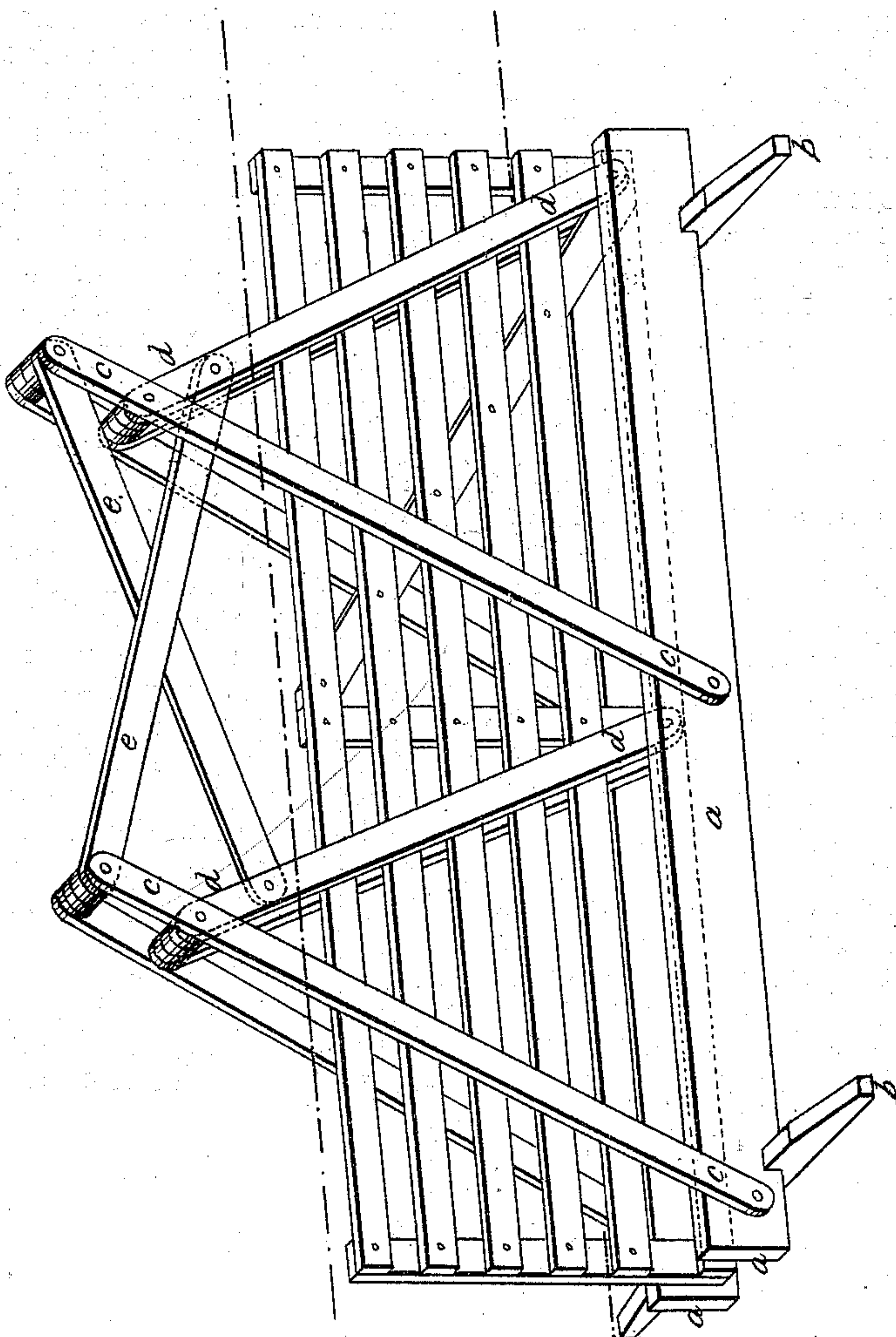


JOHN L. BETTS.

Improvement in Operating Gates.

No. 125,375.

Patented April 9, 1872.



Witnesses.

George R. Betts
Henry Whisler

Inventor

John L. Betts.

UNITED STATES PATENT OFFICE.

JOHN L. BETTS, OF ARCHBOLD, OHIO.

IMPROVEMENT IN OPERATING GATES.

Specification forming part of Letters Patent No. 125,375, dated April 9, 1872.

Specification describing certain Improvements in Swinging and Setting Gates, invented by JOHN L. BETTS, of Archbold, Ohio.

My invention relates to a certain new and useful mechanical arrangement for operating sliding gates, doors, and similar objects, whereby they are moved on a dead level in a horizontal direction without the use of rollers or similar devices and with the least possible friction; and it consists in the combination of frame-work hereinafter described.

Instead of putting posts in the ground, in the usual way, I mount or swing the gate or other object between two plank sills, twelve feet long and seven inches wide, as shown in the drawing, and marked *a a*. They are let into a ground sub-sill crossing each end, three inches deep and seven inches apart, marked *b b*. Letters *c c* in the lower portion of the device indicate the bottom end or bolt-hinge of what I call walking posts. There are four of them, each eight feet long, between which the gate is suspended by four swinging legs, *d d*, each six feet eight inches long. They are swung by bolt-hinges to the walking posts, one foot below the bolt-hinge of the cross-braces *e* in the top portion, and are bolted again, one foot below the swinging joint, to the opposite braces *e*. The gate is swung between the swinging legs by being bolted through the legs *d d* to the bottom of the gate, between the sills *a a* in the bottom section. The bolts all form joints by going clear through the parts to which they are connected. The apparatus

may all be made of slats four inches wide, except the sills. I give this measure for suspending a gate or any object requiring to be suspended while traveling a distance of twelve feet upon a horizontal line; but the apparatus may be increased in size and strength and proportions, according to the weight of the object required to be moved.

The most important part of my device is the cross-braces *ee* and their connections with other parts of the apparatus, making it one machine for suspending gates or other objects, whereby, when the gate is drawn out to shut across the gap or way, the walking posts take a stride of twelve feet, more or less, and support the gate from the ground the whole way; and when opened back they take the same stride back, as shown in the drawing.

I do not claim the gate or other object to be moved, as that does not form the essence of my invention; but

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

The mechanical frame composed of the sills *a a*, cross-sills *b b*, walking posts *c c*, swinging legs *d d*, and cross-braces *e e*, combined together, as shown, for the purpose of moving a gate or other object horizontally across a gap or space, substantially as specified.

JOHN L. BETTS.

Witnesses:

R. H. BETTS,
JACOB VERNIER,
GEORGE McLAUGHLIN.