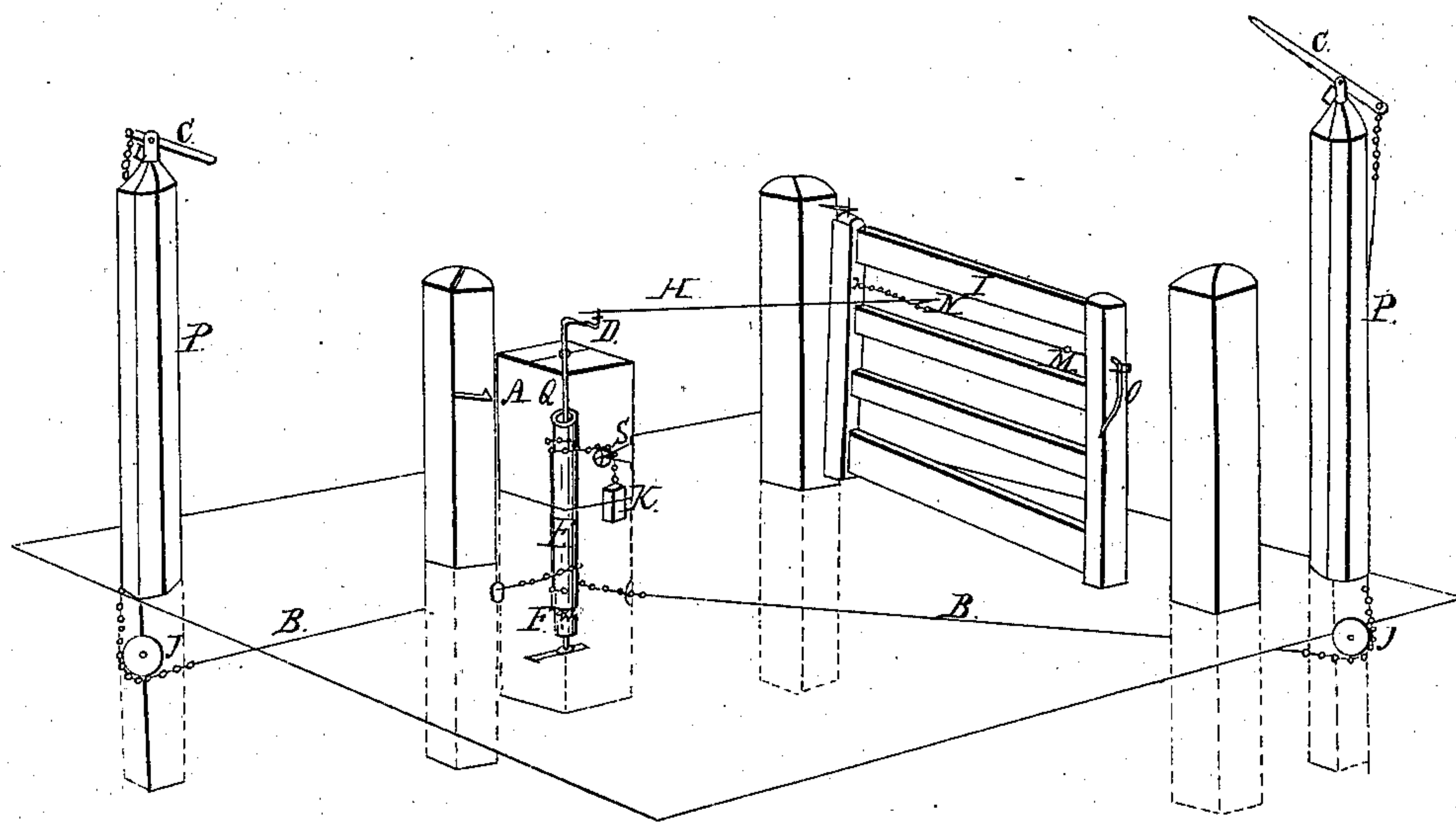


C. Winegar,
Automatic Gate,

N^o 15,631.

Patented Aug. 26, 1856.



Witnesses;
Edward Curren,
Justus Cook.

Inventor;
Caleb Winegar.

UNITED STATES PATENT OFFICE.

CALEB WINEGAR, OF UNION SPRINGS, NEW YORK.

METHOD OF OPERATING FARM-GATES.

Specification of Letters Patent No. 15,631, dated August 26, 1856.

To all whom it may concern:

Be it known that I, CALEB WINEGAR, of Union Springs, in the county of Cayuga, in the State of New York, have invented a new and Improved Apparatus for Opening and Closing Carriageway-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, in which—

Figure 1 is a perspective view; Fig. 2, a detached part exhibiting the crank, ratchet wheels, &c., on a large scale.

Like letters refer to like parts in both figures.

Letter A in Fig. 1 represents the box that holds the crank-shaft Q, crank D and sliding ratchet drum E that is operated by the rods and chains B, B, that pass around the grooved rollers, J, J, and continue up the side posts P, P to the ends of the levers, C, C. The crank shaft Q passes through the said drum E. Said drum E fits and works into the ratchet ring or wheel that is firmly attached to the crank shaft Q. The drum E is loose on the crank shaft and when operated one way by pressing down the levers, C, the ratchets close in and the crank is turned and the gate opened or closed and the weight K operates and slips back the said ratchet drum ready to be again operated. Thus the said crank is carried around and around at the will of the operator. The chains and rods B, B are so attached and wound around the said drum E so that both chains B, B, operate the same way and give the gate the same motion. The pitman H connects the chain and rod of iron N and is attached just at that point so that the half revolution of said crank will first detach the latch spring and open or shut the gate. The chain and rod N is attached firmly to the foot of the gate frame with one end and the other with the latch spring so that in approaching the gate in a carriage the person places the hand on the lever C and bears down. That operates the chain and rods B—the ratchet drum plays into the ratchet

wheel F, and the crank is revolved which operates the pitman that tightens the latch chain and rod, which first detaches the latch spring and then forces open the gate where it is held firmly by the spring catch. The weight K draws back the sliding ratchet, ready to be again operated. I will also state another application of the same principle. Use simply the crank and crank shaft, B, Q, hang the gate so that it will swing to of its own weight and attach the chains and rods B, B to the crank shaft directly in the same manner described to ratchet E previously. It will be seen that, bearing down upon the levers C will open the gate in the same manner as just described and a slight jerk will detach the spring catch and the gate will fall and latch. This makes it more simple, but it works harder, for the first described plan, operates by forcing the gate both ways.

In the drawing the dotted ends of the posts are in the ground, the iron chains and rods B B are protected underground by horse shoe tile laid over it or any other suitable protection. The weight K is attached by the chain R to the ratchet drum and passes over the grooved roller S and is wound around the said ratchet drum, to draw it back as before described. It will be seen that the pitman H will have the same effect on the latch spring whether drawn or pushed.

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

1. My method of opening and closing gates by the means of the ratchet drum E, the weight K or an equivalent spring to draw back the said ratchet drum—through the intervention of the chains and rods B, B in the manner substantially as described.

2. I claim my arrangement of rod and chain N connected with the spring catch for the purpose of detaching the latch in the manner substantially as described.

CALEB WINEGAR.

Witnesses:

EDWARD CURRY,
JUSTUS ASK.