

H. V. R. READ & R. H. CAMPBELL.
CAPSULE FOR HOLDING COMPRESSED OR LIQUEFIED GAS.
APPLICATION FILED FEB. 9, 1909.

926,075.

Patented June 22, 1909.

Fig. 1.

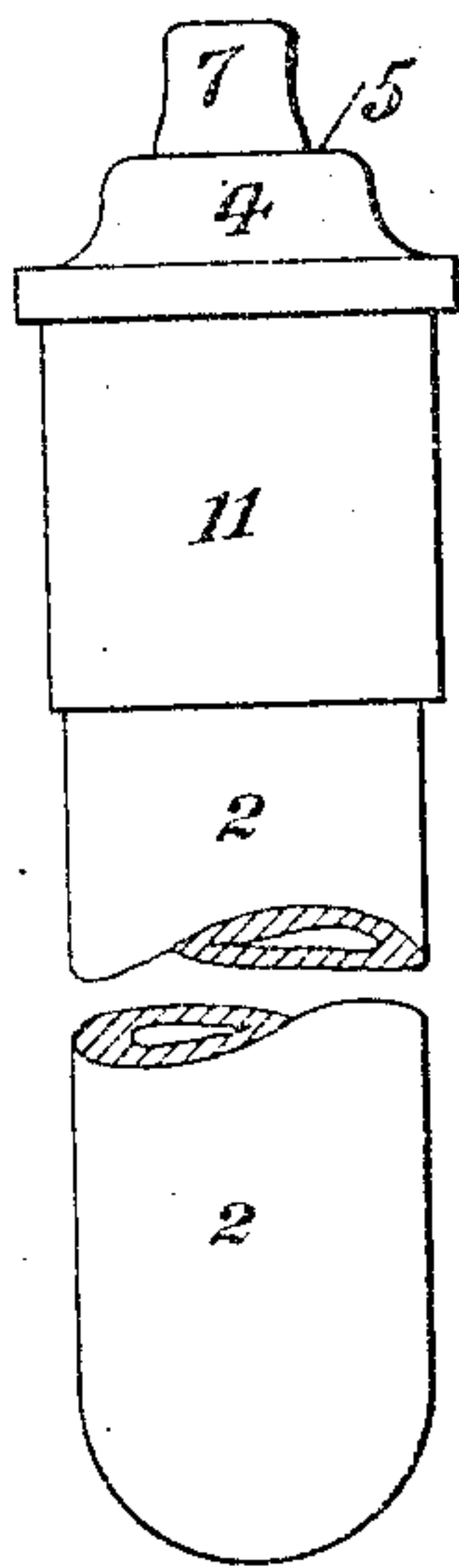


Fig. 2.

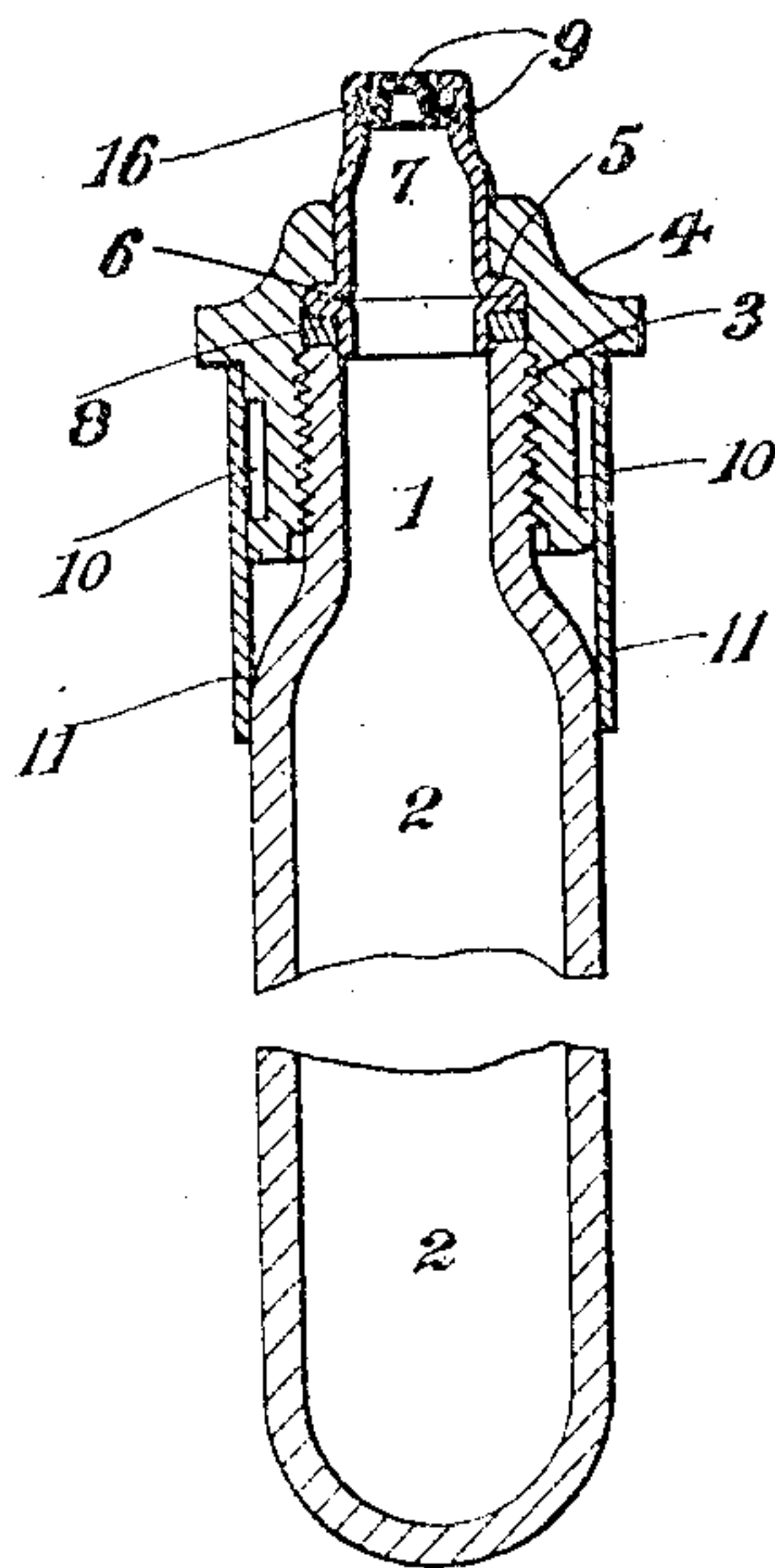


Fig. 3.

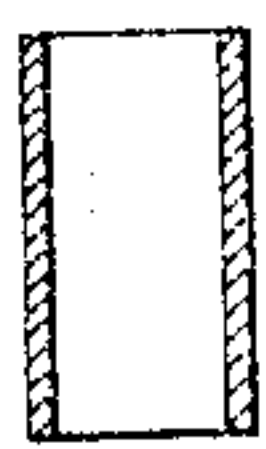


Fig. 4.

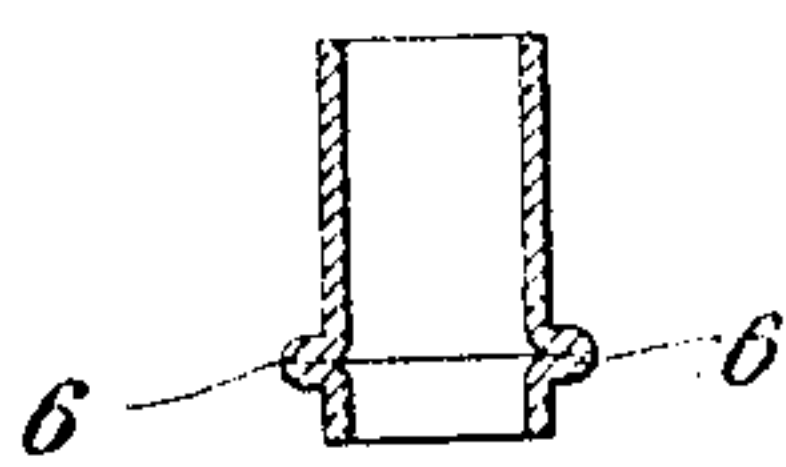


Fig. 5.

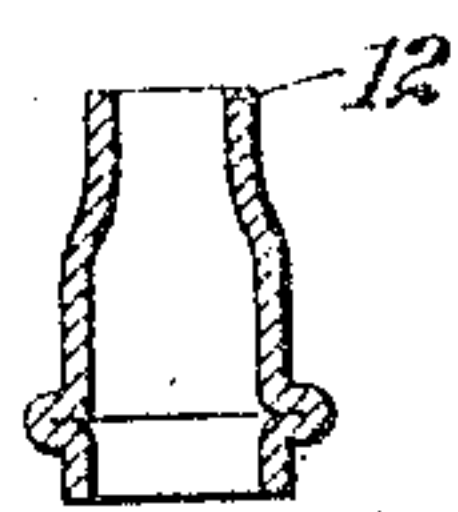
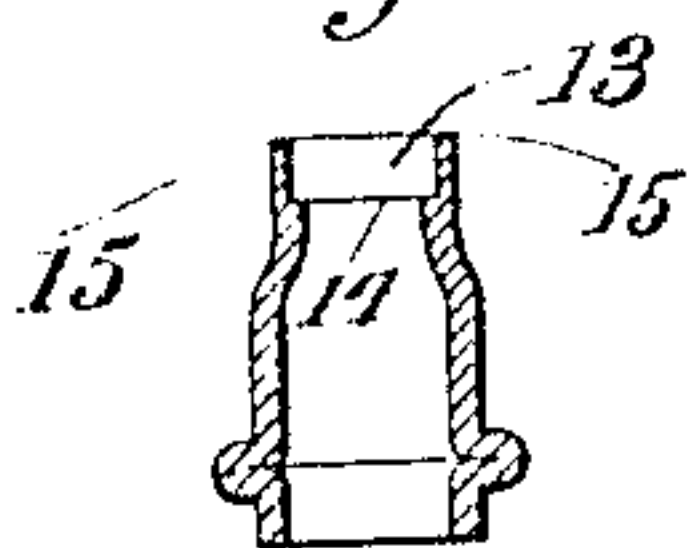


Fig. 6.



WITNESSES

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UNITED STATES PATENT OFFICE.

HARRY VAUGHAN RUDSTON READ, OF LONDON, AND ROBERT HUNTER CAMPBELL, OF EDMONTON, ENGLAND.

CAPSULE FOR HOLDING COMPRESSED OR LIQUEFIED GAS.

No. 926,075.

Specification of Letters Patent.

Patented June 22, 1909.

Application filed February 9, 1909. Serial No. 476,950.

To all whom it may concern:

Be it known that we, HARRY VAUGHAN RUDSTON READ, a subject of the King of Great Britain and Ireland, of 1 Broad Street avenue, in the city of London, England, and ROBERT HUNTER CAMPBELL, a subject of the King of Great Britain and Ireland, of Angel Road, Edmonton, in the county of Middlesex, England, have invented new and useful Improvements in and Connected with Capsules for Holding Compressed or Liquefied Gas, of which the following is a specification.

This invention relates to capsules which are of such a size as to render it desirable that they be not thrown away, and wherein the main, or body part thereof can be utilized again and again without reducing its length and without the use of a valvular arrangement for liberating the gas, and consists in an improved construction for this purpose.

The accompanying drawing represents the construction according to this invention.

Figure 1 is an elevation; Fig. 2 a vertical section of a capsule (with part broken away) provided with a removable end-piece according to this invention; Figs. 3, 4, 5 and 6 represent the successive stages by which the end-piece is formed.

The exterior of the neck 1 of the main, or body part 2 of the capsule is provided with a screw-thread 3, to receive a screwed junction piece 4, the flange 5 of which presses the flange 6 of the removable end piece 7 upon a washer 8 on the edge of the neck 1. The said junction piece 4 can, if desired, be made as shown so as to project beyond the line of the main, or body part of the capsule to form a ledge to constitute a support for the capsule in a hole in a fitting carried, for example, by a fire-extinguisher when the capsules are to be used with fire-extinguishers. The upper end of the removable piece 7 is provided with a shoulder for the cap 9, which is to be pierced, the said cap being secured by its flange being pinched between the said shoulder and the turned-in metal of the piece 7 surrounding the cap, as is usual in securing caps in ordinary capsules.

The junction piece 4 is formed so that it can receive a spanner to screw and unscrew it, it preferably having a squared part, or cut-away parts, at 10 for this purpose. In order to prevent the junction piece 4 being

unscrewed improperly, the squared part, or cut-away parts 10, is or are, covered by a sleeve 11 driven over the junction piece 4 and preferably flush, or about flush, with the main or body part of the capsule, and the parts, thus arranged are preferably protected by an external coating of wax, or other material which will protect the parts from rusting, or corrosion.

The end-piece 7 is formed from a piece of tube, as shown in Fig. 3, which is upset to form the flange 6, as shown in Fig. 4, and then the neck 12 is formed by stamping, or spinning, as shown in Fig. 5 to fit into a ring washer in the apparatus with which the capsule is used, and a part of this neck is recessed by cutting away, or otherwise, as shown at 13 in Fig. 6 to constitute a shoulder 14 for the flange of the cap 9 (Fig. 2) to rest upon, the said cap 9 being secured by the metal at 15 being turned in to force the washer 16 (Fig. 2) upon the flange of the cap 9 and the said flange upon the shoulder as in closing ordinary capsules.

The various parts may be made of any suitable material, for example the main, or body part 1, 2, may be made of steel, the removable end piece 7 of steel, the junction piece 4 of brass, the washer 8 of soft annealed copper and the sleeve 11 of aluminium.

We claim as our invention:

1. In a capsule of the character described, a body portion provided with a threaded neck, a junction piece screwed thereon and externally shaped to receive an operating tool, sealing means secured by said junction piece, in combination with an external sleeve to cover the portion of said junction piece shaped to receive an operating tool, for the purpose described.

2. A capsule of the character described, having a removable tubular end piece upset to form a peripheral securing flange and an internally recessed neck to form a seat for a sealing cap, substantially as described.

In testimony whereof we have signed our names to this specification in the presence of two subscribing witnesses.

HARRY VAUGHAN RUDSTON READ.

ROBERT HUNTER CAMPBELL.

Witnesses:

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