

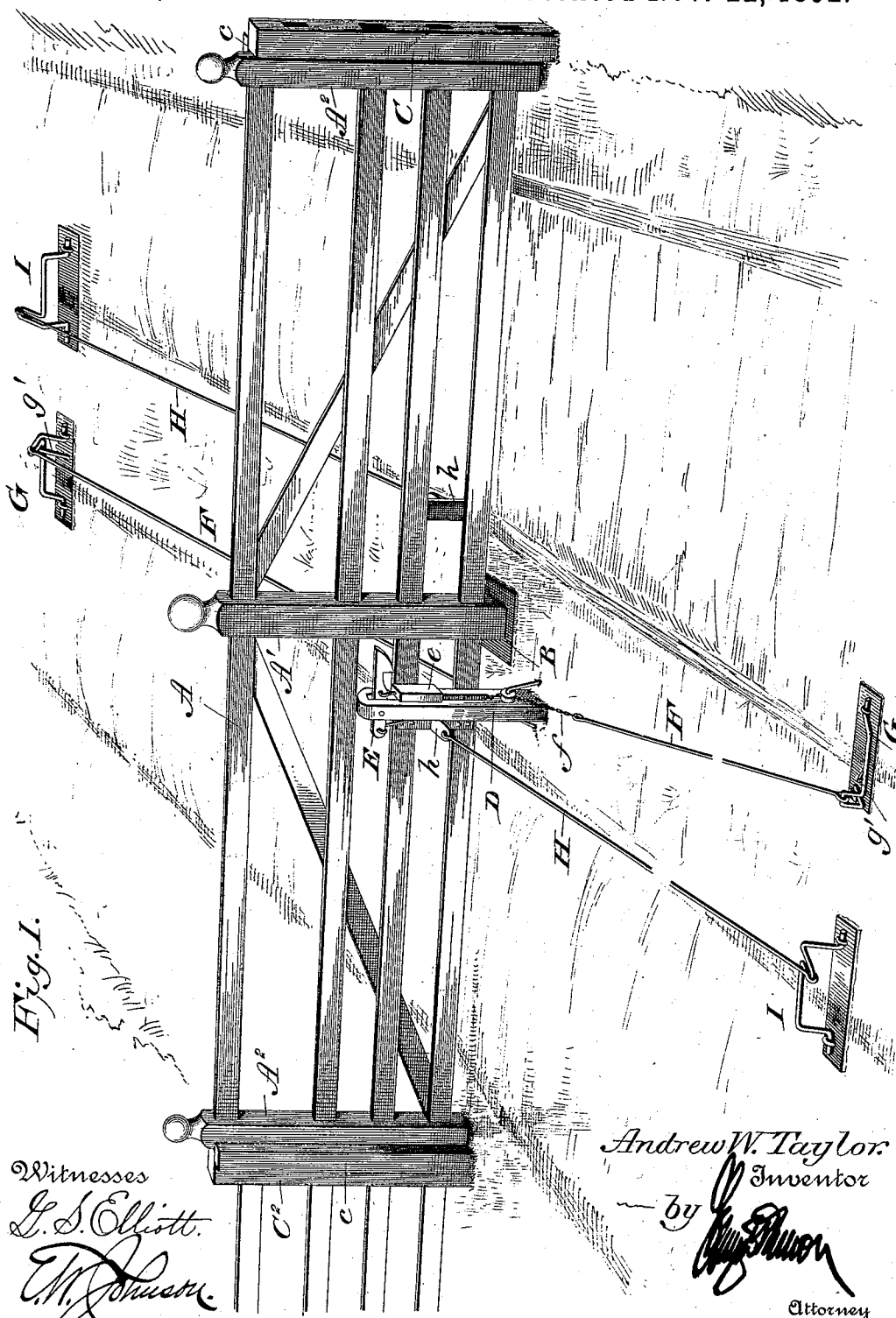
(No Model.)

2 Sheets—Sheet 1.

A. W. TAYLOR.
SWINGING GATE.

No. 486,799.

Patented Nov. 22, 1892.



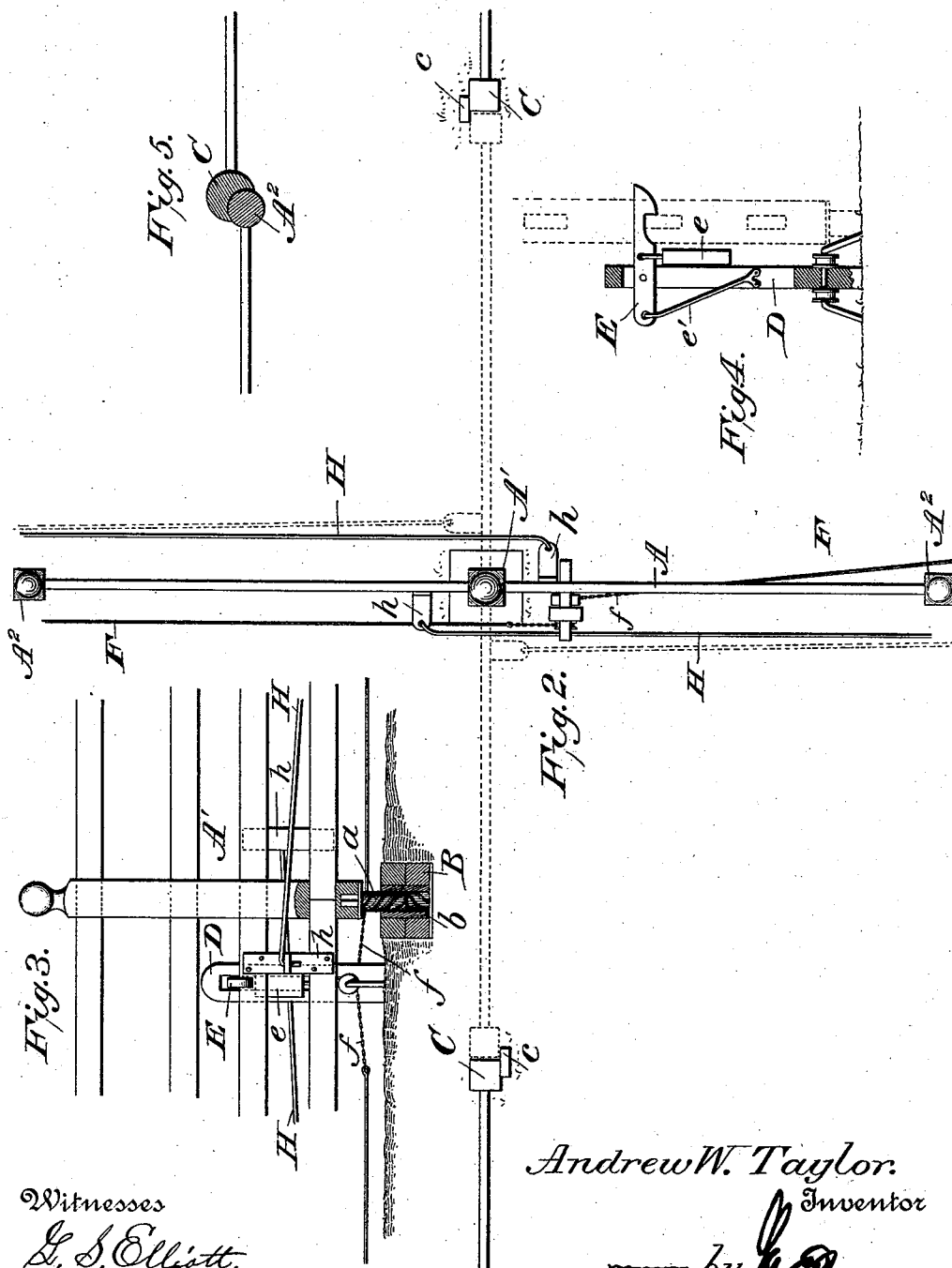
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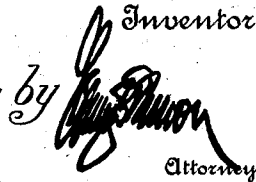
Witnesses

L. S. Elliott.

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Inventor

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UNITED STATES PATENT OFFICE.

ANDREW W. TAYLOR, OF WAYNE, NEBRASKA.

SWINGING GATE.

SPECIFICATION forming part of Letters Patent No. 486,799, dated November 22, 1892.

Application filed May 14, 1892. Serial No. 433,032. (No model.)

To all whom it may concern:

Be it known that I, ANDREW W. TAYLOR, a citizen of the United States of America, residing at Wayne, in the county of Wayne and State of Nebraska, have invented certain new and useful Improvements in Swinging Gates; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon, which form a part of this specification.

This invention relates to improvements in swinging gates, and the end sought to be attained is to provide a gate which will be simple in construction and which may be opened and closed by the passage of a vehicle over crank-arms located at some distance from the gate, but connected thereto, so that the gate will be swung open and at the same time elevated and held open in a raised position by a latch, which is also operated by a crank-arm, so that when the latch is released the gate will be automatically closed; and the invention consists in the construction and combination of the parts, as will be hereinafter fully set forth, and particularly pointed out in the claims.

In the accompanying drawings, forming part of this specification, Figure 1 is a perspective view of a gate and operating mechanism constructed in accordance with my invention, the gate being shown closed. Fig. 2 is a plan view showing the gate opened or in engagement with the latch. Fig. 3 is a side elevation, partly in section. Fig. 4 is a side elevation, partly in section, showing the latch. Fig. 5 is a detail sectional view of one of the gate and fence posts.

A designates the gate, which is supported upon a central post, the lower end of which is provided with a screw-threaded pin *a*, which enters a threaded socket *b*, suitably attached to and supported by blocks embedded in the center of the roadway. The gate may be of any suitable construction, and the framework thereof is attached to the center post *A'* and to the end pieces *A² A²*. These end pieces are adapted to abut against the posts *C C* of the fence-sections when the gate is closed,

said fence-posts being provided with strips *c c*, as shown in Fig. 1, or hollowed out when the end pieces are round, as shown in Fig. 5.

Adjacent to the block *B*, which carries the socket *b*, is located a post *D*, said post carrying a pivoted latch *E*, provided on one side of its pivot with a weight *e* and on the other side with a rod *e'*, to the lower end of which are attached flexible connections leading to rods *F F*, which extend to crank-arms *G G*, located in the roadway on opposite sides of the gate-post.

The gate *A* is provided on each side of the center post *A'* and at a slight distance therefrom with angle-plates *h h*, with which engage rods *H*, which are connected to crank-arms *I*, located on a line with the crank-arms *G* on opposite sides of the gate. The crank-arms *G* and *I* may be of any suitable construction, such as are usually provided for operating gates of this class, and adjacent to those which operate the latch *E* are inclined pins, which limit the movement thereof.

In the accompanying drawings I have shown the latch *E* provided with a weight adjacent to the end which engages with one of the rails of the gate, and said weight is of sufficient capacity to raise the crank-arms *G*, so that they will abut against the pins *g' g'* when the gate is closed, the crank-arms *I* being also held raised when the gate is closed by the weight of the gate.

In operation, when it is desired to open the gate, a vehicle coming from either direction will move the crank-arm *I* toward the gate and cause the bar *H* to exert a pushing movement against the gate, which will swing the same upon its spirally-threaded pin, so that as the gate is swung open it will be also elevated. Thus the gate is not liable to contact with obstructions which may be in the roadway, and will be raised so that its operation will not be impeded by snow. As soon as the gate assumes a position on a line with the roadway it will engage with the latch and be held open until the wheel of the vehicle engages with the crank-arm *G*, which being depressed will release the latch through the medium of the flexible connections and rods, and the weight of the gate will cause the same to close.

The gate hereinbefore described may be

readily opened by pedestrians, and will close automatically after they have passed through.

The post D should not be secured in position until after the pin attached to the center post is placed in the socket and the gate closed, as said post will prevent the gate being turned sufficiently to be released from the socket.

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

1. In combination with a swinging gate having a central supporting-post with a threaded pin which engages with a socket, rods connecting the gate to crank-arms, so that when said crank-arms are depressed the gate will be opened and will close automatically and elevate the crank-arms, substantially as shown, and for the purpose set forth.

2. In a swinging gate having a central supporting-post with a screw-threaded portion on its lower end, which engages with a threaded socket, posts for limiting the swinging movement of said gate, rods attached to the gate on opposite sides and at a distance from the supporting-post, as shown, said rods engaging with crank-arms which are adapted to be depressed by the passage of a vehicle to swing the gate and at the same time elevate the same, so that it will automatically assume a closed position, substantially as set forth.

3. In combination with an automatically-closing swinging gate, a pivoted latch carried by a stop-post adjacent to the supporting-post of the gate, said latch being adapted to engage with the gate and retain the same in an elevated position, said latch being connected to crank-arms having stops for limiting the movement of said crank-arms and retaining them in an inclined position, substantially as shown.

4. In combination with a swinging gate hav-

ing a central supporting-post, bars H, connecting the gate with crank-arms, and a post carrying a latch, said latch being connected to crank-arms which are adapted to move in an opposite direction from the crank-arms which operate the gate, substantially as shown, and for the purpose set forth.

5. In combination with a centrally-supported gate having means for elevating the same when swung open, said means also serving automatically to close the gate, rods H H, connected to the gate and to crank-arms I, and a post D, carrying a weighted latch, said latch being connected to crank-arms G, located on opposite sides of the gate and in line with the crank-arms I, substantially as shown, and for the purpose set forth.

6. In combination with a swinging gate centrally supported, said supporting means serving automatically to raise the gate when opened and close the same when released, angle-irons h h, attached to the gate on opposite sides of its supporting-post, bars H H, attached thereto and to crank-arms, a post D, carrying a latch E, having on one side a weight and on the other a rod with which flexible connections f engage, rollers over which the flexible connections pass, and rods F F, attached to flexible connections and to crank-arms G G, said crank-arms being located on opposite sides of the gate in line with the crank-arms I I, the crank-arms G G and I I being inclined so as to be depressed by contact with a vehicle-wheel, substantially as shown, and for the purpose set forth.

In testimony whereof I affix my signature in presence of two witnesses.

ANDREW W. TAYLOR.

Witnesses:

JOHN D. KING,
F. M. SKEEN.