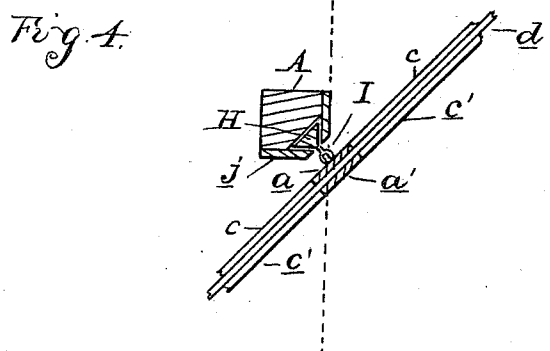
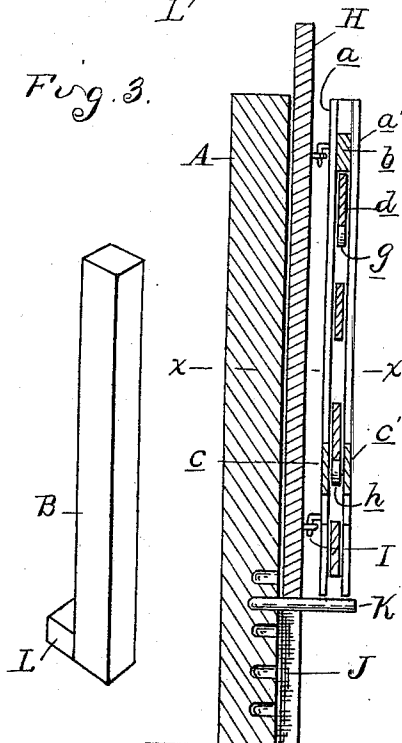
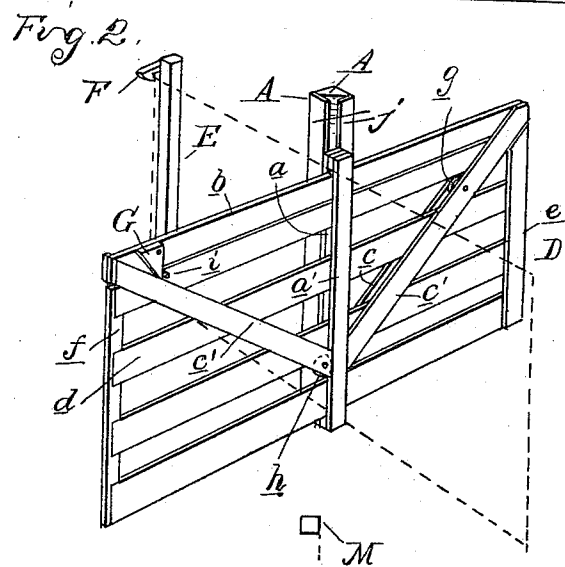
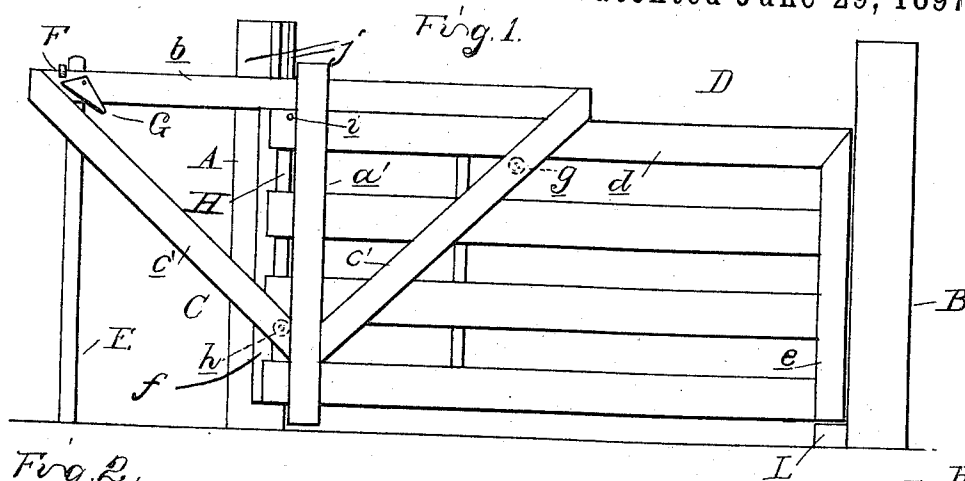


(No Model.)

W. H. PALMER.
GATE.

No. 585,400.

Patented June 29, 1897.



Witnesses
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UNITED STATES PATENT OFFICE.

WILLIAM H. PALMER, OF YALE, MICHIGAN.

GATE.

SPECIFICATION forming part of Letters Patent No. 585,400, dated June 29, 1897.

Application filed March 15, 1897. Serial No. 627,573. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM H. PALMER, a citizen of the United States, residing at Yale, in the county of St. Clair and State of Michigan, have invented certain new and useful Improvements in Gates, of which the following is a specification, reference being had therein to the accompanying drawings.

It is the object of my invention to obtain a simple construction of sliding and swinging gate especially designed for use as a farm-gate; and the invention consists in the peculiar construction, arrangement, and combination of parts, all as more fully hereinafter described and claimed.

In the drawings, Figure 1 is a front elevation of my gate in its closed position. Fig. 2 is a perspective view of the gate in its open position, showing in dotted lines the position after sliding and before swinging. Fig. 3 is a cross-section showing the means employed for raising the gate. Fig. 4 is a horizontal section on lines *xx*, Fig. 3.

A and B are two gate-posts. To the post A is hinged a carrier-frame C, comprising upright separated bars *a a'*, the horizontal bar *b*, secured between and at the upper end of the bars *a a'* and extending oppositely therefrom, and the diagonal separated brace-bars *c c'*, connecting the outer ends of the bar *b* with the lower part of the uprights *a a'*.

D is the gate, which consists of the parallel rails *d*, secured together at their outer ends by the uprights *e* and at their opposite ends by the upright *f*, which is mortised to receive the ends of the rails and when secured in position is flush with the sides of said rails. This gate is slidingly secured between the parallel bars *a a'* and *c c'* of the carrier-frame preferably by means of the rolls *g* and *h*, the former of which is journaled between the bars *c c'*, so as to bear on the under side of the upper rail *d* of the gate. The other roll *h* is journaled near the lower end of the carrier-frame beneath one of the lower rails of the gate, the drawings showing it below the second rail from the bottom. When supported upon these rails, the gate D is free to slide along the carrier-frame from the position where the rail *f* is near the center of the carrier-frame to the position where the gate is central upon the carrier-frame.

E is a post on the opposite side of the post A from the post B, against which the carrier-frame will strike in the closed position of the gate.

F is a latch-hook pivoted to the post E and adapted to engage with the bar *b* of the carrier-frame.

G is a dog pivoted to the bar *b*, one arm of which extends beneath the latch-hook F and the other in the path of the pin *i* upon the gate, the arrangement being such that as the gate is slid to a central position on the carrier the pin *i* will strike against the dog G and disengage the latch-hook from the carrier-frame.

The carrier-frame C may be hinged to the post A in any suitable manner, but I preferably attach it as shown in Figs. 3 and 4 of the drawings, in which the post A is provided with a vertically-adjustable bar H, preferably of triangular cross-section, and secured to the corner of the post A by means of the guides *j*. To this bar H the carrier-frame may be hinged by the hooks and eyes I.

J are a series of holes in the post A, in any one of which a pin K may be placed beneath the adjustable bar H to hold said bar at different elevations.

L is a block secured to the post B, upon which the outer end of the gate may rest in its closed position.

M is a post against which the gate will strike when in its opened position, which post is preferably provided with a suitable catch for holding the gate thereto.

The parts being constructed as shown and described, the gate may be opened at any time by simply sliding it upon its carrier a sufficient distance to form a passage-way beside the post B. When it is necessary to open it to its full extent, as for the passage of a team, the gate is first slid to its central position on the carrier-frame and in so doing will automatically release the said frame from the latch F, after which it may be swung into the position shown in Fig. 2.

It will be noticed that the gate is firmly attached to the carrier-frame as it slides between the separated bars *a a'* and *c c'*. At the same time it is easily moved, as it rests upon the antifricition-rolls *g* and *h*.

The gate may also be quickly lifted at any

time when necessary—as, for instance, to clear a snow-bank in winter time—by raising the vertically-sliding bar H and placing the pin K in one of the holes J.

5 What I claim as my invention is—

1. In a sliding and swinging gate, a hinged carrier-frame comprising separated upright bars, a horizontal bar secured between at the upper end and extending upon opposite sides thereof and separated diagonal brace-bars, 10 in combination with the gate proper, slidably secured to said frame between said separated bars.

2. In a sliding and swinging gate, a hinged 15 carrier-frame comprising the separated upright bars *a a'*, the horizontal bar *b* secured between at the upper end and extending upon opposite sides thereof, and the separated diagonal brace-bars *c c'* in combination with

the gate D, sliding between the separated 20 bars of the carrier and comprising the rails *d* and end uprights *e* and *f*, the latter having its sides flush with the sides of the rail, and the antifriction-rolls *g* and *h* on the upper and lower part of the carrier upon which the 25 rails of the gate bear.

3. In a sliding and swinging gate the combination with a carrier-frame and the gate properly slidably secured thereto of a post having the vertically-adjustable bar secured 30 thereto to which said carrier-frame is hinged.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM H. PALMER.

Witnesses:

JAMES E. LUTZ,
AUSTIN LUTZ.