(No Model.)

F. MANNING.

BULLET.

No. 326,231.

Patented Sept. 15, 1885.

FIG.1.

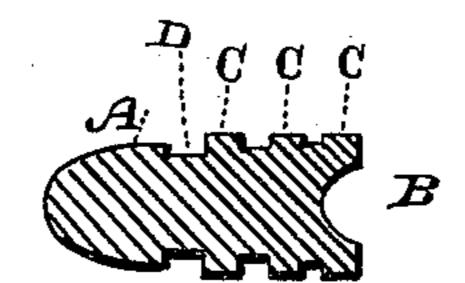
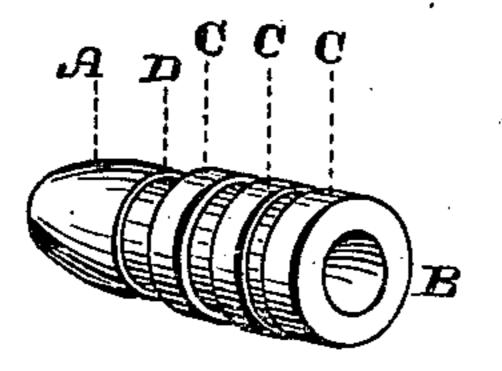


FIG.2.



Witnesses, Geodostang J.B. Some Twentor, Hanning Dewey Ho.

United States Patent Office.

FRANKLIN MANNING, OF MARYSVILLE, CALIFORNIA.

BULLET.

SPECIFICATION forming part of Letters Patent No. 326,231, dated September 15, 1885.

Application filed October 9, 1884. (No model.)

To all whom it may concern:

Be it known that I, FRANKLIN MANNING, of Marysville, in the county of Yuba and State of California, have invented an Improvement in Bullets; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to an improved bullet or projectile for fire-arms or rifled guns; and it consists of a head or front portion having a diameter smaller than that of the interior of the gun, a series of cannelures with intervening projecting rings or ridges, which have a diameter sufficient to fit the grooves or rifling of the gun, the channels or cannelures between said ridges gradually deepening from the rear of the bullet toward the front, while the deepest channel or groove is made in front of the last ring, and between it and the head of the bullet.

Referring to the accompanying drawings for a more complete explanation of my invention—

Figure 1 is a longitudinal section showing the bullet of my construction. Fig. 2 is a per-

spective view of the bullet.

A is the head or front portion of the bullet, which may be of any suitable or desired shape, and B is the rear portion or body, having pro-30 jecting rings C C C surrounding it, with intervals or spaces between, said rings forming what are known as the "cannelures" upon the bullet. These grooves or channels are made shallow at the rear or base of the bullet. 35 increasing gradually in depth toward the front. until the deepest one, which is just in the rear of the head portion of the bullet. The exterior diameter of the rings is equal, so that when the bullet is placed in the gun these 40 rings will fit the grooves or rifling of the gun, thus forming a bearing or support which holds the bullet in its central position and with its axis in line with the axis of the gun. The front or head portion, A, is made of a diam-45 eter slightly smaller than the interior of the bore of the gun, so that it does not enter the grooves or rifling, thus retaining its perfect form, so that its flight through the air will not be impeded. By this construction the front 50 portion of the bullet does not come in contact with the interior of the rifle. The front groove or channel, D, which is just behind the head of the bullet, is the deepest of all, and as these

grooves are filled with the grease or lubricant, the grease from the front groove is spread 55 over the whole length of the barrel as the bullet passes out, thus lubricating it before the bearing portion or rings pass through the barrel. The front edge of this forward ring also acts as a scraper to remove the dry detritus 50 from the previous shot, scraping it off and packing it into the groove D, where it takes the place of the lubricant which has been forced out into the barrel. By this construction the dry lead from the front portion of the 65 bullet does not come in contact with the interior of the rifle, and it is held in the central position by the guidance of the rings upon the rear portion, while the lubricant, which is just in the rear of the head, is forced out of its 70 groove upon the interior of the barrel, and the shoulder of the forward ring scrapes off the detritus which is left after each shot. This prevents the leading of the gun and gives it greater range, with a low trajectory and with 75 an accuracy of flight which surpasses any other lubricated bullet. The cannelures of increasing depth prolong and equalize the upset of the bullet.

I am aware a bullet having a conical form 80 decreasing with a gradual curve from base to point, with alternate rings of unequal size and grooves of equal depth, and corresponding with the outline of its body has been used; but such construction I do not claim as my inven-85 tion.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

A bullet or projectile for guns or fire-arms, 90 having a series of approximately equal and alternate rings and grooves surrounding the rear portion, the rings having an approximately equal diameter sufficient to fit the rifling of the gun, and the grooves increasing in depth 95 from the base of the bullet forward, a head having a smaller diameter than the rings or the interior of the gun, and a groove or channel between the forward ring and the rear of said head, substantially as herein described.

In witness whereof I have hereunto set my hand.

FRANKLIN MANNING.

Witnesses:

JOHN COLFERD,
JOHN LAWRENCE STEWARD.