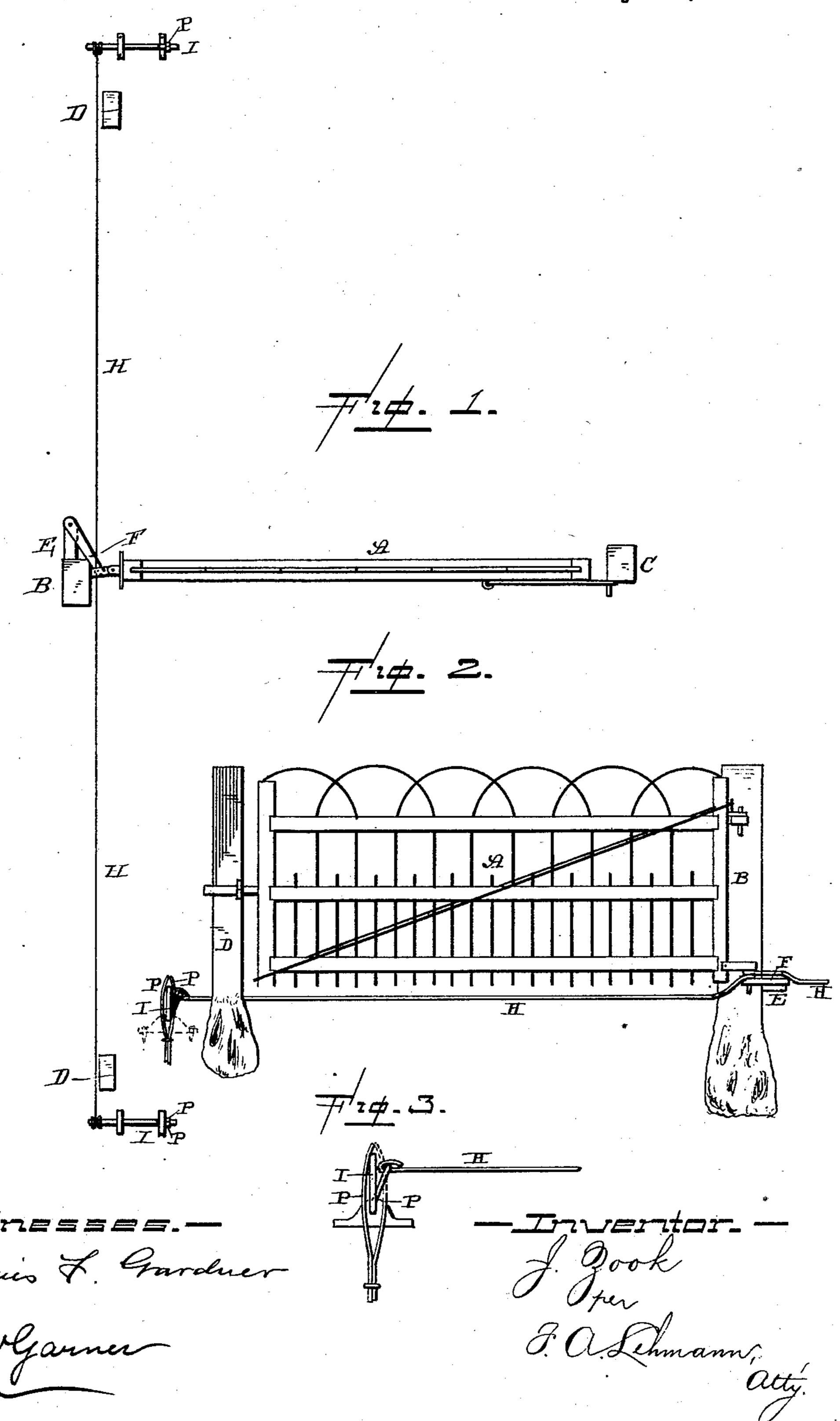
J. Z00K.

GATE.

No. 282,026.

Patented July 24, 1883.



## United States Patent Office.

JONATHAN ZOOK, OF HANPATCH, INDIANA.

## GATE.

SPECIFICATION forming part of Letters Patent No. 282,026, dated July 24, 1883. Application filed February 21, 1883. (Model.)

To all whom it may concern:

Be it known that I, Jonathan Zook, of Hanpatch, in the county of Lagrange and State of Indiana, have invented certain new and useful 5 Improvements in 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 pertains to make and use it, reference being had to to the accompanying drawings, which form part of this specification.

My invention consists in the combination of a gate provided with a fixed hinge at its upper corner, the post and the arm or support 15 projecting from one side of the post, with the hinged connecting rod or arm, which is loosely attached at one end of the same and at the other to a projection extending from the gate, the operating-rods, the cranks, and the springs, 20 as will be more fully described hereinafter.

Figure 1 is a plan view of my invention complete. Fig. 2 is a side elevation of the same. Fig. 3 is a detail view of the springs and crank.

A represents the gate; B, the post upon which it is hinged; C, the post against which it closes, and D the post against which the gate opens. The gate may be of the construction here shown, and braced by means of rods, 30 or have wires which extend diagonally from the lower to the upper corner, and which are crossed, as shown. These rods or wires brace and strengthen the gate and prevent it from sagging. The upper hinge or bearing of the 35 gate is made stationary and is applied directty to the side of the post; but the lower bearing is applied to the edge of the post at right angles to the upper. This lower bearing consists of the stationary part E, upon the outer end of which is pivoted the swinging link F. This link extends forward beyond the edge of the post, and has the lower corner of the gate connected thereto in the usual manner; also, connected to the pivotal pin or bolt, which 45 passes down through the lower hinge and this swinging link, are the inner ends of the two presence of two witnesses. operating-rods H, both of which are connected at their outer ends to the operating-cranks I in the usual manner. When the cranks are 50 operated by the wheel of the vehicle, the rod connected to the crank pushes the lower bear-

ing of the gate by means of the swinging link upward to one side, thereby inclining the gate in such a manner as to cause it to unlatch and to swing open. This swinging link, which is 55 pivoted upon the edge of the post, allows the lower corner of the gate a much greater movement than can be obtained in any other way, owing to the greater length of the link and to the position in which it is placed, and hence 60 the gate can be made to fly open with greater ease and certainty than can be accomplished in the usual way.

In order to dispense with the use of the double cranks and to hold the crank always in 65 position ready to be operated, a spring, P, is applied to each side of the crank, and these springs hold it in a vertical position, as shown. After the wheels of the vehicle have passed over the crank it immediately rises into po- 70 sition again, and is again ready to be operated.

Weights may be used instead of springs by attaching them to the lower ends of the cranks.

I am aware that a spiral spring has been attached to a crank for the purpose of return-75 ing it to position after it has been moved, and that there is nothing that is broadly new in a gate which is provided with a fixed hinge at its upper corner, and which has its lower hinge formed partially of a piece which is secured 80 to one side of the post. In no case, however, has an intermediate link been used in the manner shown and described in connection with the lower hinge.

Having thus described my invention, I 85 claim—

In a gate, the combination of the gate provided with a fixed hinge at its upper corner, the post B, the arm or support E, projecting from one side of the post, with the hinged con- 90 necting rod or arm F, which is loosely attached at one end of the arm, and at the other to a projection extending from the gate, the operating-rods H, the cranks I, and the springs P P, substantially as shown and described.

In testimony whereof I affix my signature in

JONATHAN ZOOK.

Witnesses:

B. F. KING, C. M. STOLTZ.