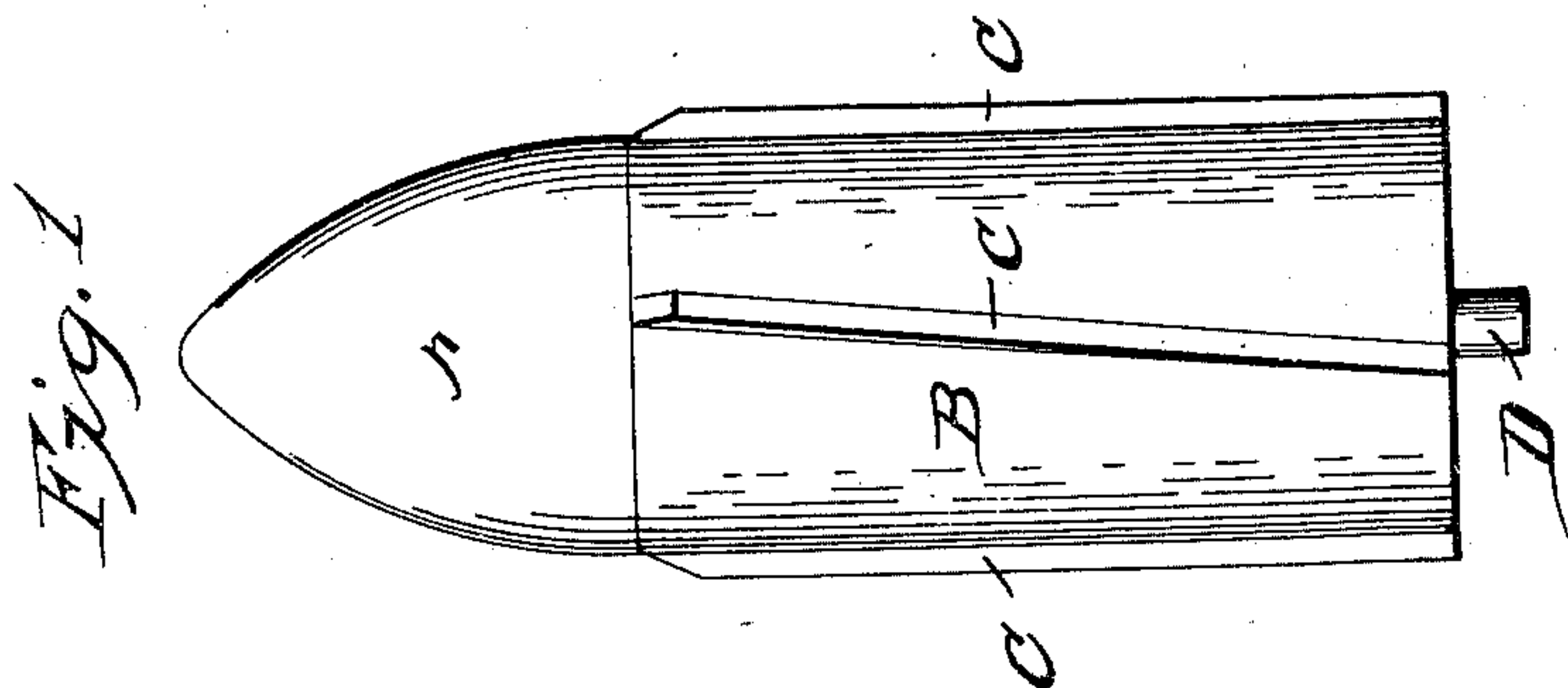
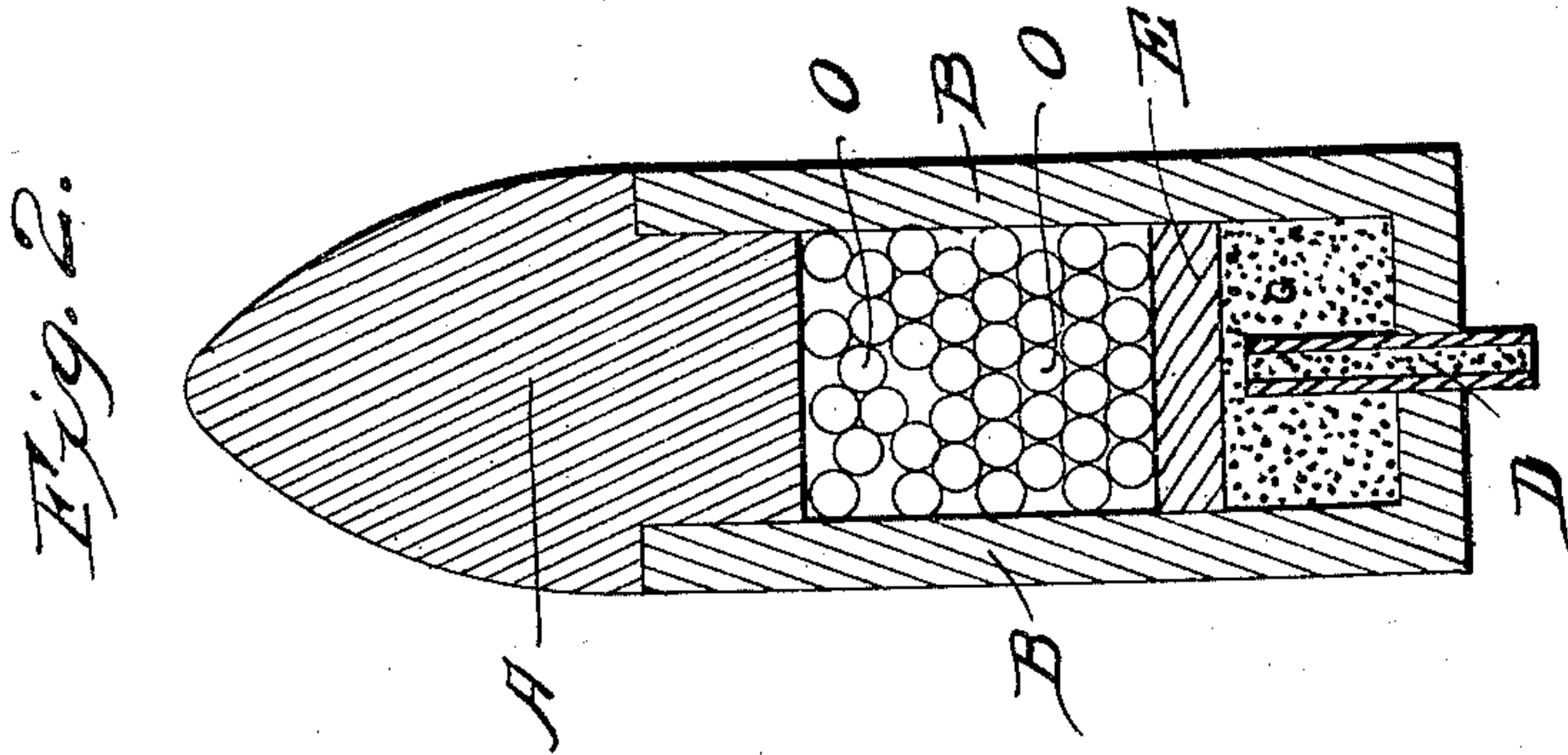


S. GROOM.
EXPLOSIVE CANISTER SHOT.

No. 36,820.

Patented Oct. 28, 1862.



Witnesses:
Marcus P. Norton
Samuel Pierce

Inventor
Smith Groom

UNITED STATES PATENT OFFICE.

SMITH GROOM, OF TROY, NEW YORK, ASSIGNOR TO HIMSELF AND JACOB SHAVOR, OF SAME PLACE.

IMPROVEMENT IN EXPLOSIVE CANISTER-SHOT.

Specification forming part of Letters Patent No. 36,820, dated October 28, 1862.

To all whom it may concern:

Be it known that I, SMITH GROOM, of the city of Troy, county of Rensselaer, State of New York, have invented new and useful Improvements in Shot and Shell for Rifled Cannon; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

Figure 1 of the drawings accompanying this specification shows a side of my improved canister shot or shell containing powder, wadding, war-missiles, and wood plug with conical end, hereinafter described. Fig. 2 is a section through the center of said shot or shell shown at Fig. 1, which shows the construction of said canister-shot hereinafter described.

The nature of my improvements consists in the construction of a shot or shell so that the same may, on near approach to the enemy, shoot and throw war-missiles among such enemy or explode upon the ground at any desired distance therefrom.

The shell B, Figs. 1 and 2, is constructed hollow and in the form of an elongated cylinder, with the rear end closed. Upon the outside surface of such canister shot or shell I construct spiral ribs or flanges C, Fig. 1, four in number, which give a rotating motion to said shot or shell when driven from a rifled cannon, whereby greater range is given to the same, and which ribs or flanges correspond to and with the grooves or rifles in the cannon used. Through the rear end of this shot or shell I construct the time-fuse D, Figs. 1 and 2. Around this fuse, and in the rear end of the said shot or shell, I place powder G, used for driving forward the wadding, the war-missiles o, and conical wood plug A, Fig. 2, or for exploding said shot or shell, as the case may be, when the range shall have been attained. Upon the said powder I pack the said wadding E, Fig. 2. Upon said wadding I place round shot or other war-missiles o, same figure. Upon such shot or war-missiles

I drive the said plug of wood A, which is forced into said shell B B, Fig. 2, in as firm condition as required. This wood plug A, Figs. 1 and 2, is made in a conical form from the said shell to the front end or entire distance, projecting beyond the said shell. This wood plug may project over and beyond the side of said shot or shell, which projection shall prevent or overcome "windage." Thus it will be seen that said wood plug accomplishes a twofold purpose: First, it completes the canister shot or shell by being forced into the aforesaid cylinder or shot, thereby holding the small shot or balls O, Fig. 2, in the required place; and, second, it prevents or overcomes windage by constant outward pressure while moving out from the cannon, in which the same may be used without injury to the bore thereof.

When the powder in this shot or shell becomes ignited, an explosion takes place, or the said wood A, small shot or war-missiles O, and wadding E are driven in great force out of the said canister shot or shell—in either case a destructive instrument of war among or in the midst of the enemy. It may be regulated to shoot forward into or among the enemy the war-missiles therein on near approach to the enemy, or to shoot or explode in their midst, as thought best.

The construction of this canister shot or shell is simple and not very expensive.

This shot or shell may of course be made of any size or weight desired for use.

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

A canister shot or shell so constructed as to shoot forward the wood or metal plug A, war-missiles O, and wadding E, in the manner substantially as herein described and set forth.

SMITH GROOM.

Witnesses:

S. E. BLAKELY,
MARCUS D. NORTON.