(Model.)

H. L. CANUTT.

Farm Gate.

No. 242,880. Patented June 14, 1881.

Fig. 1.

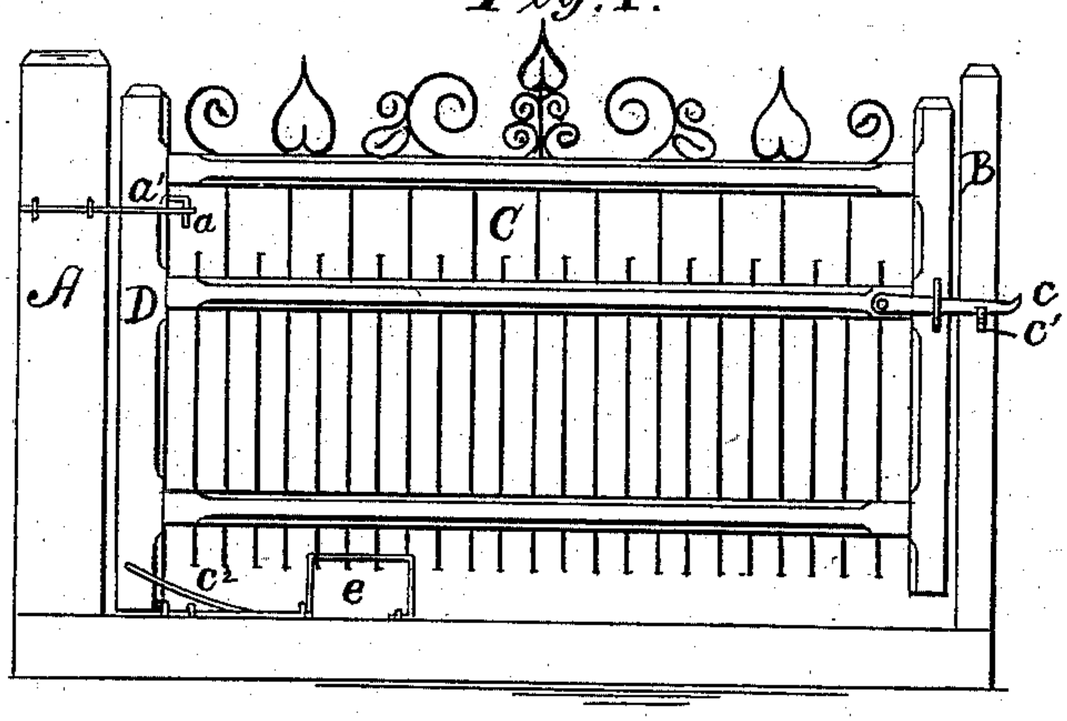


Fig. 3.

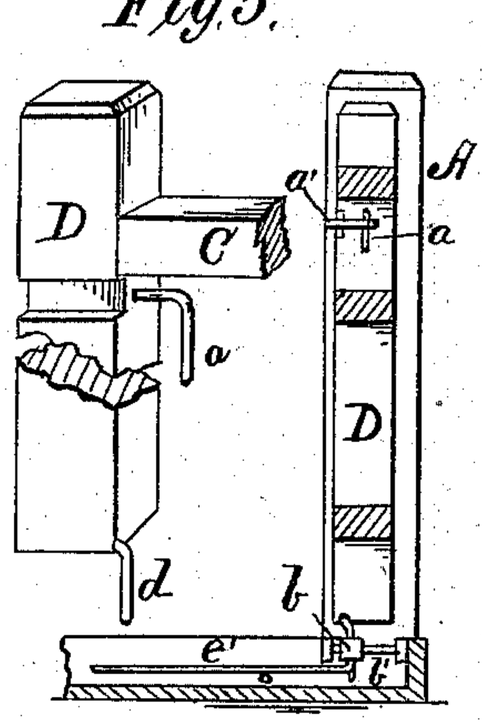


Fig. 2.

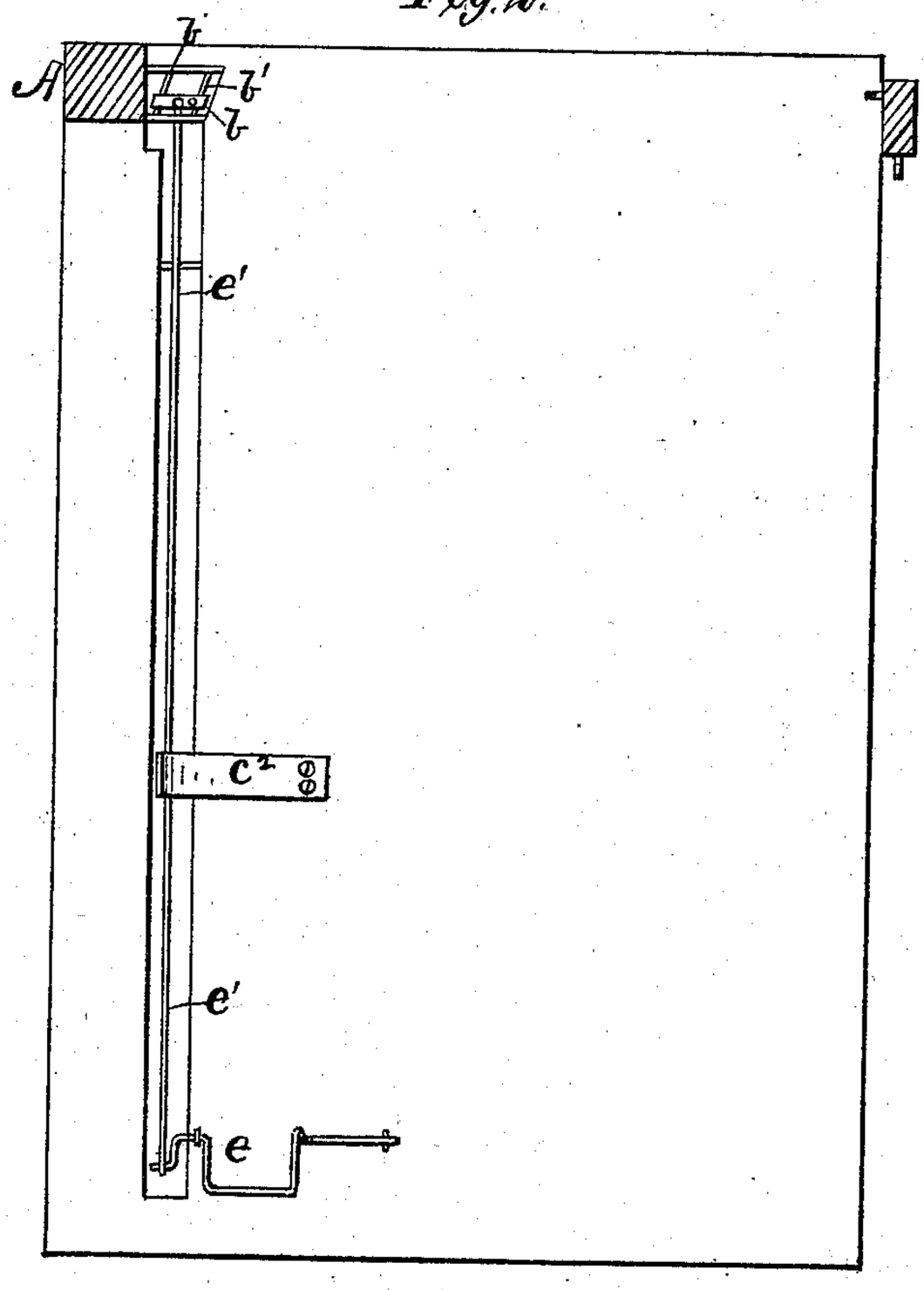


Fig. 4.

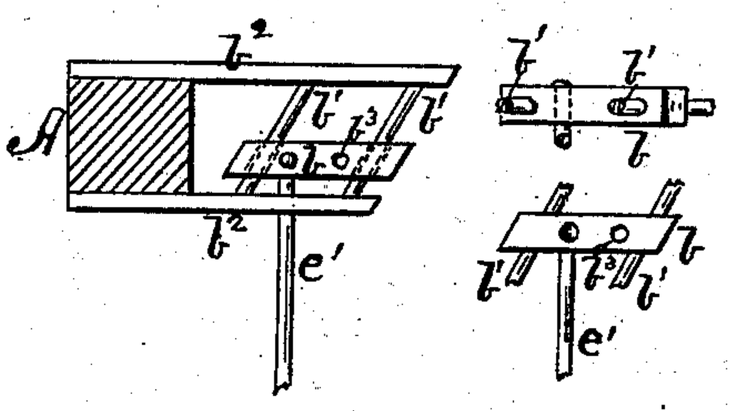
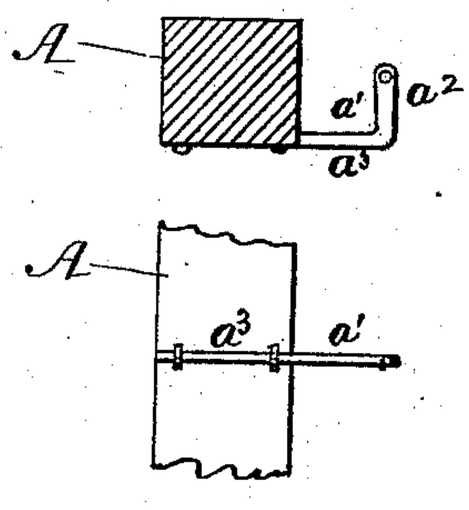


Fig. 5.



Witnesses:
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UNITED STATES PATENT OFFICE.

HARRY L. CANUTT, OF DUBLIN, INDIANA.

FARM-GATE.

SPECIFICATION forming part of Letters Patent No. 242,880, dated June 14, 1881.

Application filed February 2, 1881. (Model.)

To all whom it may concern:

Be it known that I, HARRY L. CANUTT, a citizen of the United States, residing at Dublin, in the county of Wayne and State of Indiana, have invented certain new and useful Improvements in Farm-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, reference being had to the accompanying drawings, and to letters or figures of reference marked thereon, which form a part of this specification.

This invention relates to that class of swinging gates which open automatically; and it consists in the construction and arrangement of the several parts hereinafter described, and pointed out in the claims.

In the drawings, Figure 1 is an elevation of a gate having my improvements applied thereto. Fig. 2 is a plan of the lower hinge and the automatic levers; and Figs. 3, 4, and 5 are detail views of parts slightly enlarged, in order to show the parts more clearly.

A is the hinging-post; B, the shutting-post; and C is the gate constructed with a rear vertical end or hinging-bar, D. The upper portion of the gate C is supported by a hook-and-eye hinge. One portion, *a*, of this hinge is fixed on the front face or side of the bar D. The hinge bar or strap *a'*, which comprises the other part of the hook-and-eye hinge, is made L-shaped, so that its outer end, a^2, may be connected to the hook *a*, and its other end, a^3, carried back alongside the bar D to the post A, to which it is fastened. This construction and arrangement places the gate-bar D between the outer wing, a^2, of the L-shaped bar *a'* and the post A. When the gate is closed the bar D turns in close to the post A, so as to leave but a very slight open space. When the gate is opened the bar D swings around to the end of and in line with the wing a^2, and this relative position of parts prevents any sagging of the latch end of the gate. The lower end of the gate-bar D is supported on a sliding block, *b*, arranged so that it may be moved to and fro parallel, or nearly parallel, with the roadway. This block could be held between two parallel sills or bars having guideways for its edges to rest in. I prefer to employ the method shown. I have two parallel guide-rods, *b' b'*, put through holes in the ends of the blocks. The ends of the guide-rods are fixed in framing-pieces b^2 b^2.

The rods *b'* could be arranged parallel with the roadway, and by moving the bar *b* along them the gate would be thrown open or shut, as desired, but the latch end of the gate would not swing so truly as when the rods are set as shown. The rods, as shown, are inclined outward from the post and to that side of the gate opposite to the side on which the hinge-bar *a'* is arranged. This outward inclination will throw the bar *b* sufficiently toward the post B to lift the latch *c* from the catch *c'*, so that the gate can swing automatically open. When the gate is open and the bar *b* is drawn to the ends of the rods nearest the post A, the latch end of the gate will be raised from its fastening c^2, and will swing automatically shut. The bar D is fastened to the block *b* by any suitable means. I employ a pin, *d*, fixed on the corner of bar D and put into a suitable hole, b^3, in the block *b*. Putting the pin *d* on the inner angle of the bar D, next the side to which the gate opens, causes the gate to swing more readily open or shut when the block *b* is moved.

The pin *d*, as will be seen, is placed eccentrically to the vertical center, or on the inner angle or corner of the bar D, next to the gate C, and on that side toward which the gate swings. The upper pin or hook, *a*, is placed at the middle of the front side of the bar D. This arrangement of the two hinge-pins causes the gate to turn quicker than it would do if the pin *d* were placed at the center of the under end of bar D.

The gate may be operated by any of the well-known mechanisms—as, for example, the crank and rod *e e'*. By turning the crank *e* the block is moved to and fro on its bearings, and the gate will be opened or closed. The sliding block *b* will operate the gate with any ordinary hinge employed for the top; but I prefer to use the peculiarly-constructed hook-and-eye hinge shown and described hereinbefore.

I have shown two guide-rods, *b'*, because better results are thereby secured; but a single rod properly arranged will hold the block so that the latter can be moved to and fro.

It will be seen that the gate C is connected to the post A by the upper hinge only. The lower edge of the gate is supported on the block *b*, and is wholly disconnected from the post, except by the small framing-pieces which are employed to hold the guides *b' b'*. These framing-pieces rest on the ground, and are thus supported from below, so that they exert no force on the gate-post. By this arrangement the weight of the gate is almost wholly taken off the post, so that the liability of the latter to be drawn out of a vertical position is almost wholly obviated.

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

1. The combination, with the gate C, having a pintle, *a*, on the inner side of and near the upper end of its rear post, and a pintle, *d*, fixed on the inner front corner of said post and projecting downward, of the L-shaped hinge *a'*, having one end fixed to the post A and its other end carried in front of the rear post, D, and connected to the pintle *a*, and the sliding hinge-block *b*, receiving the eccentric pintle *d*, and supporting the gate, substantially as set forth.

2. The combination, with a gate having its rear post provided on the inner side with a pintle, *a*, of the L-shaped hinge having its outer end arranged in front of the rear gate-bar and its opposite end carried to and fixed to the gate-post, so that the gate-bar, when the gate is closed, stands between the outer wing of the hinge and the gate-post, in order to make the gate fit up to post and keep latch end from sagging when open, substantially as set forth.

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

HARRY L. CANUTT.

Witnesses:
WILL SCOTT,
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