(No Model.)

C. L. HUDLER.

GATE.

No. 407,010. Patented July 16, 1889.

Fig 1

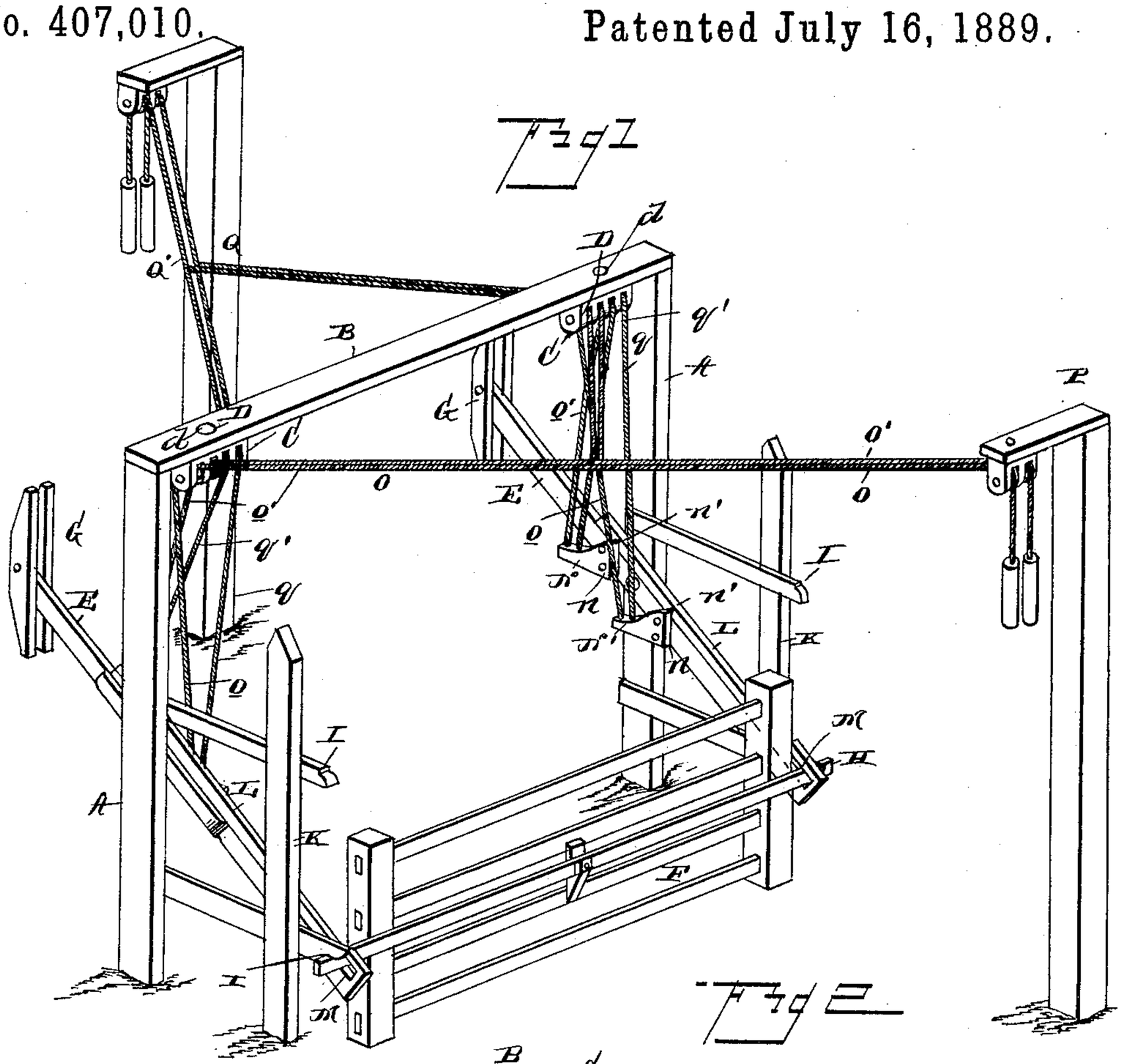


Fig 2

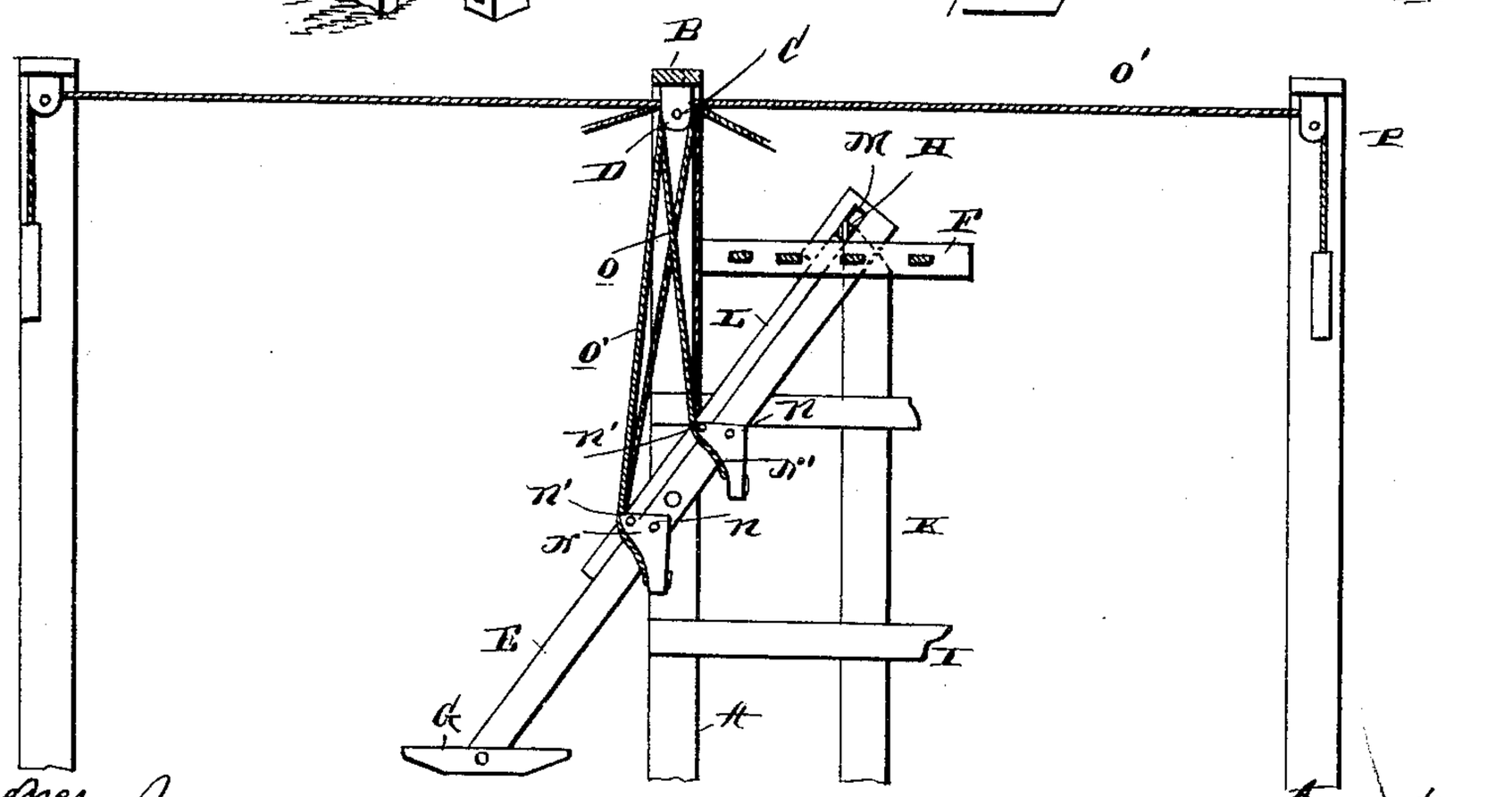
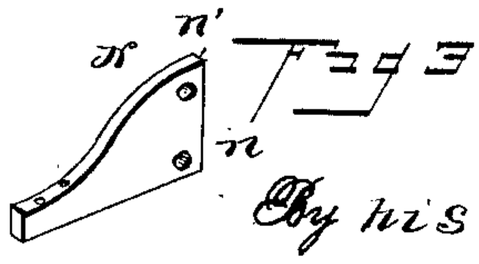


Fig 3



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CHARLES LEMUEL HUDLER, OF HERMITAGE, MISSOURI.

GATE.

SPECIFICATION forming part of Letters Patent No. 407,010, dated July 16, 1889.

Application filed March 30, 1889. Serial No. 305,416. (No model.)

To all whom it may concern:

Be it known that I, CHARLES LEMUEL HUDLER, a citizen of the United States, residing at Hermitage, in the county of Hickory and State of Missouri, have invented a new and useful Gate, of which the following is specification.

The invention relates to improvements on gates of that class which are operated by a driver or equestrian without dismounting; and it consists in a certain novel construction and combination of devices, fully described hereinafter in connection with the drawings and specifically pointed out in the claims.

In the drawings, Figure 1 is a perspective view of a gate embodying my improvements. Fig. 2 is a central sectional view of the same in the open position. Fig. 3 is a detail view of one of the angle blocks or levers.

Similar letters denote corresponding parts in all the figures.

A A designate the side posts of the improved gate, which are connected at their upper ends by the cross-beam B, on the under side of which are arranged the pulleys C. These pulleys are arranged in sets of four, and are mounted in the swiveled pulley-blocks D D, which are provided with vertical spindles *d d*, mounted in suitable bearings in the said cross-beam. Swinging levers E E are pivoted to the inner sides of the posts A A, and the gate F is attached rigidly thereto, whereby, when the levers are inclined in the direction shown in Fig. 2, the gate is raised to open the way. The opposite ends of the levers are provided with counterbalancing-weights G G to assist in raising the gate and prevent it from falling while the operator is lowering the same.

H represents a spring latch-bar, which is affixed at its center to the center of the gate, and projects at its free ends beyond the ends of the gate to engage catches I I on the catch-posts K and near their upper and lower ends. These catch-posts are arranged on opposite sides of the gate adjacent to the side posts A, and the catches consist of notches cut in the ends of horizontal bars in such positions that the projecting ends of the latch-bar may engage therein in the different elevations of the gate. The upper ends of the posts K are also adapted to engage the catches, and when in this latter position vehicles and other high obstacles may pass under the gate. Sliding bars L L are mounted, respectively, on the operating-levers E E, and bear at their front ends against the free ends of the latch-bar, whereby when the said bars are moved longitudinally the latch-bar is disengaged from the catches. The free ends of the latch-bar operate in the slotted guides M M on the gate.

N N′ designate angle blocks or levers, which are pivoted at one angle *n* to the levers E E and at the other angle *n′* to the sliding bars L L, whereby, when the free ends of the blocks or levers are elevated, the sliding bars are forced toward the gate and the ends of the latch-bar are disengaged from the catches. The angle blocks or levers N N are arranged between the gate and the pivots *e e* of the swinging levers, and the angle blocks or levers N′ N′ are arranged between the said pivots and the counterbalancing-weights, whereby, when the former blocks or levers are drawn upward, the gate will be elevated, and when the latter blocks or levers are drawn upward the gate will be lowered.

Operating-cords O and O′ are provided, respectively, with the branches *o o* and *o′ o′*, the free ends of which are attached, respectively, to the free ends of the angle blocks or levers N N and N′ N′, and the said branches extend over the pulleys which are arranged above the gate, whereby, when the cord O is pulled, the angle blocks or levers N N are operated, the latch-bar is disengaged, and the gate is elevated, and when the cord O′ is pulled the angle blocks or levers N′ N′ are operated, the latch-bar is disengaged, and the gate is lowered. The cords O O′ extend to one side of the road and are connected to a standard P within reach of the pedestrians, riders, and drivers, and a similar set of cords Q Q′, (also provided with branches *q q* and *q′ q′*, which are connected to the angle blocks or levers and pass over the said pulleys) is arranged to extend to a corresponding post P′ on the opposite side of the gate. Thus the gate may be opened or closed from either side simply by drawing upon a cord, and as the gate is counterbalanced it may be readily opened by a

child. The swiveled pulley-blocks accommodate themselves to the position of the cord which is pulled, thereby preventing chafing.

Having thus described the invention, I claim—

1. The swinging levers carrying the gate and provided with counterbalancing-weights, in combination with operating-cords provided with branches which pass over guiding-pulleys and are connected at their free ends to the swinging levers, respectively, on opposite sides of their pivots, substantially as and for the purpose specified.

2. The combination of the swinging levers carrying the gate, the latch-bar projecting at its ends beyond the ends of the gate to engage suitable catches, the sliding bars connected to the said latch-bar, the angle blocks or levers mounted on the swinging levers and connected to the sliding bars, and the operating-cords connected to the said blocks or levers, substantially as specified.

3. The combination of the swinging levers mounted on suitable posts and carrying the gate, the catch-posts provided with suitable catches arranged on opposite sides of the gate, the spring latch-bar projecting at its ends beyond the ends of the gate to engage the said catches, the sliding bars mounted on the swinging levers and connected to the free ends of the latch-bar, and the angle blocks or levers mounted on the swinging levers, respectively, on opposite sides of their pivots, connected to the sliding bars, whereby the latter are operated, and provided with operating-cords, substantially as specified.

4. The combination, with the side posts supporting a cross-beam and the swinging levers pivoted to the side posts and carrying the gate, of the pulley-blocks swiveled on the cross-beam, the latch-bar projecting at its ends beyond the ends of the gate to engage suitable catches, the sliding bars connected to the free ends of the latch-bar, the angle blocks or levers connected to the said sliding bars, and the operating-cords connected to the angle blocks or levers and passing through the pulley-blocks, substantially as specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

CHARLES LEMUEL HUDLER.

Witnesses:
WILLIAM MCCRACKEN,
WILLIAM W. HIATT.