UNITED STATES PATENT OFFICE.

LEWIS N. ALLENDORF, OF POUGHKEEPSIE, NEW YORK.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. **165,653**, dated July 20, 1875; application filed January 28, 1875.

To all whom it may concern:

Be it known that I, LEWIS N. ALLENDORF, of Poughkeepsie, in the county of Dutchess and State of New York, have invented a certain new and useful Improvement in Automatic Gates; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 is a view of the gate when open. Fig. 2 is a view of the gate when closed. Fig. 3 is a view of the crank-tripping device.

Similar letters of reference indicate corresponding parts.

This invention consists in the improvement of automatic gates, as hereinafter described, and pointed out in the claim.

In the drawings, A represents the gate, connected at its top to the post *a* by eye *m* and staple *n*, and at its lower end to an oscillating or swinging hinge-rod, *c*, which projects out from the inner side of the gate-post, and passes up through an eye, *j*, upon the lower end of the gate-bar *b*, and extends upward sufficiently for the attachment of the trip and latch connections. The elbow-latch, as shown at *d*, is connected to the upper end of the oscillating rod *c* by rod *e* and link *f*, said latch, when the gate is closed, falling down in a notched plate, *l*, secured to the inner side of the post *t*. The crank-tripping device, which automatically operates the gate, is arranged upon each side of the same, and consists of a crank or bent rod, *k*, one end of which passes through an eye, *o*, secured to a post, *r*, driven in the ground, the other end passing through a slot formed in the lower end of a short post, *p*. This crank communicates with the oscillating rod *c* by rods and chains *g g' s*, or other suitable means of connection, the rods *g* having suspended thereon a weight, *u*, the chains *s* passing over a pulley, *i*, secured to the upper end of the post *p*. The weight *u* serves the purpose of keeping the crank-rod *k* in an upright position ready to be again acted upon by the wheel of the vehicle passing over it, as illustrated in Fig. 3 of the drawings.

The operation is as follows: When the wheel of the vehicle strikes the rod *k* upon either side of the gate the oscillating rod *c* will be brought to an angle, or carried out of its vertical position, as shown in Fig. 1, which will raise the latch *d*, through the medium of the connecting-link *e*, allowing the gate to swing by its own gravity in an opposite direction, and, when the opposite rod *k* is reached, the position of the oscillating rod will be reversed, and the gate will swing to its closed position, when the latch *d* will drop into the notched plate *l*, and securely fasten the gate.

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

The gate A, hinged at its upper end to the post *a*, and at its lower end to the swinging or oscillating rod *c*, which is connected with the latch *d* by means of rod *e*, in combination with the operating mechanism, consisting of the crank-rod *k*, rod and chain connections *g g' s*, and weight *u*, substantially as and for the purpose specified.

In testimony that I claim the foregoing I have hereunto set my hand this 22d day of January, 1875.

LEWIS N. ALLENDORF.

Witnesses:
PAUL FLAGLER,
J. D. WILBER.

4 Sheets--Sheet 1.

C. ARMS.

Pocket-Book.

No. 165,654. Patented July 20, 1875.

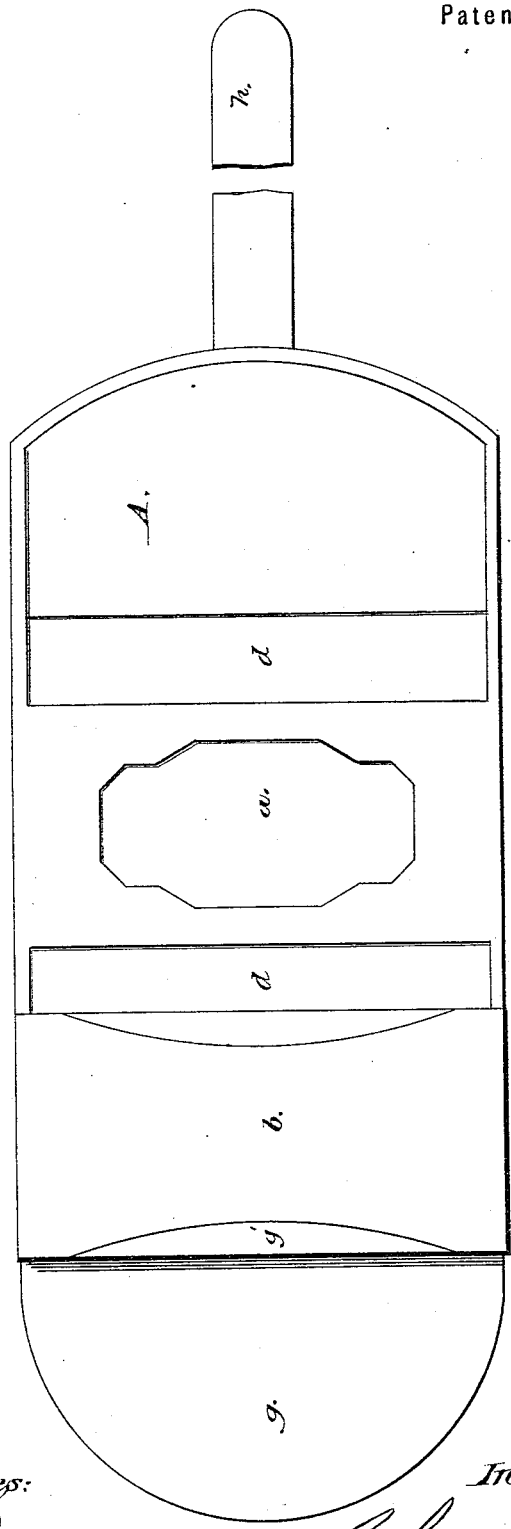

Fig. 1.

Witnesses:

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