

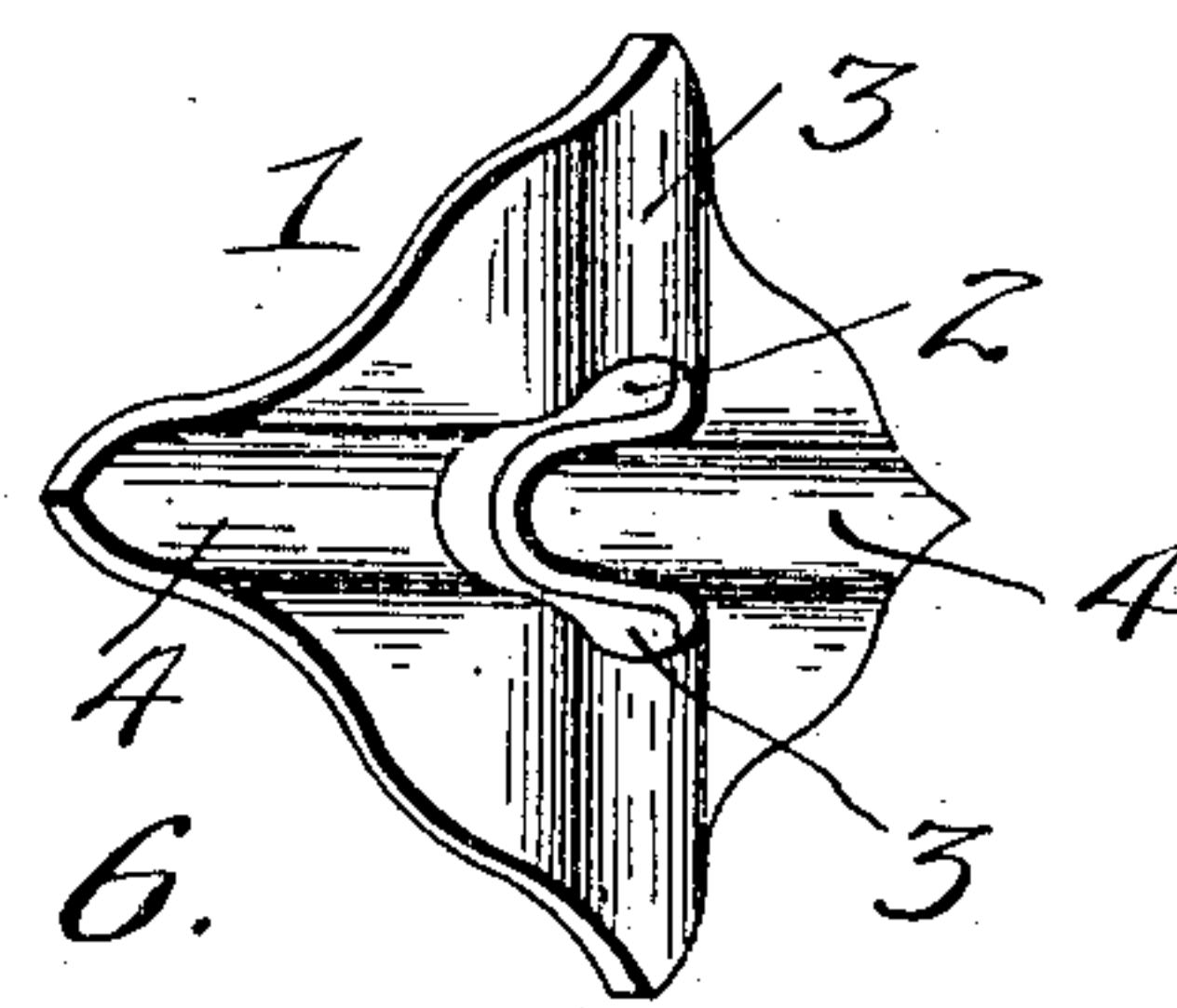
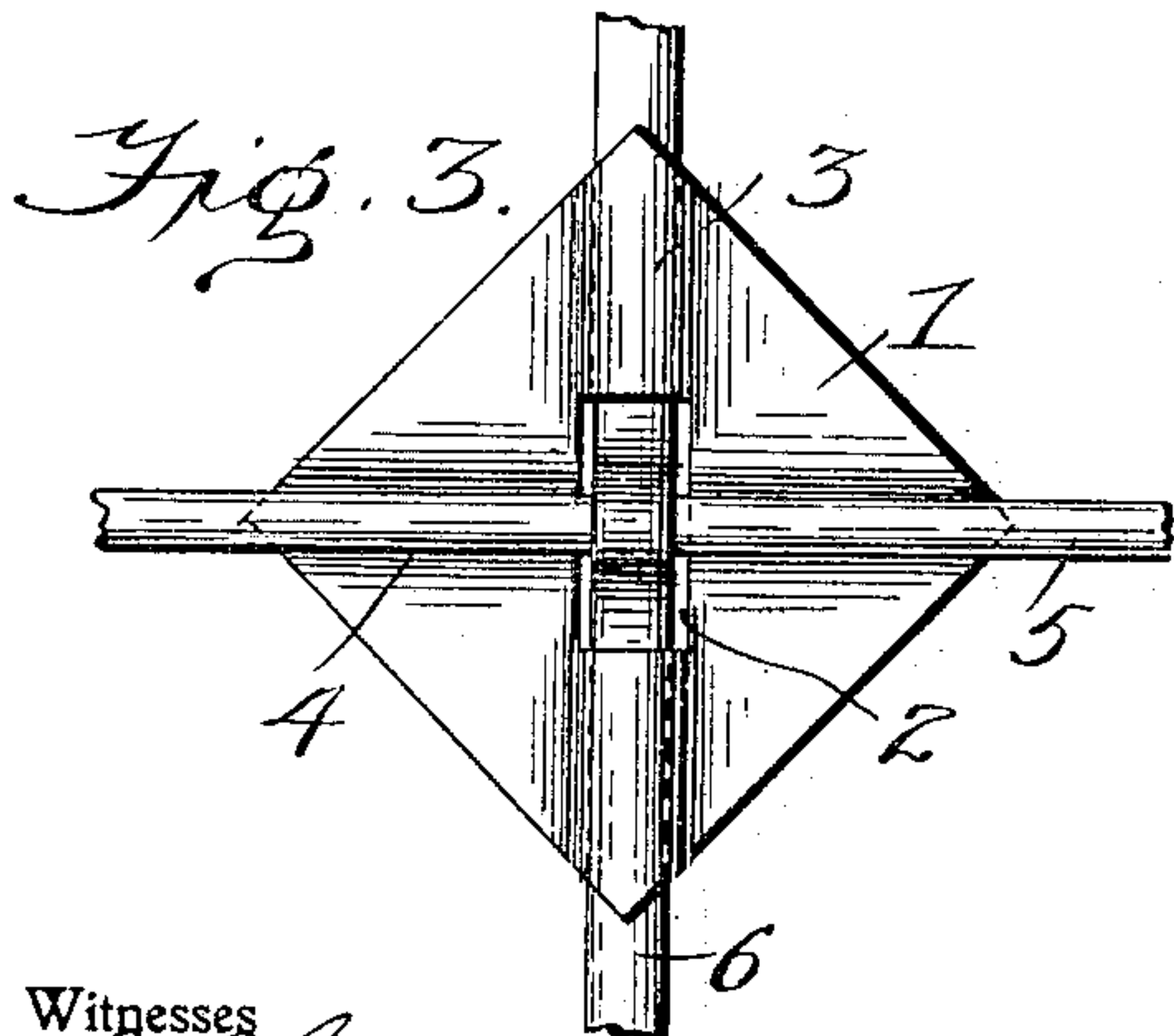
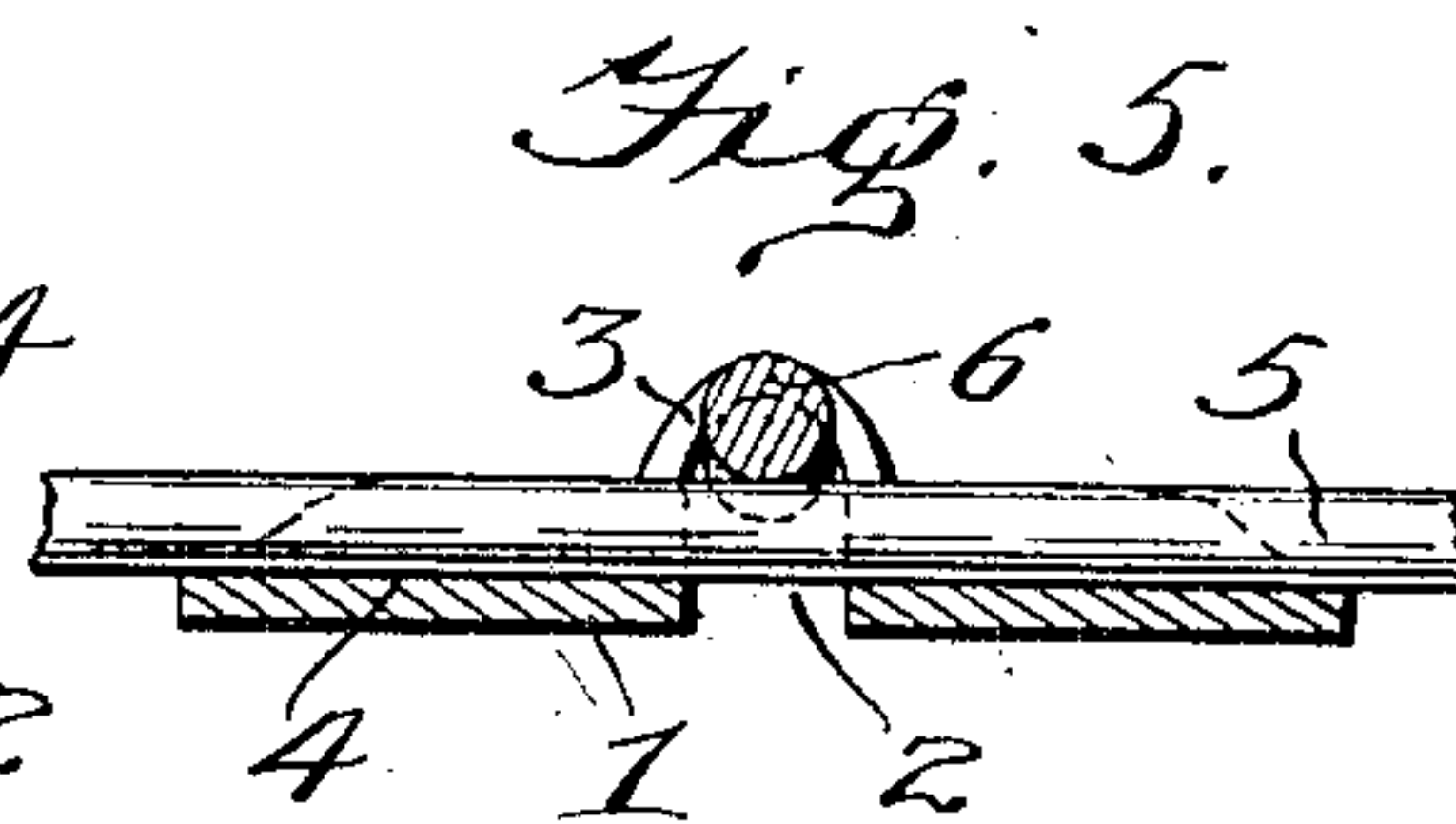
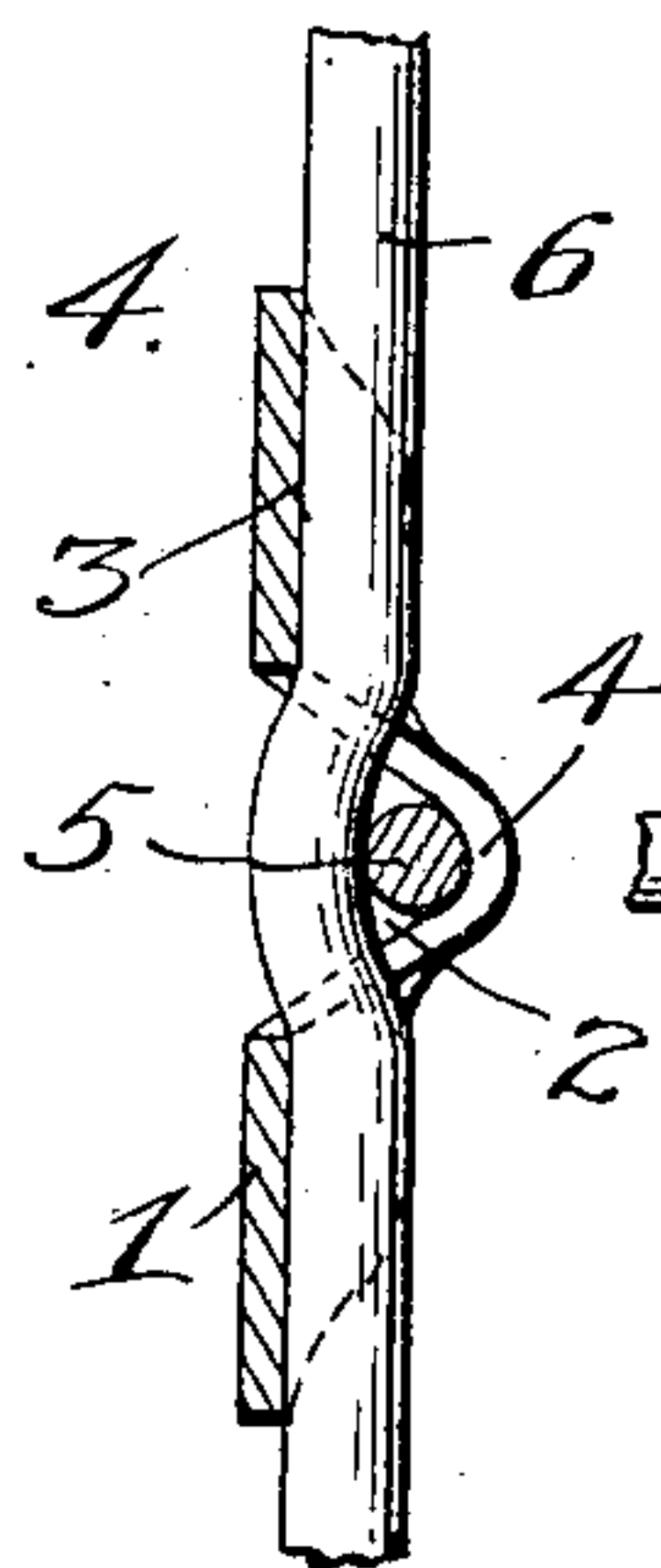
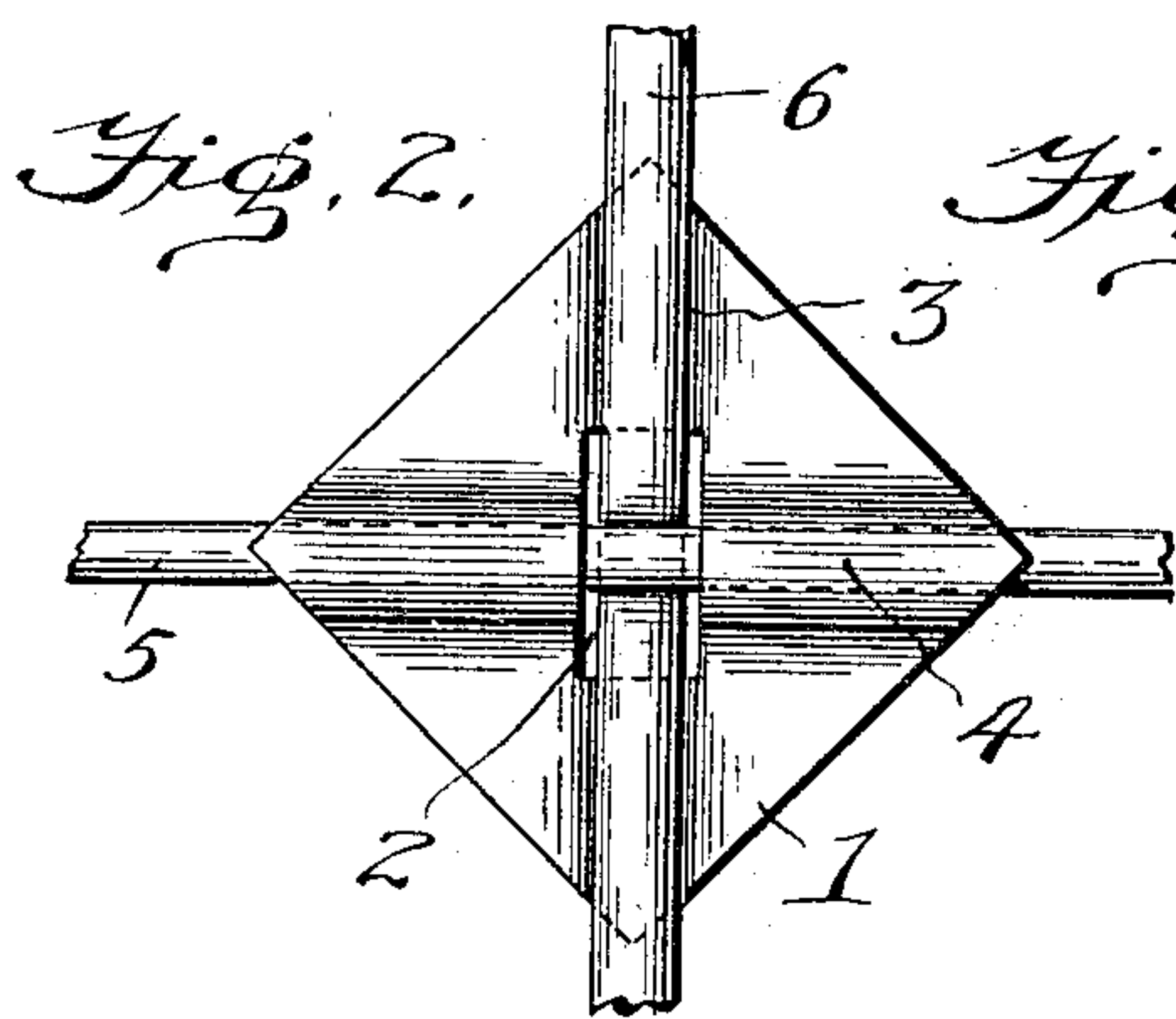
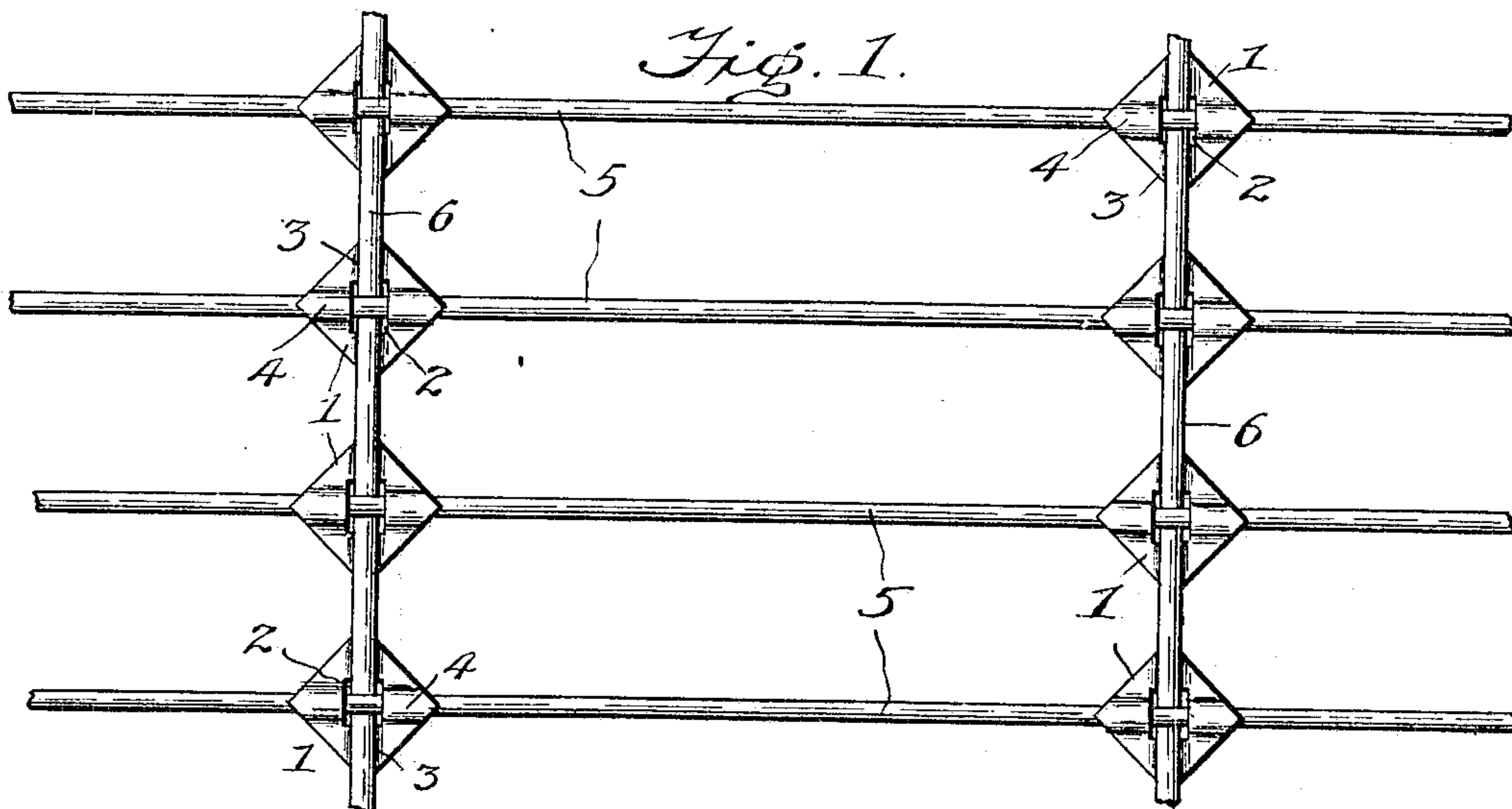
No. 758,780.

PATENTED MAY 3, 1904.

W. G. RENAKER.
LOCKING PLATE FOR WIRE FENCES.

APPLICATION FILED NOV. 5, 1903.

NO MODEL.



Witnesses

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UNITED STATES PATENT OFFICE.

WILLIAM G. RENAKER, OF CLAYTON, ILLINOIS.

LOCKING-PLATE FOR WIRE FENCES.

SPECIFICATION forming part of Letters Patent No. 758,780, dated May 3, 1904.

Application filed November 5, 1903. Serial No. 179,977. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM G. RENAKER, a citizen of the United States, residing at Clayton, in the county of Adams and State of Illinois, have invented certain new and useful Improvements in Locking-Plates for Wire Fences; and I do 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 improvements in locking-plates for wire fences.

The object of the invention is to provide a plate with which the line and stay wires of a fence may be securely locked together at their points of crossing.

A further object is to provide a locking-plate of this character which will be simple in construction, strong, and durable and by the use of which a fence may be quickly and strongly built, the wires of the same being held against slipping under all conditions.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a side elevation of a portion of a fence, showing the application of the invention. Fig. 2 is an enlarged view of one side of one of the locking-plates, short sections of the line and stay wires being shown in place. Fig. 3 is a similar view of the opposite side. Fig. 4 is a vertical sectional view of the same. Fig. 5 is a horizontal sectional view, and Fig. 6 is a detail perspective view of the plate before being applied to the fence-wires.

Referring to the drawings more particularly, 1 denotes a plate which is of substantially diamond shape. In the center of the same is formed a narrow vertically-disposed slot 2. The plate is bent in diametrically opposite directions to form reversely-disposed grooves or channels 3 and 4, the groove or channel 3 being formed across the plate vertically from the upper to the lower points of the plate and in line with the slot 2.

The groove or channel 4 is formed across the plate horizontally from one of the side points of the diamond to the other and is formed in the opposite side of the plate from the groove 3 and transversely to the slot 2 and is intersected by said slot.

In assembling the parts of the fence the plates are arranged at the desired positions on the line-wires 5 by engaging the grooves or channels 4 with said wires. The stay-wires 6 are then fed down from the top in the groove 3 and through the slot 2 in front of the line-wires 5. After the parts have been arranged in this manner a suitable tool is applied to the plate, by which the same will be flattened. This action will cause a bend to be formed in the stay-wires at the point where they cross the line-wires, owing to a lack of support for said stay-wires at this place, due to the plate being cut away to form the slot 2. The line-wire is prevented from being bent at the same time by the wide support or bearing given to the same and the fact that the slot is much narrower where crossed by said line-wire than it is the other way where crossed by the stay-wire, which is lengthwise of the slot.

The diamond-shaped plate and vertical arrangement of an oblong slot, as herein shown, permits the use of comparatively light line-wires and heavy stay-wires, which may be bent or kinked to hold the same in place without bending the light line-wires, thereby preventing the liability of said line-wires from being weakened and perhaps broken at these points. Furthermore, by arranging the plates so that the grooves therein run diagonally across the same a maximum bearing-surface is presented to the wires which serves to strengthen and brace the same, while the length and position of the grooves preclude all possibility of the plates slipping on the wires.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the prin-

ciple or sacrificing any of the advantages of this invention.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

In a tie or lock for wire fences, the combination with a stay-wire, and a line-wire, the former being bent or kinked and the latter unbent at the point of crossing, of a tie comprising a diamond-shaped plate arranged with its corners forming points bearing against the wires, said plate being formed with an elongated slot extending vertically between its opposite and lower corners and two sets of grooves, one set disposed vertically on one side thereof between said upper and lower corners and the ends of the slot and receiving said stay-wire, and the other set disposed

horizontally on the opposite side thereof between the sides of the slot and the horizontal corners of the plate and receiving said stay-wire, said plate being flattened from a primary form to grip the wires, the greater length of the horizontal grooves sustaining the line-wire against bending while the portion of the stay-wire exposed at the slot is bent during the flattening of the plate, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

WILLIAM G. RENAKER.

Witnesses:

J. ALLIE WING,
CHAS. MARSHALL.