J. N. LAUTH.

COTTON BALE-TIE.

No. 188,742. Patented March 27, 1877.

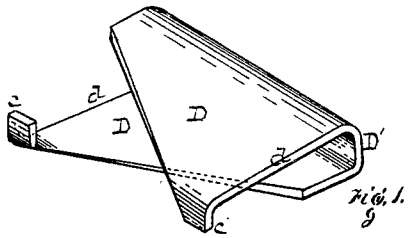

Fig. 1.

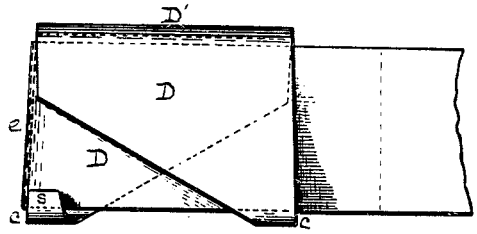

Fig. 2.

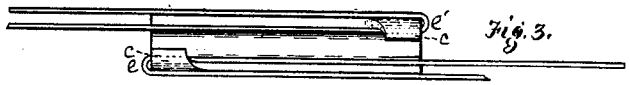

Fig. 3.

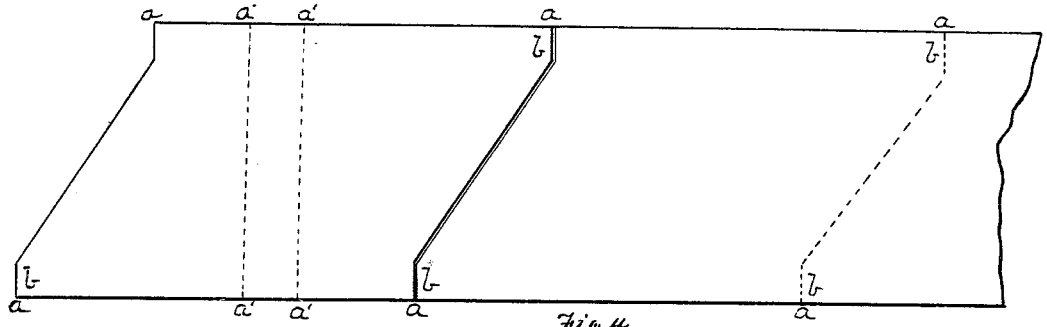

Fig. 4.

Witnesses.
C. L. Parker
Jno. S. Kennedy

Inventor.
John N. Lauth.
by George H. Christy
his Atty.

J. N. LAUTH.

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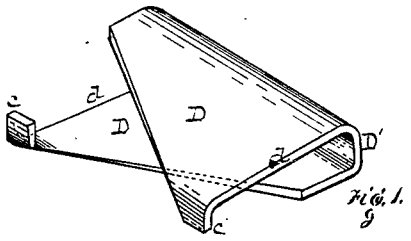

Fig. 1.

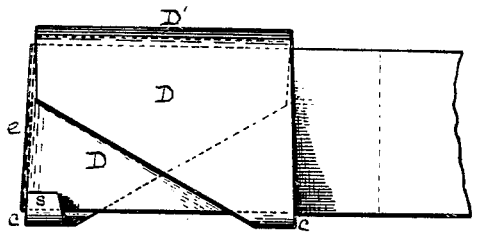

Fig. 2.

Fig. 3.

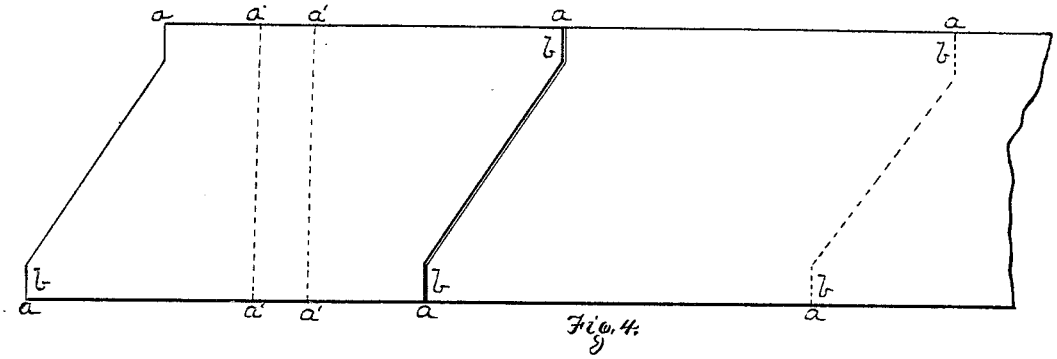

Fig. 4.

Witnesses.
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UNITED STATES PATENT OFFICE.

JOHN N. LAUTH, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. **188,742**, dated March 27, 1877; application filed February 3, 1877.

To all whom it may concern:

Be it known that I, JOHN N. LAUTH, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Cotton-Bale Ties; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of my improved buckle. Fig. 2 is a plan view thereof, showing it attached to one end of the hoop or strap. Fig. 3 is an edge view, showing both straps in place; and Fig. 4 shows the division of a bar into blanks.

Starting with a bar of the proper width and thickness, I divide it into blanks, substantially as represented in Fig. 4, *a a* representing the line of cut. The corners *b b* are bent so as to give the lugs *c c*, and then the body is bent in the lines *a' a'*, so as to give a product substantially as represented in Fig. 1. The buckle thus made consists of two triangularly-shaped parts, D D, united on one side by a bow, D', each part having a bearing-edge, *d*, for the strap, and a turned-up lug, *c*, at the outer extremity of each bearing-edge to prevent the loop of the strap from slipping off; and as a further means to the same end I make the bends represented by the lines *a' a'* not exactly at right angles to the edges of the blank, but inclined slightly, so that, after the bending is done, the bearing-edges *d d* will not be parallel, but at their outer or open ends will be a little farther apart than at their ends next the bow D'; or in other words, will slope back toward the bow D', as a result of which the loops *e e'* will have a little draft backward toward the bow, and be less liable to slip off. To secure the buckle permanently to one end of the strap I make another bend in one of the lugs *c*, as shown at *s*, so that such additional bend shall be parallel, or nearly so, with the parts D. One end of the hoop is then slipped through endwise under *s*, and the end bent back and under. The buckle cannot then come off. After the hoop is passed around the bale and the proper length ascertained, the loop *e'* is bent with the free end under, and is slipped sidewise over the other half of the buckle, and the fastening is then complete.

While I consider the way described to be the best for making the buckle, it may be cast to substantially the same form of malleable iron.

I am aware that it is not new to make a buckle by cutting a bar directly across into rectangular blanks, bending the same into a **U** form, and bending a lug along each outer end of the **U**, and hence I make no claim thereto. By cutting the blanks obliquely in the manner herein described, I produce a buckle equally strong, of less weight, and save a considerable amount of otherwise waste material.

I claim herein as my invention—

1. A bale-tie buckle, consisting of the bow D' and triangular parts D D, lying in paralled planes opposite to each other, and having each a bearing-edge for engaging the hoop, and a turned-up lug, *c*, at the outer extremity of each bearing-edge, substantially as set forth.

2. A bale-tie buckle having the bow D' and triangular parts D D, each with a bearing-edge for engaging the hoop, and one having at its outer end the bends *c s*, substantially as set forth.

3. The bale-tie buckle described, having two independent bearing-edges, *d d*, in different planes, each made sloping from the open to the closed side of the buckle, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JOHN N. LAUTH.

Witnesses:
J. J. SHAFFER,
WM. N. TAYLOR.