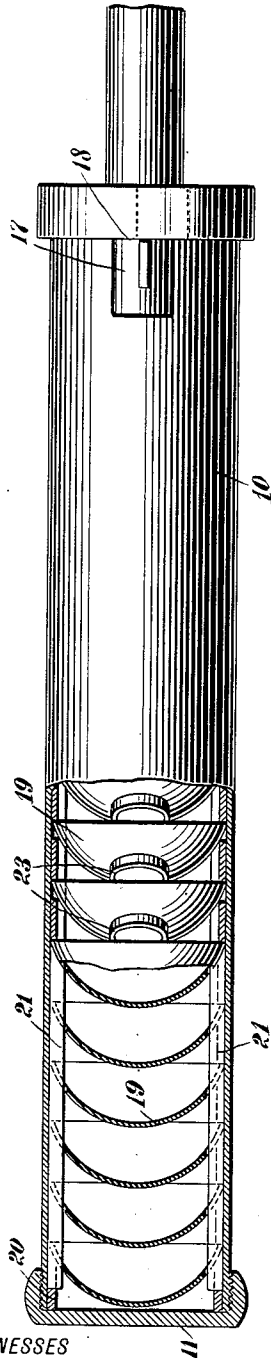


959,400.

Patented May 24, 1910.

Fig. 1,



WITNESSES

Edward Thorpe
W. W. A. Co.

Fig. 2,

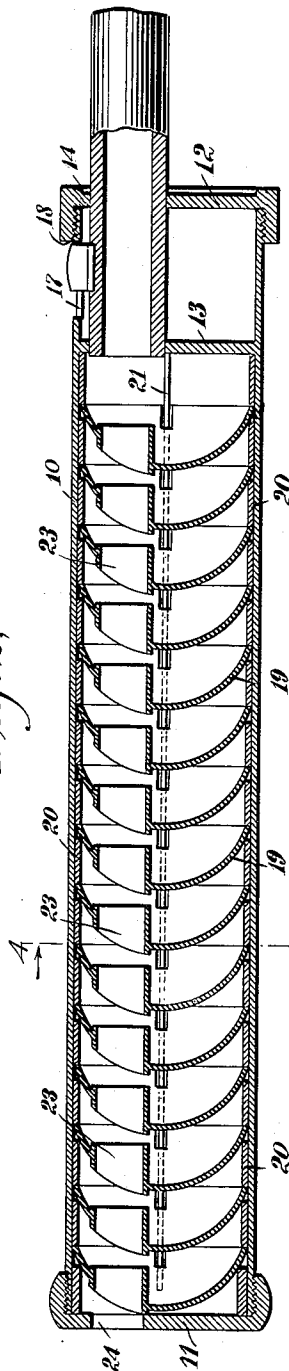


Fig. 3,

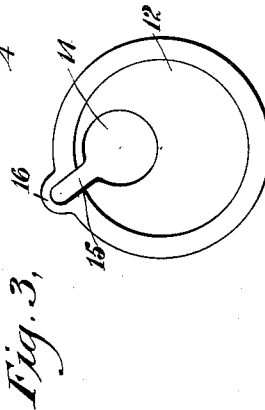
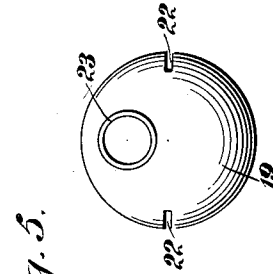
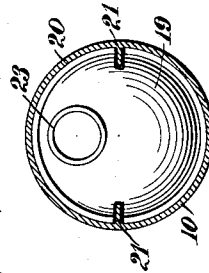


Fig. 4,



INVENTOR

James H. Stinson
BY *Mummales*
ATTORNEYS

UNITED STATES PATENT OFFICE.

JAMES HENRY STINSON, OF COOKE, MONTANA.

GUN-MUFFLER.

959,400.

Specification of Letters Patent.

Patented May 24, 1910.

Application filed June 23, 1909. Serial No. 503,830.

To all whom it may concern:

Be it known that I, JAMES H. STINSON, a citizen of the United States, and a resident of Cooke, in the county of Park and State of Montana, have invented a new and Improved Gun-Muffler, of which the following is a full, clear, and exact description.

The invention is an improvement in gun mufflers or silencers and has in view means to arrest the forward movement of the escaping powder gases and give the same a backward curling motion at successive points, whereby they escape gradually and produce a but slightly audible sound. This I accomplish by providing a casing constructed to be detachably applied to the muzzle of the rifle and having therein a series of dished disks or heads, the several heads being arranged in spaced relation, with their concave sides facing rearwardly, and a sectional barrel forming a continuation of the rifle barrel, with each section of the barrel carried by one of the heads and projecting slightly beyond each side thereof.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a plan of my improved gun muffler as detachably applied to the muzzle of a rifle, the outer portion of the muffler being shown in central longitudinal horizontal section; Fig. 2 is a longitudinal vertical central section of the same; Fig. 3 is a rear end view of the muffler when detached from the rifle; Fig. 4 is a cross-section on the line 4-4 of Fig. 2, looking in the direction of the arrow; and Fig. 5 is an outer face view of one of the muffler disks or heads.

In the construction of my improved gun muffler, I make use of a tubular casing 10 of suitable length, the same having screw-threaded caps 11 and 12 at its forward and rearward ends respectively, and a cross wall or disk 13 arranged slightly forward of the cap 12. Both the cap 12 and wall 13 have alining openings arranged eccentric to the casing near the top thereof, with the opening 14 in the cap 12 having a radial slot 15 passing toward the circumference of the casing and terminating in a pressed-out portion 16 of the band or screw-threaded flange of the cap. One edge of the slot 15 is arranged in substantial alinement with one

edge of an opening 17 formed in the top of the casing, the opening being somewhat wider than the slot to form a shoulder 18 at the front of the cap 12. This construction adapts the muffler to be easily applied and removed from the muzzle of the rifle in much the same manner as a bayonet, the muzzle of the rifle being passed into the alining openings of the cap 12 and head 13, with the sight of the rifle in register with the slot 15. When the sight is passed into the opening 17, the muffler is given a partial turn to engage the sight on the shoulder 18.

That portion of the tubular casing between the wall 13 and the outer or forward cap 11 is provided with a series of dished disks 19 arranged in spaced relation, with the concave sides of the disks facing rearwardly or toward the muzzle of the firearm. The several disks are prevented from shifting their position to or from each other by spacing rings 20, the spacing rings closely fitting the bore of the casing and receiving the edges of the disks between them. Relative rotation between the disks and casing is prevented by providing longitudinal keys or splines 21 projecting from the inner wall of the casing at diametrically opposite points into the slots 22, of like shape, formed in the edges of the disks, this construction necessitating the making of the spacing rings 20 in two sections, with the sections arranged at opposite sides of the splines.

That portion of the casing between the wall 13 and the outer cap 11 is further provided with a sectional barrel forming a continuation of the barrel of the rifle, each section 23 of the barrel being carried by one of the heads 19 and arranged to project a slight distance to each side of the head, with the outer edge of the barrel section conforming to the convexity of the head, and the opposite and inner edge of the barrel section arranged transversely of the casing and terminating a substantial distance at the bottom from the next inner or rearward barrel section. The bore of the sectional barrel is slightly larger than the bore of the rifle, and an opening 24, of equal or larger size, is formed in alinement therewith in the cap 11.

Upon the discharge of a rifle equipped with the muffler, the out-rushing powder gases are arrested at successive points by the dished heads 19, and their direction changed from a forward movement to a

backward curling motion, which reduces the velocity of the gases and enables them to escape gradually without making any substantial report.

5 Having thus described my invention, I claim as new and desire to secure by Letters Patent:

10 1. The combination in a gun muffler, of a casing having gas-tight side walls, and a series of heads dished in the same direction throughout and arranged within the casing in spaced relation and having a projectile passage leading therethrough, with the dished edges of the heads extending to the inner wall of the casing, and with the concave sides of the heads facing rearwardly to arrest the forward movement of the powder gases and give the same a backward curling motion at successive points.

20 2. The combination in a gun muffler, of a casing, and a series of heads arranged within the casing in spaced relation and having a projectile passage leading therethrough, the heads being dished in the same direction throughout, with the central portions thereof extending farthest outwardly and the dished edges thereof extending to the inner wall of the casing, and with the concave sides of the heads facing rearwardly to arrest the forward movement of the powder gases and give the same a backward curling motion at successive points.

35 3. The combination in a gun muffler, of a casing having spaced walls at its rear end provided with alining openings to receive the muzzle of the gun, with the outer wall having a slot extending from the opening thereof and leading into an opening formed

in the side of the casing to receive the sight of the gun, with the opening in the casing relatively wider than the slot to form a shoulder to engage behind the sight.

4. The combination in a gun muffler, of a casing, a series of dished heads arranged within the casing in spaced relation, with the concave sides of the heads facing rearwardly to turn the powder gases back, and a sectional barrel eccentrically arranged within the casing, with each section spaced apart and carried by one of said heads.

50 5. The combination in a gun muffler, of a casing, a series of dished heads arranged within the casing in spaced relation, with the concave sides of the heads facing rearwardly to arrest the powder gases at successive points, and a sectional barrel arranged within the casing, with each section of the barrel carried by and projecting to the opposite sides of one of the heads, and with the outer edges of the barrel sections substantially conforming to the convexity of the heads.

6. The combination in a gun muffler, of a casing, a series of heads arranged within the casing in spaced relation, and a sectional barrel arranged within the casing, with the several sections spaced apart and each section projecting to both sides of and carried by one of said heads.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JAMES HENRY STINSON.

Witnesses:

FLORENCE MCCARTHY,
JOHN F. CURL.