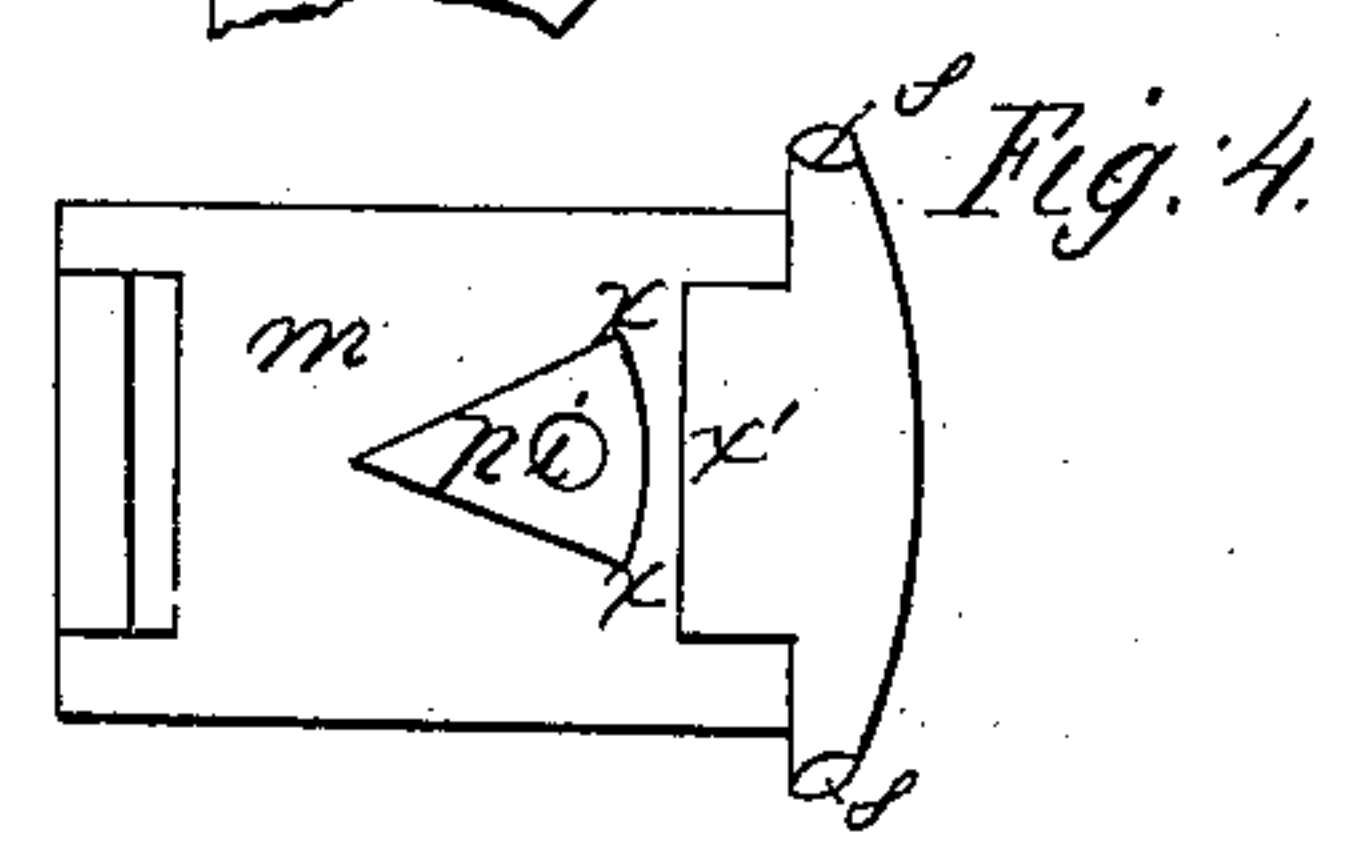
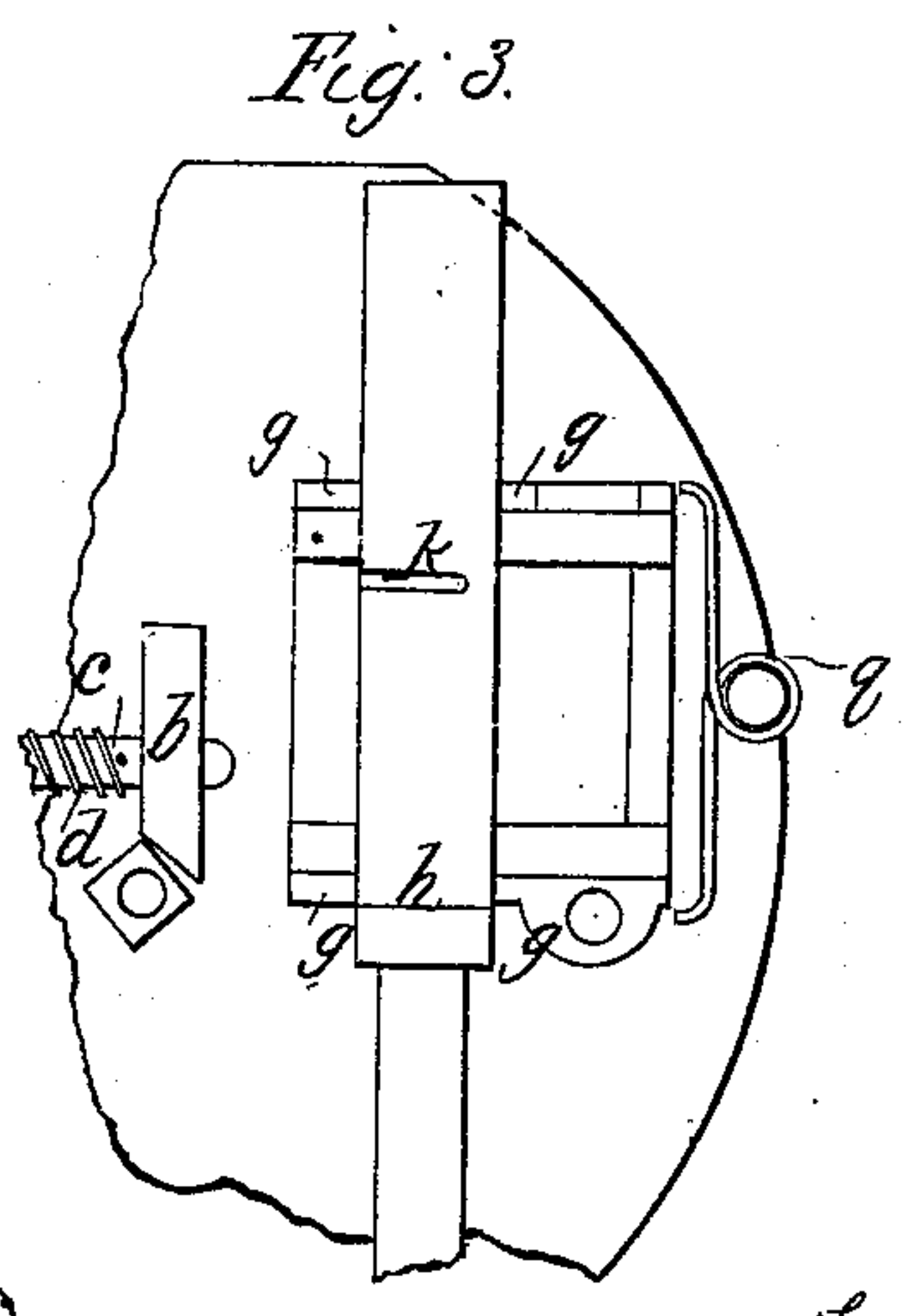
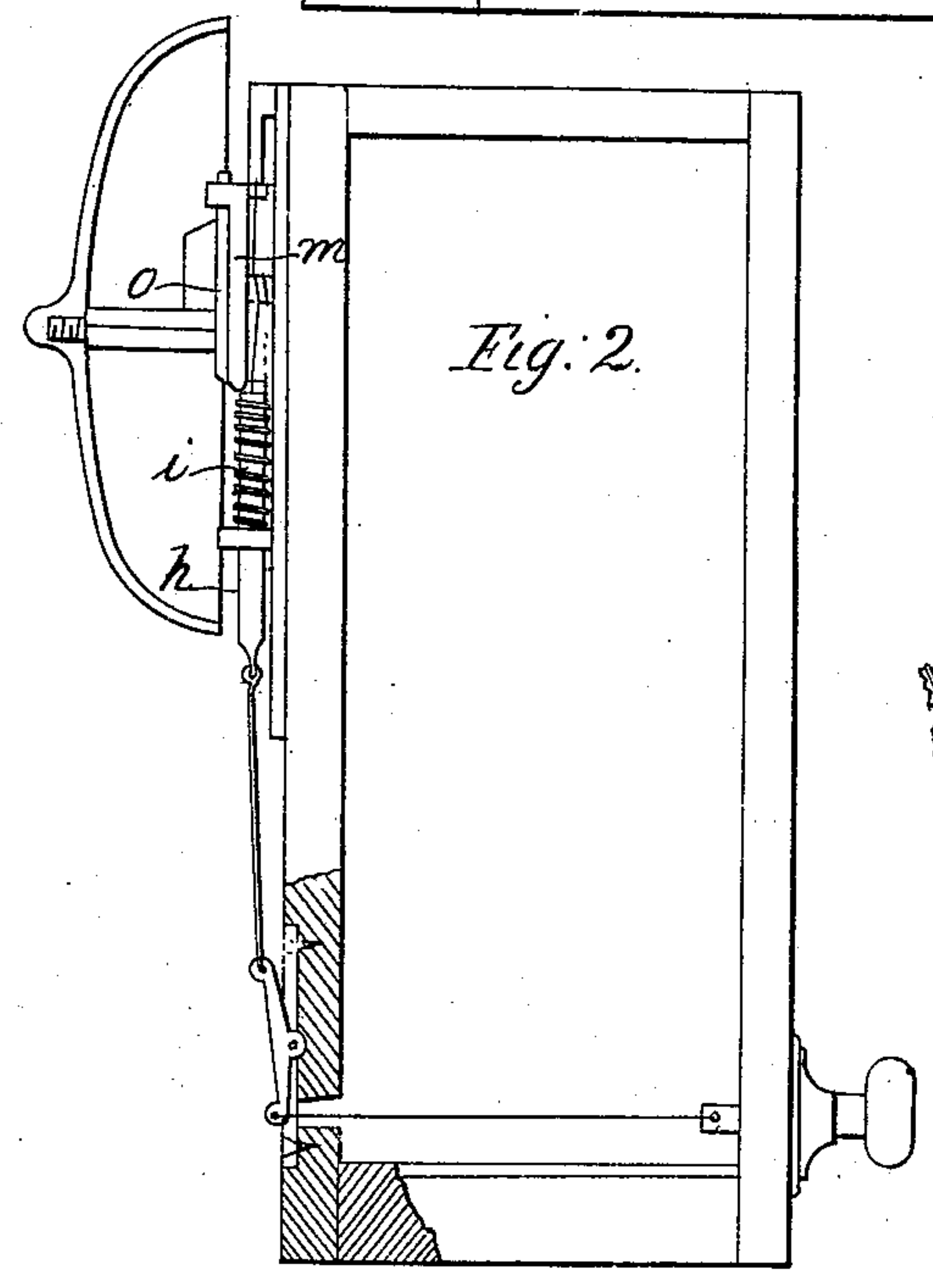
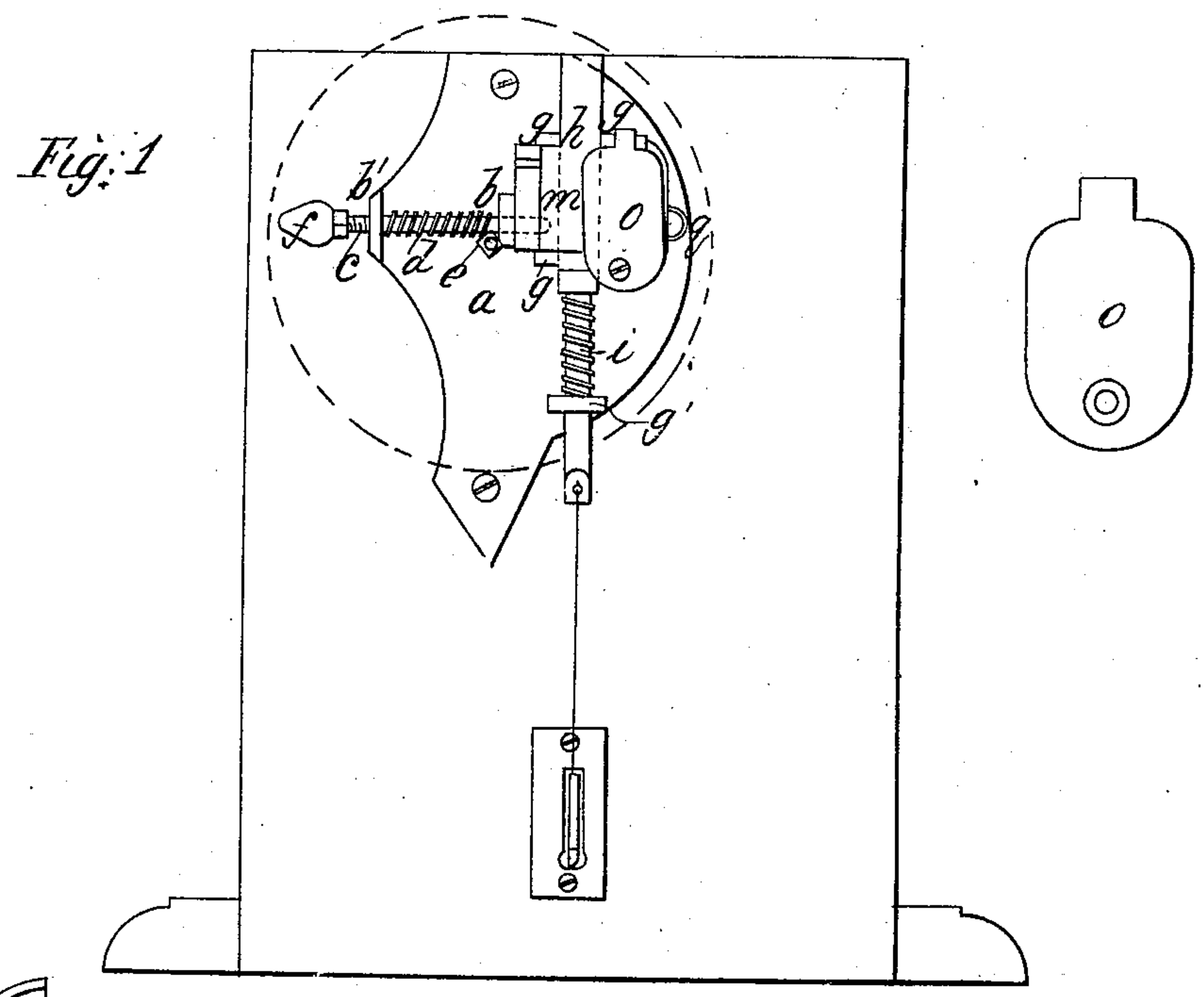


C. Penfield.

Door Bell.

N^o 85,759.

Patented Jan. 12, 1869.



Witnesses;
Charles Leck
Edw L Prior

Inventor,
Chester Penfield



CHESTER PENFIELD, OF NEW BRITAIN, CONNECTICUT.

Letters Patent No. 85,759, dated January 12, 1869.

IMPROVEMENT IN DOOR-BELLS.

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, CHESTER PENFIELD, of New Britain, county of Hartford, and State of Connecticut, have invented certain new and useful Improvements in Door-Bells; and to enable others skilled in the art to make and use the same, I will proceed to describe its construction and operation, by referring to the drawings, in which the same letters indicate like parts in each of the figures.

The nature of this invention will be understood from the specification and drawings, in which—

Figure 1 is a face view.

Figure 2 is a side view.

Figure 3 is a partial face view, with the cap *o* removed.

Figure 4 is an under-side view of the plate or driver *n*.
a is the plate to which the mechanism is attached or secured.

b b are stud-posts, in which the hammer-spindle *c* is arranged, and vibrates by means of a spiral spring, *d*, upon said spindle, one end of which takes its bearing against the stud-pin *b'*, and the other end against a pin, *e*, in the spindle *c*.

The object of this arrangement is to hold the hammer *f* in close proximity with the rim of the bell without striking the bell, except when actuated by impelling force.

g are guide-ways or posts, in, through, or between which the actuating-bar *h* plays.

This bar is provided with a reacting-spring, *i*, one end of which takes its bearing against a shoulder or boss formed on said bar, and the other against the stud *g'*, so that when acted upon by the pull-spindle, in the ordinary way, the rod will be reacted to its resting-place by the spring *i*.

This bar is also provided with a boss, *k*, the office of which is to actuate the driver.

m is a driver, which works between the studs or guides *g*, and is held in place by the cap *o*.

Upon the under side of this driver is arranged a vibrating cam, *p*, upon the pin *r*, which is allowed to vibrate in either direction until the corner *x* strikes the protuberance *x'*.

This driver *m* is held or actuated to its position at rest by means of the spring *q*, having its bearing upon a stump just in rear of the driver, while its arms take bearing against the prongs *s*, on the under side of the driver *m*.

Now, it will be seen that when the spindle *h* is operated or pulled in the usual way, the boss *k* will act first against one side of the cam *p*, to throw back the driver until it passes the point thereof, when the driver *m*, with accelerated action, strikes the back end of the hammer-spindle *c*, and produces a stroke upon the bell, which is repeated successively each back-and-forth action of the spindle, thus holding each and all the parts firmly in place for use, rendering it more compact, cheaper of manufacture, less liable to get out of order, and more convenient for use.

I believe I have thus shown the nature, construction, and advantage of this invention, so as to enable others skilled in the art to make and use the same therefrom.

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

The combination of the driver *m*, having the cam *p* attached thereto, in its relative action with the vibratory hammer *f* and spindle *h*, arranged and constructed substantially as and for the purpose described.

CHESTER PENFIELD. [L. s.]

Witnesses:

CHARLES PECK,
EDW. L. PRIOR.