E. C. SINGER.
Bale-Tie.

No. 223,071. Patented Dec. 30, 1879.

Fig. 1.

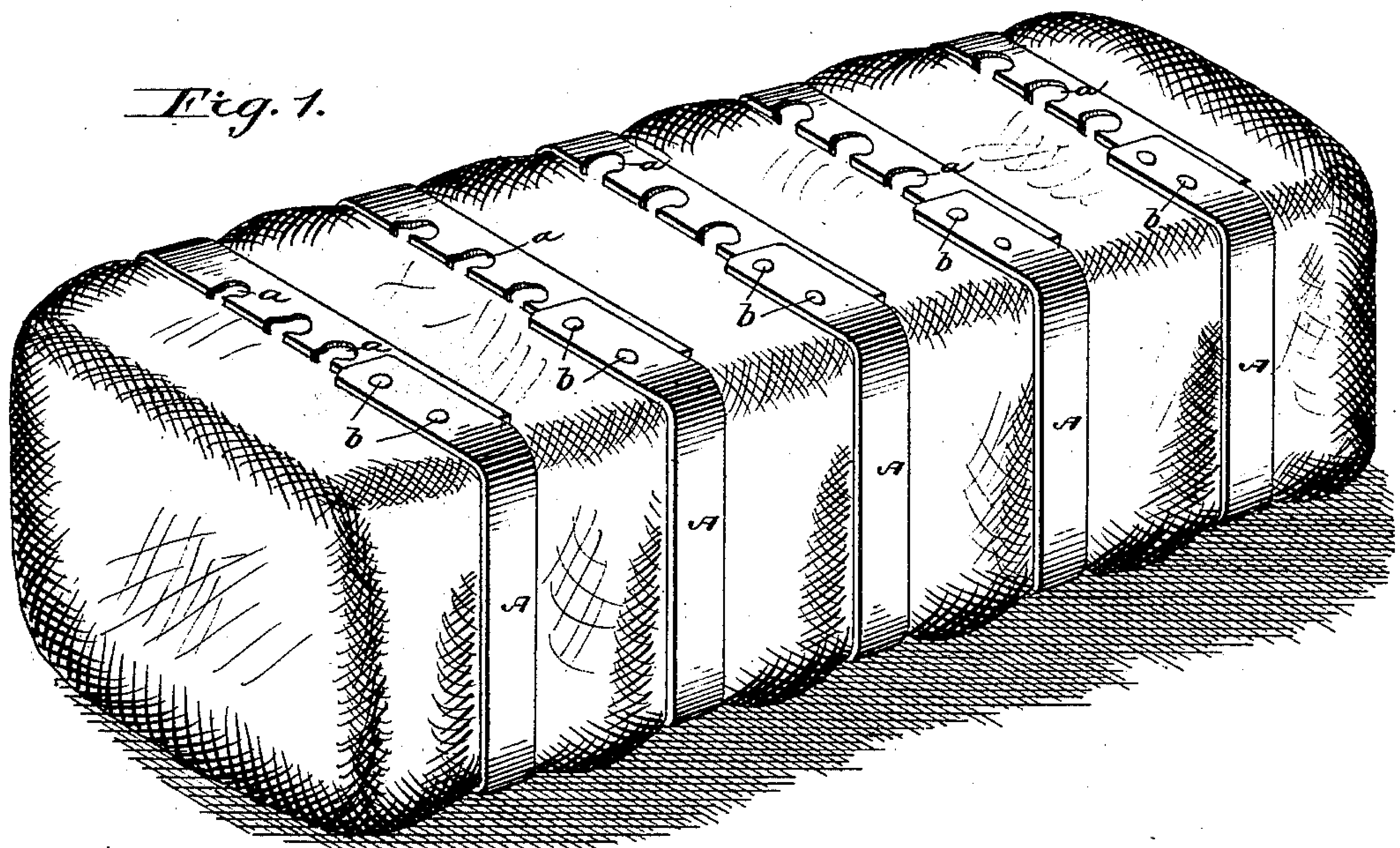


Fig. 2.

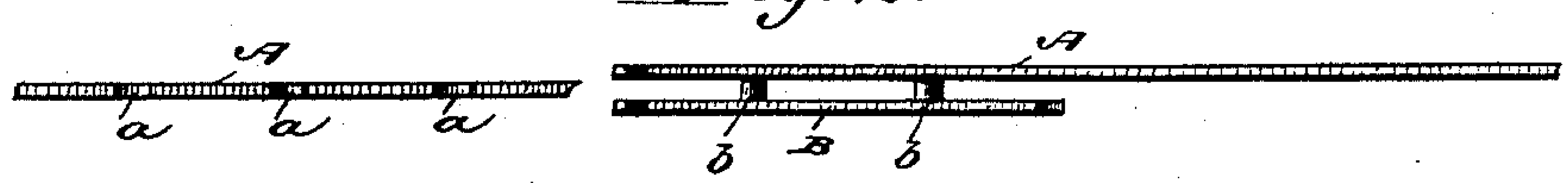


Fig. 3.

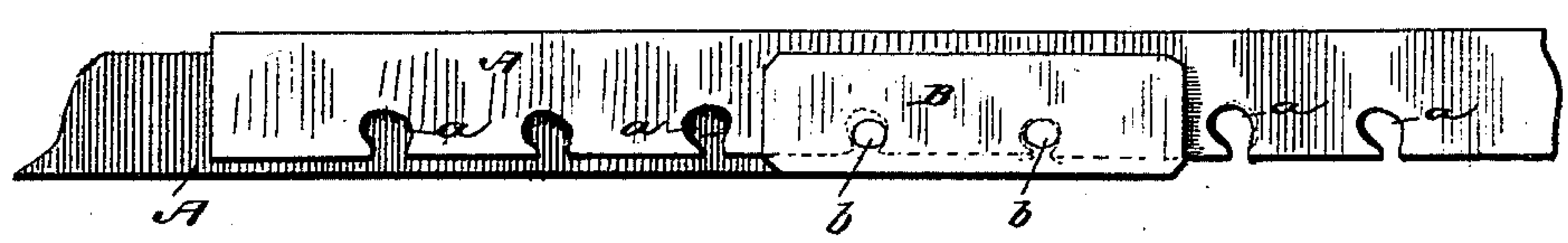
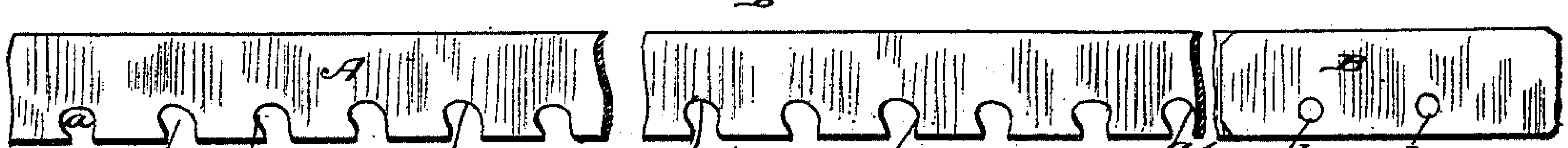


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

EDGAR C. SINGER, OF MARLIN, TEXAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **223,071**, dated December 30, 1879; application filed November 22, 1879.

To all whom it may concern:

Be it known that I, EDGAR C. SINGER, of Marlin, in the county of Falls and State of Texas, have invented certain new and useful Improvements in Cotton-Bale Ties; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification, and in which—

Figure 1 is a perspective of a bale with the tie applied thereto; Fig. 2, a side view of tie, the portion between the two ends being broken away, and the ends disconnected; Fig. 3, an inside view with the ends connected to each other and the portions between broken away; Fig. 4, an end view showing the position of pins or rivets; and Fig. 5, a side elevation of the tie, with portions cut away, showing two or more series of slots.

My invention relates to bale-ties; and it consists of a band with notches or slots cut into the same from one edge and combined with one or more pins connected to or near to the other end, so that when the two ends are brought together, edge to edge, the pins will enter the slots and thereby hold the two ends of the band together.

It also consists in forming the band with series of these slots at intervals apart, so that the band can be used to tie the bale when first formed, and subsequently, after the bale has become further compressed, shortening the band by taking up the same, so that the pins will be next the second or other set of slots, whereby the tie is adjusted to the size of the bale; and, thirdly, in the rigid attachment of a plate to one portion of the band by means of one or more rivets or pins, so that there will be formed a slot between the plate and band into which the slotted edge of the band can be inserted and the pins enter these slots, so as to hold the ends of the band together.

In the accompanying drawings, the letter A indicates the band, which is made of any metal suitable therefor, and has oblique slots *a* cut in the same from the edge, and a plate, B, connected thereto, usually near the other end, by means of pins *b*, in a manner that will form a slot by leaving a space between the plate and band, as shown in Fig. 2. Instead of two pins or rivets, more or less may be used, and when more than one are used they are placed apart at a distance equal to the distance apart of the slots, so that when the two edges of the band are brought together, with the pins and slots opposite each other, the pins will easily enter the slots, after which the pressure exerted against the sides of the band by the expansion of the cotton or other substance being baled will cause the pin and wall of the slot to bear against each other, thus holding or tying the free ends of the band tightly together; and the obliquity of the slots prevents the pins from becoming disengaged therefrom by any side pressure against either of the overlapping portions of band.

The plate B may be dispensed with, though it is deemed better to use it, as it prevents the pins from catching in the substance being baled or other bodies; and when dispensed with the pins may project from either the top or bottom face of the band, and, for that matter, they may so project when they connect the plate to the band.

In baling cotton, it is, in the first instance, made quite compact and then tied, and after the lapse of some time, occupied in transporting the bale or otherwise, it is further compressed and tied again; and, with a view of making this tie serviceable on the bales compressed as aforementioned, I form it with a series of the slots *a*, at intervals apart, as shown in the drawings. I prefer to form them in sets, as described, for by so doing the number of points liable to catch in obstructions is diminished and the tie rendered stronger than when the slots are made from end to end of the band, in which manner, however, they may be made.

By constructing the band with the notches and pins and plate, as described, a very strong and efficient tie is produced and at little cost.

Having described my invention, what I claim is—

1. A bale-tie consisting of a band having at one end slots cut in it from the edge and

one or more pins projecting from the broad side thereof at the other end, and adapted to engage with said slots, for the purposes set forth.

2. A bale-tie consisting of a band having several sets of slots at intervals from each other cut from the edge, and one or more pins projecting from the broad side thereof and adapted to engage with said slots, for the purpose set forth.

3. The within-described bale-tie, composed of band A, provided with slots *a*, and a plate, B, and pins *b*, as described, for the purposes set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

EDGAR C. SINGER.

Witnesses:
THOMAS D. WILLIAMS,
JOHN F. KNOX.