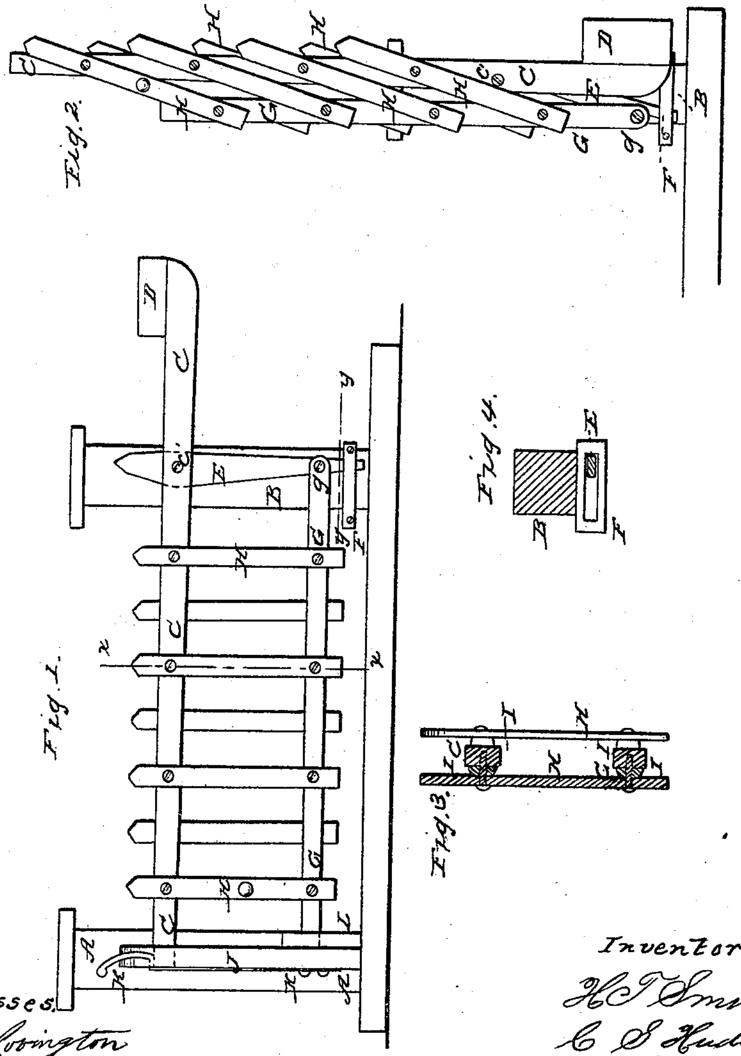
SMITH & HUDSON.

Farm Gate.

No. 52,759. Patented Feb. 20, 1866.



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UNITED STATES PATENT OFFICE.

A. J. SMITH AND G. S. HUDSON, OF ELLISBURG, NEW YORK.

IMPROVEMENT IN FARM-GATES.

Specification forming part of Letters Patent No. **52,759**, dated February 20, 1866.

To all whom it may concern:

Be it known that we, A. J. SMITH and G. S. HUDSON, of Ellisburg, Jefferson county, and State of New York, have invented a new and useful Improvement in Farm or Entrance Gates; and we do hereby declare that the following is a full, clear and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a side view of our improved gate when closed. Fig. 2 is a side view of the same when raised or opened. Fig. 3 is a vertical cross-section through the line *x x*, Fig. 1. Fig. 4 is a detail sectional view through the line *y y*, Fig. 1.

Similar letters of reference indicate like parts.

Our invention has for its object to furnish a farm or entrance gate simple in construction, cheap and strong; and it consists, first, in the combination of the swinging bar and the guides for the same with the gate and post; and, second, in the combination of separators with the pickets and rails at the pivoting-points, as hereinafter more fully described.

A and B are the posts, which may be made solid, and inserted in the ground in the ordinary manner. The posts A and B may be capped and cased or molded, if desired.

C is the top rail of the gate, which is pivoted at the point *c* to the post B by a screw or bolt of sufficient size and strength to sustain the entire weight of the gate and balancing-weight D.

The swinging bar E is pivoted at its upper end at the point *c'* to the top rail, C, and to the post B, and is kept from coming in contact with the post B by a separator (not shown in the drawings) placed between the said bar E and the said post B, and through which the same bolt *c'* passes which pivots the swinging bar E and the rail B to the said post. The lower end of the bar E swings backward and forward in a slot formed in the guide F. When the gate is closed the lower end of the bar E is in the rear part of the slot, as represented in Fig. 1; but when the gate is opened or raised the lower end of the bar E moves forward to the front end of the slot, as seen in Fig. 2. This allows the rails C and G to take a vertical position parallel with each other when the gate is opened, and also allows the pickets H to take positions parallel to each other and to the swinging-bar E, as seen in Fig. 2.

The lower rail, G, of the gate is pivoted to the lower ends of the swinging bar E by the screw or bolt *g*.

The pickets H are pivoted to the rails by bolts or screws, as shown in the drawings.

It frequently happens that the pivoting parts of gates are fastened together, and made difficult or impossible to be operated by snow or sleet freezing around the points. We guard against this by the use of the separators I, placed between the pickets H and the rails C and G, as shown in Fig. 3. These separators I must be of sufficient thickness to accomplish the object. Ordinary washers will not answer the purpose.

J is a bar attached to the post A at the forward end of the gate. The upper end of this bar is notched to receive the end of the rail G, in which position the said rail is held by the action of the spring-catch K until released by drawing back said catch. The forward end of the lower rail, C, is received in a notch formed in the upper end of the piece L, attached to the bar J. The sides of these notches are made inclined, so as to serve as guides in directing the ends of the descending rails C and G into their places. The rear end of the rail C extends beyond the post B and is weighted, as shown. This balancing-weight D should be heavy enough to balance the gate when said gate is elevated to an angle of about forty-five degrees. The gate will then move easily in all directions.

What we claim as new, and desire to secure by Letters Patent, is—

1. The combination of the swinging bar E and guide F with the rails C and G, and with the post B, in a farm or entrance gate, substantially as described, and for the purpose set forth.

2. The combination of the separators I with the pickets H and rails C and G, in a farm or entrance gate, substantially as described, and for the purpose set forth.

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