(No Model.)

P. J. REGAN.

FIRE ALARM.

No. 521,919. Patented June 26, 1894.

Fig. 1.

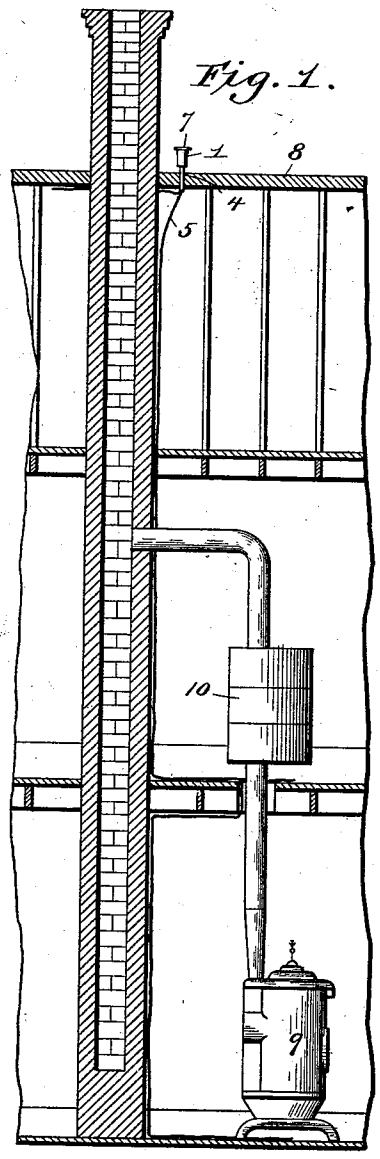


Fig. 2.

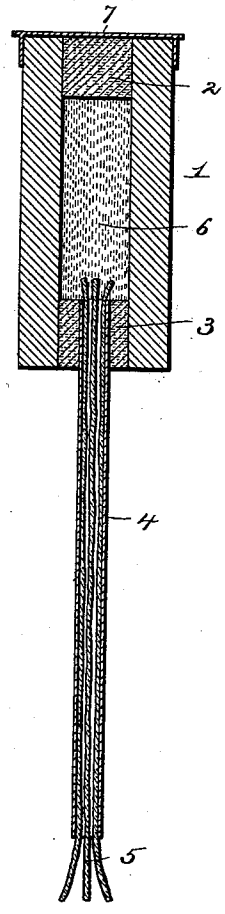
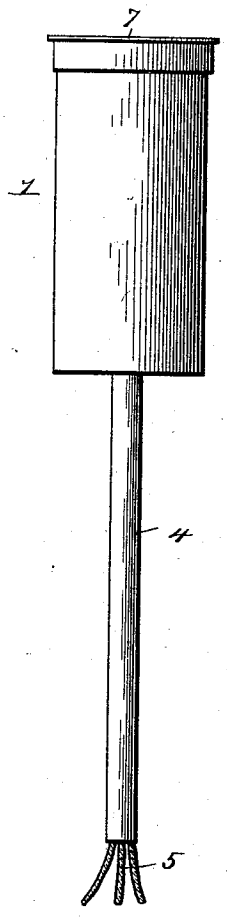


Fig. 3.



Inventor

Patrick J. Regan.

Witnesses

Harry L. Ames.

J. B. Owens.

By his Attorneys.

C. A. Snow & Co.

THE NATIONAL LITHOGRAPHING COMPANY,
WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

PATRICK J. REGAN, OF IOWA CITY, IOWA.

FIRE-ALARM.

SPECIFICATION forming part of Letters Patent No. 521,919, dated June 26, 1894.

Application filed November 21, 1893. Serial No. 491,592. (No model.)

To all whom it may concern

Be it known that I, PATRICK J. REGAN, a citizen of the United States, residing at Iowa City, in the county of Johnson and State of Iowa, have invented a new and useful Fire-Alarm, of which the following is a specification.

The invention relates to that class of fire alarms wherein a detonating signal is employed, and adapted to be exploded by means of a fuse lighted, in its turn, by the fire, an alarm of which it is the purpose of the invention to give; and my invention has for its object the production of a superior device of this class, and one which will give an alarm of a louder and more effective character.

In the accompanying drawings the invention is shown in detail, and therein—

Figure 1 represents a sectional view of a building having my improvements applied, and showing the manner of using them. Fig. 2 is an enlarged section, taken through the torpedo or cartridge. Fig. 3 is an enlarged side elevation of the same.

The reference numeral 1 indicates a cylindrical chamber or receptacle, formed of wood, paper, or asbestus, and open at each end. This cylinder may be formed by rolling sheets of the material and simultaneously gluing them together, or by any other suitable means. It is preferred, however, that the material be of the non-combustible class, since, if otherwise, it might be fired by the explosive contained in the cylinder.

Located in the upper end of the cylinder 1, and fixed securely therein, is the stopper or cork 2, which is immovably secured in place and may be formed of wood, paper, plaster of paris, or any other material suitable for the purpose. 3 indicates a similar cork, and this is arranged in the lower end of the cylinder so as to close it effectively. Secured in the cork 3, and communicating with the interior of the cylinder, is the rigid metallic tube 4. This tube extends downwardly from the cylinder 1 for a distance equal to about twice the length of the cylinder, and its lower end is left open, as shown. Arranged in the tube 4, and extending a short distance into the cylinder 1, are the fuses 5, which are shown to be three in number, and which may be of any class capable of conducting fire to the interior of the cylinder. The interior of the cylinder is filled with any suitable explosive, 6, which is of a quantity that will completely fill the cylinder, and is arranged to communicate with the upper ends of the fuses 5.

Adapted to be placed over the upper end of the cylinder 1 is the waterproof cap 7, which may be constructed of sheet-metal, or any other suitable material, and is of such a size that it will extend a slight distance down the sides of the cylinder. The purpose of this device is to keep the water out of the cylinder, for while it is proposed to waterproof the cylinder, it is possible that some water may find its way through the cork 2 during the continued exposure of the cylinder.

By reference to Fig. 1, the use of my invention will be understood, and there it is shown as arranged with the tube 4 passing through the roof 8, of the building, and terminating a short distance below it, while the upper end, carrying cylinder 1, projects above the roof and, consequently, holds the cylinder in a similar position. The fuses 5 are now carried to various parts of the house, past and to those points where a fire is most likely to originate. Thus, one end of a fuse is shown under the stove 9, while the fuse, on its way to the stove, is passed by the heating drum 10. A second fuse proceeds along the chimney of the house; and so they are arranged, in order that the fire, wherever it starts, will immediately ignite one of the fuses. As soon as this occurs, the fire will be instantly transmitted to the cylinder 1, and upon entering it, will explode the matter contained therein and cause a loud report calculated to alarm the inmates of the house, and all persons in the vicinity of the building.

I contemplate using my invention on board of ships; and when so used, the alarm will be arranged and operate as before described, and hence no particular description is necessary. It is susceptible of use in connection with residences, factories, stores, and indeed all structures which are capable of becoming fired.

Having thus described my invention, what I claim is—

A fire alarm consisting of a body-portion

adapted to receive an explosive material, a metallic tube fitting in the body-portion and having one end in communication with the interior thereof while the remaining end is adapted to project through the outer wall of the house or other structure with which the alarm is used, and a fuse having one end seated in the explosive material of the body-portion and passing through the iron tube, while the remaining end of the fuse proceeds to the interior of the house or other structure, whereby the presence of fire in said house or structure will be communicated to persons in the vicinity thereof, substantially as described.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

PATRICK J. REGAN.

Witnesses:

PHILIP REGAN,

C. M. DUTCHER.