R. D. DESELLE.

GATE.

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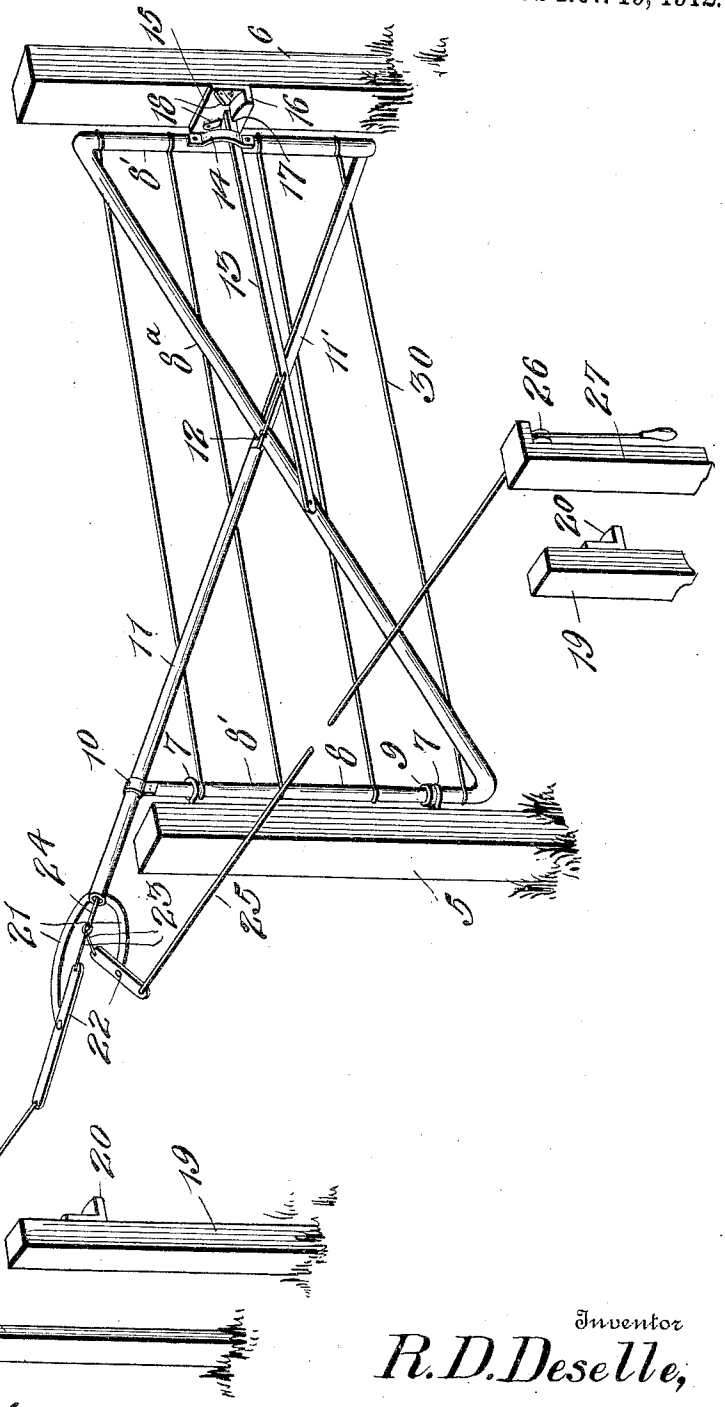

Witnesses

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GATE.

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To all whom it may concern:

Be it known that I, ROUVILLE D. DESELLE, a citizen of the United States, residing at Snohomish, in the county of Snohomish and State of Washington, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had to the accompanying drawings.

This invention relates to gates and has for its primary object to provide an improved gate structure in which is embodied new and novel means for mounting and supporting the gate operating mechanism.

Another object of the invention is to provide a device of the above character which is comparatively simple and inexpensive in its construction, strong, durable and efficient in practical use and which provides means whereby the gate operating mechanism is mounted and protected against liability of derangement.

A still further object is to provide a gate of very strong and durable construction having a latch bar pivoted thereon, and novel means carried by the gate and operated at a distance therefrom for releasing said latch bar to swing the gate to its open or closed position.

With these and other objects in view, the invention consists of the novel features of construction, combination and arrangement of parts hereinafter fully described and claimed, and illustrated in the accompanying drawings, in which I have shown a perspective view of a gate and operating means therefor embodying the present invention.

Referring more particularly to the drawings 5 indicates the hinge post and 6 the latch post of the gate. These posts are arranged at opposite sides of the roadway and the swinging gate is hingedly mounted in the eyes 7 secured to the hinge post.

The gate proper is formed from a single length of metal tubing of substantially Z-shaped form as indicated at 8. The vertical parallel end portions 8′ of this length of tubing form the opposite ends of the gate, the diagonal intermediate connecting portion 8^a extending between the lower hinged end of the gate and the upper outer end thereof. Upon the vertical hinged end portion of the gate a ring or collar 9 is secured which engages the lower hinge eye 7 and prevents the gate from moving therethrough. The hinged end of the gate is extended above the post 5 as clearly shown in the figure and has arranged upon its upper end a bearing 10 in which is mounted the diagonally extending tube 11. The lower end of this tube is secured to the extremity of the gate member 8 at the lower end of the outer vertical portion 8′ thereof. It is also rigidly secured to the diagonally extending portion 8^a as shown at 12 and adjacent to this point to its lower end the tube 11 is formed into a flat rectangular metal bar 11′.

A longitudinally extending latch bar 13 is pivoted to the diagonally extending portion 8^a of the gate structure and at its free end is movably disposed in a guide 14 secured to the outer vertical end portion of the gate.

A latch device is secured to the face of the gate post 6 and is shown in detail in the figure. This latch device comprises a base plate 15 having a guide block 16 secured thereto at its lower edge or integrally formed with the same as may be desired. The upper edge of this block is convex as shown and provided with a central recess 17. A keeper bar 18 is pivoted at one end upon each end of the base plate 15 and has its free end normally disposed in contact with the convex edge of the block 16, adjacent to the central recess 17.

As the gate is moved to its closed position, the free end of the latch bar 13 strikes upon the convex edge of the block 16 and elevates the first of the keepers beneath which it passes into the recesses 17. In the event that the latch bar should fail to fall into this recess and move beyond the same, it will strike the oppositely inclined keeper bar and be thrown back into said recess thus locking the gate between the posts. A short post or standard 19 is arranged adjacent to the hinged end of the gate at each side thereof and has arranged thereon a latch 20 of similar construction with the exception that this latch has but a single one of the pivoted keeper bars 18. It will thus be obvious that the gate when swung to either side of the gate post may also be locked in its open position.

Novel means are provided for actuating the latch bar to release the same and open the gate. To this end the tube 11 is extended beyond the bearing 10 and has formed upon its end the spaced arms 21. On the end of each of these arms a lever 22 is centrally pivoted. The ends of each of the le-

vers are formed with eyes and to the adjacent ends the flexible connections 23 are secured whereby said levers are connected to a wire or rod 24 which extends through the tubular portion of the member 11 and is pivotally connected to the latch bar 13 as clearly shown in the figure. To the other ends of the levers 22 the operating cords 25 are connected, said cords passing over the pulleys 26 arranged on the upper end of the posts 27.

In the operation of my improved gate, when the driver of the vehicle or horseman approaches the gate, he pulls upon the end of the operating cord 25, thereby moving the pivoted lever 22 connected to the end thereof in alinement with the cord and drawing the connecting wire or rod 24 longitudinally through the tube 11. This movement of the connecting wire elevates the free end of the latch bar 13 in the guide 14 and lifts the same above the pivoted keeper bars 18. The continued pull upon the operating wire moves the upper end of the tube 11 toward the operator, moving the gate proper from between the posts 5 and 6 to its open position. When the inertia is sufficient to swing the gate, the strain upon the operating cord or wire 25 is released whereupon the latch bar 13 drops to the lower end of the guide 14 into position to engage with the latch member arranged upon the post 6 or one of the posts 19.

From the foregoing it will be seen that I have devised a comparatively simple and positively acting gate operating mechanism whereby the gate may be easily and quickly swung to its open position from either side thereof without dismounting from the vehicle or horse. The construction of the gate itself is very strong and durable and the latch operating mechanism of such simplicity that the cost of repairs is reduced to a minimum.

While I have above described a specific form of latch device, the same constitutes no part of the present invention which resides solely in the gate construction and operating means therefor, my improved gate being capable of use in connection with any well known form of latch device.

The ends of the Z-shaped tube comprising the gate frame are preferably connected by means of a plurality of wires 30 to prevent live stock from attempting to pass beneath or over the diagonal intermediate portion 8^a of the gate frame.

While I have shown and described the preferred construction of my improved gate and operating mechanism, it will be obvious that the same may be very greatly modified in the form, proportion and details of construction of the various parts without departing from the essential feature or sacrificing any of the advantages involved in the invention.

Having thus described the invention what is claimed is:—

The combination with a gate supported at one end for swinging movement and latch devices for locking the gate in its closed position, of a latch bar pivotally mounted upon the gate for engagement with said latch devices, a diagonally disposed bar fixed to the lower free end of the gate and to the upper hinged end thereof, said diagonal bar having a tubular portion open at both ends, the upper end of said tube extending beyond the hinged end of the gate, and the lower end of the tube terminating at a point intermediate of the ends of the gate, a cable connected to the latch bar and extending through said tube, oppositely extending arms secured to the upper end of the tube, levers fulcrumed intermediate of their ends upon said arms, connections between one of the ends of the levers and said cable, and means connected to the other ends of said levers to disengage the latch bar from the latch devices and to swing the gate to its open position.

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

ROUVILLE D. DESELLE.

Witnesses:
A. G. Willis,
Wm. Hodgins.