

FRANCIS WATKINS.
Improvement in Bale-Ties.

No. 114,236.

Patented April 25, 1871.

Fig. 1.

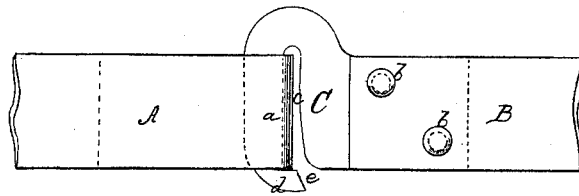


Fig. 2.



WITNESSES.

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FRANCIS WATKINS, OF LONDON WORKS, BIRMINGHAM, ENGLAND.

Letters Patent No. 114,236, dated April 25, 1871.

IMPROVEMENT IN BALE-TIES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern :

Be it known that I, FRANCIS WATKINS, of London Works, Birmingham, England, have invented a new and useful Improvement in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification.

Figure 1 represents a plan or top view of my improved bale-tie.

Figure 2 is a plan or top view of the same.

Similar letters of reference indicate corresponding parts.

This invention relates to a new device for connecting the ends of bale-ties, and consists in attaching a slotted plate to one end of the hoop, which plate forms a hook that can be fitted through the hook formed by bending the other end of the hoop, so that thereby the two ends will be securely connected.

A in the drawing represents one end, and B the other end of a bale-hoop.

The end A is turned down and in, to form a hook, *a*, as shown in fig. 2.

To the end B is fastened, by means of rivets *b* or otherwise, a metal plate, C, which has a transverse notch or indentation, *c*, so as to receive the form of a hook, as is clearly shown in fig. 1.

When the hook C is put through the loop or hook

A, as in the drawing, the two ends are firmly connected, and cannot be again separated except by a combined longitudinal and lateral motion of one of the loop-ends.

The outer arm *d* of the hook C has its end turned in, as shown in fig. 1, thereby partly closing the open end of the notch *c*, and confining the part A in the hook C, as shown.

The hook C may, instead of being riveted or fastened to the hook, be rolled or otherwise made of one piece with the same, while otherwise its shape will be as above specified.

The advantage of this device over those heretofore used is that it is simple and easily closed, and cannot spontaneously open, while the ordinary bale-ties are either complicated or difficult to apply, or unreliable.

Having thus described my invention,

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

In combination with the hoop A B, provided at its free end with the loop *a*, the hook-plate C, having the curved projection *d*, slot *c*, and inclined opening *e*, all constructed as described and for the purpose specified.

The above specification of my invention signed by me this 24th day of November, 1868.

F. WATKINS.

Witnesses:

FRANK BLOCKLEY,

E. GREENE COLLINS.