

(No Model.)

J. HUGHES.
GATE.

No. 508,018.

Patented Nov. 7, 1893.

Fig. 1.

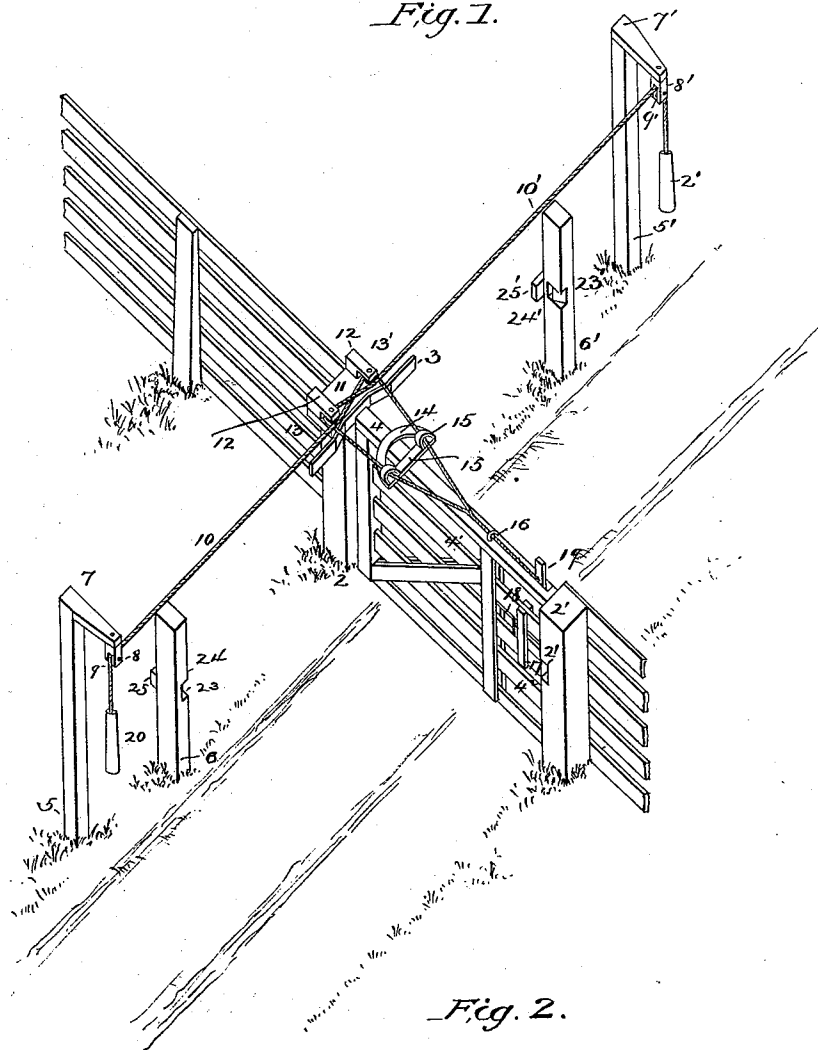
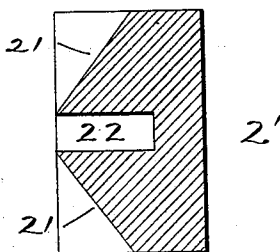


Fig. 2.



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UNITED STATES PATENT OFFICE.

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GATE.

SPECIFICATION forming part of Letters Patent No. 508,018, dated November 7, 1893.

Application filed January 12, 1893. Serial No. 458,113. (No model.)

To all whom it may concern:

Be it known that I, JONATHAN HUGHES, a citizen of the United States, residing at Waynetown, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had therein to the accompanying drawings, in which—

Figure 1 is an isometrical view of a gate embodied in my invention; and Fig. 2 is a transverse section of the latch post, showing the latch mortise and the inclines leading thereto.

My invention relates more particularly to an appliance for the opening and closing of swinging-gates in two directions, so as to allow persons in vehicles or otherwise mounted to pass through from either direction without the inconvenience of dismounting. With this purpose in view my invention consists in the peculiar construction, combination, and arrangement of the various parts as will be more specifically pointed out in the following description and claim.

In the annexed drawings like numbers of reference indicate corresponding parts throughout the several views.

1 represents the gate proper which may be formed substantially as shown in the drawings and is hinged to the rear post 2 by any suitable means ordinarily employed in hanging swinging gates. For the purpose of causing said gate to close automatically I have provided the inner side of post 2 near the top with a horizontal spring 3 which operates against the upper rail 4 of the gate.

5, 5' represent two uprights or posts located at a suitable distance from the side latch-posts 6, 6' for the purpose of allowing gate 1 to be closed without interfering with the vehicle and for carrying cords or cables as shown.

To the top of the uprights or posts 5, 5' are securely fastened the arms 7, 7' which project laterally over the roadway for convenience in grasping the cords or cables and are provided with rectangularly-slotted blocks 8, 8' which have rollers or sheaves 9, 9' mounted loosely therein, over which pass the cords or cables 10 10'. Said blocks are securely attached underneath at the outer ends of the arms, or if

desired ordinary pulleys may be suspended instead of said blocks for the purpose of receiving the cords or cables.

Rigidly secured to the rear post 2 is a rectangular cap-piece 11 provided with a pair of small cap-pieces 12, 12' attached transversely thereon and slotted at their inner ends for the reception of a pair of rollers 13, 13' around which pass the cord or cables 10, 10'.

A segment-shaped guide-piece 14, provided at its ends with the eyes 15, 15' through which pass the cords or cables, is firmly fastened on rail 4 for the purpose of securing leverage, sufficient, to make the opening and closing of the gate an easy matter. 16 indicates a guide-staple for the cords or cables 10, 10'.

The front portion of gate 1 is provided with a spring-latch 17, 18 operated horizontally, which may be substantially of the form shown in the drawings and comprises a latch 17 which is impelled outward by a spring 18 that is securely fastened underneath rail 4' at the inward end of the latch. The vertical lever 19, pivoted at its lower end to rail 4', is used to operate latch 17 horizontally, the two being pivoted together at about their longitudinal centers.

Each of the cords or cables 10, 10' referred to hereinbefore, passes from its roller or sheave 9 or 9' inwardly, over the small cap-piece 12 or 12', or in front of the nearest roller 13 or 13', to and around the roller farthest from the approaching side, and forward through the eye 15 or 15' and the guide-staple 16, to the lever 19 where each is tied or otherwise fastened if desired.

20 and 20' indicate weights suspended at the free ends of the cords or cables for the purpose of taking up slack so as to tighten them when not in use.

The front post or latch-post, proper 2' is formed on the inner side with a pair of oblique faces 21, 21' which converge approximately to the sides of a rectangular mortise 22 between them. In closing gate 1 from either direction, the oblique faces 21, 21' force latch 17 inward, and the mortise catches it in its outward thrust which securely fastens the closed gate.

Each of the side latch-posts 6, 6' is formed on its near and inner side with an oblique face

23 or 23' that inclines toward the edge of a rectangular mortise 24 or 24' which catches the latch and securely holds the opened gate. 25 and 25' indicate buffing-blocks for the gate.

5 To open the gate, the free end of one of the cords or cables is drawn downward thereby drawing the latch 17 out of the mortise 22 and releasing the closed gate. By then giving the cords or cables a stout pull and slackening
10 quickly, so as to throw the gate lightly against the side latch-posts the gate opens and fastens itself. The gate is closed by repeating the above operation on the cord or cables opposite from the one used in opening it.

15 It will be seen by this novel and peculiar arrangement that the gate proper can be as conveniently manipulated by footmen or pedestrians as it can be by persons in vehicles or otherwise mounted.

20 I am aware that cords and cables have heretofore been used for the purpose of opening and closing swinging-gates. Therefore, I do not claim broadly the use of cords and cables, but

25 What I do claim as my invention, and desire to secure by Letters Patent, is—

The combination, in a gate, of the rear post provided on the inner side near the top with a horizontal spring which operates against

the upper rail of the gate, proper, and at the 30 top with a rectangular cap-piece having small cap-pieces secured transversely thereon and rollers mounted loosely between said pieces; the gate having a segment-shaped guide-piece secured firmly on the upper rail and provided 35 at its ends with eyes for the reception of cords or cables; a latch at the front portion of said gate impelled longitudinally outward by a spring at its inward end; the front post or latch-post provided with oblique faces that 40 converge approximately to the sides of a rectangular mortise which catches the spring-latch and securely holds the closed gate; the side latch posts provided on their near and inner sides with oblique faces which incline 45 rearwardly toward the edge of rectangular mortises, the cords or cables passing through the slotted blocks to and around the rollers of the cap-piece and forward through the eyes of the guide-piece to a vertically-pivoted lever 50 which operates the spring-latch, and weights attached to the free ends of said cords or cables, substantially as specified.

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Witnesses:

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