

(No Model.)

S. A. RHODES.
WIRE TIGHTENER.

No. 598,746.

Patented Feb. 8, 1898.

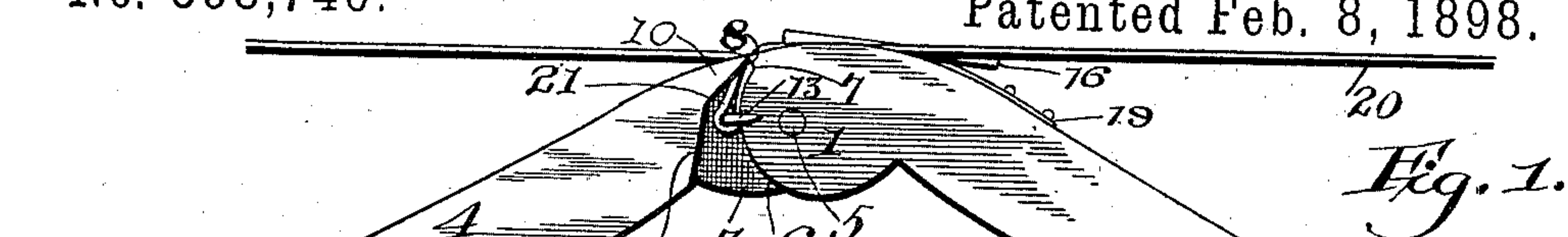


Fig. 1.

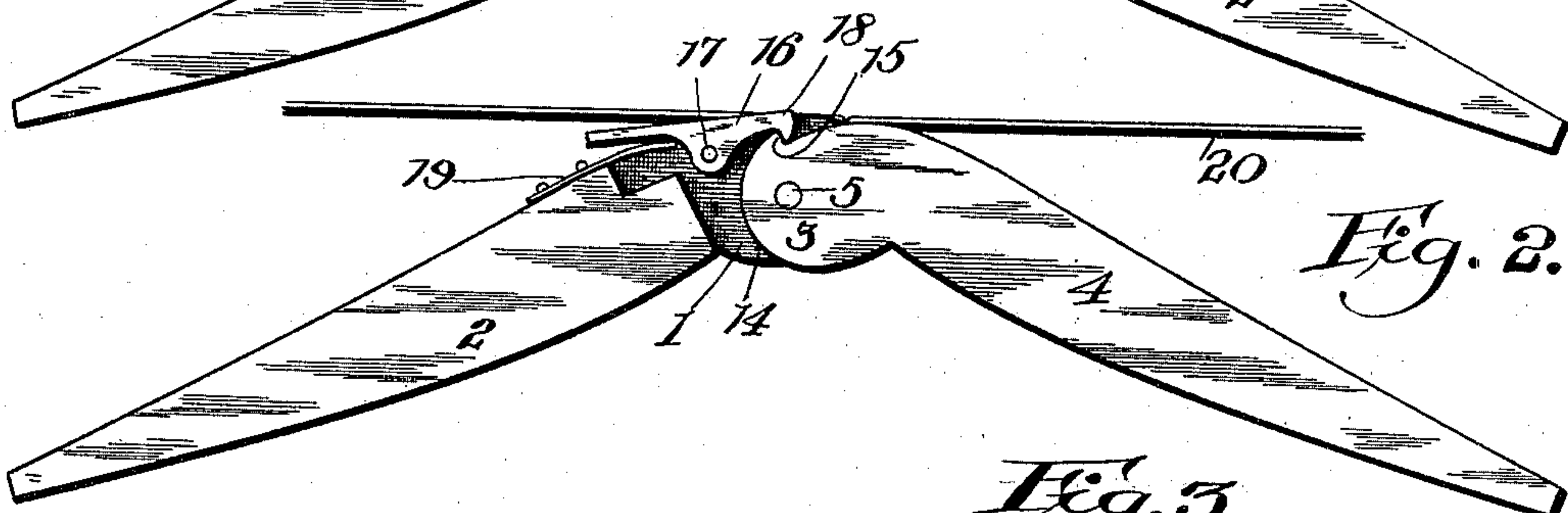


Fig. 2.

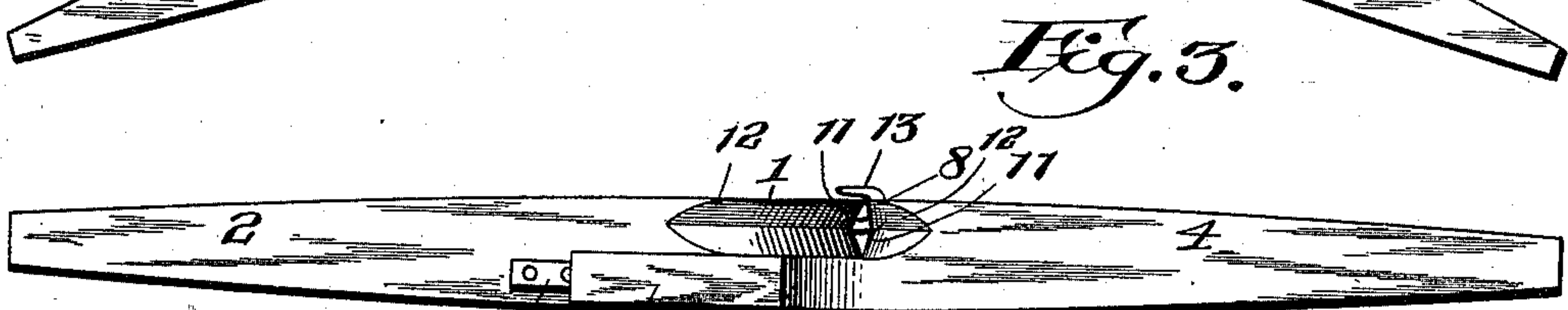


Fig. 3.

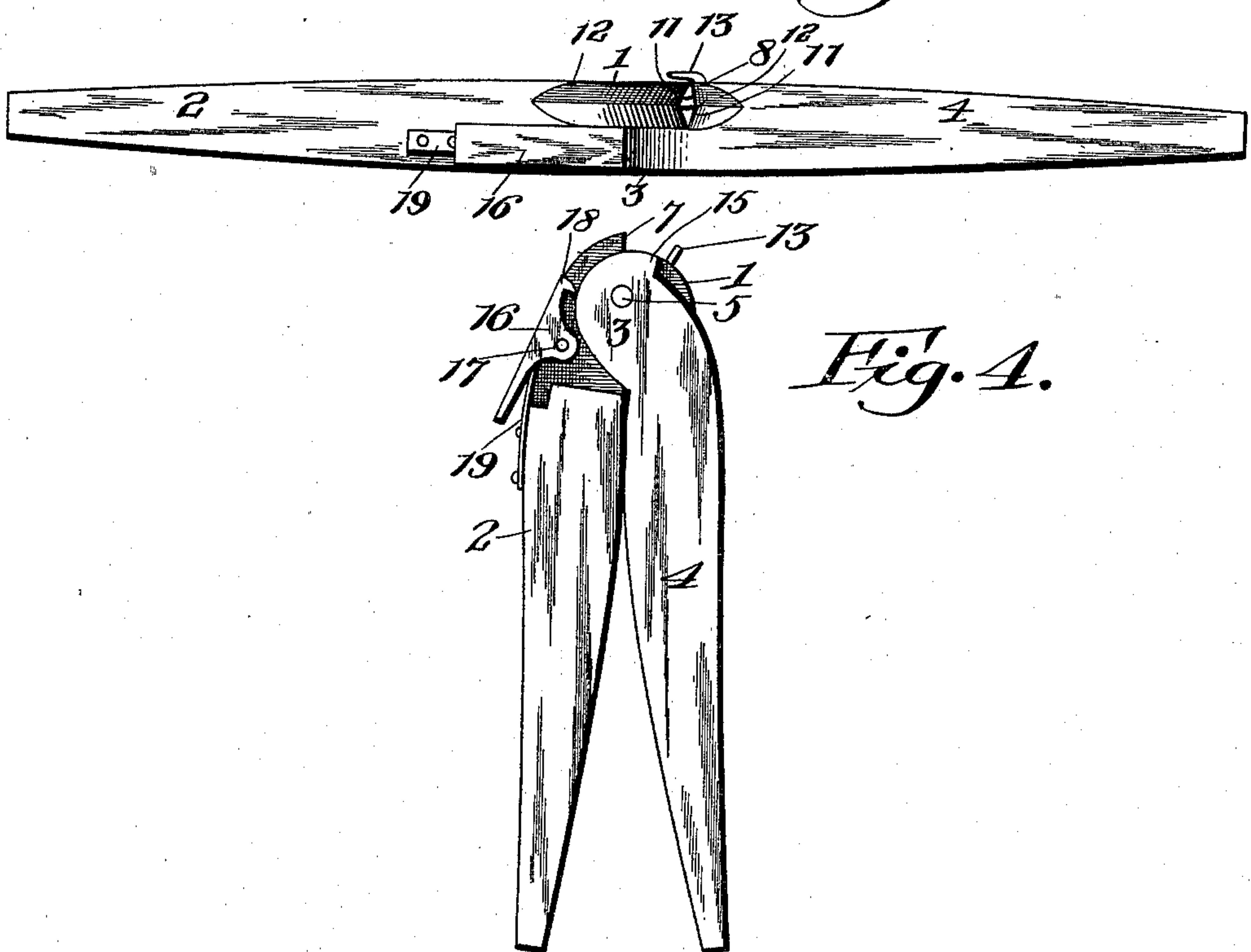


Fig. 4.

Witnesses

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SAMUEL A. RHODES, OF McCLEAN, NEBRASKA.

WIRE-TIGHTENER.

SPECIFICATION forming part of Letters Patent No. 598,746, dated February 8, 1898.

Application filed August 31, 1897. Serial No. 650,166. (No model.)

To all whom it may concern:

Be it known that I, SAMUEL A. RHODES, a citizen of the United States, residing at McClean, in the county of Keyapaha and State of Nebraska, have invented a new and useful Wire-Tightener, of which the following is a specification.

This invention relates to wire-tighteners adapted to loop and twist wires in order to take up the slack between the supporting-posts; and its object is to provide a simple and inexpensive tool of this character capable of affording great leverage and thereby enabling the operator to loop and twist heavy wires expeditiously and with ease.

With this object in view the invention consists of the several details of construction and combination of parts, as will be hereinafter fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a side view of the wire-tightener in position to twist the looped wire grasped by it. Fig. 2 is a similar view looking at the side opposite to that shown in Fig. 1. Fig. 3 is a plan view of the tool in its open position, the handles being partly broken away. Fig. 4 is a view of the tool closed, looking at the side illustrated in Fig. 2.

Similar reference-numerals indicate similar parts in the several figures.

In the following specification the tool will be described as being open when the handles are spread apart and the wire-gripping jaws in contact with each other, and as being closed when the handles are brought together and the jaws separated.

The tool is formed of two substantially similar sections, each comprising a head and a handle. 1 and 2, respectively, indicate the head and handle of one section and 3 and 4 the head and handle of the other section. The heads are halved out in order to bring the handles in a common plane and are pivotally connected together by a pin or rivet 5.

Referring to Fig. 1, it will be seen that the inner edge portion 6 of the head 1 is curved eccentrically to the pivot-pin 5, and that it is provided with a shoulder 7, extending at substantially a right angle to the curve, whereby a short gripping-jaw 8 is formed on the head and which projects beyond the inner curved portion of the head. The shoulder 9, which

is formed in the handle 4 by halving out the head 3, is so cut as to form a projection 10, which constitutes the other wire-gripping jaw, and when the handles are spread apart, as shown in Fig. 2, the ends of these jaws will engage each other and prevent the further spreading outwardly of the arms. The opposing ends of the jaws 8 and 10 are each provided with a recess 11, which will preferably be V-shaped, and a groove 12, also preferably V-shaped, is cut in the outer face of each of the jaws. 13 indicates a wire-looping hook projecting from the curved edge 6 of the head 1 and so arranged that when the tool is closed the hook will be substantially midway between the jaws 8 and 10, and when the handles are spread apart and the heads turned on their pivots in opposite directions the hook will just clear the end of the jaw 10.

Referring to Fig. 2, it will be seen that the inner edge portion 14 of the head 3 is also curved eccentrically to the pivot-pin 5, and that a shoulder 15 is formed in its outer edge portion. 16 indicates a dog pivoted intermediate to its ends on a pin 17, secured in the head 1, and the dog will lie against the inner face of the head 1. A hook 18 is formed at the inner end of the dog and is adapted to engage the shoulder 15 on the head 3 when the handles are spread apart to their limit. 19 indicates a spring secured at one end to the handle 2 and engaging with its other end the outer end of the dog 16 and tending normally to force the hooked end of the dog into engagement with the shoulder 15.

The fence or other wire is indicated by 20.

In using the tool the operator will take it in its closed position and first place the hook 13 over the wire to be tightened and cause the wire to engage in the recesses and grooves in the jaws, when by spreading the handles apart the hook will draw the wire in between the two jaws and form a loop, as indicated at 21 in Fig. 1, and as soon as the jaws are in engagement with each other the hooked end of the dog 16 will engage the shoulder 15 and lock the handles in their open position. The operator can then grasp the handles at their outer ends and turn them in the same manner as turning an auger and thereby twist the wire until it is sufficiently tightened. He will then release the dog from engagement

with the shoulder 15 and close the handles, when the hook 13 can be easily disengaged from the loop in the wire.

From the foregoing description it will be seen that I have provided a very simple and efficient device for the purpose intended and which will afford great leverage to the operator in twisting the wires and thereby enable him to loop and twist heavy wires expeditiously and with ease.

It will be understood that changes in the form, proportion, and the minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of this invention.

Having thus described the invention, what I claim is—

1. A wire-tightener, comprising two heads pivotally connected to each other and each having a handle and a wire-gripping jaw, said jaws engaging each other when the handles are spread apart, a wire-looping hook on one head, and a spring-actuated hooked dog pivoted on one head to engage a shoulder on the other head when the handles are spread apart to their limit, substantially as and for the purpose specified.

2. A wire-tightener comprising two heads pivotally connected to each other, and each having a handle and a wire-gripping jaw, said jaws engaging each other when the handles

are spread apart, and having recesses in their opposing ends and grooves in their outer faces, a wire-looping hook on one head, and a spring-actuated dog pivoted on one head to engage a shoulder on the other head when the handles are spread apart to their limit, substantially as and for the purposes specified.

3. A wire-tightener comprising two sections each having a head and a handle, the heads being halved out to bring the handles in a common plane and pivotally to each other, and the inner edge portions of the head being curved eccentrically to their pivot, one section having a wire-gripping jaw on its head, and the other a wire-gripping jaw on the shoulder formed by halving out the head, said jaws being opposed to each other and adapted to engage when the handles are spread apart, a wire-looping hook on the head having the jaw, and a spring-actuated hooked dog pivoted on one head to engage a shoulder on the other head when the handles are spread apart to their limit, substantially as and for the purpose specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

SAMUEL A. RHODES.

Witnesses:

CHAS. M. LIBOLT,
WALTER KNIGHT.