

J. FAWCETT.

Fire-Indicators and Alarms.

No. 144,895.

Patented Nov. 25, 1873.

Fig. 1.

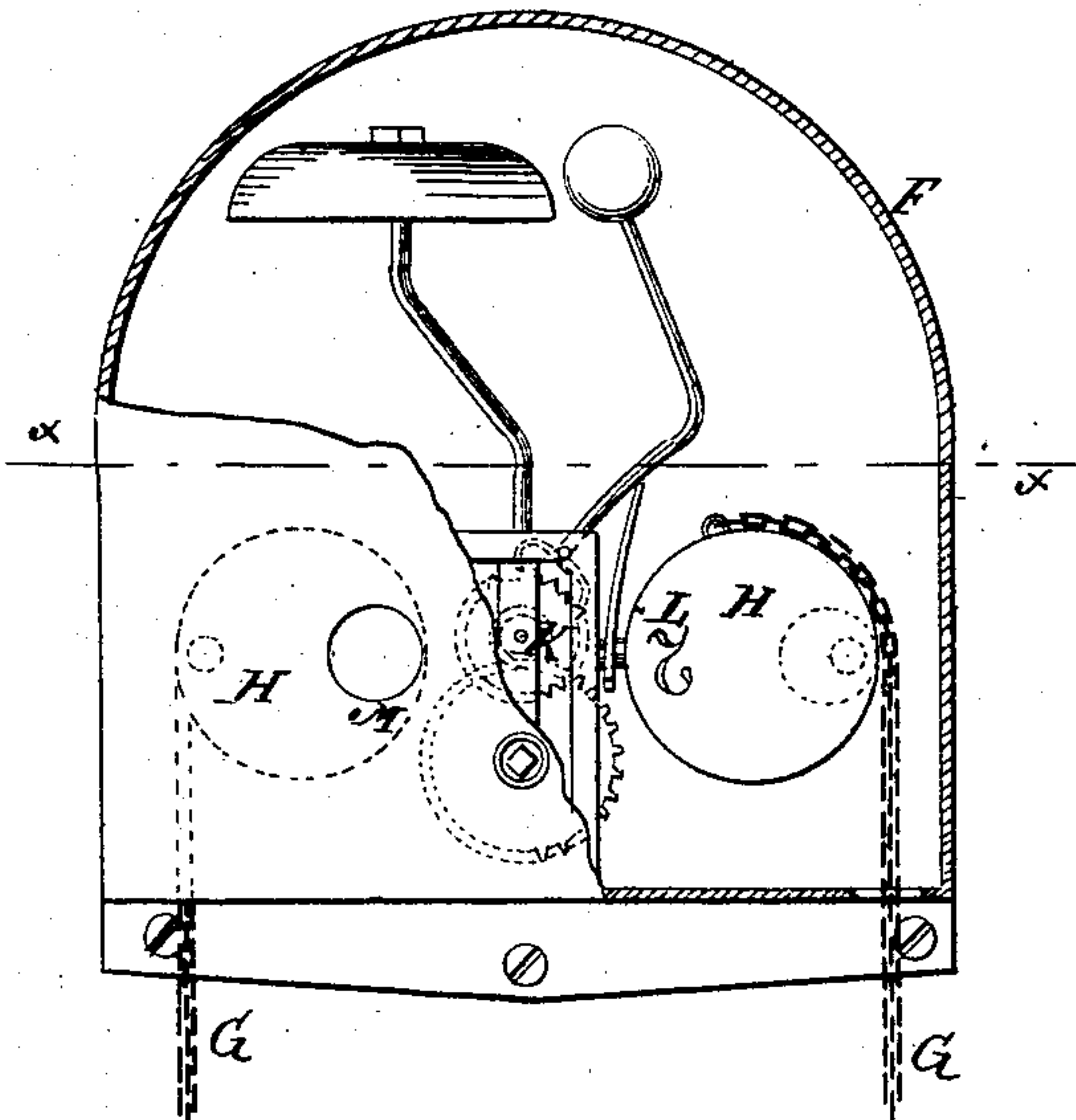


Fig. 2.

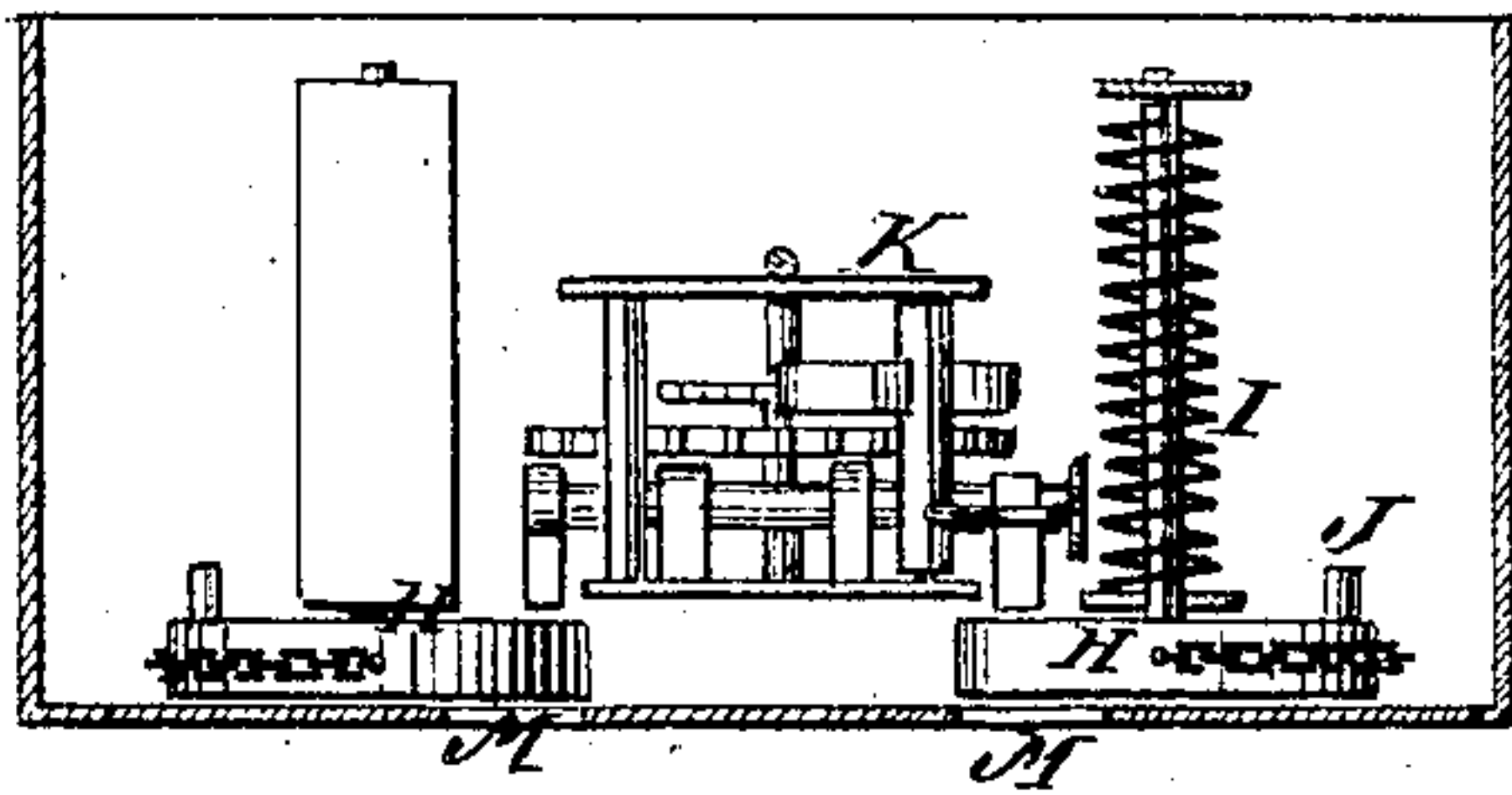


Fig. 1.

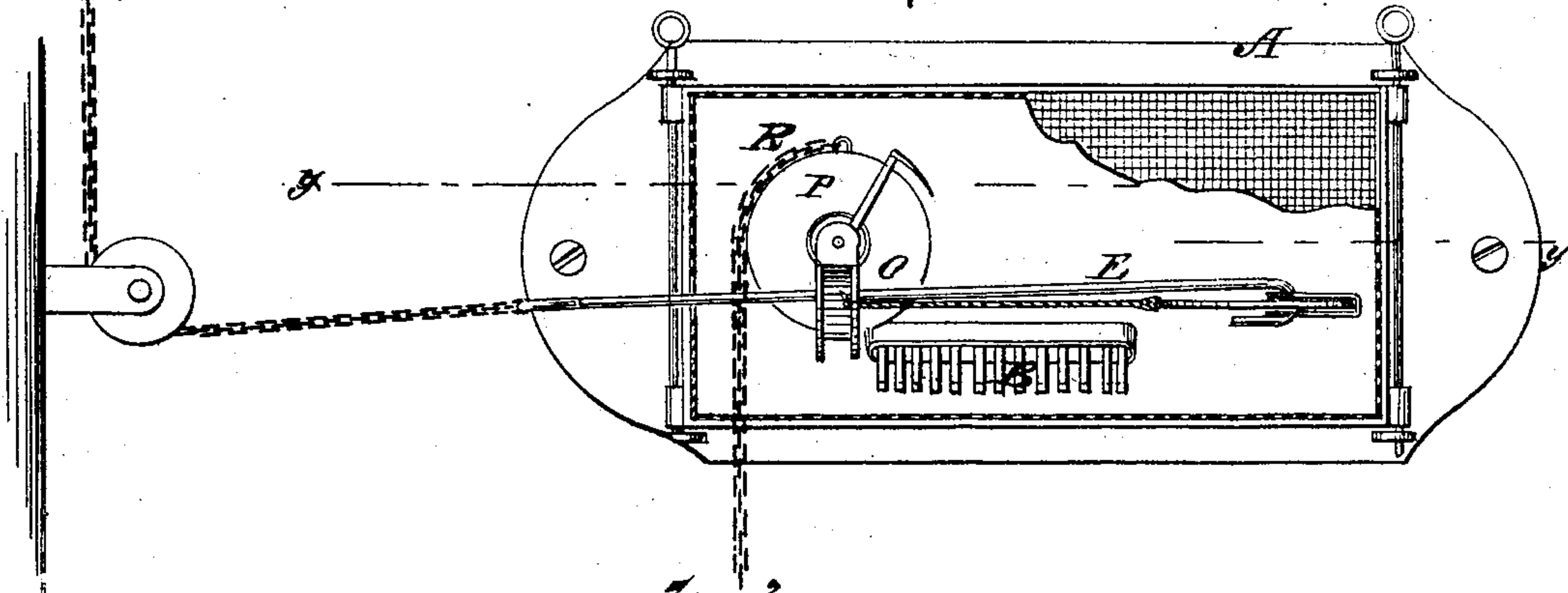
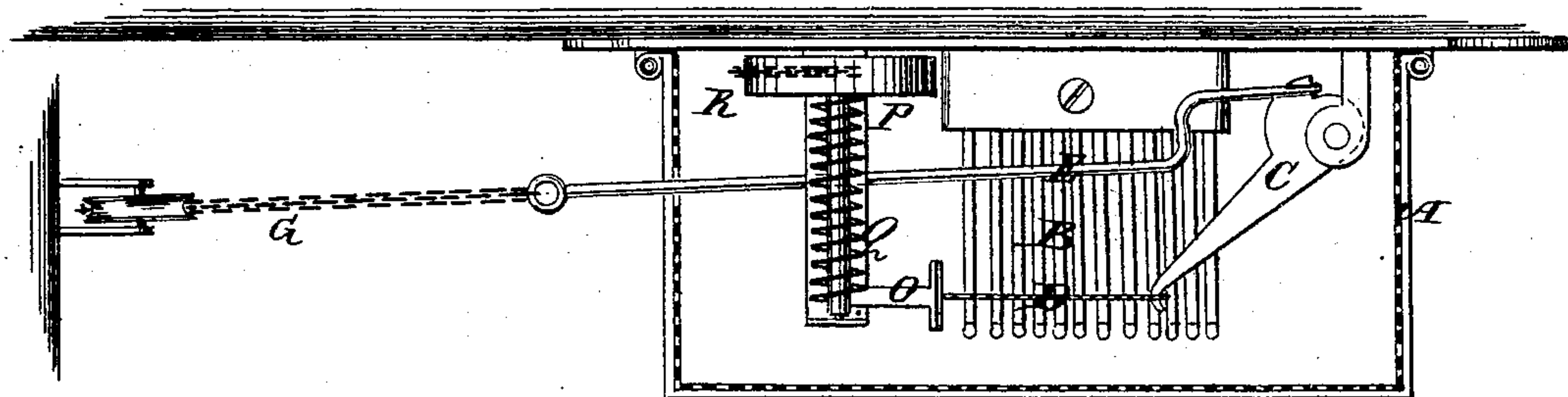


Fig. 3.



Witnesses.

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UNITED STATES PATENT OFFICE.

JOHN FAWCETT, OF EAST BOSTON, MASSACHUSETTS.

IMPROVEMENT IN FIRE INDICATORS AND ALARMS.

Specification forming part of Letters Patent No. 144,895, dated November 25, 1873; application filed August 23, 1873.

To all whom it may concern:

Be it known that I, JOHN FAWCETT, of East Boston, in the county of Suffolk and State of Massachusetts, have invented a new and Improved Fire Indicator and Alarm, of which the following is a specification:

My invention consists of a little cage of wire or perforated sheet metal containing a card of matches, or other easily-ignitable substance, arranged under a string holding a trip-lever, with which a wire is connected, which extends to the indicator and alarm in the office or occupied room of the building, and is attached to a wheel or drum, which, when let free by the burning of the string in the aforesaid cage, is turned by a spring, and caused to trip the mechanism of an alarm apparatus, and at the same time present to the sight-hole through the case the number of the room in which the cage is fired.

Any number of the detectors can be arranged in a room, in different points, and connected with the indicator and alarm in the manner similar to the connection with the indicator, so as to increase the chances of sending notice as soon as the fire breaks out, or before it has materially advanced.

Figure 1 is a sectional elevation of my improved apparatus. Fig. 2 is a horizontal section of Fig. 1 taken on the line *x x*; and Fig. 3 is a horizontal section taken on the line *y y*.

A represents the metal cage, of wire or perforated metal, containing a card of matches, B; a trip-lever, C; fastening-cord D; and the wire E, extending to the alarm and indicator F. The matches are arranged on the bottom of the case. The cord for fastening the trip-lever is arranged directly above the matches, so that the flame from the matches, when ignited, will burn off the cord at once, and the wire E is connected to the lever, so as to instantly escape from it when the cord is burned. In the indicator F the wire E is connected, by a chain or cord, G, to a disk or drum, H, having a coiled spring, I, fixed on its shaft, and set so that when the wire is freed from the trip-lever C in the cage the spring will turn the disk H so as to cause the stud-pin J to come in contact with the restraining device of an

alarm mechanism, K, and trip it so that an alarm will be sounded, and at the same time said disk will present the number L of the room containing the cage fired to the sight-hole M of the case of the indicator.

As many different rooms may be connected with the indicator as may be desired, each room having its special cage and tripping apparatus connected by a special wire, and a special disk being provided in the indicator for each wire.

In case I wish to arrange several cages in a room at different points, and connect them with the cage, which is connected with the indicator, I will, instead of connecting the cord to a fixed object, as when having only one cage, connect the cord D to an arm, O, of the axis of a disk, P, having a spring, Q, and connect this disk with a trip-lever in the next cage in the series by a chain, R, so that if the cord D of any one of the cages in the series be burned the lever C in the cage connected with the indicator will be freed just the same.

I am well aware a series of detectors have been connected by one (expansible) wire with an indicator or alarm apparatus.

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

1. The combination of a connecting-wire, E, tripping-lever C, combustible cord D, and a card of matches, B, or other equivalent easily ignitable material, with an indicating-disk, H, spring I, and an alarm mechanism, K, the matches, combustible cord, and the trip-lever being in a metallic cage in the room to be signaled, and connected by the wire with the indicator in the room in which the signal is to be received, substantially as specified.

2. The combination of the chain R, the revolving disk P, and spring Q applied to the axis thereof, with the combustible cord D, arm O, catch-arm C, and the matches B, or equivalent ignitable material, as and for the purpose specified.

JOHN FAWCETT.

Witnesses:

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WILLIAM FAWCETT.