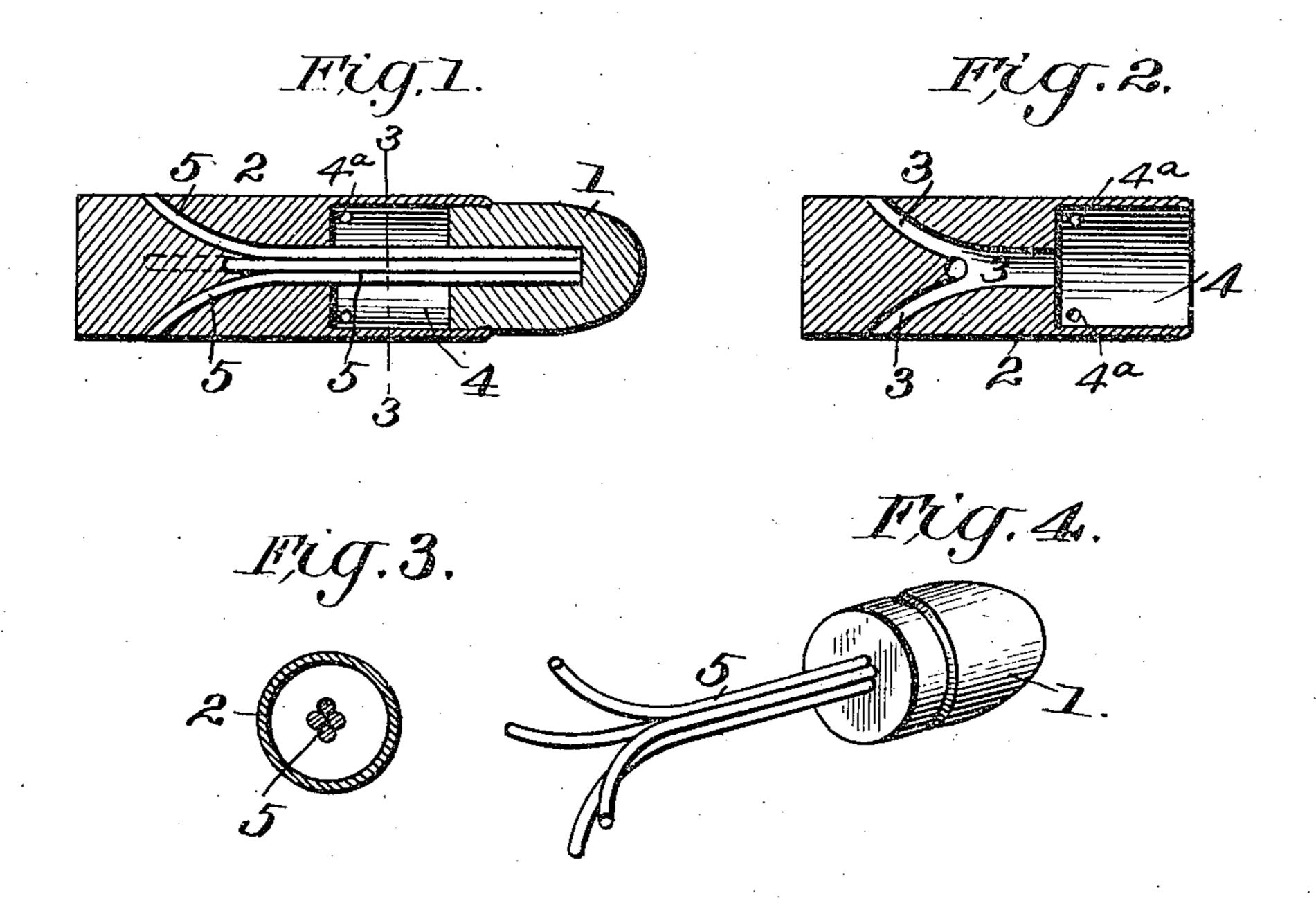
W. PEPPERLING.

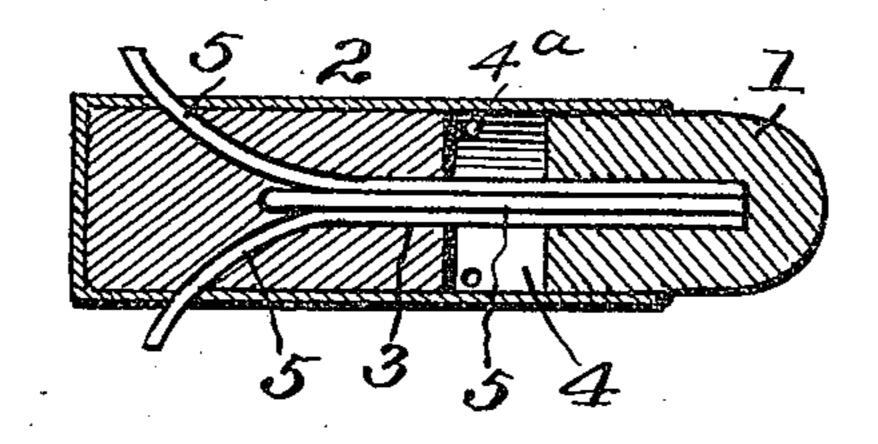
PROJECTILE.

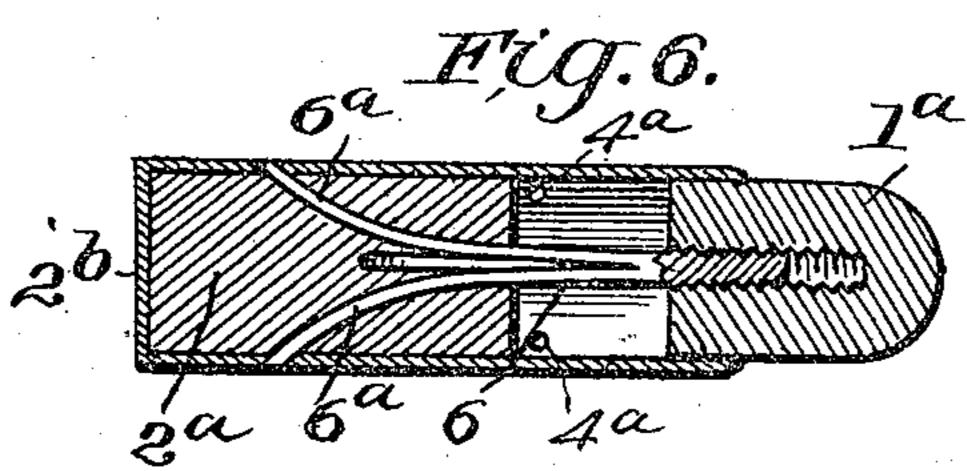
APPLICATION FILED JAN. 22, 1903.

NO MODEL









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ATTORNEYS

UNITED STATES PATENT OFFICE.

WILLIAM PEPPERLING, OF TWO HARBORS, MINNESOTA.

PROJECTILE.

SPECIFICATION forming part of Letters Patent No. 724,326, dated March 31, 1903.

Application filed January 22, 1903. Serial No. 140,171. (No model.)

To all whom it may concern:

Beit known that I, WILLIAM PEPPERLING, a citizen of the United States, and a resident of Two Harbors, in the county of Lake and State 5 of Minnesota, have made certain new and useful Improvements in Projectiles, of which the following is a specification.

My invention is an improvement in that general class of projectiles which are pro-10 vided with one or more devices adapted to expand or project laterally upon striking an object.

The chief distinguishing feature of my invention is the arrangement of parts whereby 15 the bullet or projectile proper is adapted to so act upon movable devices in rear of it as to cause them to project laterally from the shell, and thus enlarge the hole which is normally made by the projectile in entering the body of an animal or in passing through any soft tissue or material.

The details of construction, arrangement, and operation of parts are as hereinafter described, reference being had to accompany-25 ing drawings, in which—

Figure 1 is a longitudinal section of one form of my invention. Fig. 2 is a longitudinal section of the shell or base portion of the projectile. Fig. 3 is a transverse section on 30 the line 3 3 of Fig. 1. Fig. 4 is a perspective view of the bullet or projectile proper with the expanding attachment. Fig. 5 is a longitudinal section of the projectile, showing the position of parts when the same strikes 35 an object. Fig. 6 is a longitudinal section of a modified form of projectile.

I will first describe the invention as shown in Figs. 1 to 5. 1 indicates a conical bullet | or projectile proper, and 2 the base or shell 40 connected with the same. The said shell is provided in its front portion with an airchamber 4 directly in rear of the bullet 1, and the solid body or rear portion of the shell is provided with a series of curved passages 3, 45 adapted to receive a series of wires or rods 5, which are firmly connected with the bullet 1. The material of which the latter is composed may be cast upon the rods 5, or the attachment may be made in any other preferred manner. 50 The rods 5 lie in contact in the greater portion of their length, their rear ends extend-

they are flush, as shown in Fig. 1. The rods 5 are preferably made of spring material; but in any event it is essential that they shall 55 be adapted to be readily expanded, so as to project from the body of the shell. The front end of the chambered portion of the shell 2 is attached to the bullet 1 in a well-known manner by crimping it into a groove in the 60 same. The groove is not, however, made of such depth nor is the crimp or flange of the shell so formed as to greatly hinder the backward movement of the bullet upon striking an object. Small air-outlets 4° are provided 65 in the sides of the chamber 4 at the rear end of the same.

When the projectile is discharged and strikes an object, the ball or bullet 1 is forced back, the air in the chamber behind it being 70 compressed thereby owing to the comparatively slow escape provided by the outlets 4a and the rods 5 being also projected laterally from the shell 2, as shown in Fig. 5. In other words, the four small spring-rods are forced 75 out beyond the surface of the projectile, so as to practically enlarge its lateral dimensions, and thus to tear and enlarge the opening or wound which would normally be made by the projectile. The destructive effect of 80 a projectile of small size provided with my expansible attachment is obvious.

In the modified form of my invention illustrated in Fig. 6 in place of a series of separate spring-rods, such as shown in Fig. 4, I 85 employ a single stem 6, whose rear end is formed into a series of curved branches 6a. The front end of the stem 6 is threaded and screws into an elongated threaded aperture in the ball or bullet 1a. This construction 90 adapts the stem 6 to be screwed into the ball 1ª to a greater or less length, so that the spring branches 6° may be adjusted—i. e., withdrawn—more or less from the side of the shell, instead of being flush therewith, as 95 shown. In other words, the screw attachment permits the expansible device to be adjusted so as to reduce or increase its projection from the shell, as may be required. Thus the projectile may be adapted for use in shoot- 100 ing game of different kinds. The base portion 2° of the projectile may be incased by a copper shell 2b, as usual in the construction ing out to the side of the shell 2, with which of various forms of projectiles.

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

Patent, is—

1. An improved projectile of the class speci-5 fied, comprising a ball or projectile proper, a shell or base portion having an air-chamber in rear of the ball, and a device arranged slidably in the base and projected therefrom when the projectile strikes an object, and o slides back into said base, substantially as shown and described.

2. The improved projectile comprising a ball or projectile proper, a shell or base portion having an air-chamber in rear of the 5 same into which the ball is adapted to slide, and rods attached to the ball, and arranged in laterally-curved passages in the base, from which they are extended when the ball is forced back into the aforesaid chamber, sub-

23 stantially as shown and described. 3. In a projectile of the class described, the combination, with a base portion, having a chamber in its front end and one or more curved passages extending rearward there-25 from and opening at the side, of a ball held in the front end of the chamber, and one or

more rods attached thereto and extending through the said passages, whereby, when the projectile strikes an object, the ball is forced backward and the rods are projected later- 30 ally, substantially as shown and described.

4. In a projectile of the class described, the combination, with a base or other portion, of a ball, and a device attached thereto and projected rearward, the ball being so connected 35 with the base that it slides backward upon striking an object, and the device being thereby forced outward laterally from the base, substantially as shown and described.

5. In a projectile of the class described, the 40 combination, with a base or shell portion, of a ball which is slidably connected therewith, and a series of rods which are permanently attached to the ball and are curved laterally at their rear ends, so that, when the projectile 45. strikes an object, they are projected laterally from the base, substantially as shown and described.

WILLIAM PEPPERLING.

Witnesses: C. A. YERNBERG, DENNIS DEVAN.