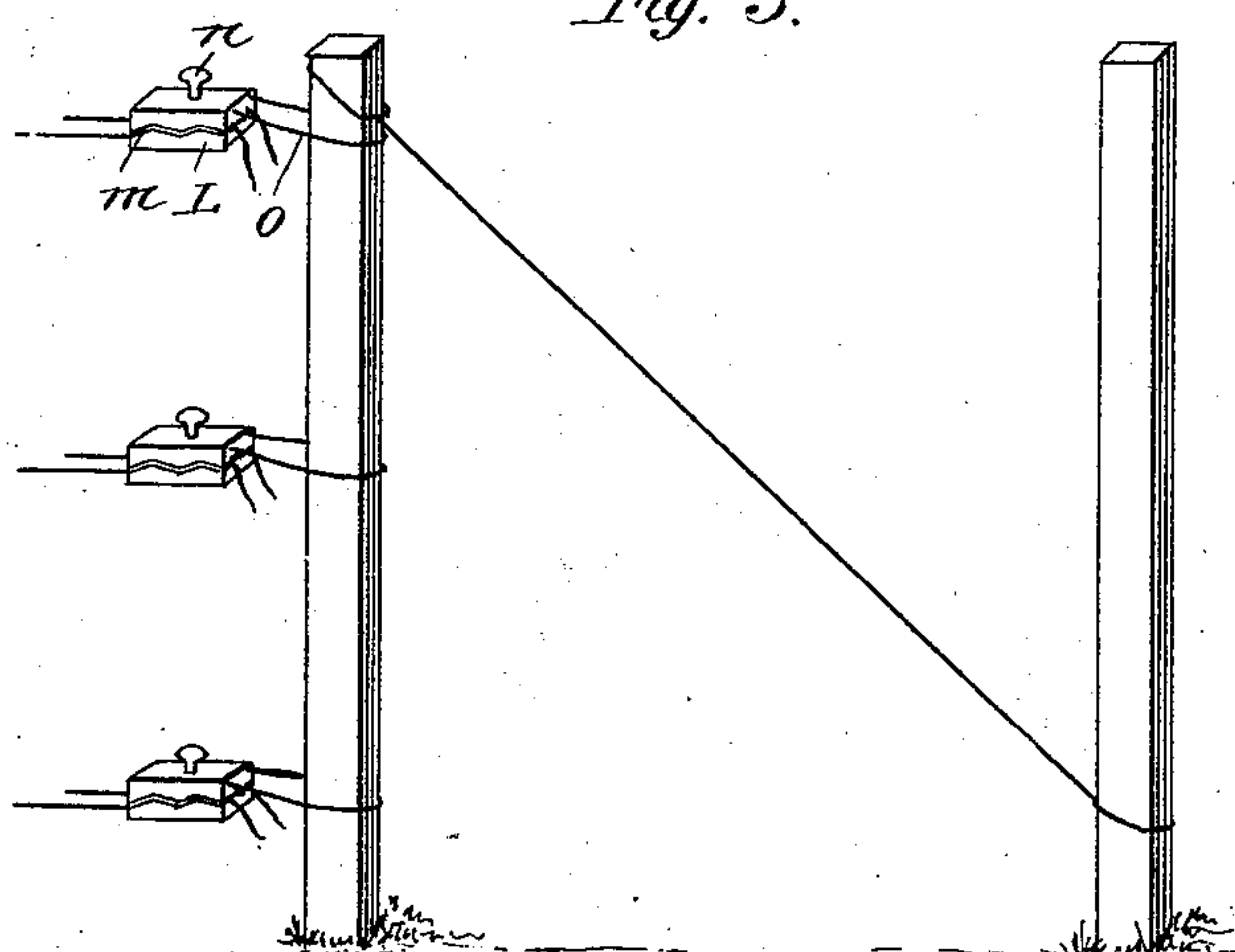
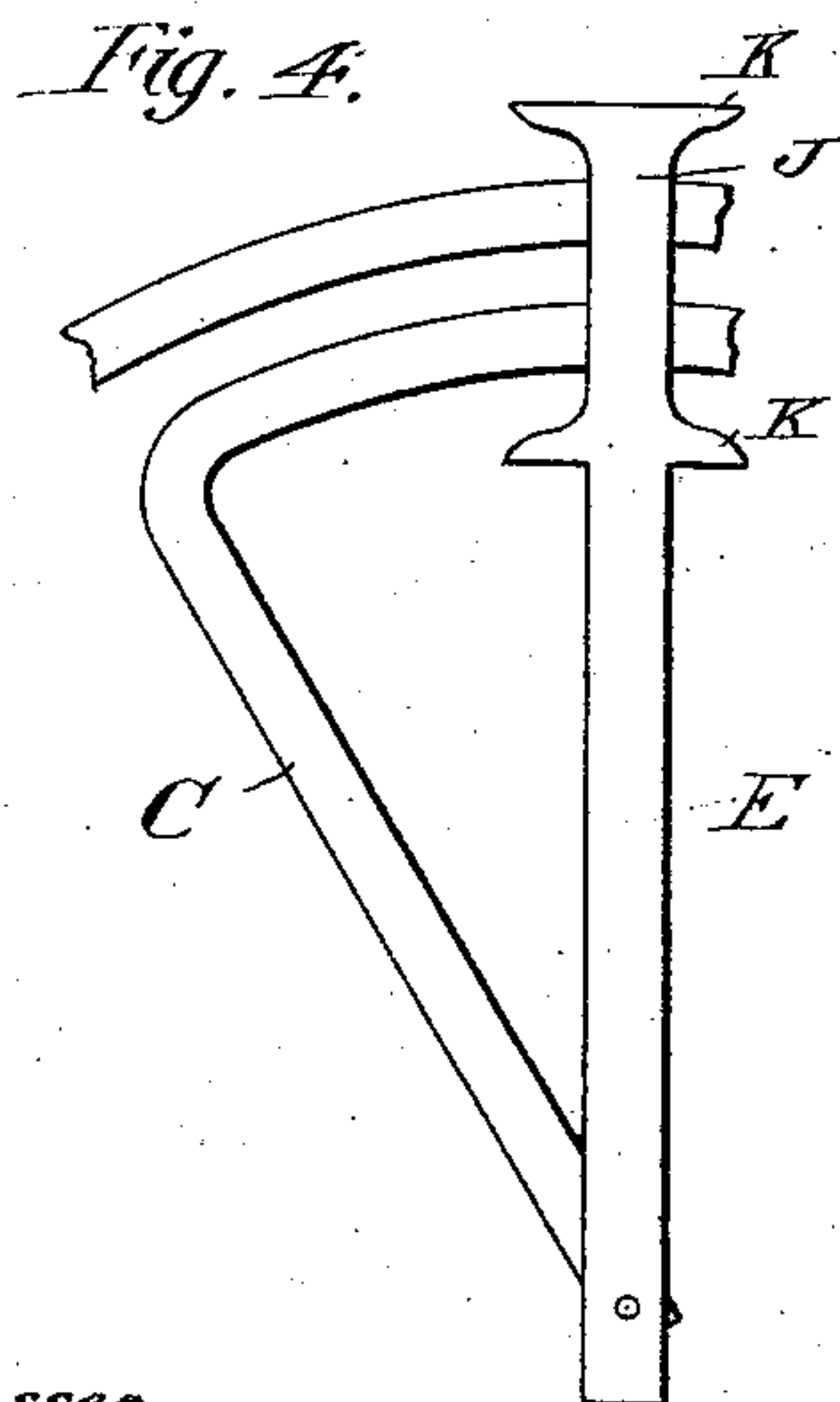
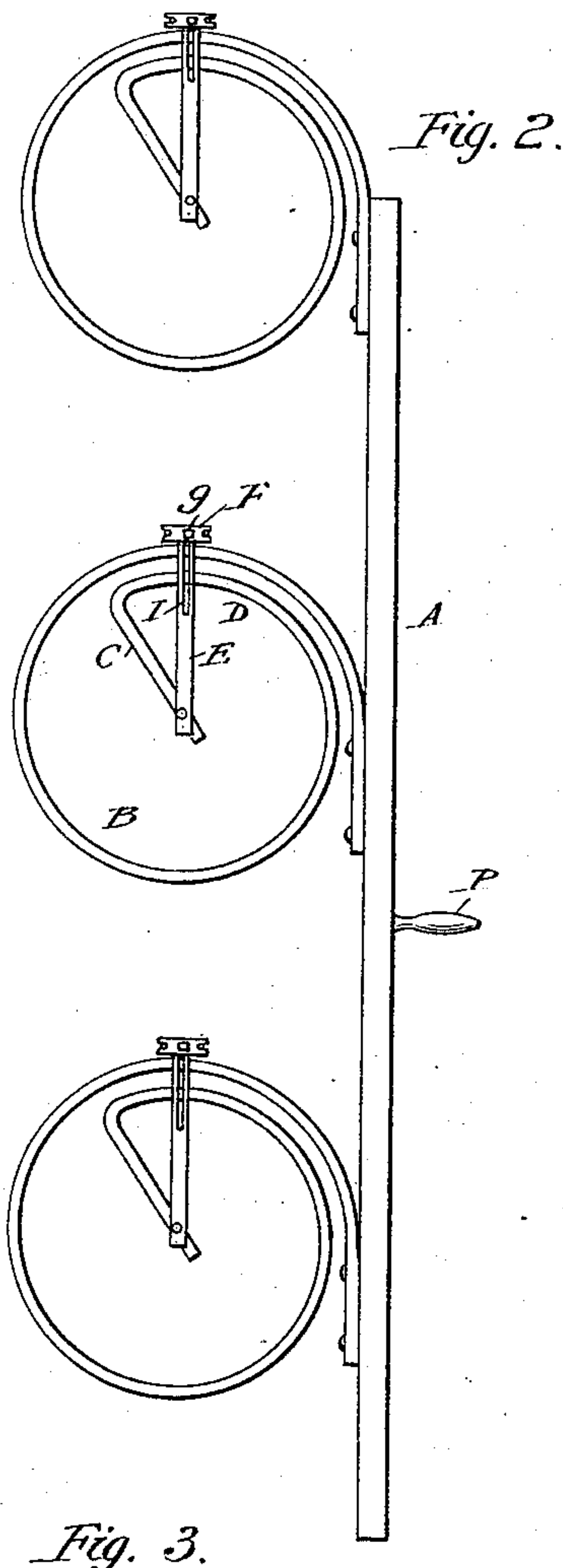
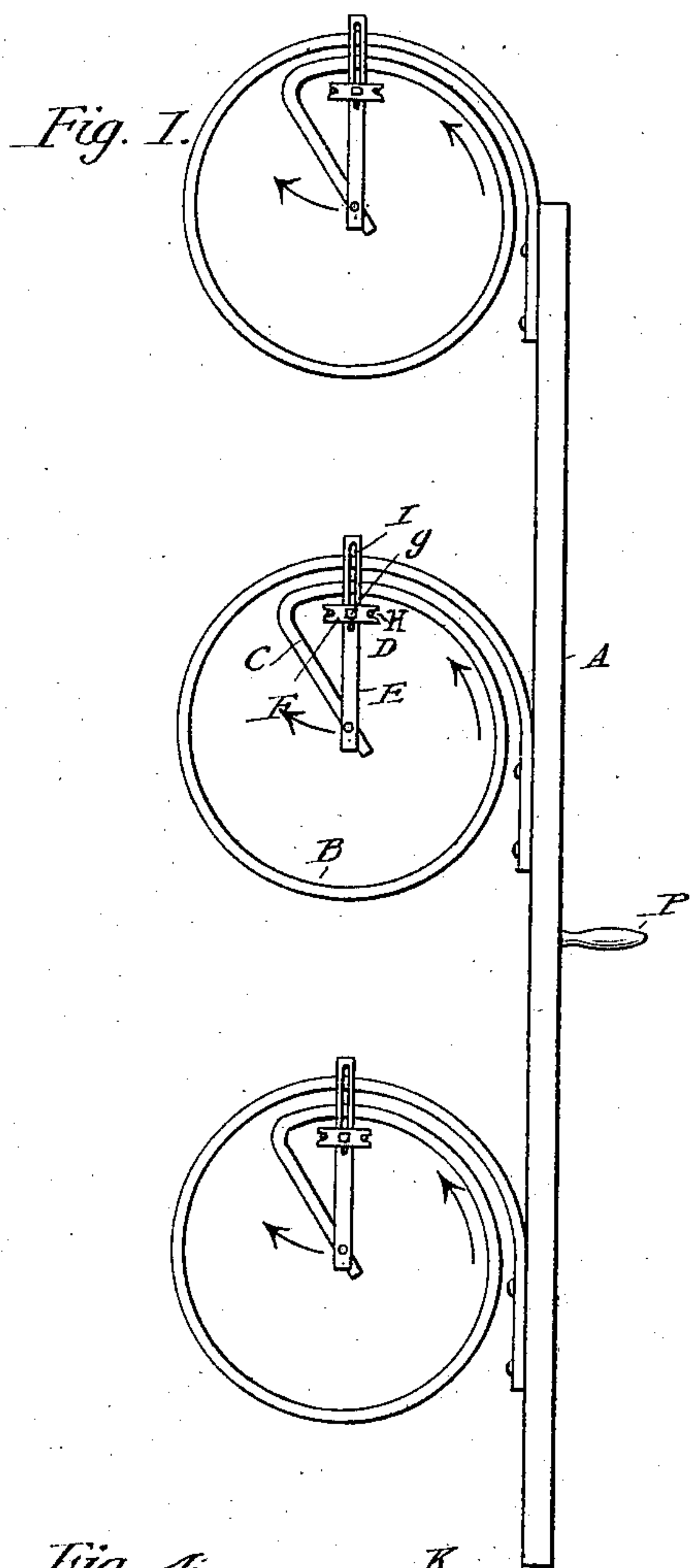


(No Model.)

M. F. CONNETT, Jr.
HAND FENCE MACHINE.

No. 365,503.

Patented June 28, 1887.



Witnesses
Geo. D. Whitney,
D. Pratt Wright,

Inventor,
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by Miles, Greenleaf
attys.

UNITED STATES PATENT OFFICE.

MATTHEW F. CONNETT, JR., OF PEORIA, ILLINOIS.

HAND FENCE-MACHINE.

SPECIFICATION forming part of Letters Patent No. 365,503, dated June 28, 1887.

Application filed March 22, 1887. Serial No. 231,953. (No model.)

To all whom it may concern:

Be it known that I, MATTHEW F. CONNETT, Jr., a citizen of the United States, residing at Peoria, in the county of Peoria and State of Illinois, have invented certain new and useful Improvements in Hand Fence-Machines; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to portable hand fence-machines of that kind by which pickets are twisted into stretched wires.

The object of the invention is to produce a hand fence-machine which shall be simple and inexpensive in construction, and by which the wires being woven are given one or more twists on each side of the pickets in order to confine the pickets.

With this object in view my invention consists, essentially, in a fence-machine made up of one or more curved guide-frames attached to an upright or support and a holder for the wires, mounted upon the guide-frames in such manner that by imparting a curvilinear motion to the guide-frames the holders are caused to describe a movement by which the wires are twisted, for the invention consists, specifically, in fence-machines made up of one or more involutes each having one or more convolutions, and one or more holders for the wires attached to the involutes, whereby by the curvilinear movement of the involute or involutes the wires carried by the holder or holders are woven or twisted as desired.

Furthermore, the invention consists in a fence-machine made up of one or more involutes having one or more convolutions, and wire-holding devices attached to the said involutes and so arranged as automatically to shift in order to compensate for the shifting of the wire.

Furthermore, the invention consists in various novel details of construction whereby the objects of the invention are attained.

I have illustrated the invention in the accompanying drawings, in which—

Figure 1 is a side elevation of my improved machine, the wire-holders being shown at their innermost limit of movement. Fig. 2 is a

similar view, the holders being shown at the limit of their outermost movement. Fig. 3 is a view showing the friction devices whereby the wires are held during the process of forming the fence; and Fig. 4 is a view of a modified form of wire-holding device.

In the drawings, A represents a standard or frame, to which are attached or with which are formed curved guide-frames B. These guide-frames are preferably made in the form of involutes with a downward-bent end, C, to which is picketed the inner end of a wire-holder, D. This wire-holder consists of the arm E, pivoted at its inner end to the end C of the involute and having its outer end slotted, the cross-head F, having the notches H for the reception of the wires, and the pin or bolt G, attached to the cross-head and adapted to slide up and down in the slot.

Instead of the holder, as shown in Figs. 1, 2 of the drawings, I may utilize the form shown in Fig. 4 of the drawings. In this form the head I is provided with two sets of confining-projections situated a distance apart equal to the distance of movement of the wires in the process of twisting. In this form the wires slide back and forth on the holder in the process of twisting, and are prevented from slipping off by the projections.

The operation of the device, which is exceedingly simple, may be briefly described as follows: The fence-wire being introduced into the notches H, or between the projections K of one of the forms of holder shown, and the holder being in the position illustrated in Fig. 1, the entire guide-frame is moved in such a way that each spiral travels about the corresponding pair of wires in the direction indicated by the arrows on the spirals in Fig. 1, and consequently the handle P describes a spiral corresponding in form to each of the spiral guides B. The result of this movement of the guides is that each holder in effect follows the inner face of the corresponding spiral until it reaches the angle at the junction of the arm C and the spiral, and thence follows the outer face of the inner coil until it reaches the position shown in Fig. 2. During this movement of the spiral guide, and in consequence of it, each arm E is rotated about the corresponding wire in the direction indicated

by the arrows at the centers of the spirals in Fig. 1, and each of the cross-heads F is thereby rotated and the wires intertwined. If, now, the motion of the frames be reversed, the cross-head travels from the position shown in Fig. 2 to that shown in Fig. 1, and the wires are twisted in the opposite direction. A movement of the wires from inside to outside, or from outside to inside, of an involute having one convolution makes two complete twists in the wires. On one having two convolutions this movement would make three twists, and three would make four, and so on. I of course do not wish to confine myself to any number of convolutions, as any desired number may be used.

In making fences of this kind it is necessary to have some means of holding the wires, whereby they will be retained firmly enough to withstand the strain imposed in the act of twisting, and whereby at the same time they will be allowed to pay out enough to compensate for the wire taken up in twisting. In order to accomplish this, I employ the plates L, provided with fluted contiguous faces M, and held together by the set-screws N. Each pair of wires are passed through these and the holders attached to a post by loops O. The plates are set by the screws to such positions as to hold the wires against slipping while under ordinary strain, but to allow them to play out when the wire is sufficiently taken up by twisting to render it necessary.

For convenience in handling the machine I provide the handle P, which is grasped in using the machine.

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

1. A fence-machine comprising one or more

curved frames and a wire-carrier attached thereto and capable of carrying the wire from the outside to the inside of the frames, or vice versa, substantially as described.

2. A fence-machine comprising one or more frames, each in the form of an involute, and a wire-carrier attached to each of the said involutes, substantially as described, whereby, by the curvilinear movement of the frames, each carrier is caused to travel around the corresponding involute, and the wires are twisted.

3. A fence-machine comprising one or more guide-frames, each in the form of an involute having an inwardly-bent end, and wire-carriers pivotally attached to the extremities of said inwardly-bent ends, respectively, and provided with wire-retaining devices, substantially as described.

4. A fence-machine made up of one or more guide-frames, each in the form of an involute having an inwardly-bent end, and wire-carriers pivoted to said inwardly-bent ends, respectively, and each provided with the shifting head having notches for the reception of wires, substantially as described.

5. A fence-machine consisting of the guide-frames made in the form of involutes and having the inward-projecting ends, the arms pivoted thereto and having the slots and the cross-heads provided with notches for the reception of the wires, and the pins projecting from the cross-heads and sliding in the slots, substantially as described.

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

MATTHEW F. CONNETT, JR.

Witnesses:

DUDLEY A. TYNG,
DAVID H. MEAD.