(Model.)

E. L. COOPER.

GATE.

No. 367,367. Patented Aug. 2, 1887.

Fig. 1.

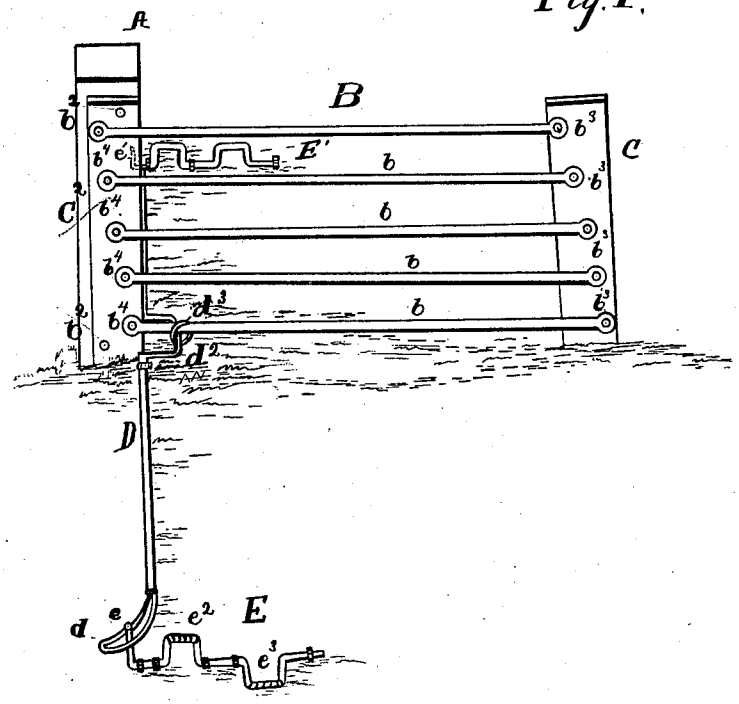


Fig 2.

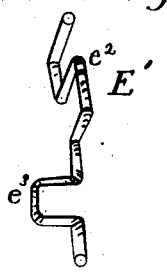
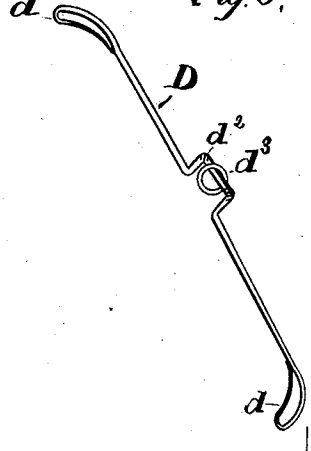


Fig. 3.



Witnesses.

N. A. Haseltine.

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UNITED STATES PATENT OFFICE.

EZEKIEL L. COOPER, OF CLARENCE, MISSOURI.

GATE.

SPECIFICATION forming part of Letters Patent No. 367,367, dated August 2, 1887.

Application filed November 30, 1886. Serial No. 220,321. (Model.)

To all whom it may concern:

Be it known that I, EZEKIEL L. COOPER, a citizen of the United States, residing at Clarence, in the county of Shelby and State of Missouri, 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 improvements in folding gates, the object of which is to provide a cheap, simple, durable, and convenient device to serve as a folding gate, and one that may be opened or closed without dismounting from a vehicle. These objects I attain by means of the device illustrated in the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a view in elevation of the device. Fig. 2 is a detail view of one of the wheel-irons, and Fig. 3 is a detail view of the trip-rod.

Similar letters of reference indicate corresponding parts in the several figures.

A is a post secured firmly in an upright position, to which the gate B is attached by any suitable means, as by means of bolts b^2. Said gate B is preferably constructed of iron rods *b*, to serve as rails; but any suitable material may be used. Said rods *b* are preferably provided with openings in their ends, and are all made of the same length, and are of any desired number, according to the height of gate desired. The rods are held in place by being secured at their front ends to a cross-piece or plate, C. Said plate may be of any suitable material, preferably of iron, and is provided with bolts b^3 for entering the openings in rods *b* and securing them thereto, and also to serve as hinges for the rods *b* to work upon as the gate is folded up or let down, as may be desired. The back ends of rods *b* are preferably secured to a plate, C^2, but may be secured to the post A by means of bolts b^4, which are to serve as hinges for the back ends of rods *b*.

The rods *b* are all made of the same length; but the back end of the lower rod is placed close to the front edge of the post or plate at the back of the gate and of the cross-piece at the front of the gate. The top rod is placed farther back on the post at the back of the gate and on the cross-piece at the front of the gate than the lower rod, and the other rods are placed on a diagonal line between the lower rod and the top rod, so that when the gate is folded up it will be perpendicular and the rods be side by side.

D is a trip-rod, and is provided with a loop, *d*, at each end in the shape of an arc of a circle, which extends upward and backward from the rod D, and is to receive the ends *e e'* of the wheel-irons E E' to operate the same. Trip-rod D is provided with an offset, d^2, in its middle, which is placed at right angles with the lower end of loops *d* in the ends of the trip-rod D. Said offset d^2 is provided with a ring, d^3, for receiving the bottom rod of the gate, which is made to work easily back and forth upon said rod, and is for the purpose of pushing the gate up and drawing it down. Said trip-rod is secured in place by any suitable means.

E E' are wheel-irons, and are provided with two offsets, e^2 e^3, in each rod. Said offsets are placed at right angles with each other. The ends *e e'* are parallel with the offsets e^2 in the wheel-irons E E', so that when the gate is closed the ends *e e'* and the set-offs e^2 will be in an upright position and the set-offs e^3 will lie on the ground. These irons are secured in place by any suitable means, and are placed across the driveway each side of the gate.

My invention is operated by driving the front wheel of the vehicle over one of the set-offs, e^2, and by so doing the ends *e e'* of the wheel-irons E E' will press downward and backward on the back side of loops *d* and draw the offset d^2 to an upright position. The offset pushes upward on the lower rod of the gate and folds the gate. To close the gate, the wheel of the vehicle is made to run over one of the opposite offsets, e^3, which was turned upright by the opening of the gate, thus drawing forward on the front side of loop *d*, throwing down the set-off d^2 in trip-rod D, and closing the gate.

I am aware of the construction shown in Letters Patent Nos. 248,807 and 218,826, and make no claim thereto.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination, with a vertically-folding gate, of a trip-rod, D, having an offset in the middle connecting it to the gate, and arc-shaped loops at its ends, which engage wheel-irons E E′, all substantially as shown and described.

2. The combination, with a vertically-folding gate, constructed as shown, of double-cranked wheel-irons E E′, having arms *e e′*, and a trip rod provided with arc-shaped loops at its ends to engage arms *e e′* of the wheel-irons, and with an offset in its middle connected by a ring to the lower bar of the gate, all substantially as shown and described.

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

EZEKIEL L. COOPER.

Witnesses:
R. H. JONES,
W. C. FROST.