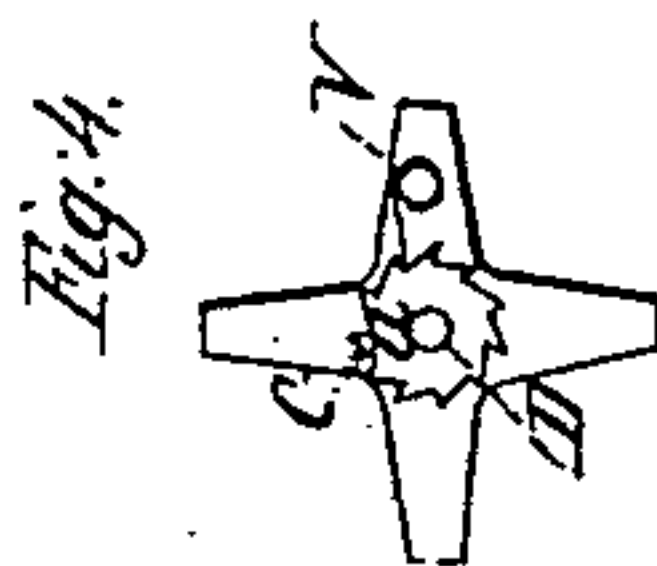
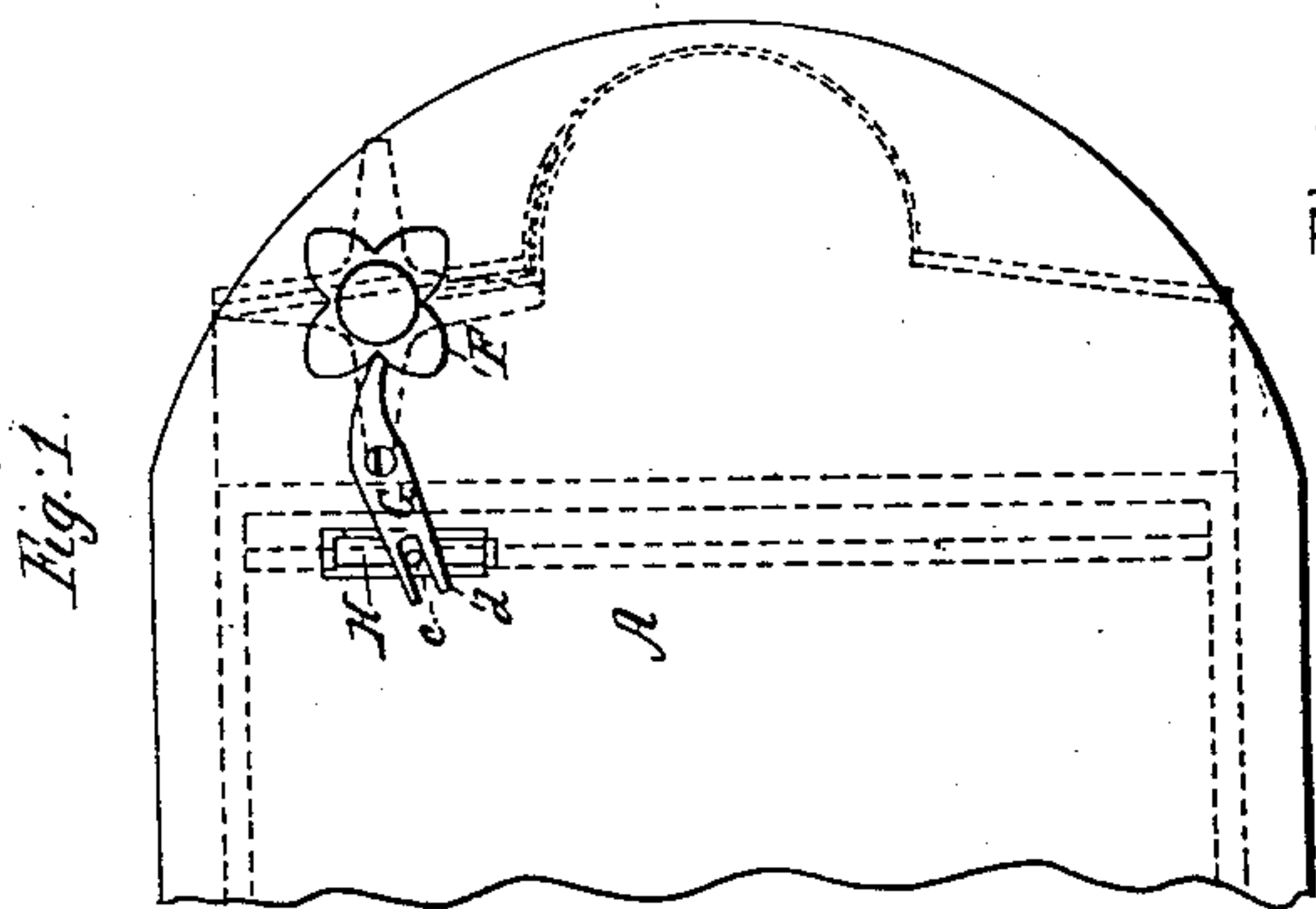
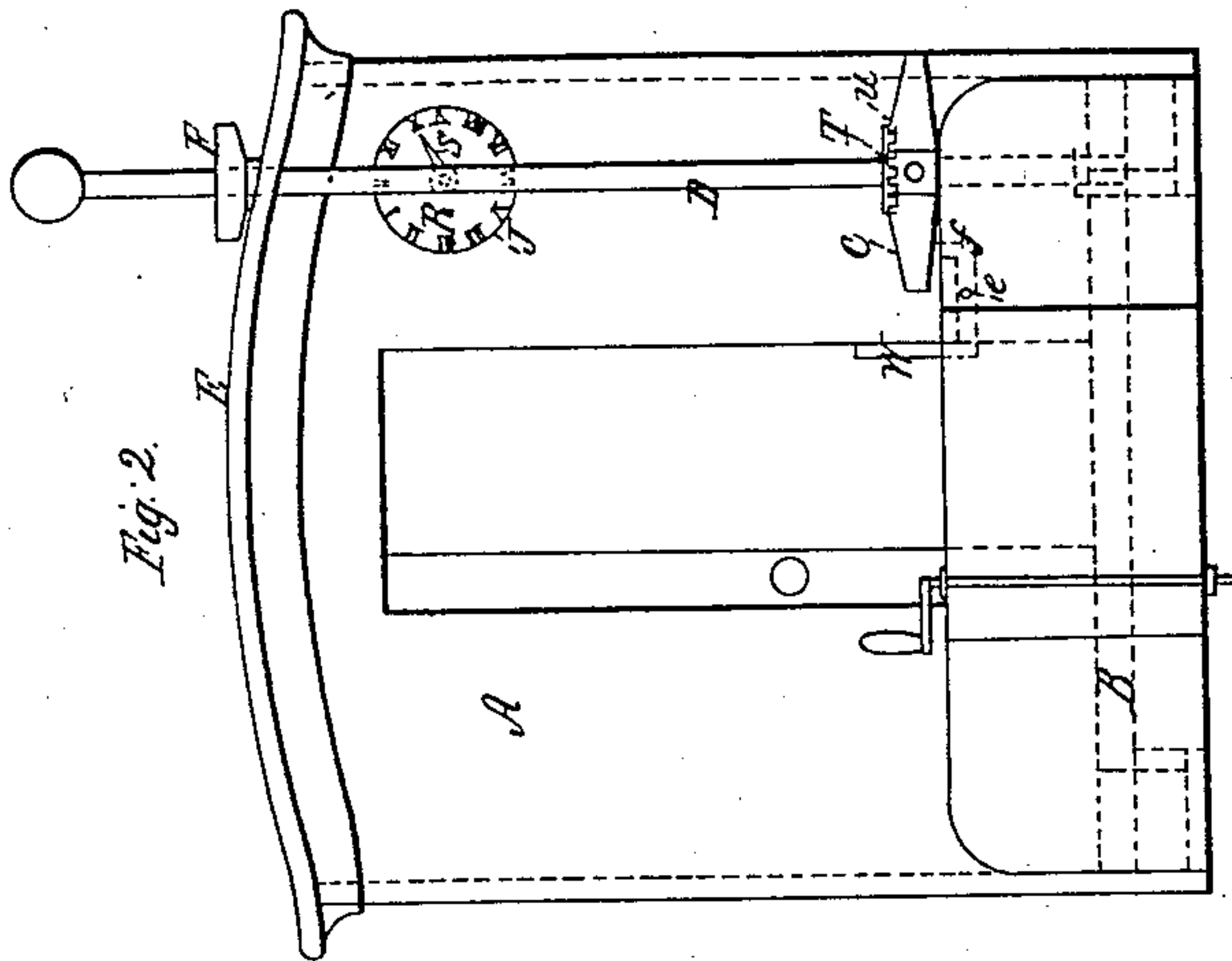
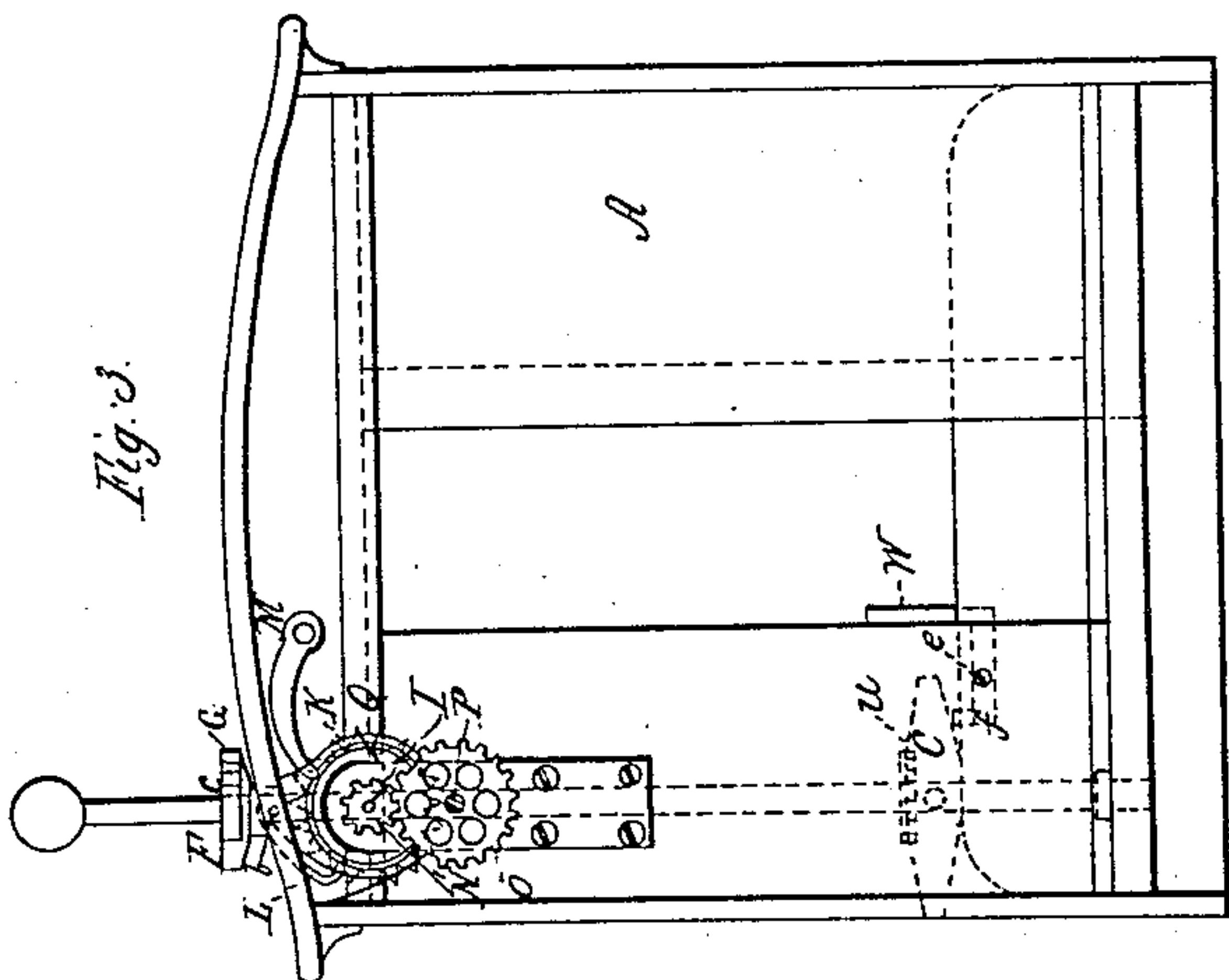


*T. Jacobs.*

*Passenger Register.*

*Nº 80,741.*

*Patented Aug. 4, 1868.*



*Witnesses;*  
*W. H. Emery*  
*Geo. R. Emery*

*Inventor;*  
*Thomas Jacobs*  
*By his Attorney*  
*Stephen Wood*

# United States Patent Office.

THOMAS JACOBS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR TO HIMSELF, JAMES E. KENNEDY, AND JOHN H. KENNEDY, OF SAME PLACE.

*Letters Patent No. 80,741, dated August 4, 1868.*

## IMPROVEMENT IN PASSENGER-REGISTERS.

*The Schedule referred to in these Letters Patent and making part of the same.*

### TO ALL WHOM IT MAY CONCERN:

Be it known that I, THOMAS JACOBS, of the city and county of Philadelphia, and State of Pennsylvania, have invented a new and useful Improvement in Registers for Street-Cars, Concert-Halls, and other rooms; and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, and to the letters of reference marked thereon:

The nature of my invention consists, in the first place, in the combination of a revolving gate and register with a street-car, concert-hall, or other room, in such a manner that by the passage of each passenger through the door or entrance, the gate is turned the requisite distance around to cause a vertical rod, on which it is permanently fixed, to operate suitable mechanism to turn the dial-hand of the register, and in the second place, in the combination of a check-lever with the gate and passage, the lever being under the control of the conductor, who, by bringing it into a certain position when desirable, prevents passengers reversing the motion of the gate to pass out.

In the accompanying drawings, which make a part of this specification—

Figure 1 is a plan or top view of the rear end of the car, with the improvements attached.

Figure 2 is an end elevation of the same.

Figure 3 is a cross-section.

Figure 4 is a plan of the gate C, ratchet U, and pawl V.

Like letters in all the figures indicate the same parts.

A is the body of the car.

B is the rear platform.

C is a revolving gate, formed of two bars crossing each other on the vertical rod D, the journals of which turn in the platform B and top, E, of the car.

On the upper end of the rod D there is a toothed wheel, F, which operates the forked lever G, to vibrate the plate H on the stud-shaft I of the register J.

K is the escapement-wheel on said shaft, and L a pawl for operating it. It is hung to the plate H by means of the pin b.

The said plate H is provided with a pin, c, which projects upwards into the fork d of the lever G.

M is the click-lever.

N is a pinion on the shaft I, and

O a wheel on the dial-shaft P.

Q is a coiled spring, for returning the vibrating-plate H to its point of rest.

R is the dial of the register, and S the hand.

Beneath the disk T, on the vertical rod D, there is a ratchet-wheel, U, in which the spring-pawl V, which is connected with the upper side of the hub of the revolving gate C, catches, when the gate revolves in the direction of the arrow, as passengers pass through it to the car, so as to connect it with the rod D, and thus communicate with the register. When the gate revolves in the opposite direction, as passengers pass out, the pawl slides over the teeth of the ratchet-wheel, and the gate turns loosely on the rod, so as not to affect the register. The ratchet-wheel U and pawl V are shown in detail, in connection with the vertical rod D and gate C, in fig. 4.

The operation is as follows:

As a passenger passes through the gate-entrance, the gate C is turned partly around, so as to cause the toothed wheel F to turn in the direction of the arrow, as seen in fig. 1, far enough to produce a movement of the escapement-wheel K the distance of one tooth, by the motion imparted by the toothed wheel F to the lever G, which operates the vibrating-plate H, thereby giving the requisite motion to the pawl L to operate the escapement-wheel K and the pinion N, and thence the wheel O and hand S, on the shaft P, on which the wheel is situated, and so on, in succession, the numbers are registered.

I do not confine myself to the gearing of the wheels of the register, as that may be varied to give the maximum capacity to the register, as may be suggested by circumstances.

There is a lever, W, in reach of the conductor, which is hung on the fulcrum-pin *e*. When he wishes to prevent passengers getting off the platform, he bears the handle of the lever down, bringing the part *f* of the lever far enough up to obstruct the turning of the gate C.

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

1. The combination of the check-lever W with the gate C, arranged and operating substantially as described.
2. The combination and arrangement of the ratchet-wheel U and spring-pawl V, with the rod D and gate C, substantially in the manner described and for the purpose specified.

In testimony that the above is my invention, I have hereunto set my hand, and affixed my seal, this twenty-fourth day of March, 1868.

THOMAS JACOBS. [L. s.]

Witnesses:

STEPHEN USTICK,  
JOHN WHITE.