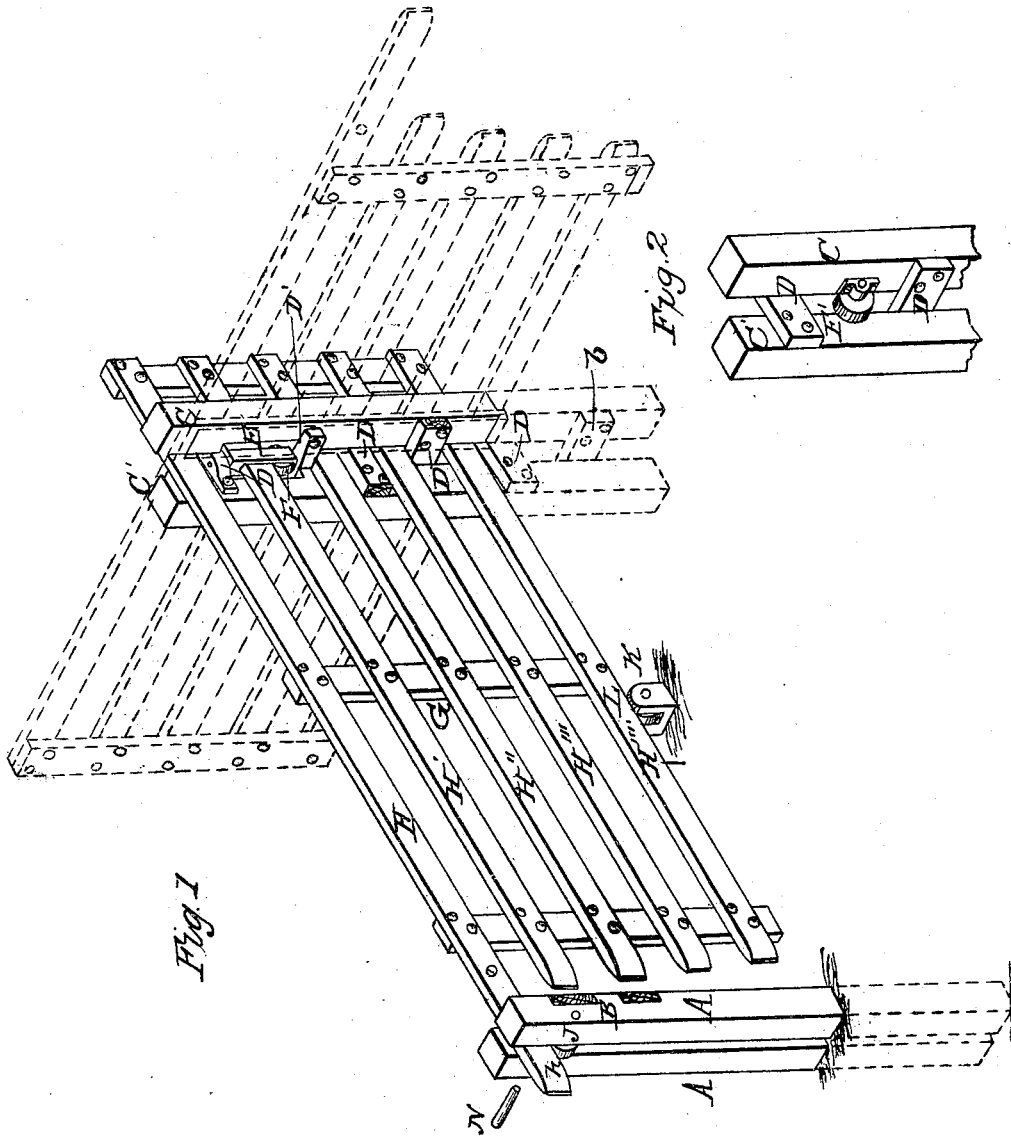


W. SNYDER.

Farm Gate.

No. 53,053.

Patented March 6, 1866.



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# UNITED STATES PATENT OFFICE.

WILLIAM SNYDER, OF WOOSTER, OHIO.

## IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. 53,053, dated March 6, 1866.

*To all whom it may concern:*

Be it known that I, WILLIAM SNYDER, of Wooster, Wayne county, Ohio, have invented a new and useful Farm-Gate; and I hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing, making part of this specification.

My invention relates to the class of gates adapted to be slid back along suitable bearings in the gate-post till they reach a balanced position, and then to be swung around on their said bearings as on a center; and my present improvement consists in devices for increasing the stability and facilitating the operation of the working parts.

A A represent two posts, arranged side by side, and secured at the proper distance apart by battens B B'.

C C' are two posts arranged diagonally with one another, and so secured relatively to each other by battens D D', which are alternately longitudinal and transverse with respect to the line of fence, as to leave a space or interval between them for the passage of the gate, and to serve to effectually brace and counterbrace the said posts so as to constitute a rigid frame.

The gate G contains five rails, H H' H'' H''' H'', which rails extend in front of the stile I, with varying prolongations, increasing as they ascend the top rail, H, projecting much farther than the others. The front ends of all the rails are chamfered on their vertical edges. The importance of the above form will appear in describing the operation of the gate. The rear end of the gate rests by one of the rails, H', on the roller F. The top rail, H, of the gate is prolonged (h) at its front or outer end, and rests when closed upon a roller, J, journaled in the posts A A'.

K is a low post planted midway, or nearly so, between the front posts, A A', and the back posts, C C', and supporting a roller, L, on which the bottom rail, H'', of the gate rests in the act of sliding back and forward.

N is a pin, which, being passed through a hole, n, in the prolongation h, serves to hold the gate shut.

The operation of opening this gate is extremely easy, and can be performed by a child. The pin N being withdrawn the gate is made to run or slide back until, becoming released from the roller J, its front portion rests upon

the roller L, along which and the roller F the gate is farther slid until it rests at its mid-length upon said roller, when it may be easily swung around the open position represented by red lines. In closing the gate the just-described swinging and sliding motions are reversed, and the top rail, H, being inserted between the posts A and A', serves to lead in the prolongation h' of the rail next below it, which prolongation performs the same service for the one next succeeding, and so on to the bottom. This arrangement avoids entirely the common difficulty experienced in shutting gates of this class arising from their liability to vary from a vertical position, while the uppermost prolongation, h, enables the gate to be secured sufficiently open to pass small stock like sheep and pigs, and yet to exclude the cattle and other large stock.

It will be seen that the roller F, in conjunction with the roller J, supports the entire weight and receives the entire friction of the gate until the prolongation h is run clear of the said roller J, and that the two rollers F and L then immediately and without any interval of time co-operate to support the gate until it assumes its balanced position and can be readily swung around upon the combined hinge and roller-bearing E F.

It will also be seen that the alternately longitudinal and transverse positions of the battens D D' enable them, in addition to their other functions, to act as efficient stays or cross-braces to the two diagonally situated posts C C'.

The low post K may serve a useful purpose even without a roller, L.

The several rollers F, J, and L may be grooved circumferentially or not, as may be desired.

A modification of my roller F is seen in Fig. 2, where a roller, F', is seen secured in stationary journal-bearings in the posts C C'. By using two swivels E, one above the other, mounted in suitable bearings upon either post C or C', the other post of the rear pair may be dispensed with, one post only being required at the rear end of the gate.

In the modification shown in Fig. 2 the boxes of the roller F', or the shaft upon which it turns, may be mounted in a slat extending from post to post, instead of in the posts themselves.

I claim herein as new and of my invention—

1. A sliding gate whose rails extend beyond its forward muntin by gradually-increasing lengths from bottom to top, as and for the purpose set forth.

2. The combination of the low post K with a sliding and swinging gate to support the front end of the gate in sliding back and forth.

3. The swivel E F, journaled both above and below and inclosing one of the bars of the

gate, as and for the purposes shown and described.

4. The roller L in the described combination with the low post K and a sliding gate, constructed as and for the purpose specified.

In testimony of which invention I hereunto set my hand.

WM. SNYDER.

Witnesses:

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