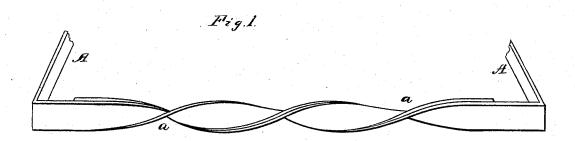
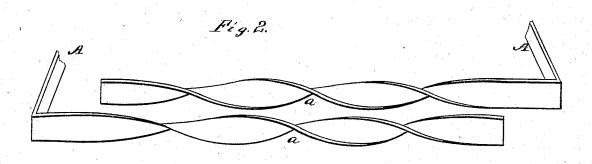
## J. J. HAGINS. Bale-Ties.

No.151,120.

Patented May 19, 1874.





Witnesses. EAN. Bates. George E. Ufham.

Inventor.

J. J. Hagins,

Chipman Somer Co.,

attys,

## UNITED STATES PATENT OFFICE.

JOE J. HAGINS, OF ROCK HILL, SOUTH CAROLINA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 151,120, dated May 19, 1874; application file 1 October 4, 1873.

To all whom it may concern:

Be it known that I, J. J. HAGINS, of Rock Hill, in the county of York and State of South Carolina, have invented a new and valuable Improvement in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my improved bale-tie, locked. Fig. 2 is a

view of the same disconnected.

This invention relates to cotton and other bale-ties. It consists in constructing the band or hoop, and the portion which constitutes the tie proper, of one piece of metal twisted at its ends, so that they present the shape of an auger, and when lapped together will interlock and form a safe fastening, as hereinafter more fully described.

In the drawings, A represents the band, which may be made of hoop-iron. Both ends a a of this band are twisted like a common auger, so that the twists of one end fit accurately into the spaces between the corresponding twists of the other end, and thus consti-

tute a simple and effective tie.

The bale having been made up in the usual manner, and surrounded by my improved bands, twisted, as above described, are brought together and interlocked by means of clamps or other suitable devices, and the tie or connection thus effected. The bale is then withdrawn from the press, and the expansion of said bale consequent upon the pressure brought to bear on it while in the press causes the twists or auger-shaped ends to draw tightly and closely together, so that the greater the force of expansion the tighter will be the tie, as will be readily seen from the above description.

To unloosen the ties, a sharp-pointed instrument may be forced between the two twisted ends a a, when they will readily separate.

It will be seen from the above description of my improved tie that I do not in any manner weaken the metal forming the band; also that the bands can be used again and again, and will not be seriously impaired by

Having described my invention, I claim as

A bale hoop or binder having its ends twisted in the form of an auger, substantially as and for the purposes specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

Witnesses:

JOE J. HAGINS.

С. Е. Совв.

O. SITGREAVES.