H. EWOLDT.

FIRE-EXTINGUISHER.

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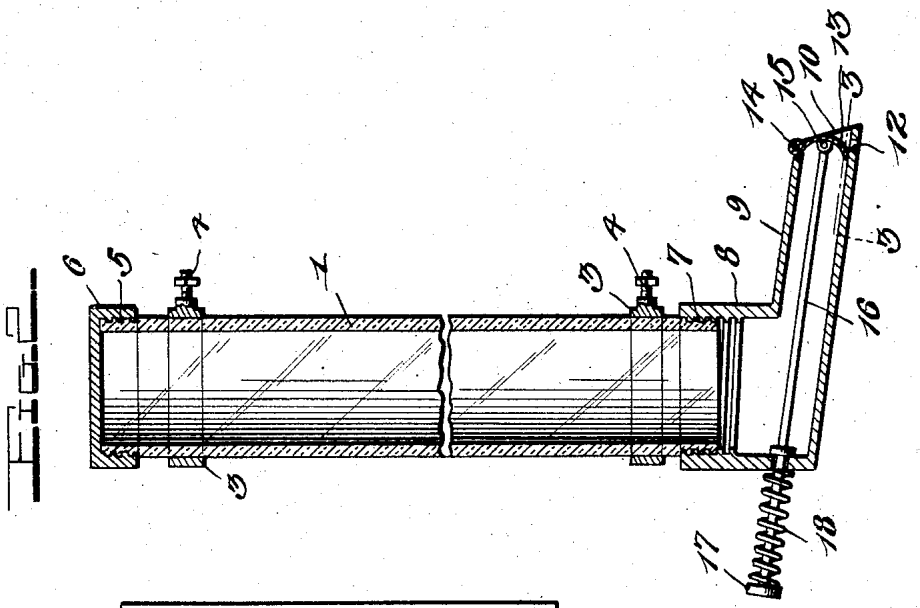
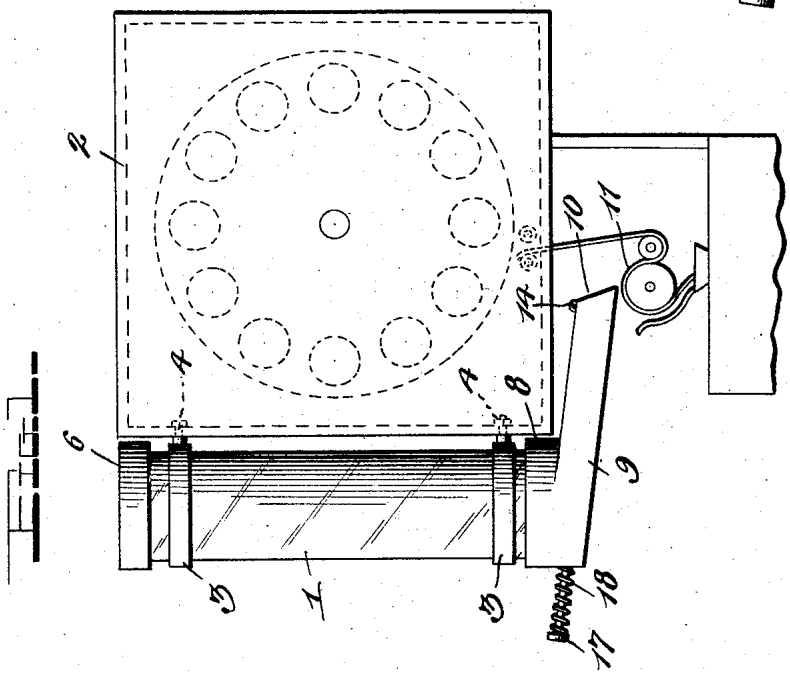
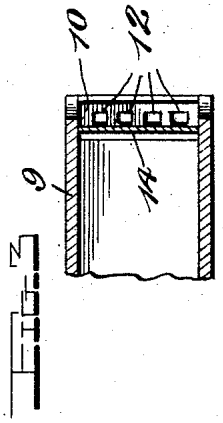
1,063,122. Patented May 27, 1913.







Inventor

Henry Ewoldt,

Witnesses

Chas. L. Griesbauer.

G. B. Norton.

By *Watson E. Coleman*

Attorney

UNITED STATES PATENT OFFICE.

HENRY EWOLDT, OF HOLSTEIN, IOWA, ASSIGNOR OF ONE-FOURTH TO PETER J. A. SCHNOOR, OF HOLSTEIN, IOWA.

FIRE-EXTINGUISHER.

1,063,122. Specification of Letters Patent. Patented May 27, 1913.

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To all whom it may concern:

Be it known that I, HENRY EWOLDT, a citizen of the United States, residing at Holstein, in the county of Ida and State of Iowa, have invented certain new and useful Improvements in Fire-Extinguishers, of which the following is a specification, reference being had to the accompanying drawings.

It is well known that many serious fires, accompanied by considerable loss of property and sometimes by the loss of human life, have been occasioned in moving picture theaters by the highly inflammable films catching fire, and with a knowledge of these conditions, my present invention has for its primary object a simple, durable, and efficient construction of device which may be easily secured to the reel box of a moving picture machine, whereby, should the films take fire, some liquid or dry fire extinguishing substance may be sprayed upon the film and put out the fire.

The invention also has for its object a simple device of this character which is constructed of few and simple parts that may be easily manufactured and readily assembled and disassembled for the purposes of refilling, cleaning, or repair and which will interfere in no wise with the proper feeding of the film. And the invention also aims to generally improve this class of devices and to render safer the operation of moving picture apparatus.

With these and other objects in view as will more fully appear as the description proceeds, the invention consists in certain constructions, arrangements, and combinations of the parts that I shall hereinafter fully describe and claim.

For a full understanding of the invention, reference is to be had to the following description and accompanying drawing, in which:—

Figure 1 is a side elevation of my device. Fig. 2 is a longitudinal vertical section thereof, and, Fig. 3 is a fragmentary horizontal section.

Corresponding and like parts are referred to in the following description and designated in the accompanying drawing by like reference characters.

My improved fire extinguishing apparatus for use in connection with moving picture machines includes a preferably cylindrical container 1 for dry or liquid fire extinguishing chemicals, said container being formed preferably of glass, although it may be formed of any desired substance or material. The container 1 is designed to be secured to one side of a reel box 2, bands 3 being provided for this purpose in the present instance and secured to one side of the reel box by bolts and nuts 4 with which said bands are provided, as clearly illustrated in the drawing. The upper end of the container 1, it being of course understood that the container will be held in vertical position on the reel box, is preferably formed with exterior screw threads 5 designed for engagement by a screw cap 6 which may be easily removed whenever it is desired to refill the container. The lower end of the container 1 is formed with screw threads 7 by which it is detachably connected to the interiorly threaded upwardly projecting neck 8 of an inwardly and downwardly inclined chute or casing 9 which is suspended from the container, as shown. The discharge end of the casing 9 is positioned as desired over the film 11 and contains in its bottom wall any desired number of orifices 12 through which the fire extinguishing substance is designed to be fed on to the film in case the latter should catch fire. Within the casing 9 is a preferably curved transversely extending valve plate 13 which normally cuts off the orifices 12 from the remaining portion of the casing, the valve plate 13 being hinged at its upper end as indicated at 14 and being pivotally connected as at 15 to the forward end of a longitudinally extending rod 16. This rod extends out of the rear end of the casing 9 and is provided with a finger knob 17, and a coil spring 18 encircles the rear protruding end of the rod 16 and bears at one end against the knob 17 and at its opposite end against the rear side of the casing, thereby tending to hold the valve plate 13 in its closed position.

From the foregoing description in connection with the accompanying drawing, the operation of my improved fire extinguishing device for moving picture machines will be apparent.

In the practical use of the device, the container 1 is secured to the reel box 2 and is filled with the desired chemical, the chute

9 being secured to the lower end of the container 1 and, owing to the screw threaded connection between the casing and the container, being swung around until its free or inner end is properly positioned over the film. In case the film catches fire, it is only necessary for the operator of the machine to press inwardly upon the finger piece or knob 17, whereupon the rod 16 will be pushed inwardly and swing the valve plate 13 out beyond the transversely extending series of orifices 12, so as to permit the fire extinguishing fluid or powder, as the case may be, to flow downwardly on the burning film to extinguish the fire.

If desired, the valve plate 13 may be formed of spring material and inwardly bowed in its operative position after it cuts off the orifices 12 from the major portion of the casing. When it is thus formed, it is evident that when the plate is pushed forwardly by the rod 16 and passes the orifices 12, it will straighten out and catch on the inner lower edge of the casing and thereby be held in open position against the tension of the spring 18 so that the operator need no longer pay attention to the extinguishing apparatus but give his attention to providing for the safety of his moving picture machine.

While the accompanying drawing discloses what I believe to be the preferred embodiment of my invention it is to be understood that the invention is not limited thereto, but that various changes may be made in the construction, arrangement and proportions of the parts without departing from the scope of the invention as defined in the appended claims.

Having thus fully described my invention what I claim is:—

1. A device of the character described, including a container for a fire extinguishing substance, a casing having a screw threaded connection with the lower end of said container and formed with outlet orifices, a valve plate adapted to cut off said orifices from the remaining portion of the casing, and means whereby the valve plate may be pushed past said orifices for the purpose specified.

2. A device of the character described, including a container, a casing detachably connected to said container at one end and projecting in angular relation thereto, the casing being formed at one end with outlet orifices, a hinged plate carried by the casing and adapted to cut off said orifices from the remaining portion of the casing, an actuating rod extending longitudinally in said casing and operatively connected to said valve plate, and a spring tending to hold said rod in its rearward position.

3. A device of the character described, including a container, a casing connected thereto and formed at one end with outlet orifices, a normally bowed spring valve plate mounted in said casing and adapted to cut off the orifices from the remaining portion of the casing, and means for springing said plate forwardly past said orifices into engagement with the end of the casing.

In testimony whereof I hereunto affix my signature in the presence of two witnesses.

HENRY EWOLDT.

Witnesses:

PETER J. A. SCHNOOR,

A. N. BERTELSEN.