

No. 774,898.

PATENTED NOV. 15, 1904.

G. W. THOMPSON.

GATE.

APPLICATION FILED AUG. 4, 1904.

NO MODEL.

2 SHEETS—SHEET 1.

FIG. 1.

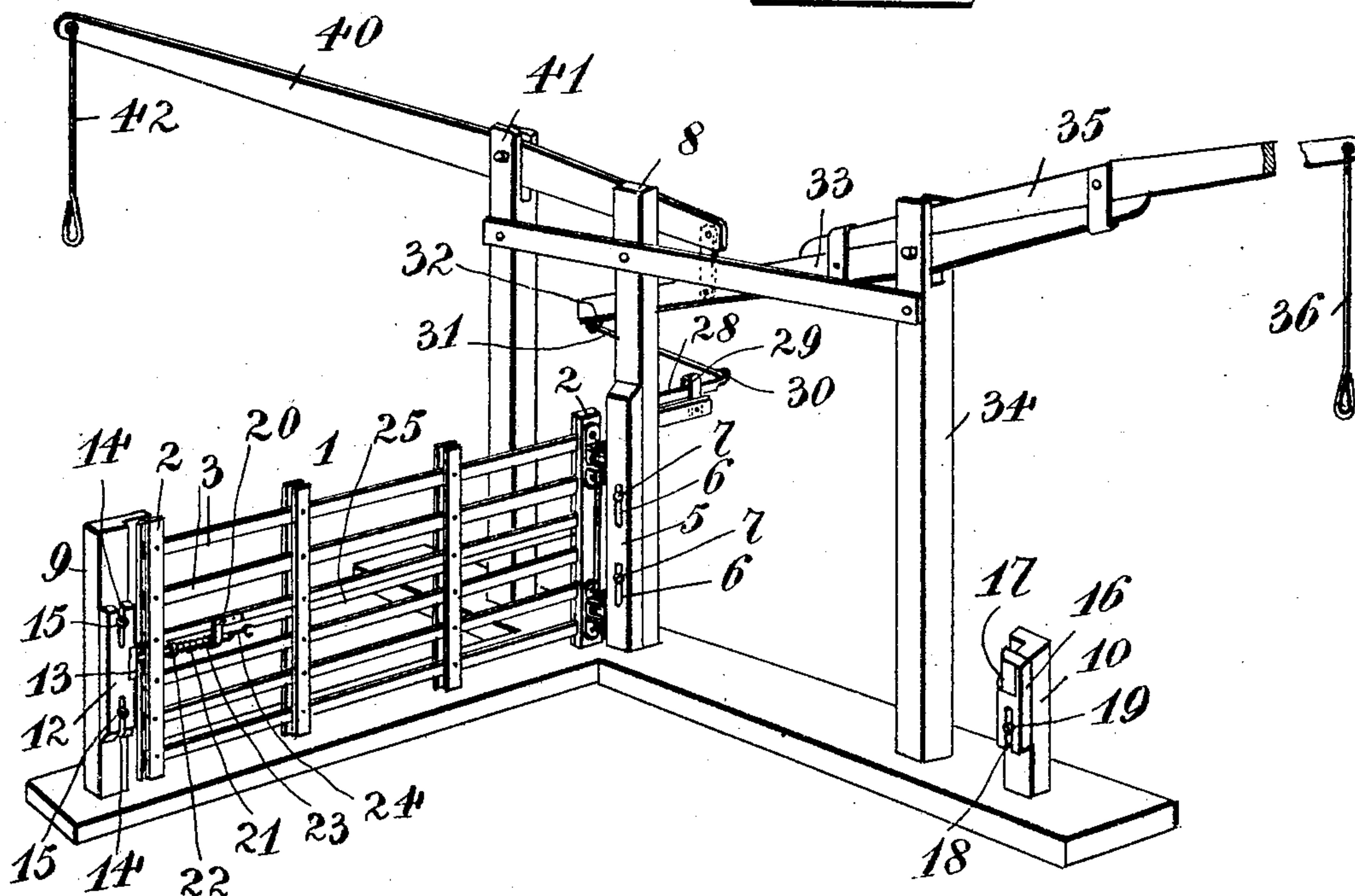
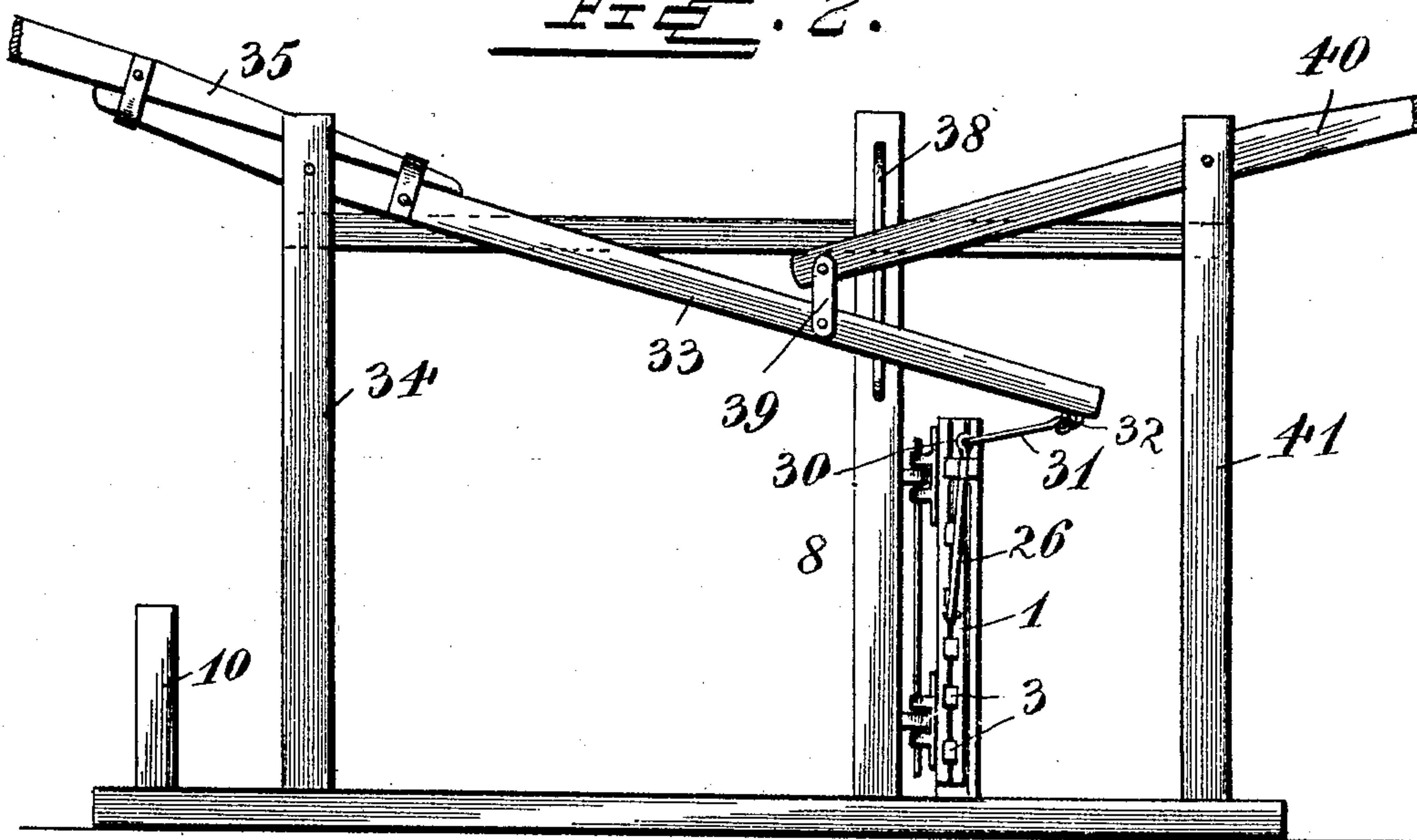


FIG. 2.



Witnesses

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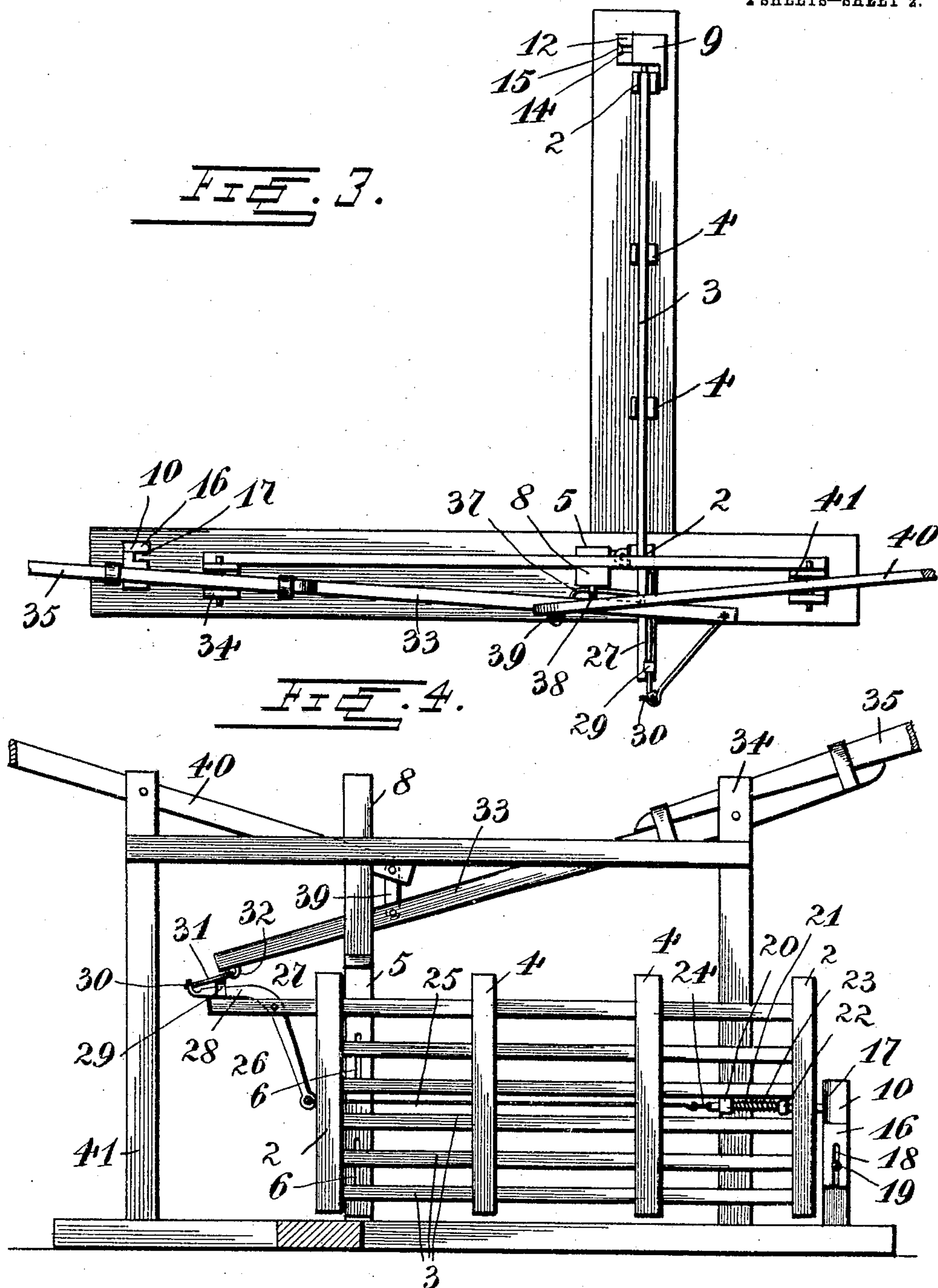
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UNITED STATES PATENT OFFICE.

GEORGE W. THOMPSON, OF ENION, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 774,898, dated November 15, 1904.

Application filed August 4, 1904. Serial No. 219,502. (No model.)

To all whom it may concern:

Be it known that I, GEORGE W. THOMPSON, a citizen of the United States, residing at Enion, in the county of Fulton and State of Illinois, have invented certain new and useful Improvements in Gates; and I do 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 relates to improvements in swinging gates.

The object of the invention is to provide a gate of this character which may be opened and closed by a rider without the necessity of his dismounting from the horse or vehicle.

A further object is to provide means whereby said gate may be automatically locked in its closed or opened position and means whereby said locking mechanism will be actuated by the operation of the opening and closing mechanism.

Another object is to provide means whereby said gate may be adjusted vertically upon its post or support, means being also provided whereby the keepers for said locking mechanism may be also vertically adjusted to correspond with the adjusted position of said gate.

With these and other objects in view the invention consists of certain novel features of construction, combination, and arrangement of parts, as will be hereinafter more fully described, and particularly pointed out in the appended claim.

In the accompanying drawings, Figure 1 is a perspective view of a gate constructed in accordance with the invention and showing the same in closed position. Fig. 2 is a rear end elevation of the same. Fig. 3 is a top plan view. Fig. 4 is a side view of the gate, showing the same open.

Referring more particularly to the drawings, 1 denotes the gate, which may be of any suitable construction, but which is here shown as consisting of vertically-disposed end bars 2, to which are secured the ends of longitudinally-disposed rails 3. Said rails are connected between said end bars by means of vertically-disposed intermediate bars 4. To

one of the end bars 2 of the gate are secured hinges by which said gate is connected to a hinge-bar 5. The hinge-bar 5 is provided with two or more vertically-disposed slots 6, adapted to receive screw-bolts 7, by which said hinge-bar is adjustably connected to a hinge-post 8. At the opposite end of the gate 1 when in its closed position is arranged a latch-post 9, and at the opposite end of the gate when in its opened position is arranged a latch-post 10. On the latch-post 9 is arranged a latch-bar 12, to which is secured a latch-keeper 13. The latch-bar 12 is provided at its upper and lower ends with vertically-disposed slots 14, through which are adapted to be passed screw-bolts 15, by which said latch-plate may be adjustably secured to said latch-post.

On the latch-post 10 is arranged a latch-bar 16, to which is secured a latch plate or keeper 17. The latch-bar 16 is provided at its lower end with a vertically-disposed slot 18, adapted to receive a screw-bolt 19, by which said latch-bar may be adjustably secured to said latch-post 10.

Slidably mounted in a bearing or guide-bracket 20, secured to one of the rails 3 of the gate, is a latch-bolt 21, on which is arranged a collar 22. Between the collar 22 and said bracket 20 is disposed a coil-spring 23, by which the end of said bolt is normally projected beyond the end bars 2 of the gate, said end of the latch-bolt being adapted to work through a guide-slot or aperture formed in a block which is secured between the bar 2 of the gate, thereby supporting and guiding the outer end of the latch-bolt. The outer end of the bolt is beveled to adapt the same to automatically engage with one or the other of the keepers 13 or 17. To the inner end of the latch-bolt 21 is connected a link 24, to which is connected the end of a latch-operating rod 25, the opposite end of which is connected to the end of the lower arm 26 of a vertically-disposed bell-crank lever 27, which is pivotally connected to the rearwardly-extended end of the upper gate-rail. The rearwardly-projecting arm 28 of the bell-crank lever is adapted to work in a guide-bracket 29, which projects upwardly from the outer end of said upper gate-rail.

On the end of said arm 28 is formed an eye 30, to which is loosely connected the lower end of a link rod or bar 31, the upper end of which is loosely connected to an eyebolt 32, secured to the outer end of a gate-operating bar, the opposite end of which is pivotally mounted in the forked upper end of a post 34.

To the pivoted end of the gate-operating bar 33 is secured the inner end of an operating-lever 35, to the outer end of which is loosely connected a depending handle bar or rod 36.

On the inner side of the gate-operating bar 33, near the free end of the same, is arranged a guide-loop 37, which is adapted to be engaged with a vertically-disposed guide loop or bar 38, which is secured to the rear side and near the upper end of the hinge-post 8, whereby the free end of said gate-operating bar is slidably connected with the upper end of said hinge-post. To said free end of the bar 33, near said sliding connection of the same with the post 8, is pivotally connected, by means of a short link or strap 39, the inner end of an operating-lever 40, which is pivotally mounted in the forked upper end of a post 41. To the outer end of said operating-lever 40 is loosely connected a depending handle bar or rod 42.

When it is desired to open the gate to permit the passage of a rider approaching the same from either direction, said rider upon approaching the gate will grasp the handle-bar or arm of the operating-lever projecting from the side of the gate on which he may be, and upon pulling said handle said operating-bars will be rocked, thereby raising the operating-bar 33, which will, through the medium of the link rod or bar 31, rock the bell-crank lever, thereby releasing the latch from its keeper and simultaneously swinging the gate to an open position, in which position the latch will automatically engage the keeper of the latch-post 10. After the rider has passed through the gate he will grasp the other operating-lever, by pulling on which he will release the latch and swing the gate to a closed position in the same manner as hereinbefore described for the opening of the same.

By adjustably mounting the hinge-bar and

latch-bars of the gate upon their respective posts, said gate may be elevated to a greater or less degree, thereby permitting small stock to pass beneath the same, but preventing the passage of large stock, this adjustment of the gate being frequently desired in separating large and small stock and for various other purposes.

From the foregoing description, taken in connection with the accompanying drawings, the construction and operation of the invention will be readily understood without requiring a more extended explanation.

Various changes in the form, proportion, and the minor details of construction may be resorted to without departing from the principle or sacrificing any of the advantages of this invention.

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

In a swinging gate, the combination with a hinge-post, of a hinge-bar connected thereto, means whereby said bar may be vertically adjusted on said post, a gate hinged to said bar, latch-posts arranged to receive said gate in its open or closed positions, slotted latch-keepers arranged on said posts, adjusting-screws whereby said keepers may be vertically adjusted on said posts, a bell-crank lever pivoted to the extended inner end of said gate, a latch-operating rod connected to the lower arm of said bell-crank lever and extended and connected to said latch whereby the same may be disengaged from said keepers, a pivoted operating-bar, a link connecting the free end of said bar to the upper arm of said bell-crank lever, an operating-lever connected to said operating-bar near its pivotal point, and a pivoted operating-lever, projecting in the opposite direction and loosely connected to said operating-bars substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

GEORGE W. THOMPSON.

Witnesses:

M. A. JOHNSON,
M. S. WRESTLER.