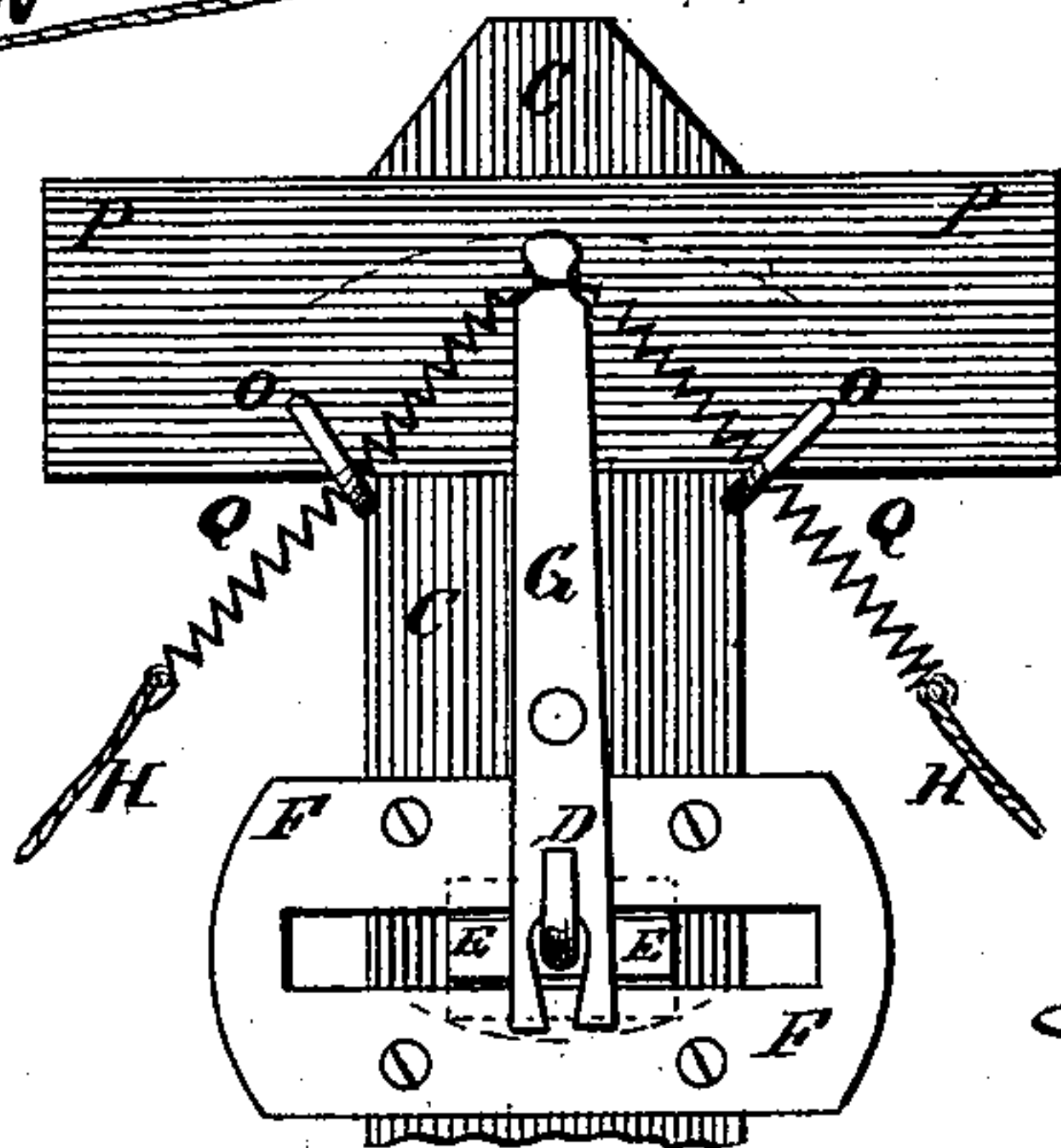
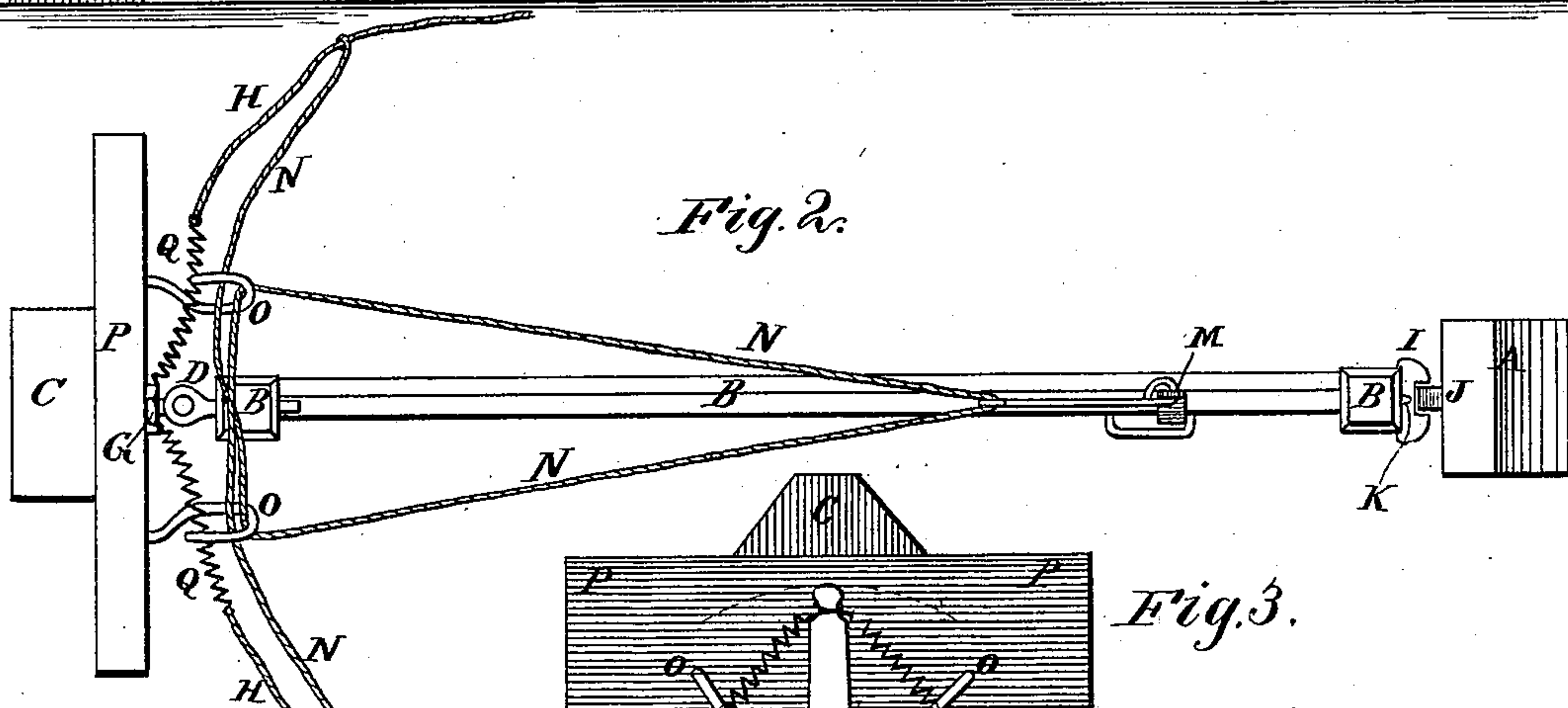
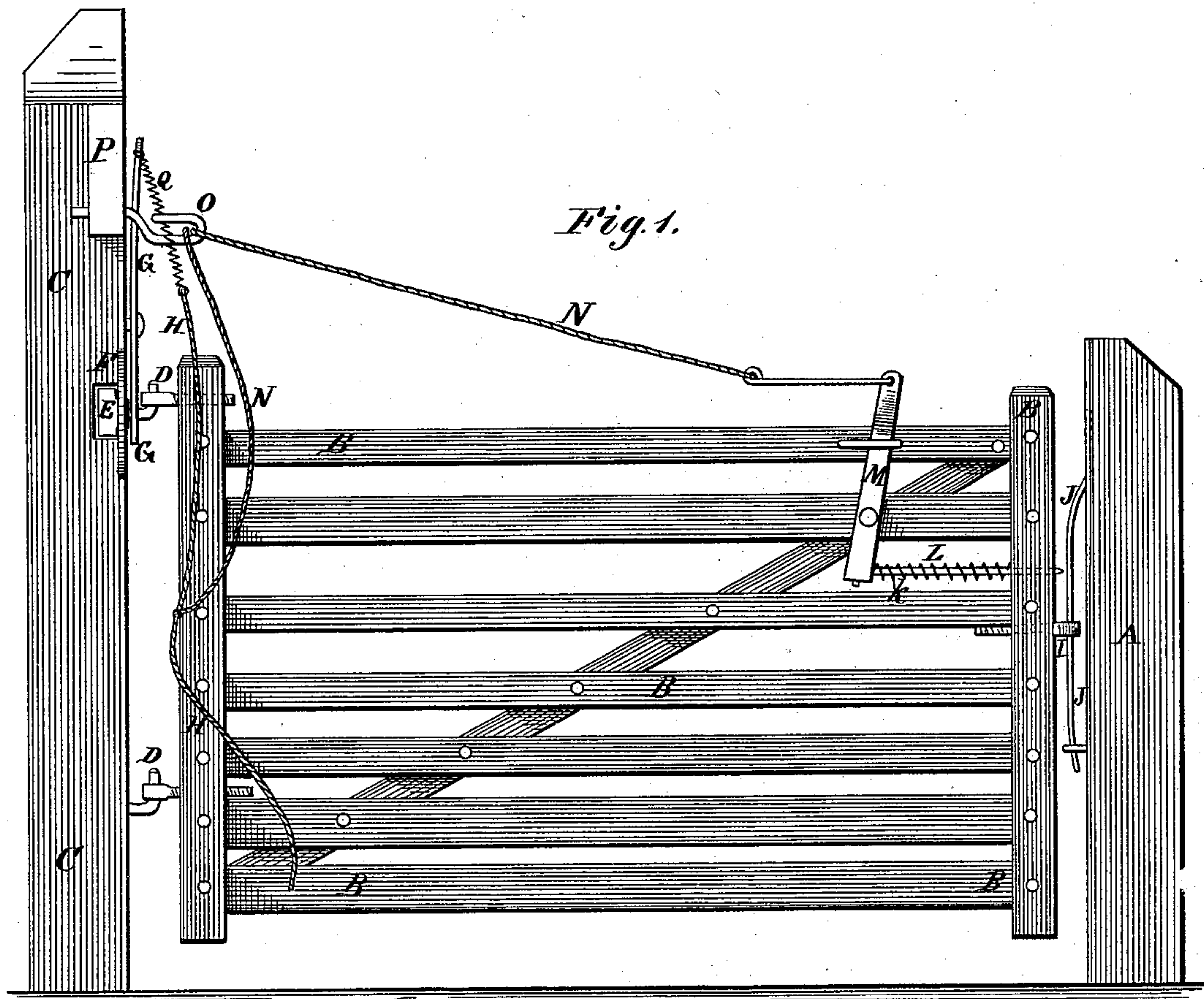


J. S. HENSHAW.
Gate.

No. 208,976.

Patented Oct. 15, 1878.



WITNESSES:

Henry N. Miller
C. Sedgwick

INVENTOR:

J. S. Henshaw

BY

ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN S. HENSHAW, OF GOSHEN, KENTUCKY.

IMPROVEMENT IN GATES.

Specification forming part of Letters Patent No. **208,976**, dated October 15, 1878; application filed July 27, 1878.

To all whom it may concern:

Be it known that I, JOHN SCOTT HENSHAW, of Goshen, in the county of Oldham and State of Kentucky, have invented a new and useful Improvement in Gates, of which the following is a specification:

Figure 1 is a side view of a gate to which my improvement has been applied. Fig. 2 is a top view of the same. Fig. 3 is a detail view of the device for tilting the rear end of the gate.

Similar letters of reference indicate corresponding parts.

The object of this invention is to furnish an improved gate which shall be so constructed that it may be opened and closed by a person in a vehicle or upon horseback with as much facility as when on foot, which can be used as any ordinary gate in case of any mishap to the self-opening arrangement, which will fasten itself securely when swung shut, which will retain its place when opened, and which at the same time shall be simple in construction and convenient and reliable in use.

The invention consists in the combination of the sliding block, the slotted plate, the lever, and the operating-cords with the post and the upper hinge of the gate; in the combination of the sliding rod, the spiral spring, the lever, the operating-cords, and the guides with the gate, the fastening-spring, the catch, and the gate-opening cords; and in the combination of the spiral springs with the lever and the cords that operate it and with the cords that operate the sliding rod to unfasten the gate, as hereinafter fully described.

A represents the front or latch post. B represents the gate, and C the rear or hinge post. D are the hinges by which the gate is connected with the post C. The pivot part of the upper hinge, D, is attached to a block, E, which slides in a transverse groove in the forward side of the post C, where it is kept in place by a plate, F, attached to the said forward side of the post C. The plate F is slotted longitudinally for the passage of the pivot of the said upper hinge, D. Upon the pivot of the upper hinge, D, of the gate B is placed the forked or slotted lower end of a lever, G, which is pivoted to the forward side of the

post C, and to the upper end of which are attached the ends of two cords, H. The cords H extend out at right angles with the line of the gate B when closed, and are connected with the upper ends of two posts or other supports, placed at such a distance from the gateway that the horse or vehicle that carries the operator will be out of the way of the gate as it swings open and shut.

By this construction, by pulling upon either of the cords H, the rear upper corner of the gate will be tilted from the operator, causing it to swing open or shut by its own weight, the gate always swinging from the operator.

To the forward side of the front bar of the gate B is attached a catch, I, to catch upon a spring, J, attached to the forward side of the front post, A. Both sides of the catch I are beveled off, so that it may push back the spring J and fasten the gate when the said gate is swung shut from either side.

The spring J is so formed as to stand out from the post A, is attached at one end to the said post, and its other end passes through a keeper also attached to the post A, to give it the necessary play. Through the front bar of the gate B, a little above the catch I, passes a rod, K, in such a position that when pushed forward its end may strike against the spring J and push it back, allowing the gate to be swung open. The rod K is held back by the spiral spring L placed upon it, the forward end of which rests against the forward bar of the gate B. The rear end of the spring L rests against a stop attached to the rod K, or against the lower end of the lever M, to which the said rod K is pivoted, and which is pivoted to the gate B.

To the upper end of the lever M, or to a short rod attached to said lever, are attached the ends of two cords, N, which are passed in opposite directions through two guides, O, attached to the end parts of a cross-bar, P, attached to the upper part of the post C, and their ends are attached to the cords H.

By this construction, when the outer end of either of the cords H is drawn upon, the first effect will be to project the rod K and unfasten the gate, and the next effect will be to tilt the rear upper corner of the gate B, so that the

said gate will swing open by its own weight. I prefer to interpose spiral springs Q between the end of the lever G and the ends of the cords H, so that the gate will certainly be unfastened, even should the cords N stretch or become too long from any other cause.

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

1. The lever G, slotted at its lower end and pivoted to the post C, the spiral springs Q and the cords H, in combination with the sliding

block E, the plate F, and the hinge D, substantially as and for the purpose described.

2. The combination of the rod K, the spiral spring L, the lever M, the cords N, and the guides O with the gate B, the spring J, the catch I, and the cords H, substantially as herein shown and described.

JOHN SCOTT HENSHAW.

Witnesses:

THOS. C. TRIGG,
SCOTT ADAMS.