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W. R. BULL

FLASH HIDER

Filed Oct. 31, 1922

Fig. 1.

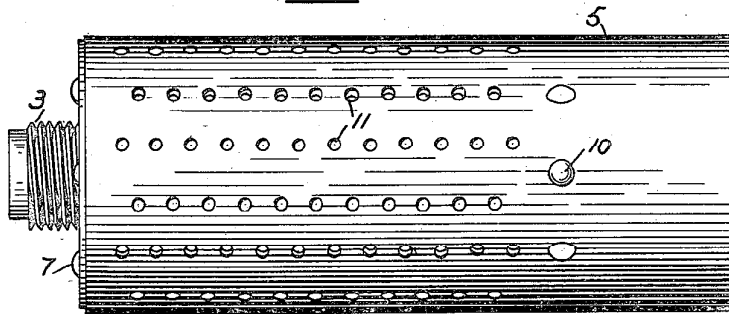


Fig. 2.

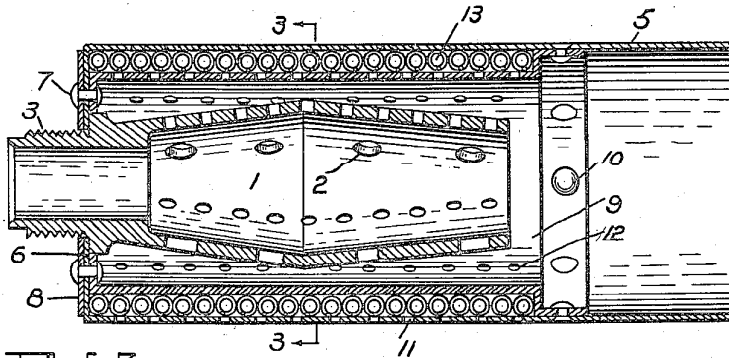


Fig. 3.

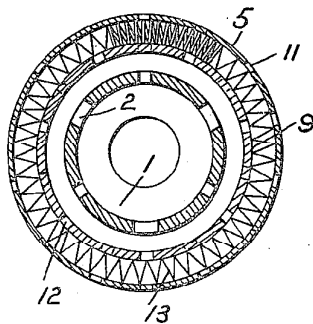
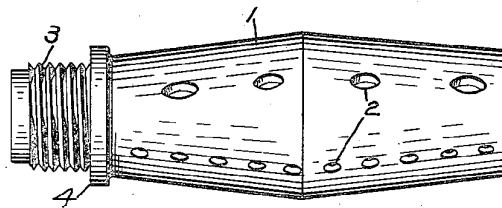


Fig. 4.



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# UNITED STATES PATENT OFFICE.

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FLASH HIDER.

Application filed October 31, 1922. Serial No. 598,205.

*To all whom it may concern:*

Be it known that I, WILLIAM R. BULL, a citizen of the United States, and a resident of Springfield, county of Hampden, and State of Massachusetts, have invented an Improvement in Flash Hiders, of which the following is a specification.

The subject of this invention is a flash hider designed to hide the flash of explosion either in a gun or explosive engines especially engines without mufflers or with any other device with which a flash hider of such character may be useful.

It is highly desirable, especially in gun fire that the flash of the explosion should be hidden or absorbed and that this should take place without unduly diminishing the effective force of the explosion.

The present invention has been devised to accomplish these objects by providing passages for the escaping gases and means for absorbing and radiating the heat of such gases.

With these and other objects in view, my invention resides in the novel arrangement and combination of parts and in the details of construction hereinafter described and claimed, it being understood that changes in the precise embodiment of the invention herein disclosed may be made within the scope of what is claimed without departing from the spirit of the invention.

A practical embodiment of my invention designed for use with a machine gun, is illustrated in the accompanying drawings, wherein:

Fig. 1 is a view in elevation of a flash hider constructed in accordance with the invention;

Fig. 2 is a longitudinal section of the same;

Fig. 3 is a cross section on the line 3—3 of Fig. 2; and

Fig. 4 is a view in elevation of the inner tube.

Referring to the drawings by numerals of reference:

In carrying out my invention I provide an inner tube 1 tapering toward each end and provided with rows of apertures 2 extending longitudinally thereof. The rear end of this tube is arranged for attachment to the discharge orifice or component parts

of the flash hider, for example at 3 to be attached to the jacket of a machine gun or other device, and the opening in this instance is of sufficient diameter to admit the muzzle of a gun barrel. The reduction of the end provides an annular shoulder 4 which serves to clamp the surrounding assembly or casing in place.

The surrounding assembly consists, as an example, of an outer casing 5 which has a head 6 provided with an aperture of sufficient diameter to receive a reduced threaded end of the inner tube and to this head may be secured as by rivets 7 an annular plate 8. The rivets 7 also serve to bind the rear flanged end of an inner casing 9 to the head and the forward end of this casing is offset outwardly and secured by rivets 10 to the casing 5. The outer casing 5 is provided with rows of longitudinally extending apertures 11 and the inner casing is provided with similarly arranged apertures 12, the apertures of the two casings being arranged in staggered relations.

Between the outer and inner casing I place a medium, herein shown as an example a coil of untempered iron wire 13, though any other medium for this purpose may be employed.

In attaching this device to a machine gun, the muzzle gland is removed and the inner tube threaded into place in the gun jacket thereby drawing the casing firmly into place against the end of the gun jacket.

When the gun is fired the escaping gases pass through the apertures in the inner tube and in the inner casing losing some of their heat thereby and come in contact with the coil of wire which absorbs and radiates further heat from the gases thereby cooling them below the flashing point. The gases then escape through the apertures in the outer tube.

I claim:

1. A flash hider, embodying a tubular member tapering toward each end and provided with rows of apertures, one end of said member embodying means attachable to a discharge orifice or other component parts of the flash hider, a casing surrounding the tubular member, comprising an outer casing provided with rows of apertures and an inner casing secured to the

outer casing and provided with rows of apertures, the apertures of said casings being staggered with relation to each other and a medium interposed between the casings.

2. A flash hider, embodying a tubular member tapered toward each end and provided with apertures, a casing surrounding the tubular member and spaced therefrom, said casing provided with apertures and a

medium carried by the casing and in the path of escaping gases.

3. A flash hider, embodying, a tubular member tapered toward each end attachable to a discharge orifice for confining escaping gases and directing the same and a medium carried on said member and in the path of the escaping gases.

WILLIAM R. BULL.