

(No Model.)

J. W. PUTT.
FARM GATE.

No. 570,714.

Patented Nov. 3, 1896.

Fig. 1

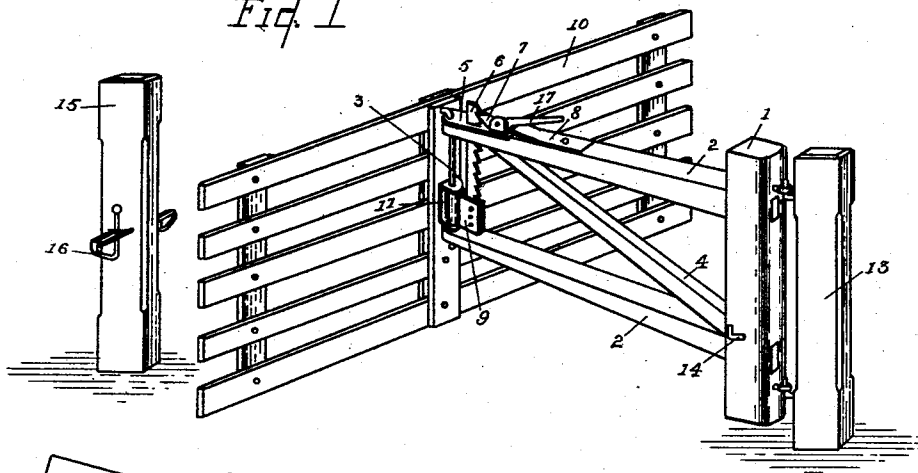


Fig. 2

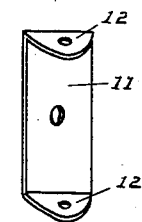
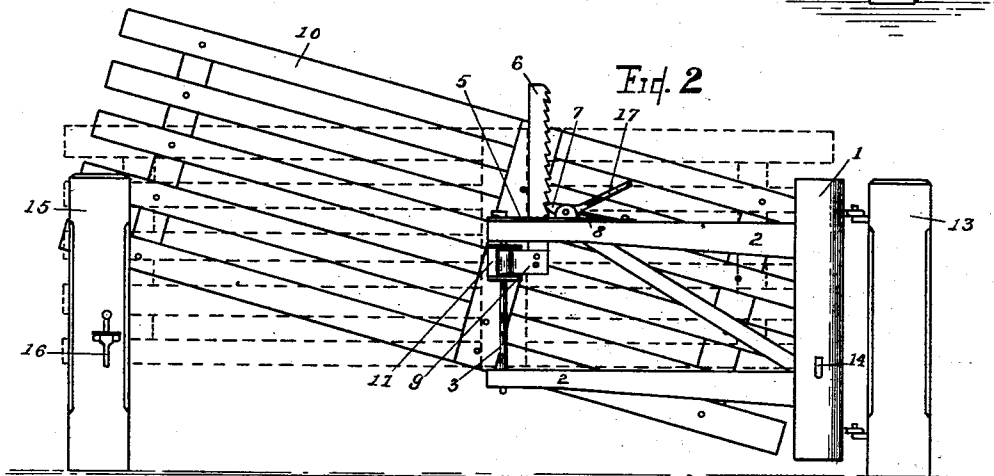


Fig. 3

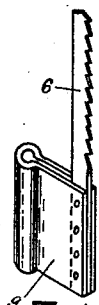


Fig. 4

WITNESSES:

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JOHN W. PUTT, OF NINE MILE, INDIANA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 570,714, dated November 3, 1896.

Application filed August 22, 1896. Serial No. 603,579. (No model.)

To all whom it may concern:

Be it known that I, JOHN W. PUTT, a citizen of the United States, residing at Nine Mile, in the county of Allen, in the State of Indiana, have invented certain new and useful Improvements in Farm-Gates; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to

10 which it appertains to make and use the same, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to improvements in farm-gates.

The object of my invention is to provide a cheap, substantial, and convenient farm-gate having few parts simply arranged with small liability of getting out of repair, adapted to swing in either direction and operate with either end to the latch-post, and adapted to be vertically adjusted at pleasure and automatically secured in any desired position of vertical adjustment by a rack-and-pawl mechanism, thereby avoiding the additional weights and strains incident to operating levers for elevating said gate.

My invention comprises a swinging frame or hanger hinged to the supporting-post, having upon its free end a vertical pintle-rod, a vertical rack-bar slidably mounted on said rod and adapted for a locked engagement with a spring-pressed holding-pawl, and a gate centrally pivoted to a supporting-bracket slidably mounted upon said rod, the said gate being capable of both a vertical and a swinging movement.

The novel feature of my improvement is the improved means for securing the swinging gate in any desired vertical adjustment.

Similar reference-numerals indicate corresponding parts throughout the several views, in which—

Figure 1 is a perspective view of my improvement partly open, showing the pivoted connection of the gate with the supporting-frame. Fig. 2 is a side view of the same, showing the extreme limit of its oblique and also showing in dotted outline the limit of its horizontal elevated position. Fig. 3 is a detail of the supporting-bracket on which the gate is pivoted. Fig. 4 is a detail of the ver-

tical rack-bar with the lateral supporting-bracket fixed thereon.

The gate-supporting frame, preferably made of wood, comprises the upright post 1 and the parallel horizontal pieces 2, having their rear ends fixed therein and connected at their free ends by the vertical pintle-rod 3, whose ends are properly secured in said pieces, the outer end of said pieces being strengthened and supported by the oblique brace 4. The said post 1 is supported upon proper hinges on the supporting-post 13. On the upper face of the uppermost piece 2 and at or near the free end thereof is fixed a plate 5, having near its forward end a perforation for the upper end of the rod 3 and a longitudinal slot in which the vertically-movable rack-bar 6 is loosely mounted, Fig. 1. The said rack-bar 6 has a series of teeth upon the rear edge thereof adapted to engage with a proper pawl or detent 7, pivotally mounted adjacent thereto upon said plate between proper apertured ears or lugs thereon. At or near the rear end of the said plate is fixed a spring 8, whose forward end is adapted to bear against the rear face of said pawl and thereby secure it normally in a position to engage the serrated edge of the rack-bar. The upper of said pieces 2 has near its forward end a vertical slot coincident with the said slot in the plate 5 for the said rack-bar.

To the lower end of the rack-bar is rigidly secured a forwardly-projecting bracket 9, provided with a vertical perforation adapted loosely to receive the said rod 3. This bracket may be formed by folding a piece of metal upon itself, as shown, or in other proper manner.

The gate 10, of any proper dimensions, preferably of wood and of any proper construction, is pivoted at its center to the metallic bracket 11, which has a central aperture for a proper supporting-bolt, the said bracket 11 being vertically arranged and pivotally or loosely mounted on said rod 3 by means of the parallel apertured ears 12 at the extremities of said bracket, arranged in vertical alignment. Between the said ears 12 the said bracket 9 is arranged, whereby elevating the said gate 10 on said rod will carry with it in its ascent the said rack-bar. On each side of the said post 1 of said gate-supporting frame are fixed proper hooks 14, adapted to receive

one of the horizontal boards on the gate 10 to secure said gate against lateral displacement when closed.

The latch-post 15 is provided upon two of its opposite sides with a proper gravity-latch 16, Figs. 1 and 2. As the gate 10 is pivotally suspended on rod 3 by means of the bracket 11, it is obvious that it will swing freely and can readily be adjusted with either end thereof of adjacent to the latch-post.

The operation and manner of employing my improvement are briefly stated as follows: As the rear end of the gate 10 is normally and detachably secured to the supporting-frame by means of the corresponding hook 14 in the post 1, the said gate and supporting-frame can be swung open together as one gate. When it is desired to open said gate but part of the way, it can readily be done by bearing down upon the forward end of the gate 10 and thereby disengaging the rear end thereof from the hook 14, when it can be readily swung to any desired angle with the supporting-frame. When it is desired to elevate the front end of the gate to avoid deep snow or snow-drifts, it can readily be done by simply raising the front end, the corresponding hook 14 forming a fulcrum for the engaging gate-rail, whose ends are sufficiently extended for that purpose, thus elevating the bracket 11, on which the said gate is pivoted, and carrying upward the rack-bar. As the pawl is normally engaged with said rack-bar, the gate will be automatically locked and supported at any desired adjustment without requiring the operator to leave his position at the latch-post.

When it is desired to elevate said gate and secure it in such position to permit the passage of small stock or hogs, sheep, or the like only, the operator elevates the forward end thereof, as described, then detaches the rear end from its engagement with the hook 15 and swings it to a horizontal position on its pivotal support. One of the lower horizontal boards or strips of said gate is then interlocked at one end with said hook and at the other end with the adjacent latch. The operator can thus manipulate said gate into any desired position of either lateral or vertical adjustment without changing his position at the latch-post. When it is desired to lower the said gate to its normal position, the operator simply disengages the pawl 7 by means of the handle 17 thereof, after which the gate will descend to its normal position on said rod 3 by gravity to its support on the lower one of the horizontal pieces 2.

It is obvious that by the use of my improved mechanism for elevating and supporting said

gate in its elevated position all the additional weight and strains incident to lever-operating devices are avoided and the convenience of operating is greatly increased. It is also obvious that the mechanical details of my improvement may be variously modified without departing from the spirit of my invention, which consists in the employment of a rack-and-pawl mechanism for automatically locking the pivoted gate in any desired position.

Having thus described my invention and the manner of employing the same, what I desire to secure by Letters Patent is—

1. In a farm-gate, the combination of a post; a hanger-frame hinged to said post and provided at its free end with a vertical pintle-rod; a gate-supporting bracket 11 having lateral perforated ears 12 by which it is pivotally mounted on said rod; a vertical rack-bar 6 mounted as described, in the said hanger-frame, provided upon its lower end with the perforated bracket 9 adapted to loosely receive the said rod 3 and arranged thereon between the ears of said bracket 11, as shown; a spring-pressed pivoted holding-pawl 7, arranged on said hanger-frame as described, and adapted to normally engage the said rack-bar; and a gate centrally pivoted on the bracket 11 and capable of a vertical swinging movement on said bracket, a horizontal swinging movement on the vertical pintle-rod, and also a vertical adjustment on the same, all substantially as described.

2. In a farm-gate, the combination of a hinged hanger-frame provided at its free end with a vertical rod for the purpose specified; a gate-supporting bracket 11 pivoted on said rod, a laterally-swinging and vertically-adjustable gate pivoted on said bracket, as described; a rack-bar 6 vertically mounted in suitable bearings in said hanger-frame, pivotally connected at its lower extremity with said rod, and engaged with the said bracket 11, whereby elevating the forward end of said gate will simultaneously elevate the said rack-bar, as described, and a pivoted spring-pressed holding-pawl 7 mounted on said hanger adjacent to said rack-bar and adapted to engage therewith, whereby the said gate will be supported in any desired position of vertical adjustment, all substantially as described.

Signed by me, at Fort Wayne, Allen county, State of Indiana, this 18th day of August, A. D. 1896.

JOHN W. PUTT.

Witnesses:

JACOB J. KERN,
GERTRUDE LINDSEY.