April 22, 1924

1,491,000

E. S. R. BRANDT ET AL

TORPEDO

Filed Aug. 9, 1920

Fig. 1.

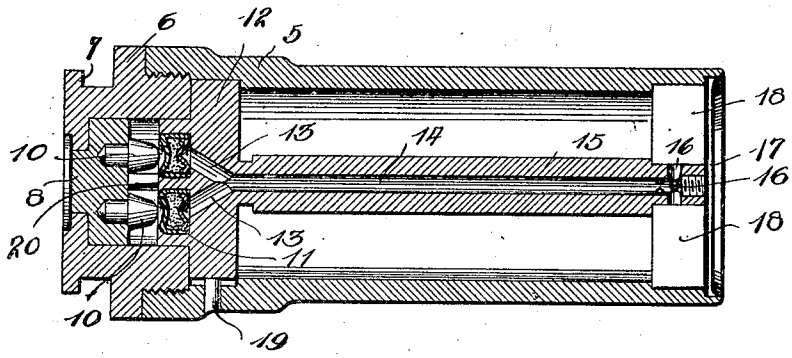


Fig. 2.

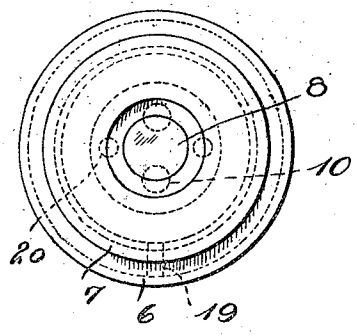
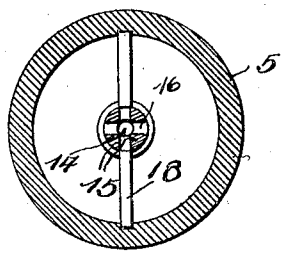


Fig. 3.



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UNITED STATES PATENT OFFICE.

EDMUND S. R. BRANDT, OF NEWPORT, AND JETHRO H. PECKHAM, OF PORTSMOUTH, RHODE ISLAND, ASSIGNORS TO THE GOVERNMENT OF THE UNITED STATES.

TORPEDO.

Application filed August 9, 1920. Serial No. 402,505.

To all whom it may concern:

Be it known that we, EDMUND S. R. BRANDT and JETHRO H. PECKHAM, citizens of the United States, residing at Newport, Rhode Island, and Portsmouth, Rhode Island, have invented new and useful Improvements in Torpedoes, of which the following is a specification.

This invention relates to improvements in torpedoes and more particularly to improvements in fuses adapted to be used in the superheaters thereof.

One of the objects of the present invention is to provide a simple and practical fuse particularly adapted for use in the combustion flask of automobile torpedoes which will be more reliable and efficient than fuses now in use.

A further object is to increase this efficiency or practically eliminate the possibilities of a cold shot.

A further object is to provide a simplified construction having relatively few parts which may be inexpensively manufactured and assembled.

A further object is to provide a fuse of the above character which will not deteriorate easily under atmospheric conditions, changes in temperature or age.

With these and other objects in mind, attention is directed to the accompanying sheet of drawings forming a part of this disclosure wherein is illustrated one of various possible forms of the invention. In this drawing,

Figure 1 is a longitudinal sectional view of the complete fuse.

Figure 2 is an end view with certain parts shown in dotted lines, while,

Figure 3 is a central cross-sectional view.

Referring now to the accompanying drawings, 5 denotes the main body member into one end of which is threaded a cap 6 provided with an annular shoulder 7 forming a recess adapted to be engaged by the holder for the fuse of the pistol. Centrally disposed with respect to this head member 6 is a member 8 provided with two projections 10, the member 8 being hit by the firing pin of the pistol when the shot is made. These projections are driven downwardly against caps 11 mounted in suitable recesses of the head member 12 adjacent diverging passageways 13 communicating with a passage 14 in a centrally disposed tubular member 15. The end of this passage 14 is provided with lateral openings 16 adjacent which are placed wisps of guncotton or other easily ignitible compounds adapted to blow out end cap 17 and also ignite the slow burning fuse composition within the member 5. This member 5 is preferably divided transversely by means of a partition 18 as shown in Figure 3 thereby forming two independent fuses which are separately ignitible. This central partition may be made of celluloid or other combustible material adapted to insure the complete combustion of the fuse. A pin key 19 engages a slot in the head member 12 holding members 12 and 15 in the proper relation to member 5 so that the slots in each will remain in the proper position for the insertion of partition 18. Pins 20 are also fixed in member 12 and upon which member 8 moves laterally when struck by the firing pin, these pins insure projection 10 being always in line with caps 11.

From the above it is believed that the operation of this device will be clear to those skilled in the art. It may be stated that this invention is designed to eliminate the chances of non-ignition of the alcohol and is an improvement over double fuses having two flash tubes, one for each cap.

The invention is of simple, practical construction and very reliable and efficient in use and operation and is believed to accomplish all of the objects and advantages herein set forth.

What we claim is:—

1. In a device of the character described, in combination, a body member adapted to contain a fuse compound, a single flash tube centrally disposed therein, firing means associated with said tube and a combustible partition dividing the fuse compound into two parts.

2. In a device of the character described, in combination, a body member adapted to contain a fuse compound, a combustible partition dividing said compound into two parts and two independent firing means, the actuation of either one of which is adapted to ignite said fuse compound.

3. In a device of the character described, in combination, a body member adapted to contain a fuse compound, a combustible partition dividing said compound into two parts, a flash tube centrally disposed within

said body member having lateral openings at the lower end communicating with the fuse compound at the opposite sides of said partition.

4. In an igniter for liquid fuel, a body member, two caps mounted therein, two separate explosive charges within the body member, a single flash tube member provided with openings adapted to receive the flash from the caps and convey the same to the two explosive charges, a fusible partition separating said explosive charges whereby either cap can ignite either charge, the charge ignited automatically igniting the adjacent charge when both charges and partition burn away together.

Signed at Newport, Rhode Island, this 17th day of March, 1920.

E. S. R. BRANDT.
JETHRO H. PECKHAM.

Witness:
W. J. COZZENS.