(No Model.)

L. D. WEST.

GATE.

No. 390,273. Patented Oct. 2, 1888.

Fig. 1.

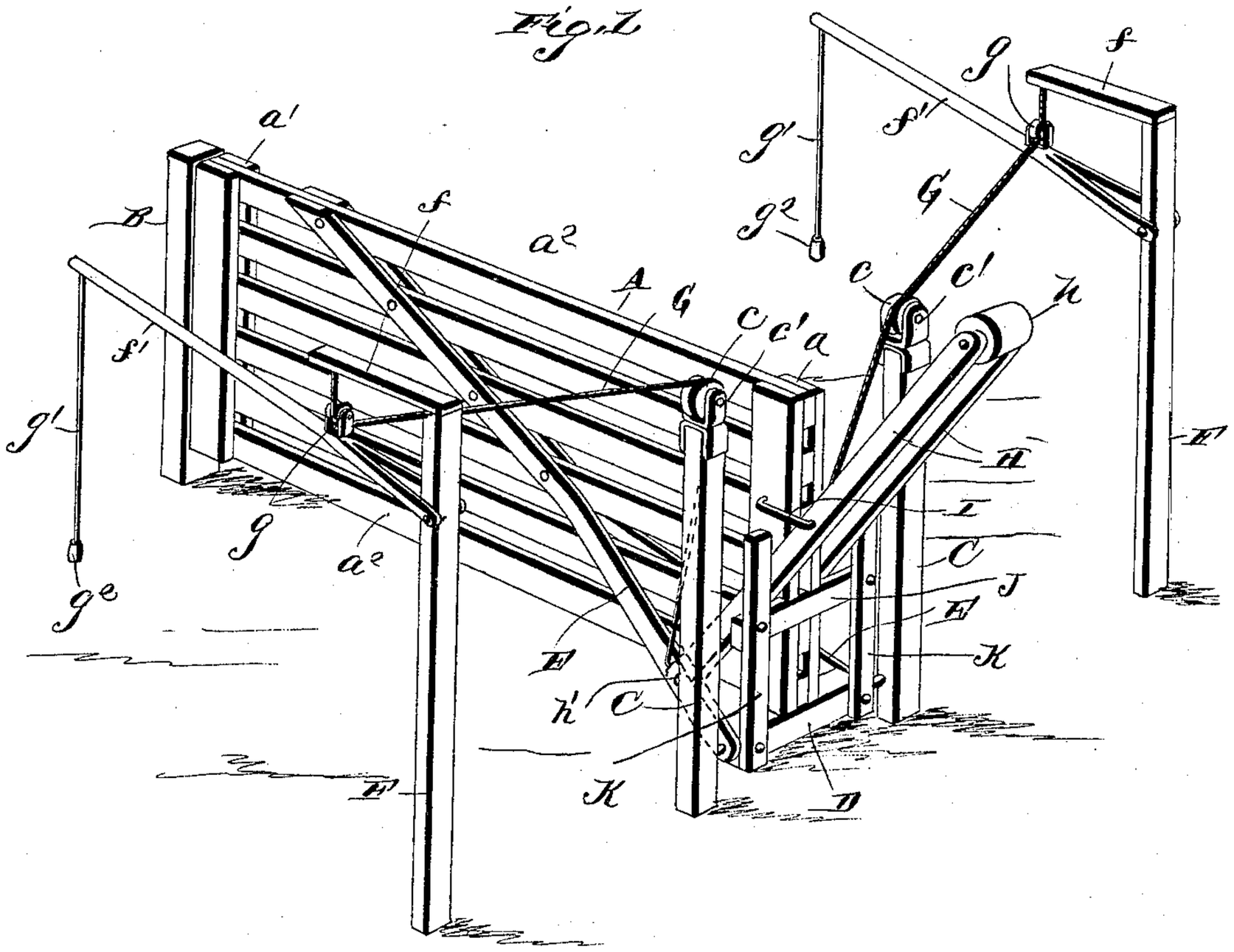
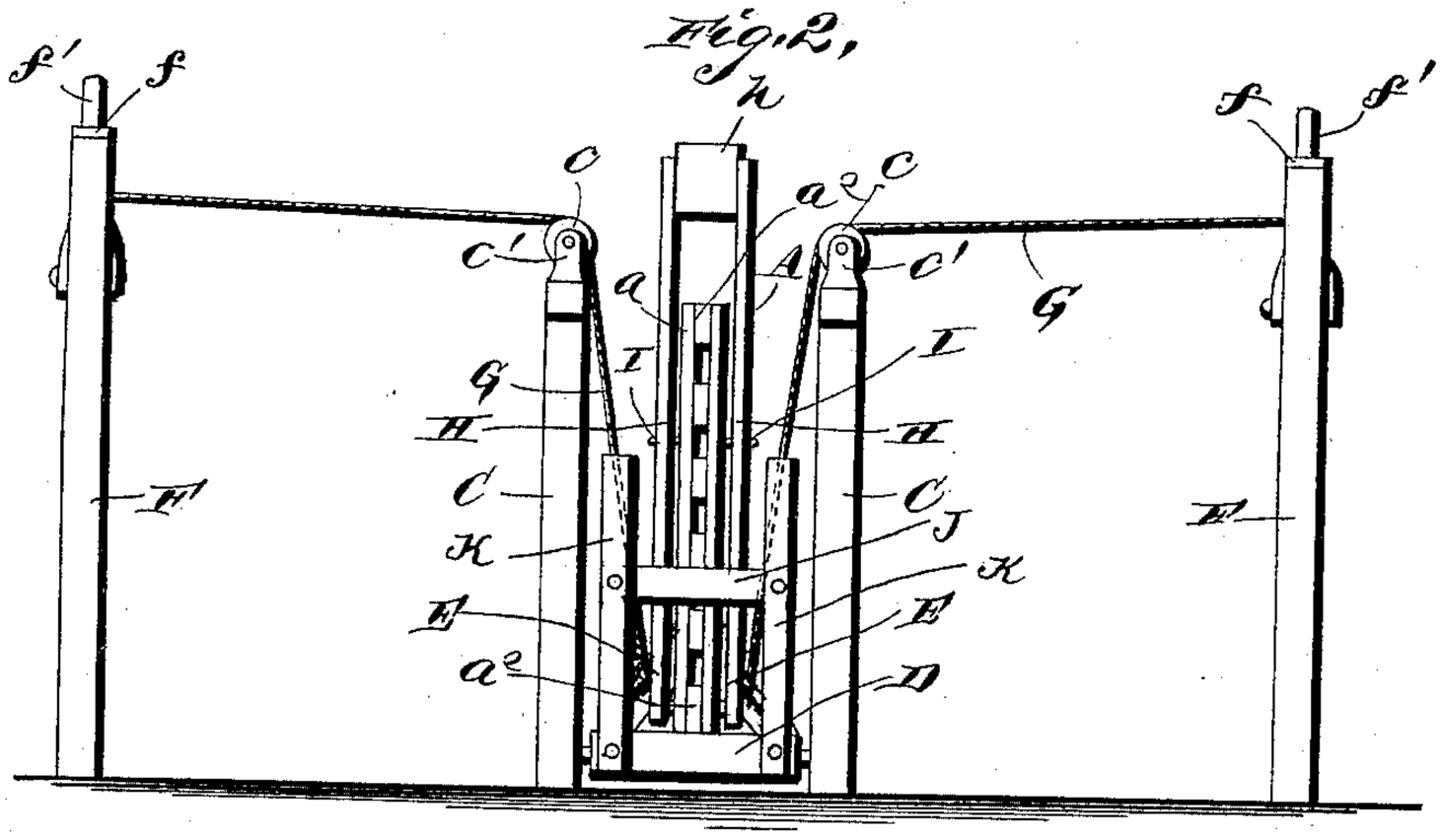


Fig. 2.



Witnesses
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UNITED STATES PATENT OFFICE.

LORENZO DOW WEST, OF ANNA, ILLINOIS.

GATE.

SPECIFICATION forming part of Letters Patent No. 390,273, dated October 2, 1888.

Application filed April 13, 1888. Serial No. 270,520. (No model.)

To all whom it may concern:

Be it known that I, LORENZO DOW WEST, a citizen of the United States, residing at Anna, in the county of Union and State of Illinois, have invented a new and useful Improvement in Gates, of which the following is a specification.

The invention relates to improvements in lifting-gates; and it consists in the construction and novel combination of parts hereinafter described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a perspective view of a gate embodying the invention. Fig. 2 is an edge view of the gate, facing its pivoted end.

Referring to the drawings by letter, A designates the gate-panel composed of the end uprights, *a a'*, and the longitudinal rails a^2 a^2. The upright *a'* adjoins the latch-post B.

C C are posts situated at equal distances on each side of the upright *a*, and *c c* are pulleys journaled in rectangular frames *c' c'*, that are pivoted on top of the posts C in such a manner as to turn thereon.

D is a transverse bar secured centrally to the lower end of the upright *a*, and provided at its ends with journals that have bearings in the inner sides of the posts C, near the bottom thereof.

E E are inclined braces secured at their lower ends to the ends of the bar D, and running thence forward and upward, being secured at suitable points to the gate-rails a^2.

F F are posts situated on each side of the gate at equal distances from the corresponding posts, C; and *f f* are horizontal arms standing from their tops parallel with the gate.

f' f' are levers the bifurcated ends of which are pivoted upon the posts F a suitable distance below the arms *f*, the levers standing out from the same sides of the posts as said arms.

G G are ropes secured at similar points to the braces E, running thence over the pulleys *c*, secured to the tops of the posts C, and thence over pulleys *g*, secured to the middle portions of the levers *f'*, and with their outer ends secured to the ends of the arms *f*.

g' g' are ropes secured at their outer ends to the ends of said levers, from which their free ends depend, and have attached the weights g^2, to keep them sufficiently taut.

H H are a pair of arms pivoted at their inner ends upon a pivot-pin, *h'*, which passes through the bottom rail of the gate, and has its ends secured in the braces E. A roller, *h*, is journaled between the outer free ends of these arms H H. These bars extend upward and outward over a cross-bar, J, secured to and between the uprights K, rising from the bar D, the said bars D and J and uprights K forming a frame-work which supports the gate when tilted back.

I I are wires connecting the said bars with the upright *a*, being pivoted to both bars and upright, and of proper length to hold the bars upward and outward when the gate begins to fall into its normal position. The roller then becomes a counter-balance to the gate and prevents the latter from falling heavily or with a jar.

To open the gate, one of the ropes *g'* is pulled downward, turning the corresponding lever-arm, *f'*, downward, and by means of the rope G, attached to said lever-arm, turning the gate upward on its pivotal points. When the center of gravity of the gate has passed outward beyond said pivotal points, it will fall outward, coming to rest with the upright *a* on the ground between the arms H, which will then lie on the ground. When the gate is being turned back into its normal position, the arms H will be lifted from the ground just after the center of gravity of the gate has passed inward beyond its pivotal points.

Having described my invention, I claim—

1. In a gate, the combination of the panel having the upright *a*, the posts C C, situated on opposite sides of said upright, the transverse bar secured to the lower end of the upright and journaled in and between said posts, the uprights K, rising from said bar, the cross-bar J, secured between said uprights, and the arms H H, pivoted at their inner ends on opposite sides of the gate, extending upward and outward over the cross-bar J, and having a roller journaled between their free ends, as set forth.

2. In a gate, the combination, with the panel having the upright *a*, the posts C C, the bar D, secured to the lower end of the said up-

right and journaled in the said posts, the pivoted arms H, the roller *h*, and wires I, of the levers *f'*, pivoted at their bifurcated ends on the posts F, the inclined braces E, connecting the ends of the bar D and the rails of the gate, and the ropes G, having their inner ends secured to said braces, passing over the pulleys *c* on the posts C, and with their outer portions passing over the pulleys *g*, secured to the middle portions of the pivoted levers and their outer ends secured to the ends of the arms *f*, standing from the tops of said posts F, substantially as described.

3. In a gate, the combination, with the panel having the upright *a*, the posts C, the pulleys journaled in frames *c'*, swiveled on said posts, the transverse bar D, journaled in said posts, and the inclined braces E, of the pivoted levers *f'*, the pulleys *g* thereon, the posts F, the arms *f* of said posts, the ropes G, running over the pulleys *c g* and secured to the ends of the arms *f*, and the ropes *g'*, having their ends secured to the ends of said levers *f'* and their lower ends depending therefrom and weighted, substantially as described.

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

LORENZO DOW WEST.

Witnesses:

CHARLES H. SHAFER,

CHRISTIAN NORDLING.