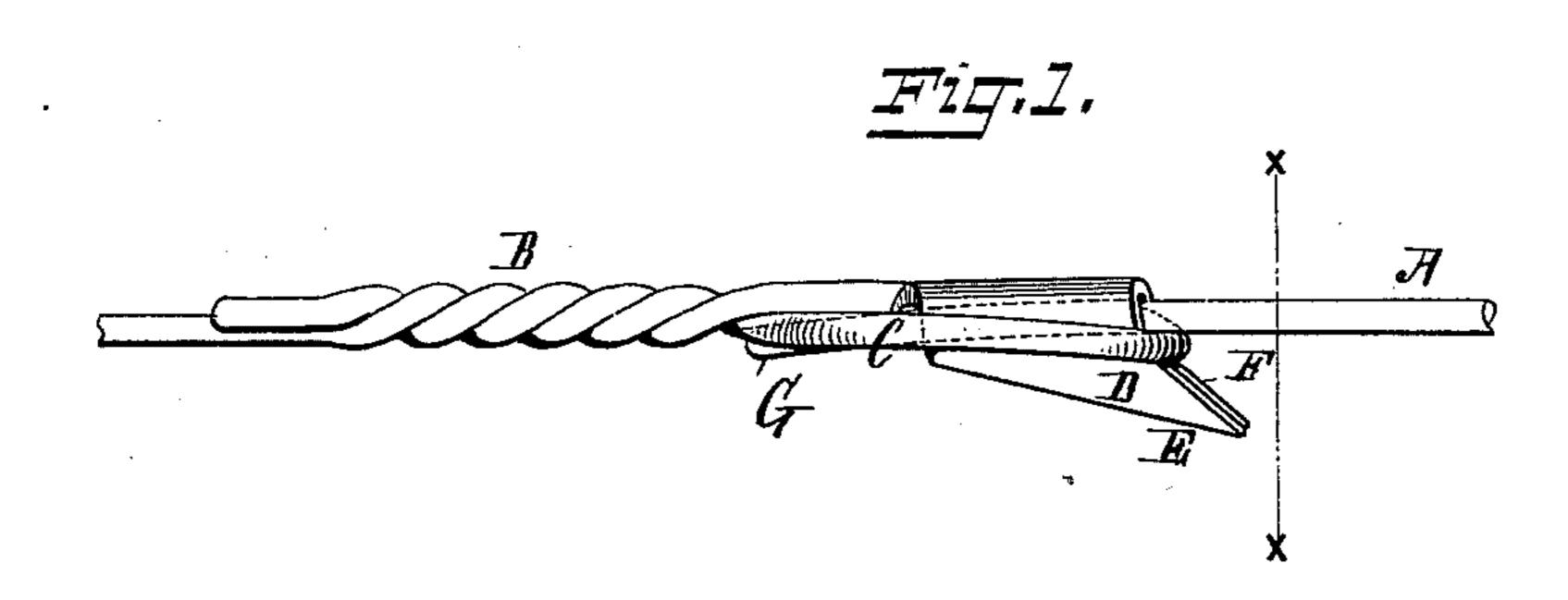
(No Model.)

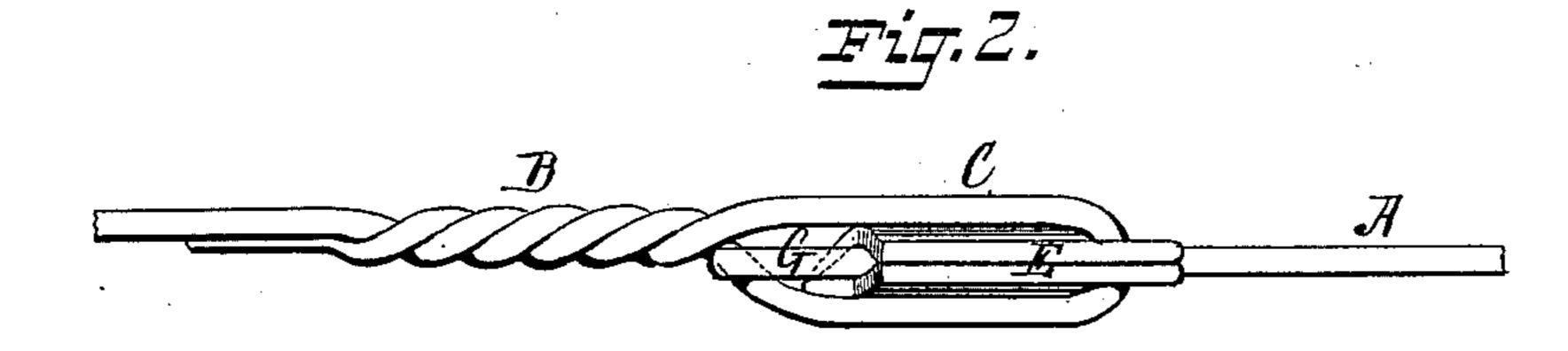
J. W. GRISWOLD.

BALE TIE.

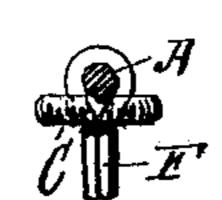
No. 420,497.

Patented Feb. 4, 1890.





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ATTORNEY

## United States Patent Office.

JOHN WOOL GRISWOLD, OF TROY, NEW YORK.

## BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 420,497, dated February 4, 1890.

Application filed April 16, 1889. Serial No. 307,456. (No model.)

To all whom it may concern:

Be it known that I, John Wool Griswold, of Troy, New York, have invented a new and useful Improvement in Bale-Ties, of which, the following is a specification.

My inventionrelates to a new form of tie—such as is used for fastening the ends of the wire bands now commonly used upon hay-bales, &c.; and it consists in the construction of the tie, as hereinafter more particularly set forth.

In the accompanying drawings, Figure 1 is a side view of my improved tie. Fig. 2 is a plan view, and Fig. 3 a section on the line X X of Fig. 1.

Similar letters of reference indicate like parts.

A represents one end of the wire band to be fastened, and B the other end. On the end B is formed a loop C by twisting in the usual way.

D is a hook made of a plate of wrought, struck, or malleable iron, which is folded or doubled over the part A of the band. The inner faces of the protruding parts of the plate are brought into close contact. The outer longitudinal edges of the plate coincide and are beveled or inclined toward the end of the band, as shown at E. The trans-

verse edges of said plate also coincide, and 30 are beveled or inclined to form an acute angle with the band, as shown at F. This angular portion of the hook forms the shoulder over which the loop C engages. A portion G of the wire A projects beyond the hook. 35 When the loop is engaged with the hook, this end portion G of the band rests and has a bearing upon the strand forming the loop, as shown in Figs. 1 and 2.

I am aware that it is not new to apply a 40 folded-over piece of metal forming a hook to one part of a closed loop produced at the end of a wire band, and this construction I do not herein claim.

I claim—

The combination, in a tie or fastening for wire bands, of the loop or eye C upon one of the parts to be connected, and the hook D of wrought, struck, or malleable metal upon the opposite part, the said eye engaging with the 50 shoulder F of the hook and the extremity G of the wire to which the hook is applied resting and having a bearing upon the wire form-

ing the loop, substantially as described.

JNO. WOOL GRISWOLD.

Witnesses:
DAVID COWEE, Jr.,
JAMES A. HISLOP.