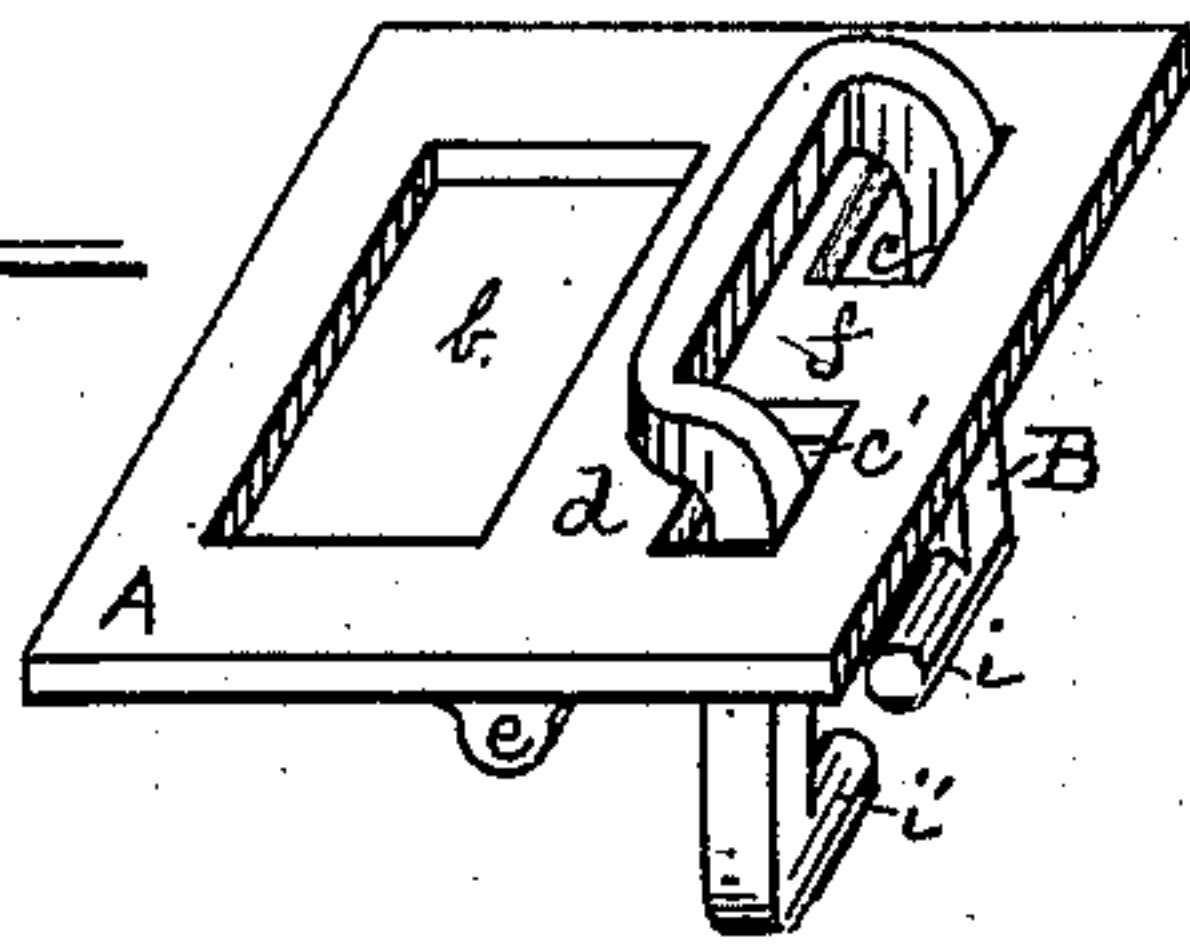


G. BULL & L. KOCH.
Bale-Tie.

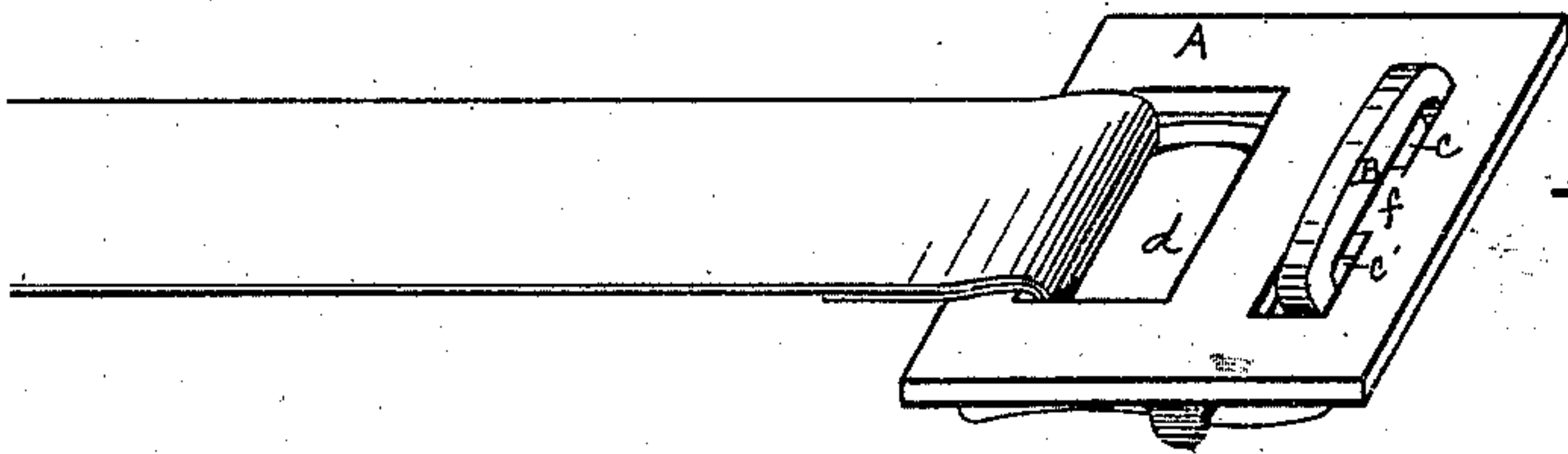
No. 197,824.

Patented Dec. 4, 1877.

== FIG. 1. ==



== FIG. 2. ==



== FIG. 3. ==



WITNESSES.

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GEORGE BULL AND LOUIS KOCH, OF NEW ORLEANS, LOUISIANA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **197,824**, dated December 4, 1877; application filed November 3, 1877.

To all whom it may concern:

Be it known that we, GEORGE BULL and LOUIS KOCH, residents of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a certain new and useful Improvement in Bale-Ties; and we do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing, making a part of this specification.

This invention relates to a new and improved device for rigidly securing the ends of bands employed in baling cotton and other products.

Our device is composed of two metallic pieces, which are connected with one end of a band, in a manner that will cause the opposite end of the said band to be firmly gripped the moment it has been fairly tightened around a bale.

On the accompanying drawing, Figure 1 represents the two sections of our device. Fig. 2 represents the device with one end of a band attached thereto, and Fig. 3 a longitudinal section of the device with the two ends of a bale-band connected therewith.

As above stated, our invention is composed of two metallic pieces, A B, the first provided with rectangular slots *b* and *c c'*, the former slot separated from the two latter by a cross-bar, *d*, the lower edge of which forms a ridge across the plate, as shown at *e*. The slots *c c'*

are separated by a longitudinal bar, *f*, which is straddled by the section B, the latter differing in form from an ordinary staple in this, that its central or arched portion is made flat and bent outward to a right angle, or thereabout, from the body of the said section, and that the ends *i i'* are bent inward to a sufficient extent to form a substantial band-seat, as well as to prevent the two sections from becoming accidentally disconnected.

Each bale is provided with the usual number of bands, the ends of which are connected by a like number of the above-described devices, as shown in Fig. 3, so that the greater the strain upon the said bands the more securely will they be held.

Having described our invention, what we claim as new, and desire to secure by Letters Patent, is—

A bale-tie composed of two sections, A B, the former provided with slots *b* and *c c'* and cross-ridge *e*, and the latter with an angular bend, as described, and inward-bent ends *i i'*, for the purpose set forth.

In testimony whereof we have hereunto signed our names.

GEORGE BULL.
LOUIS KOCH.

In presence of—
J. C. HUBBELL,
J. CONNOR.