

J. E. MULLEN.

GATE.

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940,044.

Patented Nov. 16, 1909.

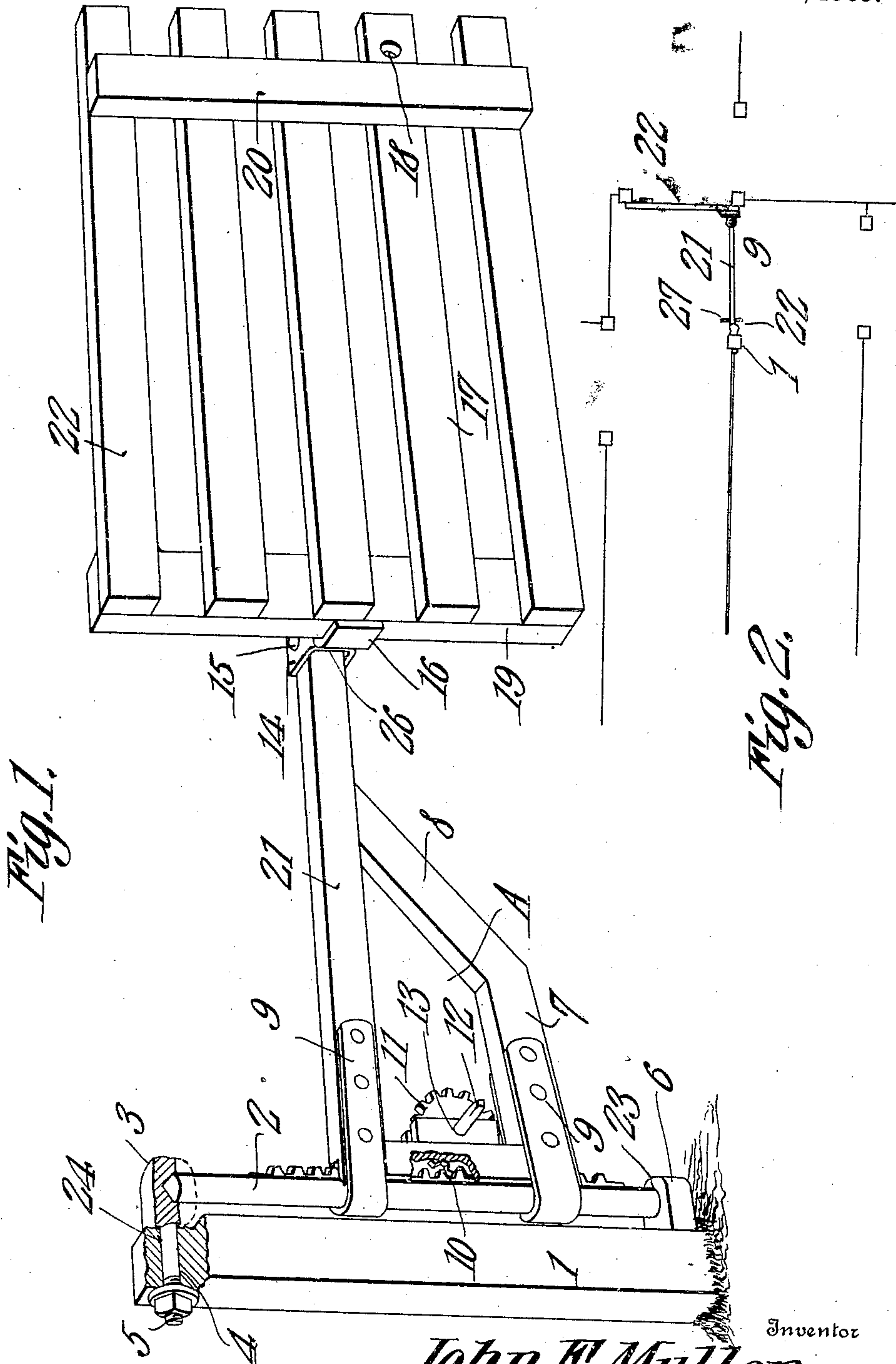


Fig. 1.

Fig. 2.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN E. MULLEN, OF NEW HAMPTON, IOWA.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, JOHN E. MULLEN, a citizen of the United States, residing at New Hampton, in the county of Chickasaw and State of Iowa, have invented a new and useful Gate, of which the following is a specification.

This invention has reference to new and useful improvements in gates and is designed to pass over obstructions in the path of its swing, such as snow-drifts and other temporary obstacles.

It further contemplates a gate constructed with a double swing, which, when during the passage of small stock such as pigs, sheep, etc., the large stock such as horses, cattle, etc., may be retained.

With the above and other ends in view the invention consists in the construction, combination and arrangement of parts all as hereinafter more fully described, specifically claimed and illustrated in the accompanying drawings, wherein—

Figure 1 is a perspective view of my gate, in its extended position, portions thereof broken away. Fig. 2 is a diagram showing how my gate may be applied to stock yards.

Reference being had to the drawings, 1 represents a gate post, at the lower end of which extends a stud or mounting 6, which has the journal opening 23 in its upper surface, and has at the opposite end thereto, a passage 24. Adapted to be received in this passage is a shank 4 carrying at its inner extremity a similar stud 3, and held therein by a nut 5 which detachably secures the stud to the post. Between these two studs is journaled an auxiliary post 2, having on its outer surface and made integrally therewith, the rack bar 10, which provides a part of a mechanism for the raising and lowering of the gate when it is desired to pass the same over minor obstacles. Attached to the auxiliary post 2 by the bands 9 passing around the same, is a gate carrying member or frame designated in a general manner as A, which comprises two approximately parallel beams 7 and 21 respectively, having their outer extremities connected by means of an oblique brace 8. Mounted between these beams at the end adjacent the post 2 is the gear 11 which meshes with the rack bar on the shaft 12. The shaft 12 of this gear forms at one end a crank receiving member to operate the gear, and at the other a stud on which the gate, in its closed position, rests.

Attached to the outer extremity of the beam 21, in such a manner that when it has completed a semi-circular swing, it may continue no farther, is a gate 22 of any of the familiar shapes and sizes. The hinge 26 by which the gate 22 is attached to the beam 21, comprises two U shaped members 14 and 16, engaging the beam 21 and the gate member 19 respectively, having their base portions secured together in such a manner that the arms are oppositely disposed in horizontal and vertical planes.

Located in the outer extremity of the cross bar 17 of the gate, is the orifice 18 which is so situated that when the gate is in its closed position it will engage the stud 27 of the gear shaft.

From the foregoing it will be understood that should the gate be swung from its engagement with the stud 27, small stock may pass under the beam 21 and at the same time retain all large stock in the inclosure provided with this gate. It will be further understood that should it be desired to pass the gate over any of the obstructions which often arise in the path thereof, the same may be raised by means of the gear 11 meshed with the rack 12, to a sufficient height to allow the free swing of the gate.

This gate may be used in stock yards as shown in Fig. 2 of the accompanying drawings, to close a series of ports and alley ways, leaving others open, also retaining small stock in one pen and large stock in another, all through the use of the same gate, the gate being of such a construction that it may close any two of six ports or alley ways.

Having thus fully described my invention what I claim as new and desire to secure by U. S. Letters Patent is:

1. The combination of a post, a frame projecting therefrom and extending across a gate opening, and a gate pivotally secured at one end to the outer end of said frame and adapted at its opposite end to be engaged by the inner end of the frame whereby the gate may be held against the frame to entirely close the gate opening or may be swung out beyond the end of the same to leave the gate opening barred by the said frame.

2. In a gate of the class described, the combination with a gate post having inwardly projecting mountings, the upper one of said mountings being detachable, of an auxiliary post journaled in said mountings

and provided with an integral rack on its inner face, a frame vertically movable on said auxiliary post, a shaft in the frame, one extremity of which is a crank receiving
 5 shank, while the other is a stud, a gear mounted on said shaft and meshing with the rack and a gate at the extremity of the frame having an orifice at its outer end which, when the gate is closed, is adapted to receive
 10 the stud.

3. In a gate of the class described, the combination with a post, of an auxiliary post pivotally secured thereto, a vertical movable frame carried by said auxiliary post hav-
 15 ing mounted therein a gear adapted to mesh with a rack formed integral with the inner

face of said auxiliary post, the shaft of said gear extending laterally on both sides of said frame, a gate pivoted at one extremity of said frame adapted to swing in a semi- 20 circle on one side thereof, said gate having an orifice in its outer extremity adapted to house one extremity of said gear shaft when the gate rests against said frame, as and for the purpose set forth. 25

In testimony that I claim the foregoing as my own, I have hereto affixed my signature in the presence of two witnesses.

JOHN E. MULLEN.

Witnesses:

T. C. CLARY,
 M. F. CONDON.