

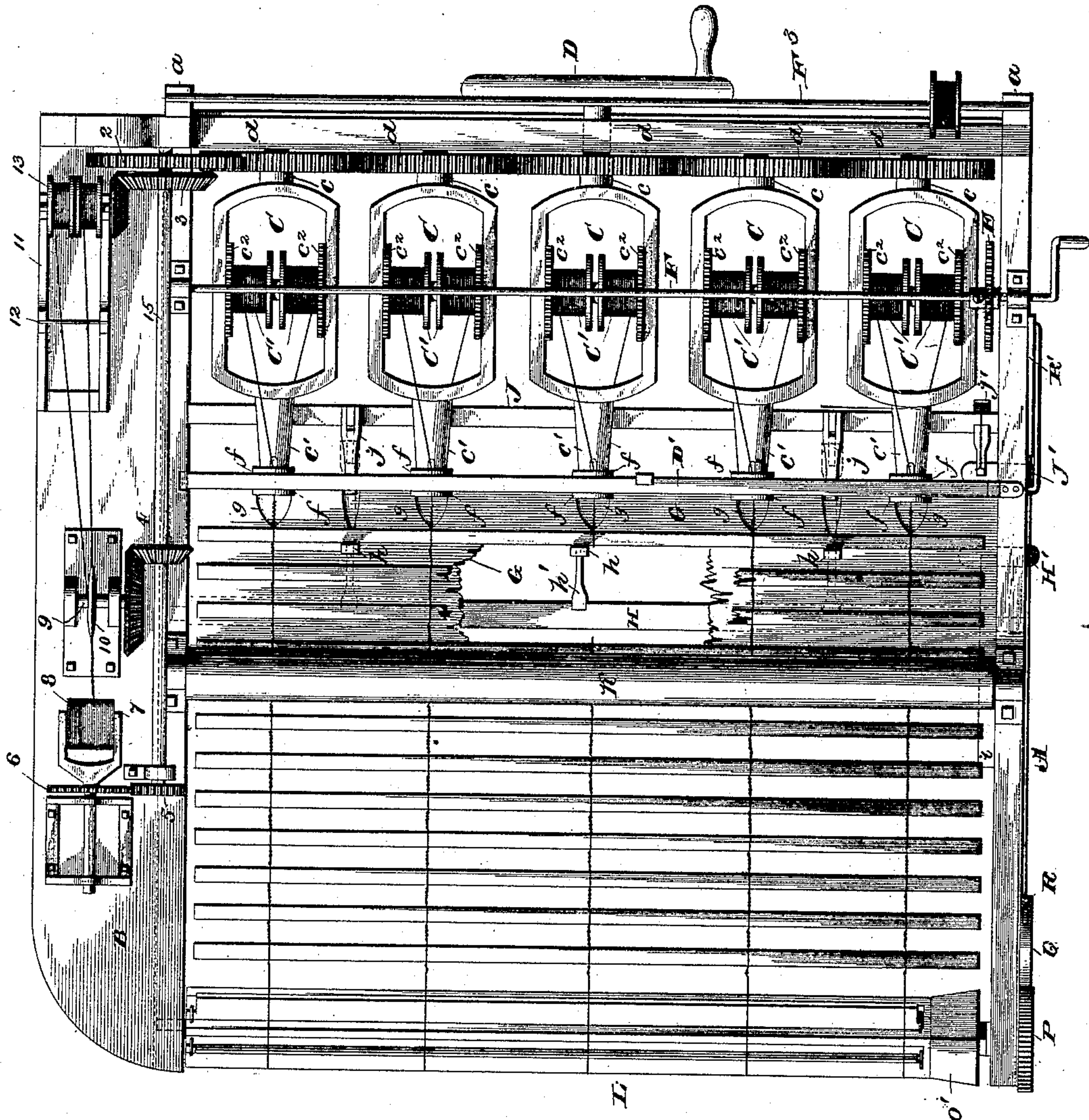
(No Model.)

3 Sheets—Sheet 1.

J. W. ROBERTS.  
WIRE FENCE MACHINE.

No. 387,108.

Patented July 31, 1888.



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WITNESSES.

*G. S. Elliott.*  
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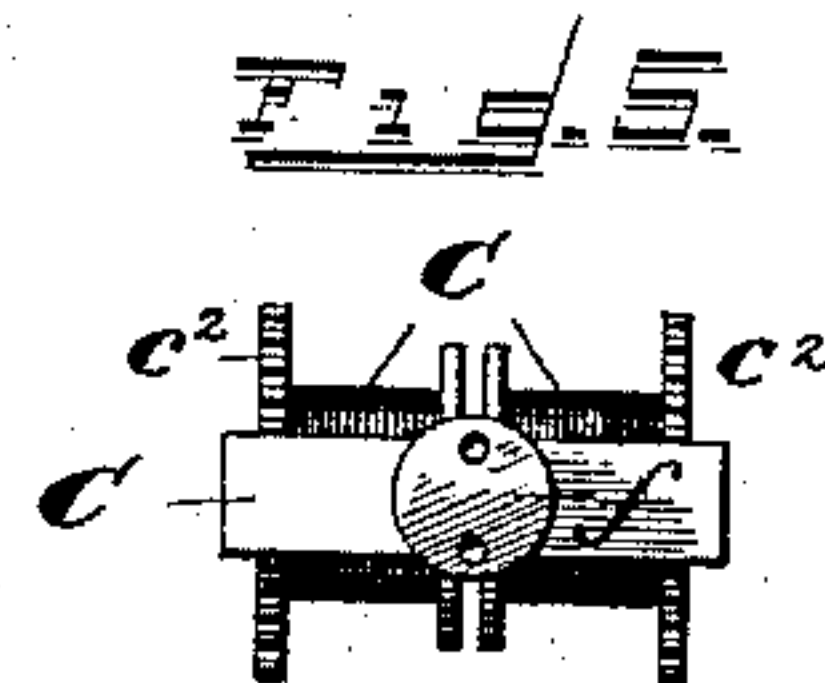
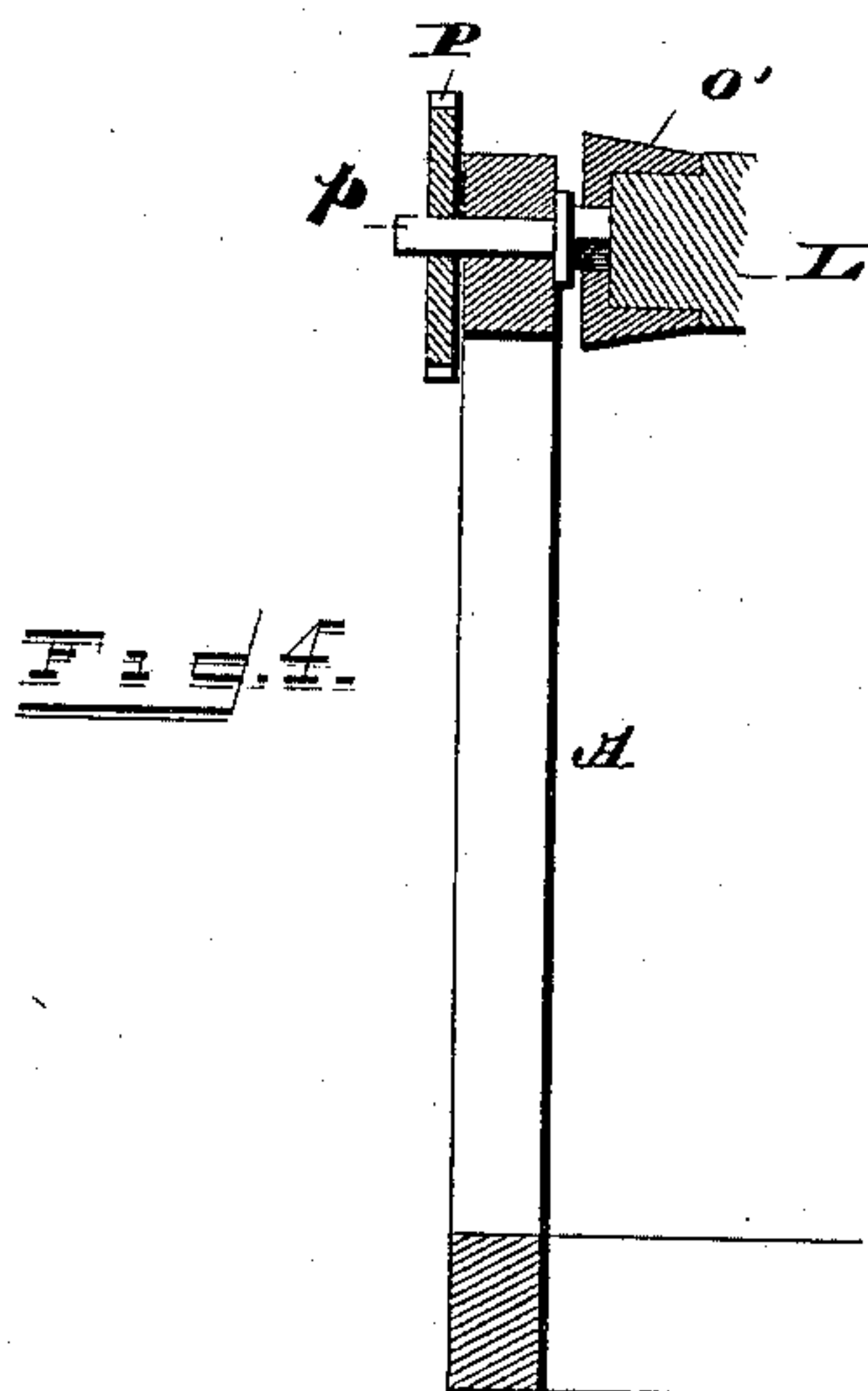
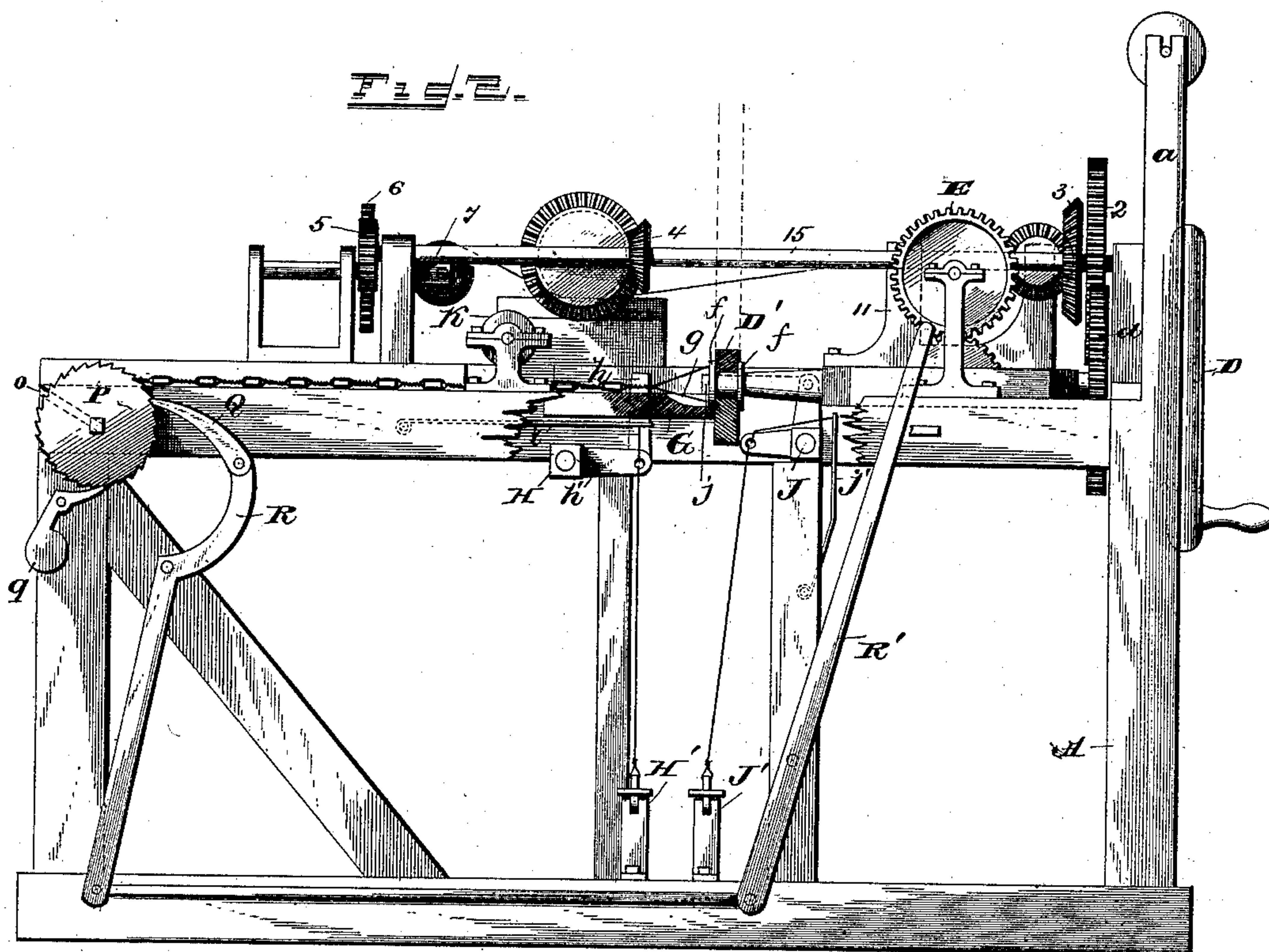
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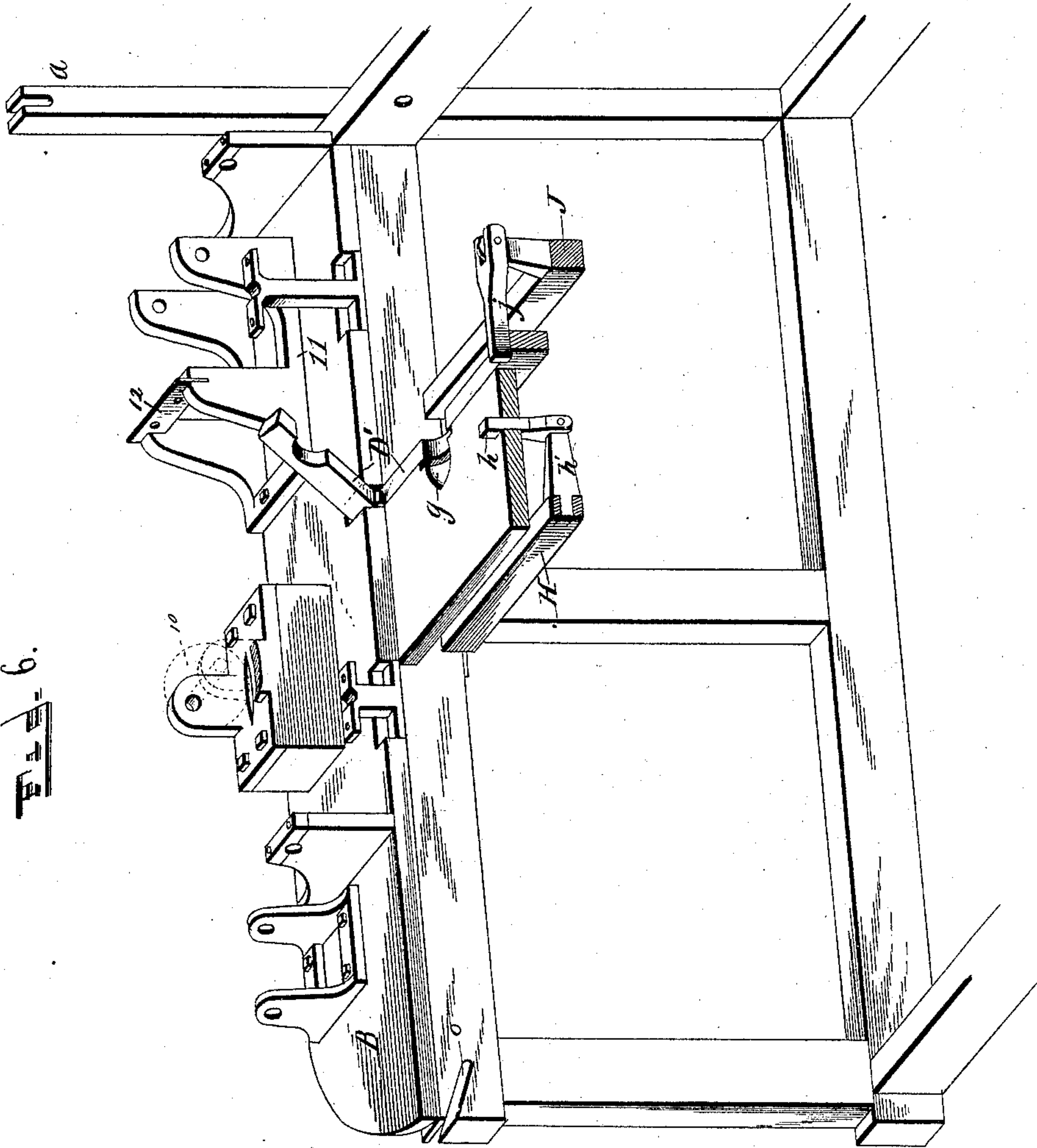
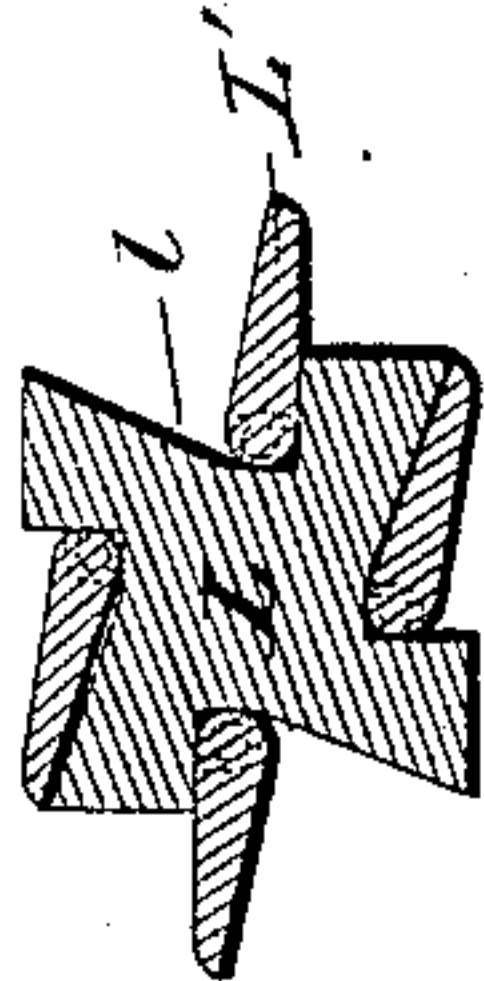


Fig. 6.

Fig. 3.



WITNESSES.

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# UNITED STATES PATENT OFFICE.

JOHN W. ROBERTS, OF CLARINDA, IOWA.

## WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 387,108, dated July 31, 1888.

Application filed March 1, 1888. Serial No. 265,826. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN W. ROBERTS, a citizen of the United States of America, residing at Clarinda, in the county of Page and State of Iowa, have invented certain new and useful Improvements in Wire-Fence Machines; and I do hereby 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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

My invention relates to that class of fence-machines wherein wood palings or laths are united by wire to form a continuous fence or web, the object of my improvement being to provide a wire-fence machine and supplemental devices therefor by means of which wires can be wound upon the bobbins and fed therefrom so as to twist the wires around the slats or pales.

The machine also embodies devices for separating barb-wire, removing the barbs therefrom, and coiling said wire upon spools in a condition for use with the wire-fence machine.

Other features and objects will be pointed out and made apparent in the following specification.

The invention consists in the construction and arrangement of the parts appertaining to the wire-fence machine, as will be hereinafter fully set forth and specifically claimed.

In the accompanying drawings, wherein like letters of reference indicate similar parts in the several views, Figure 1 is a plan view of a wire-fence machine constructed in accordance with my invention. Fig. 2 is a side view. Fig. 3 is a sectional view of the fence-receiving reel or roller. Fig. 4 is a detail sectional view. Fig. 5 is a detail view. Fig. 6 is a sectional detail perspective of a part of the machine.

A refers to the frame of the machine, which is provided at one end with upwardly-extending corner-posts *a*, and to one side of this frame is secured a shelf, B, which is supported by suitable brackets. This shelf B and the mechanism carried thereby can be removed from the main portion of the machine without in any way affecting its operation.

C refers to the spool-carrying frames, which

are preferably five in number. These spool-carrying frames have at opposite ends projecting shafts *c* and *c'*. The shafts *c* are squared before entering their bearings, so as to receive cog-wheels *d d*, which mesh with each other, so that the spool-carrying frames, when the central cog-wheel is turned, will rotate at the same rate of speed.

The central spool-carrying frame has its shaft *c* extended through the supporting frame, and to the end thereof is attached a driving-wheel, D. The shafts *c'* have their bearings in a separable transverse bar, D', the upper portion of said bar being held in place by spring-catches, so that any one of the spool-carrying frames may be removed when desired. Upon each side of this transverse bar D' the ends of the shaft *c'* have formed collars *f*, and the ends of these shafts, with their perforations, form the twister-heads.

The spools C' are mounted loosely on removable shafts, and one of the flanges or heads of each of the spools is formed into a gear-wheel, *c''*, adapted to mesh with a gear-wheel, E, adjustable longitudinally upon a transverse shaft, F, located above the spool-carrying frames, so that said gear-wheel E may slide upon its shaft, so as to contact with the gear-teeth of any one of the spools, so as to rotate said spool and wind the wire thereon from a spool or spools mounted upon a parallel shaft, F<sup>3</sup>, supported by the standards *a a*.

The main frame A at the rear of the transverse bar D is provided with a board or platform, G, the front edge of which, directly opposite the twister-heads of the spool-carrying frames, is cut away to form recesses *g*, as clearly shown in Fig. 2. Back of these recesses this board G has vertical openings, through which pass the ends of upwardly-projecting bars *h*. These short bars are pivotally secured at their lower ends to crank-arms *h'*, which are rigidly connected to a transverse shaft, H, which is pivotally attached to the frame under the transverse board or table G, and one of the projecting arms *h'* is connected to a suitable spring, *i*, which holds the bar *h* normally in an elevated position above the edge of the table. The arms *h'* are also connected to a foot-treadle, H', for depressing the bars *h*. After the pickets or slats have been placed between the wires one edge thereof is brought



in contact with the bars *h h* by the pressers *j*, which are pivotally attached to projecting arms of a rock-shaft, *J*, which is connected to a treadle, *J'*. These presser-bars *j* are held normally retracted by a spring, *j'*, attached to the frame and connected to one of the crank-arms of the rocker-shaft *J*.

Upon the main frame, back of the board or table *G*, is mounted a roller, *K*, beneath which the fence passes to the receiving reel *L*, which is removably journaled to the rear end of the main frame.

The receiving-reel *L* for the wire-and slat fence is provided with longitudinal recesses *l*, within which are pivotally secured slats *L'*, which will unfold or turn out, as shown in Fig. 3, when the fence is wound thereon; and these slats may be folded down within the recesses *l*, so as to decrease the diameter of the roller, when it is desired to remove the fence therefrom. The one end of the shaft *L* is provided with a pin, which has a bearing in the lower end of an inclined slot, *o*, and to the opposite end of said shaft is attached a cap, *o'*, having a rectangular opening, in which will fit a squared end of a shaft, *p*. Upon this shaft *p* is attached a ratchet-wheel, *P*, which is held from rotating in one direction by a gravity-pawl, *q*, and is operated so as to turn the shaft *L* by a pawl, *Q*, which is pivoted to the end of a lever, *R*, this lever *R* being operated by a hand-lever, *R'*, which is pivoted near the front portion of the machine.

In operation, after a twist has been made around a picket or paling, the treadle *H'*, is depressed to draw down the bars *h* flush with the top of board *G*, and the lever *R'* is operated to rotate the roll *L* a sufficient distance, thus drawing the picket last secured to the rear of the openings in which the bars *h* are seated. The treadle *H'* is now released, permitting the ends of bars *h* to rise above the surface of board *G*, another picket is inserted between the wires adjacent to the twister-heads, and the treadle *J'* is depressed to thrust the pressers *j* forward, thus clamping the picket securely between the sides of bars *h* and the ends of pressers *j* until it is made a part of the fence fabric by the twisting of the wires.

Upon the table or shelf *B* is mounted a longitudinal shaft, 15, upon which are secured gear-wheels 2, 3, 4, and 5. The gear-wheel 5 meshes with a gear-wheel, 6, which is attached to the shaft of a frame, 7, which carries a spool, 8. This frame 7 and its shaft are supported by bearings which are attached to the table *B*. In front of the spool-carrying frame is attached a suitably-constructed frame with bearings, within which is journaled a shaft, 9, which carries a steel disk, 10, which disk is of sufficient size to enter a recess in the bottom of the frame. A beveled gear-wheel attached to this shaft engages with gear-wheel 4, so as to rotate the disk.

11 refers to a suitable frame or casting, the rear standards of which carry a steel plate, 12, with perforations, through which the wires

pass on their way to the spools 13, mounted upon and rotating with a shaft which carries a beveled cog-wheel engaging with a beveled wheel, 3.

The spools 13, hereinbefore referred to, can be removed from their shaft, when desired, and placed upon the bar *F'*, supported by the standards *a a*, when it is desired to wind the wire therefrom upon the spools *C'*.

The device hereinbefore described and referred to by numerals is adapted to untwist barbed wire and remove the barbs therefrom. The spool of barbed wire 8, being secured in the frame 7, is rotated so as to untwist the wires, and the disk 10 will cut the barbs therefrom and separate the wires, which pass to the perforated steel plate or scraper 12, which will remove any pieces of the barbs which may adhere to the wires before it is coiled on the spools preparatory to being used for making slat fences.

I claim—

1. In a wire-and-picket-fence machine, the combination, with a rock-shaft, *H*, provided with projecting arms *h'*, bars *h*, pivoted thereto, spring *i*, and treadle *H'*, of a rock-shaft, *J*, having horizontally-moving presser-bars, a spring for holding said presser-bars normally retracted, and a treadle for moving the rock-shaft, substantially as described.

2. The combination, in a wire-fence machine, of a rock-shaft, *J*, having horizontally-moving presser-bars, a spring for holding said presser-bars normally retracted, and a treadle for operating the same, substantially as shown, and for the purpose set forth.

3. In a wire-fence machine, a roller, *L*, having a series of recesses, *l*, and slats pivotally secured so as to fold within said recesses, substantially as shown, and for the purpose set forth.

4. In combination with a removable roller, *L*, slats *L'*, pivotally secured thereto, a cap, *o'*, with a squared recess, a ratchet-wheel mounted on a key-ended shaft, and operating means, substantially as shown, and for the purpose set forth.

5. In a device for untwisting and coiling wires, a shaft provided with gear-wheels connecting the different parts of the same, a spool-carrying frame, a cutting-disk, and spools for winding the wire after being separated, substantially as shown, and for the purpose set forth.

6. The shaft 15, with rotating means and gear-wheels 3, 4, and 5, a spool-carrying frame with a gear-wheel, 6, a disk, 10, transverse plate, 12, with perforations, and spools 13, the parts being organized so as to rotate and operate substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN W. ROBERTS.

Witnesses:

D. C. RIBBLE,  
DAVID COUTS.