

(No Model.)

R. & A. ELLWOOD.

WIRE STRETCHER.

No. 260,957.

Patented July 11, 1882.

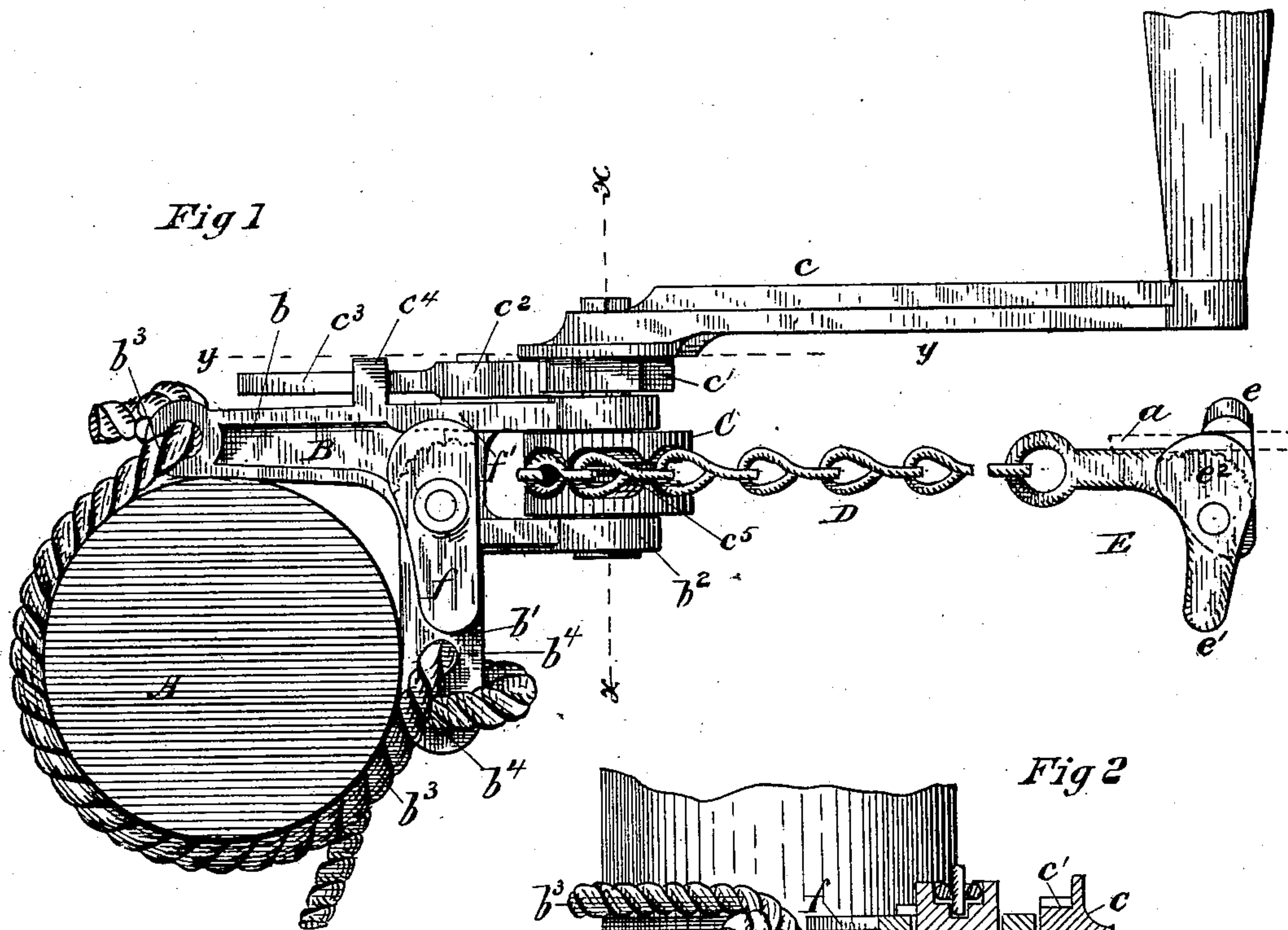


Fig 1

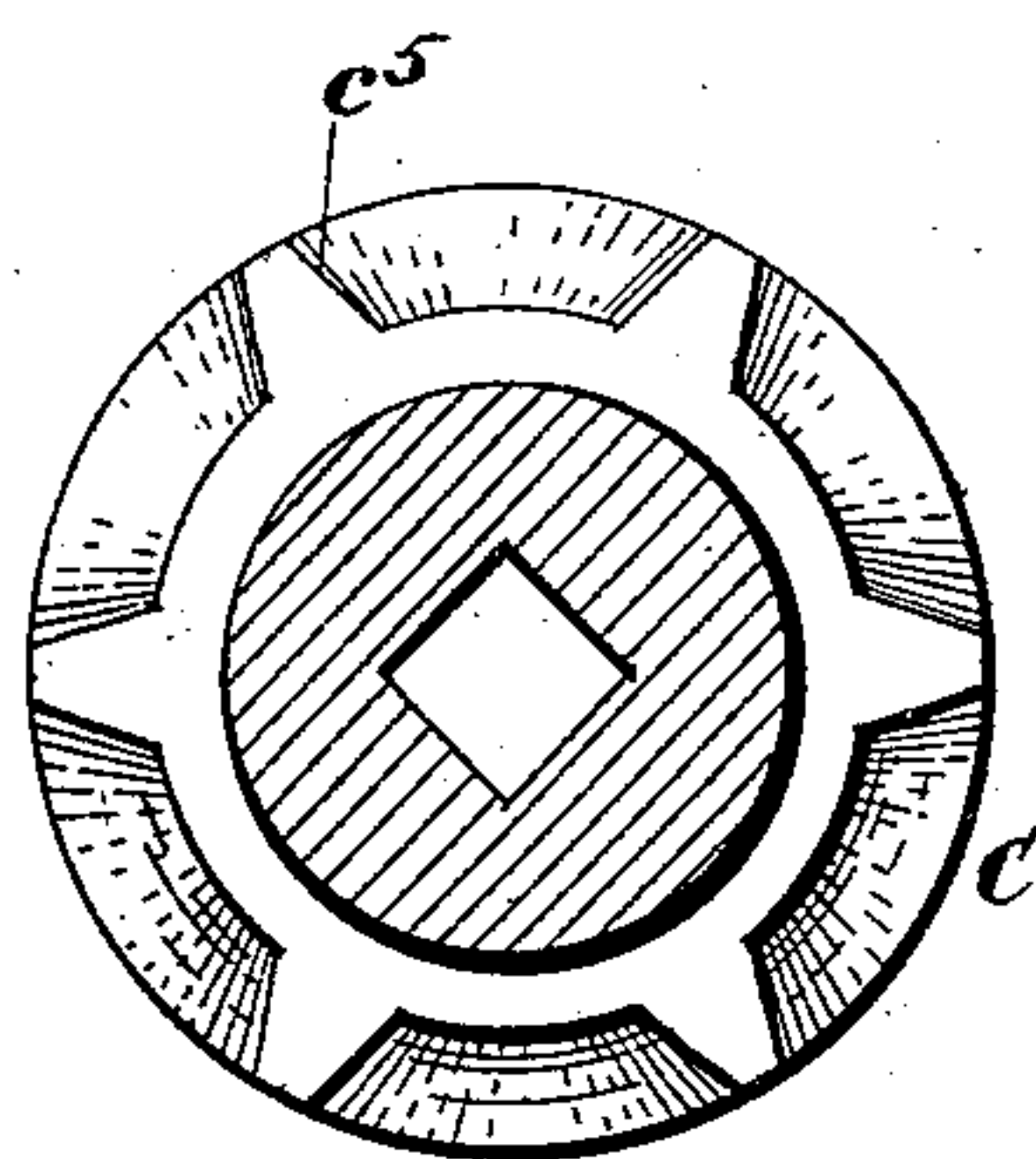


Fig 4

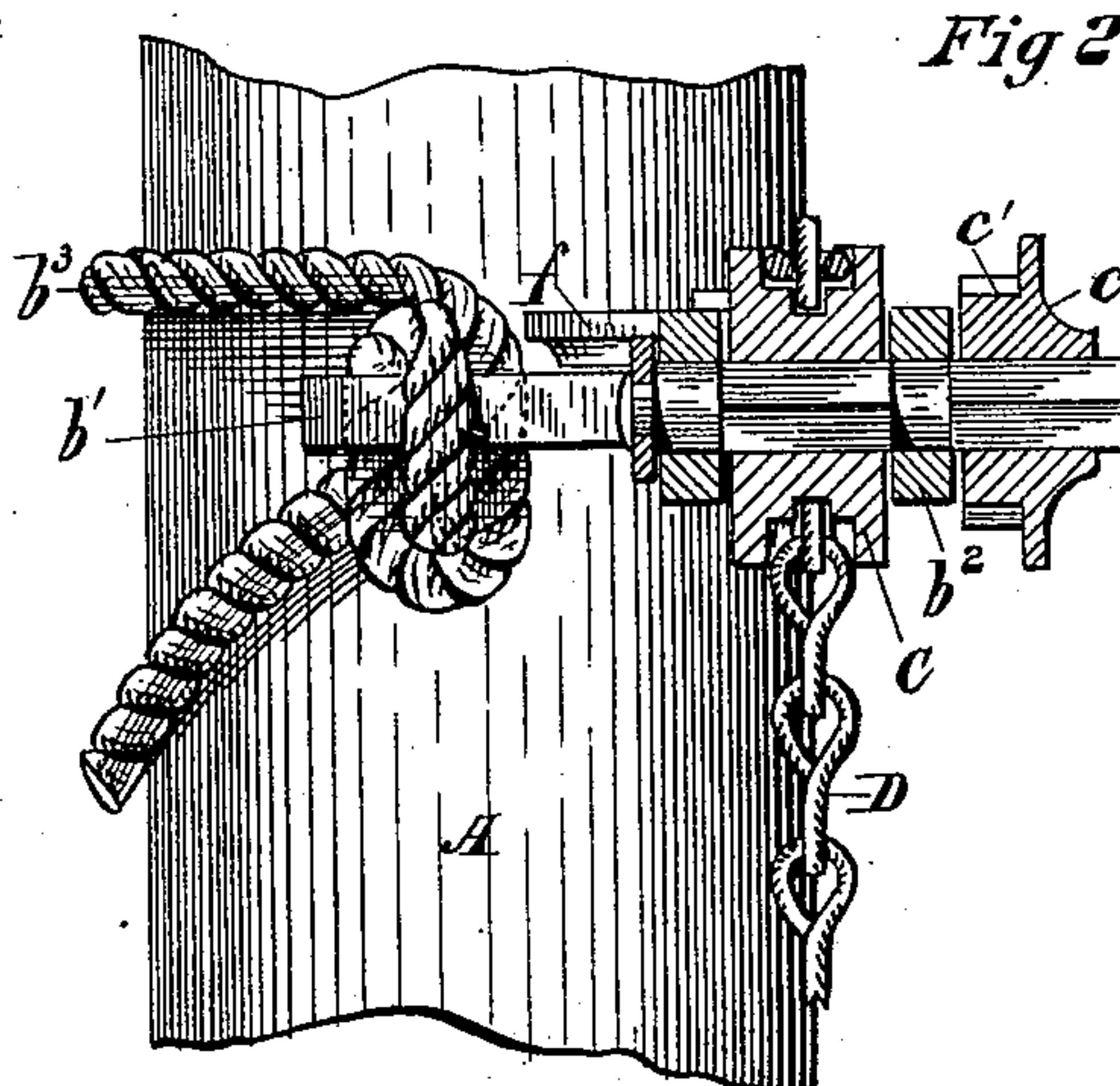


Fig 2

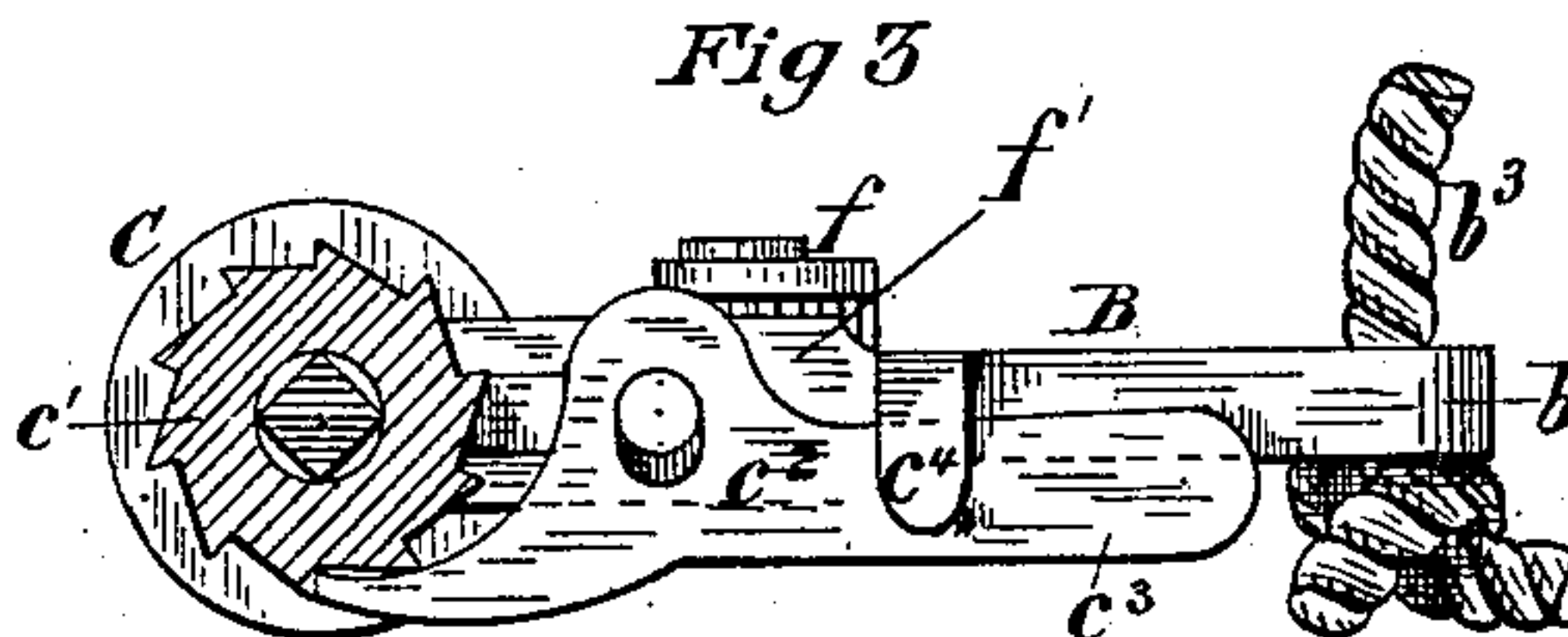


Fig 3

Witnesses

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UNITED STATES PATENT OFFICE.

REUBEN ELLWOOD AND ABRAM ELLWOOD, OF SYCAMORE, ILLINOIS.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 260,957, dated July 11, 1882.

Application filed February 2, 1882. (No model.)

To all whom it may concern:

Be it known that we, REUBEN ELLWOOD and ABRAM ELLWOOD, of Sycamore, in the county of DeKalb and State of Illinois, have invented certain new and useful Improvements in Wire-Stretchers, of which the following is a full and clear description, reference being had to the accompanying drawings, which form a part of our specification.

Figure 1 represents a plan view of our improved wire-stretcher. Fig. 2 is a vertical section of the same, taken on the line $x x$, Fig. 1; Fig. 3, a detail section of the same, taken on the line $y y$, Fig. 1. Fig. 4 is a central section of the sprocket-wheel.

Our invention relates to wire-stretchers designed for use in making wire-fences.

Our invention consists in a device whereby wire-stretchers are made susceptible of being readily attached to a post or other substantial article for holding the stretcher in place.

In the accompanying drawings, A represents a post or other rigid fixture to which the wire-stretcher may be attached.

B is the frame of the wire-stretcher, consisting of two arms, $b b'$, and a yoke, b^2 .

b^3 is a rope, which is readily affixed to the arms of the wire-stretcher frame B, by passing through holes or slots in the ends of said arms, substantially as shown in the drawings. We have shown in the end of the arm b' two holes, b^4 , through which the end of the rope passes, and is then tucked through the loop formed thereby to make a secure fastening, as clearly shown in Fig. 2.

C is a sprocket-wheel whose spindle or shaft has bearings in the frame B, as is clearly shown in the drawings. This sprocket-wheel is so attached to its spindle or shaft as to turn with it.

c is a crank with which the sprocket-wheel is turned.

c' is a ratchet upon the spindle of the sprocket-wheel, having its pawl, c^2 , pivoted to the frame B of the wire-stretcher. This pawl is more clearly shown in Fig. 3. Its long end c^3 , being its heavier end, keeps it engaged with the ratchet while it is held in place by means of its guide c^4 , and the depth of the slot in the pawl where it is pivoted is so great that when the stretcher is by accident or design turned upside down the pawl is supported only by the

ratchet and the shank which supports the guide c^4 , in which position the pawl becomes an ordinary one, its retaining end resting on the ratchet by its own weight.

D is a chain adapted to engage with the sprocket-wheel by resting in the sprocket of the wheel, as clearly shown in Fig. 1. Any form of sprocket-wheel may be used in place of the special form here shown, but we find this form well adapted to our use. The chain does not wind upon the sprocket-wheel, but simply passes over it and hangs down loosely, as shown in Fig. 2.

E is an eccentric clamp, having a stationary jaw, e , with an eccentrically-pivoted jaw, e' . By turning this jaw e' upon its pivot its upper part, e^2 , is turned away from the jaw e , so that the wire to be stretched (represented by a) can be placed between them and there clasped by the two jaws in such a manner that the greater the strain put upon the chain D to stretch the wire the more tightly the eccentric clamp will clasp the wire between its jaws $e e'$.

f is also an eccentric clamp, pivoted to the frame B in such a manner that the wire can be clamped between it and the stationary shoulder f' , on the frame B. This clamp is placed upon the frame to operate in such a manner that when it is desired to bring together the ends of two wires one wire can be placed in the clamp $f f'$ and the end of the other wire taken in the clamp E, and the two wires drawn together.

The operation of our wire-stretcher is as follows: When it is desired to secure the stretcher to the post A it is immediately and readily secured thereto by means of the rope b^3 . The end of the wire that it is desired to stretch is then placed in the clamp E and stretched by the operator's turning the sprocket-wheel C, by means of the crank c . The pawl c^2 holds the sprocket-wheel from reversing, and keeps the tension of the wire to any point to which it is strained. When the wire is stretched to the point desired it is then secured by attaching it to its post or to another wire, as may be desired. When it is simply desired to bring the ends of two wires together, one wire is put in the clamp $f f'$ and the other wire taken hold of by the clamp E, and the two drawn together by turning the sprocket-wheel, as above described.

It will be readily seen that the chain simply passes over the sprocket-wheel and can be readily removed therefrom to attach its clamp E to the wire. Our wire-stretcher can be readily attached to a post or other similar article, and is very simple of construction and easily operated.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

The wire-stretcher frame B, provided with the holes *b*⁴, in combination with the rope, substantially as set forth.

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Witnesses:

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