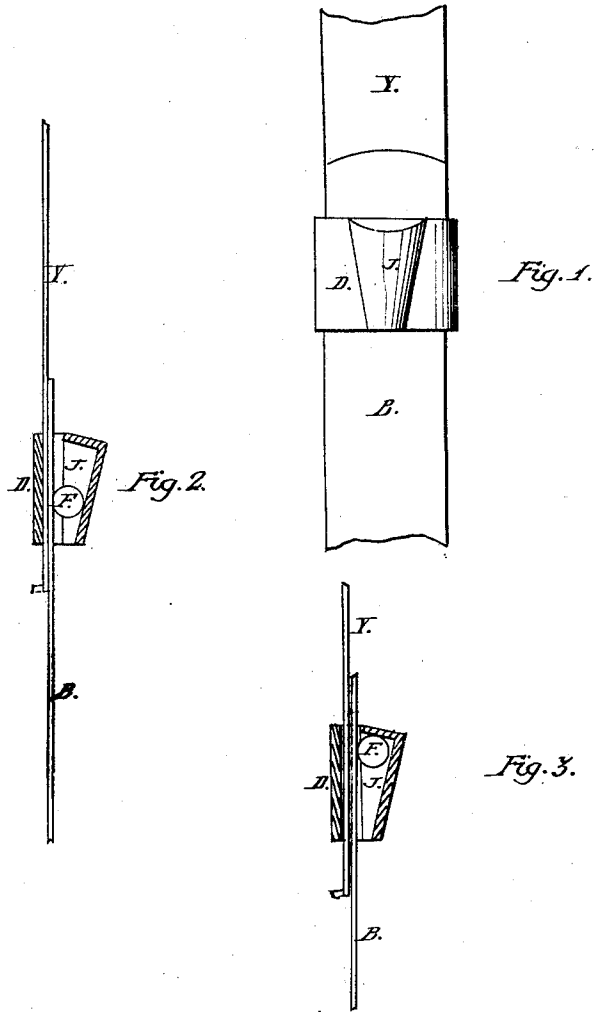


W. S. Loughborough.

Cotton Bale Tie.

N^o 28,187.

Patented May 8, 1860.



Witnesses:
Lauding Braun
Louis Ernst

Inventor:
W. S. Loughborough.

UNITED STATES PATENT OFFICE.

WM. S. LOUGHBOROUGH, OF ROCHESTER, NEW YORK.

IMPROVEMENT IN IRON TIES FOR COTTON-BALES.

Specification forming part of Letters Patent No. 28,187, dated May 8, 1860.

To all whom it may concern:

Be it known that I, WM. S. LOUGHBOROUGH, of Rochester, in the county of Monroe and State of New York, have invented a new and useful Self-Adjusting Iron Tie; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 shows the tie as applied to the ends B and Y of the hoop. Fig. 2 is a transverse section of the same, showing the ends B and Y secured by the ball F. Fig. 3 is the same section, and shows the position of the ball F when the tie is being applied.

The nature of my invention consists in providing iron ties with a ball operating against an inclined plane, so as to allow the hoop or band to be "taken up," when necessary, without requiring any readjustment of the tie.

I construct the shell D of the tie with an offset or chamber, J, on its face side, the outer wall of which, being raised from the plane of the shell to an angle of twelve degrees, more or less, forms an inclined plane for the ball to work against.

The ties may be made either of cast, malleable, or wrought iron. If of the former, the

ball should be placed in the core, so as to be inclosed within the shell D when cast.

To apply the tie, pass the end B of the hoop through the shell and behind the ball F, which rolls it into the larger part of the offset J, thus leaving room to pass the other end, Y, through behind B. Then slide the tie up until the ball assumes the position shown in Fig. 2, which ties the band effectually, and the greater the strain upon the hoop or band the more firmly it will be held, and when the strain is removed, as in the act of re-pressing cotton and the like, the ball becomes free, and may be rolled up, as in Fig. 3, by sliding the end B farther through.

It may be found desirable to bend the end Y out, as shown by the dotted lines in Figs. 2 and 3, to prevent a possibility of that end drawing out.

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

The construction of iron ties, substantially as and for the purposes specified.

WM. S. LOUGHBOROUGH.

Witnesses:

LANSING B. SWAN,
LOUIS ERNST.