

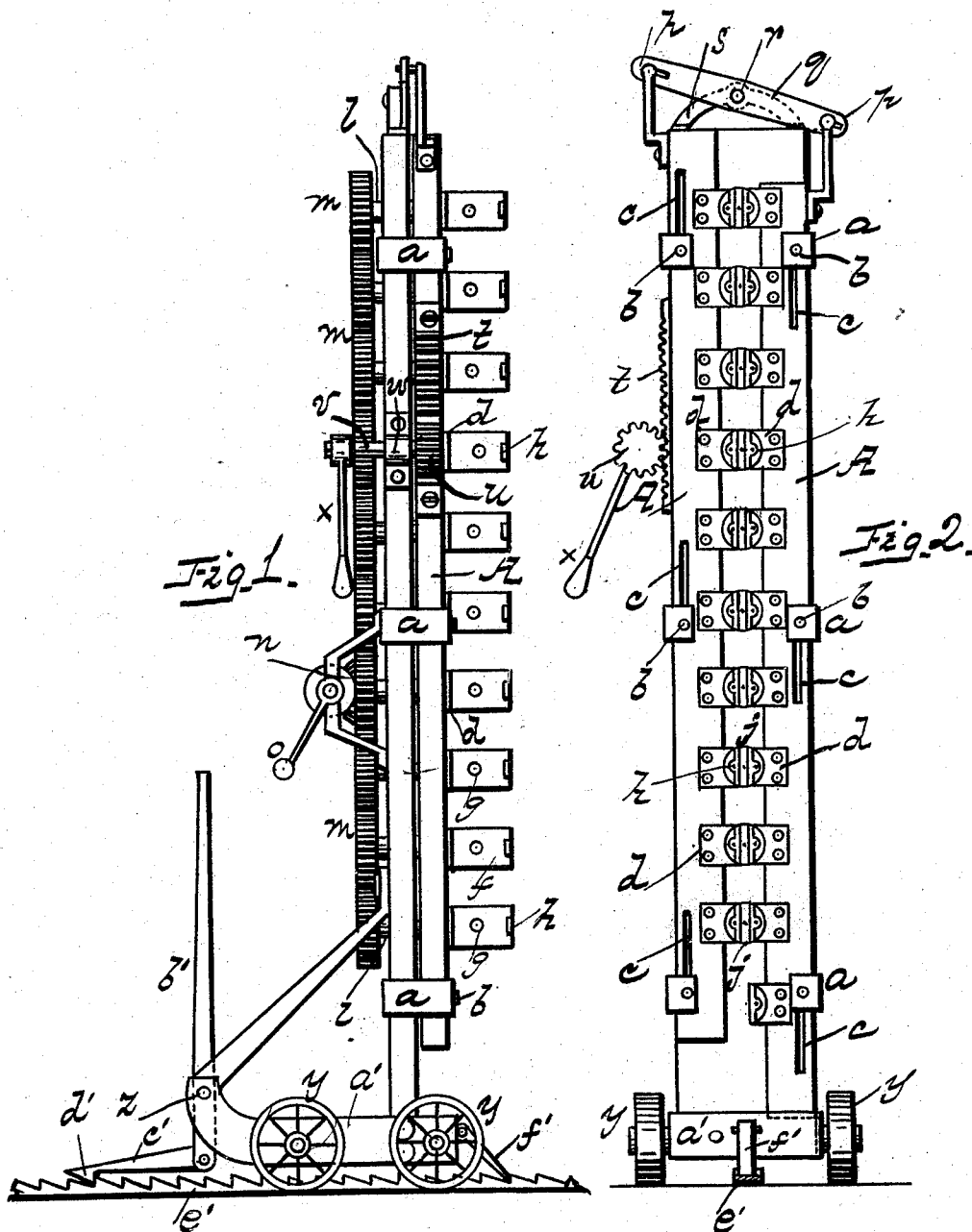
(No Model.)

2 Sheets—Sheet 1.

J. A. MITCHELL.
WIRE FENCE MACHINE.

No. 504,991.

Patented Sept. 12, 1893.



WITNESSES

Jas. B. Clarke

M. M. Mason

INVENTOR

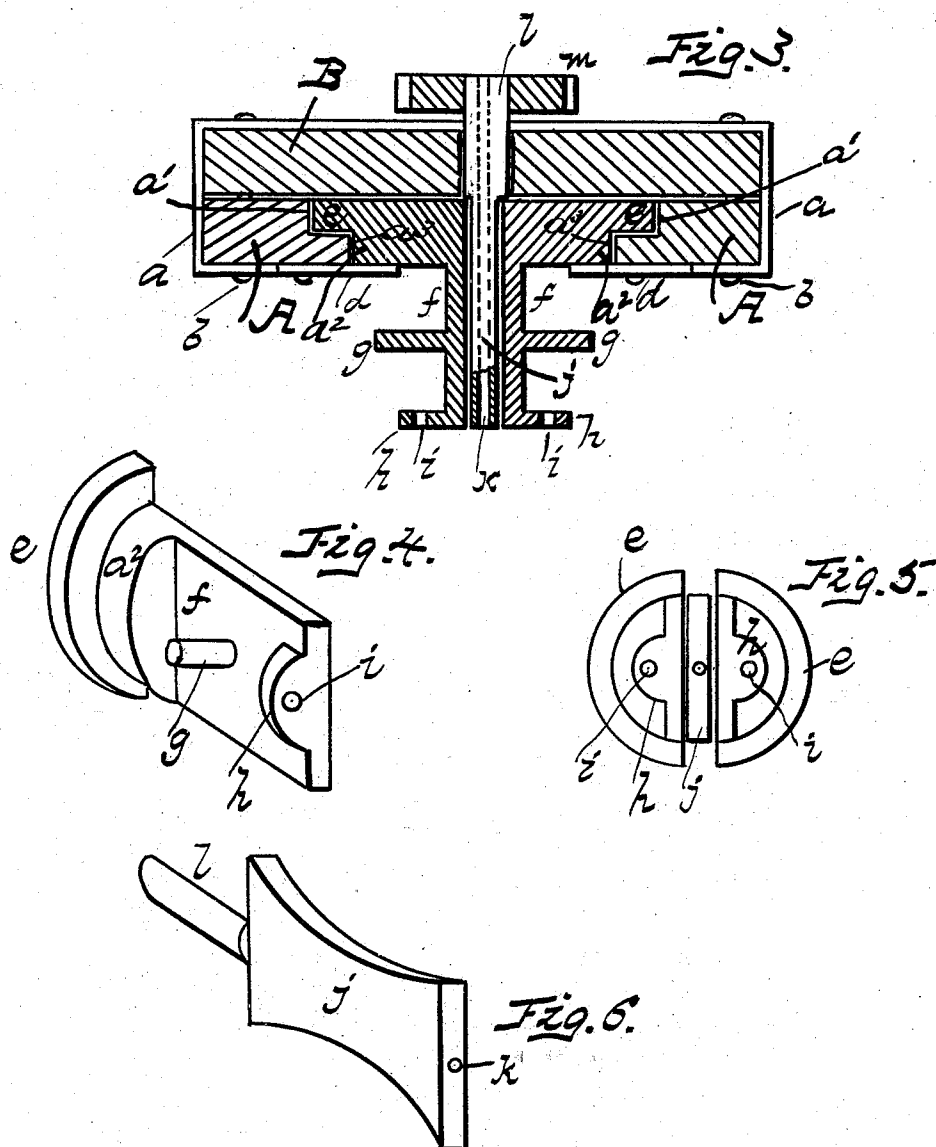
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UNITED STATES PATENT OFFICE.

JAMES A. MITCHELL, OF MARTINSBURG, WEST VIRGINIA.

WIRE-FENCE MACHINE.

SPECIFICATION forming part of Letters Patent No. 504,991, dated September 12, 1893.

Application filed May 3, 1893. Serial No. 472,828. (No model.)

To all whom it may concern:

Be it known that I, JAMES A. MITCHELL, a citizen of the United States, residing at Martinsburg, in the county of Berkeley and State of West Virginia, 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.

This invention has relation to improvements in machines for making wire fences and it consists in the novel construction and arrangement and combination of parts all as will be hereinafter more fully described.

The annexed drawings to which reference is made, fully illustrates my invention, in which—

Figure 1 represents a side view of my device; Fig. 2, a rear view of the same. Fig. 3 is a transverse section. Fig. 4 is a perspective view of one half of a twister. Fig. 5, is a front view of a twister, and Fig. 6 is a perspective view of the central portion of one of the twisters.

Referring by letter to the accompanying drawings A, A, designate twin traveling bars, which are loosely attached to the frame B, of the machine. These bars are designed to move alternately and in a vertical direction up and down, and the same are held to the frame by bands a ; the ends thereof having bolts b , which pass through slots c in the vertically moving bars A, A. These slots c serve the purpose of guiding the bars A, A, in their vertical movement; prevent lateral movement and at the same time limit the up and down movement of said bars, forming a stop therefor. Each of these bars is provided with a series of plates d adapted to hold the twisters in position on the movable bars. Clearly shown in Fig. 2 of the drawings. These twisters are constructed with semicircular flanges e and a cut away portion f' , on the face of which is a stud g which receives the wire spool, and a projection h having a perforation i through which the wire passes. These flanges e fit snugly and work in recesses a' in bars A A corresponding to the contour of said flanges and the semicircular portion a^2 of the twisters also work in re-

cesses a^3 in the edge of the bars A, A. These twisters are arranged in pairs and are composed of two half sections or twins having between them a central piece j , which has a longitudinal hole k for the horizontal wire. These central pieces are constructed with a stem l , which stems have their bearing in the frame of the machine, and the end thereof is provided with a gear wheel m , which meshes with the adjacent gear wheel of the next twister; thus gearing the twisters to one another vertically and providing means whereby all the twisters are simultaneously operated, suitable gear being provided as at n having a crank handle o whereby when the same is turned the entire train of gearing is operated and thus revolving the twisters.

To the upper end of each of the vertically moving bars is pivoted the ends p of a rocking bar q , which is centrally pivoted as at r to the central portion of a frame s , secured to the top of the frame of the machine and to the side of one of these bars A, is secured a toothed rack bar t which engages a pinion u on a shaft v journaled at w on the main frame. Said shaft has a crank arm x , whereby when the same is operated the vertically moving bars are caused to travel up and down alternately, through the medium of the rock bar pivoted on top of the frame as aforesaid. The lower end of the main frame is provided with transporting wheels y , which support the frame.

In front of the frame is pivoted, as at z , to the frame a' , a hand lever b' , to the lower end of which is pivoted a bar c' ; the free end of which has a hook d' , that engages the rack or teeth in a bar e' , thus when the machine is in operation in building a wire fence, as the work progresses the operator works the hand lever and thus causes the hook to engage the teeth thereby drawing the machine forward. A pawl f' is pivoted to the rear of the machine and engages the teeth in the bar, and prevents any backward movement of the machine.

It will be seen that by my construction of a wire fence machine that the operator in moving the machine forward simply grasps the hand lever b' and draws it forward, when the toothed bar engages the teeth in the bar e' , and draws the machine forward, and in

shifting the side wires in weaving a fence, the operator simply operates the crank arm x , thus forcing one of the bars A up and the other down simultaneously while the central line wire remains stationary.

A suitable track may be employed on which the frame may travel.

A machine as herein described is simple in operation, durable and at the same time cheap to manufacture.

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

1. The combination with the main frame, the vertically sliding bars, slotted and having the plates on their face, of the twister composed of two sections having the flange e , a cutaway portion, spool holder or stud, and flange having the perforation i , all substantially as described.

2. The combination with the main frame, sliding bars, and twisters, and plates for holding said twisters in position, of the pivoted

rock bar attached to the top of the frame, and pivoted at its ends to the top of each sliding bar, and the rack secured to the side of the sliding bar A, the pinion therefor, journaled on the edge of the main frame and crank arm x , all substantially as described.

3. The combination with the main frame, sliding bars, twisters, rock bar, pivoted on the top of the main frame, rack t secured to the edge of the bar A pinion and crank arm x for operating the same, and the toothed bar e' , of the lever b' , pivoted to the frame, the toothed bar c' pivoted to this lever and adapted to engage the bar e' having the teeth, and the pawl pivoted to the rear of the frame and engaging said teeth, all substantially as described.

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

JAMES A. MITCHELL.

Witnesses:

A. H. HELLRIEGEL,
ALLEN W. MALLERY.