A. E. KIMBERLY.

Bale-Tie.

No. 200,659. Patented Feb. 26, 1878.

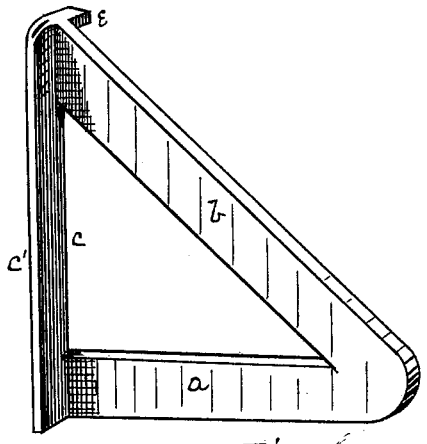

Fig. 1.

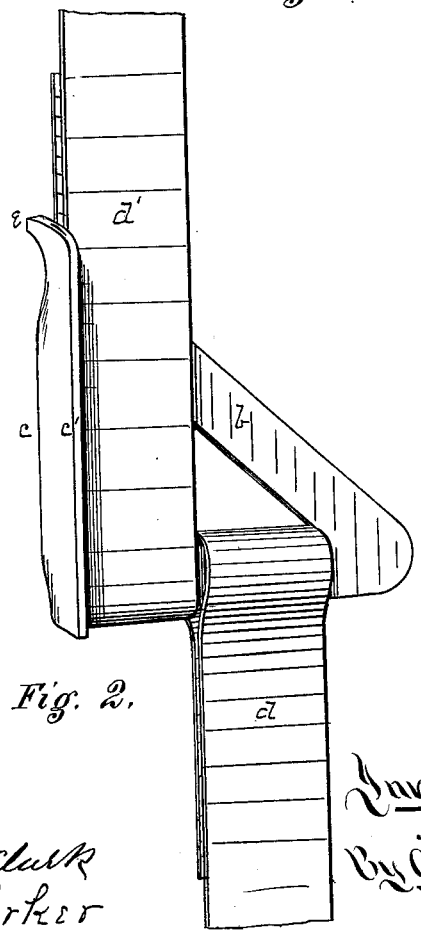

Fig. 2.

Witnesses

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AMOS E. KIMBERLY, OF WEST LIBERTY P. O., IOWA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **200,659**, dated February 26, 1878; application filed February 9, 1878.

To all whom it may concern:

Be it known that I, AMOS E. KIMBERLY, (P. O. West Liberty, Muscatine county, Iowa,) of Iowa township, county of Cedar, State of Iowa, have invented or discovered a new and useful Improvement in 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 bale-tie; and Fig. 2 is a like view of the tie, showing the loops or bands as attached thereby.

My improved bale-tie is made of triangular shape, of cast or wrought metal.

It consists of three bars, *a*, *b*, and *c*, the latter bar having a flange, *c'*, projecting out forward or back, as may be preferred, and along the whole of the length of the bar *c*, or only at its upper end. The opposite edges of the bar *a* constitute the bearing-seats of the loops *d d'*. The loop *d* is passed around the bar *a*, and, by preference, secured by closing the straps down upon the bar, or by riveting them together outside of the bar, so that in transportation or handling the buckle or tie may not become lost.

When the fastening is to be made, the loop *d'* is bent at the proper point, with the free end beneath, and is slipped over the bar *c*, so as to come inside the flange *c'*. It then takes its seat on the bar *a* beside the loop *d*, but on the opposite edge of the bar. The flange *c'* not only prevents the loop *d'* from slipping off under any circumstances, but also, by bearing, particularly at its upper end, against the edge of the loop *d'*, or one of the folds thereof, holds the bar *a* transverse to the line of strain, and in proper position for the bearing-faces of the loops to be well seated on opposite edges of the bar.

The bar *c* may be flanged both forward and back, if so preferred; or a lug, *e*, may take the place of each or either flange, so as to provide a side or edge bearing upon both the upper and lower folds of the loop *d'*.

The general form of this tie or buckle is that of a right-angled triangle.

I claim herein as my invention—

1. The bale-tie described, consisting of three bars, *a b c*, constituting exactly or approximately a right-angled triangle, and of a flange, *c'*, or equivalent lug, projecting from the bar *c*, substantially as set forth.

2. The right-angled triangular bale-tie *a b c*, with flange *c'*, in combination with loops *d d'*, substantially as set forth.

3. The triangular bale-tie *a b c*, having a flange, *c'*, projecting from one side of the bar *c*, and a lug, *e*, projecting from the opposite side, substantially as and for the purpose set forth.

In testimony whereof I have hereunto set my hand.

AMOS E. KIMBERLY.

Witnesses:

JNO. A. WILSON,

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