

M. F. MAURY.

BALE-TIE.

No. 187,161.

Patented Feb. 6, 1877.

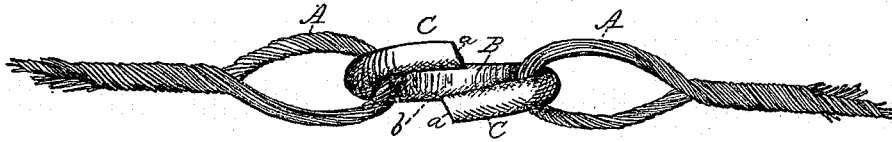


Fig. 1.

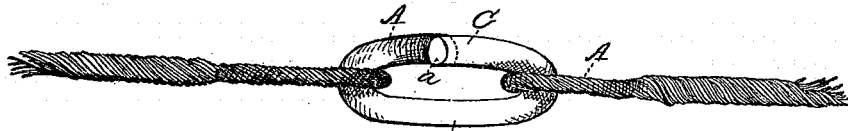


Fig. 2.

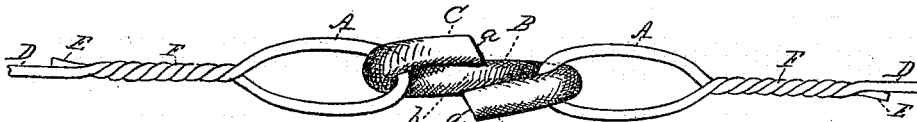


Fig. 3.

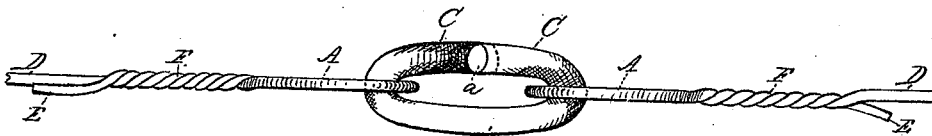


Fig. 4.

WITNESSES;

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# UNITED STATES PATENT OFFICE

MATTHEW F. MAURY, OF CHARLOTTESVILLE, VA., ASSIGNOR TO WASHBURN & MOEN MANUFACTURING COMPANY, OF WORCESTER, MASS.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **187,161**, dated February 6, 1877; application filed October 27, 1876.

*To all whom it may concern:*

Be it known that I, MATTHEW F. MAURY, civil engineer, of Charlottesville, Albemarle county, Virginia, have invented certain new and useful Improvements in Bale-Ties for baling hay, cotton, and other fibrous substances; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a plan view of my improved fastening used in connection with a wire rope. Fig. 2 represents a side view of the devices shown in Fig. 1. Fig. 3 represents a plan view of a device when used in connection with a wire band, as will be hereafter explained; and Fig. 4 represents a side view of the devices shown in Fig. 3.

To enable those skilled in the art to which my invention belongs to make and use the same, I will proceed to describe it more in detail.

In the drawings, the loops A A are formed by bending the ends of the wire rope back, and twisting the same about the main part of the wire rope. Loops A have combined with them a metallic fastening device, B, made, in this instance, from a round piece of iron rod, the ends C C of which are cut off bevelly, as shown at *a a*, and are bent back toward and past each other to form hooks, but are also sprung or bent laterally, so as to leave a space, *b*, between their ends, of sufficient width to allow of loops A being slipped over the hooked ends of the part B, as indicated in the drawings.

By cutting the pieces B from the wire rod so that their inner edges, when bent back, as shown in Figs. 1 and 3, will be the longest, I am enabled to make my connecting device B so as to have their ends lap each other, and still not use any more metal than would be required if the ends were cut off square and abutted against each other.

This last form of fastening device would answer a good purpose, but one of the loops, at least, would have to be made after the band had been put around the material in the operation of baling, whereas, by making the device as shown in the drawings, both loops may be formed before the operation of baling commences, and then quickly and con-

veniently slipped upon the hooks of the device B at the time of baling, and, in practice, the operator will find it convenient to pass one loop over its hook C, and then pass the other loop around the bale, and slip that over its hook C, so that both loops will occupy the relative positions with respect to the hooks C C, as shown in the drawings.

In Figs. 3 and 4 the main part of the band or tie proper is formed from wire D, the ends E of which are bent back to form the loops A, and are then twisted about the main part D, as indicated at F in the drawings.

Those skilled in the art to which my invention belongs will readily understand the practical advantages resulting from having the beveled hooked ends C C project slightly past or lap each other, since the loops A A are not so liable to slip out after they have been placed in position as they would be if the ends C did not pass each other, and a space was left between their ends of sufficient width to allow of the loops being slipped into position after they had been formed.

In baling hay and other similar substances there is more or less pulsation or longitudinal movement of the bands or ties after the baling operation has commenced, and before the full strain is allowed to come upon the bands or ties, and, with a connecting device such as I have shown and described, the loops are not liable to slip off of the hooks during such pulsation or movement, since either loop will pass under the opposite hook before it reaches the end of its own hook.

I am aware of the invention patented to E. S. Lenox July 9, 1872, No. 128,803, and I hereby disclaim said Lenox's invention; but claim that my present invention is an improvement thereon.

Having described my improved bale-tie, what I claim therein as new and of my invention, and desire to secure by Letters Patent, is—

The combination, with the looped ends A A of the body or main part of the bale-tie, of the connecting device B, having its ends C C cut off upon a bevel, and bent to overlap each other, as and for the purposes set forth.

MATTHEW F. MAURY.

Witnesses:

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