

No. 631,969.

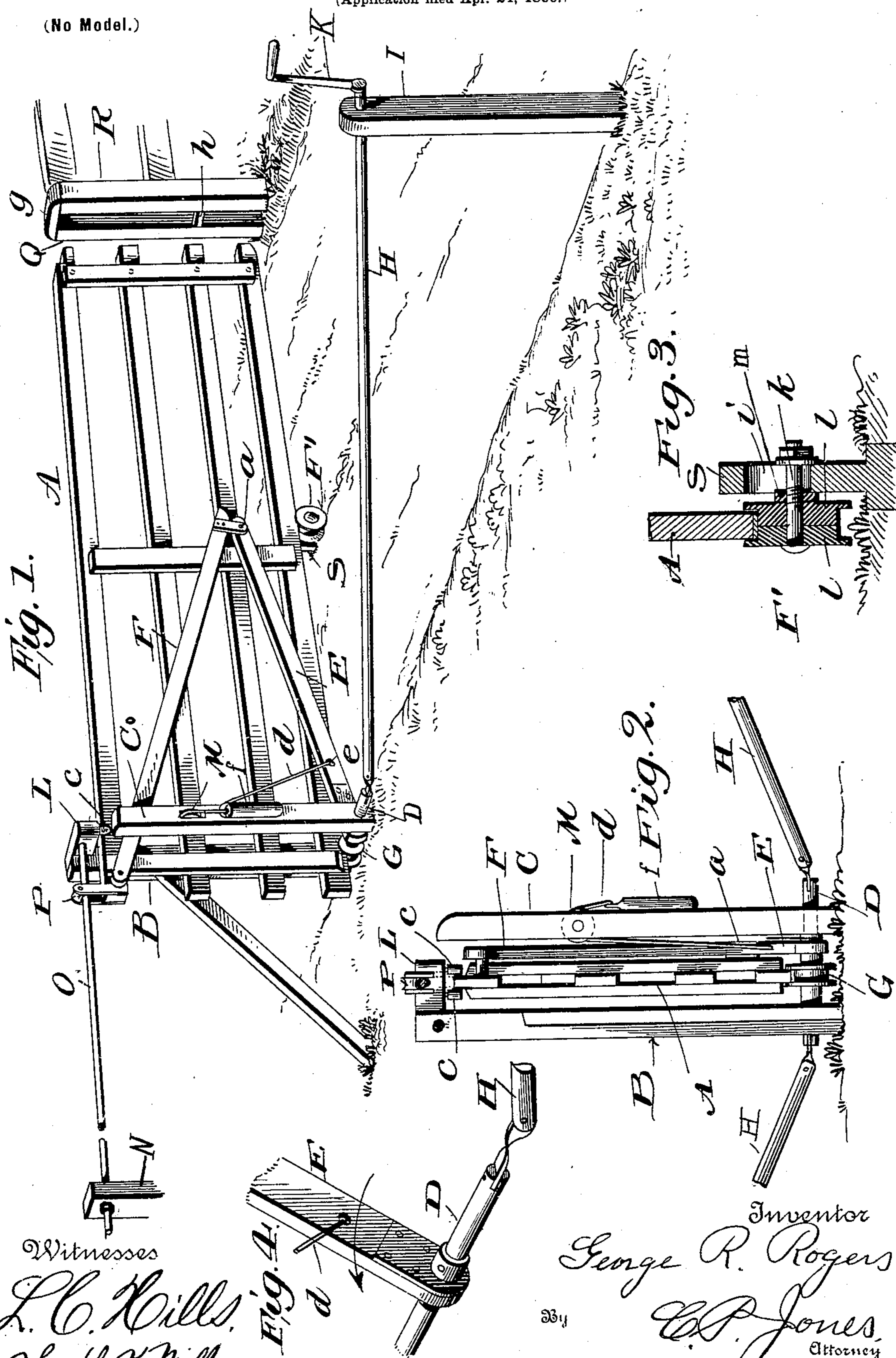
Patented Aug. 29, 1899.

G. R. ROGERS.

GATE.

(Application filed Apr. 24, 1899.)

(No Model.)



Witnesses  
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# UNITED STATES PATENT OFFICE.

GEORGE R. ROGERS, OF PARKERSBURG, INDIANA.

## GATE.

SPECIFICATION forming part of Letters Patent No. 631,969, dated August 29, 1899.

Application filed April 24, 1899. Serial No. 714,228. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE R. ROGERS, a citizen of the United States, residing at Parkersburg, in the county of Montgomery and State of Indiana, have invented certain new and useful Improvements in Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to certain new and useful improvements in farm-gates, more particularly to that class known as "sliding" or "rolling" gates, and has for its object to provide a gate of this character that is simple in construction, cheap of manufacture, and easy of manipulation, and one that can be operated from a vehicle, horseback, or by a person on foot.

The invention consists in the novel arrangement, construction, and combination of parts, as will be hereinafter more fully described and claimed.

In the accompanying drawings, Figure 1 is a perspective view of my improved gate, showing the same in a partly-open position. Fig. 2 is an end view of the gate and standards. Fig. 3 is a detail showing a cross-sectional view of the center post and the adjustable roller, and Fig. 4 is a detail.

Referring more particularly to the drawings, A represents a gate of any preferred construction which is adapted to slide between posts B and C, placed a suitable distance apart on each side thereof. A rock-shaft D passes through the base of posts B C and projects from the outer sides thereof and has fixed thereon between the said posts an arm E, which in turn is hinged at its upper end *a* to a connecting bar or rod F, the other end of the connecting-rod being pivoted to the rear end of the top gate-bar. Also mounted on the said rock-shaft between the posts B C is an antifrictional roller G upon which the lower bar of the gate rests or slides. Hinged or linked by any suitable means to each of the projecting ends of the rock-shaft a short distance from the uprights or posts B C is a rod H, which inclines upwardly from the said connection and passes through the upper end of a post I, placed a suitable distance from and in line with the posts B C. A crank K

is fixed on the end of the rod H a convenient distance to reach from a vehicle or the ground.

The upper end of the post B is provided with an inwardly-projecting bracket L, which has arranged on its under surface two antifrictional rollers *c c*, between which the upper bar of the gate slides.

The post C has a pulley-wheel M pivoted in a slot formed therein a suitable distance from the ground, the said pulley-wheel carrying a wire cord or chain *d*, one end of which is connected to the arm E at *e* and the other end carries a weight *f* on the opposite side of the post C. The purpose of the weight is to assist in starting the gate in opening or closing.

A post N is placed a distance equal to the length of the gate to the rear of posts B C and has secured to its top one end of the gate-supporting rod O, while the other end of the said rod passes through the bracket L.

Pivoted in ears or lugs secured to the rear of the top bar of the gate is a grooved wheel P, which is adapted to slide on the rod O, and thus guide and support the gate in its backward and forward movements.

Posts Q R are placed on the opposite side of the road to posts B C a suitable distance apart to allow the ends of the gate to enter therebetween when the gate is closed and are connected by braces *g h*.

Planted in the center of the road midway between the posts is a short post S, provided with a slot *i*, which has adjustably secured therein a bolt or shaft *k*, on which is mounted an antifrictional roller F', upon which the base-board of the gate slides and rests when closed. By means of this adjustable roller the gate can be raised or lowered in case the posts are not set right or to allow for the settling of the posts, or by placing washers on the bolt carrying the roller the gate can be guided in the proper direction should it get out of line.

In constructing the rollers on which the gate slides I prefer to make the rail-bearing surfaces very broad, which I accomplish by forming the roller in two sections *l l* and connecting the said sections by means of bolts or rivets. The nut *m* on the bolt *k* allows the said bolt to be adjustably secured in the slot *i*.

The operation of opening and closing my gate is as follows: When it is desired to open

the gate, all that is necessary is to grasp the handle of the crank K and turn the said crank from its upward position half-way around to a downward position, which movement will turn the rod H and rock-shaft D, and the arm E, fixed on the rock-shaft, will rise and describing the arc of a circle in turn raise and force backward the connecting-rod F, which rod in moving backward will carry the gate with it to which it is pivoted. In closing the gate the crank K is raised from its lower to its upper position, which turns the rod H, rock-shaft D, and arm E forwardly. The arm E will return to its former position and in turning will draw forward the connecting-rod F, which in turn will draw forward the gate. It will thus be seen that by turning the crank K half-way around, or from its upper to its lower position, the gate will be entirely opened and that by turning the crank from its lower to its upper position the gate will be entirely closed.

What I claim is—

1. In a gate of the class described the combination with posts arranged on each side of the said gate, of a rock-shaft extending through the said posts and having hinged to its projecting ends adjacent to the said posts a rod provided with a crank, the said rock-shaft carrying an antifrictional roller and a fixed arm having connection with the gate, substantially as set forth.

2. In a gate of the class described the combination with posts arranged on each side of the said gate, of a rock-shaft extending through the base of the said posts and having hinged to its projecting ends adjacent to the said posts an upwardly-inclined rod pass-

ing through a post, placed a suitable distance from the before-mentioned posts, and provided with a crank, the said rock-shaft carrying an antifrictional roller and a fixed arm having connection with the gate, substantially as set forth.

3. In a sliding gate, the combination with posts arranged on each side of the said gate, of a rock-shaft extending through the base of the said posts and having hinged to its projecting ends adjacent to the said posts an upwardly-inclined rod extending at right angle to the gate and having its upper end pivoted in a post, placed a suitable distance from the gate, and provided with a crank, the said rock-shaft carrying an antifrictional roller and a fixed arm having hinged at its end a connecting-bar the opposite end of which is pivoted to the upper bar of the gate at its rear, substantially as set forth.

4. In a sliding gate, the combination with a gate of posts on each side thereof, one of the said posts having an inwardly-projecting bracket provided with antifrictional rollers between which the upper bar of the gate slides and the other post provided with a grooved pulley carrying a weighted rope having its end connected to an operating-lever of the gate for the purpose of assisting the said lever in its upward movement, substantially as set forth.

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

GEORGE R. ROGERS.

Witnesses:

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