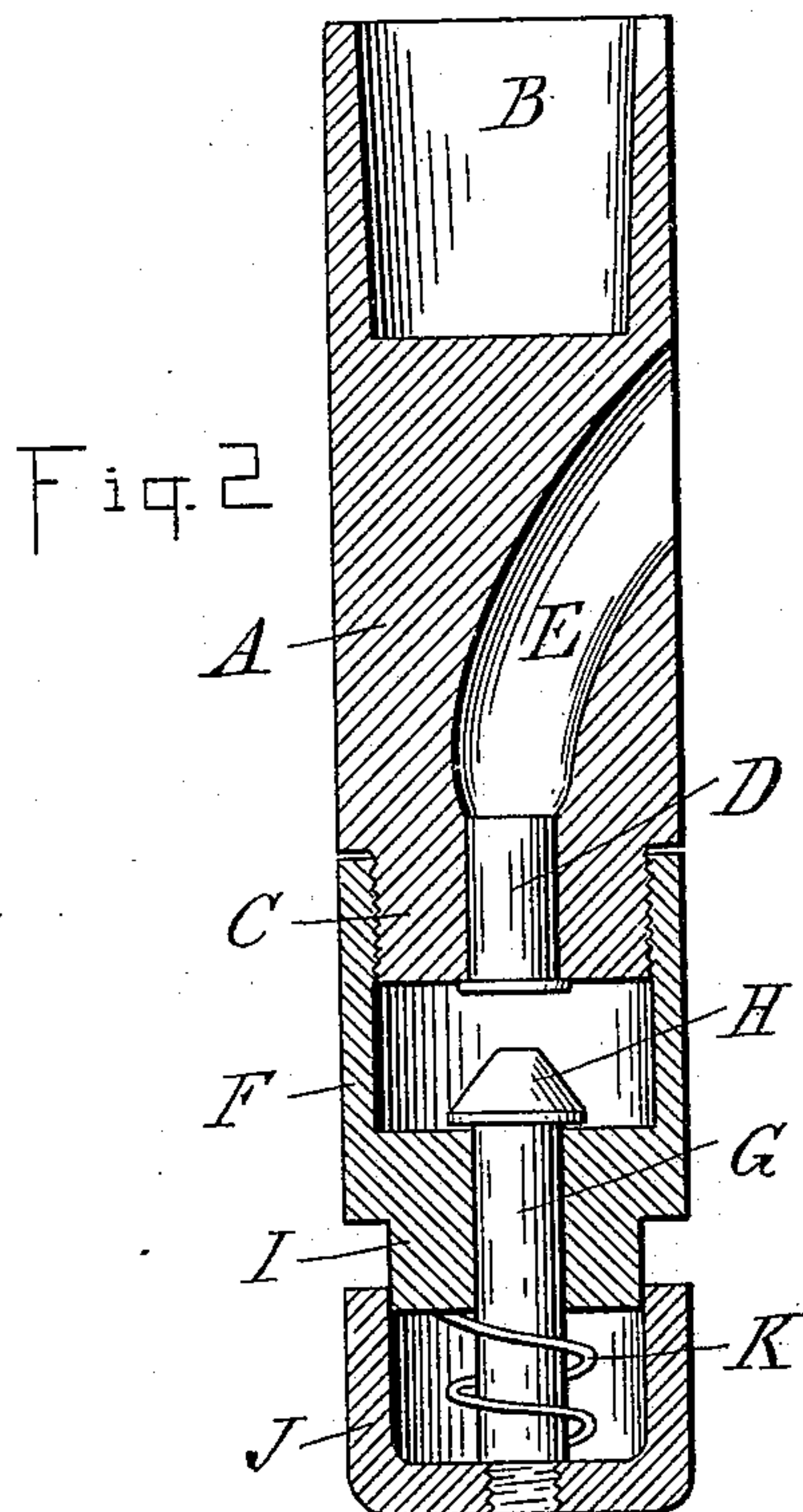
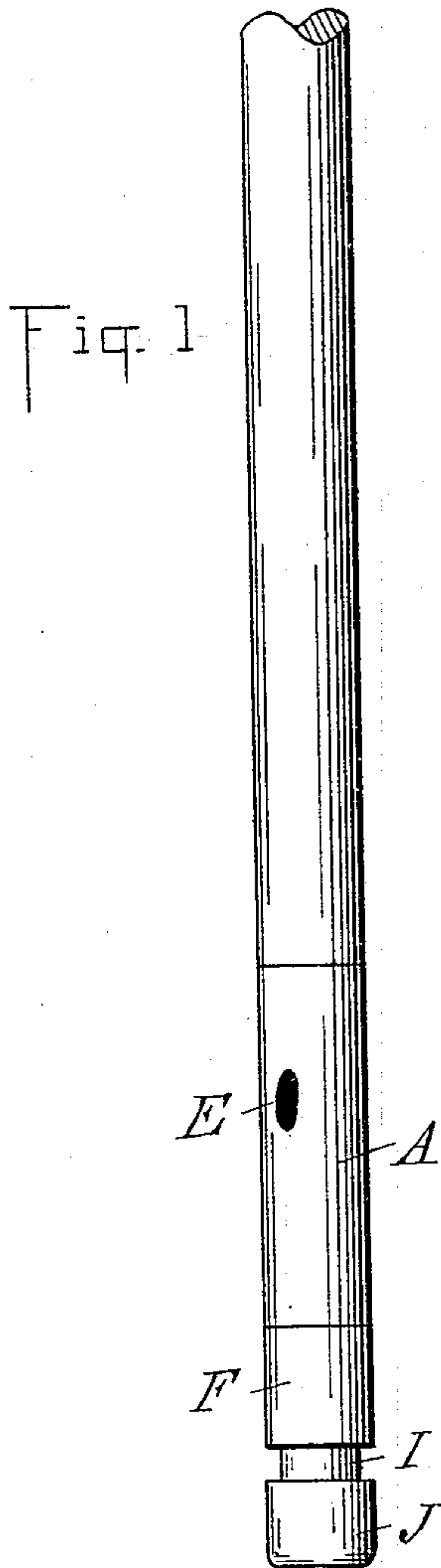


(No Model.)

G. D. ADAMS.  
DETONATOR FOR FLAG STAFFS, &c.

No. 426,423.

Patented Apr. 29, 1890.



Witnesses:  
*R. M. Hulbert*  
*J. Paul Mayer*

Inventor:  
George D. Adams  
By *Thos. S. Spragues Son*  
Att'y

# UNITED STATES PATENT OFFICE.

GEORGE D. ADAMS, OF DETROIT, MICHIGAN.

## DETONATOR FOR FLAG-STAFFS, &c.

SPECIFICATION forming part of Letters Patent No. 426,423, dated April 29, 1890.

Application filed February 26, 1889. Serial No. 301,258. (No model.)

*To all whom it may concern:*

Be it known that I, GEORGE D. ADAMS, a citizen of the Dominion of Canada, residing at Detroit, in the county of Wayne and State of Michigan, have invented certain new and useful Improvements in Detonators, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to new and useful improvements in detonators; and the object of my invention is to form a device of this kind adapted to be readily secured at the ends of poles or shafts, such as are used for carrying flags and emblems of various kinds—such as tridents, lances, spears, &c.—with which masonic bodies, political clubs, or spectacular shows often equip themselves, and whereby a cap or cartridge concealed therein may be readily exploded by producing a light blow against the end of the pole, as in tapping it on the floor.

To this end my invention consists in a cylindrical butt adapted to be secured to the end of a pole, and consisting of a fixed and movable portion with a cartridge-chamber in the stationary part, and a firing-pin actuated by the movable part, or vice versa, all as more fully hereinafter described, and shown in the accompanying drawings, in which—

Figure 1 is an elevation of the pole provided with my detonating butt, and Fig. 2 is a vertical central section of the detonator.

A is the stationary portion of the butt, provided with the socket B at its upper end to receive the end of the pole, and with the screw-threaded nipple C at the lower end.

D is a cartridge-chamber formed in the axis of the nipple to receive a blank cartridge, and this communicates with a vent E for permitting the lateral escape of the gases formed by the explosion of the cartridge.

F is a tubular extension, interiorly screw-threaded at its upper end for detachably securing it to the nipple C, and provided with the solid bottom centrally apertured to form a vertical guide-bearing for the firing-pin G, which is provided with the head H in axial line with the cartridge-chamber. The lower end of the extension F is provided with the nipple I, which forms a vertical guide-bearing for the loose ferrule J, which is closed at

the bottom, and has the lower end of the firing-pin attached thereto, and a coil-spring K is placed around the lower end of the firing-pin within the ferrule to keep said firing-pin normally withdrawn.

In practice the parts constructed as shown and described are intended to operate as follows: By unscrewing the extension F of the butt the cartridge-chamber is disclosed for inserting a cartridge. After screwing on the extension F the device is then ready for firing, which may be effected by a sudden blow against the end of the ferrule, as will be easily produced in tapping the pole hard against the floor.

As the nature of the device is so entirely disguised by its outer appearance, which makes it look merely as an extension to the pole, it is well calculated to produce a surprising effect in its use.

What I claim as my invention is—

1. In a detonating butt adapted to be secured to a pole, of the stationary portion provided in its lower end with the cartridge-chamber and the vent communicating therewith, of a detachable extension provided with a firing-pin slidingly secured therein, and of the sliding sleeve or ferrule to which the firing-pin is secured, and containing a retracting-spring, substantially as described.

2. The combination, in a detonating butt, of the stationary portion A, provided at its upper end with the socket B and at its lower end with the screw-threaded nipple C, the cartridge-chamber D in the lower end of the portion A and communicating with a vent E, the extension F, detachably secured to the nipple C and provided with the nipple I, the firing-pin G, slidingly secured in the extension F and provided with the head H, and the sliding ferrule J, to which the firing-pin is secured and containing the retracting-spring K, all arranged to operate substantially as described.

In testimony whereof I affix my signature, in presence of two witnesses, this 15th day of January, 1889.

GEORGE D. ADAMS.

Witnesses:

A. BARTHEL,  
ED MCBREARTY.