

No. 812,537.

PATENTED FEB. 13, 1906.

O. T. WEISER.
FIRE INSULATOR AND EXTINGUISHER.
APPLICATION FILED APR. 12, 1905.

Fig. 1.

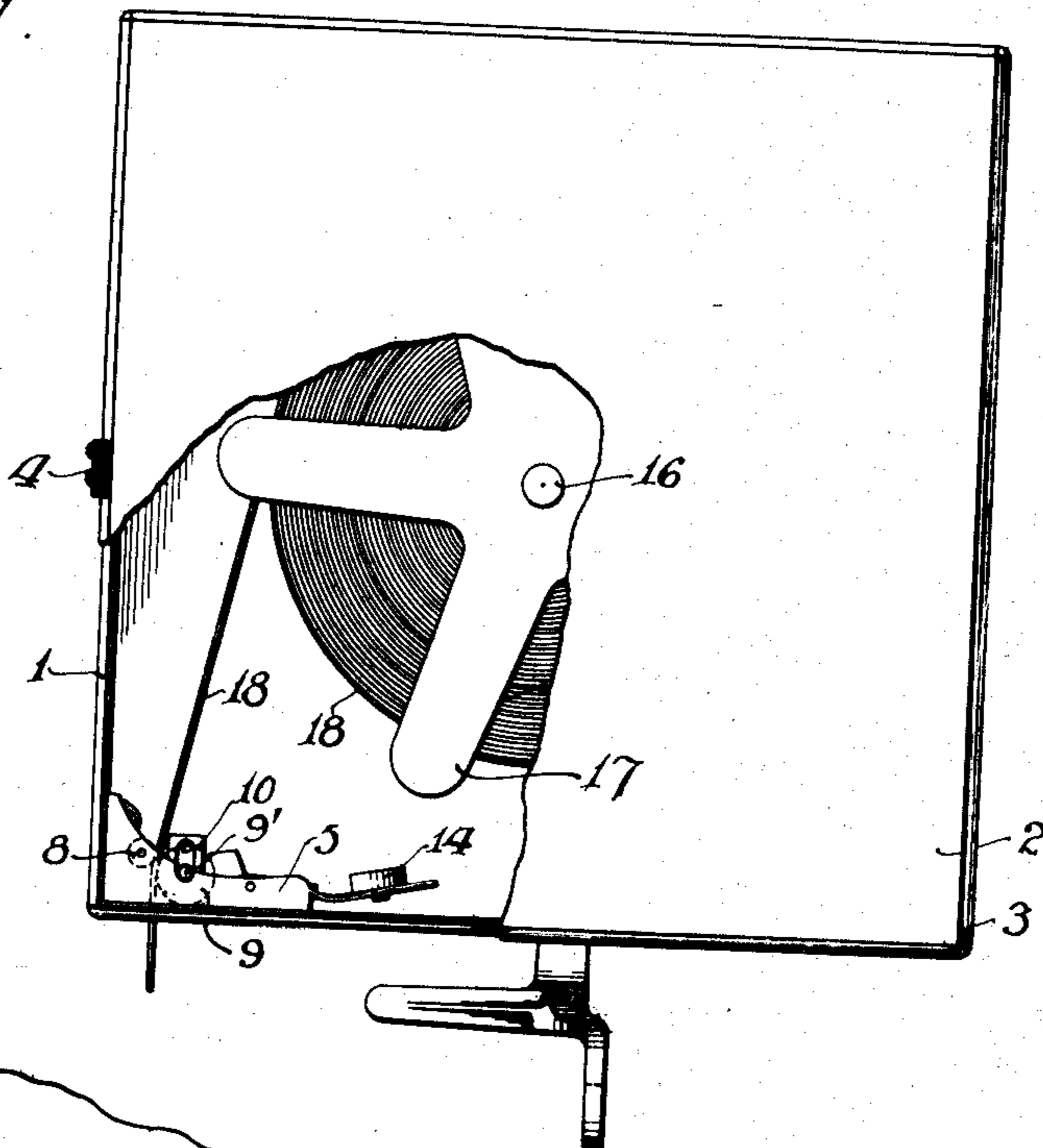


Fig. 2.

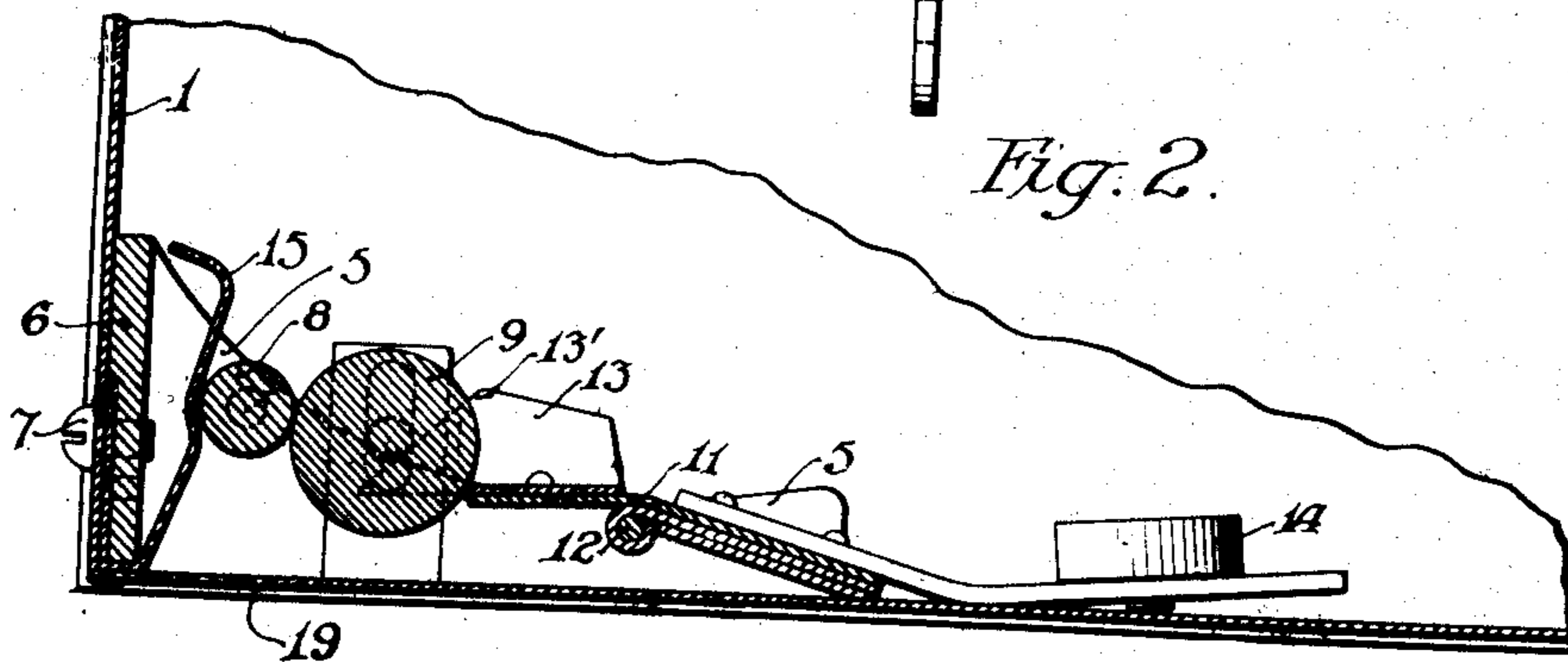
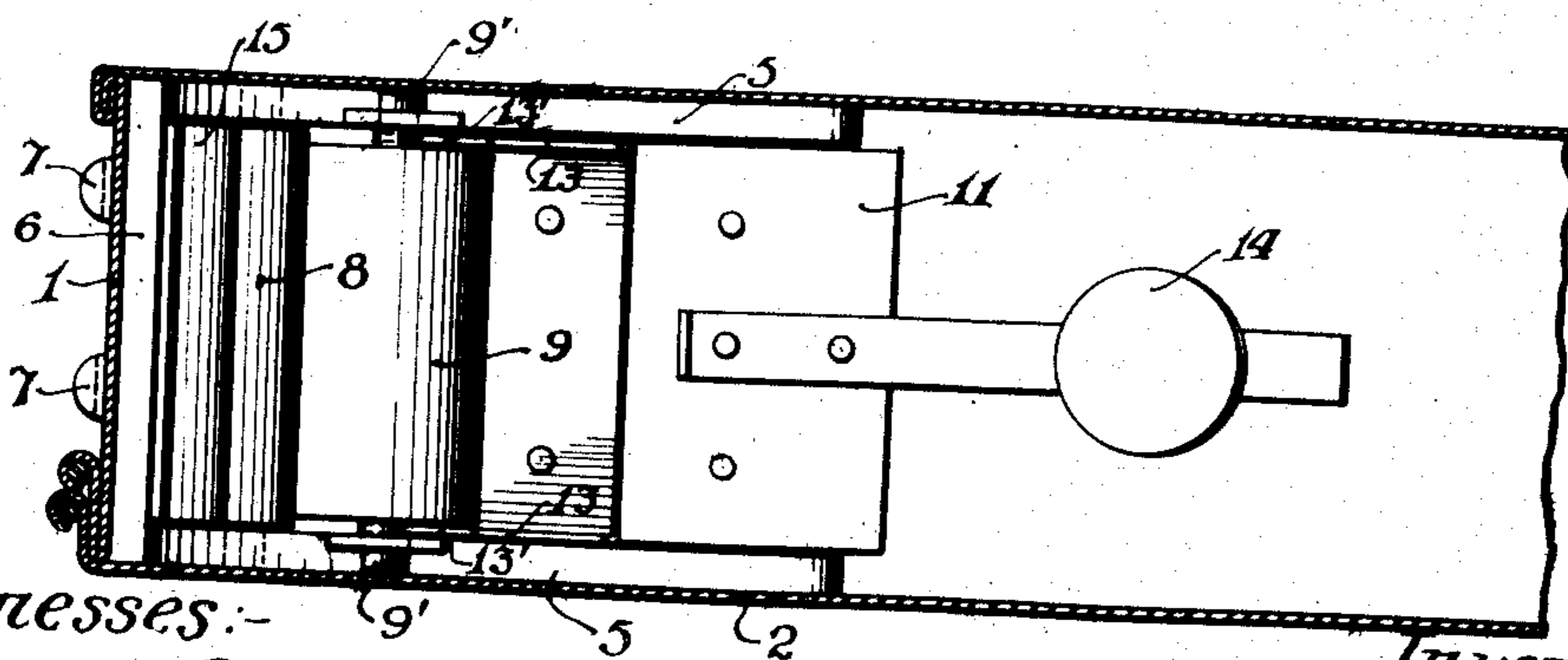


Fig. 3.



Witnesses:-
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UNITED STATES PATENT OFFICE.

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FIRE INSULATOR AND EXTINGUISHER.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, ORVILLE T. WEISER, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain Improvements in Fire Insulators and Extinguishers, of which the following is a specification.

This invention is a fire insulator and extinguisher designed particularly for use in connection with photographic films. Its leading purpose is to prevent the combustion of films used in moving-picture machines, which are commonly made of celluloid, and owing to the combustible nature of this material their unprotected use is a source of considerable danger, especially where they are used in projecting-machines in close proximity to a light. My invention is designed to incase the reels on which the films are wound in fireproof casings having automatic cut-off mechanisms which extinguish the burning film without the casing.

In the accompanying drawings, Figure 1 is a side elevation of an apparatus embodying my invention, the lid of the casing being broken away to show the interior construction. Fig. 2 is a vertical longitudinal sectional view taken through the extinguishing apparatus and the part of the casing to which it is connected, and Fig. 3 is a plan view of the mechanism shown in section in Fig. 2.

The apparatus comprises the fireproof casing 1, having the lid 2 connected therewith by the hinge 3 and the spring-catch 4, the joints being made practically air-tight. Within the casing are secured the housings 5, connected by the web 6, which is fastened to the casing by the screws 7. The housings have journaled therein the rollers 8 and 9, the latter having journals 9' working in vertical slots 10 of the housings. A broad plate 11, extending between the housings, is fulcrumed upon a rod or bearing 12, and secured to this plate in close proximity to the housings are the vertical plates 13, having the inclined edges 13', the latter engaging the journals 9'. A counterweight 14 is secured to the fulcrumed plate or lever 11 to counterbalance the roller 9, supported by the plates 13, and lift it into engagement with the roller 8. A guard 15 is supported by the web 6 and extends between the housings 5 in close proximity to the roller 8.

A spindle 16, fixed within the casing, supports the reel 17, which carries the celluloid film 18. This film is drawn between the rollers 8 and 9 through the slot 19 in the casing, being drawn off the reel between the rollers and through the slot in feeding and carried in the opposite direction onto the reel in winding, duplicate structures being used for feeding the film through the projecting-machine and winding it up after passing therethrough. It will be understood that in either drawing out or drawing in the film it moves freely between the rollers 8 and 9, because its thrust on the roller 9 will tilt the counterweight slightly. The counterweight causes the roller 9 to press the film against the roller 8, however. Hence when the film outside of the casing becomes ignited the flame can follow it no farther than the line where the rollers press it, thereby cutting it off. The housings, guard, and plates described combine with the rollers in cutting off the flame, which is left thereby no passage to the film on the reel or in the casing beyond the rollers.

Having described my invention, I claim—

1. An apparatus of the class described comprising a fireproof casing, housings within said casing, a roller journaled in said housings, a second roller journaled in slots in said housings, and a lever having a movable connection with said second roller whereby the latter may be lifted into engagement with said first roller.

2. An apparatus of the class described comprising a fireproof casing, a reel journaled in said casing, an aperture in said casing, housings in said casing, rollers journaled in said housings, one of said rollers having spindles thereon movable in slotted supports therefor, and a broad lever extending between said housings and having inclined members for holding said rollers together.

3. An apparatus of the class described comprising a tight fireproof casing having a narrow slot therein, a pair of rollers within said casing adjacent to said slot, said slot and rollers being adapted for passing a film, a film-reel supported in said casing, and means co-acting with said rollers for preventing the passage of fire to the film between said reel and rollers.

4. An apparatus of the class described comprising a tight fireproof casing having a slot therein, a pair of rollers within said casing ad-

jacent to said slot, said slot and rollers being adapted for the passage of a film, and means coacting with said rollers for preventing the passage of fire beyond said parts into said casing, said means comprising a support having slots in which one of said rollers is adapted to reciprocate from and toward the other.

In testimony whereof I have hereunto set my hand this 5th day of April, 1905, in the presence of the subscribing witnesses.

ORVILLE T. WEISER.

Witnesses:

ROBERT JAMES EARLEY,
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