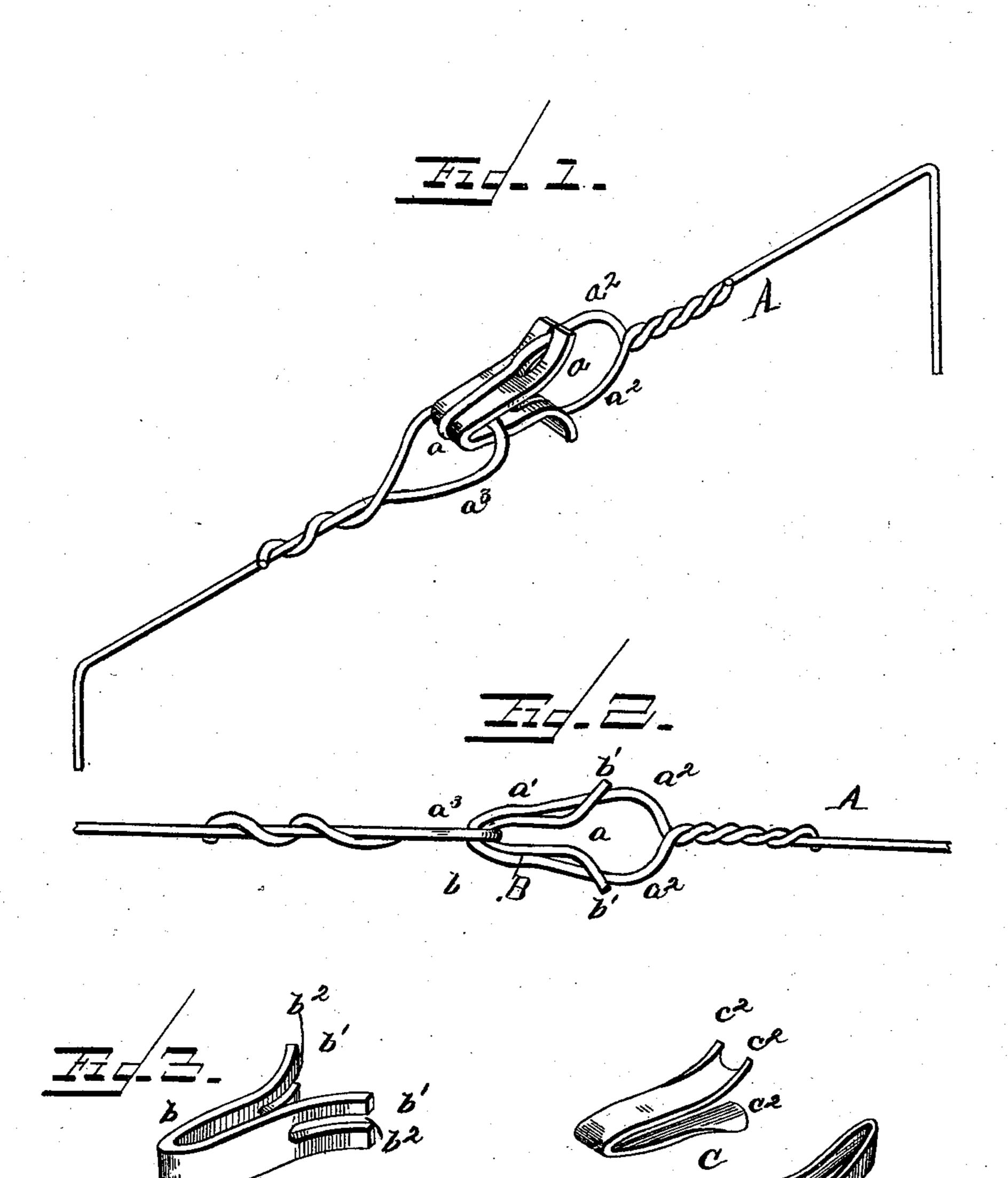
(No Model.)

W. A. KILMER.

BALE TIE.

No. 504,436.

Patented Sept. 5, 1893.



#IINESSES F. L. Ourand. E. K. Stewart. INVENTOR William A. Kilmer ber M. Hingleton. Attorney

## United States Patent Office.

WILLIAM A. KILMER, OF NEWBURG, NEW YORK.

## BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 504,436, dated September 5, 1893.

Application filed February 10, 1892. Serial No. 420,996. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM A. KILMER, a citizen of the United States, residing at Newburg, in the county of Orange and State of New York, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to an improvement in bale ties, and it is designed to strengthen the catching part of the tie and also to insure the retention of the end of the wire after it

15 is caught into the catch.

Referring to the drawings: Figure 1 is a perspective view of the device. Fig. 2 is a top view. Fig. 3 shows one form of the catch

plate, and Fig. 4 another form.

In these drawings, the letter A indicates a bale tie having at one end the catch loop, a, which is made with the point, a', and the two rear curves,  $a^2 a^2$ . Into this catch loop is put the catch plate, B or C. This plate is made 25 of a piece of any suitable metal. The plate, B, has the elongated tongue, b, adapted to the point, a', of the catch loop and the diverging ends, b' b'. These ends, b' b', have the notches, b<sup>2</sup> b<sup>2</sup>. This catch plate is put in 30 place as shown in Figs. 1 and 2 by slipping it into the catch loop, a, the side wires of the loop coming into the notches,  $b^2$   $b^2$ , and the ends, b' b', are clamped against the wires. In the form shown in Fig. 4, the ends, c' c', 35 are not notched, but are curved lengthwise, l

having the points,  $c^2$   $c^2$ , and these points are clamped about the side wires of the catch loop, a. The other loose end,  $a^3$ , of the wire, A, is to be run through the loop, a, and plate, B or C, as shown in Figs. 1 and 2, and twisted upon itself. When the strain on the bale is released, this end,  $a^3$ , is jammed down into the inside of the elongated tongue of the catch plate and is firmly held there.

I am aware of United States Patent No. 45 466,563, wherein is shown a bale tie having a "saddle" in the catching loop, which saddle fits about the wire. In my device the catch plate does not fit about the wire, but only the ends of the catch plate grip the wire. This 50 holds the plate from dislodgment and in place, while a saddle which simply fits about the wire without gripping it is not firmly held.

Having thus described my invention, what I claim is—

1. A wire bale tie, having at one end a catch loop provided with a catch plate held in said loop, the ends only of the plate being clamped against the side wires of the loop, as set forth.

2. A wire bale tie, having at one end a catch 60 loop provided with a catch plate, B, having the notches,  $b^2$   $b^2$ , into which the side wires of the loop fit, the ends, b' b', of the plate being clamped against said wires, as set forth.

In testimony whereof I affix my signature in 65 presence of two witnesses.

WILLIAM A. KILMER.

Witnesses:

EMMA M. GILLETT, W. H. SINGLETON.