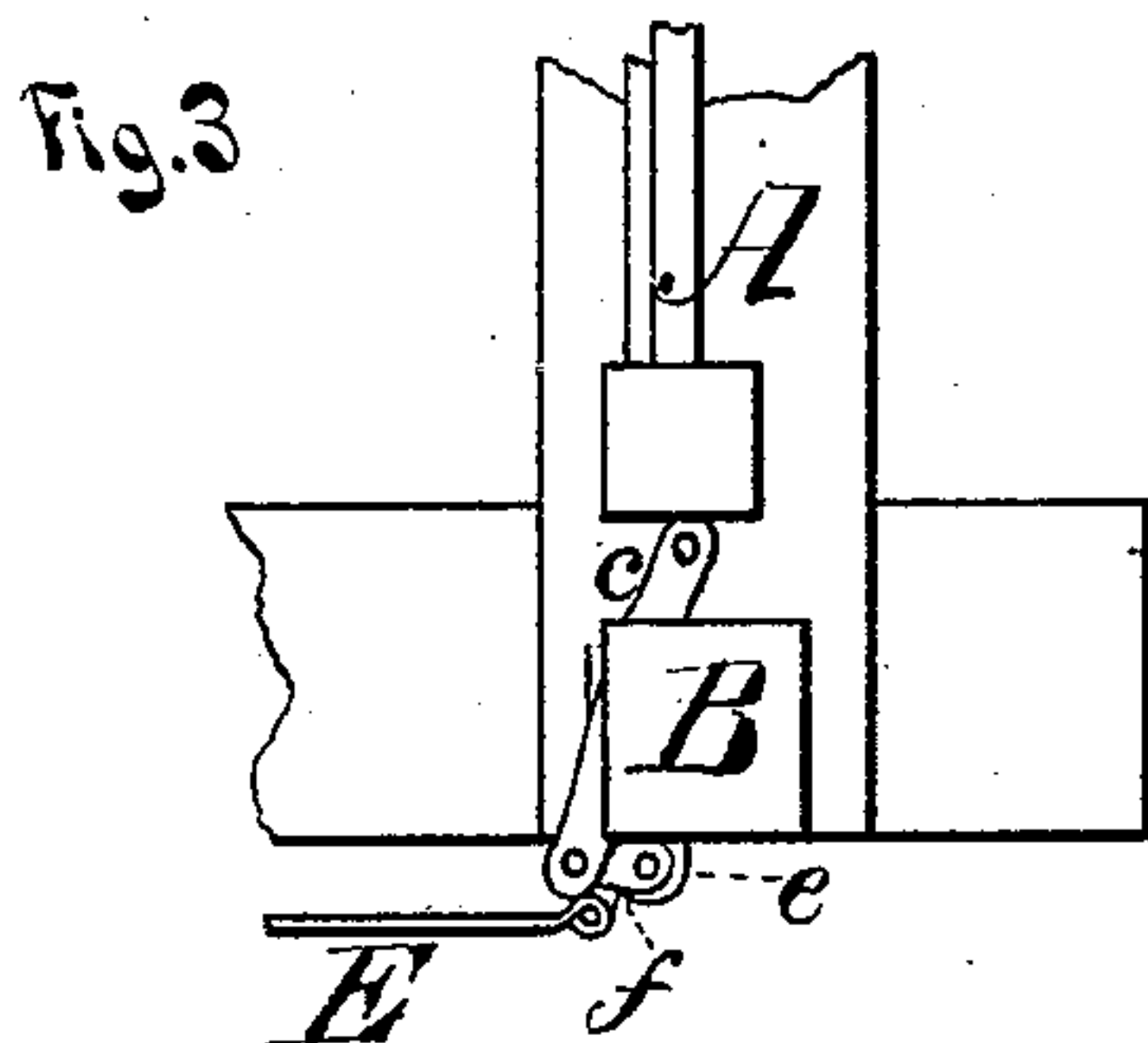
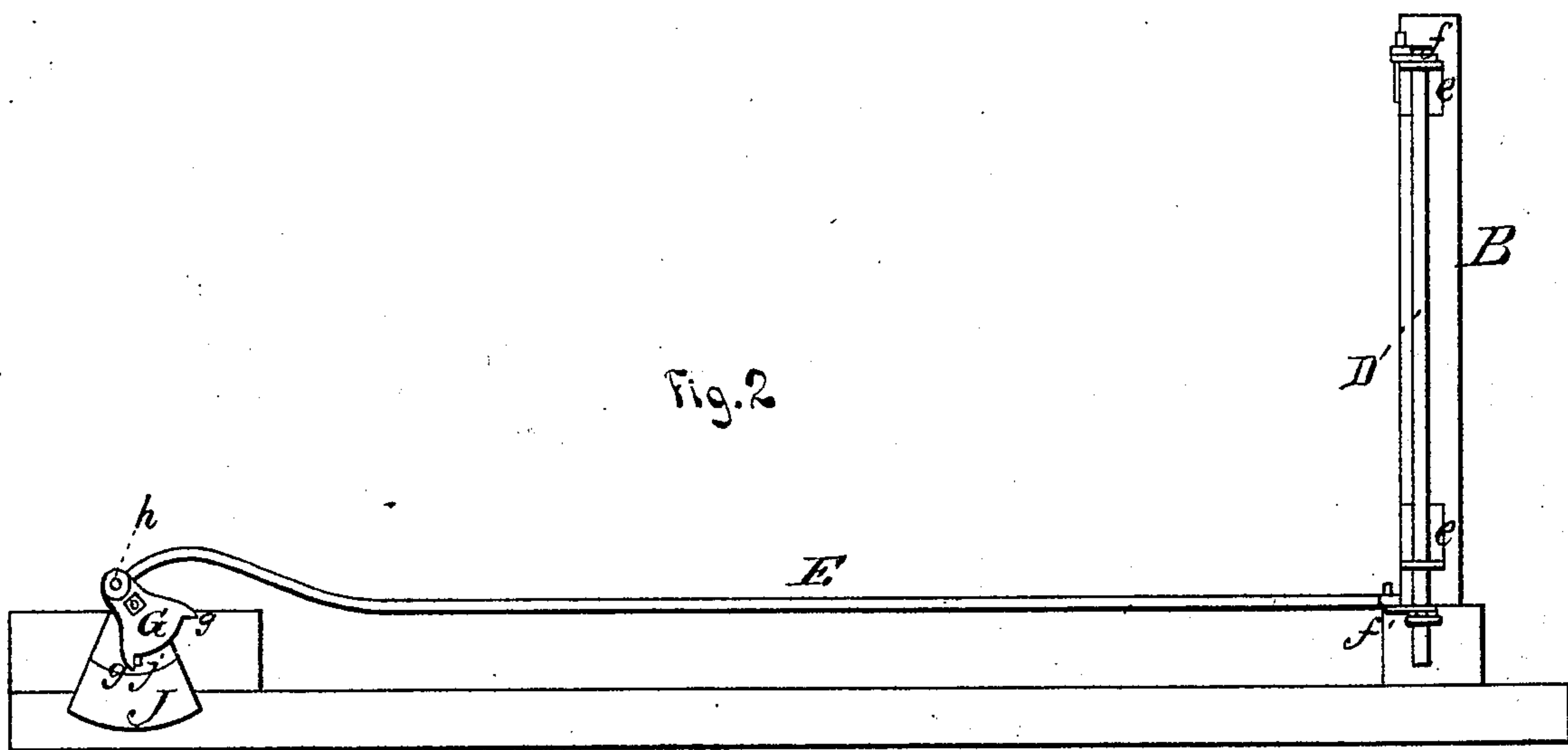
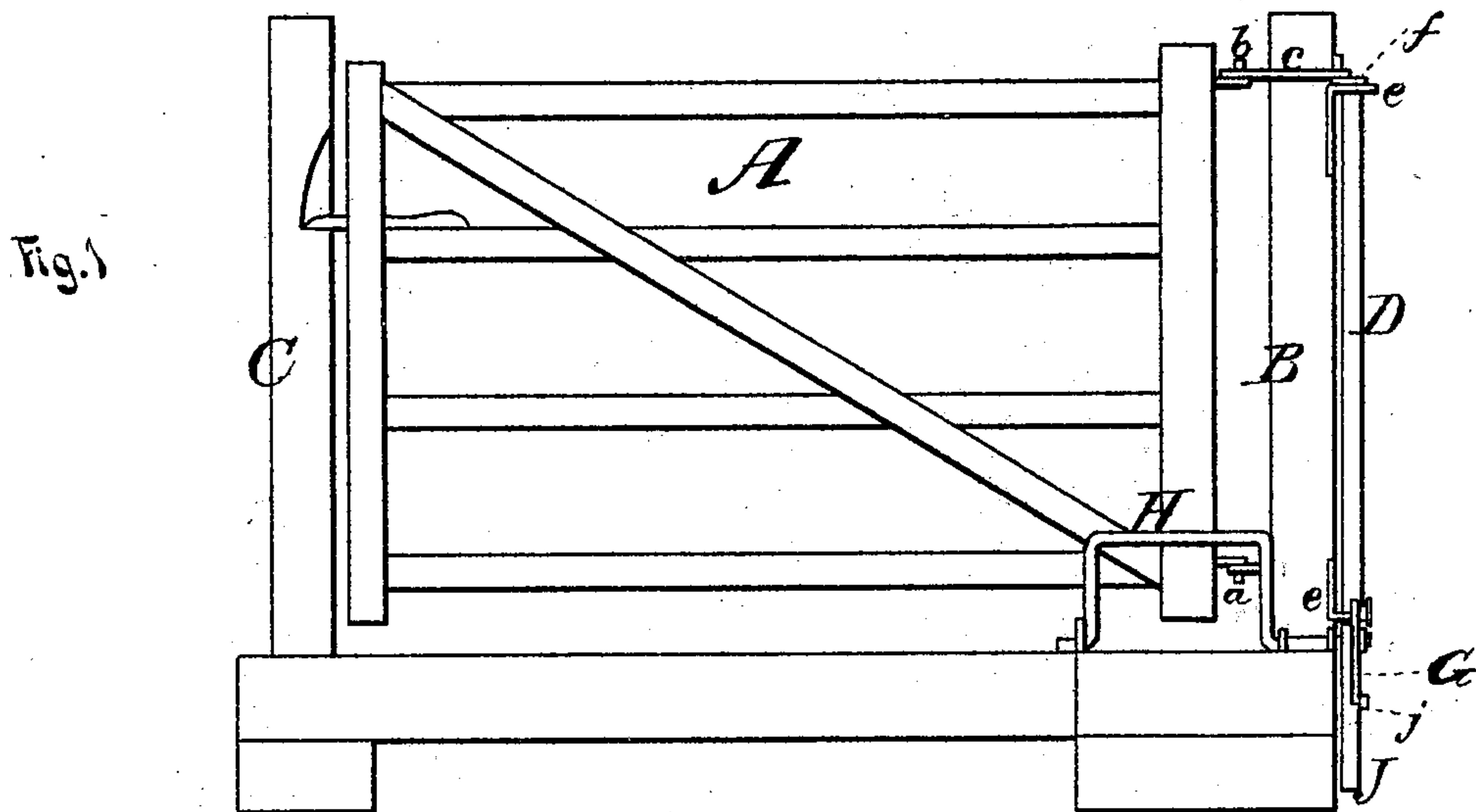


G. R. MEASE.
Automatic-Gates.

No. 150,070.

Patented April 21, 1874.



Witnesses.
Geo. E. Upham,
Robert. Everett.

Inventor.
Geo. R. Mease,
Chipman & Fosmire & Co.,
Attys.

UNITED STATES PATENT OFFICE.

GEORGE R. MEASE, OF UPPER SANDUSKY, OHIO.

IMPROVEMENT IN AUTOMATIC GATES.

Specification forming part of Letters Patent No. 150,070, dated April 21, 1874; application filed January 17, 1874.

To all whom it may concern:

Be it known that I, GEORGE R. MEASE, of Upper Sandusky, in the county of Wyandot and State of Ohio, have invented a new and valuable Improvement in 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 a front elevation of my gate. Fig. 2 is an end view of the same. Fig. 3 is a detail view.

This invention has relation to devices for opening and shutting gates on the approach of vehicles toward and after their passage through the gateway, as will be hereinafter explained. It also consists in a toothed tripping-segment applied loosely on a cranked rod in combination with a gravitating segment, which is fixed on said cranked rod, and provided on its face with a tripping-pin, whereby a very slight motion of the tripping-segment will cause the gate to open, as will be hereinafter explained.

The following is a description of my improvements: In the annexed drawings, A designates a farm or other gate; B, the post to which it is hung; C, the post against which it is closed, and to which it may be fastened in any suitable manner. The lower end of the gate A is connected to the post B by means of a hinge, *a*, which will allow the gate to be tilted longitudinally for swinging it open. The upper end of the gate is connected, by a pintle, *b*, to one end of a lever, *c*, the other end of which is pivoted to a crank, *f*, fixed on the upper end of a shaft, D. The lever *c* is applied horizontally in a recess made into the post B, and through this lever a curved slot, *i*, is made longitudinally, through which slot passes a pin, *d*, shown in Fig. 4, which guides the lever in its endwise and vibratory movements. The shaft D is vertically applied in bearing-guides *e e*, secured to the post B on the opposite side to that on which the gate is hinged, and the lower end of this post has a crank-arm, *f'*, secured to it. The crank-arm *f* is connected, by a rod, E, to a tripping-segment, G, whose arc is about the fourth-part of a circle, at the terminations of which teeth *g g* are formed. This segment is applied loosely on the rod *h* of a vibrating crank, H,

which is supported in bearings, and located any desired distance from the post B. On the rod *h* a loaded segment, J, is keyed alongside of the segment G, for the purpose of keeping the crank H upright, as shown in Figs. 1 and 2, except when pressed on by the wheel of a vehicle approaching the gateway, or leaving the gateway. On the face of this loaded segment G is a stud, *j*, so arranged that when the crank is upright this stud will be equidistant from and between the two teeth on the loose segment G. When the crank H is depressed by the wheels of a vehicle approaching the gateway, the stud *j* on segment J will, after making nearly one-quarter of a revolution about the axis of the crank-shaft *h*, strike one of the teeth *g* on loose segment G, thereby moving this segment a short distance, and, by means of the rod E and cranks *f f'* on the shaft D, the lever *c* is moved longitudinally and outwardly, and at the same time swung forward a little, as indicated by dotted lines, Fig. 4, thus tilting the gate so that it will swing open toward the approaching vehicle. When the crank H is left unrestrained the weight of segment J will cause it to assume an upright position again, but the gate will remain open, and the segment G in the position in which it was left.

By a similar arrangement of crank and segments, and connecting-rod on the opposite side of the gateway, the gate can be shut after the passage of a vehicle through it.

I am aware that it is not broadly new to open and close gates by the passage of vehicles over balanced cranks, which are connected with gate-hanging contrivances, and I make no such broad claim.

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

The rod E connecting the lower crank-arm *f'* of shaft D to a toothed segment, G, loosely applied on the oscillating rod *h* of a crank, H, in combination with the loaded segment J, and its tripping-pin *j*, substantially as described.

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

GEORGE R. MEASE.

Witnesses:

NOAH STOKER,
JAMES S. THOMPSON.