

B. A. RAMSEY.  
BALE-TIES.

No. 179,604.

Patented July 4, 1876.

fig. 1.

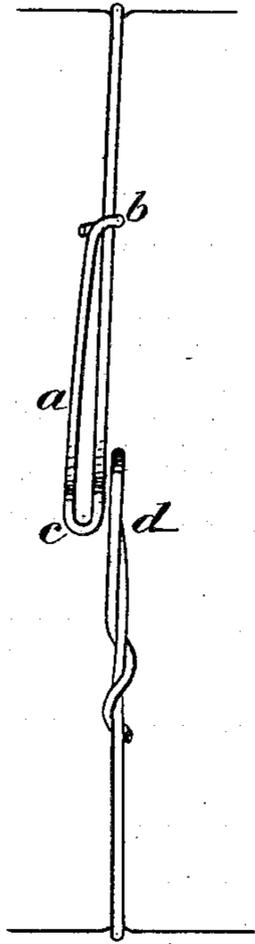


fig. 2.

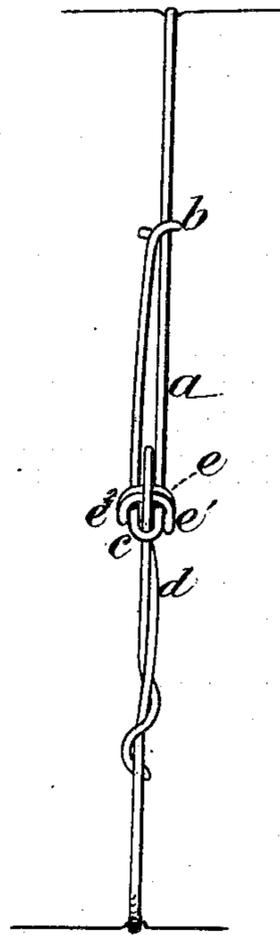


fig. 3.

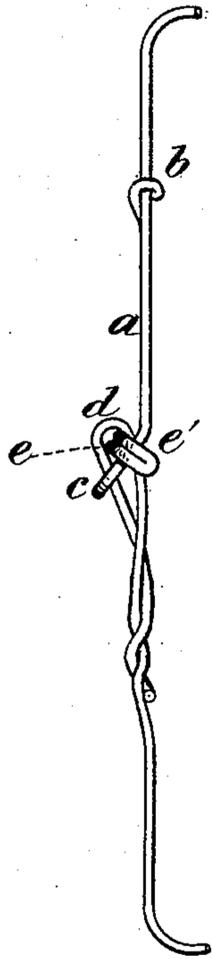


fig. 4.



Witnesses:

West Wagner.  
J. A. Rutherford.

Inventor:

Blackman A. Ramsey  
by Johnson & Johnson  
Attorneys

# UNITED STATES PATENT OFFICE.

BLACKMON A. RAMSEY, OF TRENTON, TENNESSEE.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **179,604**, dated July 4, 1876; application filed June 5, 1876.

*To all whom it may concern:*

Be it known that I, BLACKMON A. RAMSEY, of Trenton, in the county of Gibson and State of Tennessee, have invented certain new and useful Improvements in Cotton-Bale Ties, of which the following is a specification:

My improved wire bale-band and tie is made by forming a loop, having its doubled end upset or bent outward from the bale at an obtuse angle, to form the prepared end, which, in applying the wire, hangs over the side of the bale. The wire is then drawn up from the bottom of the bale as tight as possible, and, having ascertained the proper length to make the tie, the straight end is doubled to form a loop, by bending the end outward from the bale, which is then passed through the upset loop, and a half-circle key passed through the inserted loop, so as to embrace the upset loop of the prepared end of the wire, and lock the two loops together by the expansion of the bale.

The ends of the semicircular or bent key lap over the sides of the upset loop and hold it in position astraddle the upset loop, so that the key cannot come out endwise, and by this means I am enabled to use a separate key, which locks itself in position, and which may be formed at the time of making the tie. To give greater strength, the key may be doubled, and is made by bending it in form. Besides giving the advantage of holding the key in place by its bent ends, which embrace the two sides of the upset loop, such formed key also has the advantage of preventing all possibility of straightening and liability of being drawn through the upset loop.

In the accompanying drawings, Figure 1 represents the prepared end of the wire as it hangs over the bale in position to receive the

tie; Fig. 2, the tie completed; Fig. 3, a side view of the same, and Fig. 4 the semicircular or bent key.

The prepared loop *a* is first formed by doubling the wire and fastening the end at *b*, while the loop end is upset at *c* outwardly, to form an obtuse angle or end, which stands out obliquely from the bale. The straight end is then drawn tightly up and formed into a loop, *d*, which is passed through the upset loop, so that the two loops *a* and *d* are at right angles to each other and locked by means of a semicircular or bent key, *e*, so that its bent ends *e*<sup>1</sup> *e*<sup>2</sup> lap over and embrace the upset sides of the loop *c*, and are drawn against the sides of the bale.

The bent ends of the key effectually prevent any endwise movement, so that it cannot come out after being inserted, whether the loop *d* be tight or slack; and it cannot be drawn straight without first overcoming the resistance offered by the two bent ends.

The upset loop *c* gives facility for inserting the loop *d*, and more especially the bent key, as it gives the ends of the latter room to stand in against the bale in an oblique position opposite to that of the obliquely-upset loop.

I claim—

A wire bale-tie, consisting of the upset loop *a c* and the loop *d*, in combination with the separate bow or bent key *e*, substantially as herein set forth.

In testimony whereof I have affixed my signature in the presence of two witnesses.

BLACKMON ASBURY RAMSEY.

Witnesses:

J. W. CAIL,

W. F. PATTERSON.