

(No Model.)

L. G. ROWAND.
THERMOSTAT.

No. 474,149.

Patented May 3, 1892.

Fig. 1.

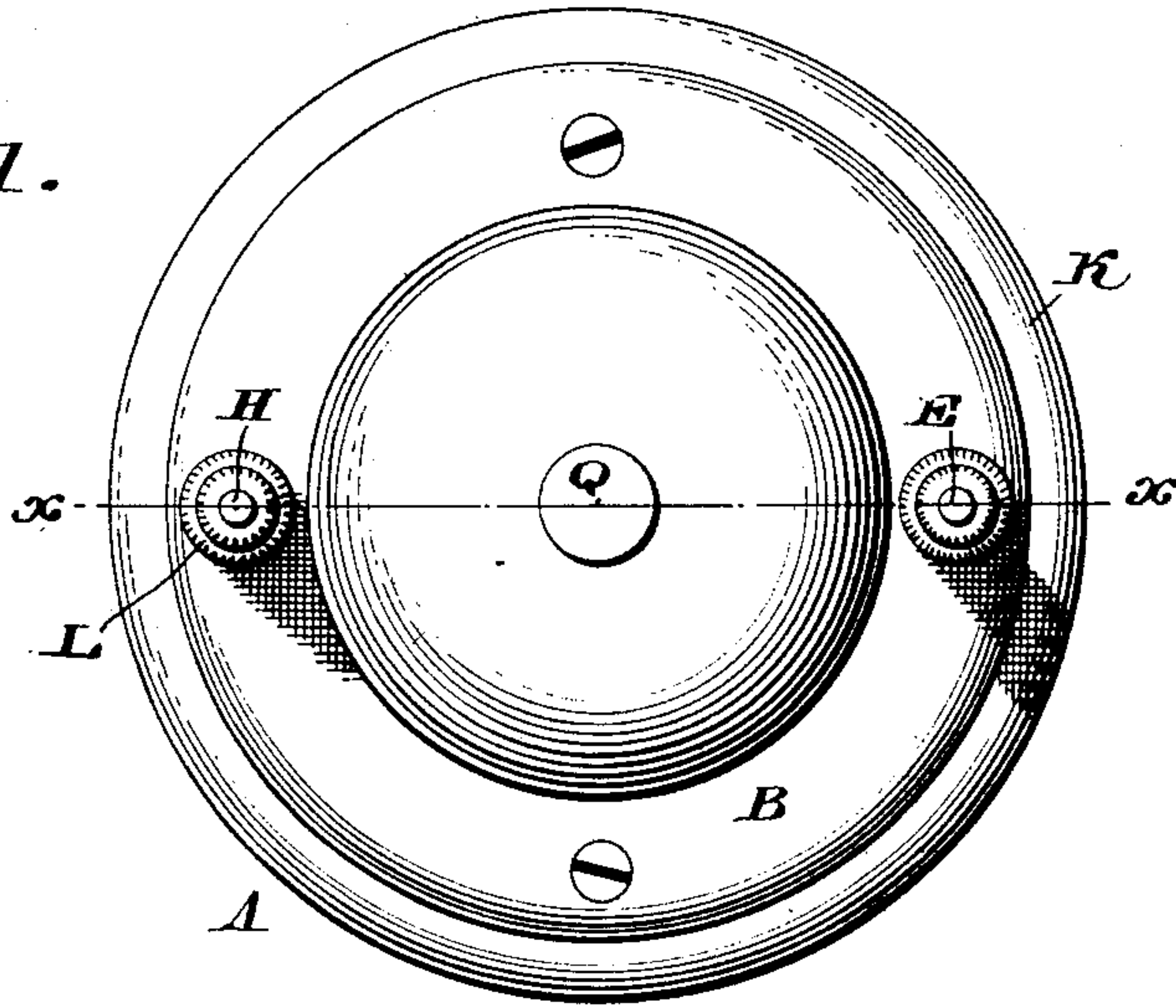


Fig. 2.

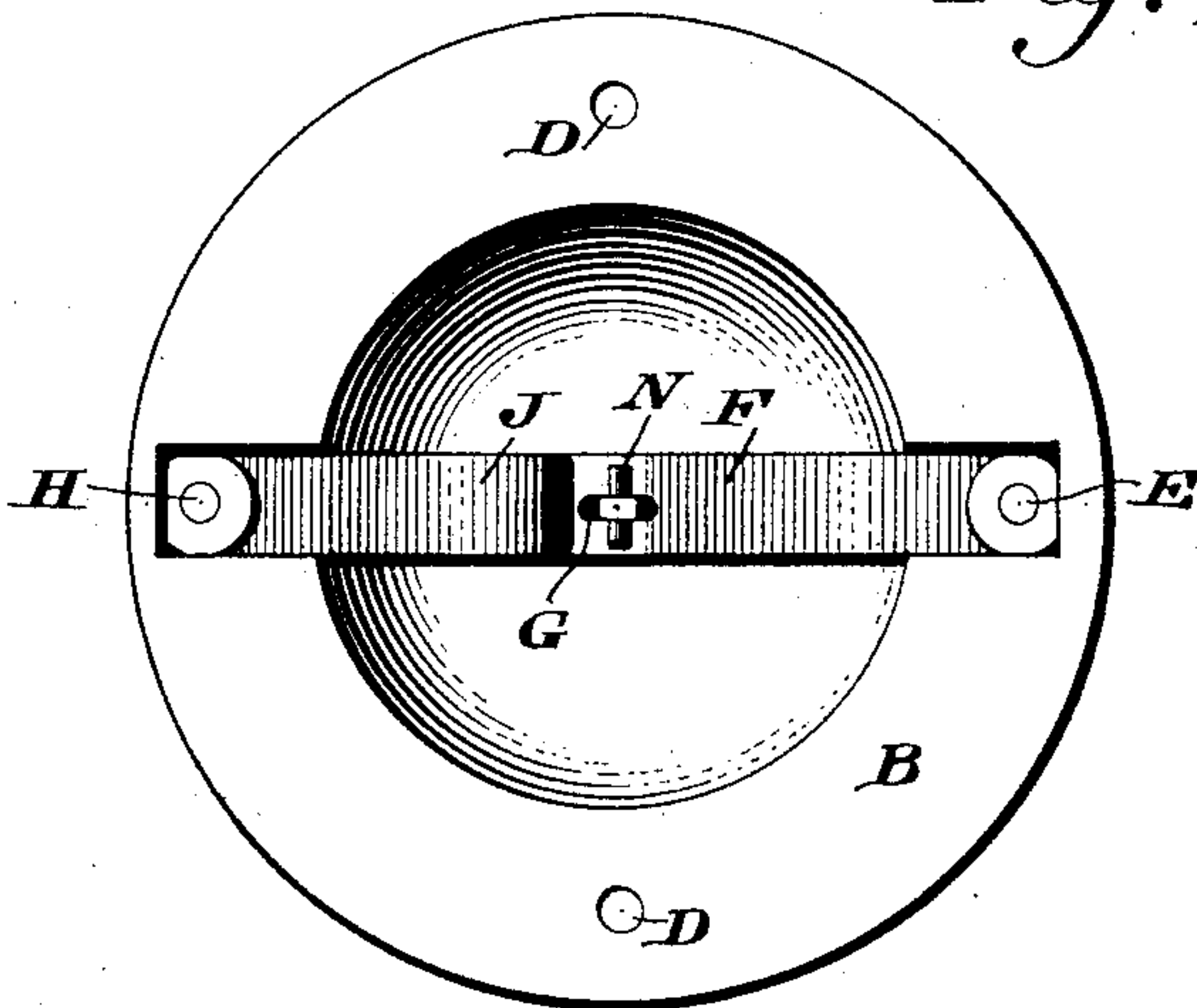
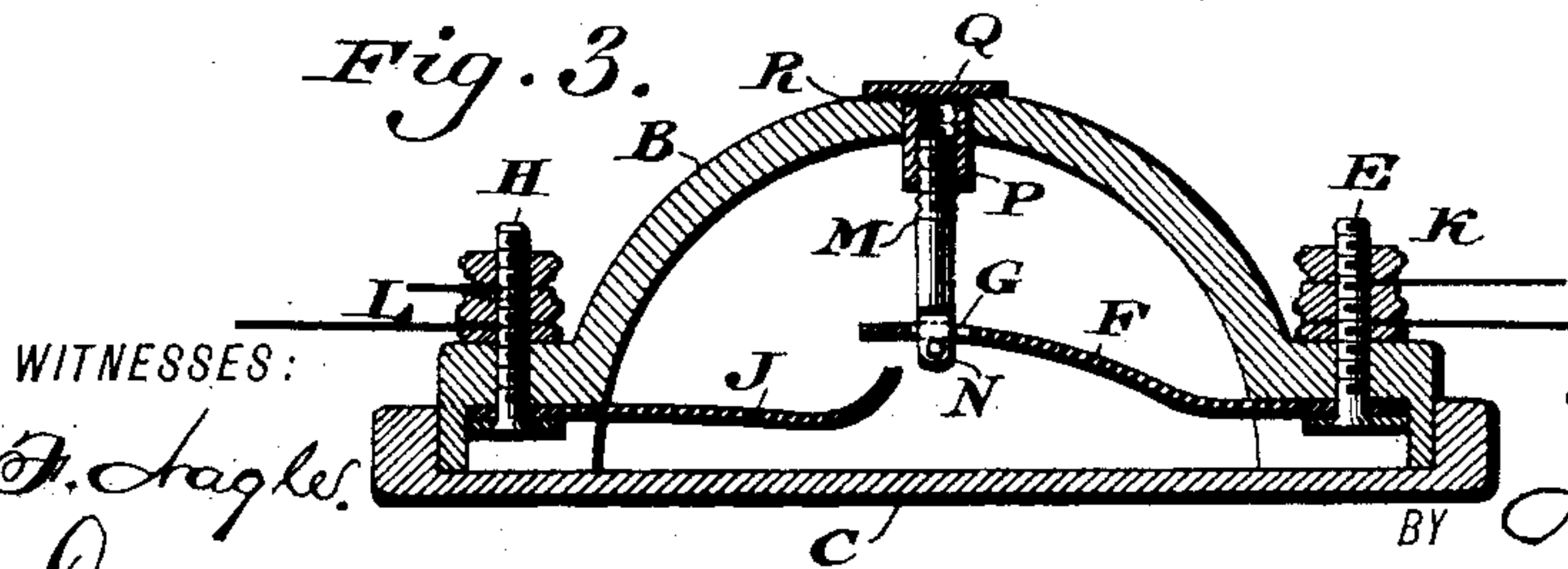


Fig. 3.



WITNESSES:

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THERMOSTAT.

SPECIFICATION forming part of Letters Patent No. 474,149, dated May 3, 1892.

Application filed October 7, 1891. Serial No. 408,062. (No model.)

To all whom it may concern:

Be it known that I, LEWIS G. ROWAND, a citizen of the United States, residing in the city and county of Camden, State of New Jersey, have invented a new and useful Improvement in Thermostats, which improvement is fully set forth in the following specification and accompanying drawings.

My invention relates to improvements in thermostats, and has for its object simple and efficacious means whereby in case of a fire an electric circuit is formed, so as to sound an alarm.

For this purpose the invention consists of a non-conducting support with movable and stationary contact-plates and means consisting of a head, a tube secured to said head by a fusible solder, and a plunger or rod for preventing the movable plate from contacting with the stationary plate until a temperature is had causing the solder connecting said plate and tube to fuse, and thereby to separate the said parts.

It further consists of the combination of parts hereinafter set forth.

Figure 1 represents a face view of a thermostat embodying my invention. Fig. 2 represents an inner rear view of the device, the back or attaching plate being removed. Fig. 3 represents a central section on line $x x$, Fig. 1.

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

Referring to the drawings, A designates a casing, of any suitable electrical non-conducting material, formed of a front piece B and a back or attaching plate C, said parts being detachably connected and having openings D, by which they can be readily connected together and attached by screws or nails, &c., to a wall or ceiling or other suitable support. Within the casing and attached to the piece B by a binding post or screw E is a spring-plate F, having a slot G therein, and secured by a binding post or screw H is a stationary plate J, which when the spring-plate F is free to act is in contact with the same, said plates being normally separated. The plate F is electrically connected by the post E with the

wire K of an electric circuit, and the plate J is connected by the post H with the wire L, that leads to the ground, and has an alarm connected therewith.

To keep the spring-plate F from contact with the plate J, a rod M is attached to the plate F by inserting one end in the slot G and passing a pin N through the end or tongue of the rod below the said plate, the other end of the said rod being screwed or otherwise secured to the tube P, which fits in an opening in the piece B. To one end of the tube is attached a holding-head Q, which is outside of the casing and is attached to the tube by fusible solder R, which will melt at a high temperature occasioned by fire in the place where the device is located.

It will be seen that in case of fire the fusing of the solder separates the head Q and tube P, so that the spring-plate F is no longer held by connection with the head Q, and it is released, and thus comes in contact with the plate J, electrically connecting the wires K and L, so that a current is passed through the wire L, sounding the alarm connected therewith.

By having the rod M attached by a screw-threaded end with the tube P an adjustable connection is made, so that the tension of the plate F can be regulated.

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

A thermostat consisting of a casing, a spring-plate secured at one end to said casing and having a slot in its free end, a rigid plate connected with said casing, a holding-head having an interiorly-screw-threaded tube secured thereto, a rod with a threaded end in said tube and a tongue on the other end inserted in said slot, and a pin in said tongue below said slotted plate, said holding-head being secured to said tube by solder fusible above a normal temperature, said parts being combined substantially as described.

LEWIS G. ROWAND.

Witnesses:

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