

R. MONTFORT.

Bale-Ties.

No. 156,490.

Patented Nov. 3, 1874.

Fig 1

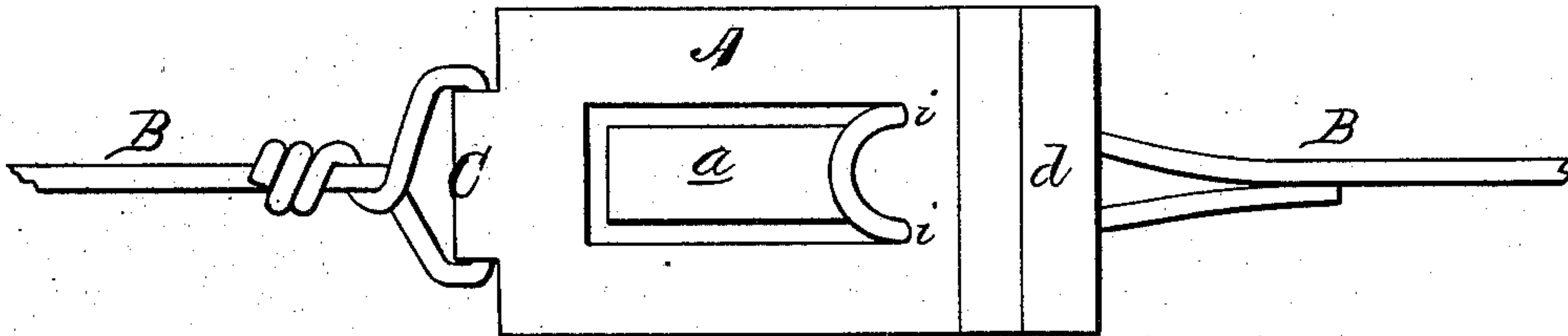


Fig 2

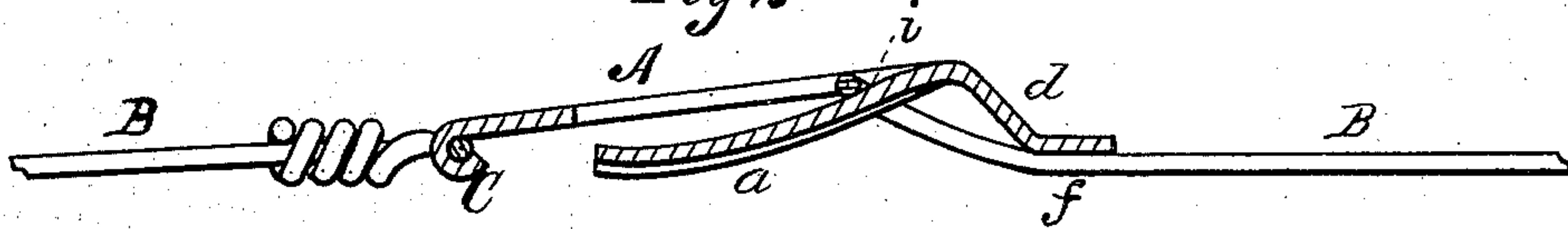
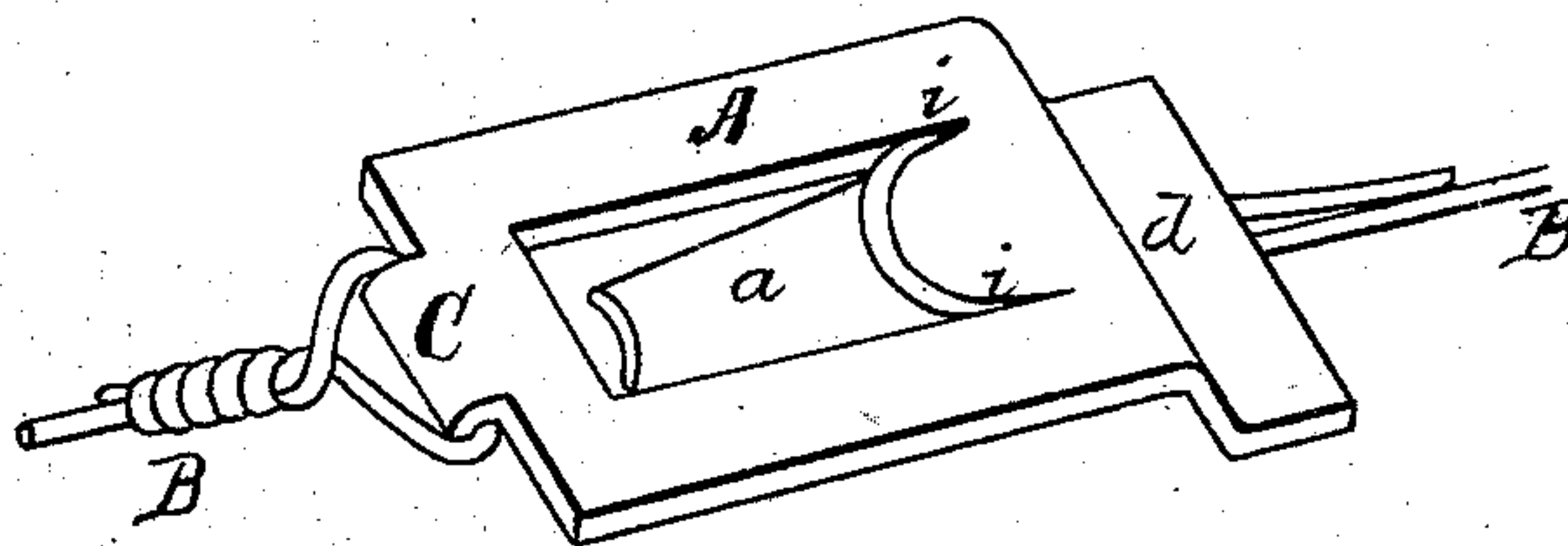


Fig 3



WITNESSES

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UNITED STATES PATENT OFFICE.

RICHARDSON MONTFORT, OF BUTLER, GEORGIA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **156,490**, dated November 3, 1874; application filed August 29, 1874.

To all whom it may concern:

Be it known that I, RICHARDSON MONTFORT, of Butler, in the county of Taylor and State of Georgia, have invented a new and valuable Improvement in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a plan view of my bale-tie. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a perspective view.

This invention has relation to locks, whereby the free end of a wire binder is secured to the buckle; and the novelty consists in a tongue, which is cut out from a metallic plate, bent slightly downward, and then curved in the direction of its length, the convexity of the curve being upward, over which the looped end of a binder is passed, whereby the wire is allowed to penetrate closely up in the space between the tongue and the edges of the plate, causing it be rigidly held against slipping, when the said tongue is rigidly thrust upward in the slot of the plate by the expansion of a baled mass consequent upon its release from pressure. It also consists in a transverse downwardly-bent portion or ridge in rear of the heel of the tongue, whereby the wire will be bent obliquely to the line of strain, when its looped end is passed from below over the tongue, and the said wire is subjected to the tension produced by an expanding baled mass, whereby the hook will be materially aided in bearing the said strain, and the plate may be made of thin metal, as will be hereinafter more fully explained.

In the annexed drawings, A designates a metal plate of suitable thickness, out of which a tongue, *a*, is struck, by means of a cutting-die, or in any other suitable manner, and which is curved or rounded in its length, the convexity thereof being upward, as shown in Fig. 3. It is also slightly bent downward, for the purpose of allowing the looped end of a wire binder, B, to be conveniently passed over it, as shown in Fig. 2. At the same time that the tongue *a* is stricken out of the plate a por-

tion thereof in rear of the heel of the tongue is bent downwardly, as shown at *d*, for a purpose hereinafter to be described. C designates an eye or hook upon the opposite end of plate A to that on which the portion *d* is situated, to which one end of the wire binder B is rigidly secured before being passed around a baled mass.

When a wire binder is thus secured to the hook C, and then passed around a compressed mass, the tie will be completed by engaging the loop upon the end of the binder over the tongue *a*. If now the compressing power be withdrawn from the bale, reactive expansion will immediately take place, causing the looped portion of the binder to be drawn closely up into the space *i*, between the edges of the tongue and those of the plate, at the same time that the tongue is pushed up by the same force, and the wire at *f* is violently forced against the lower surface of the downwardly-bent portion *d* of the plate.

I have thus secured three biting points, at which the wire will be seized by the uniting-plate A, viz., one on each side of the tongue *a*, and one under the downwardly-bent portions *d* of the plate, and by this means I am enabled to make the plate A of thin metal, and yet have a durable, strong tie.

It will be observed that neither the tongue *a* nor the hook C is above the upper surface of the plate, and in consequence neither is liable to be broken off by accidental shocks or careless handling.

Instead of the hook or eye C I may use a perforation in the body of the plate, as this change or variation will be equally effective.

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

In a bale-tie, the buckle A, having the struck-up tongue *a*, the downwardly-bent heel *d*, and the hook C, for the purpose of attaching the wire to the buckle, as shown and described.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

RICHARDSON MONTFORT.

Witnesses:

J. GARDNER,

JAMES M. BATEMAN.