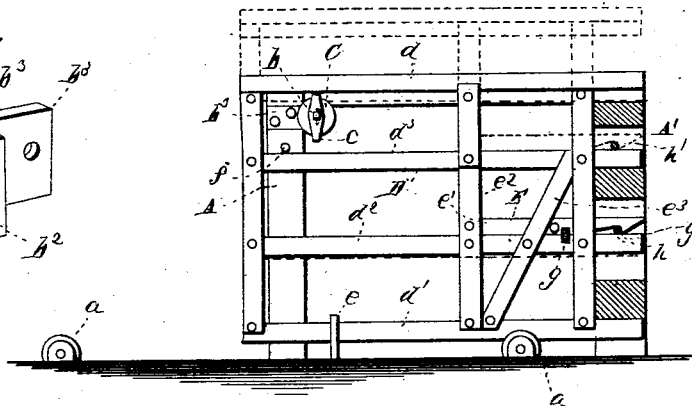
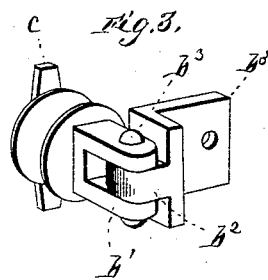
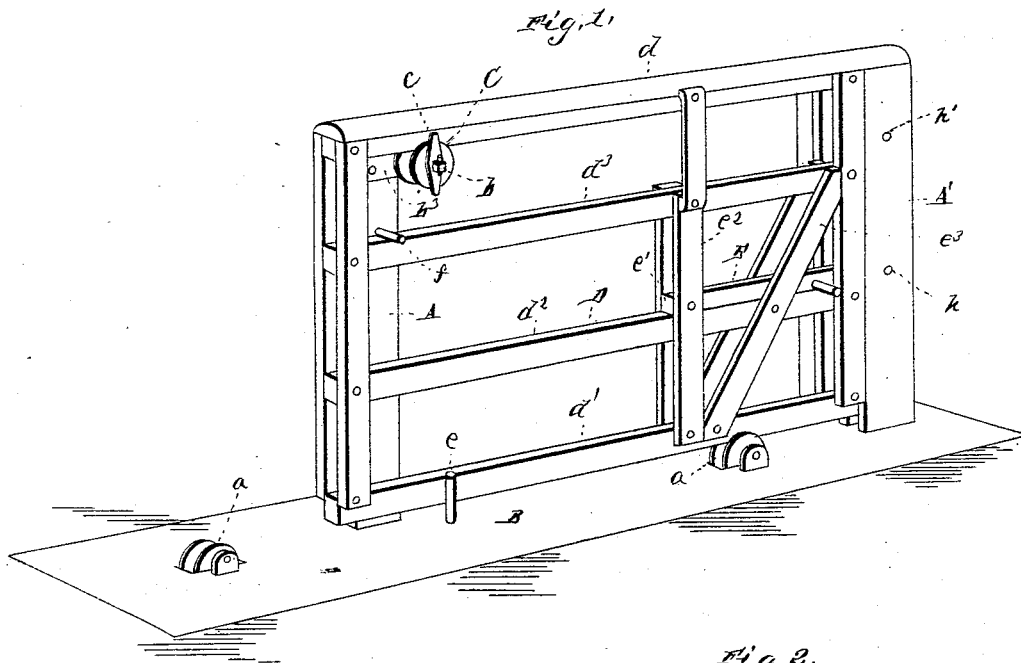


(No Model.)

E. A. GUY.  
GATE HINGE.

No. 455,665.

Patented July 7, 1891.



*WITNESSES*

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# UNITED STATES PATENT OFFICE.

ELISHA A. GUY, OF DOWAGIAC, MICHIGAN.

## GATE-HINGE.

SPECIFICATION forming part of Letters Patent No. 455,665, dated July 7, 1891.

Application filed August 2, 1890. Serial No. 360,819. (No model.)

*To all whom it may concern:*

Be it known that I, ELISHA A. GUY, a citizen of the United States, and a resident of Dowagiac, in the county of Cass and State of Michigan, have invented certain new and useful Improvements in Gate-Hinges; and I do declare the following to be a full, clear, and exact description of the invention, such as it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

Figure 1 of the drawings is a representation of the invention in perspective. Fig. 2 is a side elevation showing (in dotted lines) the gate in raised position. Fig. 3 is a detail view.

This invention relates to certain improvements in gate-hinges; and it consists in the novel construction and combination of parts hereinafter disclosed.

In the drawings, A A' refer to two posts, A being the hinge-post and A' the latch-post, and B refers to a base or sill, in which are hung two grooved rollers or wheels *a a*, one being arranged near the latch-post and the other beyond the hinge-post. The hinge-post A is provided near its upper end with a swiveled grooved roller or sheave C, carried by a stud or axle *b*, projecting from or cast with a bifurcated bracket *b'*, having a knuckle or swivel joint connection with an eye-bracket *b<sup>2</sup>*, a pivot-bolt *b<sup>3</sup>* passing through registering apertures in said eye-bracket and bifurcated bracket. On the outer or rectangular end of the axle or stud *b*, bearing the sheave or roller C, is keyed or otherwise secured a guard *c*, adapted to keep the top or other rail of the gate resting upon said sheave or roller from accidental displacement while the gate is being opened or closed. The eye-bracket *b<sup>2</sup>* is cast or made with a right-angle attaching plate *b<sup>3</sup>*, the longer arm of which is let into and flush with the outer side of the hinge-post A and bolted or screwed thereto. The sheave or roller C is adapted through its swivel or knuckle joint to swing horizontally into a position at right angles to its normal position, thus enabling the gate (presently de-

scribed) to assume a corresponding position after being unlatched and moved off the roller or wheel *a* near the latch-post.

D is the gate, having a T-shaped toe-rail *d* adapted to rest and travel upon the top sheave or roller C, said gate also having in addition to its bottom rail *d'* two or more intermediate rails *d<sup>2</sup> d<sup>3</sup>*, the bottom rail being guarded by a peg or pin *e* driven into the sill or base B to prevent lateral displacement of the gate by pressure, as by an animal from within the inclosure. Also to prevent the upward displacement of the gate by an animal attempting to pass under it, a pin or projection *f* is secured in the hinge-post A just above the upper intermediate rail *d<sup>3</sup>*.

E is a drop-latch consisting of a bar *e'*, pivoted at its outer end between short parallel upright pieces *e<sup>2</sup>* of the gate and flanged midway its length by parallel oblique pieces *e<sup>3</sup>* and projecting between and beyond parallel upright end pieces of the gate.

The latch E is held down upon the lower intermediate rail *d<sup>2</sup>* by a spring *g*, suitably secured thereto, while the forward end of said latch is of an approximately semi-harpoon shape, having an upwardly-tapering lower edge terminating at its lowest point in a shoulder or hook *g'*, engaging either of the two cross-pins *h h'*, held in the latch-post cross-wise of mortise-like openings *i* therein. It will therefore be seen that the gate will automatically latch when closed, and that the latch, while it is readily released by the hand, is securely held against accidental disengagement. It will also be seen that the gate is adapted after removal from its present position to be adjusted so as to cause its upper intermediate rail to rest upon the swiveled sheave or roller and its latch to engage the upper cross-pin in the latch-post, thus providing for the raising of the gate to permit the egress of small animals or their separation from the cattle, and to enable the gate to clear snow or other temporary obstruction.

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

The sheave or roller C, carried by a stud or axle *b*, projecting horizontally from a bracket

*b'* and provided at its end with the guard *c*,  
said bracket having a bifurcated or longitudi-  
nally-recessed portion, in which is pivotally  
secured a horizontal and knuckle projection  
5 of a bracket *b*<sup>2</sup>, having at one end the vertical  
perforated attaching-plate standing at right  
angles thereto, substantially as specified.

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

ELISHA A. GUY.

Witnesses:

C. J. COLEMAN,  
WM. PIGOTT.