

No. 632,987.

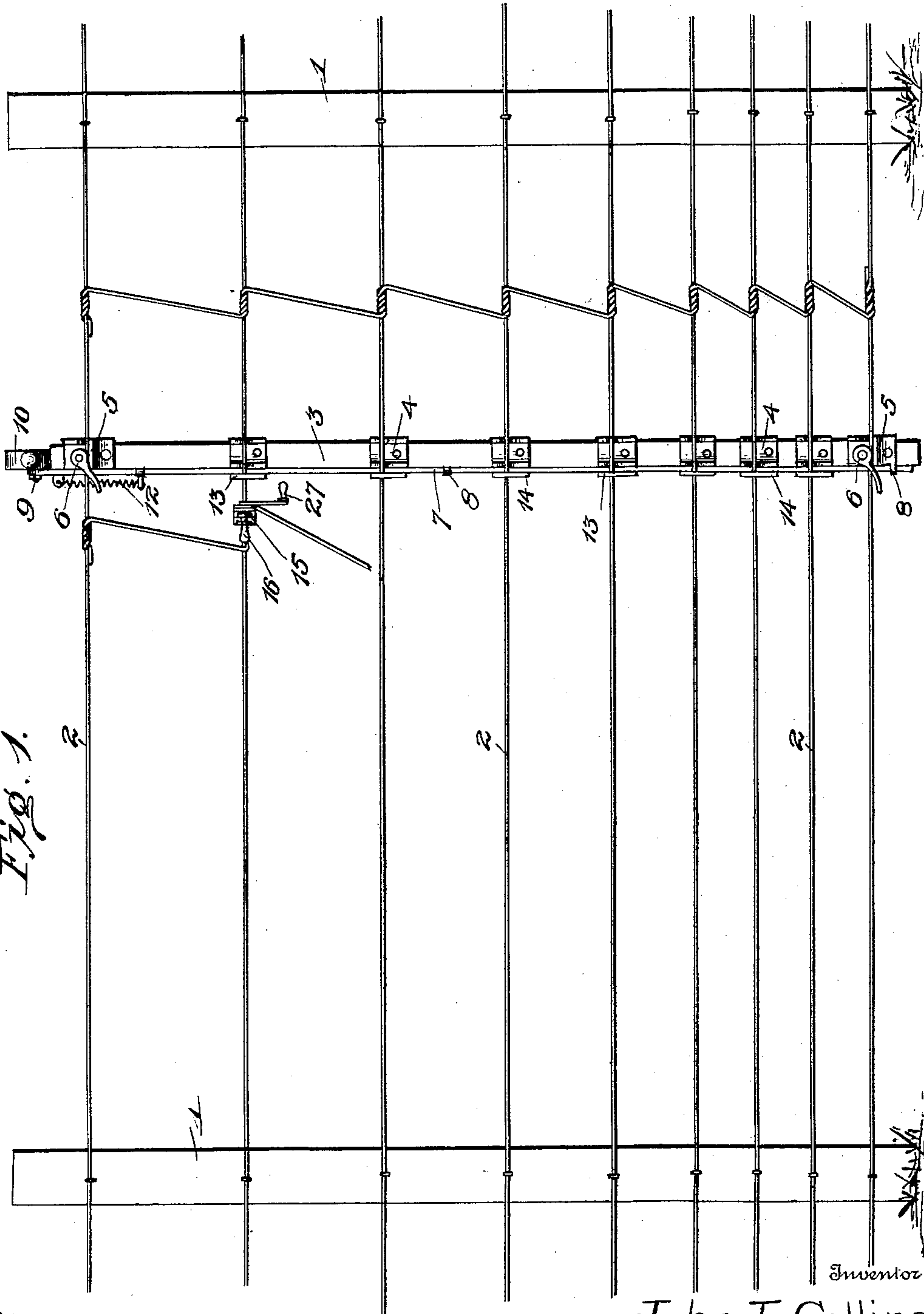
Patented Sept. 12, 1899.

J. T. COLLINS.
WIRE FENCE SPACING DEVICE.

(Application filed Feb. 1, 1899.)

(No Model.)

2 Sheets—Sheet 1.



Witnesses
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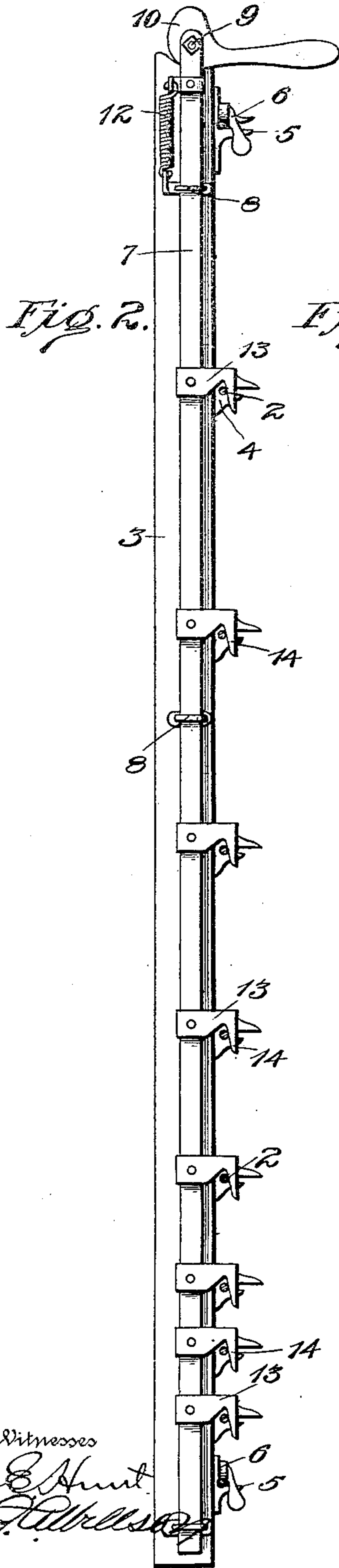


Fig. 2.

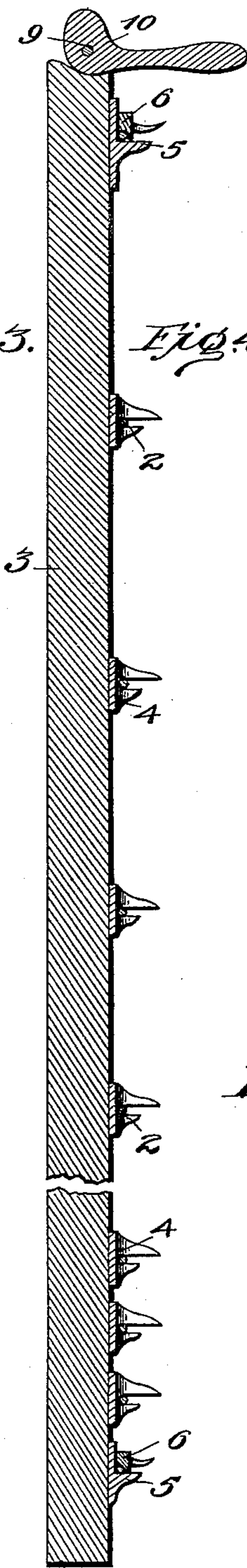


Fig. 3.

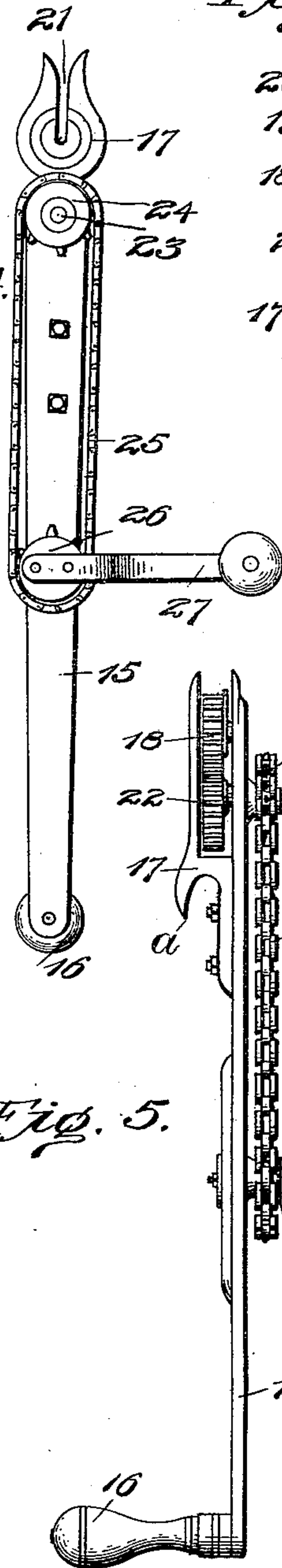
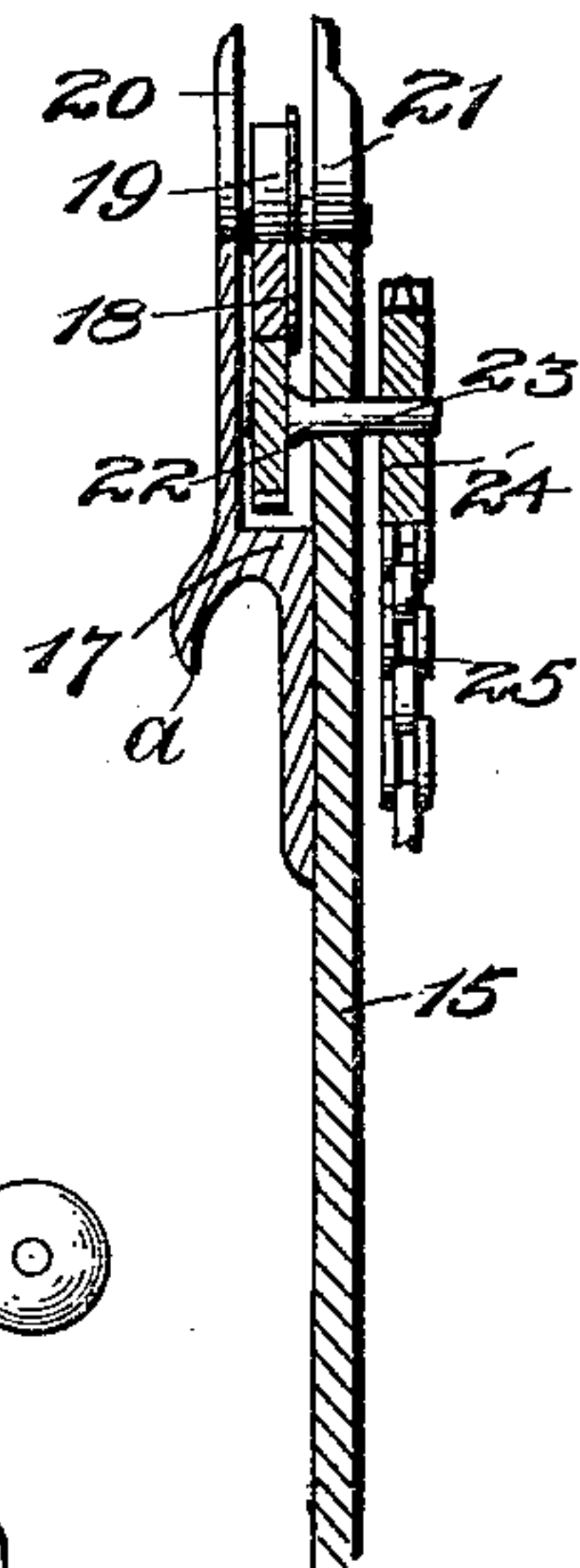
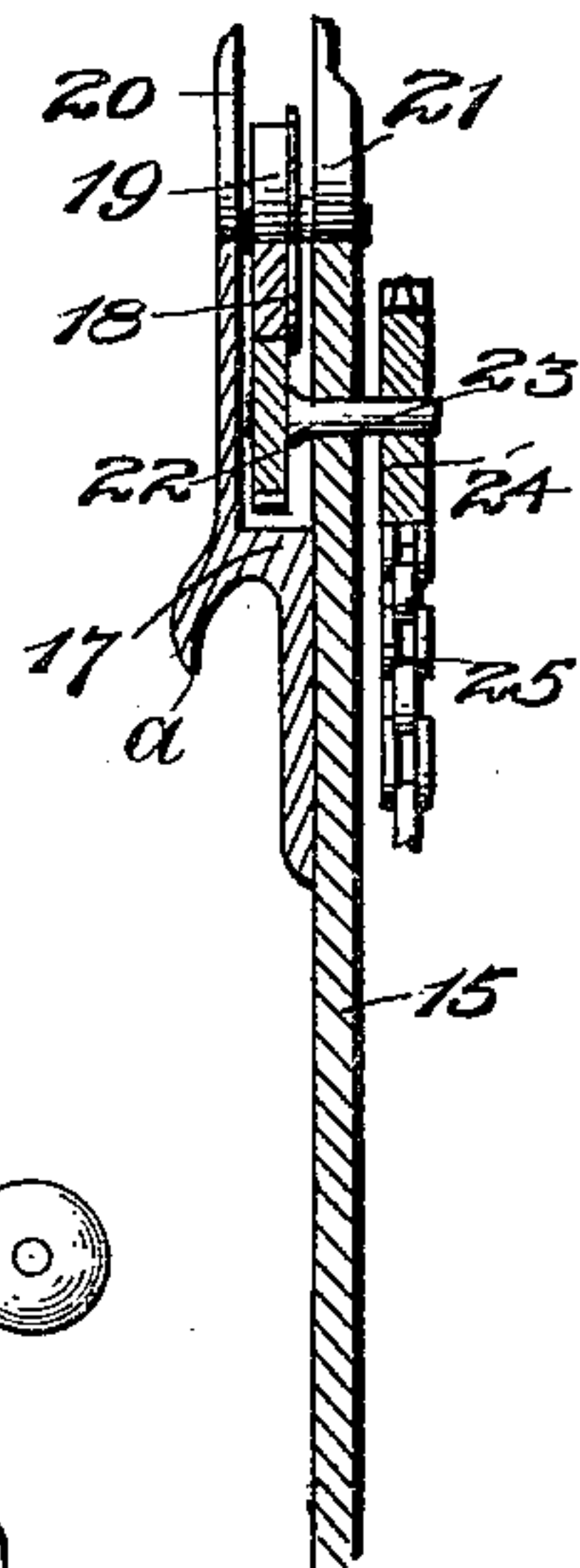


Fig. 4.

Fig. 5.



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UNITED STATES PATENT OFFICE.

JOHN T. COLLINS, OF KOKOMO, INDIANA.

WIRE-FENCE-SPACING DEVICE.

SPECIFICATION forming part of Letters Patent No. 632,987, dated September 12, 1899.

Application filed February 1, 1899. Serial No. 704,116. (No model.)

To all whom it may concern:

Be it known that I, JOHN T. COLLINS, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented certain new and useful Improvements in Wire-Fence Machines; 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.

My invention relates to wire-fence machines; and the object is to provide a simple, inexpensive, and durable machine of this character for rapidly and economically weaving or twisting the stay-wires with the horizontal wires in building a wire fence.

To this end the invention consists in the construction, combination, and arrangement of the device, as will be hereinafter more fully described, and particularly pointed out in the claim.

The accompanying drawings show my invention in the best form now known to me; but many changes in the details might be made within the skill of a good mechanic without departing from the spirit of my invention as set forth in the claim at the end of this specification.

The same reference characters indicate the same parts of the invention in the several views.

Figure 1 is a front elevation of a section of a wire fence in course of construction, showing my improved fence-machine in position. Fig. 2 is a side elevation of the spacer-bar. Fig. 3 is a vertical section of the same. Fig. 4 is a side elevation of the twisting device. Fig. 5 is a front view of the same. Fig. 6 is a longitudinal section of part of the twisting device.

1 1 denote the fence-posts, and 2 2 the horizontal fence-wires fixed thereto.

3 represents the spacing-bar, and 4 4 a series of guide-shoes fixed thereto to receive the parallel fence-wires. The top and bottom shoes are each formed with a lateral horizontal jaw 5, and above this jaw is pivoted a cam-lever 6 to engage the fence-wire and clamp it on the jaw to hold the spacing-bar in position on the fence-wires.

7 denotes a guide-bar having a longitudinal movement in the aligned staples 8 8, fixed

in one side of the spacing-bar 3, and its upper end is provided with a transverse bolt 9, on which is fulcrumed the cam-lever 10, the face of which has a bearing on the upper end of the spacing-bar.

12 denotes a spiral spring, the lower end of which is fixed to the spacing-bar 3 and its upper end to the guide-bar 7 to retract the latter when released by the cam-lever 10.

13 13 denote a series of plates fixed to the guide-bar 7 in line with all of the guide-shoes 4 4, except the top and bottom ones, and each plate is provided with a depending hook 14 to engage the fence-wire and retain it in its contiguous shoe.

The twisting device consists of a straight bar 15, the lower end of which is provided with a handle 16, and 17 denotes a parallel bracket fixed to the upper end of said bar to receive the twister-gear 18, the said gear being formed with a radial slot 19, which is arranged to be brought into alinement with correspondingly-aligned guide-slots 20 21 in the ends of the bar and bracket. A gear-wheel 22 meshes with said twister-gear 18, and it is fixed on a shaft 23, journaled in the bar and bracket, and its end projects through the bar to receive the sprocket-wheel 24, from which a sprocket-chain 25 extends to a similar sprocket-wheel 26, provided with a crank-handle 27 and loosely mounted on a stud-shaft 28, fixed on the bar 15.

The operation is as follows: The spacing-bar 3 is fixed to the fence-wires, as heretofore described, and a piece of stay-wire of the proper length is now placed parallel with the uppermost fence-wire, with its end held in this position. The opposite end of the stay-wire is now held parallel with the uppermost fence-wire, and in this position the twister-bar 15 is applied, so as slip the twister-gear 18 over the two wires, and the crank-handle 27 is now rotated to twist the stay-wire about the fence-wire, as shown. The stay-wire is now carried down to the next lower fence-wire and turned parallel with it and the twist formed, as before, and so on down to the lowermost fence-wire, which is treated in a like manner. The spacing-bar is then advanced to the next position for a stay-wire, and the same operation is repeated until the fence is completed.

While I have shown the the twister-gear 18 arranged to be rotated by the sprocket-wheels and chain, it is evident that a series of intermeshing gears may be employed instead
5 when desired.

In Figs. 5 and 6 I have shown the frame of the twisting device provided with a hook *a*, by means of which it may be conveniently suspended from the fence-wires while the
10 spacing and clamping device is being changed from one position to another.

Having thus fully described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States,
15 is—

In a device of the class described, the spacing-bar 3, the guide-shoes 4 formed with the

jaw 5, and the coacting cam-lever 6 pivoted thereto, in combination with the guide-bar 7 having a sliding engagement with said spacing-bar, the cam-lever 10 fulcrumed on said
20 guide-bar and in operative contact with the contiguous end of the spacing-bar, the retractile spring 12, coacting with the guide and spacing bar, and the hooked plates 13 carried
25 by said guide-bar, substantially as shown and described.

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

JOHN T. COLLINS.

Witnesses:

CHAS. DEHAVEN,
N. B. SMITH.