A. OBERNDORF, Jr. SAFE ATTACHMENT.

Patented July 7, 1896. No. 563,681. Fig.I. 0 Fig. 3 me m-INVENTOR Abraham Oberndorf Jr. Jos. a. Ryan ATTORNEYS.

United States Patent Office.

ABRAHAM OBERNDORF, JR., OF CENTRALIA, KANSAS.

SAFE ATTACHMENT.

SPECIFICATION forming part of Letters Patent No. 563,681, dated July 7, 1896.

Application filed April 13, 1396. Serial No. 587,339. (No model.)

To all whom it may concern:

Be it known that I, ABRAHAM OBERNDORF, Jr., of Centralia, in the county of Nemaha and State of Kansas, have invented a new and useful Improvement in Burglar-Proof Attachments for Safes, &c., of which the following is

a specification.

In an application for a patent filed by me October 23, 1895, Serial No. 566,588, allowed 10 January 14, 1896, I have shown and described a device in the nature of a portable attachment which when placed in a safe, vault, or strong room will, in the event of an attempt by burglars to blow open the same, cause the 15 generation of a stifling and poisonous gas, which will make it impossible for the burglar to live in the fumes of the same, and thus prevent him from making away with the booty. That device comprehended a broad 20 fan-like trigger, which I call a "pneumatic" trigger, which is acted upon by the concussion of the blast to trip a hammer and allow its descent from a spring to fracture a bottle containing the ingredients of the poison va-25 pors.

My present invention proceeds upon the same general principle and comprises certain peculiar improvements of the parts in detail, as will be hereinafter more fully described with reference to the drawings, and then

pointed out in the claims.

Figure 1 is a side view, partly in section. Fig. 2 is a sectional edge view, and Fig. 3 is a sectional side view, of the bottle holder and

35 cage.

In the drawings, A represents the frameplate, which is designed to be hung up or detachably fastened within the safe or vault, for which purpose a ring or loop A' may be 40 used, or screws passing through holes a may be employed. On this plate is attached a marginal inclosing flange B, which with a detachable grating B' over its open side forms a housing for a pneumatic trigger C. This 45 pneumatic trigger is in the nature of a fanblade corresponding in shape to the upper part of the housing, and lying within the same immediately behind the grating B', being sustained upon a pivotal axis at c c and 50 held to the front parallel with the grating by a flat spring C' behind it. To the fan-blade of this trigger is rigidly attached an arm D,

extending laterally and having a pin e, playing in a recess B² of a right-angular trippingslide E. This slide passes through the side 55 of the case and has its right-angular end extended past the free ends of pawl-levers N. whose other ends engage notches in the hammers K. These hammers are fulcrumed at kto a cage J and are actuated by springs K', 60 but are held cocked, when the device is set, by the pawls N, which are forced by springs e'into the notches of the hammers. The case J is composed of parallel rods j, connected and supported at their ends by plates l and 65 m. The plate l is provided with one or more cartridge-chambers l', adapted to receive metal ball-cartridges l2, which rest immediately beneath the points of the hammers, and which hammers when they fall thereupon ex- 70 plode the cartridges and drive the bullets into the glass tube, bottle, or receptacle I for the liquid or liquids or other substances that generate the gas. These bottles or tubes are inserted into the cage through a laterally- 75 swinging frame m' and are retained therein by a clasp m^2 , which with the frame m' may be turned aside, as shown in dotted lines in Fig. 2, to admit the bottles, or be turned over the bottles so as to retain them in the cage. So The hinged frame m' is closed by the tension of a spiral spring m^3 wound about its axial rod m^5 , and the ends of said rod are extended and work in sliding blocks m^4 , which slide in slots in the two end plates, so as to accommo- 85 date larger bottles or a greater number of them.

S is a detachable safety-plate, which is adapted to enter the space between the hammers and the end plate and occupy a position 90 beneath the hammers, so that the latter cannot fall upon the cartridges. This safety-plate is inserted from either the front or sides during the hours of business, when the safe is open, so that the cartridges cannot be accidentally exploded by those legitimately using the safe. When the safe is closed for the night, this safety-plate is removed. To prevent damage to the sharp points of the hammers that explode the cartridges, holes h are formed in the said plate to receive said points. The operation of my invention is as fol-

lows: Assuming that the safe or vault has

been closed for the night and the device is set

up therein in operative position, if any attempt to blow open the safe is perpetrated the concussion of the blast, operating upon the fan of the pneumatic trigger C, deflects 5 the latter on its pivots c c against the spring C', and slide E is pushed forward by arm D, and the pawls N that hold the hammers against the tension of the springs K' being removed from the notches of the hammers the 10 springs K' force the hammers down upon the cartridges with an exploding blow, and the cartridges are made to drive their bullets into the glass bottles, crashing them, spilling or mixing and scattering their contents and

15 allowing the poisonous gas to be generated and to fill the safe or vault, so that a continuation of his operations would mean death or insensibility to the burglar. To allow the liquids to pass freely through the plate m, 20 the latter is preferably made perforated.

With the above-described device it is practical to so fill the safe, vault, or strong room with a poisonous gas, which shall pervade the place for so long a time as to utterly frus-25 trate a continuance of the burglary and prevent the loss of the valuable contents of the safe.

The device is very simple and practical, and is so universal in its application as to permit 30 it to be applied to any safe, vault, or strong room already in use, no matter what its construction is, and herein lies a great point of advantage over other devices operating upon this general principle which require to be 35 built in with and made a part of the construction of the safe or vault.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a burglar-proof attachment for safes &c. the combination with the exploding-hammer, its spring-retaining pawl and trigger, of a cage for the frangible bottles having one

side made in the form of a hinged door-frame and a spring for holding it closed substan- 45 tially as and for the purpose described.

2. In a burglar-proof attachment for safes &c., the combination with the exploding-hammer, its spring-retaining pawl and trigger, of a cage for the frangible bottle having one 50 side made in the form of hinged door-frame, a spring for holding it closed, and adjustable bearings for the axis of said door-frame to accommodate different sizes or a large number of bottles substantially as described.

3. In a burglar-proof attachment for safes &c., the combination with the exploding-hammer, its spring-retaining pawl and trigger, of a cage for the frangible bottle, a hinged door, having an axis parallel to the cage and 60 provided with a spiral spring and a clasparm extension at the edge of the door substantially as and for the purpose described.

4. In a burglar-proof attachment for safes &c., the combination with the cage for the 65 frangible-bottle-bearing cartridge-seats and the hammers for exploding the cartridges, of a flat detachable plate arranged beneath the hammers and having holes or recesses to receive the points of the hammers substantially 70 as and for the purpose described.

5. In a burglar-proof attachment for safes &c., the combination with the cage for the frangible bottles, of a hammer pivoted to the same and having an actuating-spring and a 75 retaining-notch, a spring pawl-lever engaging with said notch, a sliding tripping device for acting upon the end of and releasing the pawllever, and a pneumatic trigger with an arm operating upon the slide substantially as and 80 for the purpose described.

ABRAHAM OBERNDORF, JR.

Witnesses:

A. HARBURGER, M. Cook.