(No Model.)

J. H. HAMMER.

PROJECTILE.

No. 603,466. Patented May 3, 1898.

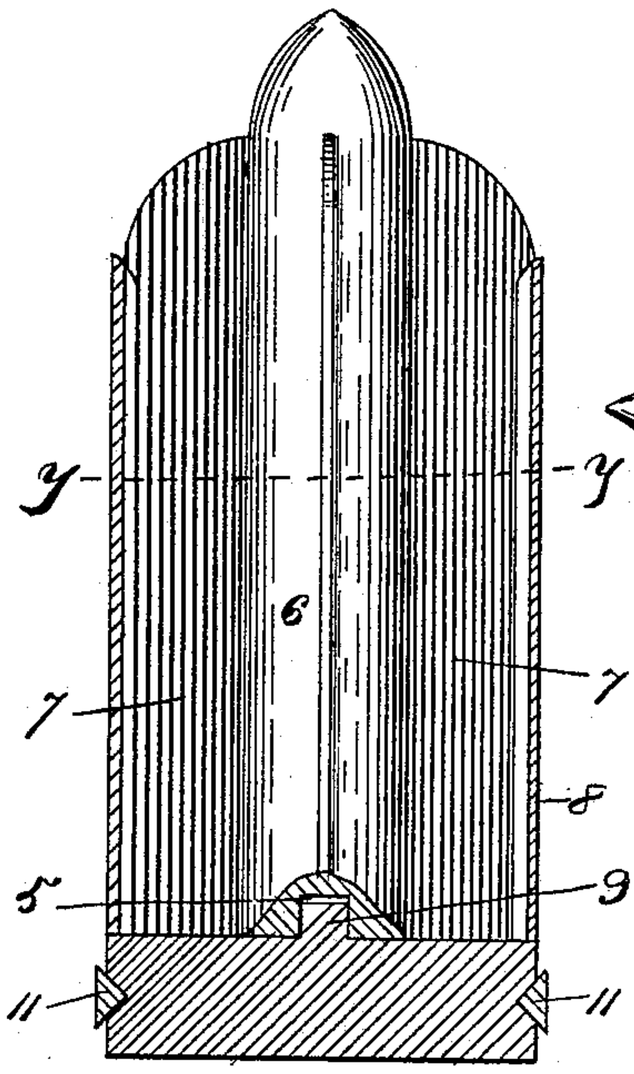


Fig. 5.

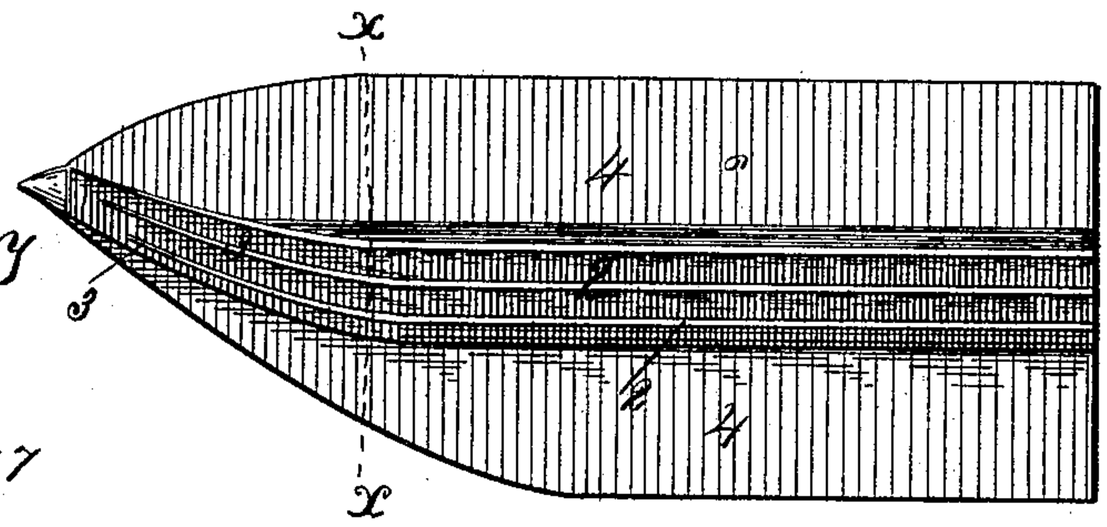


Fig. 1

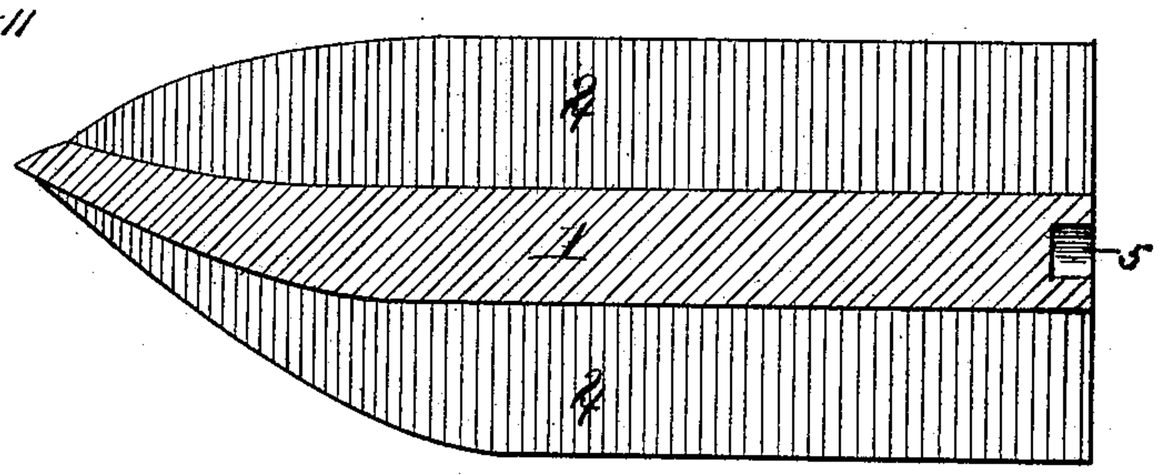


Fig. 2.

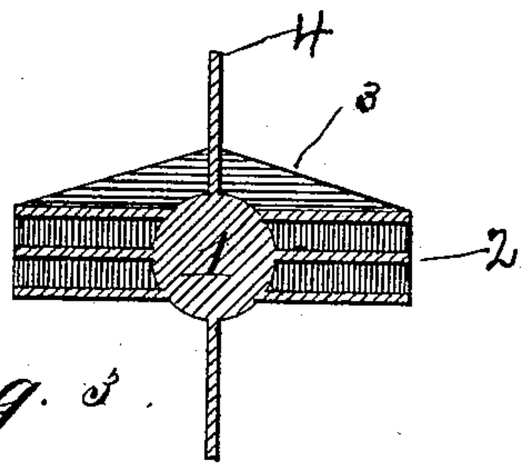
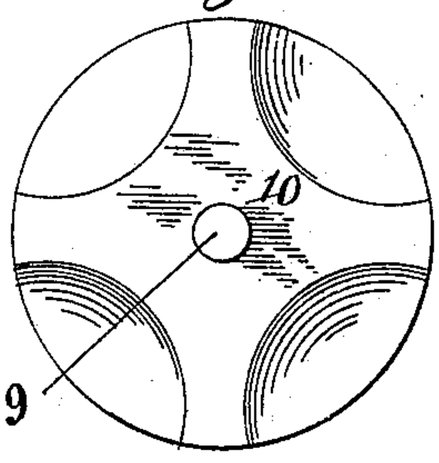


Fig. 3.

Fig. 4.



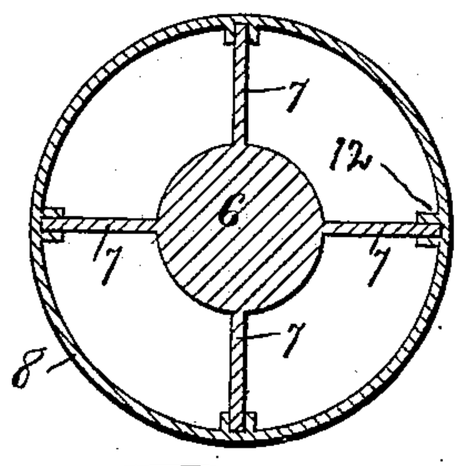


Fig. 6.

WITNESSES:

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PROJECTILE.

SPECIFICATION forming part of Letters Patent No. 603,466, dated May 3, 1898.

Application filed March 15, 1897. Serial No. 627,629. (No model.)

To all whom it may concern:

Be it known that I, JOHN HENRY HAMMER, a citizen of the United States of America, residing at Allegheny, in the county of Allegheny and State of Pennsylvania, have invented certain new and useful Improvements in Projectiles, of which the following is a specification, reference being had therein to the accompanying drawings.

This invention relates to certain new and useful improvements in projectiles, and has for its object to produce a projectile provided with flanges or wings which will regulate the course of the projectile.

The object of my invention of the above-referred-to class is to produce a projectile having curved flanges which will cause the device to travel in any desired direction. A further advantage gained by the curved flanges is that the projectile can be fired into water, while the resistance of the flanges against the water causes the projectile to travel in a curved line, striking the object from underneath—in case of a vessel, striking it in the weakest portion. The projectile is usually smaller than the bore of the firearm, the flanges have a removable covering to protect the bore from injury, and the force of the atmosphere removes the covering after leaving the bore.

With the above and other objects in view this invention finally consists in the novel construction, combination, and arrangement of parts to be hereinafter more specifically described, and particularly pointed out in the claims.

In describing the invention in detail, reference is had to the accompanying drawings, forming a part of this specification, and wherein like figures of reference indicate similar parts throughout the several views, in which—

Figure 1 is a side elevation of my improved projectile. Fig. 2 is a longitudinal sectional view of the same. Fig. 3 is a sectional view taken on line X X of Fig. 1. Fig. 4 is a top plan view of the removable head. Fig. 5 is a perspective view of a modified form of head. Fig. 6 is a cross-sectional view on line Y Y of Fig. 5.

Referring to Fig. 1 of the drawings, 1 designates the projectile, provided with wings 2, having a curved portion 3. Said projectile is also provided with a flange 4, extending at right angles to the wings 3, and formed in the end of the body of the projectile is an opening or recess 5, adapted to receive a lug formed on the removable head, which will be hereinafter described.

Referring to Fig. 5, I have shown a modified form, the projectile 6 being provided with wings 7, extending longitudinally of the projectile and engaging the flange 12 on the jacket 8, which prevents the wings 7 from cutting the bore of the firearm and prevents the rifling of the bore transmitting a rotary motion to the projectile. Said projectile is also provided with a recess 5 to receive a lug 9, formed on the front side of the removable head 10. Formed on the periphery of the removable head is a V-shaped groove receiving a packing 11 to form a tight joint between the head and the bore of the firearm.

In using the device shown in Fig. 1 the curved flanges or wings are inclined in the direction the projectile is to curve. This may be done before the projectile is inserted in the bore of the firearm. In either case the jacket is used to protect the bore, the flange 12 of the jacket being properly spaced when used with the projectile of Fig. 1. After the projectile and jacket leave the firearm the resistance of the air causes the jacket and removable head to slide off the wings.

It will be noted that various changes may be made in the details of construction without departing from the general spirit of my invention.

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

1. In combination, a projectile, flanges or wings carried by said projectile, a protecting-jacket surrounding said flanges or wings and engaging the same, a removable head provided with a lug engaging an opening in the end of the projectile, substantially as shown and described.

2. In combination, a projectile provided with wings or flanges, a protecting-jacket engaging said flanges, and a removable head engaging the rear end of the projectile, substantially as shown and described.

In testimony whereof I affix my signature in presence of two witnesses.

JOHN HENRY HAMMER.

Witnesses:

W. H. TIMMERMANN,

THOS. M. BOYD, Jr.