

T. D. GIBSON.

Projectile.

No. 90,164.

Patented May 18, 1869.

Fig 1

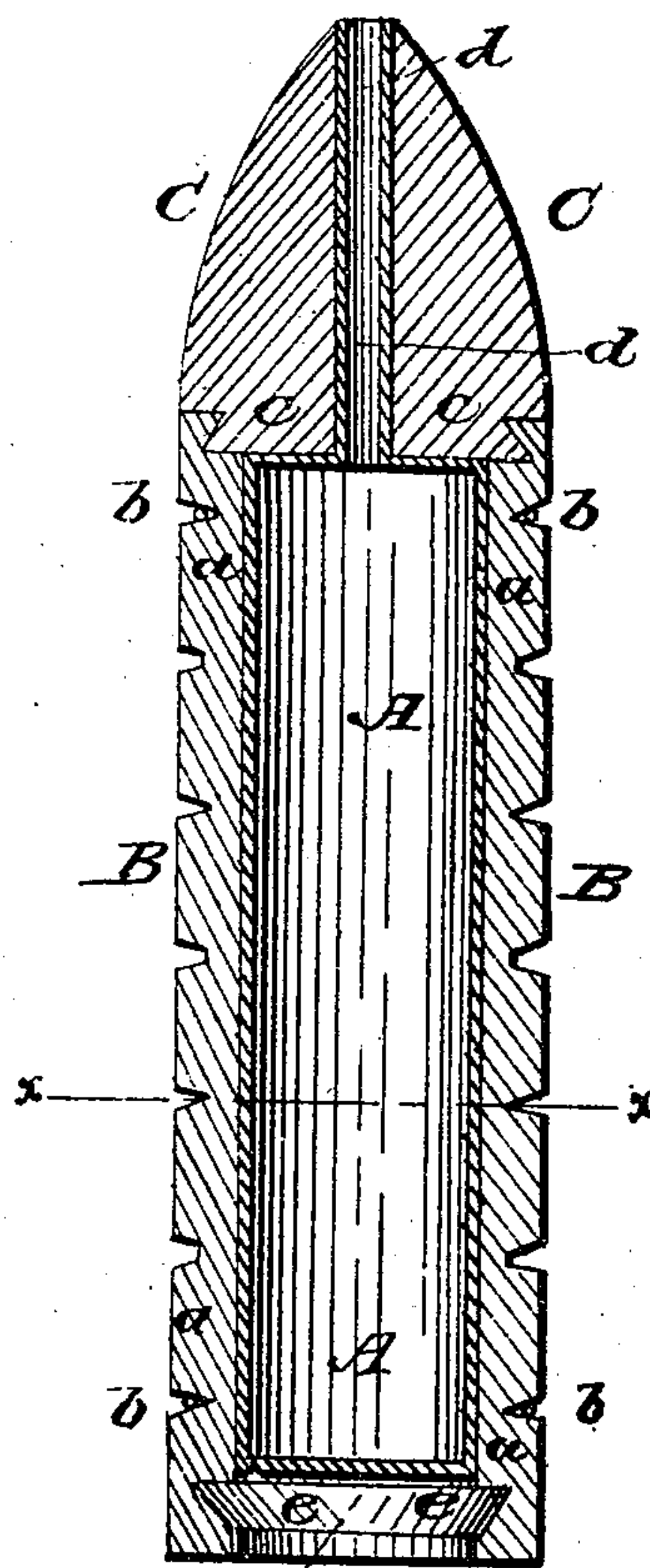
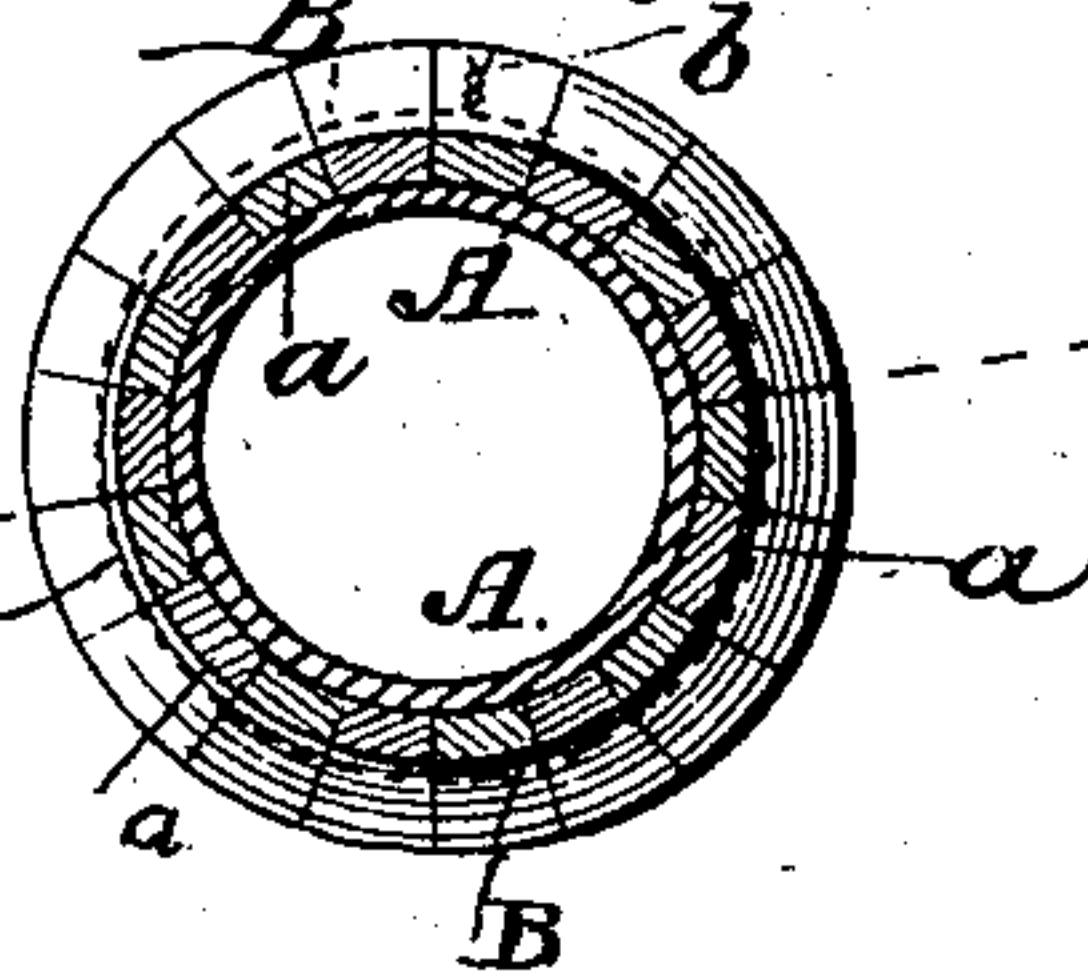


Fig. 3



Fig. 2



Witnesses

H. A. Morgan
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THOMAS D. GIBSON, OF WILMINGTON, DELAWARE.

Letters Patent No. 90,164, dated May 18, 1869.

IMPROVED HOLLOW PROJECTILE FOR FIRE-ARMS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, THOMAS D. GIBSON, of Wilmington, in the county of New Castle, and State of Delaware, have invented a new and improved Hollow Projectile for Fire-Arms; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable those skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 represents a longitudinal central section of my improved shell.

Figure 2 is a horizontal section of the same, taken on the plane of the line *xx*, fig. 1.

Figure 3 is a detail side view of a modification of my invention.

Similar letters of reference indicate corresponding parts.

This invention relates to an improvement in hollow projectiles for ordnance, and consists of a series of longitudinal notched bars, which, when the shell explodes, are spread in all directions, and are broken so as to do a large amount of injury to a hostile army, against which the article has been shot.

A, in the drawing, is a cylindrical vessel, made of sheet-metal or other suitable material, of suitable length and diameter.

It is surrounded by a metal cylinder, B, which is composed of a series of longitudinal bars, *a a*, as is clearly shown in the drawing.

These bars are notched on the outside, as in fig. 1, or on their inner edges, as in fig. 3, so as to be weaker where they have the notches.

The bars *a a* are held together by means of a ring or rings, *b*, or by a band or bands of suitable construction, or in any other suitable manner.

C is the point or front end of the shell.

The same has a conical tenon, *c*, projecting from its base, fitting into corresponding recesses of the bars *a*, as in fig. 1.

The front end, C, can be made solid or perforated.

In the latter case, its central aperture, *d*, communicates with the inside of the case A, so that an explosive compound fitted to the apex of the shell, may, when exploded, by striking against an obstacle, ignite the charge of the case A, thereby exploding the shell.

D is a plug for closing the lower end of the shell.

The same is, by means of a dovetail tenon, *e*, fastened to the bars *a*, in a manner similar to the head C.

If the head C is perforated, as aforesaid, the plug D may be solid; but if C is solid, then the plug should be perforated to retain a fuse for exploding the shell.

When the shell is exploded, the rings or bands, *b*, will be broken, and also the bars A where they are notched, and all the pieces will fly in all directions, destroying or injuring everything in their way.

The immense effect of this weapon is evident, and also its usefulness on the battle-field.

This shell may be fired from cannon, or be thrown by hand or other mechanism.

I am aware of the patent granted to T. Harding, July 14, 1863, for a hollow projectile, and I claim nothing therein shown; but

What I claim as new, and desire to secure by Letters Patent, is—

A hollow projectile for fire-arms, composed of the bars *a a*, arranged around the charge A, when notched as described, for the purpose herein shown.

THOS. D. GIBSON.

Witnesses:

J. M. BARR,

THE. F. CRAWFORD.