

(No Model.)

J. B. McNELLY.
WIRE STRETCHER.

No. 427,787.

Patented May 13, 1890.

Fig. 5.

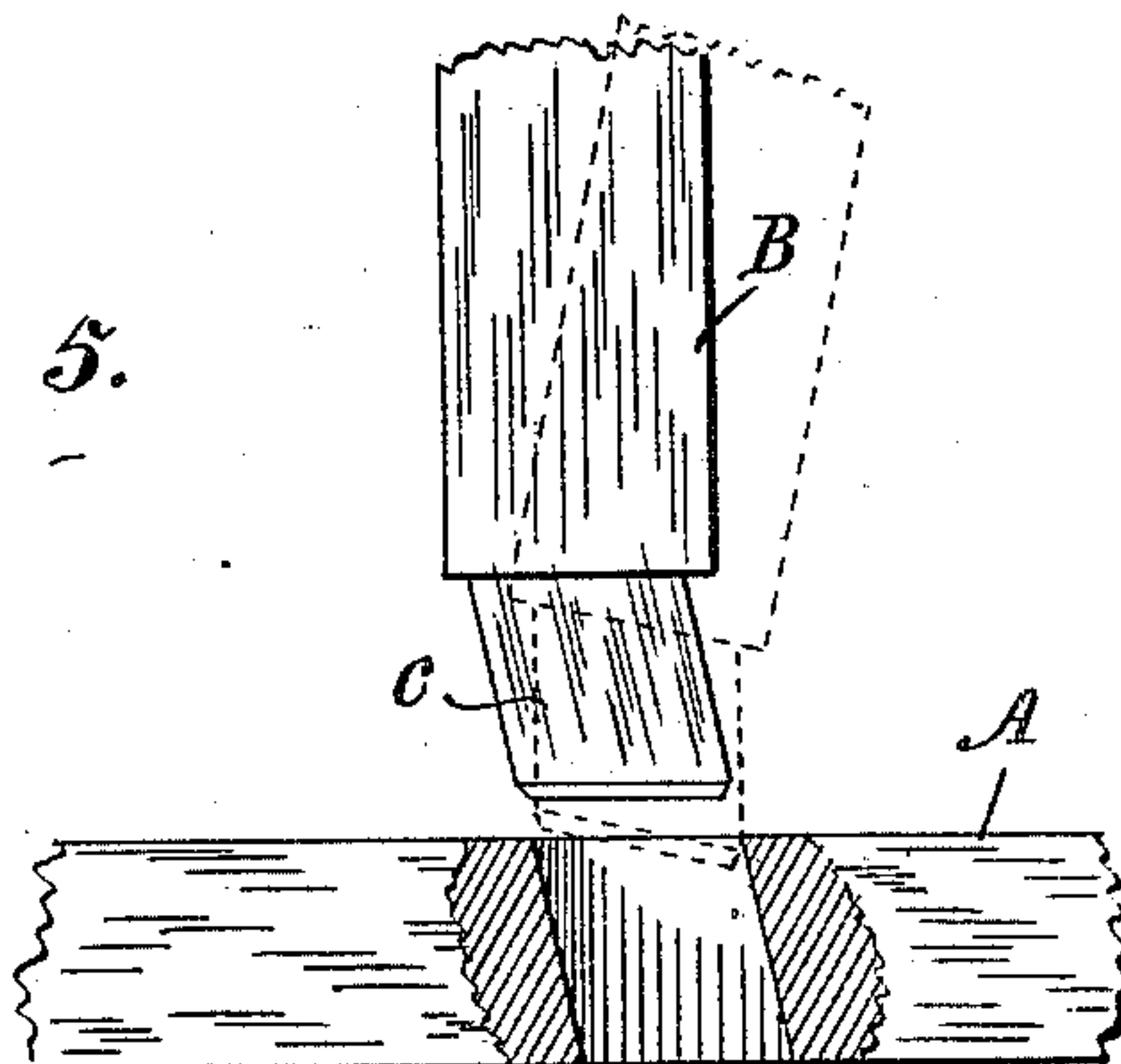


Fig. 4.

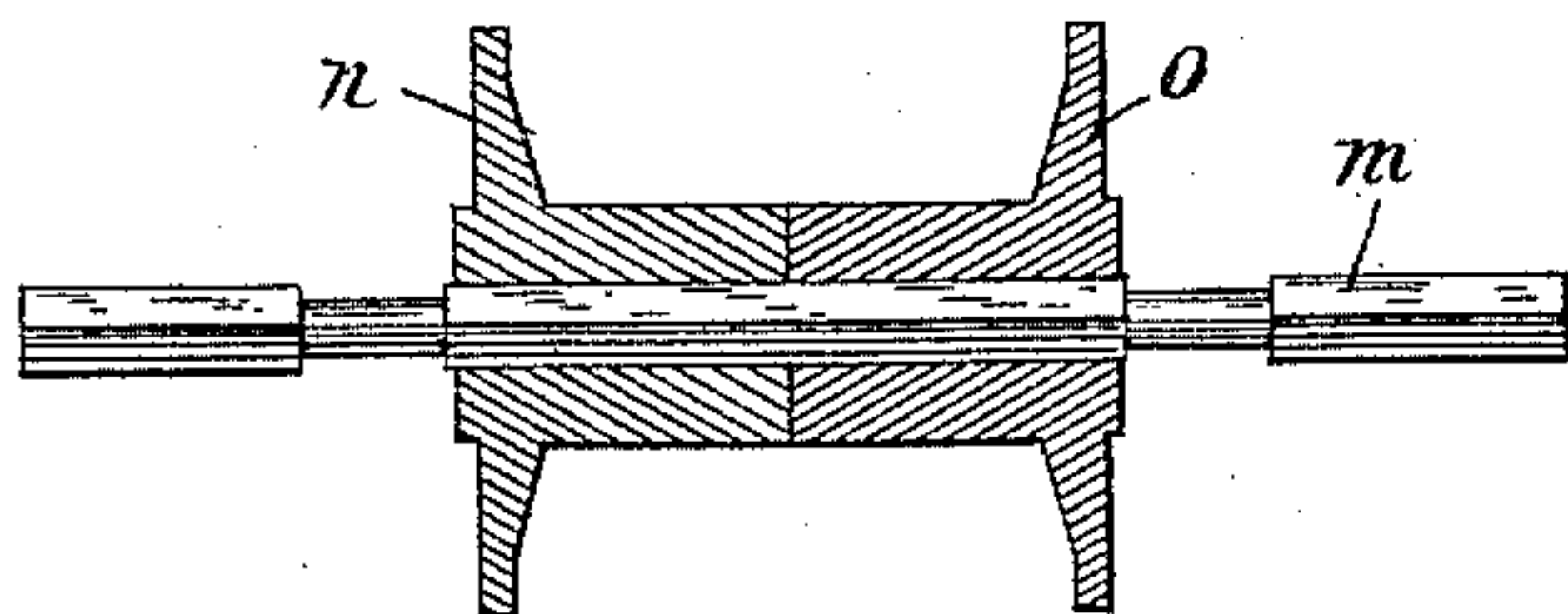


Fig. 3.

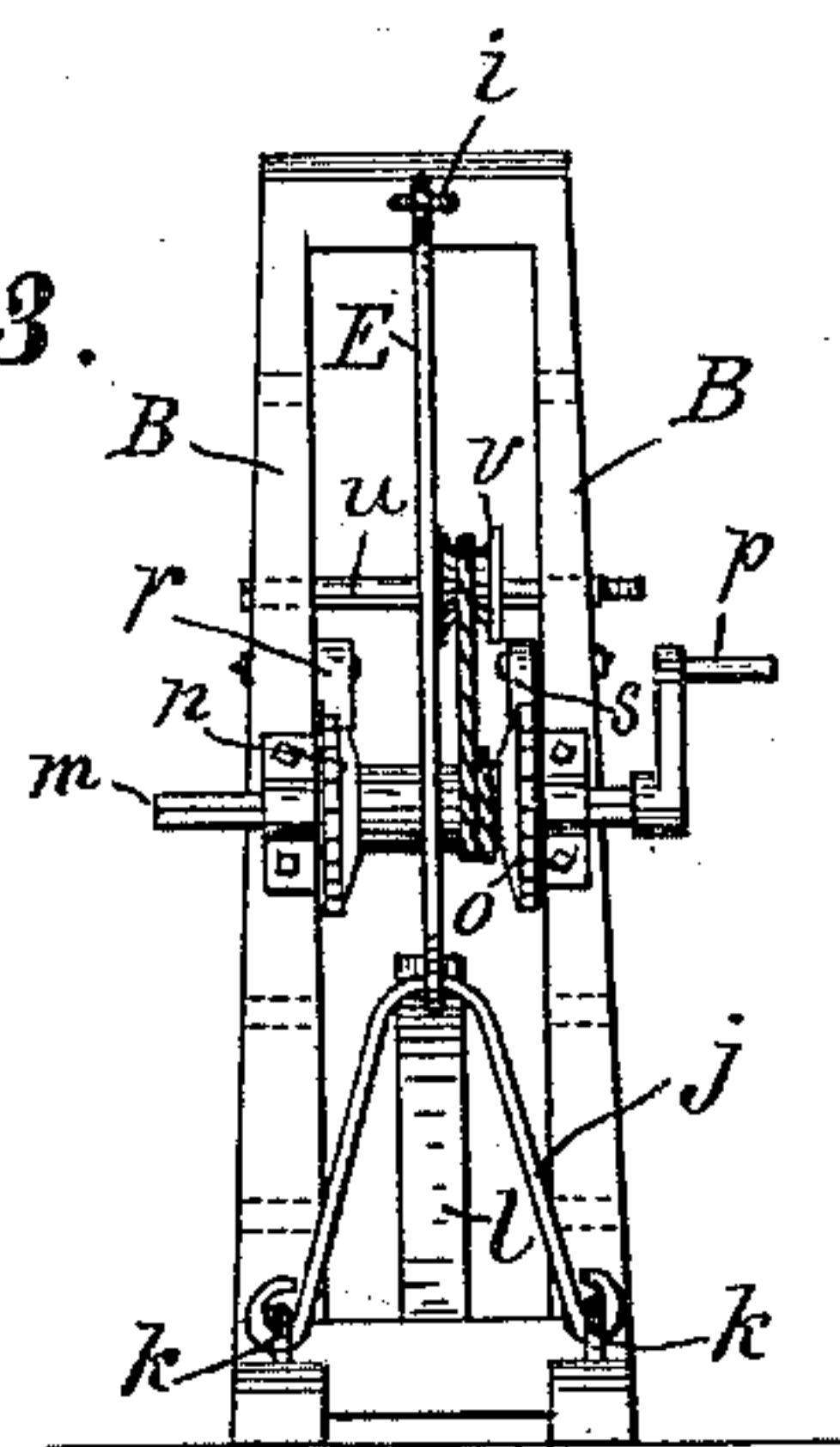


Fig. 2.

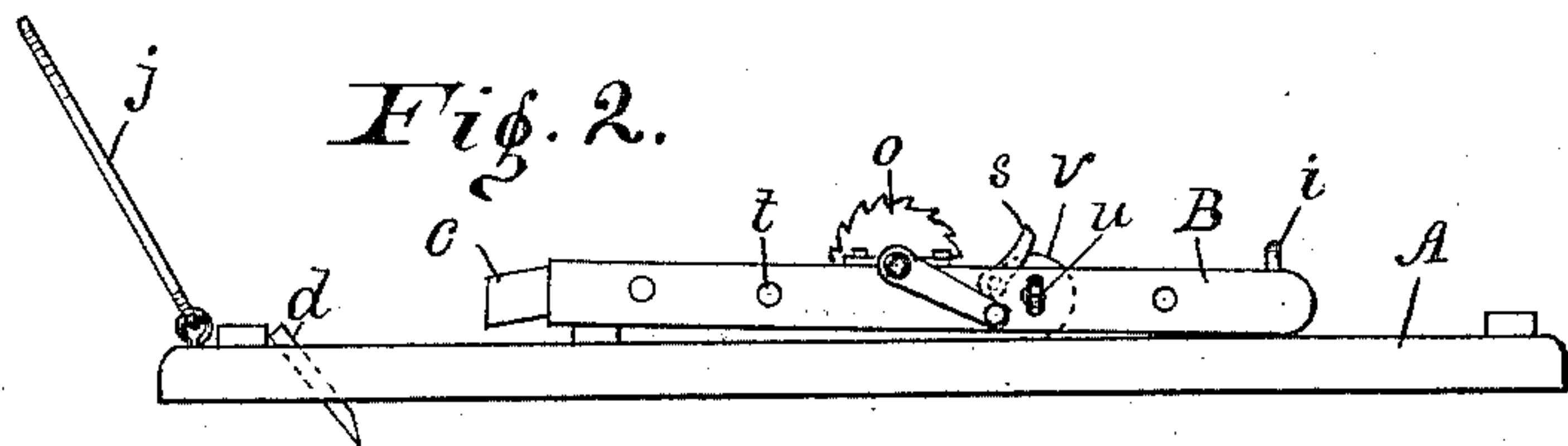
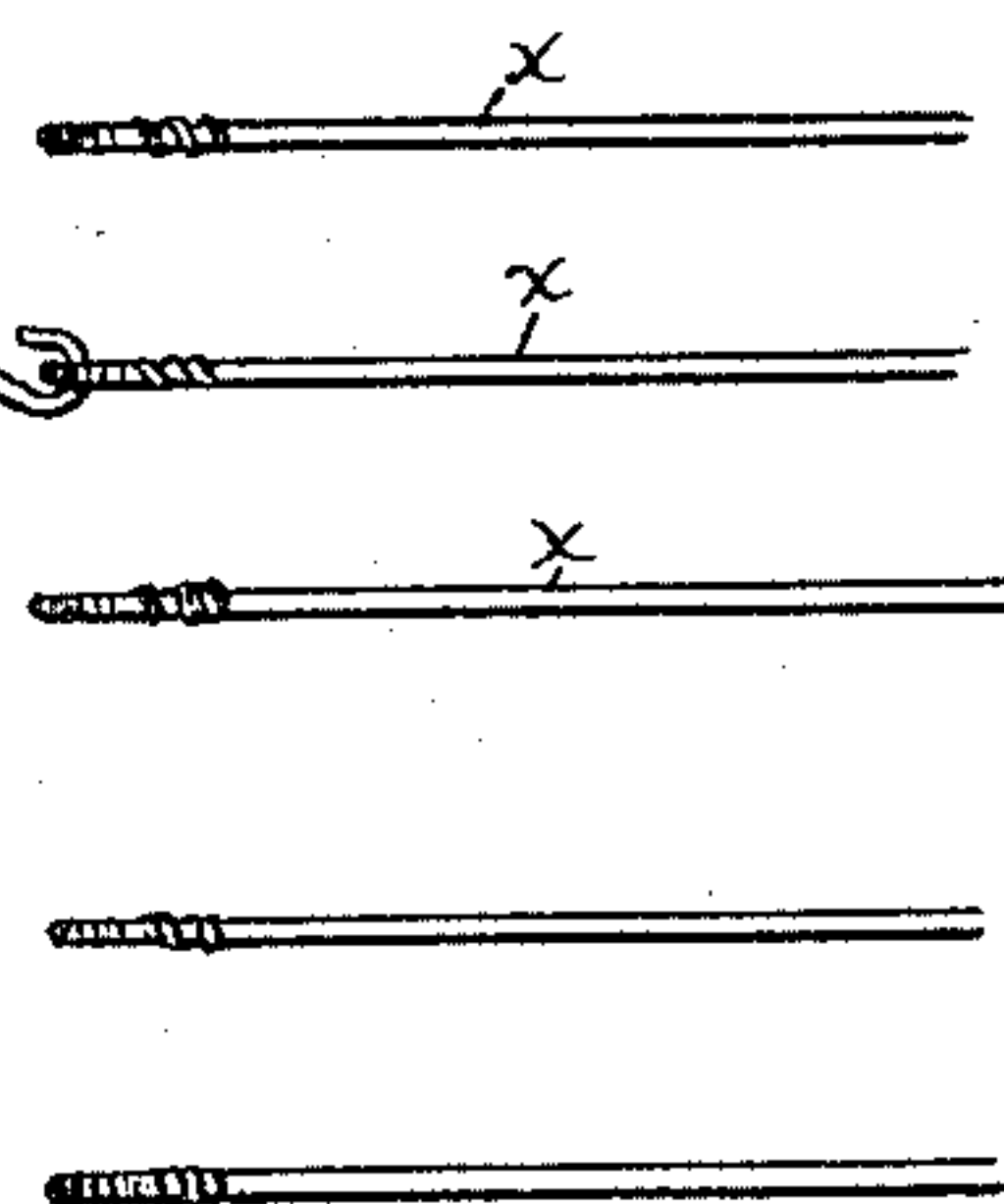
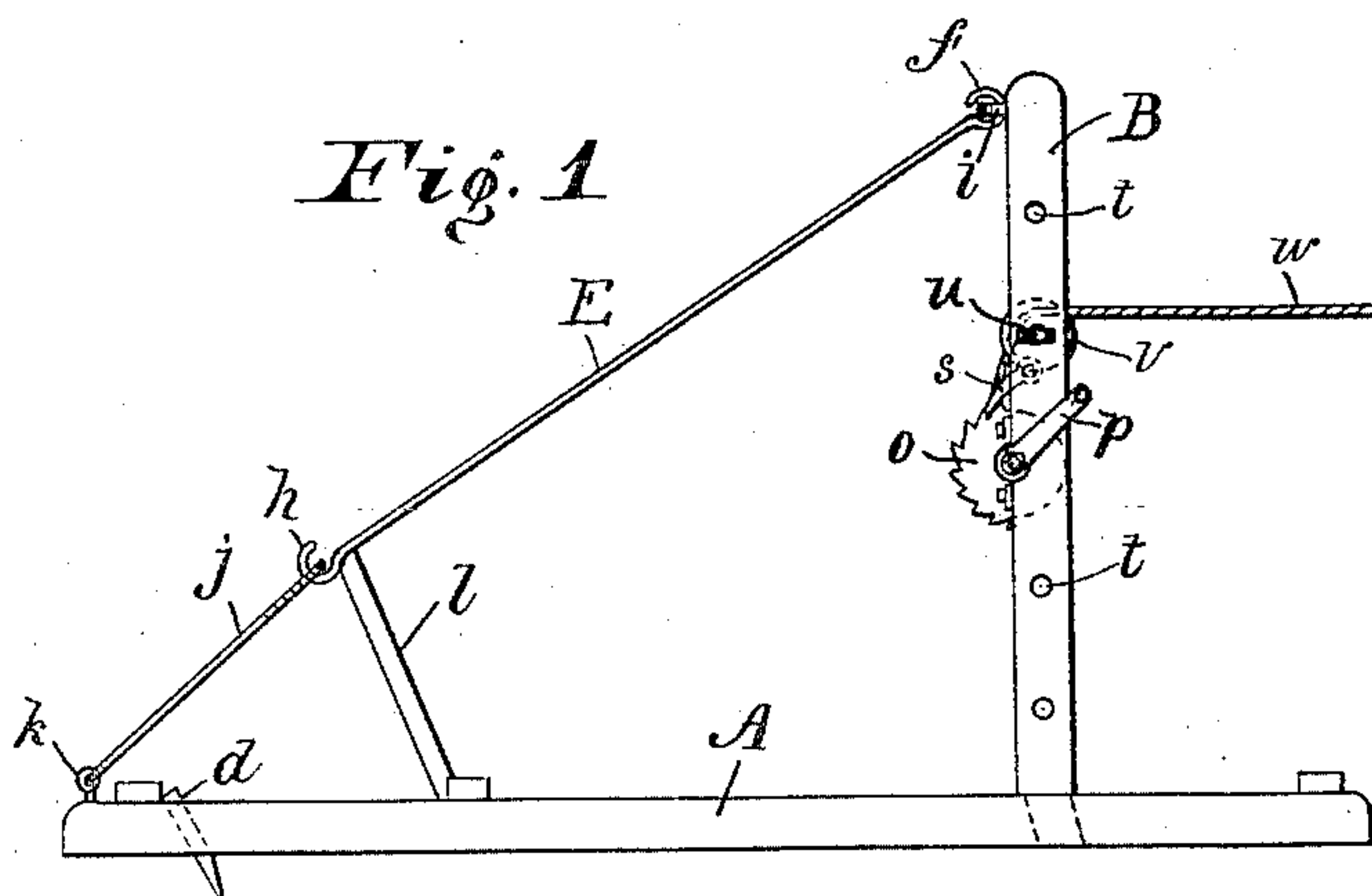


Fig. 1.



Witnesses

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UNITED STATES PATENT OFFICE.

JOSEPH B. McNELLY, OF BROWN'S VALLEY, INDIANA.

WIRE-STRETCHER.

SPECIFICATION forming part of Letters Patent No. 427,787, dated May 13, 1890.

Application filed November 11, 1889. Serial No. 329,852. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH B. McNELLY, a citizen of the United States, residing at Brown's Valley, in the county of Montgomery and State of Indiana, have invented a new and useful Improvement in Wire-Stretchers, of which the following is a specification.

My invention relates to an improved device for stretching fence-wires.

10 The objects of my improvement are to provide a device of the class mentioned which may be easily constructed so as to be folded into compact form when not in use, and in which means are provided whereby a series of
15 wires arranged horizontally one above the other, as in a fence, may be stretched in different parallel planes by a single windlass, all as hereinafter fully described.

20 The accompanying drawings illustrate my invention.

Figure 1 is a side elevation showing the machine in position for operation. Fig. 2 is a similar view showing the machine folded for transportation or storage. Fig. 3 is a front
25 elevation. Fig. 4 is a view of the windlass on a larger scale, showing its construction. Fig. 5 is a detail view showing the construction of the tenons on the upright portion of the frame.

30 The main frame of my stretcher consists of a bed-piece A, on which is erected near one end the vertical frame B. Bed-piece A is provided at one end, on the under side, with inclined anchor-pins *d*. Frame B is detachably connected with the bed-piece A by means of
35 a pair of tenons like *c*, Fig. 5, formed on the lower end of frame B. The edges of tenons *c* are inclined at an acute angle to the vertical plane of frame B, and they fit into correspondingly-inclined mortises in the bed, the arrangement being such that the tenons hook into the
40 bed-piece and hold firmly therein when the frame B is held in a vertical position by the stay-rod E, but may be easily withdrawn from the mortises when the frame is inclined away from the stay-rod, as indicated in dotted lines, Fig. 5. Stay-rod E is provided at opposite
45 ends with hooks *f* and *h*, one of which engages an eyebolt *i* in frame B, and the other engages a bail *j*, which is connected by eyebolts *k k*
50 with the bed-piece A. For the purpose of making the stay taut after it has been attached to the frame and to the bail, the bail

and rod are raised at their point of connection by a removable strut *l*. Mounted on one side of frame B in suitable bearings is a windlass consisting of a shaft *m*, having a pair of
55 circular serrated flanges *n* and *o* keyed thereon, and a crank *p*. Shaft *m* is formed, preferably, of a square bar of iron having cylindrical journals formed a short distance from
60 each end and adapted to fit the bearings on the frame. The flanges are formed of cast-iron and are provided with a central square hole, which fits the shaft. Pivoted to the inner sides of frame B are a pair of pawls *r s*,
65 which engage the serrations in the flanges. The posts forming the sides of frame B are each provided with a series of holes *t*, arranged above and below the windlass and adapted to receive and sustain a short horizontal shaft *u*,
70 which extends across the open space between the sides of the frame and carries a sheave-pulley *v*, adapted to turn on and to slide freely along the shaft. A stout rope *w*, preferably
75 of wire, is attached at one end to the windlass, and is provided at the other end with a hook or other suitable means for seizing either of the fence-wires *x*.

In operation, when not in use, frame B and the stay-rod lie horizontally along the top of
80 the bed-piece, as in Fig. 2, and bail *j* is swung forward and forms a handle for drawing the machine from place to place. In use the tenons *c* are inserted in the mortises in the bed-piece, while the frame B is in an inclined position.
85 The frame is then raised to a vertical position, beyond which it is prevented from passing by the hooked form of the tenons. Stay-rod E is next connected at opposite ends with the top of frame B and the bight of the bail *j*. Strut
90 *l* is now put in place, making the stay taut and firmly locking frame B in position. Shaft *u* is now adjusted in one of the series of holes *t*, so as to bring the top of sheave *v* in line with the first wire to be stretched. Rope *w* is then
95 passed from the windlass over the sheave-pulley *v* and attached to the wire to be stretched, thus bringing the line of draft from the windlass directly in line with the line of wire which is to be stretched. The windlass is then turned,
100 and is held by one or both of the pawls *r* and *s* until the wire has been secured. Shaft *u* is then lowered to the level of the next wire, and so on until all have been stretched.

I claim as my invention—

The above-described wire-stretcher, consisting of the horizontal bed-piece A, having in its upper face a pair of inclined mortises, the
5 vertical frame B, having inclined tenons *c* and a series of transverse shaft-bearings *t*, the bail *j*, hinged to the forward end of the bed-frame, the stay-rod E, arranged to connect the top of the vertical frame and the bail, the windlass
10 constructed substantially as shown and described and mounted on the vertical frame,

pawl *r*, arranged to engage the windlass, shaft *u*, mounted in one of the series of transverse bearings in the vertical frame and carrying pulley *y*, and rope *w*, secured to the windlass 15 and passing over pulley *y*, all combined and arranged to co-operate as set forth.

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Witnesses:

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