

No. 737,338.

PATENTED AUG. 25, 1903.

J. C. CALOUN & E. R. DISBRO.

REPEATING DETONATOR.

APPLICATION FILED FEB. 5, 1903.

NO MODEL.

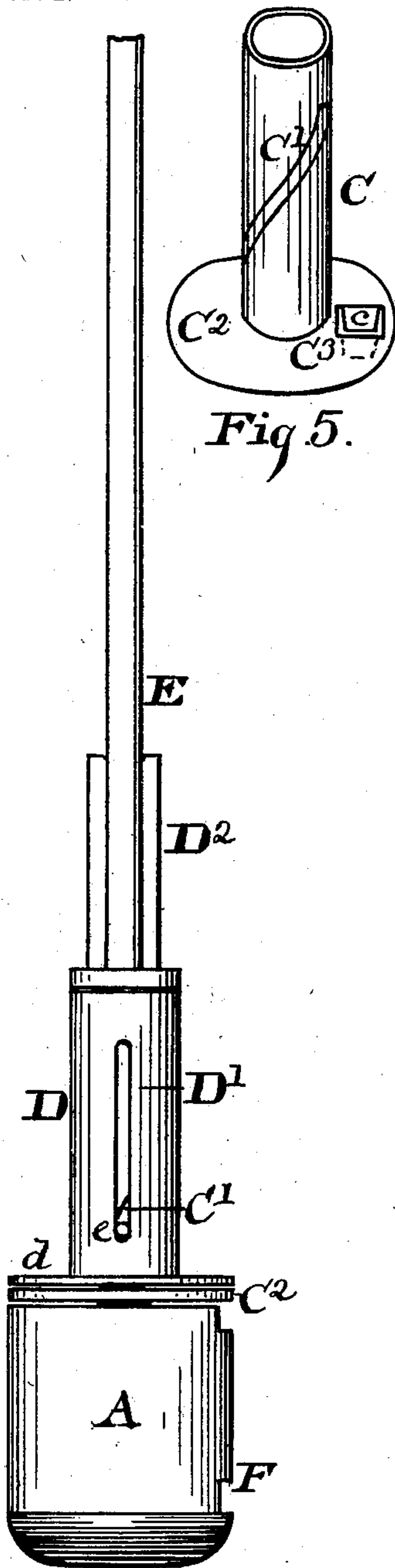


Fig. 1.

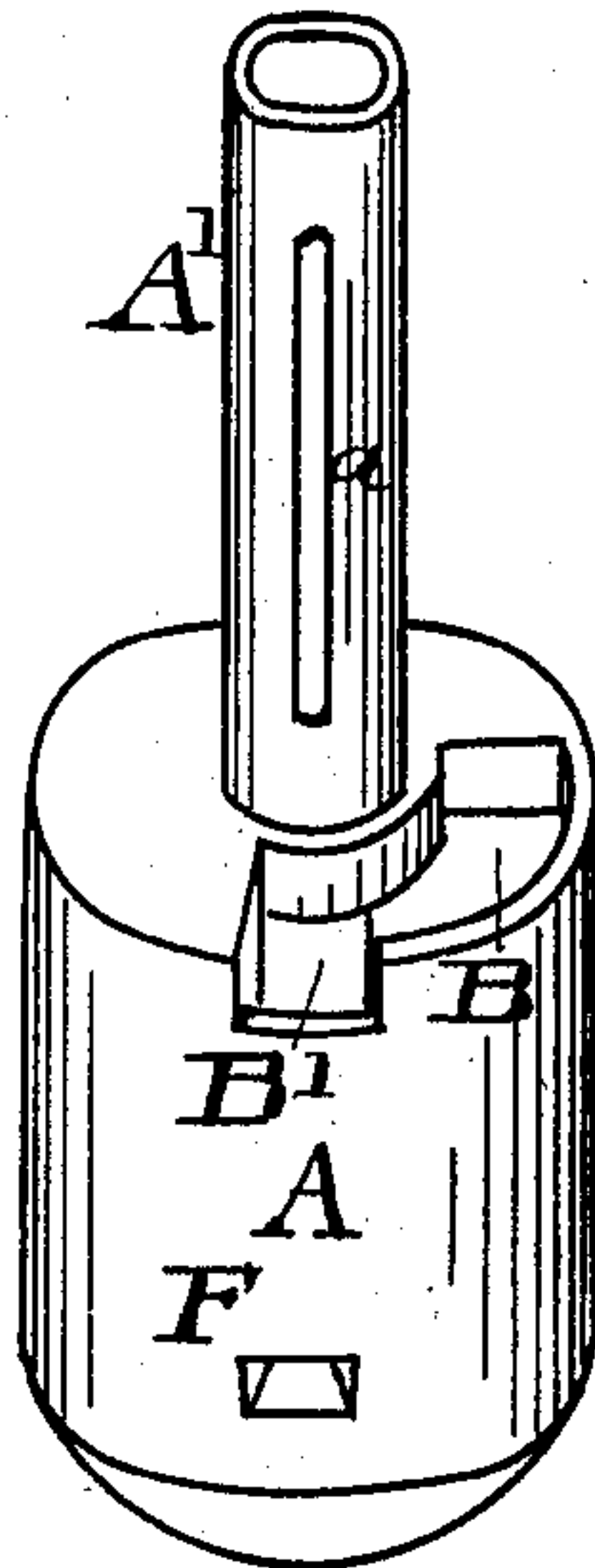


Fig. 4.

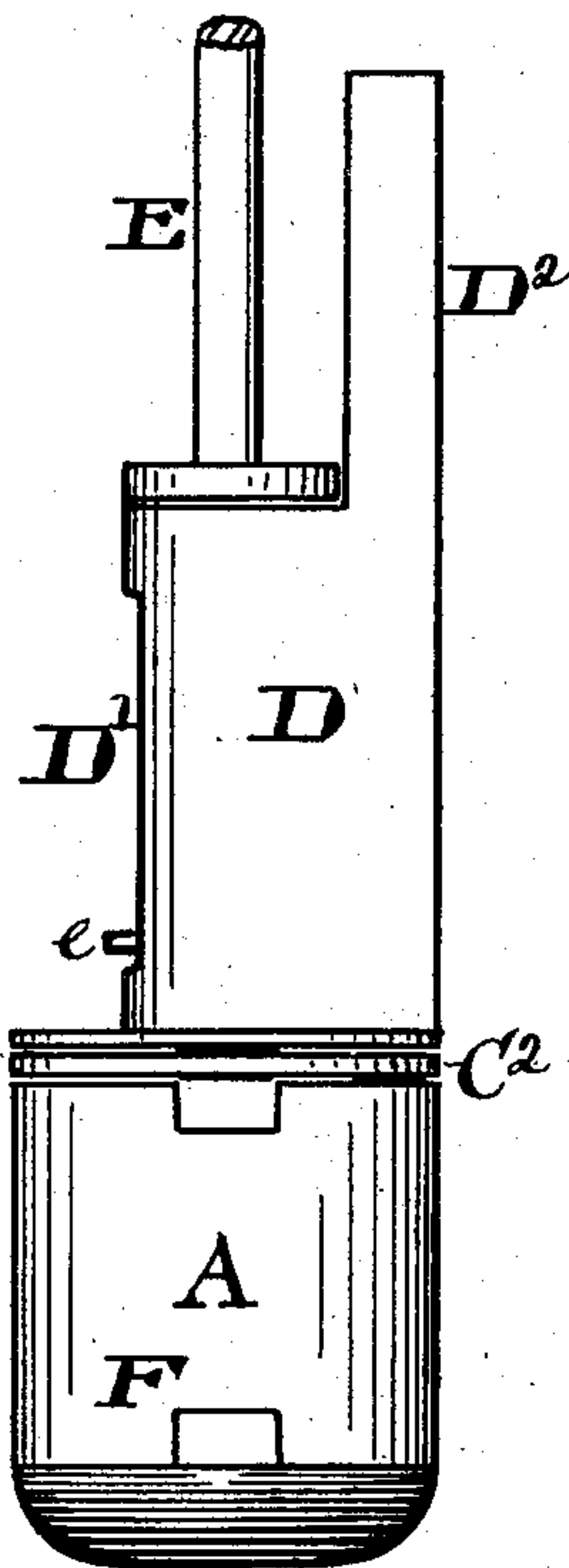


Fig. 2.

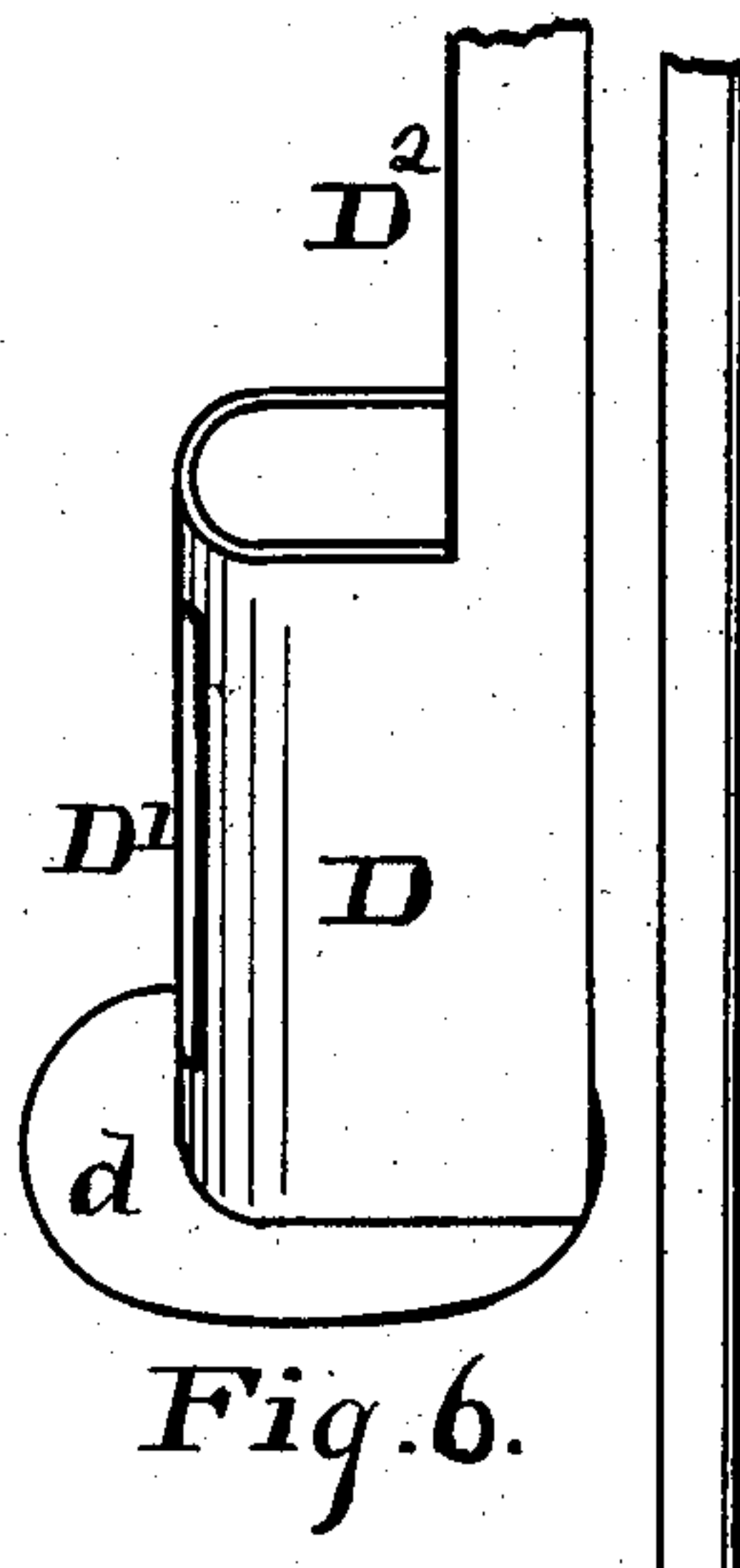


Fig. 6.

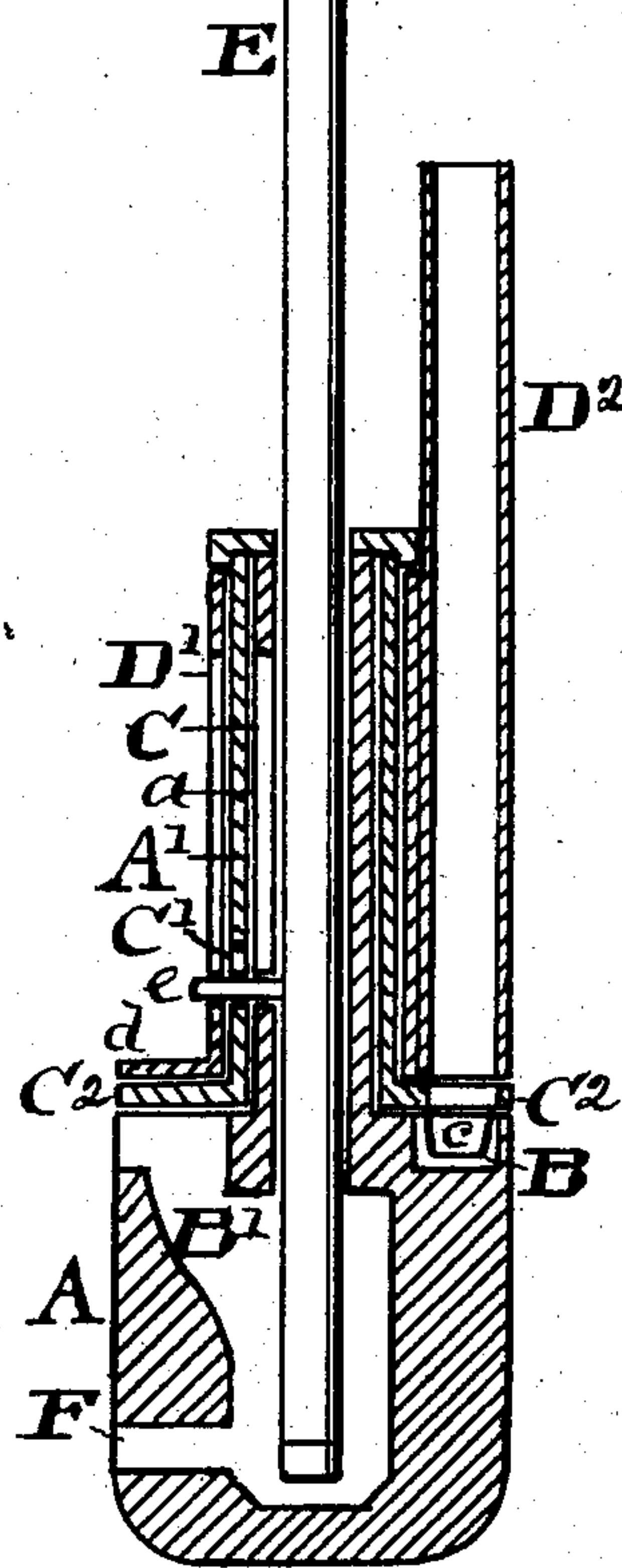


Fig. 3.

Witnesses:

E. A. Tibbitts
[Signature]

Inventors:

Joseph C. Caloun,
Edward R. Disbro,
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UNITED STATES PATENT OFFICE.

JOSEPH C. CALOUN AND EDWARD R. DISBRO, OF CLEVELAND, OHIO.

REPEATING DETONATOR.

SPECIFICATION forming part of Letters Patent No. 737,338, dated August 25, 1903.

Application filed February 5, 1903. Serial No. 142,017. (No model.)

To all whom it may concern:

Be it known that we, JOSEPH C. CALOUN and EDWARD R. DISBRO, citizens of the United States of America, and residents of Cleveland, Cuyahoga county, and State of Ohio, have invented certain new and useful Improvements in Repeating Detonators, of which the following is a specification.

This invention relates to detonators, and has for its object to provide a rapid repeating device; and the invention consists in the new construction and combination of elements comprising the device whereby repeated detonations are automatically produced, substantially as hereinafter described, and pointed out in the claim.

In the accompanying drawings, which illustrate the invention, Figure 1 is a side elevation, Fig. 2 is a front elevation, and Fig. 3 is a vertical section, of the device. Figs. 4, 5, and 6 are respectively details of the several principal parts comprising the invention.

This device is intended to be attached to the lower end of a walking stick or cane.

A represents a round-chambered block, having a hollow stem A' connected with the said chamber and has a slot *a* in one side. In the upper part of the block is provided a curved recess B, one end of which is connected with a vertical passage B', leading into the afore-said chamber in the block A.

C is a cylinder or sleeve fitted to rotate on the stem A'. It has a spiral slot C' in its side, which works in conjunction with the afore-said slot *a* in the stem A'. Its lower end is also provided with a disk plate C², in one side of which is made an opening C³, which lies over the curved recess B in block A. *c c* are depending lips at the ends of said opening C³, the purpose of which will hereinafter appear.

D is a magazine-case which fits over the cylinder C. It is also provided with a slot D', which is located in line with the slot *a* in the stem A'.

D² is a vertical chamber at one side of the case D, which constitutes the magazine for holding cartridges, and it may be of suitable length to hold a considerable number.

d is a plate on the lower end of the case D, which lies over the opening C³ in the disk C². Said disk C² plays between the bottom of the magazine-case D and the top of the block A.

E is a plunger which plays in the hollow

stem A', designed for discharging the cartridges. This plunger may constitute a part of a walking-cane. In the side of the plunger is provided a pin *e*, which projects through the slots *a*, C', and D', and as the plunger is moved up and down in the straight slots *a* and D' the pin *e*, moving in the spiral slot C' in the cylinder C, causes it to rotate.

The operations of this device are as follows: The magazine being filled with cartridges, the lowest one drops through the opening C³ into the recess B, and as the plunger is drawn up the cylinder C is rotated. This carries the cartridge around in said recess B, because the cartridge is in between the lips *c c* on the disk plate C². When the cartridge reaches the vertical passage B', it drops into the chamber in the block A and lies on the bottom, and the plunger as it descends strikes and explodes the cartridge. When the plunger is raised again, the cylinder is rotated back again, and another cartridge will be deposited in the chamber in block A, when the operation is again repeated. The opening F in the side of the block A and at the bottom of the chamber is for the discharge of the spent cartridge and the emission of smoke.

Having described our invention, what we claim is—

The herein-described repeating detonator consisting of a chambered block A, a slotted hollow stem A' on said block, a curved recess B in the top of the block, and a vertical passage B' connecting the recess with the chamber in the block; a sleeve C on the stem A', a spiral slot C' in the sleeve, a disk plate C² on the lower end of the sleeve, an opening C³ in said plate, and depending lips *c c* at the ends of said opening; a magazine-case D over said sleeve C, a slot D' in side of said case, a vertical cartridge-chamber D² on one side of the case D, a plate *d* on the case which covers the opening C³ in disk C²; a plunger E in the stem A', and a pin *e* on the plunger playing in the slots *a* C' and D'; constructed and combined to operate substantially as described.

Signed by us at Cleveland, Ohio, this 3d day of February, 1903.

JOSEPH C. CALOUN.
EDWARD R. DISBRO.

Witnesses:

GEO. W. TIBBITTS,
EDWARD F. SPURNEY.