

(No Model.)

R. MAGRUDER.

GATE LATCH.

No. 312,135.

Patented Feb. 10, 1885.

fig. 1.

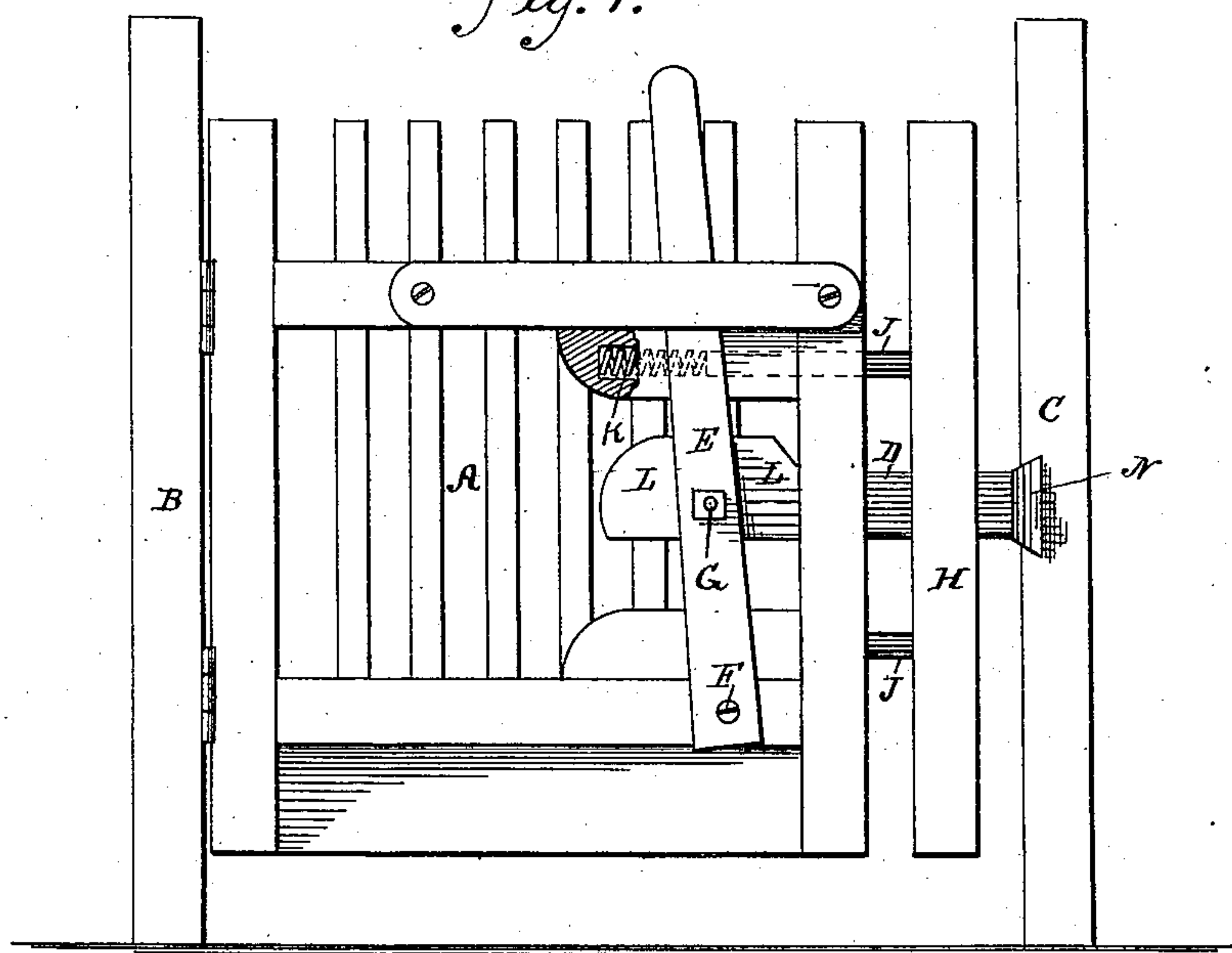


fig. 2.

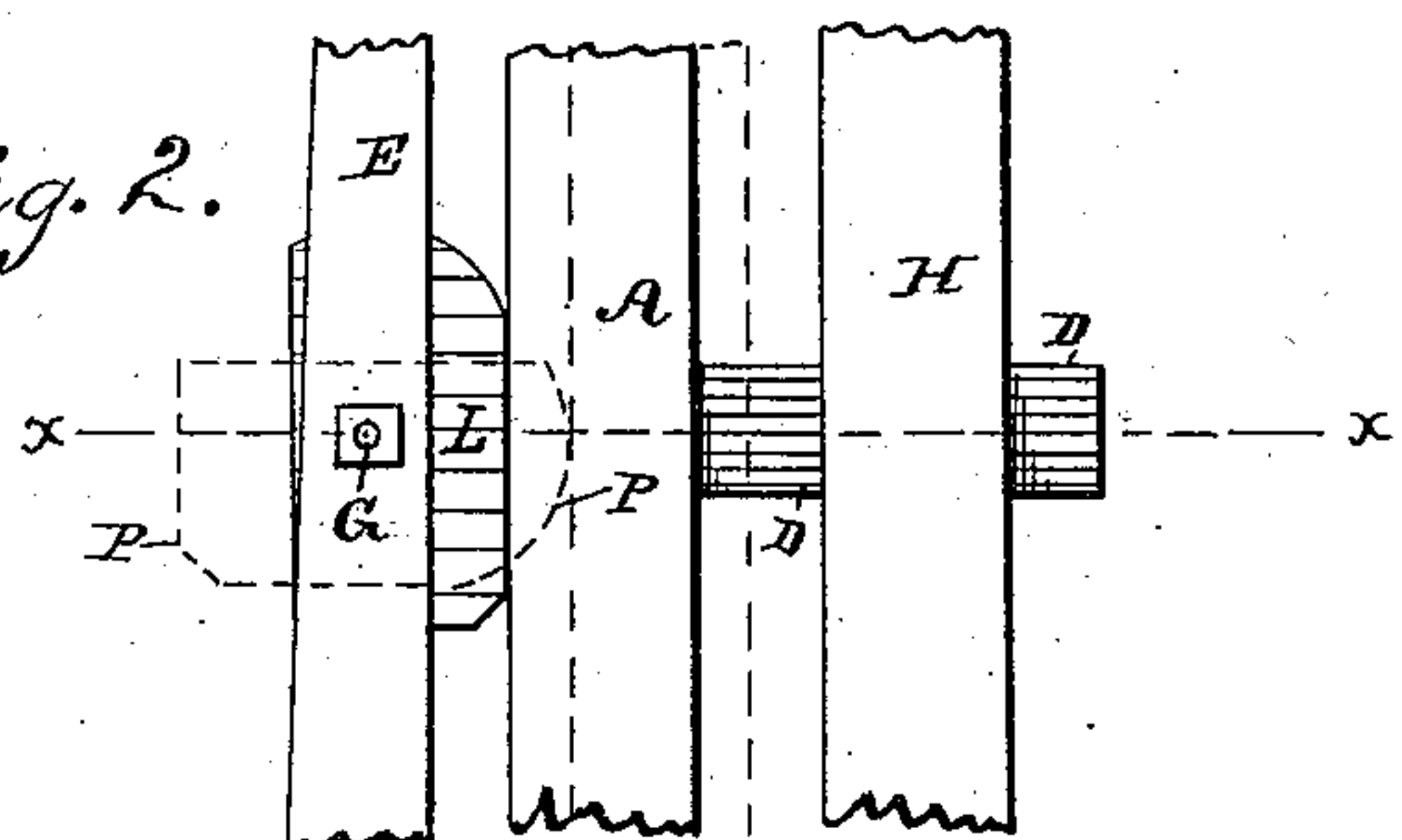
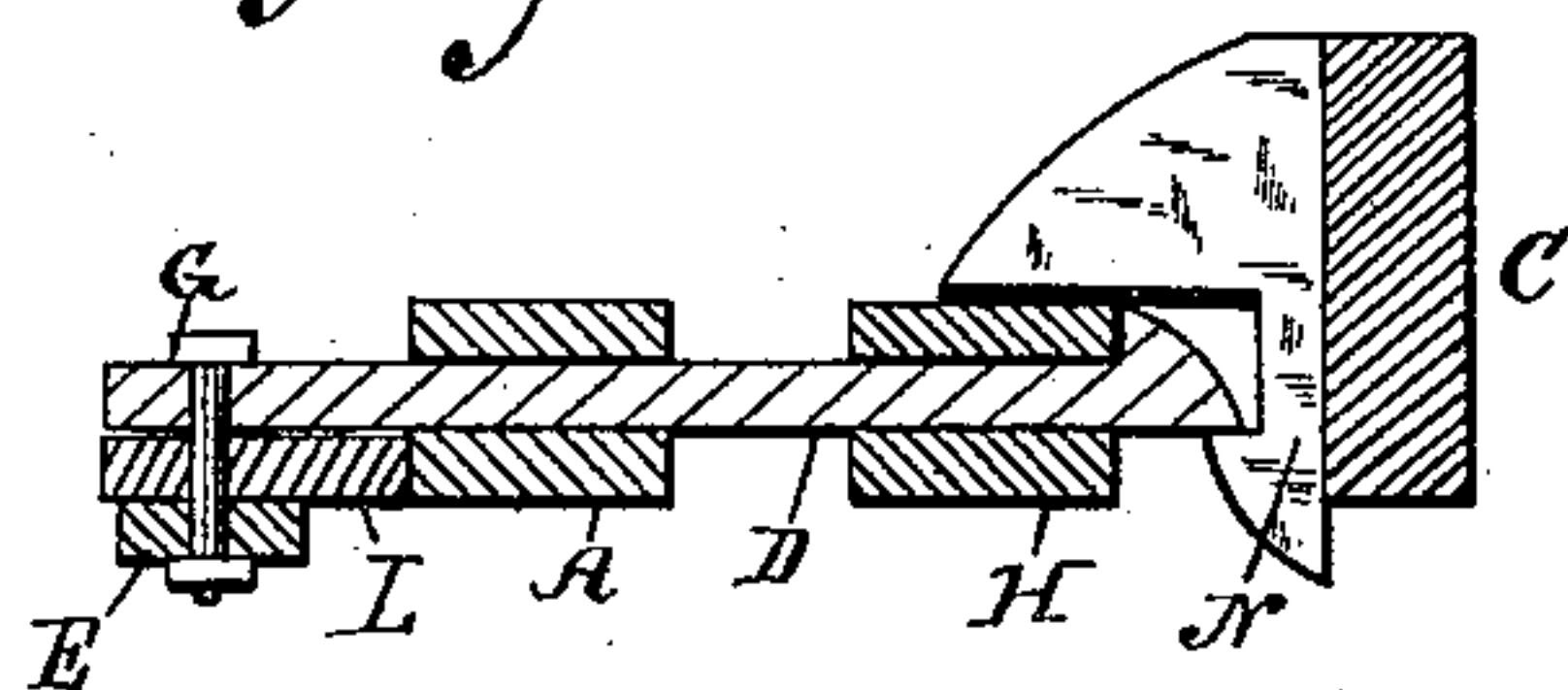


fig. 3.



WITNESSES:

Harrison B Brown
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UNITED STATES PATENT OFFICE.

ROBERT MAGRUDER, OF LIBERTY HILL, TEXAS.

GATE-LATCH.

SPECIFICATION forming part of Letters Patent No. 312,135, dated February 10, 1885.

Application filed December 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, ROBERT MAGRUDER, a citizen of the United States, residing at Liberty Hill, in the county of Williamson and State of Texas, have invented certain new and useful Improvements in Gate-Latches, of which the following is a full, clear, and exact description.

This invention relates to that class of gates which are used to close and open passages through fences; and its object is to compensate for shrinkage of the gate in dry weather and swelling thereof in wet weather, in order that the bolt or latch may at all times extend the right distance from the edge of the gate to properly engage the gate post or jamb.

To this end my invention consists in the construction and combination of parts forming the gate-latch, hereinafter described and claimed, reference being had to the accompanying drawings, in which—

Figure 1 is a front elevation of a gate showing my latch. Fig. 2 is a detail view in front elevation, on a larger scale, illustrating the principle of operation; and Fig. 3 is a horizontal section at $x x$, Fig. 2.

A represents the gate, which may be of any construction or design to suit the position it is to occupy and the taste of the owner.

B is the supporting-post to which the gate is hinged.

C is the jamb-post to which the gate is held by a latch or bolt, D, when closed. This latch may be in the form of a wedge-ended bolt, fitted to slide longitudinally in the gate and to protrude therefrom to engage the jamb-post C.

E is a hand-lever pivoted at F to the gate and at G to the latch, whereby the latch may be retracted to set the gate free to be opened.

The gate is made somewhat narrower than the space between the posts, and I stop the opening thus formed sufficiently close for all practical purposes of stopping young pigs, chickens, &c., by means of a vertical bar, H, which is attached to the latch D, to be moved to and fro therewith.

J J are parallel guides secured to the bar H, and fitted to slide freely in the gate.

K K are spiral springs acting to push out the guides J, thereby projecting the bar H and the latch.

L is a many-sided block pivoted eccentrically at G to the latch, and serving to control the amount which the latch shall project beyond the gate by resting one of its sides on the rear face of the front post of the gate proper.

In Fig. 1 the block is set to hold the latch in its normal position, or that due to the requirements of fair weather. In this position of the block the latch will in fair weather strike the holder N of the jamb-post C, and be wedged back in the act of closing to enter the holder. When the weather becomes wet, the gate will swell, and the front edge thereof, as commonly made, will strike the post C without entering the casing to rest on the jamb, and the latch is useless. To meet this emergency, the block is turned as shown in dotted lines P, Fig. 2. When the weather is dry for a long time in summer, the gate will shrink, and the latch would not then reach the holder N, and would again be useless. In this case the block is turned to the position shown in full lines, Fig. 2, when the latch will be permitted to spring out more than to the normal position, and will thereby do service. The bar H might in some cases be omitted, and a latch or bolt, D, with my eccentric block L, serve the purpose. The lever E may be left off and a knob or handle applied to slide the latch or bolt directly, or the common door knob and bolt may be substituted for the latch and lever shown, provided in all cases that my eccentric block or my bar H is combined with the latch or bolt.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The combination, with a gate too narrow to fill the space between the gate-posts and a reciprocating latch therefor, of a vertical bar fixed to the latch at the edge of the gate, substantially as shown and described.

2. The combination, with a gate too narrow to fill the space between the gate-posts and a sliding latch therefor, of a block eccentrically and adjustably pivoted to the latch, to act against a fixed portion of the gate, substantially as described, whereby the amount of projection of the latch may be regulated.

3. The combination, with the gate A and the latch or bolt D, of the bar H, secured to the latch, and provided with the parallel guides

J and the springs K, substantially as shown and described.

4. The combination, with the gate A, the latch or bolt D, and the bar H, secured to the
5 latch, and provided with the guides J and springs K, of the eccentric adjustable block L, hung to stop the projecting of the latch at

fixed points, substantially as shown and described.

ROBT. MAGRUDER.

Witnesses:

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JESSE MIDDLETON.