T. McIntire.

Cotton Bale Tie.

No. 57,945. Patented Sept. 11, 1866.

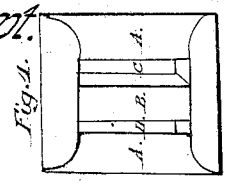

Fig. 4.

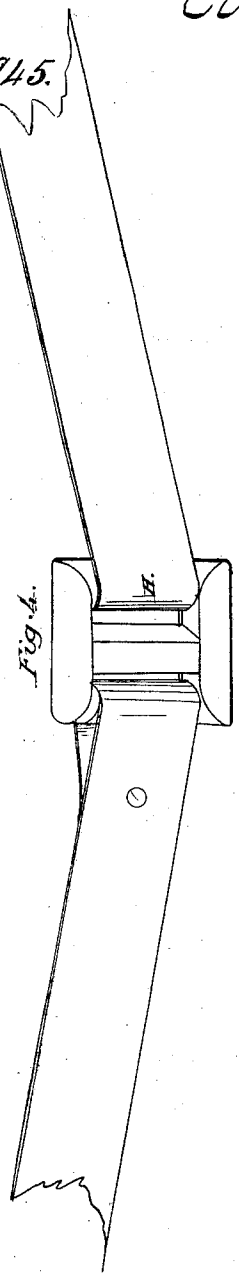

Fig. 1.

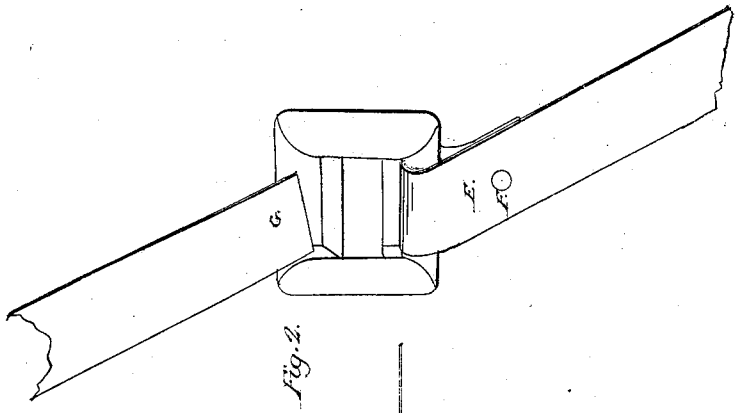

Fig. 2.

Fig. 3.

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UNITED STATES PATENT OFFICE.

THOMAS McINTIRE, OF PORTSMOUTH, OHIO.

IMPROVEMENT IN COTTON-TIE FASTENINGS.

Specification forming part of Letters Patent No. **57,945**, dated September 11, 1866.

To all whom it may concern:

Be it known that I, THOMAS McINTIRE, of Portsmouth, in the county of Scioto and State of Ohio, have invented a new and useful Improvement in Cotton-Bale Fastenings; and I do hereby declare that the following is a full and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Figure 1 is a perspective view of a metal clasp or buckle. Fig. 2 is a perspective view of the same, with two ends of a hoop, one end being fastened. Fig. 3 is a vertical section of the same, showing both ends of the hoop fastened. Fig. 4 is a perspective view of the same.

The nature of my invention consists in the new article of manufacture herein described, to wit: a metal clasp or buckle for cotton-bale hoops, so constructed and fastened in one end of the hoop that when the other end is inserted it is firmly secured by the tension of the hoop caused by the expansion of the bale, thus making a convenient and excellent cotton-bale fastening, which can be readily adjusted to any sized bale, in the manner and for the purpose hereinafter described.

To enable others skilled in the art to make and use my invention, I will proceed to describe its construction and operation.

A C B D represent a metal clasp or buckle. C and D represent two slots or holes. A A represent the two ends of the clasp or buckle, which are round. B is a flat bar, with square edges between the slots or holes C and D, as seen in Fig. 1.

The end of the hoop E is passed through slot C, bent round and fastened with rivet F, forming a hinge, so that the clasp is easily turned down to receive the other end of the hoop G, as seen in Fig. 2. The clasp is drawn into a direct line with the hoop, hoop G (hoop G is represented by H H in Figs. 3 and 4,) passing through slot D, the tension of the hoop, caused by the expansion of the bale, forming a round bend in the hoop over the end of the clasp A on the upper side, also a square bend under the bar B against the bale, thus pressing the end of the hoop against the under side of the clasp in a parallel line with hoop E, forming a perfect lock, as seen at I in Fig. 3.

Fig. 4 is a perspective view of a clasp and two ends of a hoop fastened as described in Figs. 2 and 3.

My clasp or buckle is made of cast-iron—common or malleable, molded and cast in the common manner—or of wrought-iron, made at one operation of a machine which I have designed for the purpose.

One great objection to the cotton-bale ties now in use is the difficulty of adjusting them to the various-sized bales at the press; and still a greater difficulty arises when compressing the cotton, for then the bands must necessarily be taken up or shortened to suit the size of the bale. In my fastening these difficulties are entirely obviated, it being a self-fastener, requiring no holes, notches, or any other preparation on the hoop for fastening around the bale at the press, but is simply passed through the slot in the clasp or buckle and drawn around the bale. It forms a secure fastening or lock in resisting the expansion of the bale, as described above in Figs. 2 and 3.

Another great advantage in my fastening is that in compressing, as soon as the hoop is slack, the lock or fastening is relieved, and the hoop is easily and readily taken up or shortened, by passing it further in through the slot in the clasp, and is again fastened as before. Therefore it is a perfect self-fastening cotton-bale tie, and is so constructed as to lie close to the bale, and is not in the way of storing or handling the cotton in shipping, nor liable to catch or tear loose.

The clasp or buckle thus constructed is then permanently fastened to one end of a piece of hoop-iron cut to the proper length for a cotton-bale hoop. The end of the hoop is passed around the cylindrical bar at the end of the buckle, folded back on the under side of the hoop, and secured by a rivet. The loop and bar thus form a hinge-joint, on which the buckle will turn freely. The hoop and buckle, thus completed, is then coated with paint or varnish, to prevent rusting. Without this protection the iron-rust would indelibly stain the cotton with which it is in contact. This paint or varnish is put on by a

process of my own invention, so as to add but a trifle to cost of the hoop.

The hoop and buckle, thus completed, are furnished to the planter as they are to go onto the bale, and much time is saved in their original application; and when the bale is compressed for shipping, as is ordinarily done, the parts being permanently put together, there is again a saving of time in readjusting the hoops.

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

A new article of manufacture—viz., iron hoops for cotton-bales cut to the required length, and having a clasp or buckle, constructed substantially as described, permanently attached by a rivet at one end, so as to form a hinged joint, the whole being covered by a protecting covering of paint or varnish, substantially as described.

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