

(Model.)

3 Sheets—Sheet 1.

J. C. MENDENHALL..

GATE.

No. 247,091.

Patented Sept. 13, 1881.

Fig. 1.

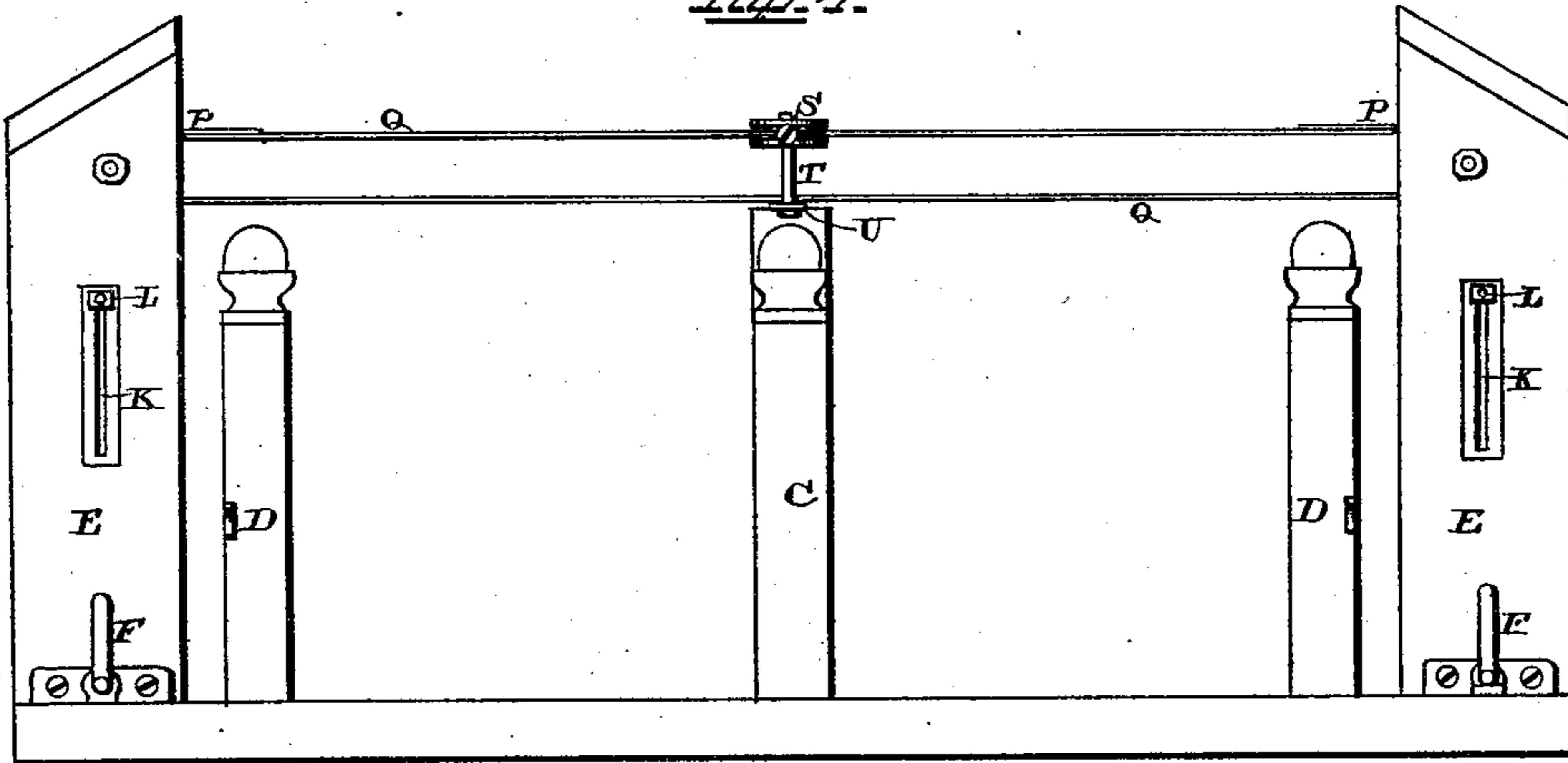
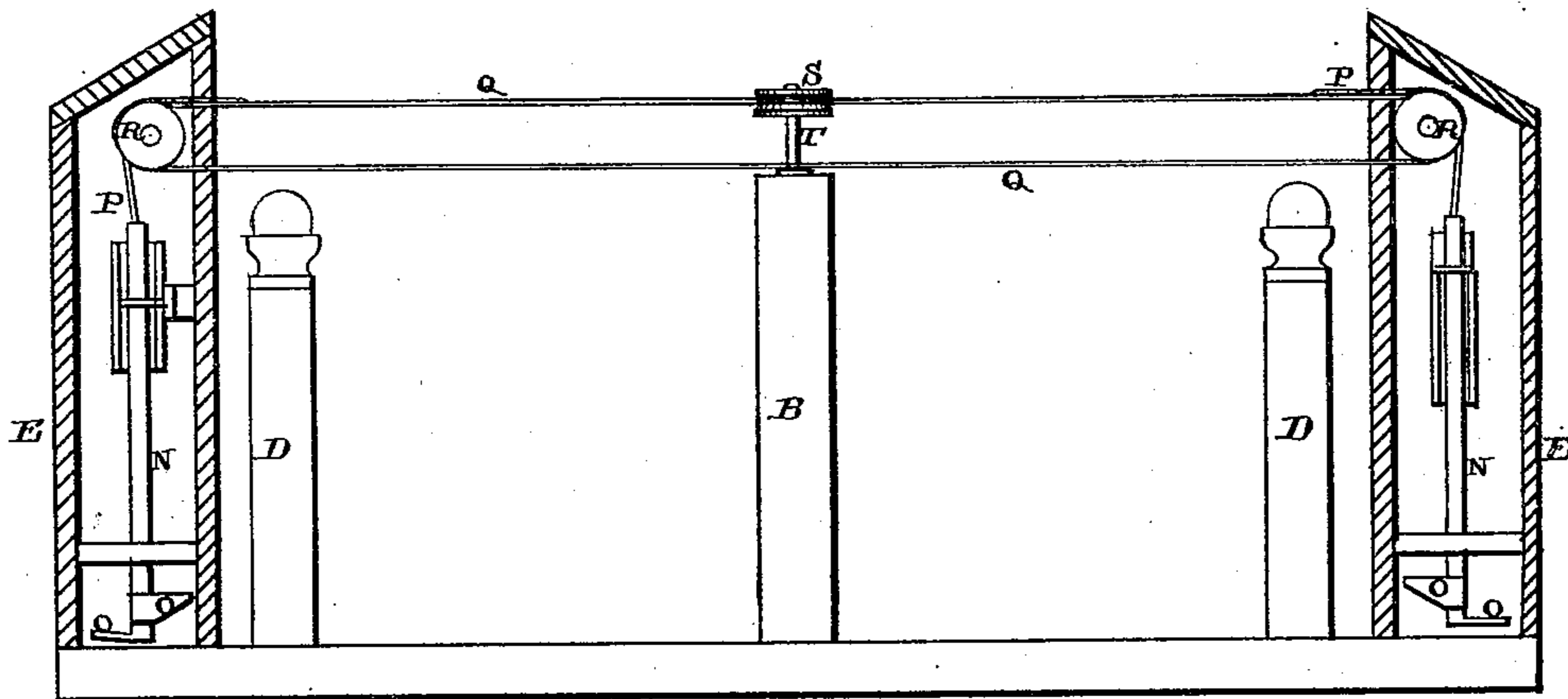


Fig. 2.



WITNESSES.

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Fig. 3.

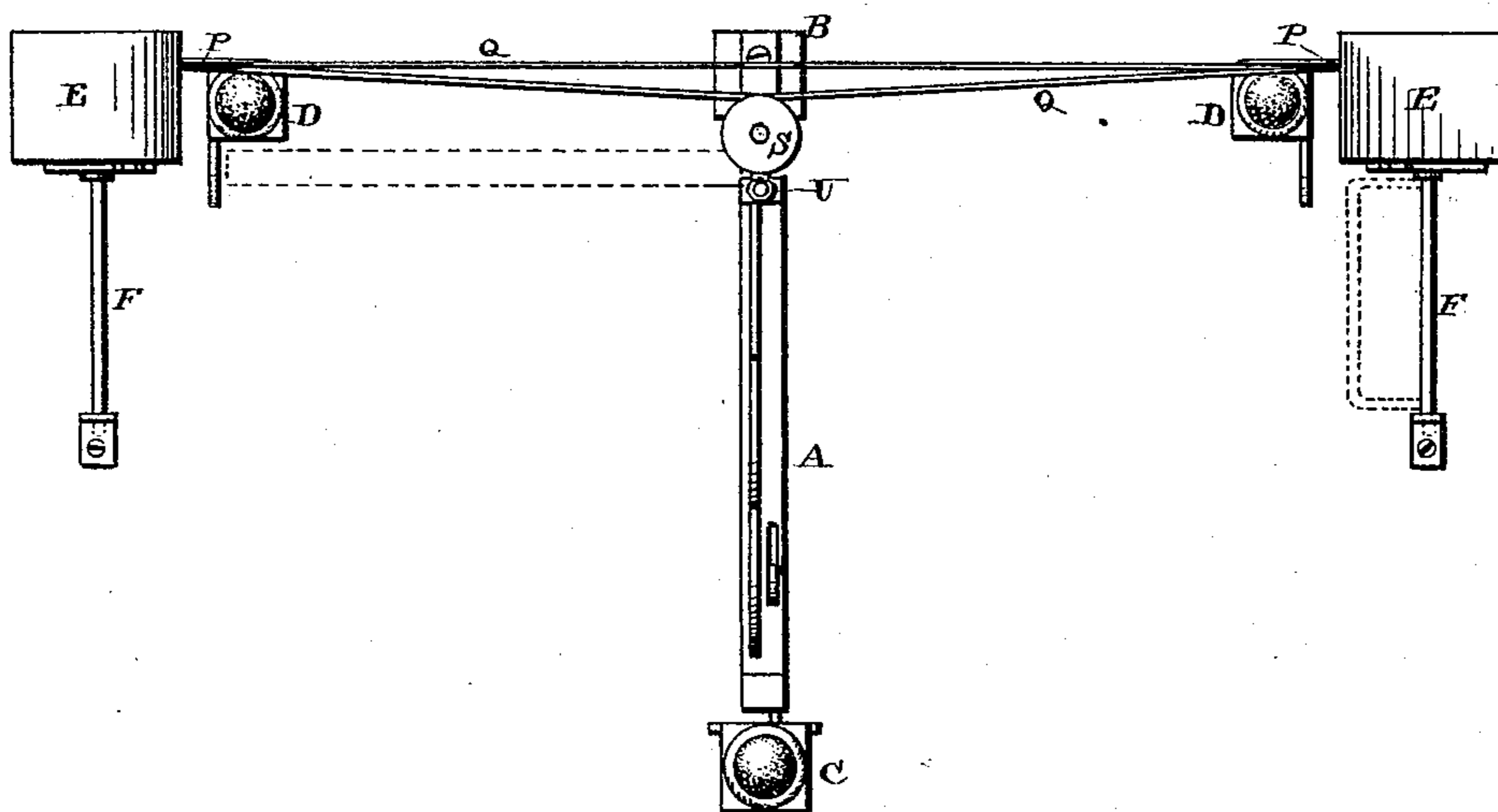
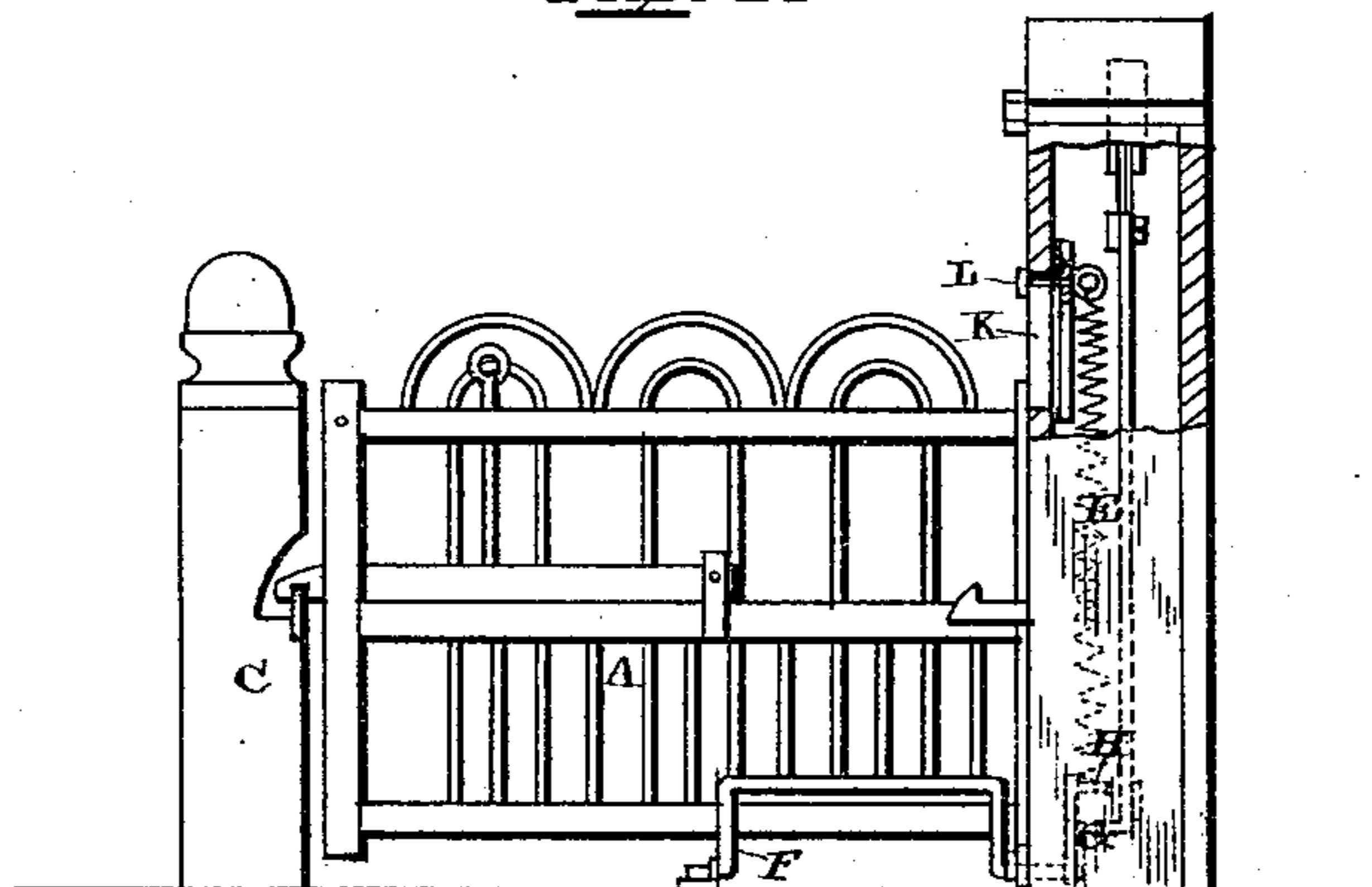


Fig. 4.



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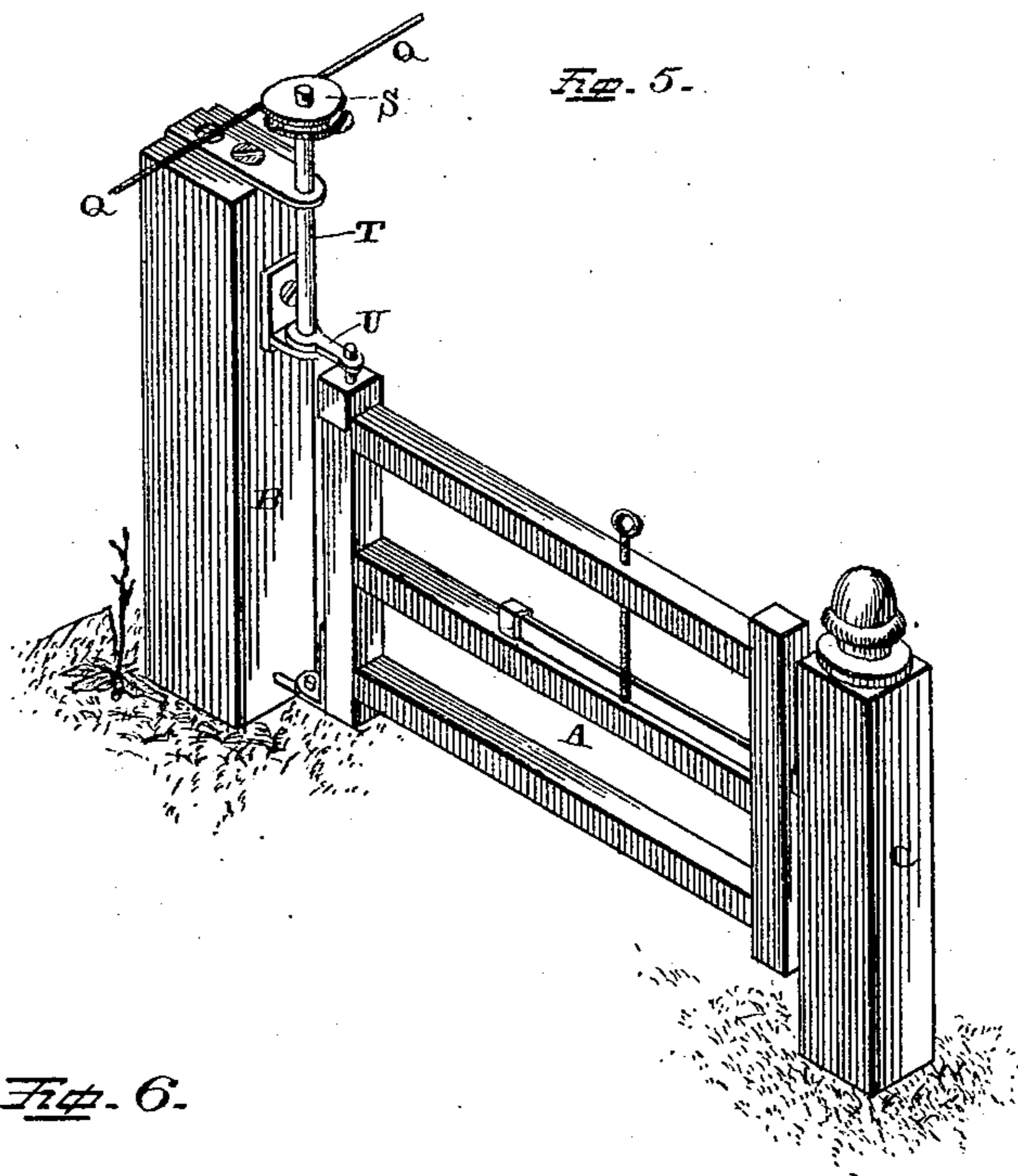


Fig. 6.

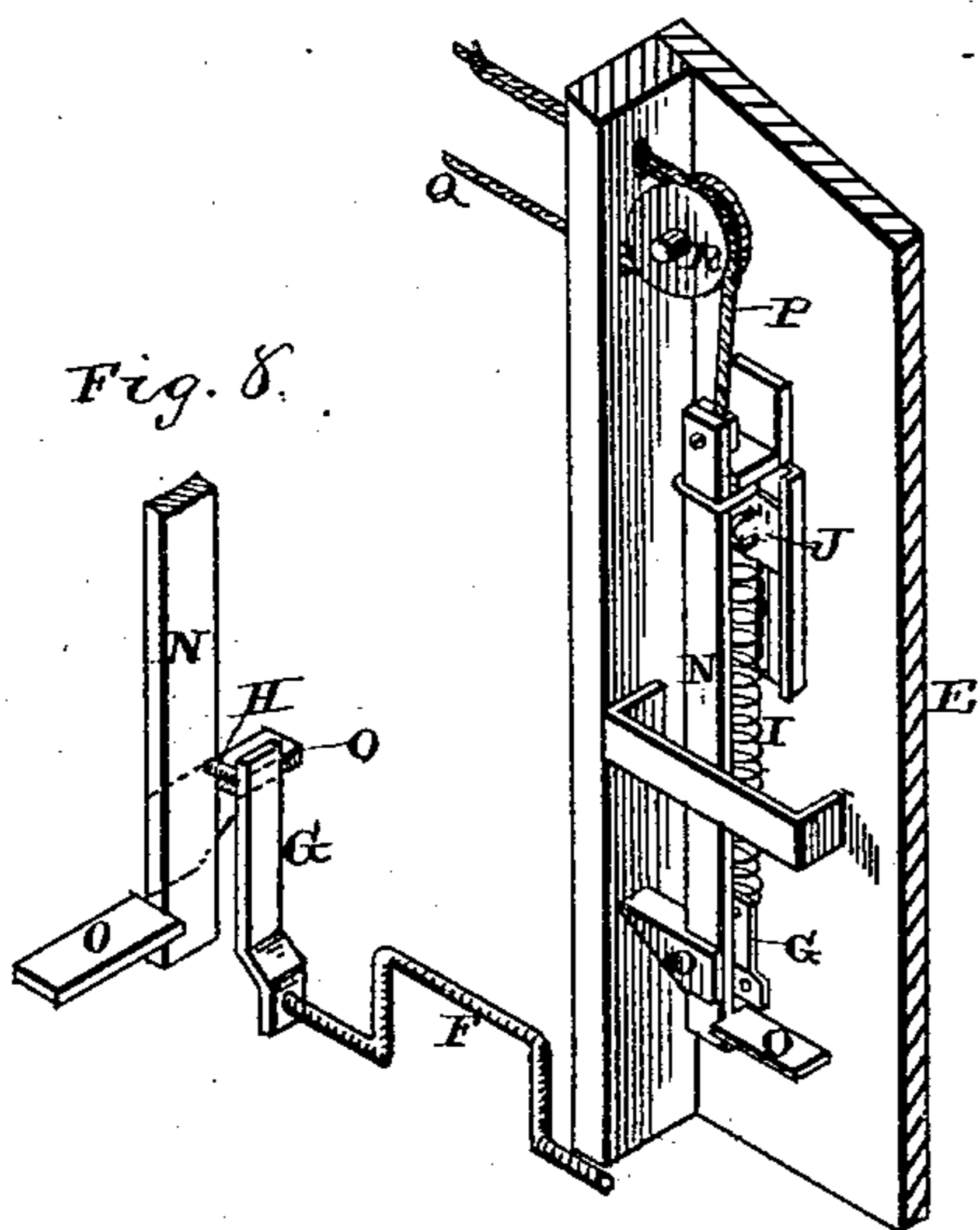


Fig. 8.

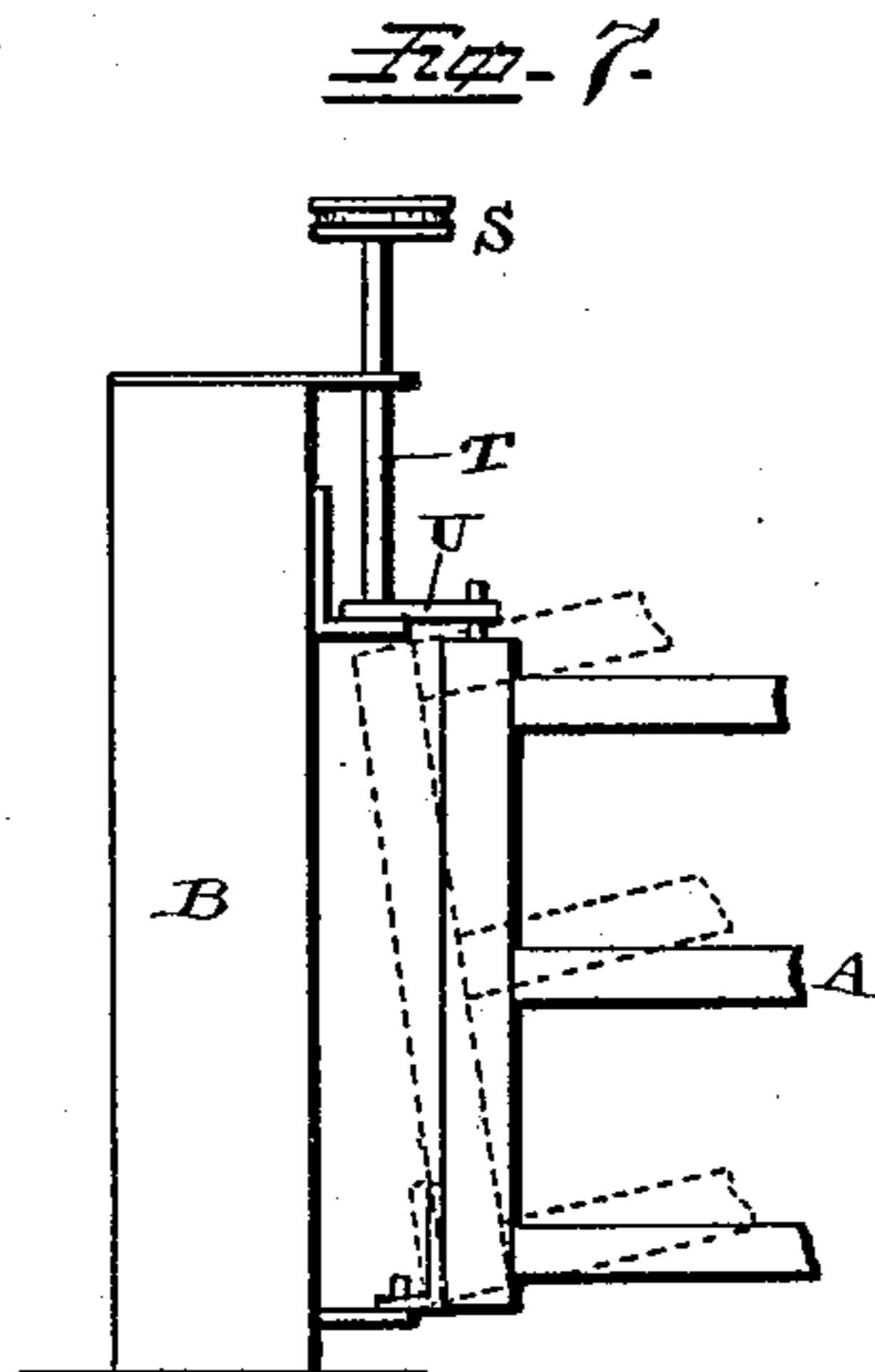


Fig. 7.

Witnesses.

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UNITED STATES PATENT OFFICE.

JUNIUS C. MENDENHALL, OF PLAINFIELD, INDIANA.

GATE.

SPECIFICATION forming part of Letters Patent No. 247,091, dated September 13, 1881.

Application filed March 8, 1881. (Model.)

To all whom it may concern:

Be it known that I, J. C. MENDENHALL, of Plainfield, in the county of Hendricks and State of Indiana, have invented certain new and useful 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 the accompanying drawings, which form part of this specification.

My invention relates to an improvement in gates; and it consists in the combination of the cranks, against which the wheels strike, with springs which are fastened at their upper ends to vertically-movable slides, whereby the cranks can be brought into or thrown out of action at will.

It further consists in the combination of the crank, against which the wheels strike, a vertically-movable rod, having an arm projecting out from each of its sides at its lower end, suitable operating wires and pulleys, and a shaft for inclining the inner end of the gate in whichever way it is desired the gate shall move, all of which will be more fully described herein-after.

Figures 1 and 2 are side elevations of a gate embodying my invention, taken from opposite sides. Fig. 3 is a plan view of the same. Fig. 4 is an end view, and Figs. 5, 6, and 7 are detail views. Fig. 8 is an enlarged detail view of the crank, its arm, and the vertical rod.

A represents the gate, which may be of any desired size or construction; B, the post to which it is hinged, and C the post against which it closes.

At suitable distances beyond the post B are the two posts D, against which the gate is held when open, and just beyond each one of these posts D is a high hollow post or box frame, E, in which the operating mechanism for moving the gate is placed. Just opposite each one of these frames E is placed the crank F, against which the wheels of the vehicles are to strike for the purpose of opening and closing the gate, and the inner end of this crank has an arm, G, secured to it, and projecting from the upper end of this arm is a pin, H. Fastened to the upper end of this arm is the spiral spring I, which spring has its upper end

fastened to the slide J, which is provided with suitable guides for causing it to move straight.

Through the front of the frame is made a vertical slot, K, and through this slot, into the slide, is passed the clamping-bolt L, by means of which the slide can be held in any desired position.

The spring I serves to always pull the crank F back into position after it has been moved, and when it is desired to disconnect the cranks, so that they will no longer operate, it is only necessary to loosen the clamping-bolt so that the slide can drop downward, when the spring will no longer act on the crank. By means of this construction the operating mechanism can be thrown in and out of gear at will.

Moving vertically in each one of the frames is a rod, N, which has an arm or projection, O, extending from each of its sides, at its lower end, one of the arms being higher than the other, and which arms serve for the pin or projection H on the arm G to bear upon when the crank F is moved in either direction by the wheel of a passing vehicle. To the upper end of this vertically-moving rod N is fastened a wire, P, which has its upper end fastened to the wire Q, which passes around the two pulleys R, one of which is placed in each frame. The wire Q, after passing around the two pulleys R, has its two ends passed around, from opposite sides, a third pulley, S, secured to the shaft T, which is journaled in suitable bearings on the post B. As both ends of the wire are fastened to this pulley from opposite sides, it is evident that whenever the wire Q is moved by one of the rods N being forced downward by a crank, F, the pulley S will be turned partially around for the purpose of opening or closing the gate.

To the lower end of the shaft T is secured an arm, U, which forms the upper bearing for the gate, and whenever the pulley S is turned partially around by the wire Q this bearing is moved over to one side, so as to tilt the gate in that direction, and thus cause it to either fly open to let a vehicle through or to close after it. After one of the cranks F has been moved so as to open the gate this crank is thrown out of gear, so that it will not affect the gate, no matter whether moved in one direction or the other, until the other crank has

been operated to close the gate, when the first crank is again ready for operation to move the gate in either direction. When both cranks are ready to operate, the lower ends of the two rods are about on a level, and the pins H on the arms G will strike either one of the arms O to move the gate in either direction; but after either rod has been forced downward it remains down, where it cannot again affect the gate until the other rod has been depressed so as to draw the first one up into position again.

By means of the box-like frames here shown the operating-wires are placed high above the reach of cattle and other animals. Instead of but a single wire being used, as is here shown, any number of them may be used together, if so preferred.

Should it be desired, the upper ends of the springs which are connected with the cranks may be fastened upon a hook or any other similar means for keeping the springs stretched; but in this case it will be necessary to open the

frame so as to unfasten the ends when it is desired to throw the crank out of action.

Having thus described my invention, I claim—

1. In a gate, the combination of the crank F, provided with the arm G on its inner end, the spring I, and arm connected to the operating-wires of the gate, the arm being forced downward by the arm G when the crank is operated, substantially as shown.

2. The combination of the crank, provided with an arm, G, and pin H, with the spring, the vertically-moving rod provided with arms, the wires, the pulleys, and the shaft for inclining the inner end of the gate, substantially as described.

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

JUNIUS C. MENDENHALL.

Witnesses:

I. E. MILLIS,
CASS M. LAWRENCE.