

(No Model.)

J. VOGEL & J. BROOKS.
TOY DETONATOR.

No. 433,427.

Patented July 29, 1890.

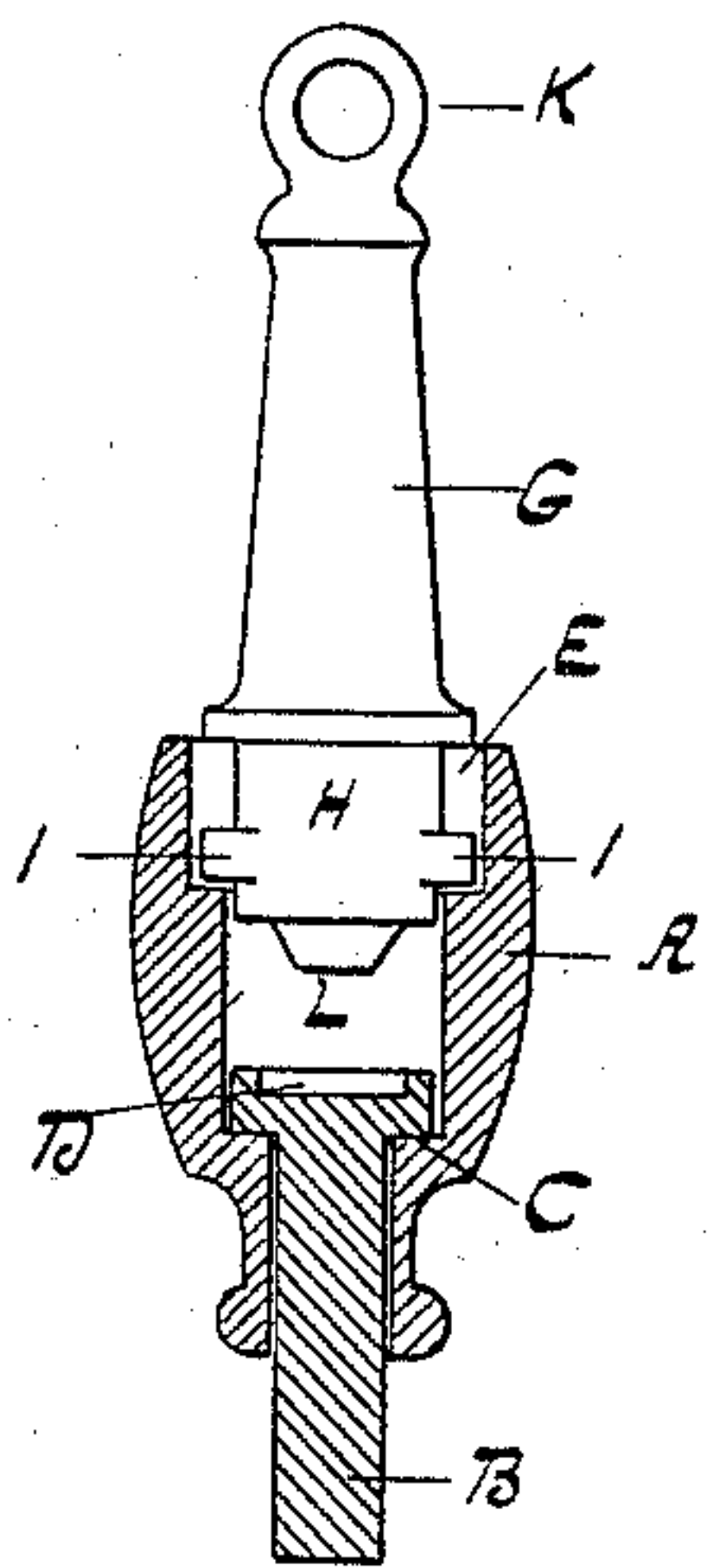


FIG. 1

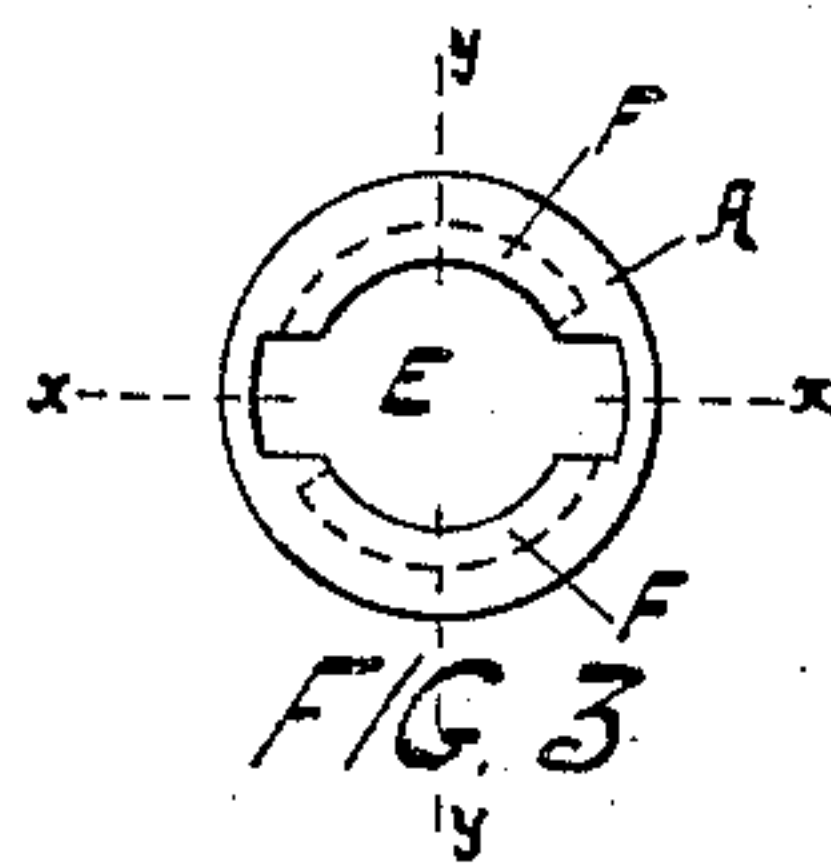


FIG. 3

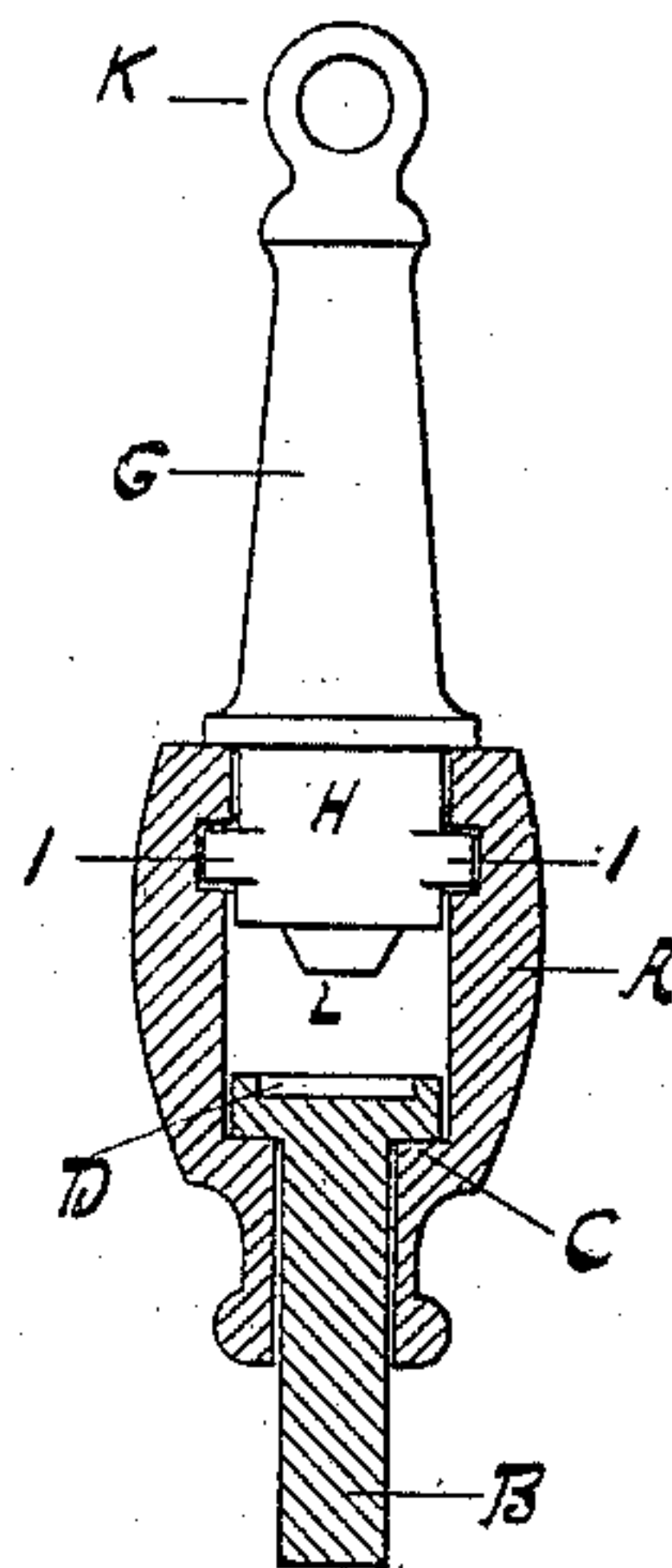


FIG. 2

WITNESSES:

Robert Ruddy
Alec W. Mack.

INVENTORS:

Julius Vogel
James Brooks

UNITED STATES PATENT OFFICE.

JULIUS VOGEL AND JAMES BROOKS, OF NEW YORK, N. Y.

TOY DETONATOR.

SPECIFICATION forming part of Letters Patent No. 433,427, dated July 29, 1890.

Application filed October 14, 1889. Serial No. 326,960. (No model.)

To all whom it may concern:

Be it known that we, JULIUS VOGEL and JAMES BROOKS, citizens of the United States, residing at New York, in the county and State of New York, have invented certain new and useful Improvements in Toy Cap-Exploders, of which the following is a full and clear description, reference being had to the accompanying drawings, forming part of this specification.

It is the design in this invention to provide a toy cap-exploder so constructed that its several parts will be easy of access for the purpose of loading, cleansing, and reloading, and to render the device perfectly harmless and safe for the use of children.

In the accompanying drawings, Figure 1 is a vertical section on line *xx*, Fig. 3, showing the top part in exterior view. Fig. 2 is a vertical section on line *yy*, Fig. 3, with the top part turned ninety degrees. Fig. 3 is a top view of a portion of the exploder.

A is a hollow chamber provided with a cylindrical bore at the bottom, in which is loosely fitted a plug or piston B. This plug ends in a circular flange C, which limits its downward movement and prevents its dropping out of the chamber A by the flange engaging with a corresponding recess or shoulder of the chamber A. The plug is provided with a circular recess or cavity D for the reception of a paper cap or cartridge.

The top of chamber A is formed with a peculiarly-shaped opening E, on each side of which there is a semicircular cavity F, formed in the wall of chamber A.

G is a key, the bottom H of which is cylindrical, provided with two diametrically-opposite projections I. This bottom of the key conforms to the shape of the opening E in chamber A. In the position, as shown in Fig. 1, the key may be easily inserted into or removed from the chamber A; but when the key is turned to the right, as shown in Fig. 2, the projections I will engage with the cavities F and lock the chamber A firmly to the key G. The end K of the key is made so as to be secured to a cord or chain or other device.

The mode of using the device is as follows:
The key G is removed and the plug B pushed

up to a convenient height to place the cartridge into the cavity D. The plug is then allowed to drop back, and the key is replaced and locked, as in Fig. 2. The device so charged is now ready for service. It may be let go from the hand and dropped on the floor, pavement, or other sufficiently hard substance, and as the movable plug B strikes the bottom L of the key G the concussion explodes the cartridge.

The space around the loosely-fitting plug B and around the bottom part of key G is sufficient to let off the gases generated by the explosion, whereas all pieces of the cartridge liable to fly around are confined within the chamber A, thus rendering the device perfectly safe.

What we claim as new, and desire to secure by Letters Patent, is—

1. In a toy cap-exploder, the combination, with the hollow chamber A, provided with the opening E, and semicircular cavities F, of the movable plug or piston B, circularly recessed at its top, for the reception of a paper-cap or cartridge, in and for the purpose set forth.

2. In a toy cap-exploder, the combination, with the hollow chamber A, provided with opening E, and semicircular cavities F, of the key G, provided near the bottom with projections I, fitting the cavities F, thereby locking chamber A to key G, said key being detachable from chamber A, substantially as described.

3. In a toy cap-exploder, the combination of hollow chamber A, with opening E, and cavities F, plug or piston B, circularly recessed at its top, key G, provided with projections I to fit the cavities in hollow chamber A and being detachable from chamber A, all as and for the purpose set forth.

In testimony that we claim the foregoing we have hereunto set our hands this the 30th day of September, A. D. 1889, in the presence of two witnesses.

JULIUS VOGEL.
JAMES BROOKS.

Witnesses:

A. W. MACK,
A. STETTMEIER.