

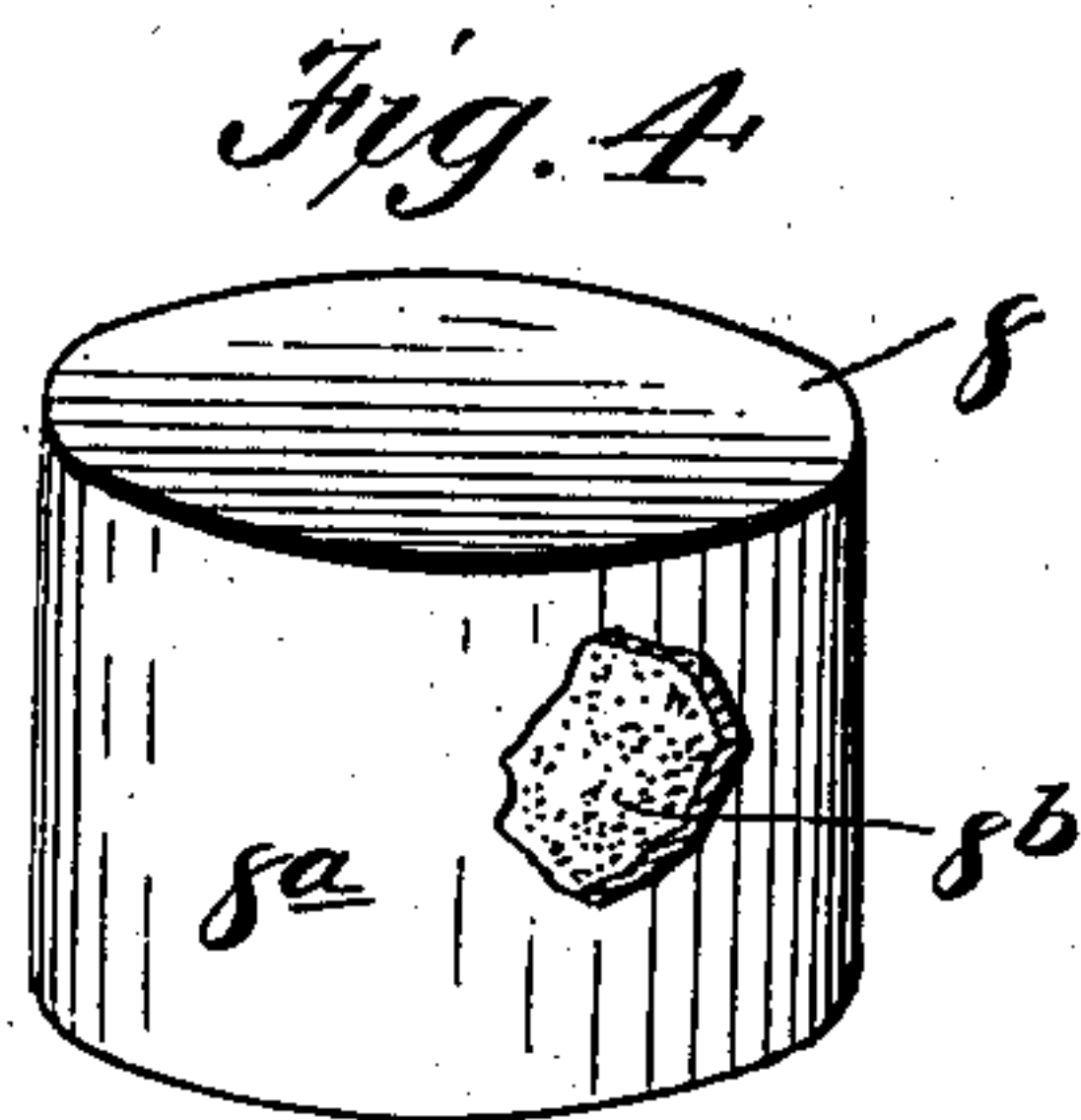
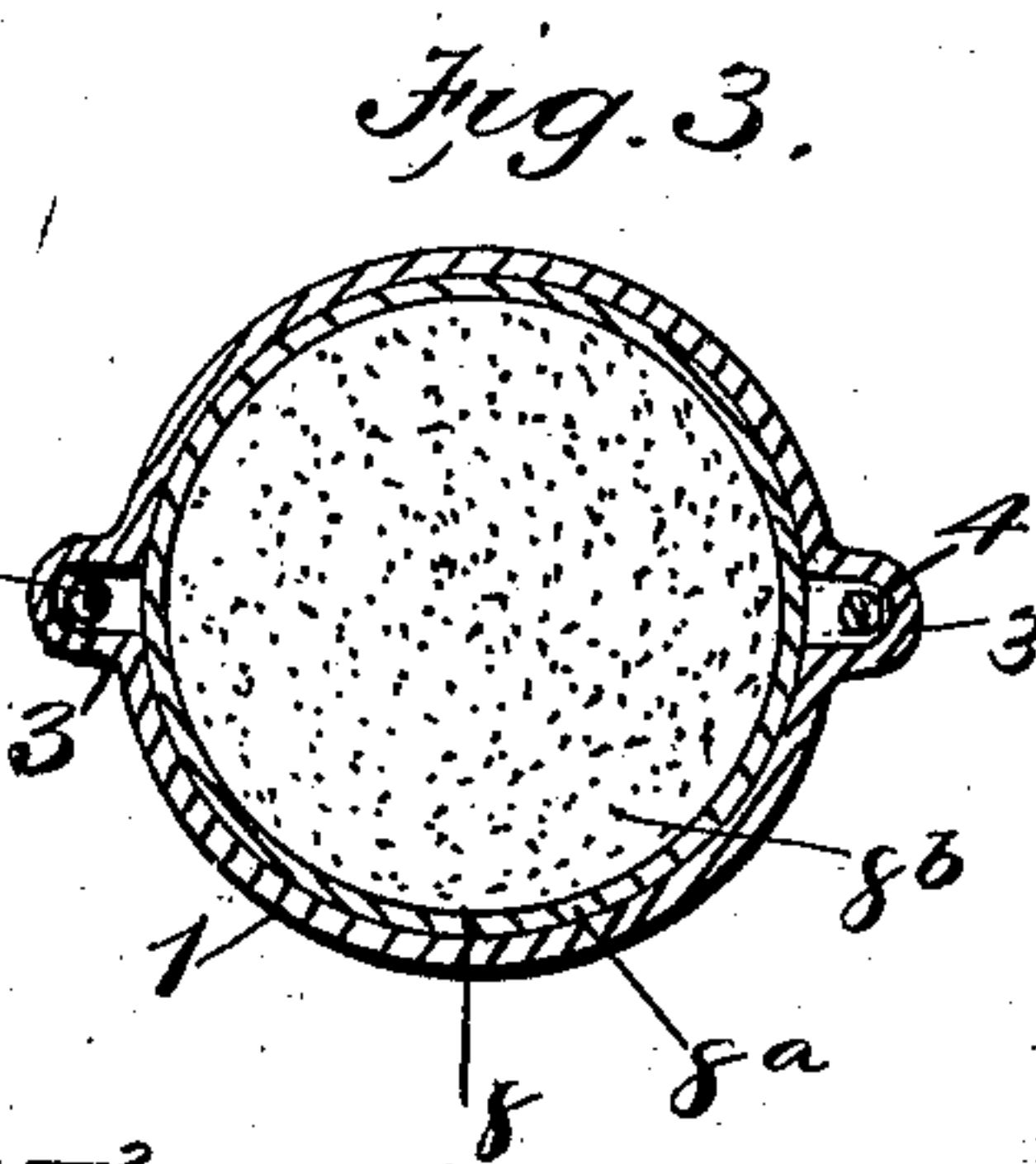
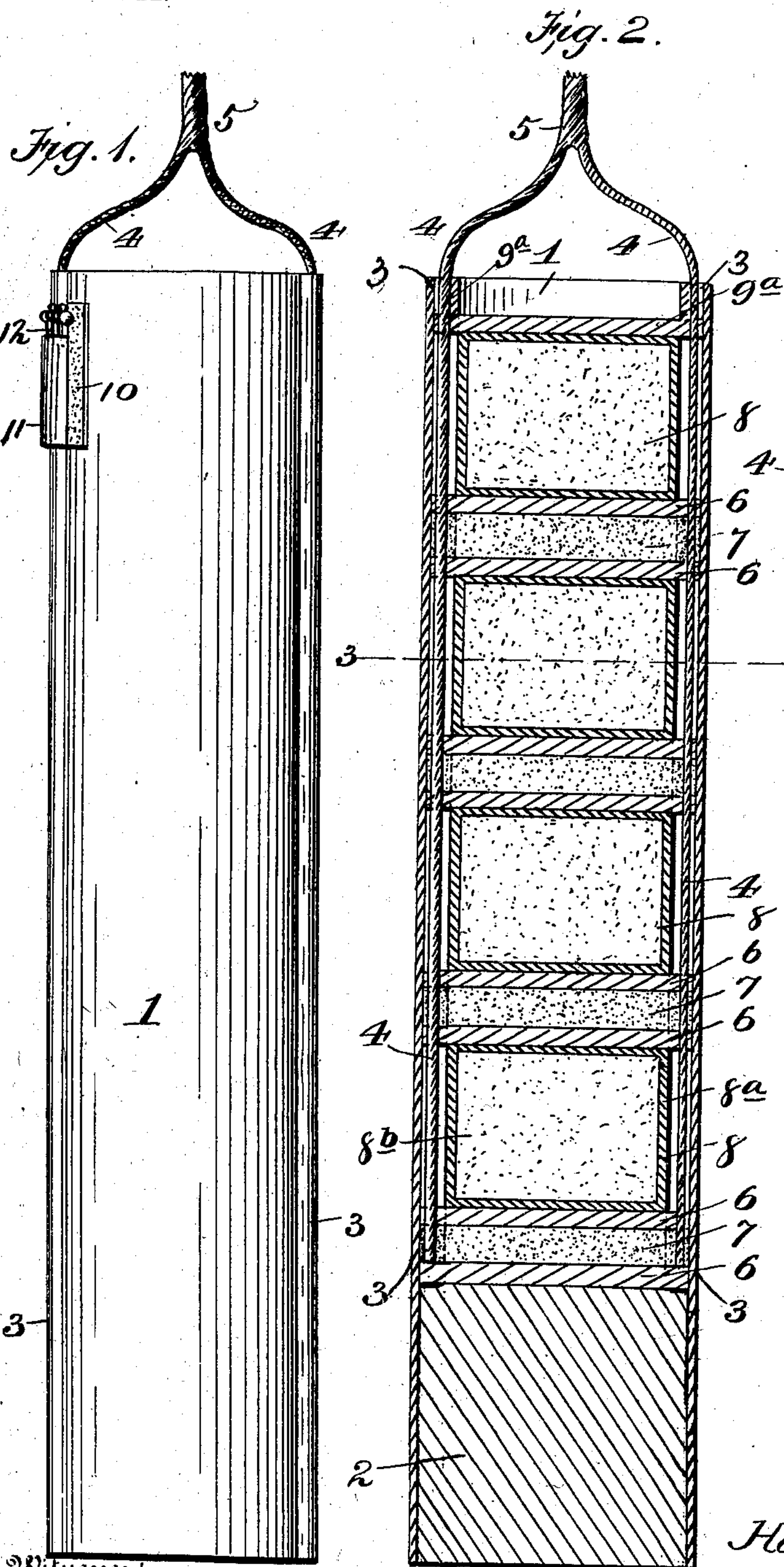
No. 719,176.

PATENTED JAN. 27, 1903.

H. A. BIERLEY.
FIRE EXTINGUISHER.

APPLICATION FILED SEPT. 16, 1902.

NO MODEL.



Witnesses:
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UNITED STATES PATENT OFFICE.

HENRY A. BIERLEY, OF PORTSMOUTH, OHIO.

FIRE-EXTINGUISHER.

SPECIFICATION forming part of Letters Patent No. 719,176, dated January 27, 1903.

Application filed September 16, 1902. Serial No. 123,636. (No model.)

To all whom it may concern:

Be it known that I, HENRY A. BIERLEY, a citizen of the United States, residing at Portsmouth, in the county of Scioto and State of Ohio, have invented new and useful Improvements in Fire-Extinguishers, of which the following is a specification.

My invention relates to fire-extinguishers, and has for its object to construct a Roman-candle fire-extinguisher—that is, an extinguisher which will operate on the same principle as a Roman candle and will eject cartridges filled with a powder which when heated volatilizes and extinguishes fire.

The simple and novel construction employed by me in carrying out my invention is fully described in this specification and claimed, and illustrated in the accompanying drawings, forming a part thereof, in which—

Figure 1 is a side elevation of my device. Fig. 2 is a longitudinal section of the same. Fig. 3 is a transverse section. Fig. 4 is a detail of a cartridge.

Like numerals of reference designate like parts in the different views of the drawings.

The numeral 1 designates a tube open at one end and having a solid plug 2 in the other to adapt the tube to be safely held by the plugged end. Longitudinally-extending recesses 3 are formed in the tube 1 to accommodate fuses 4, extending throughout the length of the tube and beyond the open end thereof, where they are united in a twist 5.

Mounted in the bottom of the tube 1 adjacent to the plug 2 is a wad 6. On top of this wad is a charge 7, of powder, which comes in contact with the fuses 4. On top of the powder is another wad 6, and on top of the wad is a cartridge 8, having a casing 8^a, filled with any volatile powder 8^b, the fumes of which are destructive to fire. The casing 8^a is frangible, so that it will be broken when ejected on coming in contact with any object. On top of the cartridge 8 is placed a wad 6, then a charge 7 of powder, and so on till the tube 1 is filled almost to the top, when a wad having ears 9^a is fitted therein and temporarily secured. A small piece of sandpaper 10 is attached by glue or otherwise to the outside of the tube, and a sheath 11 for holding matches 12 is mounted thereon adjacent to the sandpaper 10.

My extinguishers are adapted to be held in

a rack or box placed in a room. On the breaking out of fire one of the extinguishers is grasped by the plugged end, a match taken out of the sheath and struck on the sandpaper 10, the fuses 4 lighted, and the tube pointed toward the fire. The fuse will burn down until the first charge 7 of powder is encountered. This charge will explode, thereby ejecting one of the cartridges 8, which will burst and vaporize, thereby tending to reduce the flame. This action will continue until all of the cartridges 8 have been ejected.

I do not wish to be limited as to details of construction, as these may be modified in many particulars without departing from the spirit of my invention.

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

1. In a fire-extinguisher, the combination of a tube, cartridges containing dry powder which is destructive to fire mounted within said tube, and arranged alternately with charges of explosive, and a fuse arranged to ignite said charges, substantially as described.

2. In a fire-extinguisher, the combination of a tube, frangible cartridges filled with a substance which is destructive to fire, charges of powder mounted in said tube and alternating with said cartridges, and a fuse arranged to successively ignite said charges to eject said cartridges to extinguish a fire, substantially as described.

3. In a fire-extinguisher, the combination with a tube containing combustible means for extinguishing fire, of a match striker and holder mounted on said tube, substantially as described.

4. In a fire-extinguisher, the combination of a tube closed at one end, a groove extending longitudinally said tube, a fuse mounted in said groove, cartridges mounted in said tube and containing a substance destructive to fire, and charges of explosive arranged alternately with said cartridges, substantially as described.

In testimony whereof I have hereunto set my hand in presence of two subscribing witnesses.

HENRY A. BIERLEY.

Witnesses:

ARTHUR C. MUSSER,
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