John S. Wallis.

Cotton-Bale Tie.

No. 89,612. Patented May 4. 1869

Fig. 1

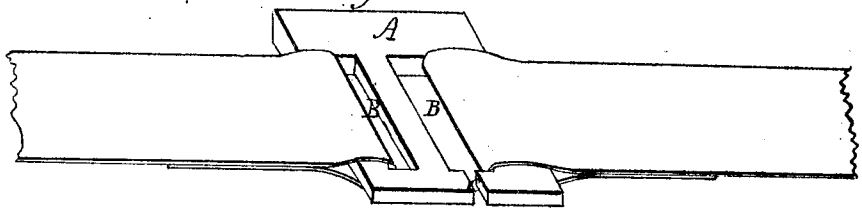


Fig. 2

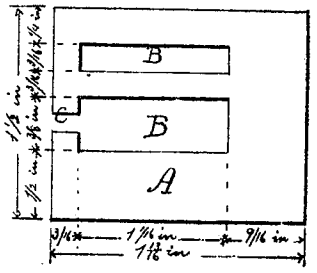
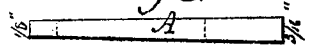


Fig. 3



Witnesses

Rufus R. Rhodes

H. N. Jenkins

Inventor

John S. Wallis

UNITED STATES PATENT OFFICE.

JOHN S. WALLIS, OF NEW ORLEANS, LOUISIANA.

IMPROVED COTTON-BALE TIE.

Specification forming part of Letters Patent No. 89,612, dated May 4, 1869.

To all whom it may concern:

Be it known that I, JOHN S. WALLIS, of the city of New Orleans, parish of Orleans and State of Louisiana, have invented a certain new and useful Improvement in Cotton-Bale Ties; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is a perspective view of my said invention, as when connected with a band in actual practice; Fig. 2 is a plan; and Fig. 3, a side view of the same when not connected to a band.

My object is to provide a buckle-tie without vertical or oblique projections on either of its faces, which shall possess all the strength that is requisite to bear the utmost tension or strain to which it can be subjected on a bale of cotton, and yet be provided with an opening or narrow cleft through which the last end of the band that is fastened may be slipped into its appropriate slot in the buckle after the same has been folded into hook form, and thus to insure the taking up of all the slack of each of the bands on a bale of cotton, and, as a consequence of this, the making of every band on the bale of equal length, and the bale itself without bulge anywhere in it, and therefore of symmetrical and regular proportions and form. To do this I make a buckle of about the following dimensions externally: one and thirteen-sixteenths of an inch one way, and in the other one inch and a half, and which is about three-sixteenths of an inch thick on one of its edges, while on the other it is only about one-eighth of an inch thick. My buckle is of rectangular form, and is cut in proper lengths from plate-iron made or rolled expressly for the purpose, of the diminishing thickness above indicated from one edge to the other, and one and thirteen-sixteenths of an inch wide when a buckle of precisely the above proportions is made; but obviously it might become necessary to deviate under certain circumstances from the strict letter of these proportions. The buckle is struck off from plate-iron, so rolled, by a proper machine, which, at one and the same operation that cuts off the buckle, also cuts out two slots or openings to receive the ends of the bands, and a cleft from one end of one of the said slots to the nearest, which is the thinnest edge of the buckle.

But my invention will be better understood by referring to the drawing, on which A represents the plate or buckle in its entirety; B, the two slots to which I have referred, and C the cleft that provides a way for the introduction of the end that is fastened after the band is put around the bale. This cleft is just wide enough to allow of the introduction of the band edgewise, after the proper length has been ascertained, and the said end is bent or folded down so as to form an oblate hook, as shown at Fig. 1. Being thus slipped in edgewise, it is obvious all the slack can easily be taken up, and that hence every band on the bale may be drawn to a uniform degree of tension, and to precisely the same length. The other end of the band, marked 1 on the drawing, may be attached to the buckle at the manufactory or afterward, as circumstances may require.

It will be observed that the slots are so cut or placed with reference to the external edges of the buckle as to provide a width of unbroken metal, between them and the thick edge of the plate, of nine-sixteenths of an inch, whereas they approach within three-sixteenths of the thin edge, and that it is through this latter narrow space that the cleft C is cut.

This arrangement re-enforces and strengthens the buckle precisely where the strain falls heaviest upon it, under the expansive energy or pressure of the cotton in the bale, to such an extent that it easily withstands this strain under all conditions and circumstances.

In Fauman's and other buckles, in which one end of the band is attached to the buckle by passing it through a lateral cleft, the plate of which the buckle is composed is of uniform thickness, and the same breadth of metal is found on each side of the buckle. Hence they have proved too weak to bear the strain to which they are subjected, and consequently have never come into use. I do not claim making a lateral cleft through one side of a buckle

into one of the slots therein independently of the other salient characteristics of my invention.

I do not claim a cotton bale-tie constructed as shown in the patent granted Joseph Bragg Dunn, February 4, 1868; but

What I do claim is—

The buckle A, when constructed of plate-iron, one side being thicker than the other, and having two slots, B B, and cleft C, as and for the purpose herein described.

JOHN S. WALLIS.

Witnesses:

RUFUS R. RHODES,

H. N. JENKINS.