

S. Whitaker, *2. Sheets. Sheet. 1.*

Gate.

No. 102741.

Patented May 3. 1870

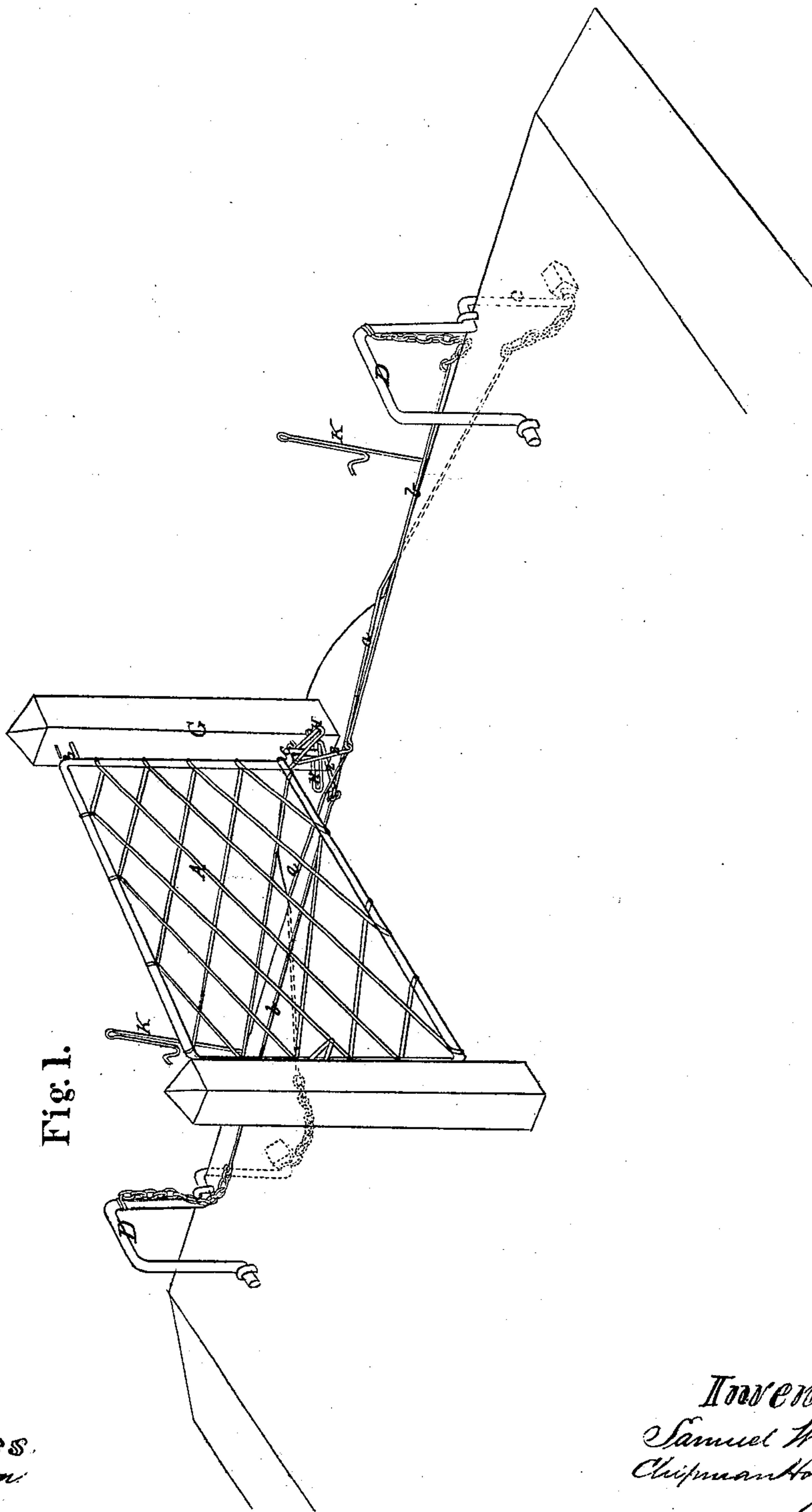


Fig. 1.

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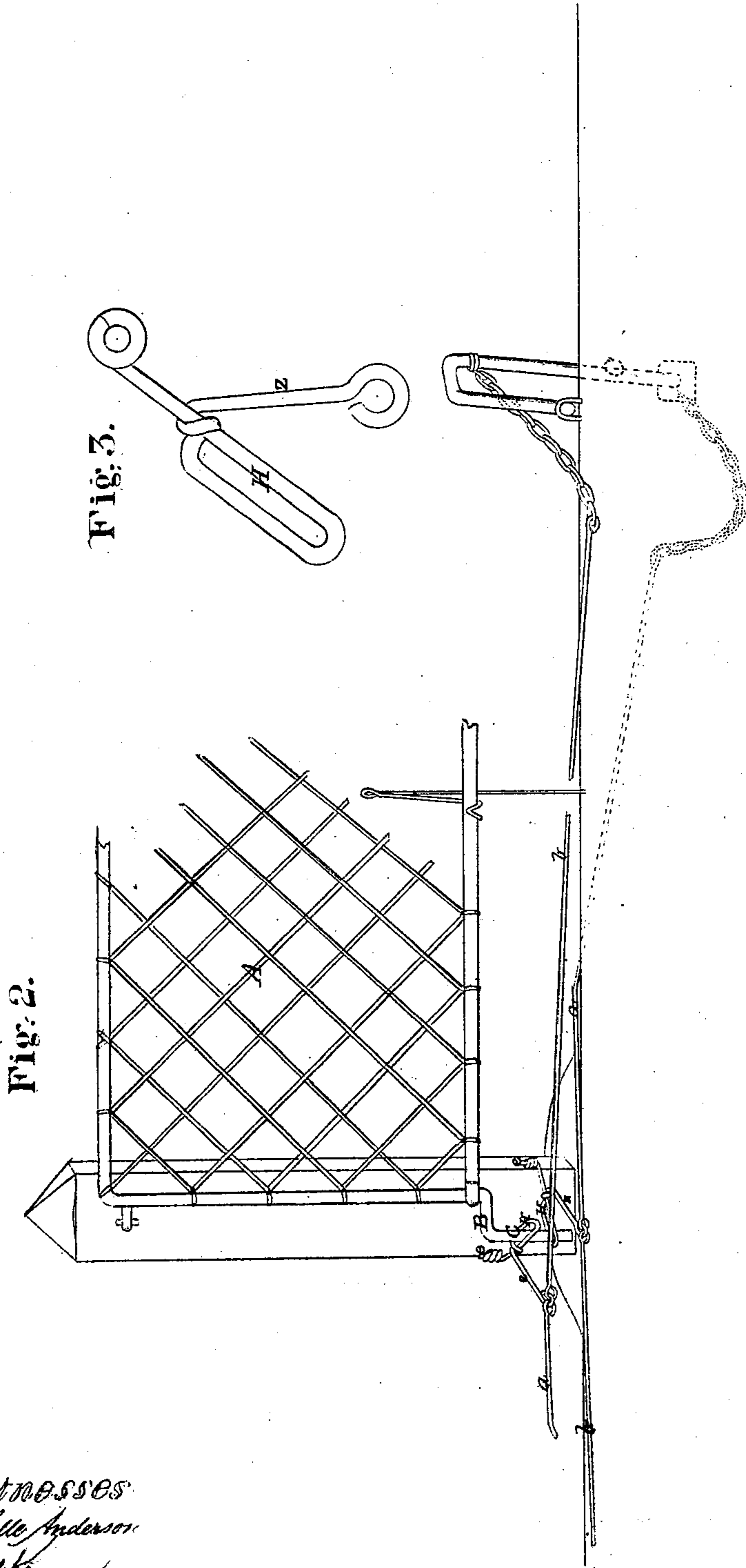
S. Whitaker,

2. Sheets. Sheet. 2.

Gate.

No. 102,741.

Patented May 3. 1870.



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United States Patent Office.

SAMUEL WHITAKER, OF BEL AIR, MARYLAND.

Letters Patent No. 102,741, dated May 3, 1870.

IMPROVED AUTOMATIC GATE.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, SAMUEL WHITAKER, of Bel Air, in the county of Harford and State of Maryland, have invented a new and valuable Improvement in Automatic Gates; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of my invention in perspective.

Figure 2 is a side view, showing the gate open.

Figure 3 represents a detailed view of the operating-loop.

My invention relates to automatic gates; and consists, mainly, in the construction and novel arrangement of certain levers, cords, and cam-slots, adapted to operate in connection with a vertical pin at the inner lower corner of the gate, and designed to produce thereby certain conditions under which the weight of the gate will operate automatically in opening or closing the same.

The letter A of the drawings designates my gate, provided with an elbow or vertical crank, B, at its inner lower corner, terminating in the vertical pin C.

D D represent the loops over which it is designed that the wheels of vehicles should pass, and thereby operate the cords or wires *a a b b*.

Depending from the outer end of each loop is a weighted arm, *c*.

The cords or wires *a a*, which operate to open the gate, are attached to the lower ends of the pendent arms *c c*, while those *b b* which act in closing the gate, are attached to the upper part of each loop.

H H represent cam-slots, or loops of wire or other suitable material. They are hinged upon pins, *e e*, at each side of the gate-post, and are provided with rigid arms, *z z*, which project outward from that end of each loop which is nearest the pin *e*, and serve as levers to

operate the cam-slots H H, and to the ends of which the operating-cords or wires *a a b b* are attached.

The vertical pin C projects downward through the loops H H, one of which is hinged a little higher than the other.

When the gate is shut, the pin C rests in a recess formed for it in a ledge attached to the post G.

The operation of the gate is as follows:

When the cord *a* is pulled from any cause, which revolves the loop D toward the gate, the loop H, to which this cord is attached, will operate in such a manner as to throw the pin C outward from the post G. The gate at the same time is elevated sufficiently to loosen the latch. At this time the pin C has been carried toward the operating-loop D by the action of the cam-slots H H, and the gate, being thereby thrown out of equilibrium, swings open, and is caught by the spring holder K.

The vehicle passes through the gateway and over the other ground-loop, D, which, in a similar manner, acting through the cord *b* upon the loops H H and pin C, elevates the gate, inclines it toward the gateway, and, throwing it out of equilibrium, causes it to close.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. The hinged loops H H, provided with rigid arms *z z*, in combination with the gate A, provided with vertical pin C at its inner lower corner, substantially as specified.

2. In combination with the gate A, provided with crank B, the hinged elongated loops H, cords *a a b b*, and loops D D, provided with the pendent weighted arms *c c*, substantially as shown and described.

In testimony that I claim the above, I have hereto subscribed my name in the presence of two witnesses.

Witnesses: SAMUEL WHITAKER.
E. W. ANDERSON,
D. D. KANE.