

(No Model.)

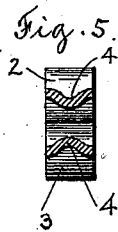
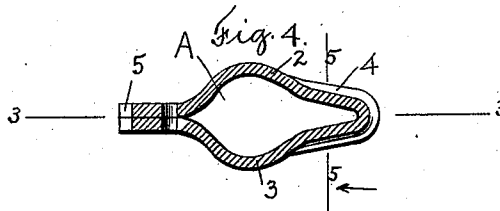
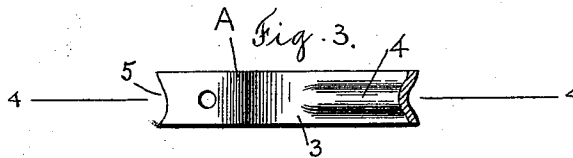
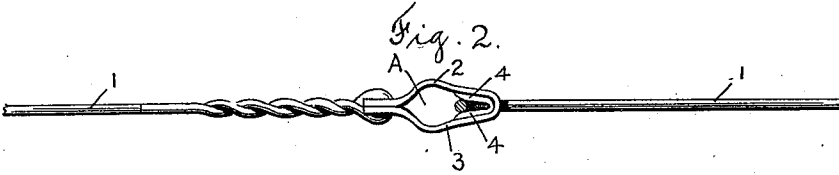
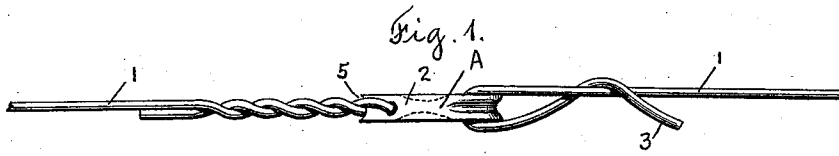
E. S. LENOX, Dec'd.

S. E. LENOX, Administratrix.

ADJUSTABLE BALE TIE.

No. 550,235.

Patented Nov. 19, 1895.



Witnesses
Chas. F. Shively
R. M. Washburn

Edwin S. Lenox Inventor

By Attorney *C. Washburn.*

UNITED STATES PATENT OFFICE.

EDWIN S. LENOX, OF WORCESTER, MASSACHUSETTS; SARAH E. LENOX, ADMINISTRATRIX OF SAID EDWIN S. LENOX, DECEASED, ASSIGNOR TO THE WASHBURN & MOEN MANUFACTURING COMPANY, OF SAME PLACE.

ADJUSTABLE BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 550,235, dated November 19, 1895.

Application filed June 29, 1894. Renewed September 11, 1895. Serial No. 562,217. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. LENOX, a citizen of the United States, residing at Worcester in the county of Worcester and Commonwealth of Massachusetts, have invented a new and useful Improvement in Adjustable Bale-Ties, of which the following is a specification.

My invention relates to that class of bale-ties known as "adjustable ties," in which a clasp is secured to one end of the tie and is adapted to engage and secure in place the other or free end of the tie, whereby the tie may be quickly and easily adjusted to bales varying in size, and at the same time may be securely held in place at any required point.

My invention consists in the peculiar construction and adjustment of the clasp.

In the drawings, Figure 1 is a plan view of my improved tie. Fig. 2 is a side view in which the free end of the tie is shown in section as it passes through the clasp, in order that the peculiar construction of the clasp may be clearly seen. Fig. 3 is an enlarged view of the clasp on a line 3 3, Fig. 4. Fig. 4 is an enlarged sectional view of the clasp on the line 4 4, Fig. 3; and Fig. 5 is a sectional view of the clasp on the line 5 5, Fig. 4.

1 is the main wire of the tie, which is secured at one end to the metal clasp A by being passed through a hole in the rear of both members 2 and 3 of the clasp, bent back upon itself and twisted, as shown in Figs. 1 and 2, when the tie is applied to a bale. The other or free end 3 of the tie is passed through the clasp bent back upon itself and secured to the main wire 1 by being bent around it, and is securely held in place by being firmly wedged into the tapering recess in which the clasp terminates, which is somewhat smaller at its apex than the diameter of the wire.

The peculiar construction of the clasp consists in the depression of its exterior face at the tapering end, which produces a corresponding elevation 4 upon the interior face of both members of the clasp, between which the free end of the tie is securely held when pressure upon the bale is released and the tie is under strain.

The elevation of the interior face of the two

members of the clasp not only creates bearing-surfaces between which the free end of the tie may be firmly wedged, but the metal of which the clasp is composed is rendered stiff by reason of the compression to which it is subjected, so that much thinner and lighter metal can be used in the construction of the clasp than would otherwise be possible.

The rear ends 5 of both members of the clasp are cut hollowing, as shown in Figs. 1 and 3, so that the twisted part of the wire may have a bearing against the lowest part of the depression thus formed, holding the clasp substantially in line with the wire to which it is attached.

The operation of the tie is as follows: The tie is passed around the bale under pressure and the free end 3 is run through the clasp and bent upon itself, as indicated in Fig. 1. When the strain upon the bale is released, tension upon the tie begins, and the wire is wedged into the tapering recess of the clasp.

I may prefer to reduce the width of the clasp intermediate the tapering end and the rear of the clasp, as indicated in dotted lines, Fig. 1. This construction may be used, if it is desired, to bring the members of the loop nearer together and thus produce a pinching as well as a wedging action.

It is not essential to the successful working of this tie that the members of the loop should approach each other under strain, as the wedging of the free end of the tie into the tapering recess will effectually prevent the tie from slipping under strain.

I am aware that ties of this general construction have been made heretofore, and I do not claim such broadly.

What I do claim as new, and desire to secure by Letters Patent, is—

1. A wire bale-tie having at one end a clasp formed from a single piece of metal, the exterior face of the tapering end of said clasp being depressed, whereby bearing surfaces are raised upon the interior faces of the members of the clasp, between which the free end of the tie may be firmly held in place substantially as shown and described.

2. A wire bale tie, having at one end a flat

metal clasp, the exterior face of the tapering
end of said clasp being depressed whereby
bearing surfaces are raised upon the interior
faces of the members of the clasp between
5 which the free end of the tie may be firmly
held in place, substantially as shown and de-
scribed.

3. A wire bale tie having at one end a flat
metal clasp, the exterior face of the tapering
10 end of said clasp being depressed, whereby
bearing surfaces are raised upon the interior
faces of the members of the clasp, between
which the free end of the tie may be firmly
held in place, the rear ends of the members
15 of the clasp being hollowed, whereby the

clasp is prevented from moving freely upon
the wire to which it is attached, substantially
as shown and described.

4. A wire bale tie having at one end a flat
metal clasp, said clasp having its exterior face 20
depressed at its tapering end, and having the
ends of both members hollowed, and a point
intermediate the extremities of the clasp
where the metal is diminished in cross-sec-
tion, substantially as shown and described.

EDWIN S. LENOX.

Witnesses:

C. G. WASHBURN,
R. M. WASHBURN.