March 25, 1924. 1,487,850

J. A. MILLER ET AL

FIRE EXTINGUISHER HOLDER

Filed March 1, 1922

Fig-1.

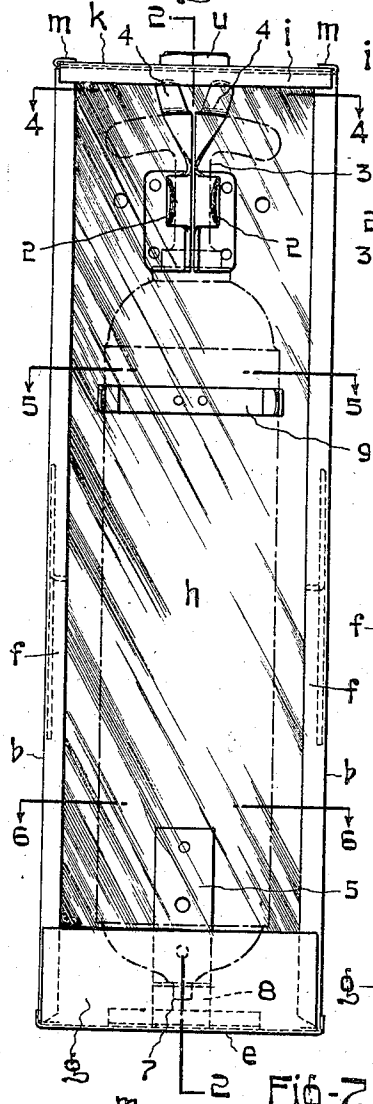


Fig-2.

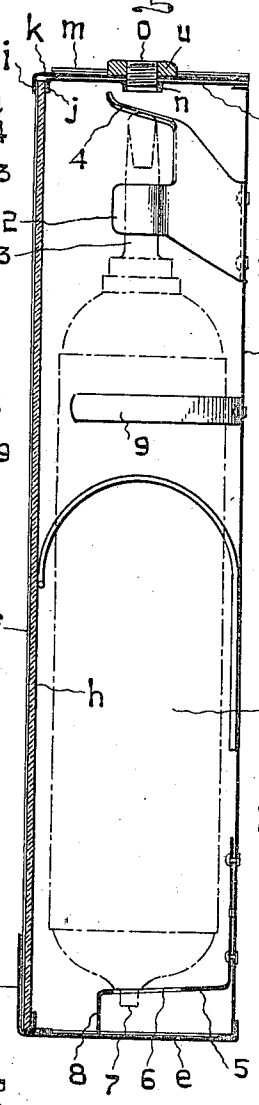


Fig-3.

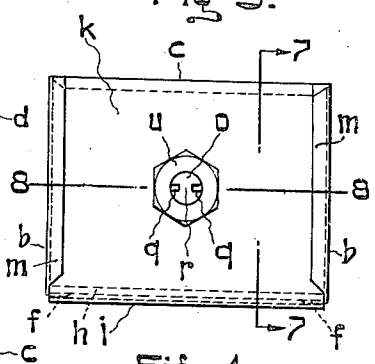


Fig-4.

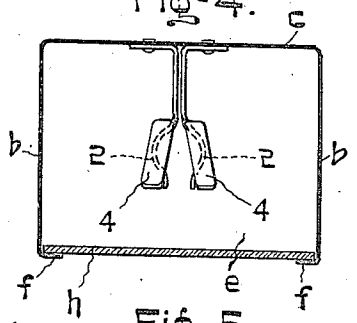


Fig-5.

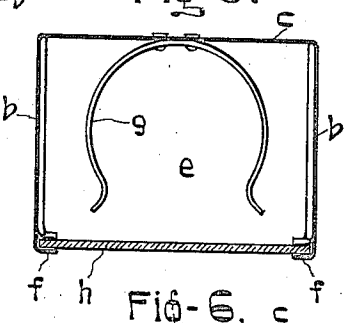


Fig-6.

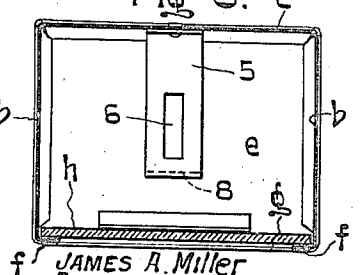


Fig-7.

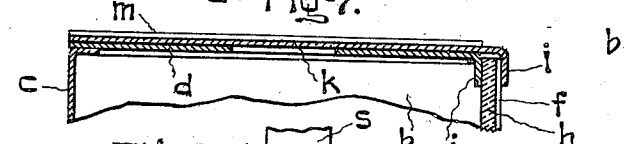
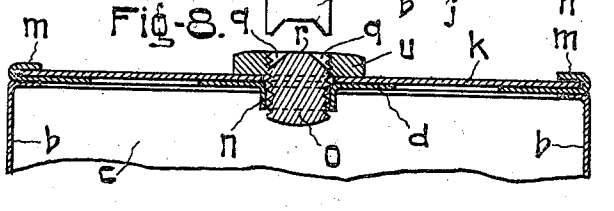


Fig-8.



JAMES A. Miller
EDWARD P. GROSCLAUDE
Inventors.

William L. Teat
Attorney.

Patented Mar. 25, 1924. 1,487,850

UNITED STATES PATENT OFFICE.

JAMES A. MILLER AND EDWARD P. GROSCLAUDE, OF MONTREAL, QUEBEC, CANADA, ASSIGNORS TO PYRENE MANUFACTURING COMPANY OF CANADA, LIMITED, OF MONTREAL, QUEBEC, CANADA, A CORPORATION OF CANADA.

FIRE-EXTINGUISHER HOLDER.

Application filed March 1, 1922. Serial No. 540,295.

To all whom it may concern:

Be it known that we, JAMES A. MILLER and EDWARD P. GROSCLAUDE, a subject of the King of Great Britain and a citizen of the United States, respectively, and residents of the city of Montreal, Province of Quebec, Dominion of Canada, have invented certain new and useful Improvements in Fire-Extinguisher Holders; and we do hereby declare that the following is a full, clear, and exact description thereof.

Our invention relates particularly to the means for supporting and containing the receptacle for the fire extinguisher liquid.

The invention has for its object to provide a fire extinguisher of this type in which the receptacle or extinguisher proper is completely enclosed and thereby guarded against tampering while at the same time, according to the present invention, permitting of inspection. Our invention also aims to prevent, in an extinguisher of this type, the accidental turning of the handle, by vibration for instance. It also has for its object to provide for the receptacle or fire extinguisher proper being readily set in place and held steadily against displacement by a detachable connection at the bottom and a clasping device near the top; a further object being to prevent vibration of the glass forming the front of the containing means in which the receptacle or fire extinguisher proper is contained, the glass exposing the fire extinguisher proper and preventing unauthorized access thereto without the breaking of the glass.

More specifically stated the invention consists of an upright oblong rectangular box the front of which has a transparent face, preferably a sheet of glass slid into guides from one end, preferably the top. The bottom ends of these guides terminates at the bottom of the box while the opposite ends or tops are closed by a slide slipped into place and locked after the glass has been inserted. The purpose of this lock is to permit the slide to be removed and the glass to be withdrawn to take out the fire extinguisher proper to be tested. The fire extinguisher proper is slid in place by a double spring clip secured to the back of the box, a spring clip the fingers of which clasp the receptacle near its upper end, a slotted bracket fastened in the bottom of the box to receive the nozzle in the lower end of the receptacle, while the glass is held against vibration by the pressure of springs within the box and pressing it against its guides.

For full comprehension, however, of our invention reference must be had to the accompanying drawings in which similar reference characters indicate the same parts and wherein:

Figure 1 is a front elevation of a supporting box within which a fire extinguisher proper is held according to our invention;

Figure 2 is a vertical sectional view taken on line 2—2 Figure 1;

Figure 3 is a plan view of the box;

Figure 4 is a horizontal sectional view taken on line 4—4 Figure 1;

Figures 5 and 6 are also horizontal sections taken on line 5—5 and 6—6 respectively, Figure 1; and

Figure 7 is a vertical sectional view taken on line 7—7 Figure 3 and illustrating the means for holding the glass.

Figure 8 is an enlarged sectional view of the top of the supporting box and illustrating more clearly the upper end of Figure 2.

The box of our fire extinguisher is of the type usually employed for fire extinguishers of the pump type and is of oblong form and vertically disposed with open front covered by a sheet of glass *h*. The sides *b*, back *c*, top *d* and bottom *e* are intact while the front edges of the sides are flanged as at *f* and the bottom is turned up over the lower ends of these flanges as at *g* and soldered in place. The front edge of the top has a turned down front flange *j* to serve as a back rest for the top edge of the glass and its side edges are turned upwardly and inwardly as at *m* to present guides for the removable locking slide *k* which also has a front flange *i* to lock the glass in place. All these parts are and may be of usual construction.

Heretofore considerable trouble has been experienced from the fact that it has not been possible to remove the fire extinguisher proper from its box without breaking the glass. We overcome this defect by forming the top of the box with a central opening *n* in which the lower end of a key *o* carried by a slide *k* protrudes, thus locking the slide in place after it has been slid to position holding the upper end of the glass. This key therefore consists of a screw-bolt

the slot of which is of special form to receive a special key to prevent tampering. This special form may consist, as shown, of notches *q* in the opposite side of the top of the bolt and in diametrical line thus presenting a relatively raised central portion *r* flush with the top of the bolt. A key *s* is suitable for such a lock. This lock is threaded through a nut *u* soldered to or otherwise rigidly secured upon the top of the slide in juxtaposition with the openings therethrough. With this construction, upon unlocking the slide it may be withdrawn and the glass removed, thus permitting the fire extinguisher to be taken out and inspected and if necessary recharged.

Another defect in connection with fire extinguishers of this type has been that vibration of the building, train or vessel in which they are located caused the handle to be turned and the extinguisher to leak. Vibration also causes vertical displacement of the fire extinguisher proper and sometimes it is displaced laterally. All this shifting damages the extinguisher and tends to destroy its effectiveness. We have succeeded in eliminating these disadvantages by attaching within the box to the back thereof at the top a duplex spring clip presenting a forwardly extending U-shaped clip 2 adapted to receive and clasp the stem 3 of the handle of the extinguisher and an upwardly and forwardly extending clip presenting two downwardly acting spring fingers 4 adapted to press upon the top of the handle and hold the extinguisher yieldingly and firmly with its nozzle in engagement with a slotted bracket 5 the slot 6 in which receives the nozzle 7 of the extinguisher. This bracket is preferably of angular form one leg being riveted to the back of the box near the bottom, the other leg of which extends parallel to the latter and slightly above it while the end of this leg has a turned down foot 8 soldered to the bottom of the box. The pressure of the presser-fingers 4 maintains the fire extinguisher firmly against vertical displacement. The clip 2 and the slotted bracket are supplemented in the function of preventing lateral displacement and the fire extinguisher is stabilized by a spring clip 9 riveted to the back of the box in position to have its arms clasp the extinguisher near the top of its body portion. Coaction of these three sustaining elements effectively prevents any displacement either vertically or laterally of the extinguisher proper within the box and at the same time permits it to be removed after the glass has been taken out.

The glass is held firmly against its guides by a pair of spring-wire holders adapted to bear against the edge portions of the inside surface of the glass and cause it to be held firmly in its guides.

What we claim is as follows:

1. A fire extinguisher holder consisting of an oblong box with back, sides, bottom and top and an open front, the sides and top having inward flanges and the top flange being set rearwardly from the side flanges; a slide upon the top and presenting a flange overhanging the flange at the top; and means for locking the slide in place.

2. A fire extinguisher holder consisting of an oblong box with back, sides, bottom and top and an open front, the sides and top having inward flanges and the top flange being set rearwardly from the side flanges; a slide upon the top and presenting a flange overhanging the flange at the top; and means for locking the slide in place, such means consisting of a lock carried by the slide and adapted to engage an opening in the top of the box.

3. A fire extinguisher holder consisting of an oblong box with back, sides, bottom and top and an open front, the sides and top having inward flanges and the top flange being set rearwardly from the side flanges; a slide upon the top and presenting a flange overhanging the flange at the top; and means for locking the slide in place, such means consisting of a lock carried by the slide and adapted to engage an opening in the top of the box, such lock consisting of a nut carried rigidly by the slide and a bolt threaded through the nut and having notches in the sides of its upper end for the purpose described.

In testimony whereof we have signed our names to this specification in the presence of two witnesses.

EDWARD P. GROSCLAUDE.
JAMES A. MILLER.

Witnesses:
GORDON G. COOKE,
HENRY WALKER.