

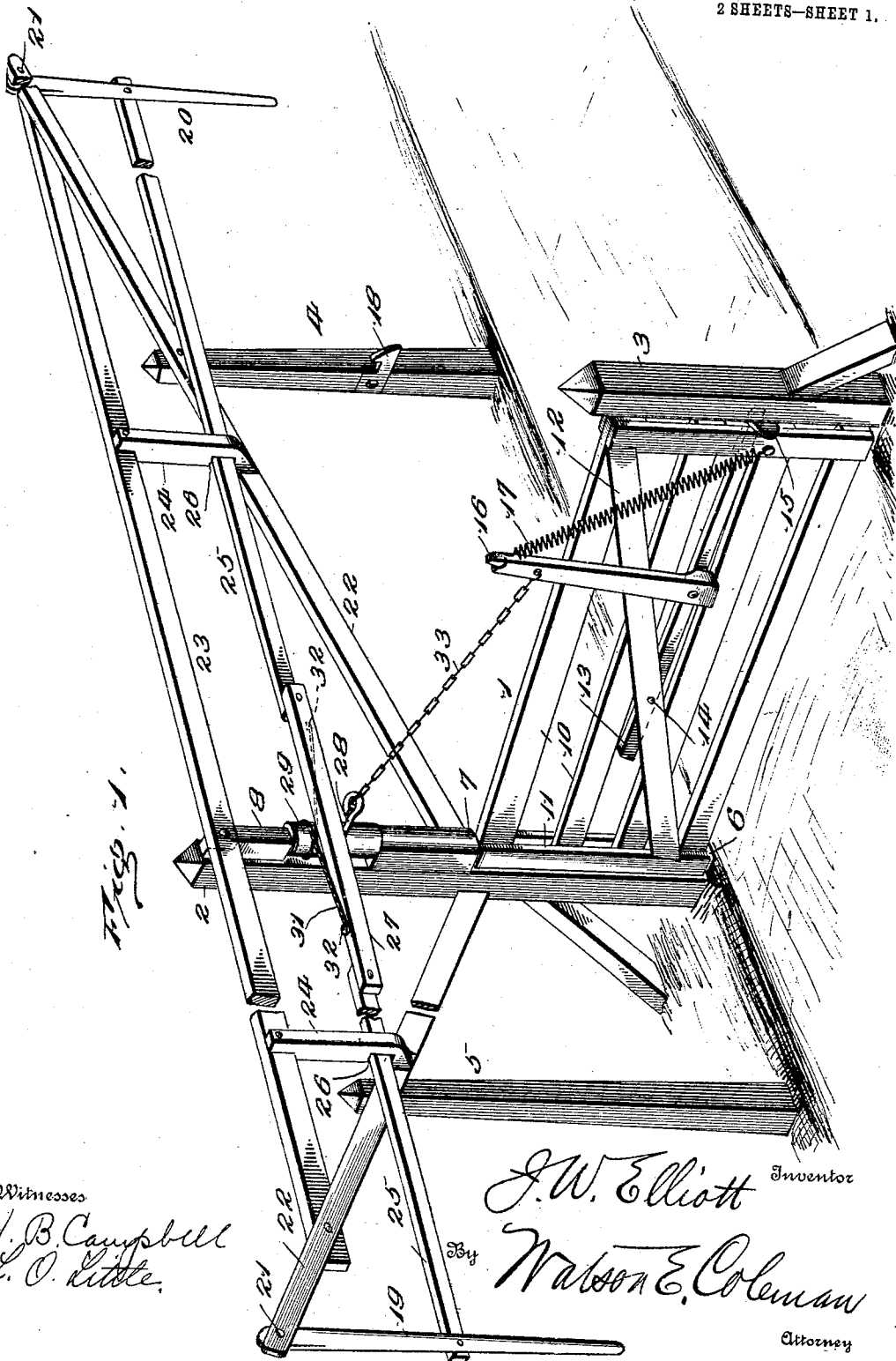
J. W. ELLIOTT.
GATE.

APPLICATION FILED APR. 25, 1907. RENEWED MAY 23, 1908.

908,550.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.



Witnesses
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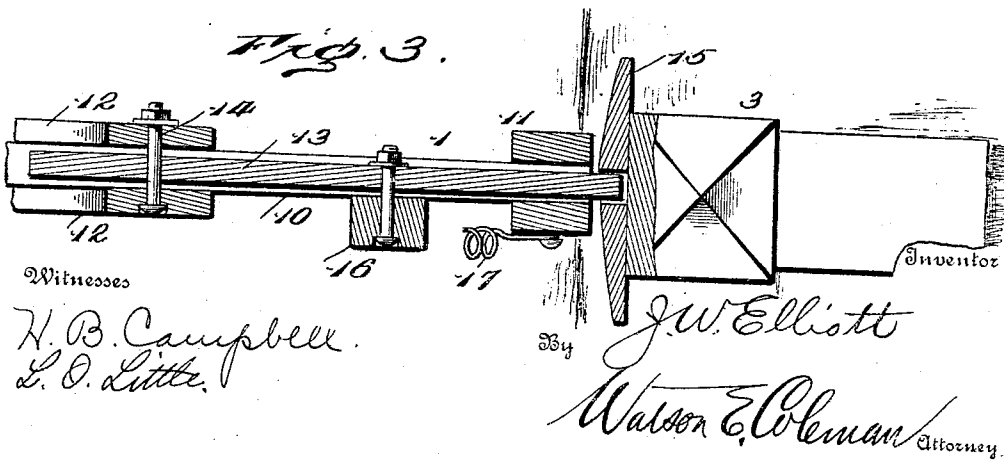
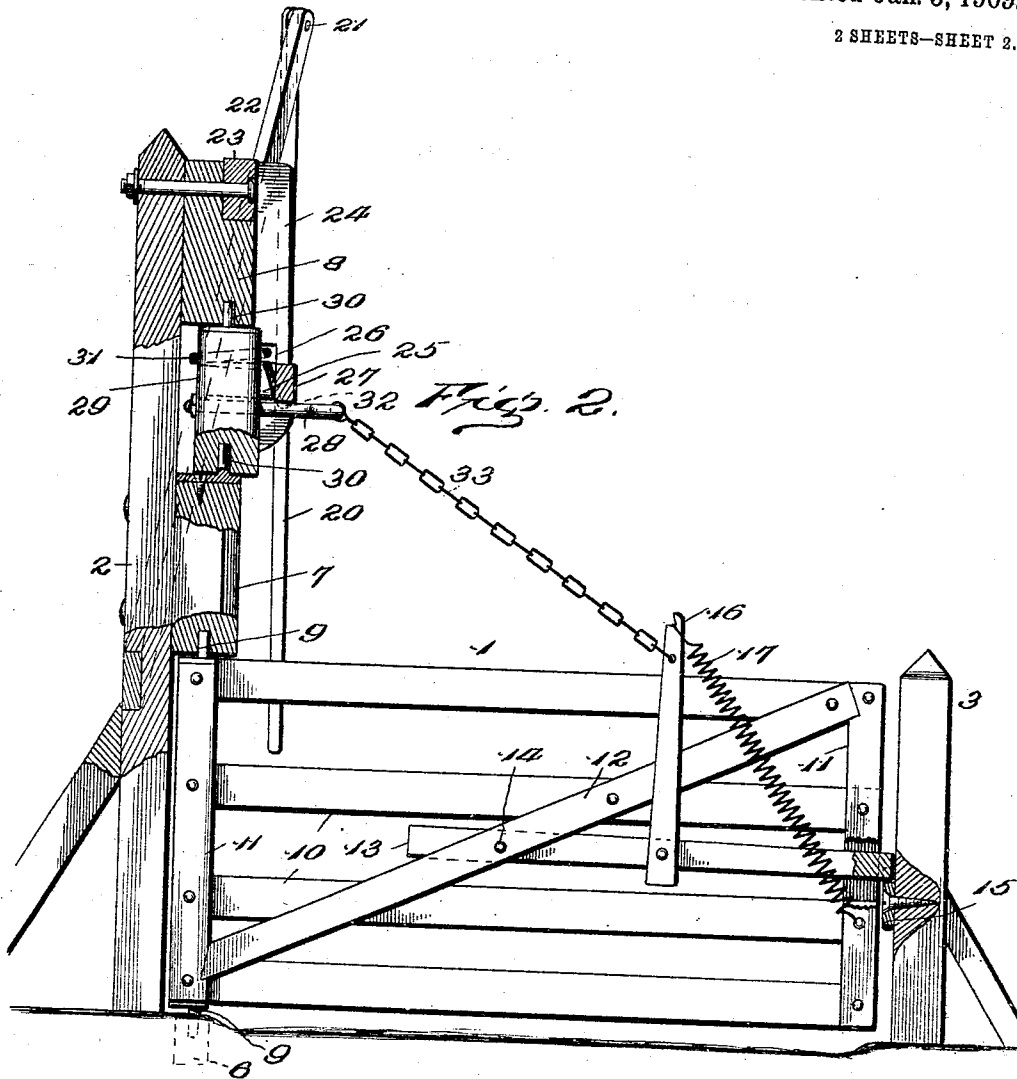
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UNITED STATES PATENT OFFICE.

JAMES W. ELLIOTT, OF FAIRFIELD, ILLINOIS.

GATE.

No. 908,550.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed April 25, 1907, Serial No. 370,251. Renewed May 23, 1908. Serial No. 434,545.

To all whom it may concern:

Be it known that I, JAMES W. ELLIOTT, a citizen of the United States, residing at Fairfield, in the county of Wayne and State of Illinois, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had therein to the accompanying drawing.

My invention relates to improvements in farm gates of that class which may be readily opened or closed by the occupant of a vehicle without dismounting from the same.

The object of the invention is to improve and simplify the construction and operation of gates of this character and to provide one which will be simple, strong, durable and comparatively inexpensive.

With the above and other objects in view the invention consists in the novel features of construction and the combination and arrangement of parts hereinafter described and claimed, and illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved gate; Fig. 2 is a vertical, transverse, sectional view; and Fig. 3 is a detail horizontal section.

In the drawings the numeral 1 denotes the gate, 2 the hinge post, 3 the latch post arranged opposite the hinge post, 4 a keeper post arranged upon the same side of the road as the hinge post and a suitable distance from the same and 5 a post similar to the post 4 and arranged upon the opposite side of the hinge post. The hinge post 2 is considerably higher than the gate and projecting from one of its sides are three bearing blocks 6, 7, 8. The inner end of the gate 1 is hingedly or pivotally mounted between the bearings 6 and 7 by providing upon said end vertically alining pivots 9, which are seated in sockets or recesses formed in bearings 6, 7 as shown in Fig. 2. The gate 1 may be of any suitable form and construction but I preferably make it of parallel, longitudinal bars 10 connected at their ends by upright bars 11 and by diagonal braces 12. The gate is provided with a latch bar 13 arranged above one of the bars 10 and having its inner end pivoted at 14 between the braces 12. The free end of the latch projects between the bars 11 at the outer end of the gate and is adapted to engage the usual notched keeper plate 15 arranged transversely on the post 3. Secured to the latch and projecting upwardly from one side of the same is a handle bar 16 to

which is connected one end of a coil spring 17, the other end of which latter is attached to one of the bars 11 so that said spring tends to swing the latch 13 downwardly. The keeper plate 15 serves to hold the gate in its closed position and to hold it in its open position I provide a notched keeper plate 18 upon the post 4. This keeper plate is of the usual form and projects outwardly or at right angles to the post as shown.

The gate may be swung to either its open or closed position by operating hand levers 19, 20 arranged upon the opposite sides of the gate at a suitable distance therefrom, and pivoted at their upper ends as at 21 to the upper and outer ends of inclined bars or beams 22, which project from opposite sides of the hinge post 2 and are connected to the posts 4, 5 as shown. The inclined bars 22 are further connected by a horizontal brace bar or beam 23, secured at its center upon the top of the bearing block 8, and having its ends connected to the bars 22. Connecting the latter and the brace bar 23 are vertical brace bars 24, which also serve as guides for link rods 25, which latter have their outer ends pivotally connected to the hand levers 19, 20. The links 25 project through and are adapted to slide and have a limited, swinging movement in the openings 26 formed in the bars 24, and their inner ends are pivotally connected to the opposite ends of a connecting bar 27. The latter rests upon a horizontal arm 28 projecting radially from a drum 29 disposed vertically between the blocks 7, 8 and having at its top and bottom concentric pivots 30, which rotate in suitable recesses or sockets in said blocks 7, 8. This mounting of the drum 29 permits it to rotate and it is adapted to be actuated by a band, cable or other flexible element 31, which is passed one or more times around the upper portion of the drum and has its ends secured at 32 upon the bar 27. The arm 28 is connected by a chain or the like 33 to the upper end of the latch bar 16.

The operation of the gate is as follows: When it is approached from either side the adjacent hand lever is swung longitudinally in the proper direction so that the link 25 connected to it will move the bar 27 longitudinally. Owing to the connection of the band 31 to the bar 27 and its engagement with the drum 29, the latter will be rotated so that its arm 28 will first lift the latch 13 to release the gate and will then swing the latter

to its open position in which position it will be retained by the engagement of the latch with the keeper 18. After the person thus operating the gate has passed the same, he 5 actuates the other hand lever in the reverse direction to first release the gate from the keeper 18 and then swing it to its closed position in which it will be held by the keeper 15.

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

1. The combination of stationary bearings, a swinging gate pivoted therein, a rotary 15 drum, a radial arm projecting from said drum, a flexible connection between said arm and the outer portion of the gate, a sliding bar, a flexible connection between said bar and said drum, supports, guides 20 arranged upon said supports, levers pivoted upon said supports, and links slidable in said guides and pivoted to said levers and to said sliding bar.

2. The combination of a hinge post, a 25 latch post, three superposed bearings, a gate pivoted between the lower and central bearings, a drum journaled between the upper and central bearings, an arm projecting from said drum, a latch upon the gate to engage 30 a keeper on the latch post, a spring for actuating said latch, a flexible connection between the latch and said arm, a bar, a flexible connection between the drum and said bar, supports, guides upon said supports, 35 levers upon said supports, and links connecting said levers and the ends of said bar, substantially as described.

3. The combination of a post, a gate hinged thereto, a rotary drum, an arm projecting from the latter, a connection between said arm and the outer portion of the 40 gate, a bar, a flexible connection between said bar and said drum, inclined beams projecting outwardly from said post, a brace beam con-

nected to said hinge post at its center and to 45 said inclined beams at its ends, guide bars connecting said beams, links slidable upon said guide bars and connected at their inner ends to the first mentioned bar and levers pivoted to said inclined beams and pivotally 50 connected to the outer ends of said links.

4. The combination of a hinge post, a latch post, a gate hingedly mounted on said hinge post, a latch upon said gate to engage 55 a keeper upon said latch post, a drum rotatably mounted upon the hinge post, an arm projecting from said drum, a connection between said arm and said latch, a bar, a flexible element wound about said drum and connected at its ends to said bar, guides, 60 links mounted in said guides and connected in their inner ends to said bar, and levers pivotally connected to said links.

5. The combination of a hinge post, a latch 65 post, a gate hingedly mounted on said hinge post, a latch upon said gate to engage a keeper upon said latch post, a drum rotatably mounted upon the hinge post, an arm projecting from said drum, a connection between said arm and said latch, a bar, a 70 flexible element wound about said drum and connected at its ends to said bar, inclined beams projecting outwardly from said hinge post, a brace beam connected to said hinge 75 post at its center and at its ends to said inclined beams, slotted guide bars connecting said beams, links in said slotted guide bars and connected at their inner ends to the first mentioned bar, and levers pivoted to said inclined beams and pivotally connected 80 to the outer ends of said links, substantially as described.

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

JAMES W. ELLIOTT.

Witnesses:

E. C. BAKER,

IVAN LITTELL.