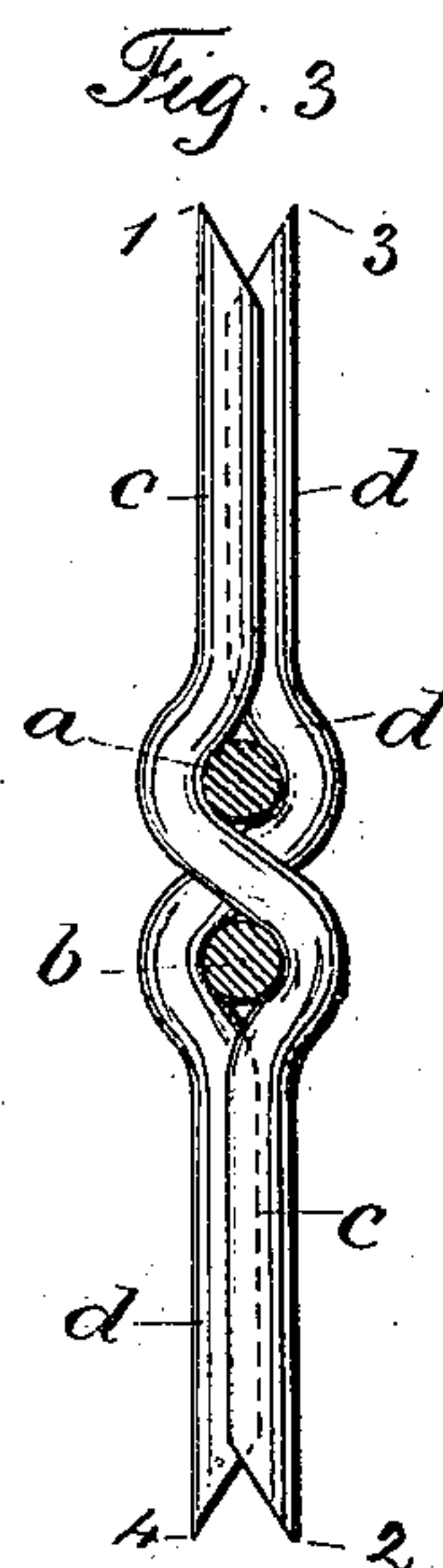
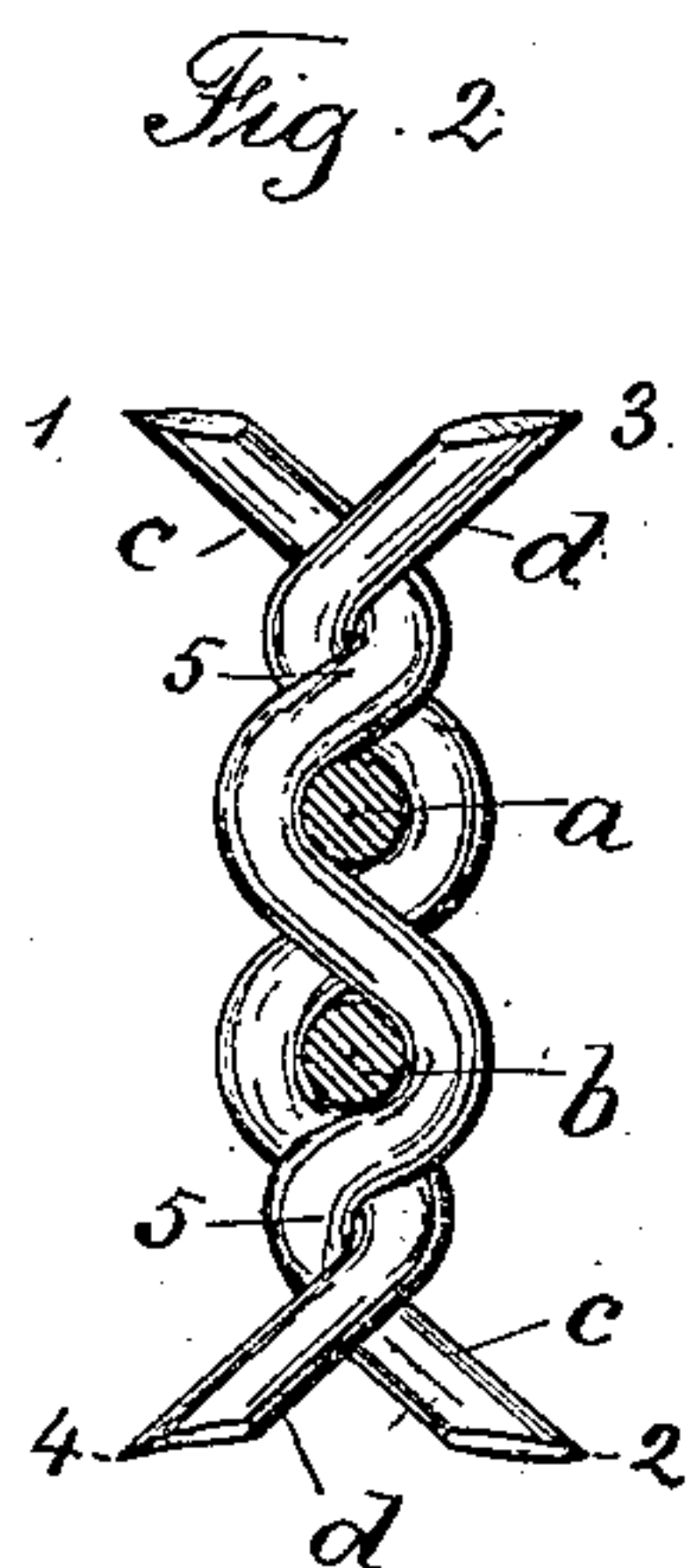
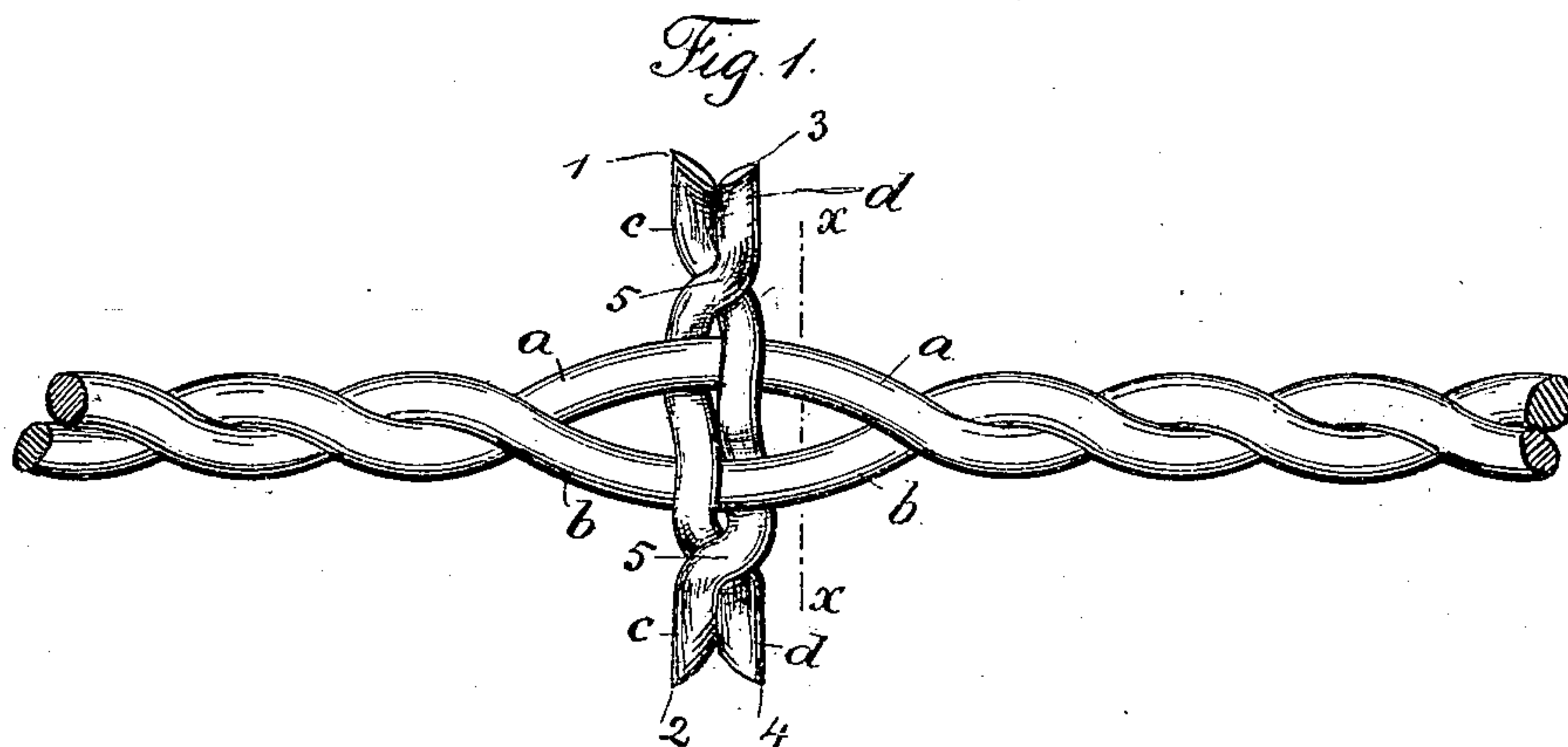


(No Model.)

E. S. LENOX.
BARBED FENCE WIRE.

No. 272,563.

Patented Feb. 20, 1883.



Witnesses
J. Haib
Harold Perrell

Inventor
Edwin S. Lenox
per Lemuel W. Perrell atty

UNITED STATES PATENT OFFICE.

EDWIN S. LENOX, OF WORCESTER, MASSACHUSETTS.

BARBED FENCE-WIRE.

SPECIFICATION forming part of Letters Patent No. 272,563, dated February 20, 1883.

Application filed September 1, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. LENOX, of Worcester, in the State of Massachusetts, have invented an Improvement in Barbed Fence-Wire, of which the following is a specification.

The object of this invention is to secure the barbs to the longitudinal wires in such a manner that they will not be liable to alter their position under the pressure to which they may be subjected by cattle against the same, and also to secure the longitudinal wires together and prevent them untwisting when one strand may become broken. I make use of two barb-wires inserted transversely and in opposite direction between the strands, and twisted together outside the strands, so that the barb-wires separate the strands by passing between them, and also lock the strands firmly by being twisted together outside the strands. The points of the barbs are retained in their proper relation to each other by the twisting together of the wires.

In the drawings, Figure 1 is a side view of a piece of fence-wire with the barbs upon it. Fig. 2 is a section at the line *xx*, and Fig. 3 shows the barb as inserted between the fence-wires and ready to be twisted.

The longitudinal wires *a b* are of any desired character. I prefer to use iron wire, and galvanize the same after the barbs are applied. The barb-wires *c d* are of a proper length to be inserted and twisted as next described, and the wire being cut off diagonally forms the penetrating-points 1 2 3 4. I prefer to bend the barb-wires into the form shown in Fig. 3 previous to their being laid in between such wires, such bending being done by rollers or swages; but the form that the barbs ultimately assume is the same, or nearly so, whether the barb-wires are bent by rolls or swages, or by twisting the ends of the barbs together. In all instances the barb-wires, after being passed across between the longitudinal fence-wires in opposite directions, are twisted together near their ends, as seen at 5, so that the wires interlock, each bend preferably being a half spiral or helical twist in the same direction, so that the tools that are used to twist the wires together cause the barb-wires to bind firmly against the opposite sides of the longitudinal wires, and each barb-wire passing through be-

tween the longitudinal wires in opposite directions is bent over one side of one wire and the opposite side of the other wire, as represented. Hence the barbs are held so firmly upon the longitudinal wires that they cannot separate, and the longitudinal wires, being twisted together at each side of the barbs, are prevented from separating to any considerable extent in case of one wire breaking, because the barbs bind the wires together, and any untwisting action will be arrested at the first barb next to the place where such longitudinal wire breaks.

I do not limit myself to the direction in which the wires are twisted together, nor to the extent of the twisting. If the barbs are to stand out farther from the fence-wires, the twists may be made by a complete rotation of the two wires, and the barb-wires may be of any desired length.

I am aware that two barbs have been twisted together so as to surround a single wire. This, however, is liable to become loose, because the barbs have a leverage, and are liable to turn around upon the single wire if any external substance is pressed against the bar. This is prevented by passing the barb-wires through between the two or more longitudinal wires in opposite directions, and then twisting them together near their ends, and when the longitudinal wires are twisted together also the barbs are still more firmly held.

I am also aware that barbs have been formed of sheet metal, with four points, and held between the wires; but the barbs are not twisted together to grasp the longitudinal wires and to support each other.

I claim as my invention—

In a barbed fence-wire, the combination, with two or more longitudinal wires, of two barb-wires passing in opposite directions between the longitudinal wires, and twisted together to confine such longitudinal wires and be supported by them, substantially as set forth.

Signed by me this 30th day of August, A. D. 1882.

EDWIN S. LENOX.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.