G. J. GILMORE.

FILM CABINET.

APPLICATION FILED FEB. 5, 1910.

976,068.

Patented Nov. 15, 1910.

Fig. 4.

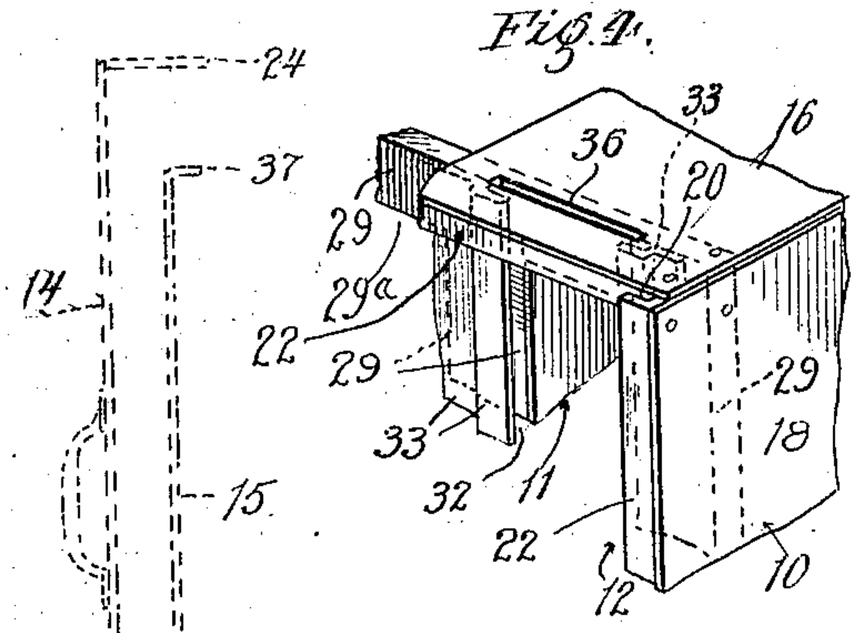


Fig. 2.

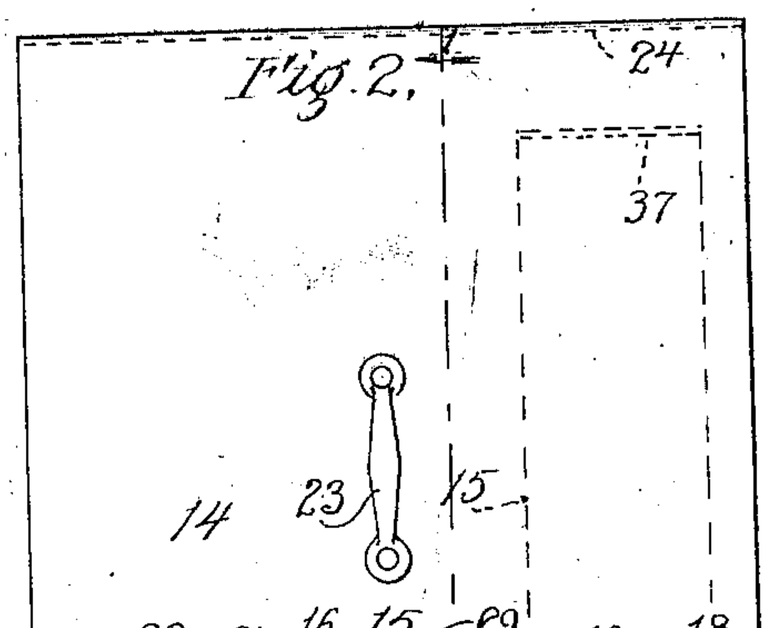


Fig. 1.

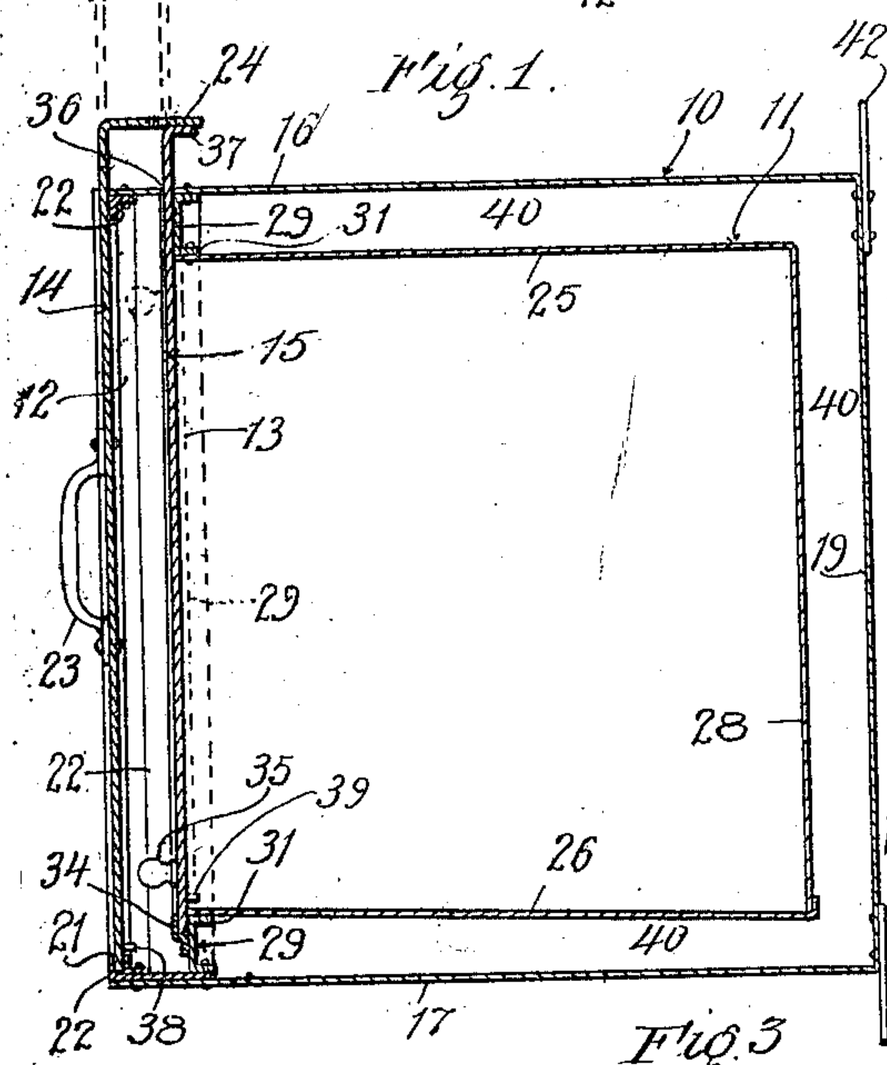


Fig. 3.

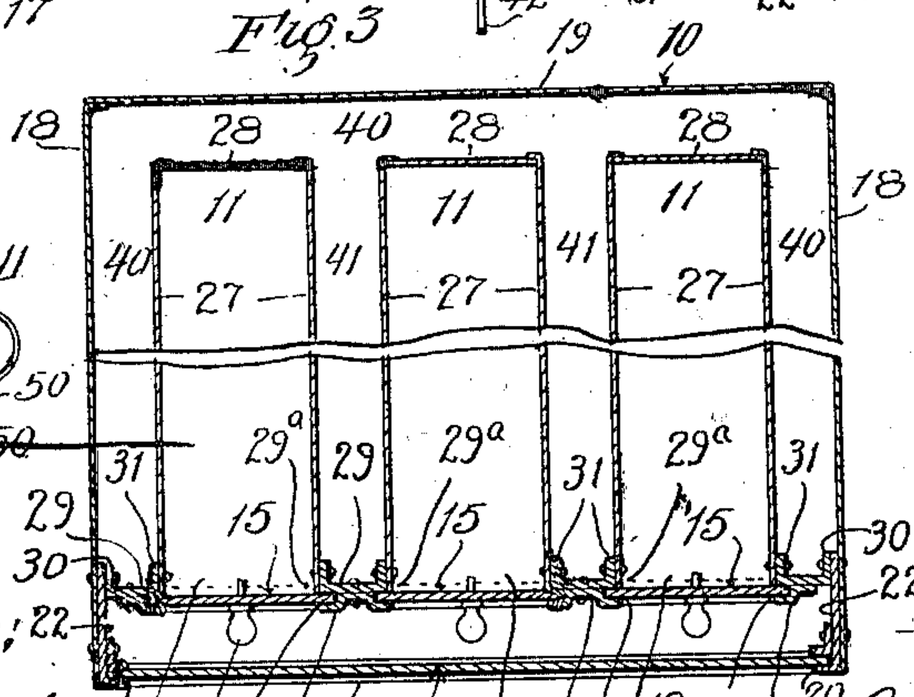


Fig. 6.

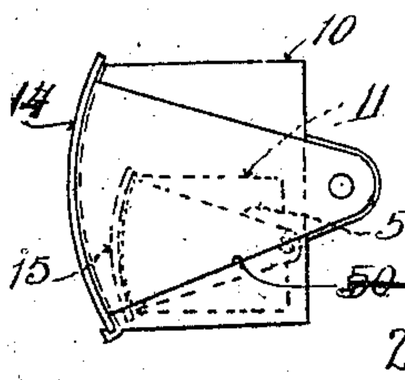
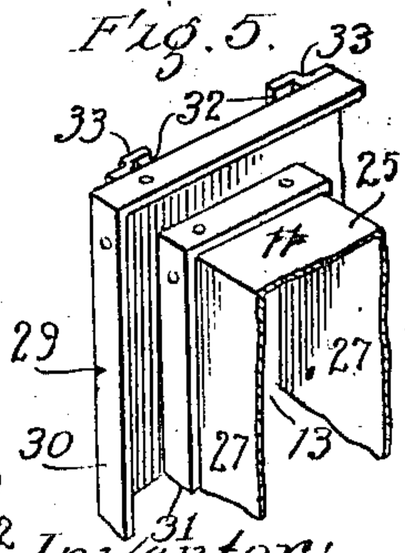


Fig. 5.



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UNITED STATES PATENT OFFICE.

GEORGE J. GILMORE, OF CHICAGO, ILLINOIS

FILM-CABINET.

976,068. Specification of Letters Patent. Patented Nov. 15, 1910.

Application filed February 5, 1910. Serial No. 542,318.

To all whom it may concern:

Be it known that I, GEORGE J. GILMORE, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented new and useful Improvements in Film-Cabinets, of which the following is a specification.

This invention relates to film cabinets of that class adapted for storing combustible or inflammable films and protecting them against injury or destruction by fire. Cabinets of this class are intended for use in connection with the moving picture industry—that is to say, they are employed for storing or holding spools of film such as are used upon moving picture machines, commonly known as kinetoscopes. Such films comprise long strips or ribbons having pictures thereon of objects in motion, each picture following the other in regular sequence so that when the film is "run" through the machine and the pictures are projected in rapid succession upon a curtain or screen, it has the effect of producing the appearance of animated objects in motion. Films of this type are usually made of highly inflammable or combustible material, so that when subjected to a very high degree of heat or to a flame or fire, they ignite readily and are quickly consumed, thereby endangering any other films lying near by and also the structure itself in which they are contained.

One of the objects of this invention is to provide a cheap, simple and efficient cabinet adapted to hold a plurality of films and having means for protecting each individual film (not already exposed) from fire, located either outside of the cabinet or within the same.

Other objects and advantages will appear in the course of this specification and to such ends this invention consists in a fireproof film storing cabinet having a plurality of jacketed individual compartments provided with gravity doors or covers that are held against accidental outward movement from internal forces.

The invention further consists in the several novel features of construction, arrangement and combination of parts hereinafter fully set forth and particularly pointed out.

The invention is clearly illustrated in the drawings furnished herewith in which—

Figure 1 is a vertical section through a cabinet containing the invention, the line of section being indicated at 1—1 in Fig. 2, Fig. 2 is a front view of the cabinet with one of the chambers or compartments exposed to view, Fig. 3 is a horizontal section partly broken away and taken on the line 3—3 of Fig. 2, Fig. 4 is a fragmental perspective view of a front upper corner of the cabinet with the doors or covers removed, Fig. 5 is a similar view looking from the inside with other parts removed and Fig. 6 is a diagrammatic side view of a modified form of the invention.

In these views 10, is the outer shell or casing of the cabinet, and 11, 11, 11, the inner shells that receive the spools of film. The outer casing and inner shells preferably open out in one direction through a main entrance opening 12, in the outer casing and individual openings 13, 13, 13 in the inner shells. A door or cover 14, is provided for the main opening 12, and individual doors or covers 15, 15, 15, are provided for the openings 13. The doors 14, 15, move freely and operate to close the openings under the influence of gravity and seal the same against the passage of fire therethrough. The structure thus far described forms a cabinet having individual compartments that are protected from each other and on their exterior, each capable of being exposed to view independently of the other.

In construction the outer casing comprises a top 16, bottom 17, sides 18, 18, and rear wall 19, preferably of sheet metal suitably joined together. At the front are vertical guideways or grooves 20, 20, and a horizontal groove 21, which are preferably provided on a frame 22, secured to the casing 10. The door 14, slides in the guideways 20, and is provided with a handle 23, by means of which it may be raised. The upper edge of the door may be bent back to form a flange 24, for stiffening the same, and for engaging the inner doors to insure the closing thereof. This single door, it will be observed, covers the entire front of the cabinet and when closed completes the inclosure or jacket for the inner chambers or compartments. Each of the inner shells comprises a top 25, bottom 26, sides 27, 27, and rear wall 28, suitably joined together. The shells are secured to a plate 29, which extends across the casing near its forward end. Said plate is preferably formed with side flanges 30, that are riveted or otherwise secured to the outer casing. Openings 29ª, that coincide with the openings 13, in the inner shells, are left

in the plate 29, and flanges 31, are provided on the edges of said openings, to which flanges are riveted or otherwise secured, the front edges of the inner shells. Guideways 32, are provided on the plate 29, and the inner doors slide in said guideways. In the preferred form of the invention, rabbeted strips 33, are secured to the plate to form the guideways, and if desired similar strips 34, may be provided at the bottom of the plate to receive the lower edges of the doors. The doors 15, project out through slots 36, in the top of the casing, and the upper edges of said doors may be bent back to form reinforcing flanges 37. Handles 35, may be attached to the inner doors to enable the user to readily open them. If desired, stops 38, 39, may be provided upon the doors to limit their upward movement, thereby preventing the user from removing the doors. The inner shells are made of such size compared with the outer casing, as to leave air spaces 40, between the shells and casing, and air spaces 41, between the adjacent shells, and the plate 29, is set back considerably from the main door 14, so that the inner shells are completely surrounded by protecting air spaces which insure perfect safety to the contents of each individual chamber or compartment.

The cabinet may be provided with ears or lugs 42, by means of which it may be secured to a wall or other support and the bottoms of the shells may incline downwardly toward the rear of the cabinet so that the film spools may roll back away from the opening in the front.

From my experiments I have discovered that it is important to provide means for preventing the doors from being forced open from the inside of the cabinet because the film in one chamber may become ignited while the door thereof is open, and if the latter is then closed while the film is burning, the expansion of the air and gases in the chamber act to force the door open, thereby permitting the flames to escape and spread to the adjacent chambers. I have found that catches, locks, etc., are not always effective, because frequently they fail to lock, unless the attendant is very careful. By providing guiding means on the cabinet for holding the doors against outward movement, regardless of this position—that is, whether they are completely closed or not—this danger is avoided.

It is obvious that the details of construction can be modified somewhat without departing from the scope of the invention, for instance, in place of having the doors move in vertical guideways, they can be arc shaped in form, and carried by arms 50, that are fulcrumed at a point near the rear of the cabinet as shown in the modified form illustrated diagrammatically in Fig. 6. In this case the film receiving chamber 11, may be placed within the casing 10, as in the preferred form, with the openings facing one way. The doors 14, 15, instead of sliding in grooves, as do the doors of the preferred form, are carried by arms 50, that are fulcrumed upon the cabinet so that the doors may be raised to uncover the openings by swinging them up on their fulcrums. The side walls of the casing and film receiving chambers should of course conform to the arc of the doors so as to leave no gaps. In this case also the door will remain closed regardless of pressure against its sides either from within or without the cabinet.

In use a spool of film may be placed in each chamber and the doors closed. To remove a spool of film, the outer door is first raised and then the door of the chamber containing the desired spool of film, is raised. When the film has been removed, the doors are released and they fall under the influence of gravity to their closed positions, thereby sealing the openings against the passage of fire. In case the raised inner door does not drop when released, the flange 24, on the outer door engages with said raised door when said outer door is dropped, thereby positively effecting the closing of said inner door simultaneously with the closing of the outer door.

I am aware that various alterations and modifications of this device are possible without departing from the spirit of my invention, and I do not therefore desire to limit myself to the exact form of construction shown and described.

I claim as new and desire to secure by Letters Patent:

1. A film cabinet comprising in combination, an outer casing, a plurality of inner film receiving chambers therein, spaced away from the outer casing and from each other to leave air spaces therebetween, said inner chambers having doorways opening into the outer casing, a sliding door for the opening of each chamber arranged to close under the influence of gravity, and guiding means for controlling said doors to move in a direction longitudinal of themselves.

2. A film cabinet comprising in combination, an outer casing having an opening in its front which is closed by a door arranged to close under the influence of gravity, a plurality of individual film receiving chambers spaced away from said casing and away from each other to leave air spaces therebetween, said chambers having openings that open into the outer casing and are closed by doors arranged to close under the influence of gravity and means for preventing accidental outward movement of the inner doors.

3. A film cabinet comprising in combination, an outer casing having an opening in its front which is closed by a door arranged

to close under the influence of gravity, a plurality of individual film receiving chambers spaced away from said casing and away from each other to leave air spaces therebetween, said chambers having openings that open into the outer casing sliding doors arranged to close under the influence of gravity and guideways for controlling said inner doors to move in a direction longitudinal of themselves.

4. A film cabinet comprising in combination, an outer casing, a plurality of inner film receiving chambers therein, spaced away from the outer casing and away from each other to leave air spaces therebetween, said inner chambers having doorways opening into the outer casing, a movable door for the opening of each chamber arranged to close under the influence of gravity, and means for preventing accidental outward movement of the inner doors.

5. A film cabinet comprising in combination, an outer casing having an open front adapted to be closed by a door which operates to close under the influence of gravity and seal the interior of the casing against the entrance of fire, a plurality of film receiving chambers within said casing, each having an entrance opening that opens out into the outer casing, a vertically sliding door for each of said last named openings guided to move in front thereof, and operating to close under the influence of gravity and seal the opening against the passage of fire.

6. A film casing comprising in combination, an outer casing having an entrance opening, a vertically sliding door for said opening, operating to close under the influence of gravity and seal the opening against the passage of fire, guideways for said door, a plurality of film receiving chambers supported within said casing and spaced therefrom to leave an air space between the casing and chambers, said chambers having individual openings that open into the outer casing, a vertically sliding door for each of said last mentioned openings, operating to close under the influence of gravity and seal said openings against the passage of fire and guideways for said last named doors.

7. A film cabinet comprising in combination, an outer casing open at the front and having a vertically sliding door guided thereon, and operating to close under the influence of gravity and seal said opening against the entrance of fire, a plate secured to said casing and spaced away from said door, and having a plurality of entrance openings, film receiving chambers extending back from said plate and into the outer casing, said chambers being spaced away from the casing and away from each other, and individual, vertically sliding doors for the openings to the chambers, guided to move upon said plate and operating to close under the influence of gravity and seal said last named openings against the passage of fire.

8. A film cabinet comprising in combination, an outer casing having an opening in its front which is closed by a door arranged to close under the influence of gravity, a plurality of inner individual film receiving chambers having openings that open out into the outer casing and are closed by doors arranged to close under the influence of gravity said outer door having means, arranged to engage with any of said inner doors and adapted to positively move the same in unison with the outer door in its closing movement.

9. A film cabinet comprising in combination, an outer casing having an opening in its front which is closed by a door arranged to close under the influence of gravity, a plurality of inner individual film receiving chambers having openings that open out into the outer casing and are closed by doors arranged to close under the influence of gravity, a rearwardly projecting flange on the outer door, arranged to engage with any raised inner door, and operating to positively move the same to closed position simultaneously with the closing of the outer door.

10. A film cabinet comprising in combination, an outer casing, a plurality of spaced film receiving chambers therein, having downwardly and rearwardly sloping bottoms, and having openings which open into the outer casing and individual, gravity operating doors for said openings.

In witness whereof, I have hereunto subscribed my name at Chicago, Cook county, Illinois, this 3rd day of February 1910.

GEORGE J. GILMORE.

Witnesses:
CHARLES O. SHERVEY,
FANNIE F. RICHARDS.