

(No Model.)

A. J. HOBBS.

GAS CHECK FOR RELOADING CARTRIDGES.

No. 357,005.

Patented Feb. 1, 1887.

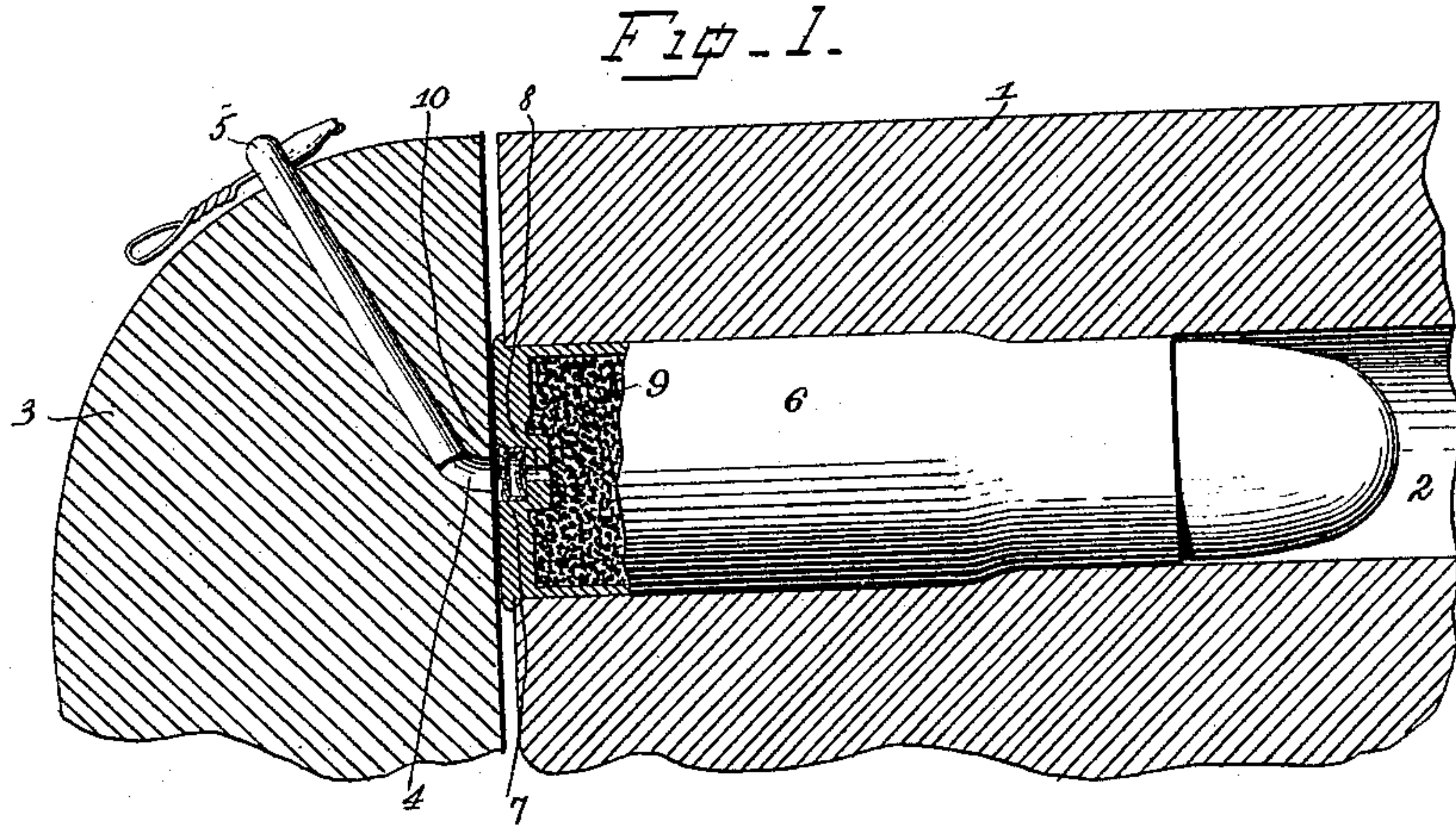


Fig. 2.

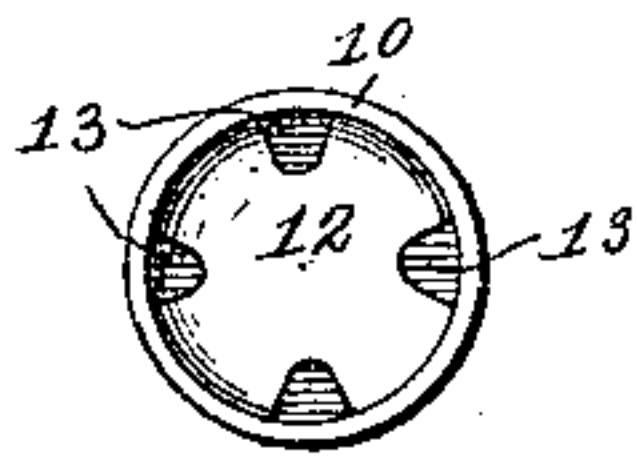


Fig. 4.

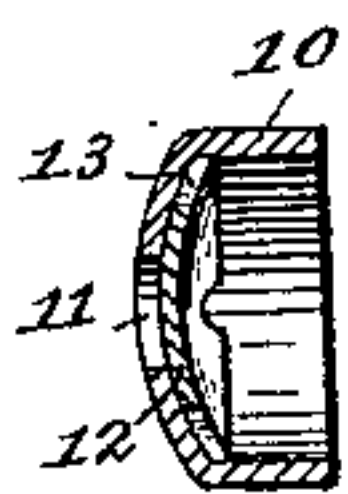
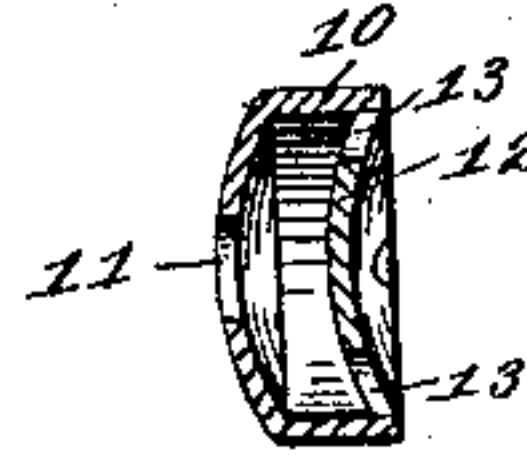


Fig. 3.



Witnesses-

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att'y.



# UNITED STATES PATENT OFFICE.

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## GAS-CHECK FOR RELOADING-CARTRIDGES.

SPECIFICATION forming part of Letters Patent No. 357,005, dated February 1, 1887.

Application filed September 24, 1886. Serial No. 214,419. (No model.)

*To all whom it may concern:*

Be it known that I, ALFRED J. HOBBS, a citizen of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Gas-Checks for Reloading-Cartridges; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention has for its object to provide a simple and inexpensive gas-check for cartridges, to be used in connection with friction or cannon primers—that is to say, with cartridges for guns fired by a vent instead of by a firing-pin. It is of course obvious that when cartridges are to be fired in this manner it is absolutely necessary to provide a gas-check which will close the opening in the base of the cartridge the instant that the charge becomes ignited. This has heretofore been accomplished by various devices placed within the cartridge. These devices, however, are both inconvenient and expensive, and are not found practicable in reloading-cartridges. I have produced a simple and thoroughly practical device for accomplishing this result, which may be produced at a trifling expense, is wholly independent of the cartridge itself, may be applied either before or after the loading of the cartridge, and may be substituted for a primer at any time, should it be found desirable to do so.

In the accompanying drawings, forming part of this specification, Figure 1 is a partial sectional view of the breech of a gun, showing a cartridge having my improved gas-check in the chamber and an ordinary friction-primer in the vent, ready for firing; Fig. 2, a plan view of my improved gas-check detached; Fig. 3, a cross-section thereof; and Fig. 4 is a cross-section, showing its action to prevent the escape of gas after the charge has been ignited.

1 denotes the breech of a gun; 2, the chamber; 3, the breech-block; 4, the vent, and 5 the friction-primer in position for use.

6 is a cartridge, having the usual depression, 7, in the head and an opening, 8, in the bottom of said depression, which communicates with

the interior of the cartridge; and 9 denotes the charge of powder.

My invention consists of a cup, 10, having an opening, 11, and a disk, 12, which just fits within said cup, and is provided with openings 13 through it, it being of course absolutely essential that openings 13 in the disk shall not register with opening 11 in the bottom of the cup, so that when the disk is forced back against the bottom after the charge is ignited the disk will entirely close the opening through the cup.

It will of course be apparent that the shape of the cup, the shape of the disk, and the shape and location of the openings through them may be varied to an almost unlimited extent without departing from the spirit of my invention.

The operation of my invention is clearly illustrated in Fig. 1, Figs. 3 and 4 being considered in connection therewith. In Figs. 1 and 3 my improved gas-check is shown in position for use. When the primer is exploded, the flame passes down the vent through openings 11 in the cup, openings 13 in the disk, and opening 8 in the base of the cartridge, and ignites the powder. The back-pressure of the gas acts instantly to press the disk back into the base of the cup, so that opening 11 through the cup is closed perfectly tight, thus effectually cutting off the escape of gas.

It will be seen that this device is absolutely certain in operation, as it is impossible for the cup to be pressed out of place, as it is held by the breech-block the same as the cartridge itself.

My improved gas-check may of course be used with all classes of cartridges for guns having a vent, as the expense is so trifling as to be hardly worth considering. It will be found especially valuable, however, in connection with reloading-cartridges. After a cartridge has once been fired the cup is ordinarily removed and a new one substituted. This, however, is not necessary, as I have found in practice that the disks may be simply pressed back into place, as in Fig. 3, without removing the cups from the bases of the cartridges.

Having thus described my invention, I claim—

1. As a new manufacture, a gas-check for cartridges, consisting of a cup having an opening through its bottom, and a disk within said cup having openings through it which do not register with the opening through the cup, so that when the disk is pressed into the bottom of the cup the opening through the cup will be effectually closed.

2. The combination, with a cartridge having a depression in its head, and an opening in the bottom of said depression communicating with the interior of the cartridge, of a cup adapted to fit within said depression and provided with an opening through its bottom, and a disk adapted to fit within said cup and provided with openings which do not register with the opening through the cup, whereby

when said disk is pressed into the bottom of the cup the opening in the cup is closed.

3. A reloading-cartridge for guns with a vent, having a depression in its base and an opening leading to the interior, in combination with a detachable cup having an opening through it and adapted to fit in said depression, and a disk within said cup, having openings which do not register with the openings in the cup, so that when the disk is forced back by the explosion the opening through the cup is closed to prevent the escape of gas.

In testimony whereof I affix my signature in presence of two witnesses.

ALFRED J. HOBBS.

Witnesses:

A. M. WOOSTER,  
C. E. RUGGLES.