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2,356,728

FLASH HIDER

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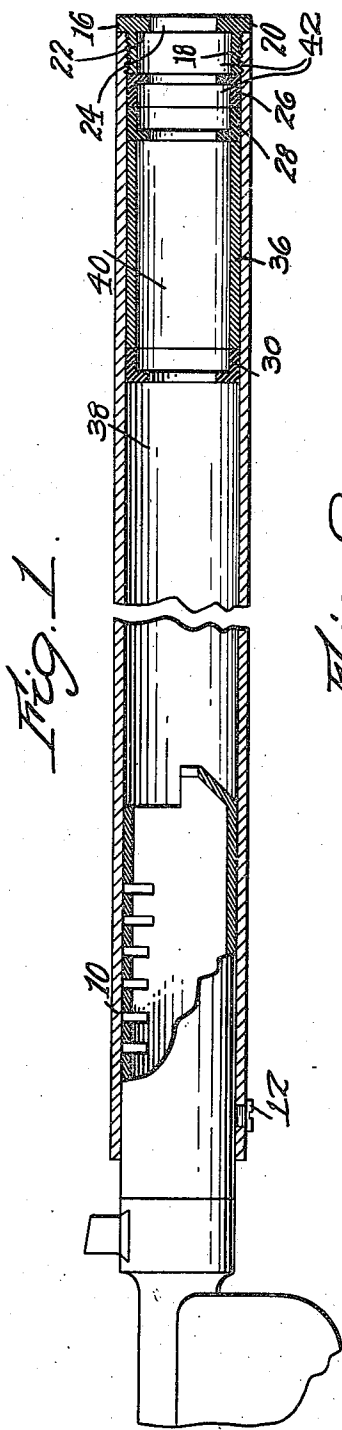


Fig. 2.

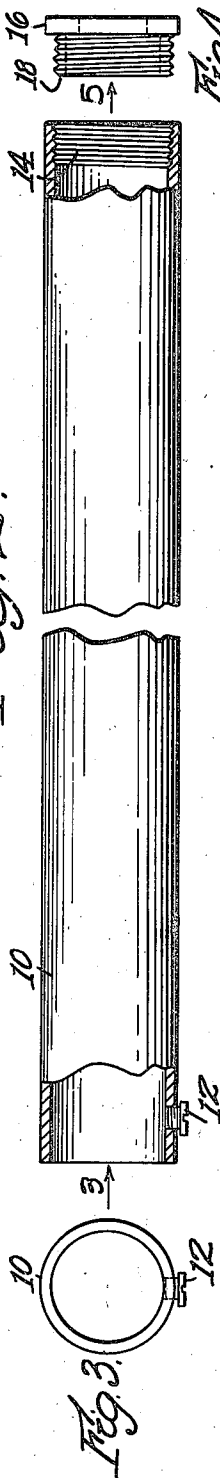


Fig. 4.

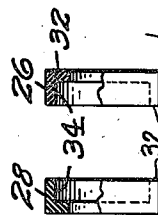
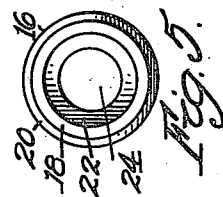


Fig. 6.

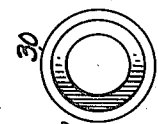


Fig. 7.

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FLASH HIDER

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4 Claims. (Cl. 89—14)

This invention relates to flash hidere of the type adapted for use in concealing the flashes incidental to firing of firearms, particularly automatic weapons.

Objects of the invention include the provision of an efficient flash hider adapted to be secured to a firearm muzzle and constructed of few parts in a simple and inexpensive manner; the provision of a flash hider comprising an elongated tube of larger diameter than the caliber of the firearm to which it is to be attached and having a series of particularly spaced baffles adjacent its exit end; the provision of a flash hider having only six parts of which three are exactly alike; and the provision of a flash hider as recited which may be made without the necessity of providing any special tools or dies for the purpose.

Other objects and advantages of the invention will appear hereinafter.

Reference is to be had to the accompanying drawing, in which

Fig. 1 is a longitudinal section through the flash hider;

Fig. 2 is an elevation with parts removed;

Fig. 3 is an end view looking in the direction of arrow 3;

Fig. 4 is an elevation of the front cap;

Fig. 5 is a view of the cap looking in the direction of arrow 5;

Fig. 6 is an exploded view of the baffles; and

Fig. 7 is a view of one of the discs looking in the direction of arrow 7 in Fig. 6.

Referring to the drawing in detail, the flash hider as here illustrated and conforming to the invention, comprises a long tube or cylinder 10 open at both ends. A screw or other fastener 12 is mounted adjacent one end of the tube, and may be used to detachably secure the flash hider to a firearm barrel at the muzzle, the tube being intended to extend away from the muzzle. The flash hider may also be similarly secured over a compensator such as disclosed in my co-pending application Serial No. 375,224, filed January 6, 1941, if a compensator is used.

The tube 10 is internally screw-threaded at its end opposite to the fastener 12, as shown at 14. A cap 16 comprising a short cylindrical body 18 externally screw-threaded to mesh with the interior threads of tube 10, is provided, and the body 18 has a flange 20 which is round and extends radially outwardly beyond the body 18 so that its periphery aligns with the outside surface of the tube in short extension thereof. A second and wider flange 22 extends inwardly of the body 18 and this flange comprises a final

baffle, being apertured at 24 for the passage of the bullet.

There are three other baffle elements in the tube, all three comprising structures exactly alike, but differently indicated for descriptive purposes as 26, 28, 30. Each baffle element comprises a plane round disc 32 having a central aperture for the bullet and a lateral peripheral flange 34 of a diameter dimension sufficient to allow a tight fit in the tube, the flange extending to one side only of the disc. Baffle element 26 is positioned to abut the end of cap body 18 with its flange 34 extending away from the cap. Element 28 is positioned next to element 26, their flanges extending toward each other and abutting to space their discs, or effective baffle members, the desired distance apart.

Baffle element 30 is located in greater spaced relation to element 28, by means of a cylindrical spacer 36, just fitting the inside of the tube, and the flange of element 30 extends toward the spacer and the other baffles to peripherally abut the former and to act as a further spacing means. As shown, the baffles are four in number, and are grouped well toward the exit end of the flash hider, first baffle 30 being in position to initially and roughly break up the explosion flashes, each of which will completely fill the tube from the gun muzzle to the first baffle, and baffles 28, 26, 22 being positioned to more finely break up and completely disperse the initially broken-up flashes. The spaces 36 and flanges 34 act to reduce the diameter of the tube between baffles.

Repeated practice tests have shown that the spacing as here disclosed, together with the long length of the tube, is the most efficient flash hider possible, using the simple and easily manufactured parts as described. It is thought that this efficiency results from providing the long unimpeded chamber 38 to take a complete explosion flash, then initially breaking it up by means of baffle 30, providing short and reduced chamber 40 for the roughly broken flashes, and finally dispersing the latter in the narrowly spaced baffles 28, 26, and 22, and very short chambers 42.

Having thus described my invention and the advantages thereof, I do not wish to be limited to the details herein disclosed, otherwise than as set forth in the claims, but what I claim is:

1. A flash hider for firearms comprising a hollow tube adapted to be secured to a firearm at one end, a cap secured to the other end of the tube and extending a short way thereinto, a

baffle element abutting said cap and having a short flange fitting the interior of said tube and extending away from said cap, a second baffle element similar to said first named baffle element and positioned in said tube with its flange abutting the flange of the first named baffle element, a spacer sleeve fitting the interior of said tube and having an end abutting the second named baffle element, said spacer being longer than the combined widths of said cap and said flanges, and a third baffle abutting the other end of said spacer.

2. A flash hider as recited in the next preceding claim wherein said flanges and spacer are all of corresponding thickness and are effective to reduce the interior diameter of the tube.

3. A flash hider for firearms comprising a hollow tube adapted to be attached to a firearm and having a chamber therein, a cap at one end of said tube, a pair of baffle elements located in said chamber adjacent said cap and each element having a similar lateral flange extending toward each other in abutting relation, a spacing sleeve

in said chamber abutting one of said baffle elements, and a third baffle element having a flange extending toward and abutting said sleeve, the latter being of greater length than the combined lengths of said flanges.

4. A flash hider for firearms comprising a hollow tube adapted to be attached to a firearm and having a chamber therein, a cap at one end of said tube, a pair of baffle elements located in said chamber adjacent said cap and each element having a similar lateral flange extending toward each other in abutting relation, a spacing sleeve in said chamber abutting one of said baffle elements, and a third baffle element having a flange extending toward and abutting said sleeve, the latter being of greater length than the combined lengths of said flanges, and all said baffle elements lying to one side of the transverse center of said tube, whereby said chamber is broken up into a plurality of chambers of decreasing lengths toward said cap.

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