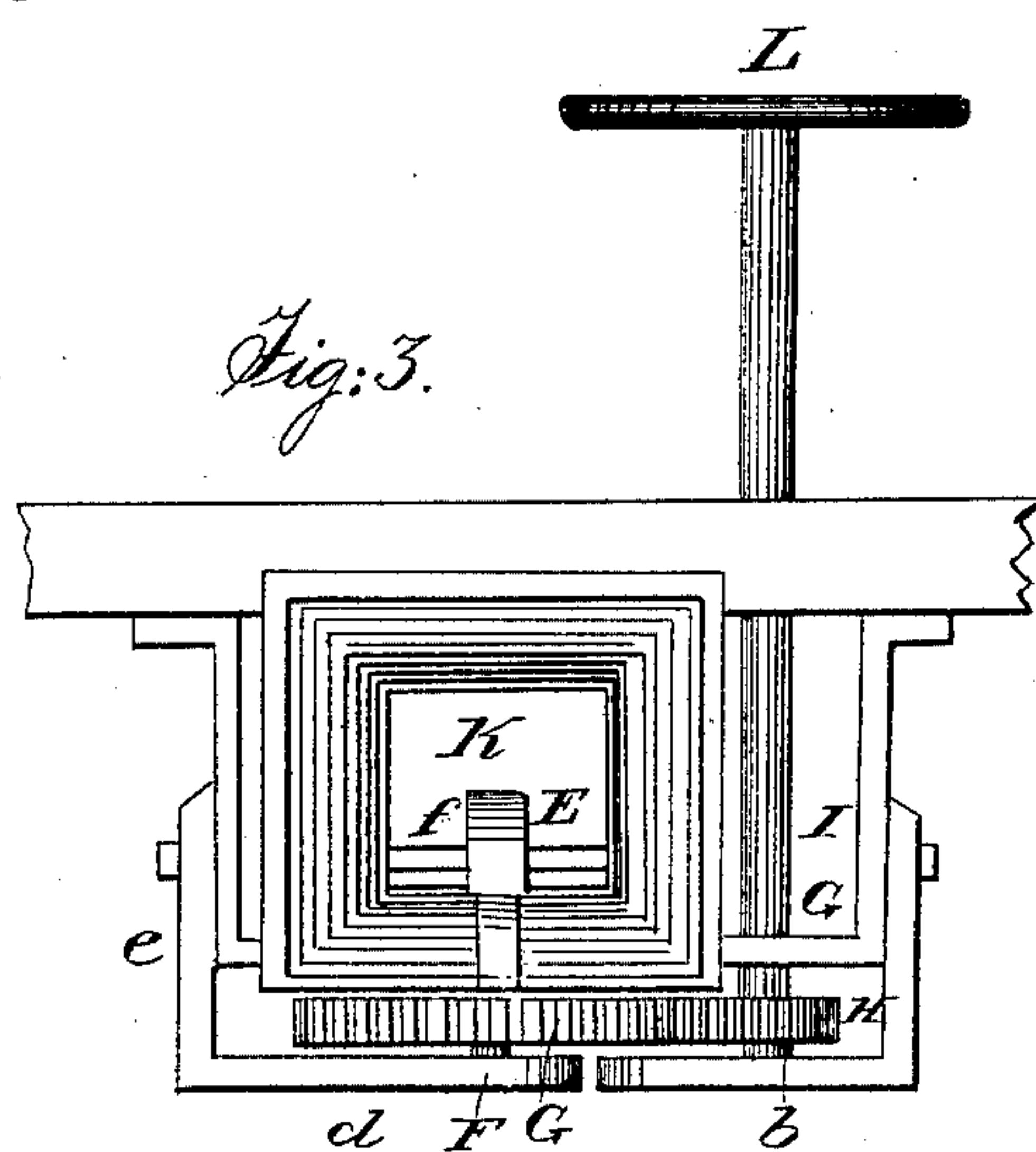
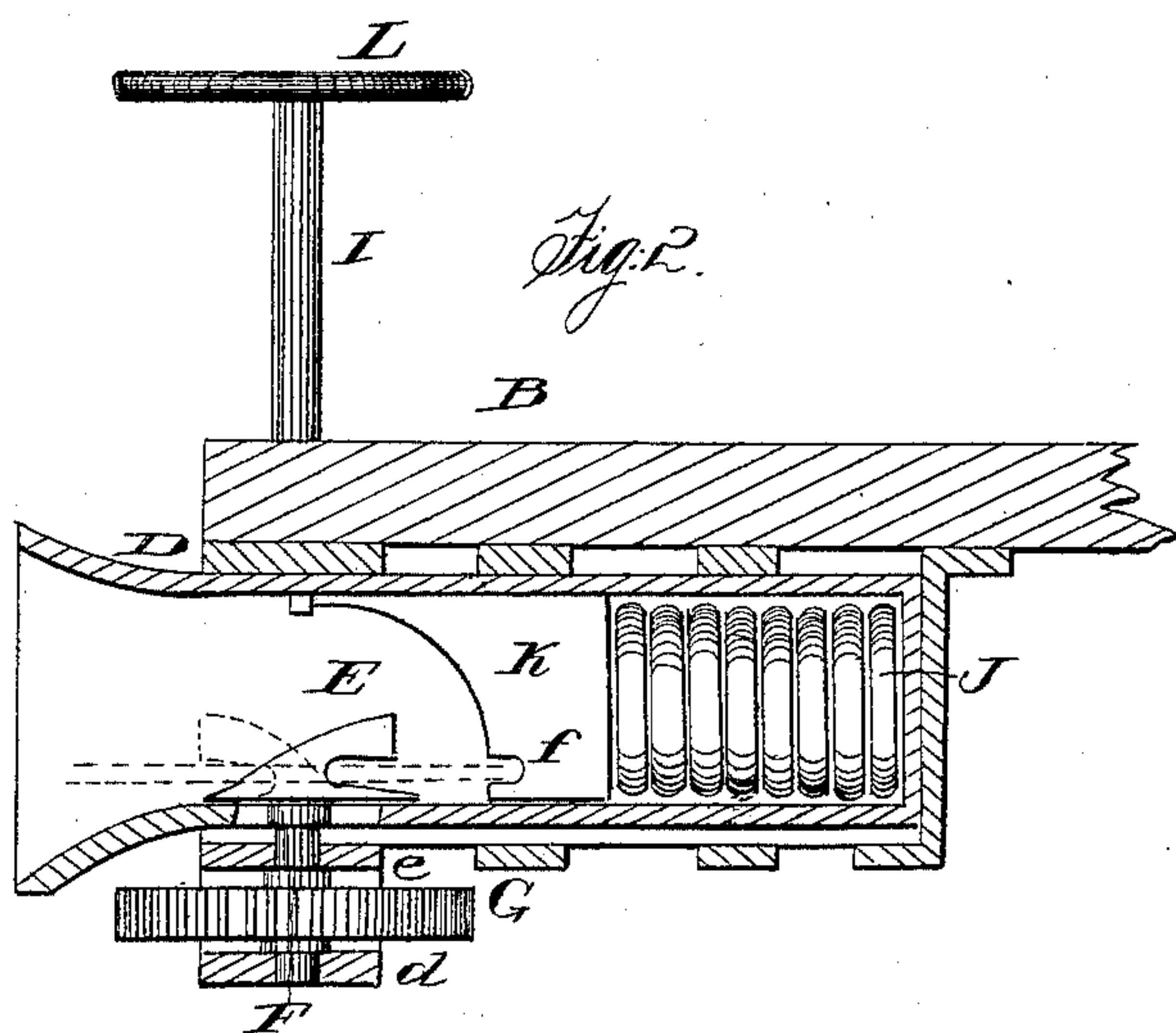
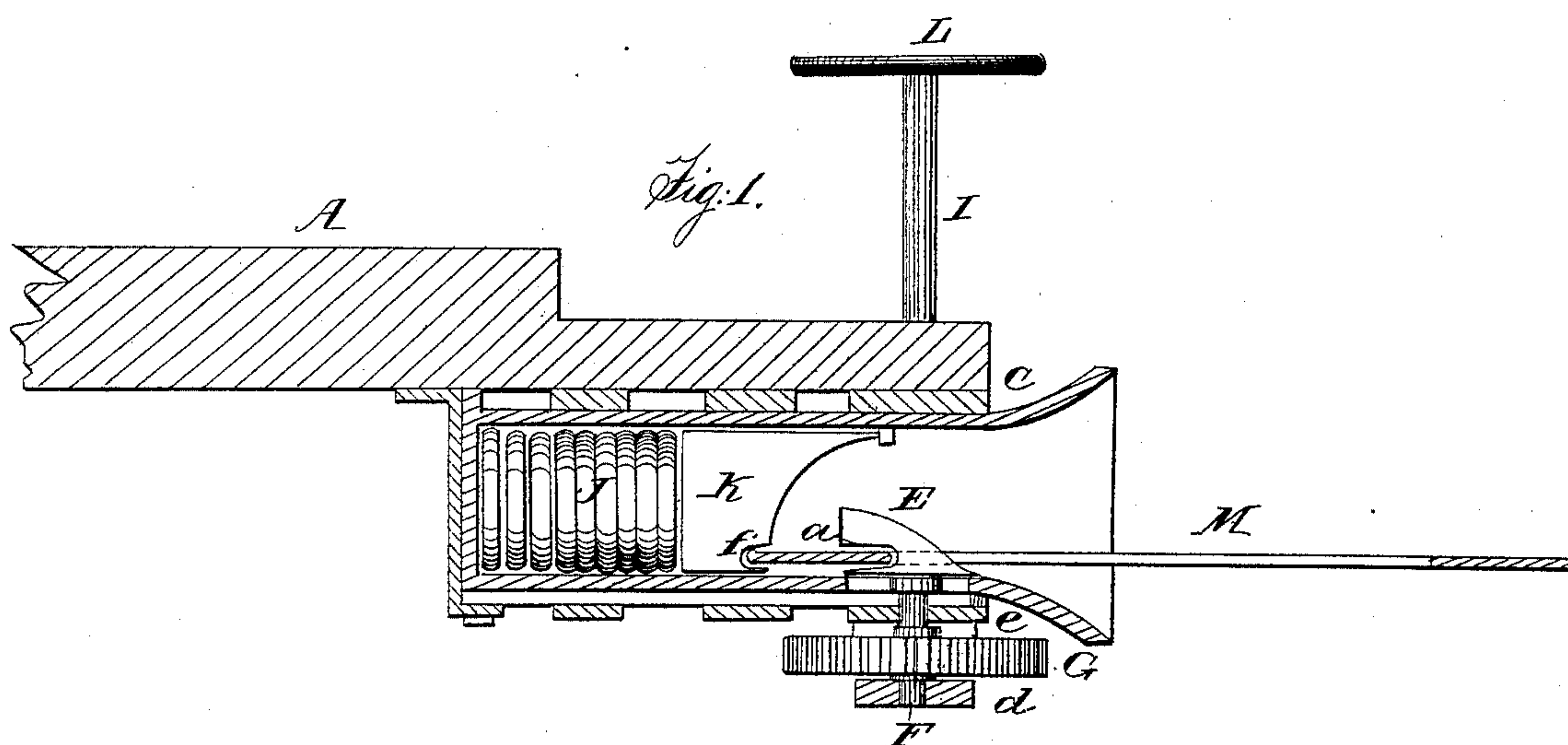


J. F. RAGUE.
Car Coupling.

No. 18,990.

Patented Dec. 29, 1857.



UNITED STATES PATENT OFFICE.

JOHN F. RAGUE, OF DUBUQUE, IOWA.

RAILROAD-CAR COUPLING.

Specification of Letters Patent No. 18,990, dated December 29, 1857.

To all whom it may concern:

Be it known that I, JOHN F. RAGUE, of Dubuque, in the county of Dubuque and State of Iowa, have invented a new and Improved Car-Coupling; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawings, making a part of this specification, in which—

Figures 1 and 2 are longitudinal vertical sections of the draw heads attached to the adjoining ends of the platforms of two cars, the above views showing my improvement. Fig. 3 is a front view of my improvement.

Similar letters of reference indicate corresponding parts in the several figures.

This invention relates to a new and useful improvement in car couplings in which the device is not only rendered self coupling but the brakeman or attendant is also enabled to disconnect or uncouple the cars while running at any speed.

The invention consists in the employment or use of a revolving hook placed within the draw-head, and used in connection with a buffer also placed within the drawhead, the above parts being arranged as will be hereinafter fully shown and described.

To enable those skilled in the art to fully understand and construct my invention I will proceed to describe it.

A, B, represent the platforms of the cars and C, D, represent the drawheads constructed of the usual form and attached to the ordinary buffer rods.

Within each drawhead C, D, a hook E is placed. These hooks are formed by cutting horizontal slots (a) in the back end of wedges or inclined planes, said wedges or inclined planes being on the upper ends of shafts F, the shafts being attached to the center or about the center of the under sides of the wedges or inclined planes. The shafts F pass up through openings in the under sides of the draw-heads.

On each shaft F, and below the draw-heads, a spur-wheel G is placed, and a pinion H gears into each spur wheel. The pinions H are placed on the lower ends of vertical shafts I, the lower ends of said shafts being stepped in plates (b), and also passing through guide plates (c) which are connected to the sides of the buffer rods. The lower ends of the shafts F are stepped

in plates (d) and pass through guide plates (e) which are also attached to the buffer rods.

The lower surfaces of the hooks E, E, may fit in a recess or rabbit made in the bottoms of the draw heads around the edges of the openings through which the shafts F pass.

In the back part of each draw head a spring J is placed. These springs may be constructed in any proper way. In front of each spring J, a buffer K is placed. These buffers may be constructed of metal and their front sides or faces are of curved or concave form, the upper edges of the faces or front sides projecting over or beyond the lower edges as shown clearly in Figs. 1 and 2. In the face or front side of each buffer K, a horizontal recess (f) is made. These recesses (f) are in line or in the same plane with the slots (a).

The upper ends of the shafts I have hand-wheels L placed on them.

From the above description of parts it will be seen that by turning the shafts I, the hooks E will be rotated by the gearing G, H.

M represents the link or shackle, the ends of which are fitted in the drawheads C, D. When the two drawheads are connected the hooks are through each end of the link or shackle, the ends of the link or shackle fit within the recesses (f) in the lower parts of the buffers K, and it will be seen that when the link or shackle is in one drawhead only as shown in Fig. 1, the link or shackle will be sustained in a horizontal position by the recess (f) in the buffer K, and by the slot (a) in the hook E. Consequently if the hook E of the drawhead D in Fig. 2 be turned so that the inclined surface of the wedge or hook will face outward it will be seen that the link or shackle in drawhead C, Fig. 1, will, when the platform A is moved toward the platform B, pass over the hook E and strike against the buffer K in drawhead D, throwing back said buffer and then dropping over the hook, as shown by dotted lines in Fig. 2. In order to disconnect the drawheads, the hook of one of the drawheads is thrown around so that its inclined surface faces the buffer, as shown in red Fig. 2, and the link or shackle will of course slip over the said hook.

The above invention is extremely simple and efficient. There are no parts liable to get out of repair, and by merely turning the hook of the drawheads as described the device is rendered self-coupling and may also be readily disconnected while the cars are in motion.

I do not confine myself to any particular mode of operating or rotating the hooks E for that may be done in various ways.

Having thus described my invention what

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

The rotating or revolving hook E in combination with the buffers K, the above parts being placed within the drawhead and arranged substantially as shown for the purpose specified.

JOHN F. RAGUE.

Witnesses:

J. F. BATES,

J. O'MEARA.