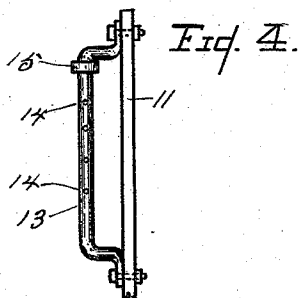
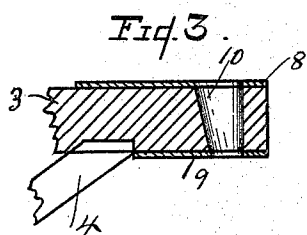
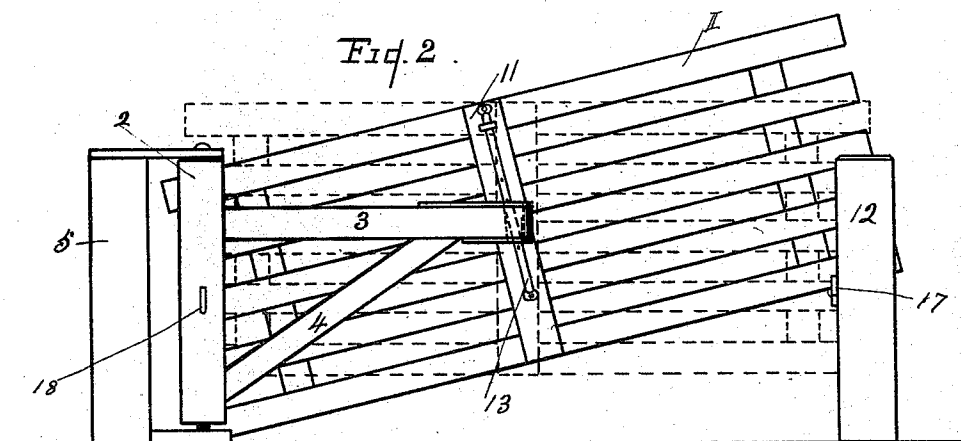
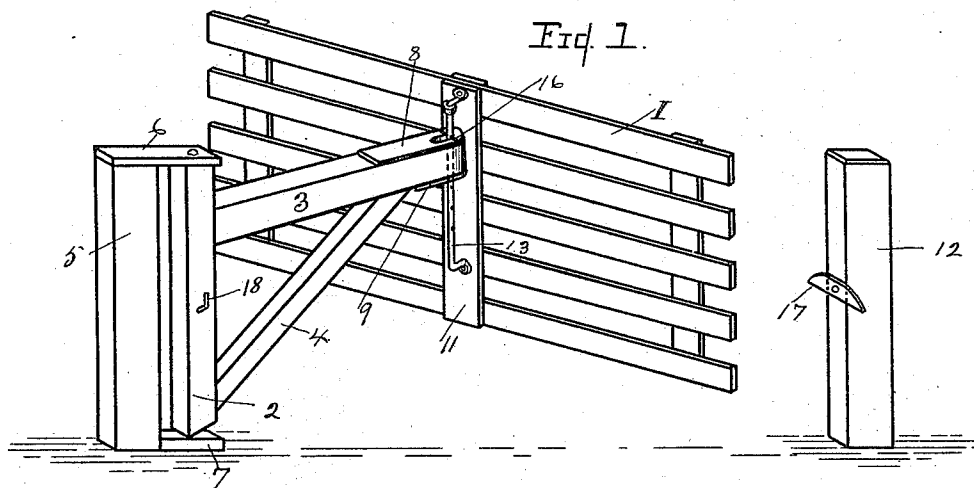


(No Model.)

D. C. DENIS.
FARM GATE.

No. 579,319.

Patented Mar. 23, 1897.



WITNESSES:

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UNITED STATES PATENT OFFICE.

DAVID C. DENIS, OF NINE MILE, INDIANA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 579,319, dated March 23, 1897.

Application filed December 16, 1896. Serial No. 615,861. (No model.)

To all whom it may concern:

Be it known that I, DAVID C. DENIS, 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 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 which are adapted for tilting and the varying adjustments required for farm use, particularly in separating different kinds of stock. Such as have been heretofore constructed are often complicated, requiring special castings for the operative parts, which are often inconvenient to procure and almost invariably too expensive to be practical for use by ordinary farmers for lanes and in farm division-fences.

The object, therefore, of my invention is to provide a farm-gate simple and substantially constructed, adapted for all the ordinary adjustments required for avoiding snow-drifts, separating stock, and all other farm uses, and so cheaply constructed as to be within the means of all, requiring no special castings, not liable to get out of repair, and that can be made and repaired without other mechanical skill than is possessed by the average farm-hand.

My invention comprises an ordinary farm-gate pivotally suspended upon a hinged supporting-hanger, and adapted to swing in either direction, and to operate with either end to the latch-post, and adapted for convenient vertical adjustment, and to be rigidly secured in position at any desired angle of inclination, and having both a vertical and swinging movement.

The novel features of my invention consist in the simple, cheap, and efficient means for adapting the gate for its various adjustments.

I attain these objects by the construction illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my improved gate, partly open, showing the pivotal

connection of the gate with the supporting-frame. Fig. 2 is a side view of the same, showing the gate tilted obliquely, and also in dotted lines its horizontal elevated position. Fig. 3 is a detail view of the free end of the horizontal supporting-arm on which the gate is pivoted, and Fig. 4 is a detail of the bracket by which the gate is pivotally suspended upon the supporting horizontal arm.

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

1 is the gate as a whole, including the upright supporting or swinging frame-post 2, having a horizontal arm 3, supported by an oblique brace 4, and the swinging gate mounted upon said arm. The swinging post 2 is secured in position at its upper end, as shown in the drawings, by a journal having its bearing in a block 6, secured to the upper end of a ground-post 5 and at its lower end by a like journal in a short post 7. For these journals and block 6 and post 7 proper hinges secured to the frame-post and ground-post may be substituted, if desired. Upon the upper and lower sides of the free end of the arm 3 are secured slotted plates 8 and 9. A vertical flaring slot 10 passes through the arm 3 and forms a continuous slot with the slots in the plates 8 and 9, as shown in Fig. 3.

Upon the middle upright strip 11 of the gate is rigidly secured a vertical metallic rod or bracket 13, having transverse perforations 14 and a lug 15 at its upper end, upon which the gate is supported when lowered to its extreme limit. The bracket 13 passes through the slot 10, and thereby the swinging gate is mounted upon the arm 3, and when elevated is supported by a pin or bolt 16, passed through one of the perforations 15. A latch-post 12 has upon it any proper latch 17. On each side of the ground-post 5 is fixed a proper hook 18, adapted to receive the end of one of the horizontal boards of the gate 1 to secure it against displacement when closed and to afford a support for the rear end of the gate when elevated above its normal position. The other end of the gate may be supported by one of the boards resting upon the latch 17, or hooks like 18 may be inserted in the latch-post for an end of one of the boards to rest in when the gate is so elevated. It is

obvious that the gate so mounted will swing either way and can be readily adjusted with either end adjacent to the latch-post.

The operation and manner of using my improved gate are, briefly stated, as follows: When the gate is closed and in its normal position, it is supported by the lug 15 of the bracket 13, resting upon the plate 8, and will be secured by the hook 18 at its rear end and the latch 17 at its latch end. Detaching it from its latch-fastening it can be readily swung open with the swinging frame comprised of the post 2 and its horizontally-braced arm 3 as one gate. When it is desired to open the gate but one-half or other part of the way, it can be readily done by disengaging the rear end from the hook 18. It can then be swung at any desired angle with the supporting-frame, as shown in Fig. 1.

If it is desired to elevate the front end of the gate to avoid deep snow or drifts, it can be readily done by detaching the fastening at that end and vertically raising the end, the rear hook 18 forming a fulcrum for the gate-rail, whose ends are sufficiently extended for that purpose, and then inserting the pin 16 in one of the perforations 14, as shown in Fig. 2. The flaring slot 10 will permit the free movement of the bracket 13 for that purpose, as shown by the dotted lines in Fig. 2.

If it is desired to elevate the gate and secure it in that position to permit the passage of small stock, as hogs or sheep, the operator elevates the front end, as described, then detaches the rear end from its engagement with the hook 18 and swings it to a horizontal position upon its pivotal support 16. One of the lower horizontal boards of the gate is then interlocked with the hook 18 at one end and secured at the other end with the adjacent latch. The operator can thus manipulate the gate into any desired position of either lateral or vertical adjustment.

When it is desired to lower the gate to its normal position, the operator removes the pin 16, after which the gate, being detached from the hook 18, will descend by its gravity until lug 15 is supported upon plate 8.

It is obvious that by my improved mechanism the convenience of operating the gate is greatly increased, while all the additional weight and strain incidental to lever-operating devices are avoided. The metal parts, as the bracket 13, the plates 8 and 9, and the hinges, when these parts are of metal, can be made by any blacksmith and the whole constructed without skilled labor at a very economical cost.

The mechanical details of my invention can be variously modified without departing from the spirit of my invention, which consists of the employment of a bracket mounted in the slotted end of the swinging frame, as shown, in combination with other parts of the gate.

To prevent loss of the pin 16, it may be secured by a chain and staple to the arm 3 or other adjacent part of the gate. The plates 8 and 9 may be omitted, and the pin 16 may be inserted in a perforation through the slotted end of 3 instead of resting upon the upper side, as described and shown in the drawings.

To prevent the displacement of the gate when in its normal position by hogs or other animals, the pin 16 may be inserted in one of the perforations on the under side of the arm 3.

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

1. In a farm-gate the combination of a post, a hanger-frame pivotally connected to said post and provided at its free end with a vertical flaring slot; a gate; a supporting-bracket having transverse perforations, passing through said slot and centrally secured to said gate; a pin or bolt adapted to be inserted in said perforations in the bracket for supporting the gate when elevated above its normal position, whereby said gate has a vertical and a horizontal swinging movement upon the hanger-frame, and is capable of vertical adjustment, all substantially as described.

2. The combination in a farm-gate of a post; a hanger-frame having a pivotal connection with said post, and having at its free ends metallic plates secured upon the upper and lower sides thereof, and provided with a vertical flaring slot in said free end and said plates, as shown; a gate; a supporting-bracket having transverse perforations, passing through said slot and centrally secured to said gate; a pin adapted to be inserted in said perforations in the bracket for supporting the gate when elevated above its normal position, whereby said gate has a vertical and a horizontal swinging movement upon the hanger-frame, and is capable of vertical adjustment.

3. In a farm-gate, the combination of a swinging hanger-frame provided at its free end with a vertical flaring slot for the purpose specified; a gate; a supporting-bracket rigidly fixed upon said gate midway the ends thereof, passing through said slot, and having a series of transverse perforations; a pin adapted to be removably mounted in said perforations, for the purpose of supporting said gate when elevated above its normal position, whereby the said gate has both a vertical and a horizontal swinging movement upon the hanger-frame, and is also adapted for a vertical adjustment on said frame, all substantially as described.

Dated and signed at Fort Wayne, Indiana, this 12th day of December, 1896.

DAVID C. DENIS.

Witnesses:

I. L. ROSS LEWIN,
A. T. RANDALL.