M. CARTER.
Gate.

No. 197,599. Patented Nov. 27, 1877.

Fig. 1.

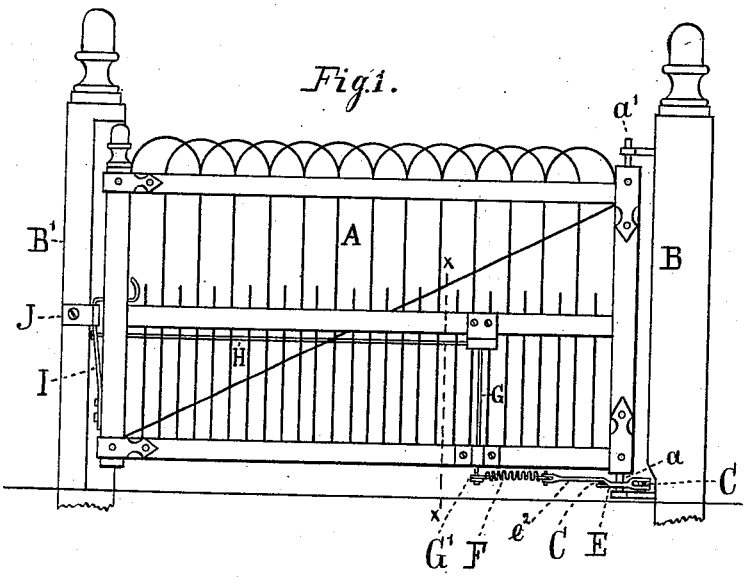

Fig. 2.

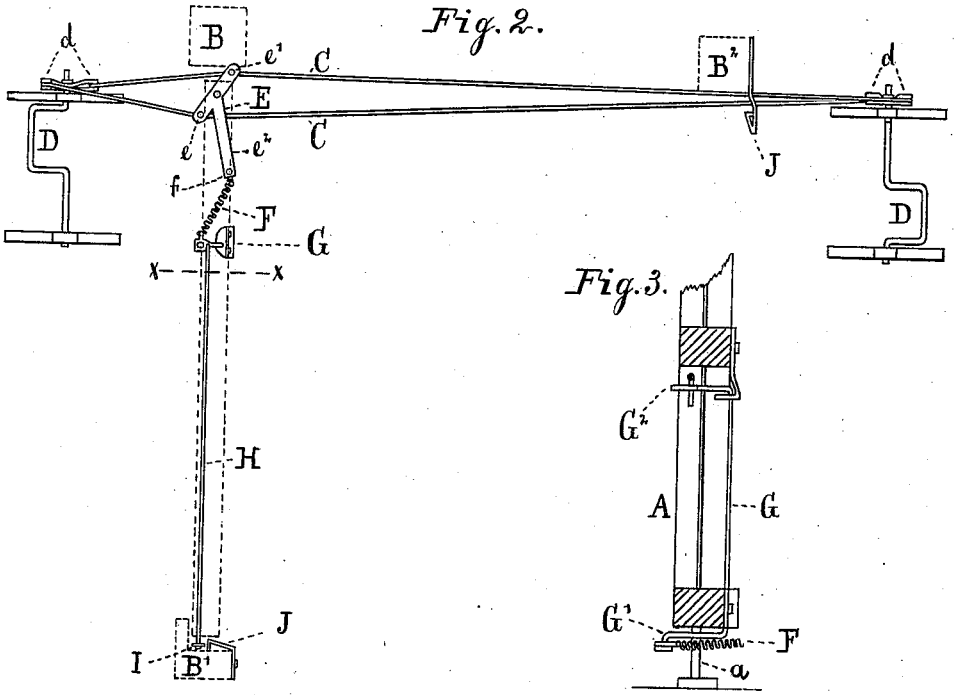

Fig. 3.

WITNESSES

James B. Lizius
R. P. Dagget

INVENTOR

Mordecai Carter,
per C. Bradford
Attorney

UNITED STATES PATENT OFFICE.

MORDECAI CARTER, OF PLAINFIELD, INDIANA.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **197,599**, dated November 27, 1877; application filed September 24, 1877.

To all whom it may concern:

Be it known that I, MORDECAI CARTER, of the town of Plainfield, county of Hendricks, and State of Indiana, have invented certain new and useful Improvements in Automatic Gates, of which the following is a specification:

Reference is had to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts.

Figure 1 is a side view of a closed gate embodying my invention. Fig. 2 is a ground or plan view of the attachments which operate said gate and the latch thereto, the gate itself and its posts being represented by dotted lines only. Fig. 3 is a detail drawing, showing the upright shaft G, its attachments, and the parts contiguous thereto, as seen from the dotted line *x x*.

In said drawings, those portions marked A represent the gate; B, the post on which it is hung; B^1, the post against which it shuts; B^2, the post against which it rests when open; C, rods by which the gate is operated; D, bent levers, against which the wheel of the vehicle strikes, and which operate the rods C; E, a three-armed lever, by means of which the rods C operate the gate A and the latch I; F, a spring connecting the arm e^2 of the lever E and the arm G^1 on the shaft G; G, an upright shaft, having the arms G^1 and G^2, and by means of which the requisite height to reach the latch is attained without running the rods obliquely. To the arm G^1 on this shaft the spring F is attached, and to the arm G^2 the rod H, which connects with the spring-latch I, and releases said latch from the catch J when operated.

The spring F, instead of being attached directly to the lever E, is preferably placed on the small bar *f*, which is then hinged to the lever; but while I have found this construction to work best in practice, it is not imperative.

The gate A is preferably hung upon the gudgeons *a* and *a'*, though the builder may use any hinge he deems best. The gudgeon *a*, when used, will also serve as a pivot for the lever E.

The operation of my gate is briefly as follows: The wheel of the vehicle, upon striking the upright part of one of the bent levers D, forces it down, and thus pulls, by means of the corresponding short lever *d*, one of the rods C. This rod in turn draws on the corresponding arm of the lever E, and then turns it partially around. This lever, by means of the third arm e^2, operates upon the spring F, turning the shaft G and the arms thereon, thus pulling the rod H, and releasing the latch I from the catch J. The gate being thus freed, and the tension of the spring having by this time become considerable, it is thereby forced open and against the post B^2. After passing the gate, the wheels of the vehicle strike the bent lever on the opposite side thereof, and the other one of the rods C being pulled, the operation is reversed and the gate closed.

My gate is simple and durable in construction and effective in operation.

One of its advantages over other devices for the same purpose consists in the peculiar operation of the three-armed lever E and the spring F.

In case of any obstruction of the gate, or any disarrangement of the parts, no damage will ensue from attempting to operate it, as the spring is sufficiently flexible, so that the levers D can be forced entirely over, and all the parts operated, without breaking or injuring any of them.

This same flexibility also prevents a sudden jar when the vehicle-wheels strike the levers D in ordinary use.

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

1. In an automatic gate, the combination of the levers D, rods C, three-armed lever E, and spring F, for the purpose of opening and closing the gate, substantially as herein shown and specified.

2. In an automatic gate, the combination of the three-armed lever E, spring F, shaft G, having arms G^1 and G^2, and rod H, for the purpose of operating the latch I, substantially as herein shown and specified.

3. The combination of bent levers D, rods C, three-armed lever E, spring F, shaft G, having arms G^1 and G^2, rod H, latch I, and gate A, forming an automatic gate, substantially as herein shown and specified.

In witness whereof I have hereunto set my hand and seal at Indianapolis, Indiana, this 20th day of September, A. D. 1877.

MORDECAI CARTER. [L. S.]

In presence of—
C. BRADFORD,
CHAS. E. MARSH.