

(No Model.)

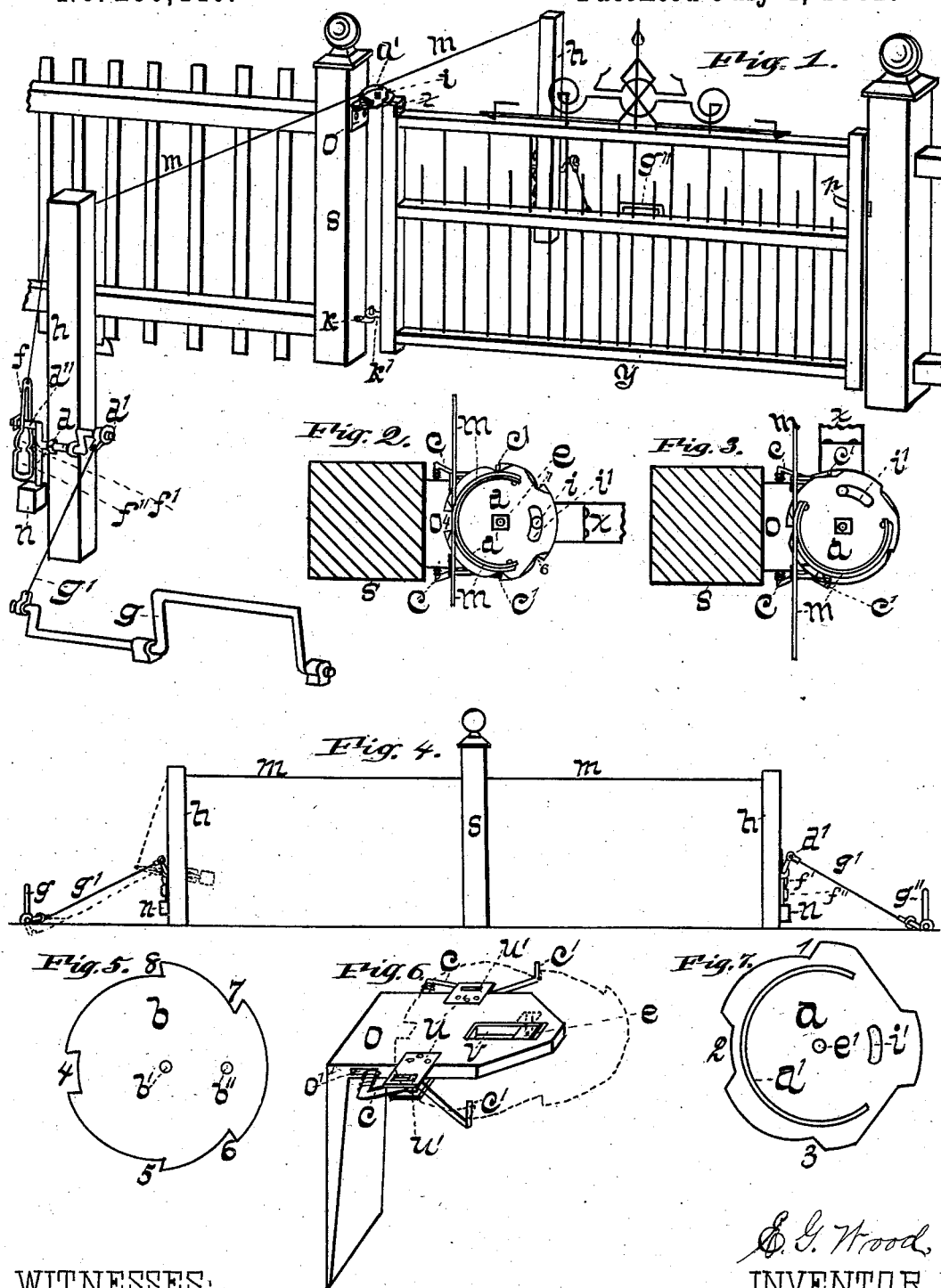
2 Sheets—Sheet 1.

E. G. WOOD.

GATE.

No. 260,440.

Patented July 4, 1882.



WITNESSES:

L. A. Adamson,
J. B. Adamson

E. G. Wood,
INVENTOR

By *Chas. E. Adamson*,
Attorney.

(No Model.)

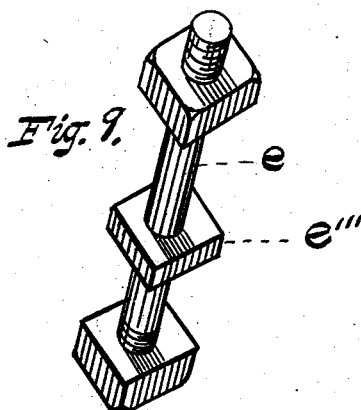
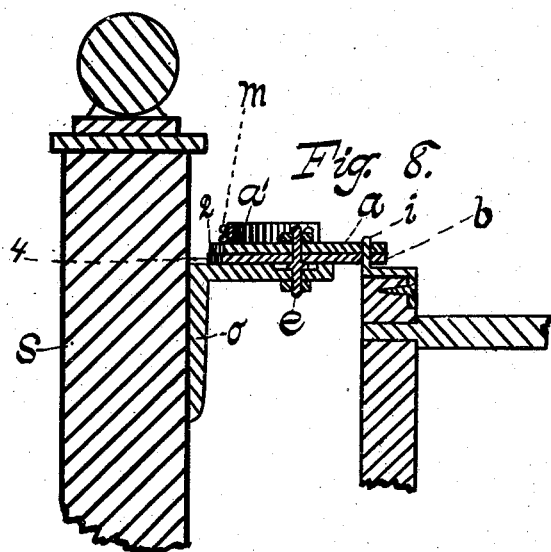
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L. A. Adamson

G. G. Adamson

E. G. Wood,

INVENTOR:

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HIS ATTY.

UNITED STATES PATENT OFFICE.

EDWARD G. WOOD, OF KOKOMO, INDIANA, ASSIGNOR OF ONE-HALF TO
RILEY DIXON, OF SAME PLACE.

GATE.

SPECIFICATION forming part of Letters Patent No. 260,440, dated July 4, 1882.

Application filed February 24, 1882. (No model.)

To all whom it may concern:

Be it known that I, EDWARD G. WOOD, a citizen of the United States, residing at Kokomo, in the county of Howard and State of Indiana, have invented a new and useful Gate, of which the following is a specification.

My invention relates to improvements in that class of gates known as "automatic gates;" and the objects of my improvements are to construct a cheap, simple, and durable automatic gate, which will be perfect and sure in its operation, easy to operate, and one that will not be liable to get out of order. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1 is a perspective view of my gate. Figs. 2 and 3 are top views of the upper hinge mechanism. Fig. 4 is a longitudinal view of the gate-connections. Figs. 5, 6, and 7 are views of the upper hinge mechanism. Fig. 8 is a vertical section of the upper hinge mechanism, and Fig. 9 is a separate view of the bolt *e*.

Similar letters refer to similar parts throughout the several views.

The gate-frame *y* may be made of various styles and sizes, and being provided at one end with an ordinary latch, *p*, and at the other end with a pintle, *i*, and a part of the hinge *k'*, it is ready to be suspended to the post. The bracket *o* is then firmly secured to the upper end of the post *s*. This bracket is provided with slots *v* and *o'*, latches *c c'*, and plates *u*, as shown in Fig. 6, and for the purpose hereinafter specified. The bolt *e* is made larger in the center, or provided with a nut or square collar, *e''*, made fast to it, as shown in Fig. 9, and has a nut on each end. It is secured to the bracket *o* by placing it in the slot *v* and tightening the nut on the under side. The under plate, *b*, and top plate, *a*, may be then placed on the bracket, (the upper end of the bolt *e* passing through the holes *e'* and *b'* in both plates.) The latches *c* (being provided at one end with a coil-spring) are then secured to the sides of the bracket between the plates *u*. A bolt, *u'*, passing through the slots in the outward ends of the plates, secures the latches in position. One end of the latch works in the slot *o'* and the other end, *c'*, extending

outward, so that it will engage in one of the notches 4, 5, 6, 7, or 8 in the plate *b*, as shown in Figs. 2 and 3, and by dotted plate in Fig. 6. The gate-frame *y* may be then placed on the lower hinge, *k*, and the pintle *i* made to engage in the hole *b''*, and slot *i'* in the plates *a* and *b*. A nut is then placed on the upper end of the bolt *e* and tightened sufficient to allow the plates to turn easily. The under nut on the bolt *e* is then loosened and adjusted so as to make the gate swing and latch properly, and then tightened. After this is done the cords or wires *m* are then attached to the ends of the rim *a'* on the top of plate *a*, as shown in Figs. 2 and 3. The other ends of these cords *m* are attached to the slides *f* on each side of the gate. The slides *f* consists of a piece of metallic rod or bar bent in a peculiar shape most clearly shown in Fig. 1, being made larger and heavier at its lower end, above which is an opening, *f''*, leading into opening *f'* by the narrow space between them. The openings are made large enough to allow the end of the crank *d''* to turn in them, the space *f'* tapering upward to a point just above the crank *d''*, as shown in Fig. 1. The said slides work on the cranks *d''*, which are attached to the posts *h*. These posts are placed on each side and a proper distance from the gate, so that it may strike and latch to them each time it is opened.

The trip-rods *g* are placed a few feet from the posts *h*, as shown in Fig. 4, and connected to the crank *d'* by a small rod, *g'*. This crank is hinged a proper distance from the ground, so that the weight *n* on the arm *d* will swing free. When the gate is closed everything stands as shown in Figs. 1 and 2, and when a vehicle-wheel presses the trip-rod down the two cranks *d' d''* are turned downward and the slide *f* and arm *d* are thrown into a horizontal position, as shown by the dotted lines in Fig. 4. When the slide *f* is thrown into a horizontal position it pulls the cord *m*. This causes the plates *a* and *b* to turn, as shown in Fig. 3. When the cord is pulled it first turns the top plate, *a*, (not moving the lower one,) the length of the slot *i'*. In so turning one of the incline notches, 1 or 3, will press the end of the latch *c* out of the notch 5 or 8, and both plates then revolve, as shown in Fig. 3. When

the cord is pulled from one side of the gate the slide *f* on the other side is drawn up toward the top of the post *h*, so that the enlarged place *f''* is drawn up around the flat end of the crank *d''*, and when the front wheel of a vehicle passes over the crank *g''* (if the vehicle is moving toward the crank *g''*) it pulls the slide *f* down some, but not sufficient to close the gate. When the front wheel is off of the trip-rod it rises and the flat end *d''* slides up in the opening *f''*. Then, when the rear wheel presses the trip-rod down, it pulls the cord sufficient to close the gate, and thus the gate operates, always opening in the direction the vehicle is moving.

Having thus described my invention, what I claim is—

1. In an automatic gate, the combination of the trip-rods with a swinging crank, *d*, which is provided with a slide, *f*, having openings *f' f''*, for the purpose set forth.

2. In a gate-hinge mechanism, the plate *a*,

having an elevation, *a'*, slot *i*, and incline notches around its outer edge, plate *b*, having two holes in it and notches around its outer edge, bracket *o*, having slots *v* and *o'*, and provided with the plates *u'*, for supporting the latch *c*, for the purpose set forth.

3. The combination of plate *a*, having slot *i* and incline notches, plate *b*, having two holes in it and notches around its outer edge, bracket *o*, wire *m*, post *s*, and gate *y*, for the purpose set forth.

4. The combination of the slide *f*, having openings *f' f''*, crank *d d' d''*, weight *n*, post *h*, wire *g'*, and trip *g*, for the purpose set forth.

5. In an automatic gate, the trip-rod *g*, rod *g'*, cranks *d' d''*, arm *d*, weight *n*, slide *f*, and wire or cord *m*, in combination with the hinge mechanism, for the purpose set forth.

EDWARD GEORGE WOOD.

Witnesses:

NATHAN DIXON,
HENRY WASSON.