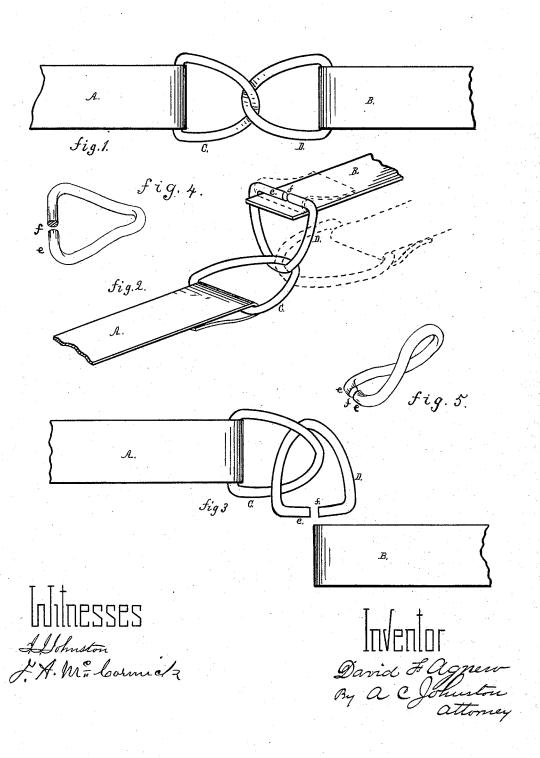
D. F. AGNEW. Bale-Tie.

No. 217,255.

Patented July 8, 1879.



## UNITED STATES PATENT OFFICE.

DAVID F. AGNEW, OF ALLEGHENY, PENNSYLVANIA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 217,255, dated July 8, 1879; application filed May 28, 1878.

To all whom it may concern:

Be it known that I, DAVID F. AGNEW, of Allegheny, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Bale-Ties; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the

letters of reference marked thereon.

My invention relates to an improvement in bale ties, commonly called "cotton-ties;" and consists in uniting the ends of the band by means of two peculiarly-formed links, which are susceptible of being turned so as to receive the band, and then changed to the plane of the band at the point of union between the two ends, said links having an opening in their straight portion, which opening allows the looped end of the band to enter it edgewise, and the peculiar construction of the link admits of it being so turned as to bring the opening midway between the two edges of the looped end of the band. The peculiarity of the construction of the links also admits of the band entering the opening of the link, and then bent so as to form a loop over the straight portion of it, and subsequently turning with relation to its mate, so that the portion of the band bent over may be turned under in the operation of baling.

To enable others skilled in the art to make and use my invention, I will proceed to de-

scribe its construction and operation.

In the accompanying drawings, which form part of my specification, Figure 1 represents the two links and the two ends of the band locked together as seen on the bale. Fig. 2 represents the position of the links with relation to each other in the operation of baling, when one end of the band is inserted in the opening of the link, and then bent over so as to form a loop, which overlap is turned under, as indicated in dotted lines. Fig. 3 represents the position of the links with relation to each other in the operation of baling, when one end of the band is edgewise through the opening in the straight portion of the link. Figs. 4 and 5 are perspective views of one of the links in different positions, whereby the twists or curvatures in the same are more plainly shown.

In the accompanying drawings, A B represent sections of the band connected to the links C D, which have a straight portion, e, in which is an opening, f, for the insertion of the band edgewise. The links C D are twisted so that the straight portion e will rest on a plane with the ends of the band, or so that the entire link in the operation of baling will be nearly on a plane with the ends of the band.

The relative position of the links and the ends of the band with relation to each other when on the bale is clearly shown in Fig. 1. The links may be constructed without the opening f, but in every other respect as hereinbefore described. When the links are constructed without the opening f the end of the band is inserted in the opening of the link, as shown in Fig. 2, and bent back over the straight portion e, and the link turned so as to bring the overlapped portion of the band undermost, as indicated by dotted lines in Fig. 1.

The bands may be looped and inserted edgewise through the opening f of the straight portion e of the link, as indicated in Fig. 3, in which case the link is turned in the loop so as to bring the straight portion e within the loop and the opening f midway between the two edges of the band, as indicated in Fig. 2. An efficient and cheap union or tie for bales is obtained by the use of links having the peculiarity of construction hereinbefore described.

Having thus described my improvement, what I claim as of my invention is—

1. The links CD, having a straight portion, e, and openings f, the other parts of said links being twisted, substantially as shown, whereby they may be operated as hereinbefore described, and brought on a plane with the ends of the band, as and for the purpose set forth.

2. The links C D, having a straight portion, e, and a twisted portion, substantially as shown, whereby the said links are susceptible of being operated and brought on a plane with the ends of the band, substantially as herein described, and for the purpose set forth.

D. F. AGNEW.

Witnesses:

A. C. Johnston, W. T. Hutchinson.