

No. 804,356

PATENTED NOV. 14, 1905.

W. D. WATKINS.
FIRE ALARM.

APPLICATION FILED OCT. 6, 1904.

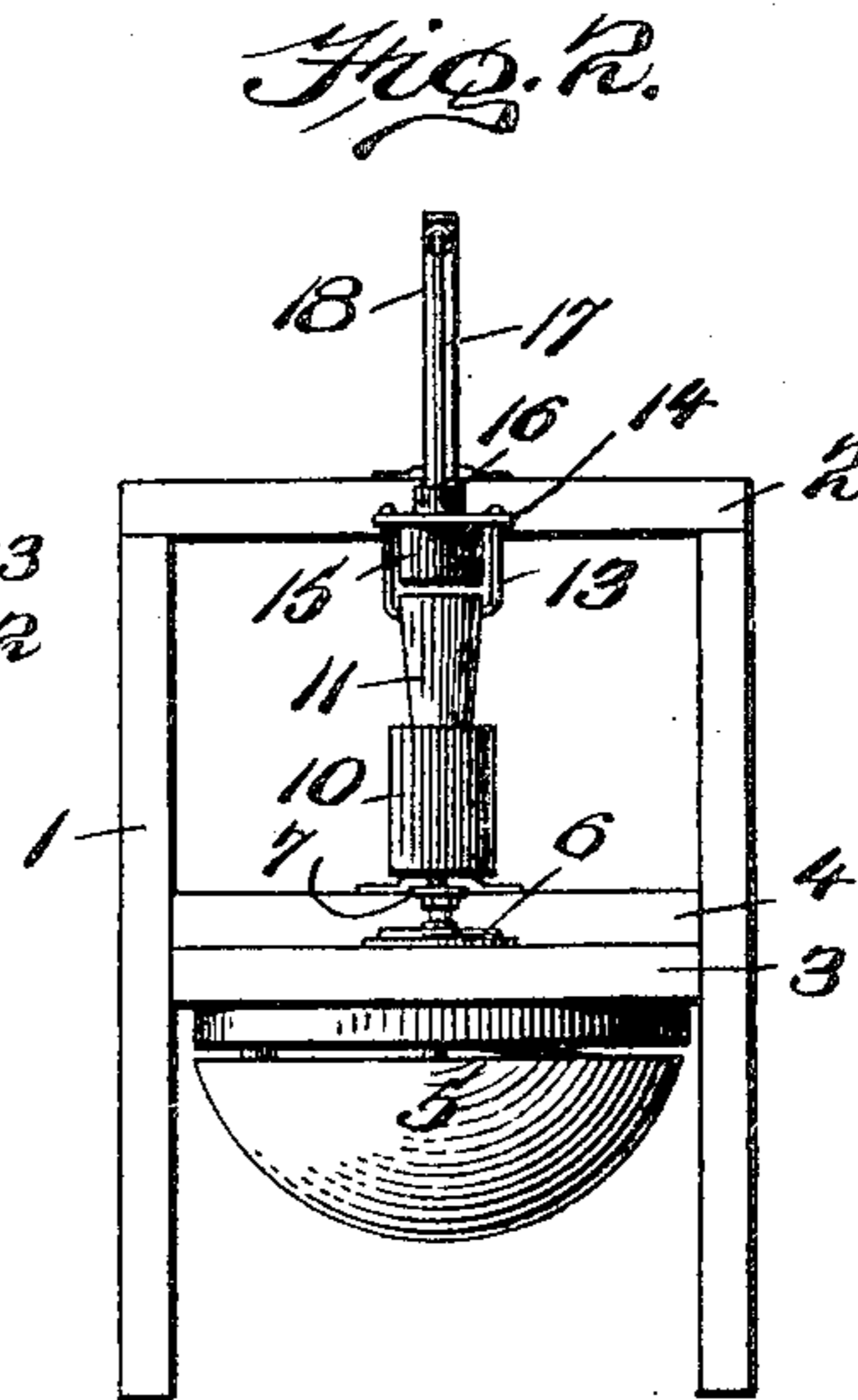
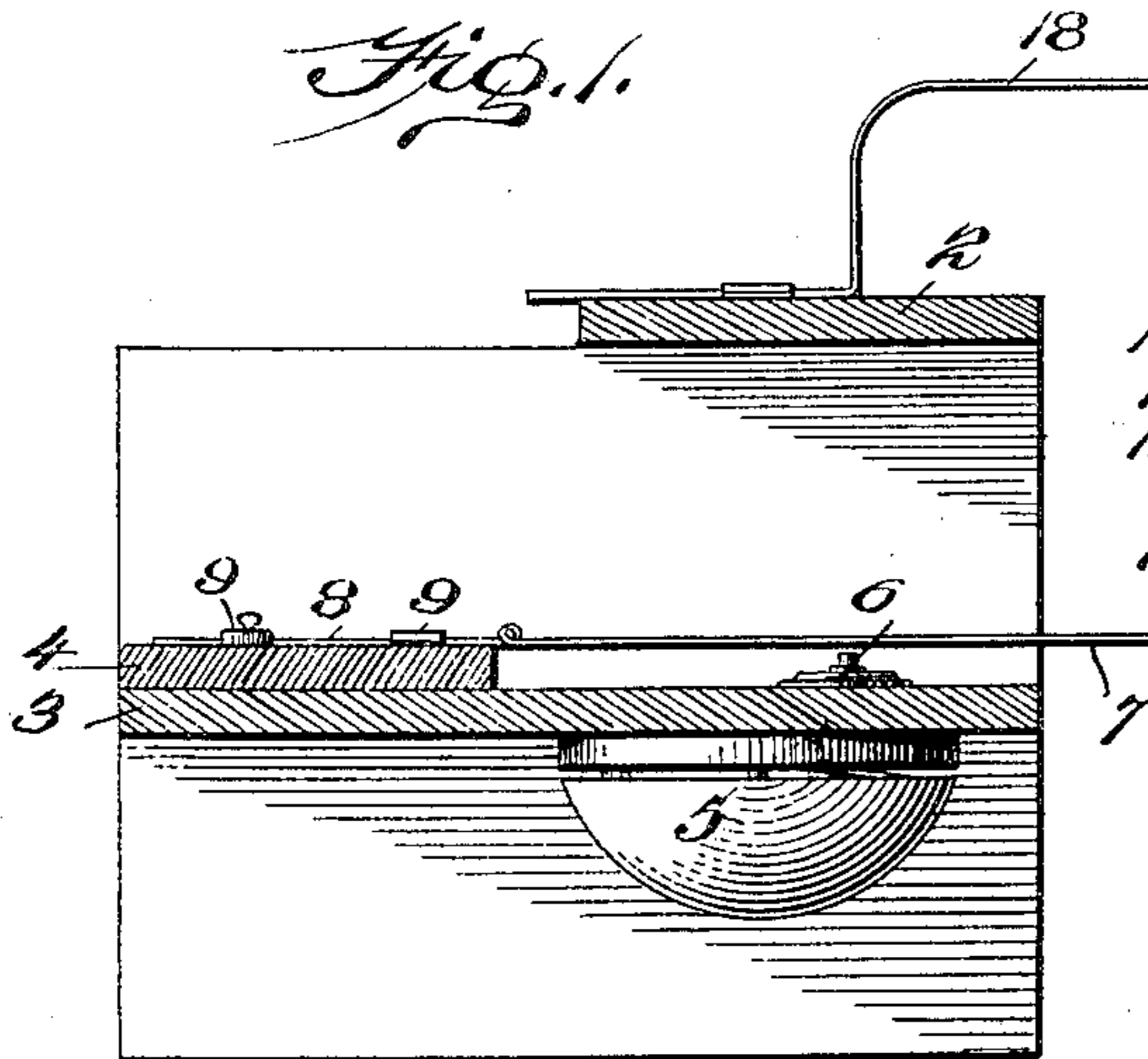


Fig. 3.

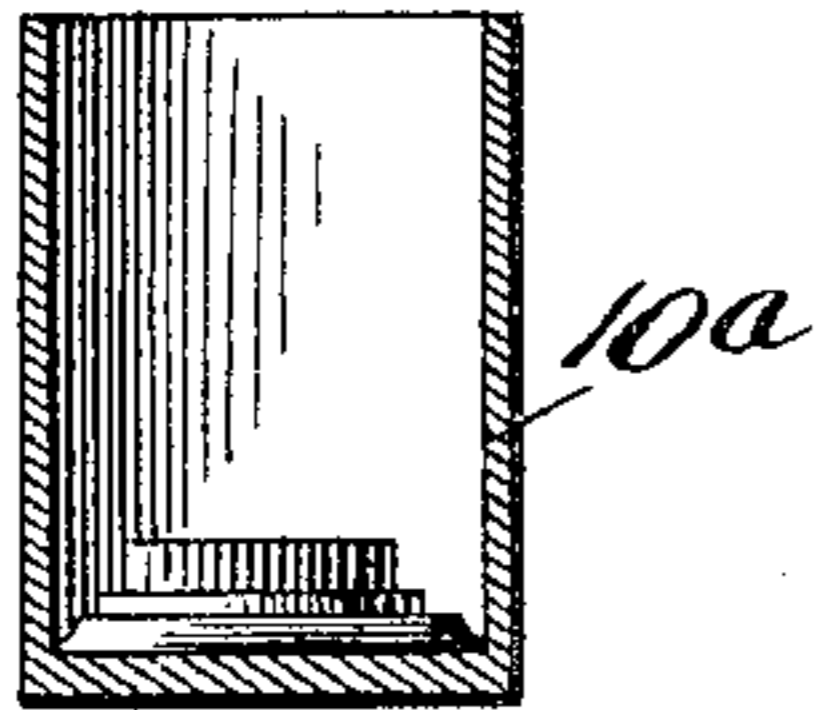
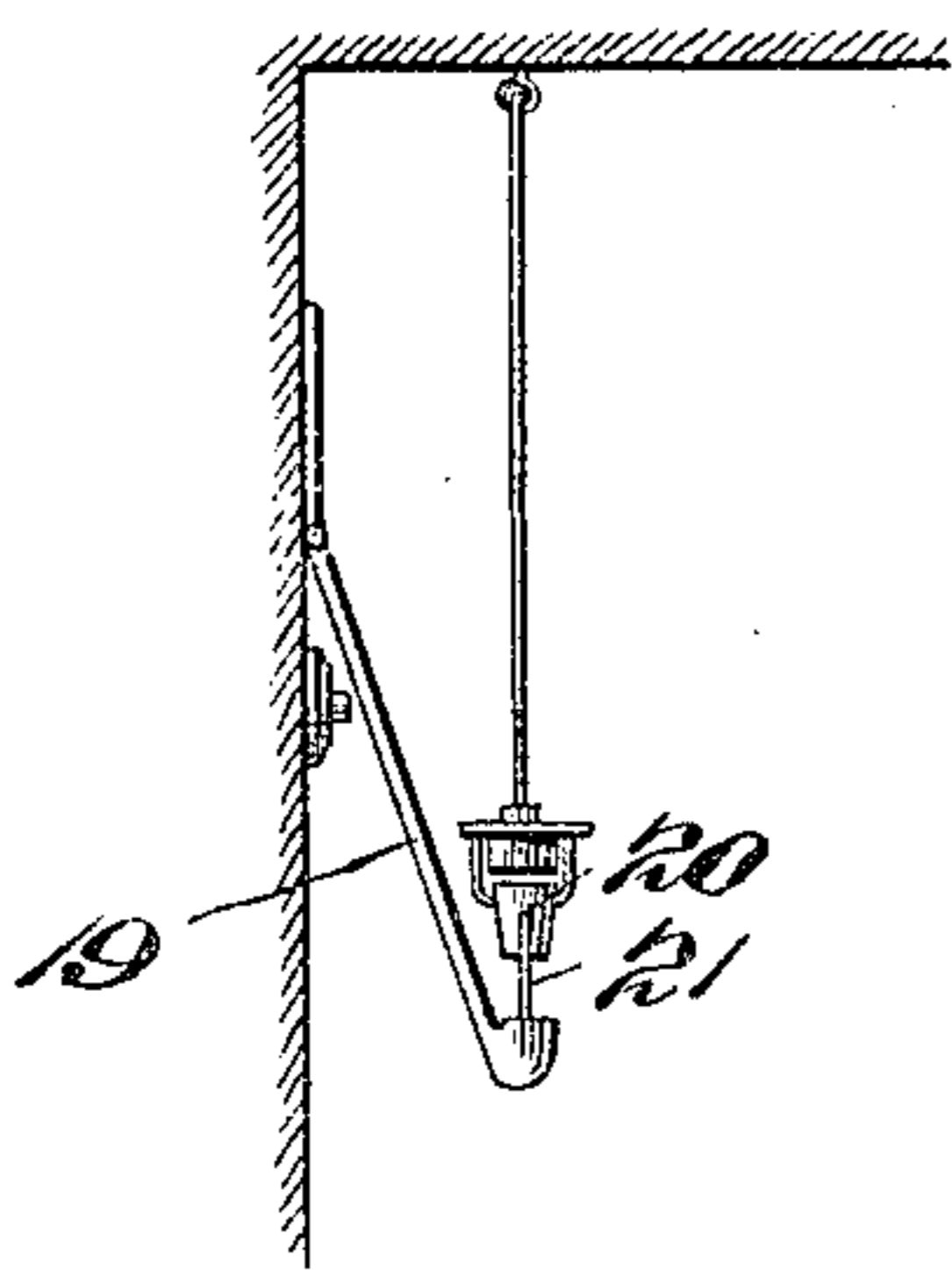


Fig. 4.



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FIRE-ALARM.

No. 804,356.

Specification of Letters Patent.

Patented Nov. 14, 1905.

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To all whom it may concern:

Be it known that I, WILLIAM D. WATKINS, a citizen of the United States, residing at Scranton, in the county of Lackawanna and State of Pennsylvania, have invented certain new and useful Improvements in Fire-Alarms, of which the following is a specification.

The object of the invention is to provide an improved portable fire-alarm that will be simple in its operation and inexpensive to manufacture.

A further object is to provide an improved fusible device for causing the operation of the alarm.

Other objects will hereinafter appear in the specification and will be particularly pointed out in the claims.

In the drawings, Figure 1 is a side elevation of an alarm embodying my invention, parts being in section. Fig. 2 is a front elevation of the same. Fig. 3 is a detail sectional view. Fig. 4 is a detail view of a slightly-modified construction.

1 represents the sides of a suitable portable casing having a top 2 and an intermediate partition 3, in the rear end of which is mounted a block 4.

5 is a bell having suitable mechanism for operating the tapper thereof, said bell being secured to the under side of the partition 3 and provided with a suitable push-button 6.

7 is a hinged lever, the member 8 of which is secured to the block 4 by means of clamps and set-screws 9. The longer member of the lever 7 projects beyond the front edge of the casing 1 and has secured upon its extreme outer end a receptacle 10.

11 is a weight adapted to enter the receptacle 10 and be suspended thereby, said weight being provided with a cavity 12 in its top, to be hereinafter referred to.

13 is a suitable frame, preferably U-shaped and secured to the top of the weight 11, a ring 14 being secured to the top ends of the U-shaped frame.

15 is a plug of any desirable fusible material or composition positioned within the U-shaped frame 13, said plug having an extension 16 of less diameter which extends through the opening of the ring 14 to a point above the same.

17 is a suitable wire or other suspending medium firmly attached to the center of the fusible plug 15, the upper end of said wire be-

ing secured to an arm 18, attached in a suitable manner to the top of the casing 1.

In the construction shown in Fig. 4 the fusible plug and the weight 11 are of the same construction as heretofore described, as is also the push-button and bell, the only difference being that the strap or lever 19 is secured to the side of a wall and is weighted at the outer end of its free member, the weight 20 being secured to the free end of the lever 19 by means of a wire 21.

It will of course be understood that the plug is formed of a material selected to melt at a predetermined temperature. Referring to Figs. 1 and 2, when the fusible plug 15 melts the material composing it drips into the cavity 12 of the weight 11, and as soon as said plug has melted sufficiently the weight 11 is deprived of its support and falls into the receptacle 10, thereby depressing the lever 7 upon the push-button 6, and thus operating the bell 5 and giving the alarm.

The operation of the modified constructions will from the above description, it is believed, be obvious and will not therefore be described.

In the construction shown in Fig. 6 the push-button in the bottom of the receptacle 10^a may be connected electrically with any suitable alarm mechanism.

It is of course obvious that the fusible material may be graded, so as to fuse at any desired temperature.

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

1. The combination of a fusible plug having a reduced upper end, a suspending medium for the plug, a ring surrounding the reduced upper end of the plug and means connected with the ring for causing an alarm when the plug is fused.

2. The combination of a suspended fusible plug having a reduced upper end, a ring surrounding the reduced end of the plug, a frame suspended from the ring, and means carried by said frame for causing an alarm.

3. In a fire-alarm, a portable case, an alarm carried thereby, a push-button for operating the alarm, a lever normally held off the push-button, but adapted to contact therewith, a receptacle on the lever, an arm supported by the casing on the outside thereof, a fusible device supported by the arm on

the outside of the casing and carrying a weight adapted to drop into the receptacle and depress the lever into engagement with the push-button when the fusible device is
5 fused.

4. In an alarm of the character described, the combination with a fusible plug, a ring secured thereto and a U-shaped frame suspended from said ring, of a weight having a
10 cavity at its upper end adapted to receive

the melted plug, a receptacle adapted to receive said weight, a lever suspending said receptacle, and a push-button and alarm adapted to be operated by said lever.

The foregoing specification signed this 21st 15 day of September, 1904.

WILLIAM D. WATKINS.

In presence of—

ANNA S. DOHERTY,

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