(No Model.)

A. L. PETERSON.

GATE.

No. 402,348. Patented Apr. 30, 1889.

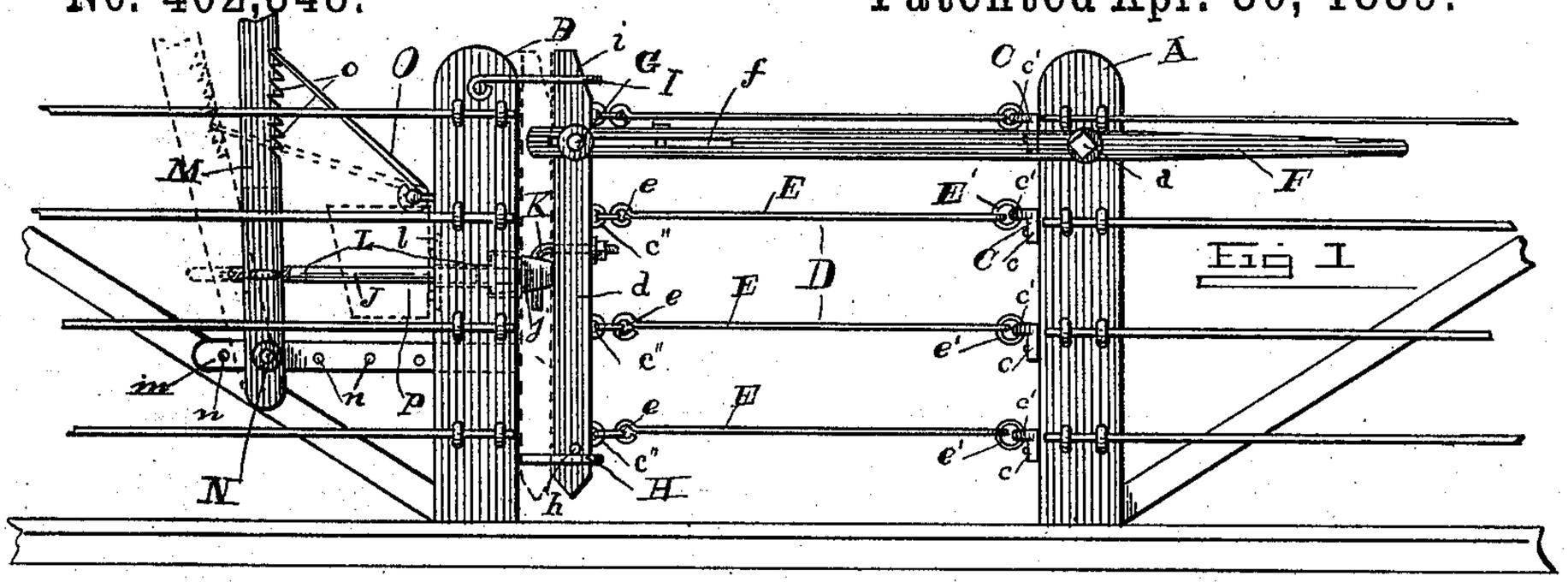

Fig 1

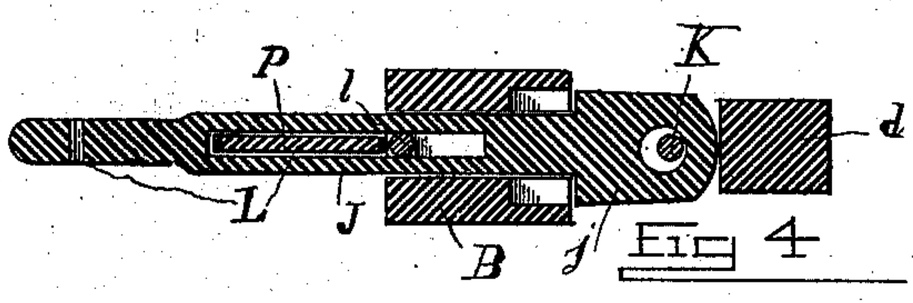

Fig 4

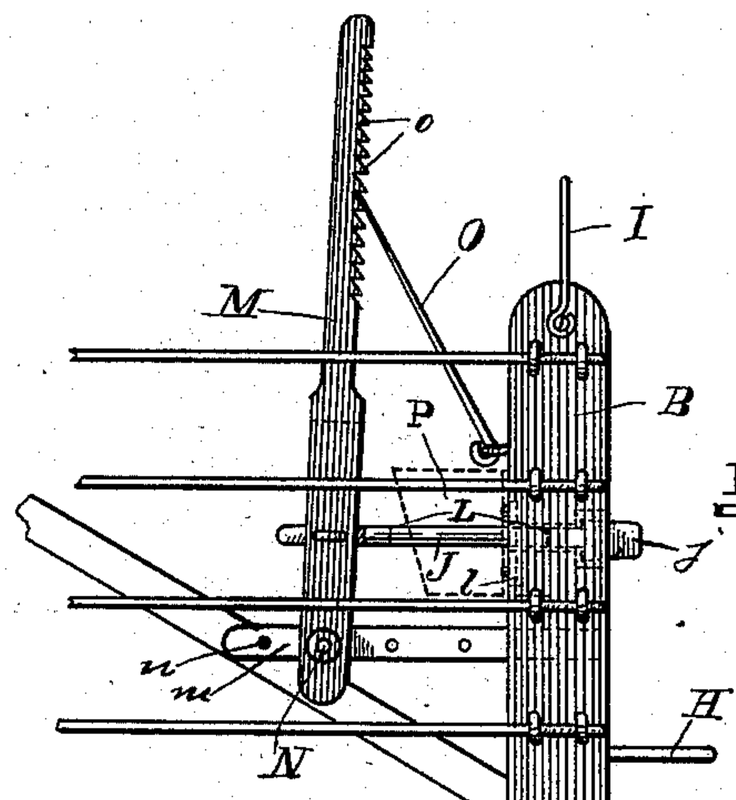

Fig 2

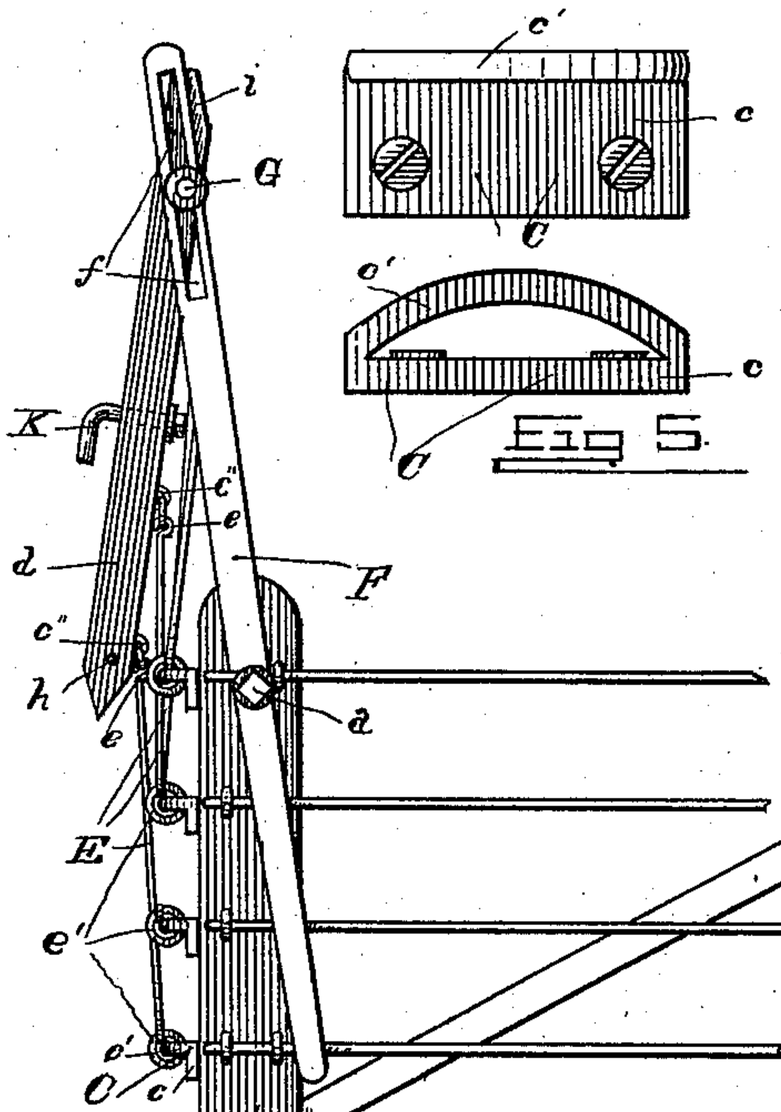

Fig 5

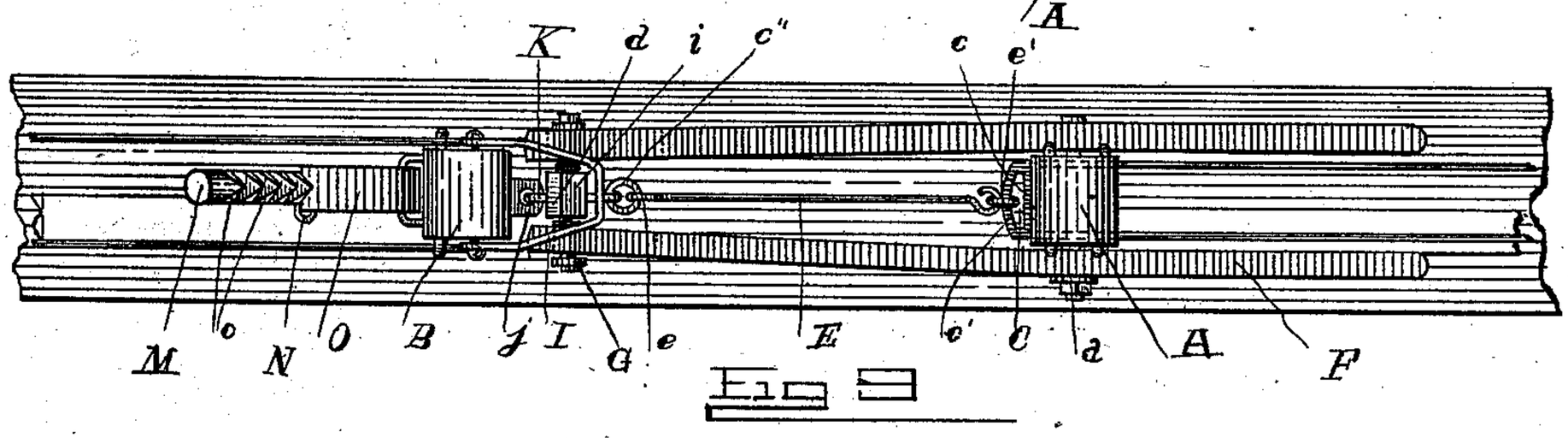

Fig 3

Witnesses.

E. K. Seville

P. L. Brooks

Inventor,

A. L. Peterson

By his Attorney W. Alexander

UNITED STATES PATENT OFFICE.

ALPHEUS L. PETERSON, OF HORSHAM, PENNSYLVANIA.

GATE.

SPECIFICATION forming part of Letters Patent No. 402,348, dated April 30, 1889.

Application filed January 23, 1889. Serial No. 297,234. (No model.)

To all whom it may concern:

Be it known that I, ALPHEUS L. PETERSON, of Horsham, in the county of Montgomery and State of Pennsylvania, have invented certain new and useful Improvements in Gates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form part of this specification, in which—

Figure 1 is a side view of my improved wire-fence gate closed. Fig. 2 is a similar view of the same opened. Fig. 3 is a plan view of Fig. 1. Fig. 4 is a detail sectional view. Fig. 5 is a detail view of one of the elongated loops.

This invention is an improvement in gates for wire fences, and its object is to provide a wire gate that can be lifted vertically and folded; and the invention consists in certain novel details of construction of the gate and its operating devices, and in the novel fastening devices therefor, whereby the wire panels of the gate can be tightly stretched, if desired, when the gate is closed. These novel features are hereinafter fully described and claimed.

In the drawings, A B designate two posts of an ordinary wire fence. On the face of post A, opposite post B, are secured elongated loops C C, which consist of a plate, *c*, provided with proper openings by which it can be secured by bolts or screws to the post, said plate having attached to it an arc-shaped metal loop or strap, *c'*, as shown. These loops correspond in their order and number to the number and distance apart of the wires of the gate.

D designates the gate, which consists of an upright end piece or bar, *d*, on which is a series of staples, *c''*, corresponding to loops C on post A, and a similar number of horizontal wires or rods, E E, which are bent into loops *e* at their ends, are connected by links E' *e'* at their ends with the loops of post A and staples of bar *d*, respectively. The gate can be readily moved to right or left, as the link-connections between the wires and post form a flexible joint or hinge, and the elongated loops permit the links to move to each edge of the post and prevent binding of the wires thereagainst. Wires E are of such length that when closed bar *d* will be in close proximity to post B, as indicated in the drawings.

F F designate two similar levers pivotally mounted on a rod, *a*, in the upper end of post A and lying parallel with the line of fence. The front ends of these levers extend forward to bar *d* and are connected thereto by means of a bolt, G, passing transversely through the upper end of bar *d* and through longitudinal slots *f f* in the ends of the levers, as shown. When the rear ends of levers F are depressed, bar *d* is lifted and with it wires E, until they assume the position indicated in Fig. 2. Bolt G moves in slots *f* toward the pivots of the levers and thus decreases the amount of power necessary to lift and sustain the gate and somewhat relieves the strain on rod *a*. One lever would operate the gate in this manner; but by employing two the movement of the gate is better regulated.

If the gate is to be swung laterally, levers F must be disengaged therefrom, or else mounted on a block or support that is pivoted on top of post A, to permit them to be swung laterally.

The lower ends of the levers F might be engaged by a convenient hook on post A, to prevent accidental falling of the gate at inopportune times.

H designates a loop secured to post B, near the bottom thereof, and in position to receive the lower end of bar *d*. This is pointed, as shown, to facilitate its engagement with said loop, and it has a short pin, *h*, passing transversely through it, by which the bar is upheld on said loop and the wires stopped in a horizontal position when the gate is lowered.

The upper end of bar *d* is beveled off on the side next post A, as at *i*, and I is a loop pivoted to the top of post B, which, when the gate is closed, can be dropped over the top of bar *d* and bind the latter to post B at top, while loop H holds the bottom of the bar.

In order to take up slack in the gate-wires and more securely fasten the gate I use the following devices:

J designates a bolt playing horizontally through a transverse opening in post B, near

the center thereof and in the line of the fence. This bolt has on its end adjoining the gate an enlarged head, *j*, vertically perforated, as shown, to receive a depending finger or hook, K, secured about centrally to bar *d*, as shown. The bolt should be prevented from turning in post B, and I preferably slot it longitudinally and vertically, as at L, and through this slot passes a pin, *l*, secured to post B, which, while preventing turning of the bolt, does not impede its longitudinal movement. The other end of bolt J is pivotally connected to a lever, M, the lower end of which is bifurcated and attached to a horizontal arm, *m*, projecting from post B, and provided with a series of openings, *n*, with any of which the bolt N, that attaches the lever to the arm, can be engaged, and thus adjust the position of the lever on said arm. The upper end of lever M has ratchet-teeth *o* on its face adjoining post B, and is engaged by a dogging-plate, O, hinged to post B, as shown.

When the gate is closed, finger K is engaged with head *j*. Lever M is then operated, drawing bolt J backward and putting tension on wires E E, as is evident, the amount of tension being regulated by the operator. Plate O locks the lever and keeps the gate-wires tense. In lieu of the ratchet-teeth and dog, I may employ a wedge-shaped key-plate, P, which is slipped in the slot of bolt J between the lever and post, and as the lever is retracted will by gravity fall into the slot and effectually prevent protrusion of the bolt.

Where it is not desired to lift the gate, levers F could be dispensed with; but I prefer using them, as described. Bolt J and its connections enable any desired tension to be put on the gate-wires, whether there be one or more wires used, and when thus strained the gate is securely locked.

Having thus described my invention, what I claim is—

1. The combination of the opposite posts, the series of elongated loops C C, connected to one of said posts, and the gate-fastening devices on the other post, substantially as described, with the gate composed of an upright bar, *d*, the series of staples connected thereto, and the wires and links connecting said wires to the respective loops, C C, of the post and staples and bar, all substantially as described.

2. The combination of the post and the gate consisting of an upright bar and a series of wires loosely connected to said post and bar, with the pivoted lifting-levers F, fulcrumed on the post, and having their front ends slotted and engaged by a bolt passing transversely through said bar, all substantially as described.

3. The combination of a gate-post, the headed bolt passing therethrough, and the lever for operating said bolt, with the gate consisting of an upright bar adapted to be connected to said bolt, a series of horizontal wires loosely connected to said bar and to the opposite gate-post, and the dogging-plate O, engaging ratchet-teeth on said lever, substantially as and for the purpose described.

4. The combination of the post, the horizontal bolt passing therethrough, and the horizontal perforated arm below said bolt, with the lever pivotally connected to said bolt and adjustably connected to said arm and having ratchet-teeth at its upper end, and the dogging-plate engaging and locking said lever, substantially as described.

5. The combination of the opposite gate-posts, the gate consisting of an upright bar, and a series of horizontal wires loosely connected to said bar and to one of said posts, the pair of levers pivotally mounted on said post and having slotted front ends, and the bolt passing through said slots and the upper end of said bar, with the horizontal vertically-slotted bolt passing through the opposite gate-post and adapted to be engaged by a finger on said bar, the lever for operating said bolt, and the locking devices therefor, all substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I affix my signature in presence of two witnesses.

ALPHEUS L. PETERSON.

Witnesses:
S. J. GARNER,
S. E. WEIDNER.