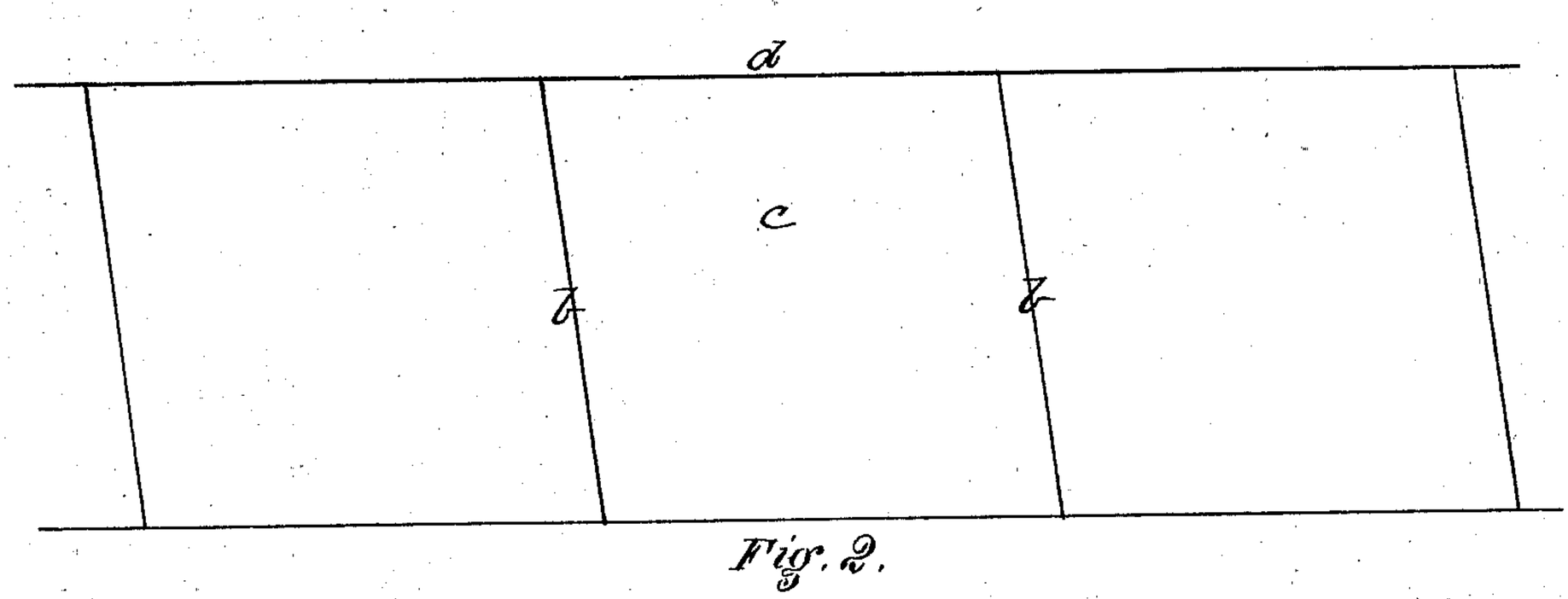

Fig. 2.

Witnesses

P. J. Merlin

Frederick Staudich

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by Bakewell Church & Ken

his attorneys

UNITED STATES PATENT OFFICE.

AARON J. NELLIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. **149,949**, dated April 21, 1874; application filed August 16, 1873.

To all whom it may concern:

Be it known that I, AARON J. NELLIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Cotton-Bale Tie; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, forming a part of this specification, in which—

Figure 1 is a perspective view of my improved cotton-tie, and Fig. 2 is a series of blanks prior to being cut apart.

My invention relates to an improvement in open-slotted tie-buckles; and it consists in forming them with an excess of metal at the rear or closed end of the tie-slots, for the purpose of gaining increased strength at the points subject to the greatest strain.

To enable others skilled in the art to make and use my invention, I will describe its construction.

The slots *a a* are cut into the blank from opposite sides. The blank is formed by rolling a bar of iron, in suitable rolls, down to the proper width and thickness, and then by cutting the same into a number of blanks, such blanks being cut from the bar in parallel but diagonal lines. After the blanks are cut, the slots *a a* are formed in them, the inner sides of which are parallel to the ends *b* of the blank *c*. On the bearing-side *a'*, the slots are cut so as to stand directly at right angles with the sides *d*. The length of this straight or bearing side of each slot is equal to the width of the band which extends around the cotton-bale. By cutting this side in this way, a stop or shoulder, *e*, is formed near the mouth of each slot. The inner or closed end of the slot is, by this means, bounded by a greater width of metal. This serves to increase the strength of the tie, as the strain is all at that point.

The method in which blanks *c* are cut from the bar is as follows: The bar is pushed under a diagonal cutter, and the ends sheared off. Then it is turned over and pushed forward the length of the tie, and a blank is cut off. This operation is repeated, turning the bar each time so as to bring the side which is to be cut parallel to the last-cut side. In this way the blanks are all formed alike, with mechanical accuracy.

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

The tie-buckle *c*, having the slots *a a*, the bearing-sides *a'* of the slots being at an angle to the ends *b b* of the buckle, to form an excess or increased width of metal at the inner or closed ends of the slots, substantially as and for the purpose described.

In testimony whereof I, the said AARON J. NELLIS, have hereunto set my hand.

AARON J. NELLIS.

Witnesses:

FREDERICK STANDISH,

T. B. KERR.