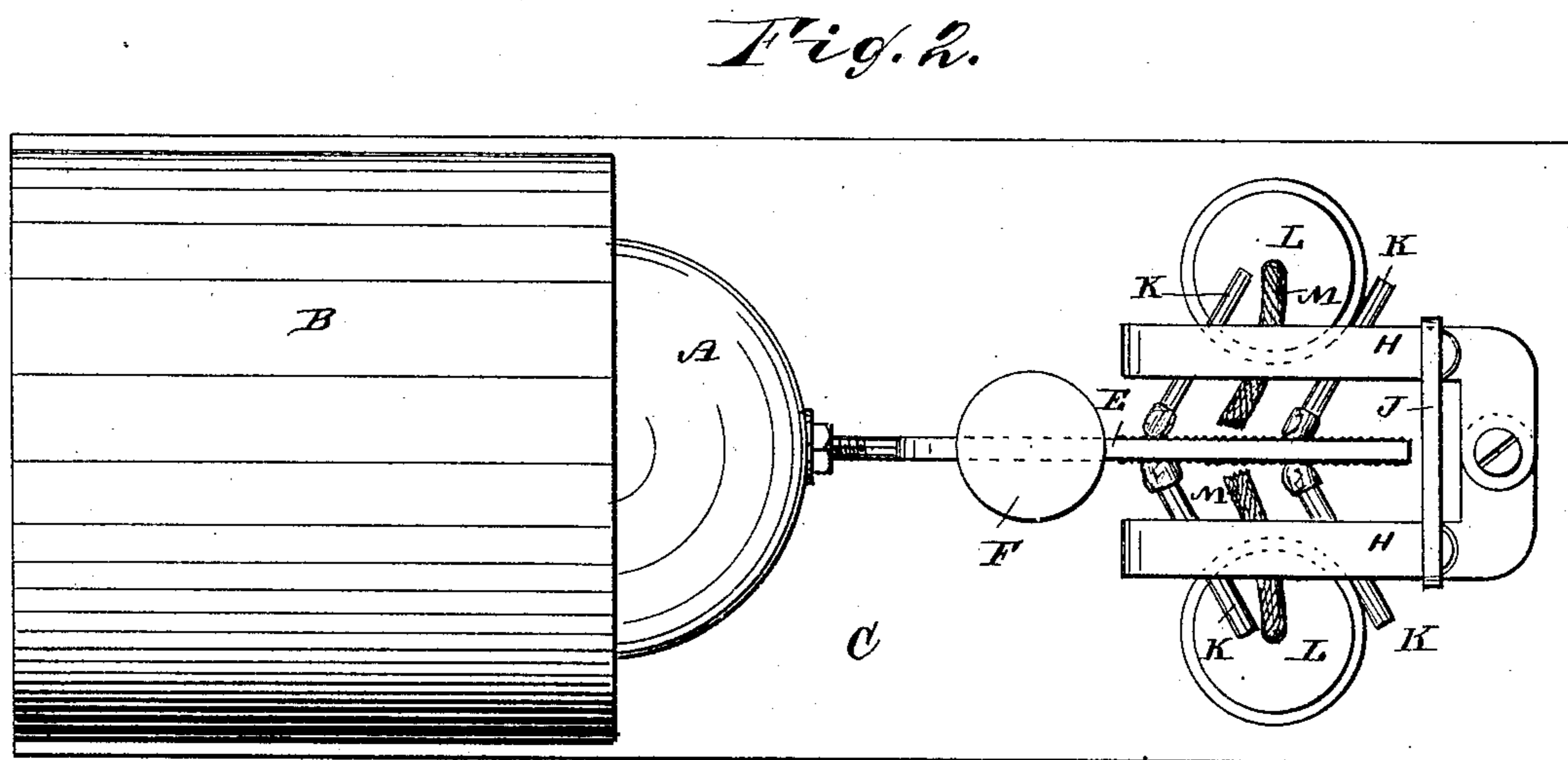
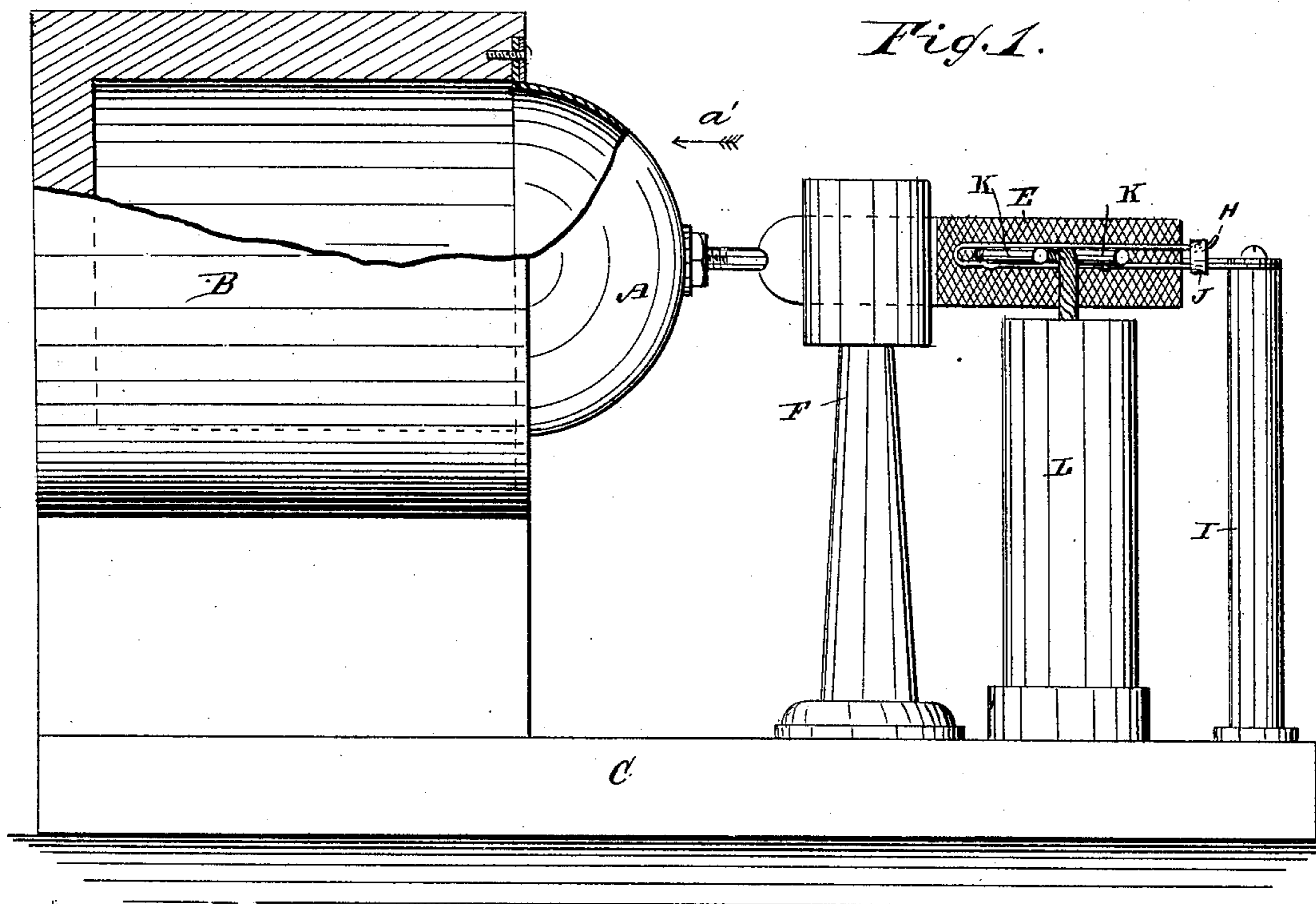


(Model.)

W. Y. CRUIKSHANK.
BURGLAR ALARM FOR SAFES.

No. 300,309.

Patented June 10, 1884.



WITNESSES:

Theo. G. Hooster
C. Sedgwick

INVENTOR:

W. Y. Cruikshank
BY *Munn & Co*
ATTORNEYS.

UNITED STATES PATENT OFFICE.

WILLIAM Y. CRUIKSHANK, OF DANVILLE, PENNSYLVANIA.

BURGLAR-ALARM FOR SAFES.

SPECIFICATION forming part of Letters Patent No. 300,309, dated June 10, 1884.

Application filed November 16, 1883. (Model.)

To all whom it may concern:

Be it known that I, WILLIAM Y. CRUIKSHANK, of Danville, in the county of Montour and State of Pennsylvania, have invented
5 a new and Improved Safe-Blower Alarm, of which the following is a full, clear, and exact description.

The object of my invention is to provide a new and improved device for sounding an
10 alarm when a safe is blown open by means of powder.

The invention consists in a roughened strip or plate connected with a device adapted to be operated by compressed air, and to move
15 the roughened plate, which device and plate or strip are combined with clamps for holding matches and the fuses of explosive cartridges, whereby, if the safe is blown open, the compressed air moves the roughened strip
20 in the direction of its length, thereby igniting the matches and the cartridges, which explode, and thus give an alarm.

Reference is to be had to the accompanying drawings, forming part of this specification,
25 in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a side view of my improved safe-blower alarm, parts being broken out and others shown in section. Fig. 2 is a plan view
30 of the same.

A semi-spherical head, A, of india-rubber or other flexible material, is secured on one end of a cylinder, B, having its other end closed, which cylinder B rests upon a base, C.
35 To the middle of the outer surface of the rubber head A a plate or strip, E, is fastened, which projects from the same, which plate or strip has its sides serrated or otherwise roughened, the said plate or strip being guided in
40 the vertically-slotted upper end of a standard, F, on the bar C. On the upper end of a standard, I, two spring clamp-plates, H, are pivoted, which clamp-plates are drawn toward each other by an elastic band, J, or by
45 a spring. Matches K are held in the clamp-plates H, the heads of which matches rest against the roughened sides or surfaces of the plate E. Below and slightly to one side of each clamp-plate H an explosion-cracker,
50 L, is held on the base, the fuses M of which

crackers are held between the clamp-plates H and between the heads of the matches K. The apparatus is to be placed within the safe.

The operation is as follows: If a safe is blown open by means of powder, the air in the
55 safe is compressed, and the compressed air forces the flexible head inward in the direction of the arrow *a'*, thereby drawing the roughened plate or strip E in the same direction. The friction ignites the matches K,
60 which in turn ignite the fuses M of the crackers L, causing an explosion of the latter a short time after the safe has been blown open. The explosion of the crackers is very violent, and makes a very loud report, which can be heard
65 distinctly, even if the crackers are in the safe, as the safe-door has been opened by the time the explosion of the crackers takes place.

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

1. In a safe-blower alarm, the combination of clamps for holding matches and the fuse of an explosive with a movable friction-plate secured to a head adapted to be operated by
75 the force of the explosive, and thereby ignite the matches and fuse and sound an alarm, substantially as set forth.

2. In a safe-blower alarm, the combination, with the cylinder B, of the elastic head A on
80 the same, the roughened plate or strip E, secured to the head A, and the clamps H, substantially as herein shown and described.

3. In a safe-blower alarm, the combination, with the cylinder B, of the elastic head A on
85 the same, the roughened plate or strip E, secured to the head A, the guide-standard F, and the clamps H, substantially as herein shown and described.

4. In a safe-blower alarm, the combination,
90 with the cylinder B, of the elastic head A on the same, the roughened plate or strip E, secured to the head, the standard I, the clamps H, pivoted to the top of the standard I, and the elastic band or spring J, substantially as
95 herein shown and described.

WILLIAM Y. CRUIKSHANK.

Witnesses:

J. V. WILSON,

JENNIE CRUIKSHANK.