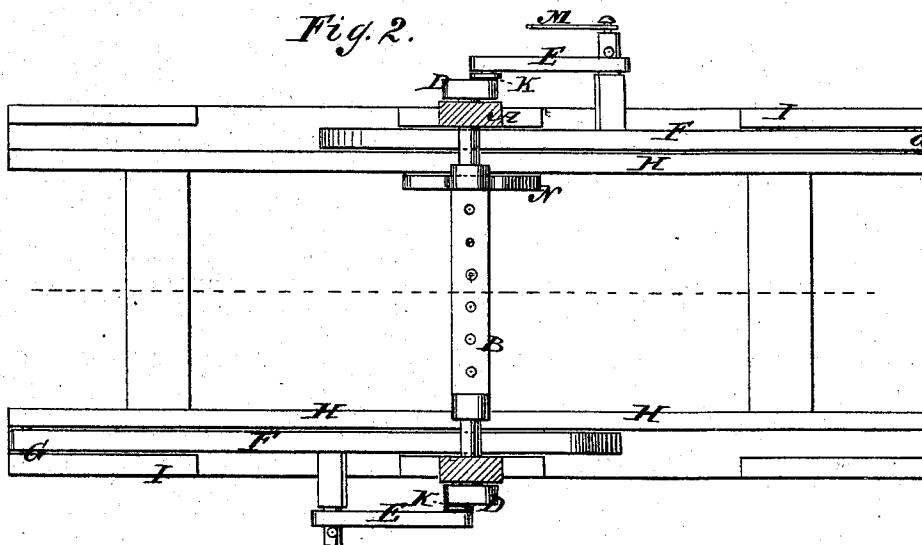
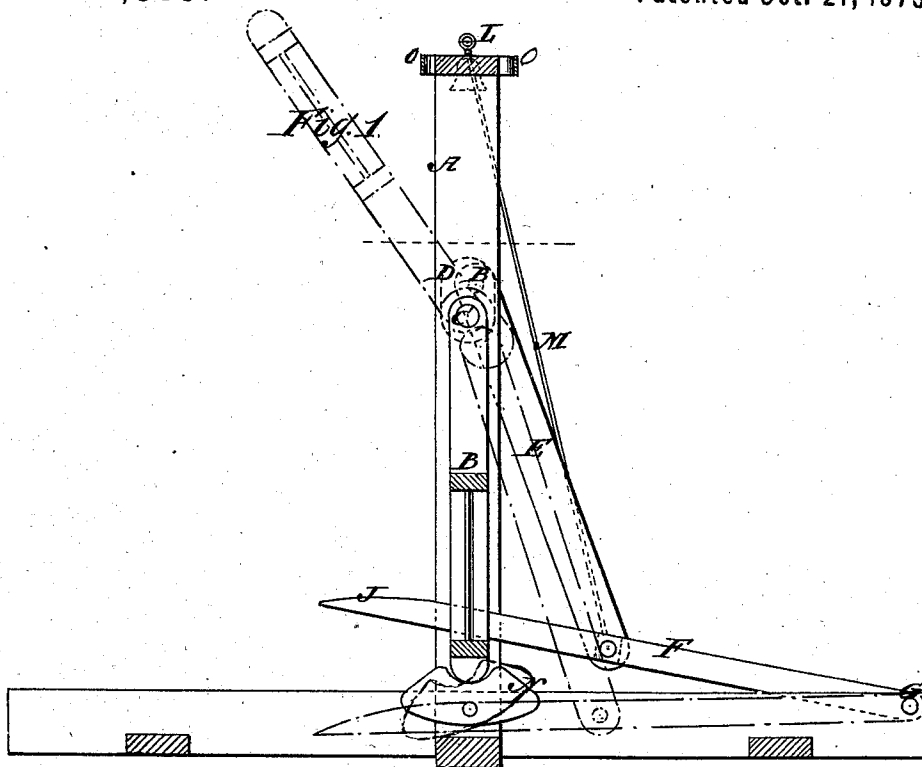


G. W. OLBERT & W. YOUNG.
Automatic Gates.

No. 143,839.

Patented Oct. 21, 1873.



Witnesses:

E. Wolff
H. Edgwick

Inventor:

G. W. Olbert
W. Young
Per *Wm. H. Young*
Attorneys.

UNITED STATES PATENT OFFICE

GEORGE W. OLBERT AND WILLIAM YOUNG, OF BARR'S STORE, ILLINOIS.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **143,839**, dated October 21, 1873; application filed July 12, 1873.

To all whom it may concern:

Be it known that we, GEORGE W. OLBERT and WILLIAM YOUNG, of Barr's Store, in the county of Macoupin and State of Illinois, have invented a new and Improved Gate, of which the following is a specification:

Our invention is an improvement in the class of gates automatically operated by the wheels of the vehicles which pass over the roadway. The improvement consists in a pendent swinging gate, connected by means of cranks and rods with pivoted levers, which are arranged horizontally and parallel to the roadway, so that when a vehicle-wheel is run onto one of said levers the gate will be thrown by the superior weight of the vehicle into a nearly vertical position, leaving the passage-way unobstructed.

Figure 1 is a longitudinal sectional elevation of our improved gate taken on the line *x x* of Fig. 2. Fig. 2 is a horizontal section taken on the line *y y* of Fig. 1.

Similar letters of reference indicate corresponding parts.

A is the gate frame or way, which may be constructed on any approved plan. B is the gate. C is the shaft, either in one or two parts, from which said gate is suspended. D represents the cranks on the ends of the shaft, E the connecting-rods, and F the treadles. The latter are pivoted at the end at which the vehicle is to run on them, as at G, and near about the middle are jointed to the connecting-rods, so as to be held sufficiently above the ground to have the requisite movement to swing the gate up when forced down to the ground by the vehicle. For wagon-wheels, these treadles will be broad and flat to facilitate the guiding of the wheels onto them, or, as represented in the drawings, they will be

arranged between two guide-rails, H I, which keep the wheels on them. In case of a railroad the guides H may represent the rails of the road with which the treadles will be so arranged as to be forced down by the tread of the wheels. The ends J are curved to facilitate the running of the wheels off and on. As the treadles are arranged on opposite sides of the gate and reversed relatively to each other the wheels will force the gate open by one treadle, and, after passing through the gate, hold it open by the other till the vehicle is entirely clear of it. By preference, the wrist-pins K, by which the connecting-rods E are attached to the cranks, are placed a little one side of the vertical plane of the axis to facilitate the turning of the cranks by said rods; but the same effect can be produced by setting the cranks a little oblique to the plane of the axis. An alarm-bell, L, may be sounded at the approach of the train to the gate by a rod, M. N is a button at the bottom of the gate for steadying it when closed. A spring, O, is fixed on each side of the top beam of the gate to relieve the shocks when the gate swings up against the beam; also to set it in motion to swing it down again after the train has passed.

Having thus described our invention, we claim as new, and desire to secure by Letters Patent—

The combination, with the gate-frame A, of the gate B, cranked shaft C, connecting-rods E, and treadles F, substantially in the manner described.

GEORGE W. OLBERT.
WILLIAM YOUNG.

Witnesses:

J. L. PLAIN,
C. WESTERMEIER, Jr.,
B. L. BERRY.