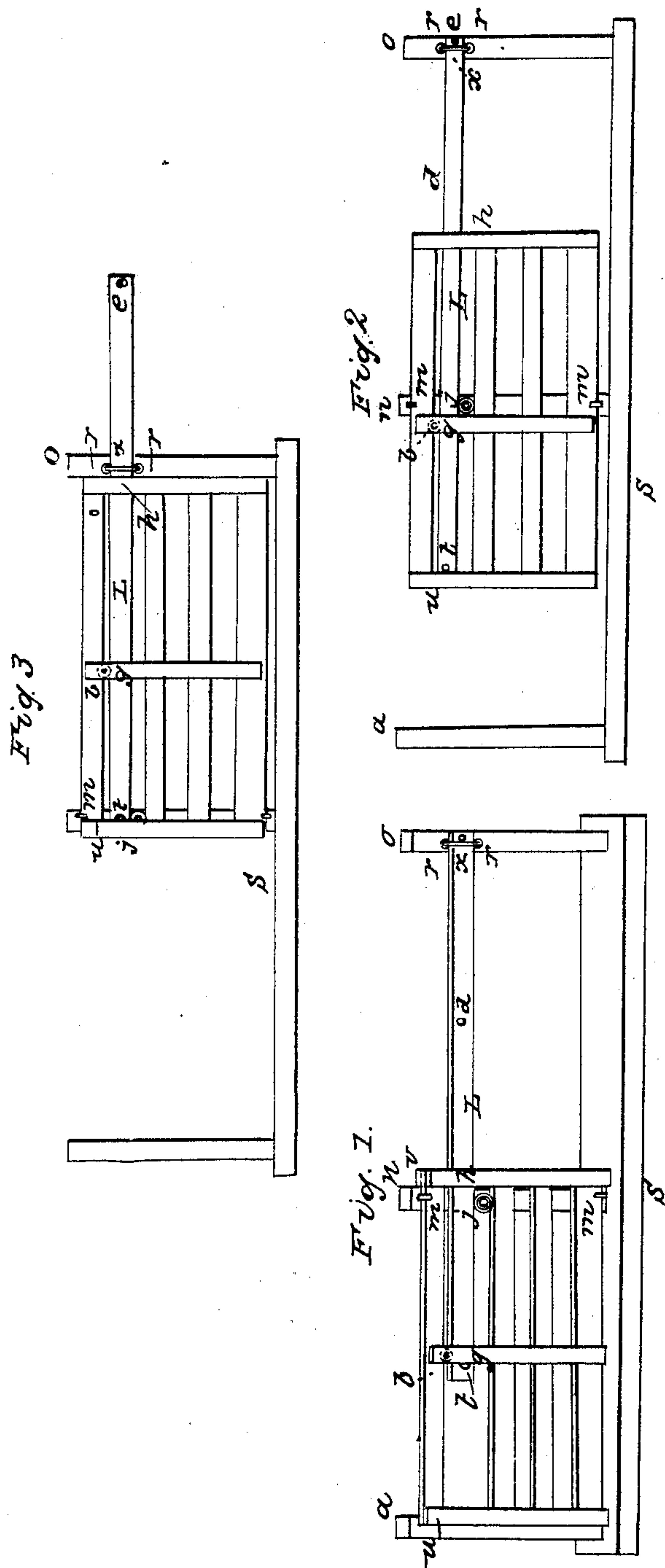


D. PHILLIPS.

Gate.

No. 11,905.

Patented Nov. 7, 1854.



UNITED STATES PATENT OFFICE.

DEWEY PHILLIPS, OF SHAFTSBURY, VERMONT.

FARM-GATE.

Specification of Letters Patent No. 11,905, dated November 7, 1854.

To all whom it may concern:

Be it known that I, DEWEY PHILLIPS, of Shaftsbury, in the county of Bennington and State of Vermont, have invented a new and Improved Method of Constructing and Hanging Gates; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, forming a part of this specification, and to the letters marked thereon.

The nature of my invention consists in providing three posts, one to be set firmly in the earth on each side of the gateway marking its width—the other to be set in a straight line with the two first, distant about the length of the gate from the center post, to the side of which center post a roller is attached, by a pin, or bolt, on which the gate is moved back and forth. I also provide a gate of very simple form, and of suitable dimensions for the space, constructed with a proper number of rails, attached by nails, rivets, or otherwise, to upright stiles at the ends and one stile near the middle of the gate, on the back side of which middle stile, and at the lower edge of the upper rail is placed a roller, on which the weight of the gate is at all times suspended, pressing in a vertical direction, it being held in an upright position by hooks or catches on the center post. I also provide an adjustable lever of about once and one half the length of the gate, of suitable dimensions and fitted to slide, or move, between friction rollers attached to the rear post, and passing between the two upper rails (and receiving the weight of the gate from the roller at the center stile) it rests on the roller at the side of the center post, and moves back and forth, longitudinally about one half the length of the gate—the gate moving the other portion of the distance on the roller at the middle stile, which roller revolves on the upper edge of the adjustable lever.

To enable others, skilled in the art, to make and use my said invention, I will give a more particular description of its construction and operation.

The drawings referred to are as follows (viz.):

Figure I, a view of the gate, showing its bearings when closed. Fig. II, an elevation of the gate, showing its bearings when half closed. Fig. III, an elevation of the gate, showing its bearings when open.

s, the ground sill, on which the posts stand—an unnecessary appendage to a gate—and used in the model and drawings to show the relative position of the posts; *a*, the front post, against which the gate closes; *n*, the center post on which the weight of the gate principally rests; *o*, the rear post, a guide to the adjustable lever—on which, when the gate is open, a part of its weight rests; *b*, the balance roller (see dotted circles near the top of the stile *g*,) is placed in a notch in the lower edge of the upper rail, between the center stile *g*, and a lip on the back side of the rail, near the center of the gate, revolving on the upper edge of the adjustable lever *L*; *j*, the center roller—confined by a bolt, or pin to the post, *n*, on which the adjustable lever *L* is supported, and moves longitudinally back and forth, in opening and closing the gate. *r, r*, two small friction rollers—one above and the other below the end of the adjustable lever *L*. On the post *o*, these may be used or omitted, at pleasure. *L*, the adjustable lever—about once and one half the length of the gate—and of suitable dimensions to sustain it, passing between the friction rollers *r, r*, and, also, between the two upper rails—moving with ease, back and forth, on the center roller *j*, in opening and closing the gate; *m, m*, catches, or hooks, on the post *n*, at the top and bottom of the gate to keep it upright; *c*, a pin in the upper rail to confine the gate when shut; *t*, a stop at the front end of the lever *L*, against which, when the stile *a*, comes in contact, it moves the lever and gate back to the rear post *o*; *e*, a stop at the rear end of the lever *L*, to prevent its moving too far forward; *d* a stop about one third the length of the lever from its rear end, which coming in contact with the clasp on the post *o*, prevents its receding in the rear; *u*, the front stile; *g*, the middle stile; *h*, the rear stile; *v*, the back stile; *x*, a clasp on the post *o*, to guide the lever *L*, sustain the friction rollers *r, r*, and arrest the stops.

Operation: The gate being constructed in a simple form, without braces, mortises, or hinges, as herein specified; and being closed as at Fig. I, the balance roller *b*, on which the gate is suspended resting on the front end of the adjustable lever *L*, which lever, and the whole weight of the gate ultimately, resting on the center roller *j*, at the side of the center post *n*. To open the gate, it is

5 moved back toward the rear post *o*,—the
balance roller *b*, revolving on the upper edge
of the adjustable lever *L*, which lever com-
monly remains at rest till the front stile *u*,
10 strikes the stop *t*, at the front end of the
lever, as at Fig. II, when the whole weight
of the gate will still rest on the center post
n. The gate being still pressed back, a por-
tion of the weight of the gate and lever re-
cedes back, till the back stile *v*, strikes the
15 rear post *o*, when the gate is open, as at
Fig. III, and the balance roller *b*, resting
on the lever *L* nearly at the center between
the posts *n*, and *o*, the whole weight will
be nearly equally shared by the two rear
posts.

20 Thus it will be seen that my improved
gate, requiring neither braces, mortises, or
hinges—having less weight of timber, and
being nearly balanced on its center—is not
liable to sag, or draw the posts, on which it

presses in a vertical direction, from their
erect position. Its first cost is much less—it
is less likely to get out of repair and occupies
less space in opening and closing than the
25 gates in ordinary use.

I do not claim operating gates by means
of rollers, as that is already known and
used; but

What I do claim as my invention and 30
desire to secure by Letters Patent is—

1. The adjustable lever *L*, of any desirable
length and dimensions, or, its equivalent.

2. The adjustable lever *L*, combined and
arranged with the gate, and posts *n*, and *o*, 35
as herein specified—or in any other manner,
substantially the same, which will produce
the desired effect.

DEWEY PHILLIPS.

Witnesses:

HIRAM BARTON,

LOUISA A. BARTON.