

No. 619,584.

Patented Feb. 14, 1899.

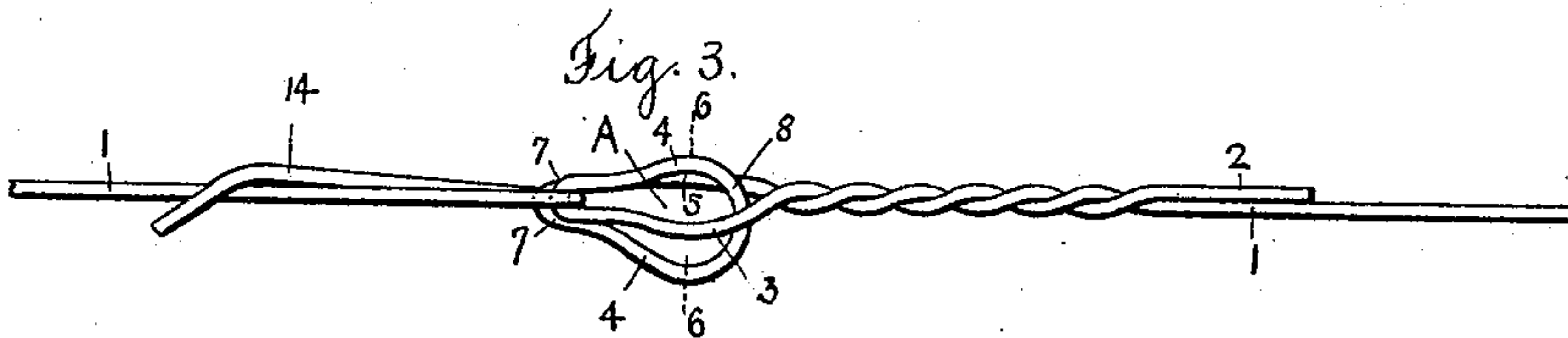
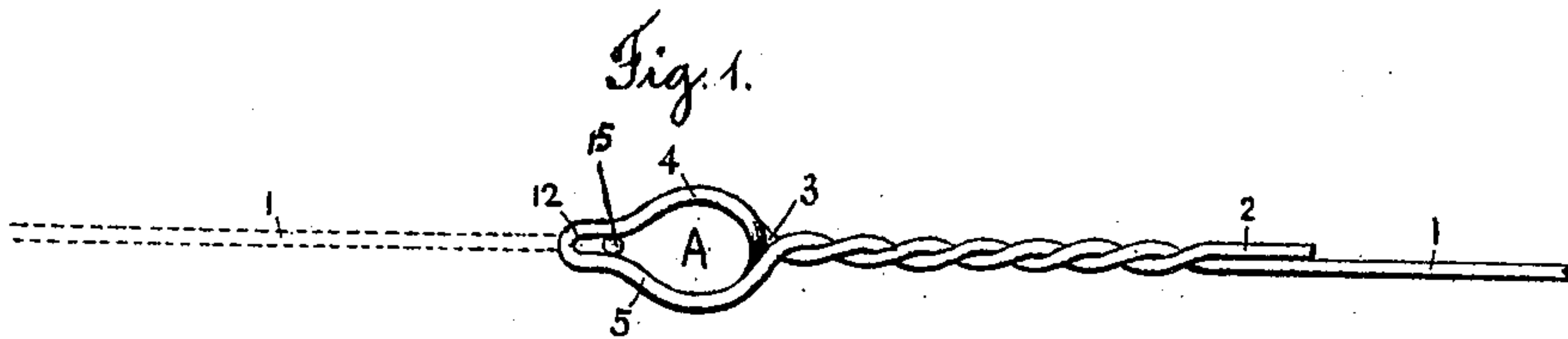
E. S. LENOX, Dec'd.

S. E. LENOX, Administratrix.

WIRE BALE TIE.

(Application filed Nov. 12, 1894.)

(No Model.)



Witnesses.

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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.

WIRE BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 619,584, dated February 14, 1899.

Original application filed January 22, 1894, Serial No. 497,685. Divided and this application filed November 12, 1894. Serial No. 528,510. (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 certain new and useful Improvements in Wire Bale-Ties, of which the following is a specification.

This application is a division of my prior application for improvements in wire bale-ties, filed in the United States Patent Office on January 22, 1894, Serial No. 497,685.

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

In the accompanying drawings, Figure 1 represents a plan view of my improved tie, which is made of a single piece of wire formed at one end into a double eye. The free end of the tie is indicated in dotted lines, and 15 is a sectional view of the free end of the tie as it passes through the loop A, showing its position before the tie is subjected to strain. The construction is more clearly shown in Fig. 2, which is a side view of the tie, showing the double loop and the three members composing it, 3, 4, and 5. In both these figures the tie is shown before any strain is applied to it. The condition of the tie after it has been subjected to strain is shown in Fig. 3, in which it will be noticed that the middle member 4 has been distorted and its relative position to the two other members of the loop has been changed.

The effect of the strain producing the change and the resistance afforded by my improved construction may be best understood if we imagine the member 4 to be severed at the two points 6 6, leaving, in effect, two

hooks 7 7, each having a tapering recess, one hook being formed on the end of the main wire 2 and the other being formed on the end of wire 1. When the tie thus modified in form is under strain, the tendency is for the ends of the hooks 6 6 to pull away from each other, thus enlarging the tapering recess so that the free end of the wire will not wedge into but slip through it; but in the construction shown the tapering recess is preserved, because the ends of the hooks are firmly united by and integral with the loop 8.

The free end of the tie is shown passed through the loop A and bent back upon itself and is secured to the main wire 1 by being bent around it at the extremity 14 and is securely held in place by being firmly wedged into the tapering recess in which the loop A terminates.

The operation of the tie is simple. The free end of the tie is passed around the bale to be confined and through the loop A and back upon itself, as indicated in Figs. 1 and 3. When the pressure upon the bale in the press is released, the bale expands and the strain upon the tie forces the free end into the tapering recess 12, where it is firmly wedged.

I do not confine myself to a double loop, as a greater number of duplications can be made effective.

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

A wire bale-tie, having at one end a multiple loop, composed of the members 3, 4, 5, integral with the tie, having an enlarged body and terminating in a tapering recess smaller toward the apex than the diameter of the wire, whereby the free end of the tie may be engaged and held in place.

EDWIN S. LENOX.

Witnesses:

HOMER COOKE,

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