

TOY TORPEDO.

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989,829.

Patented Apr. 18, 1911.

Fig. 1.

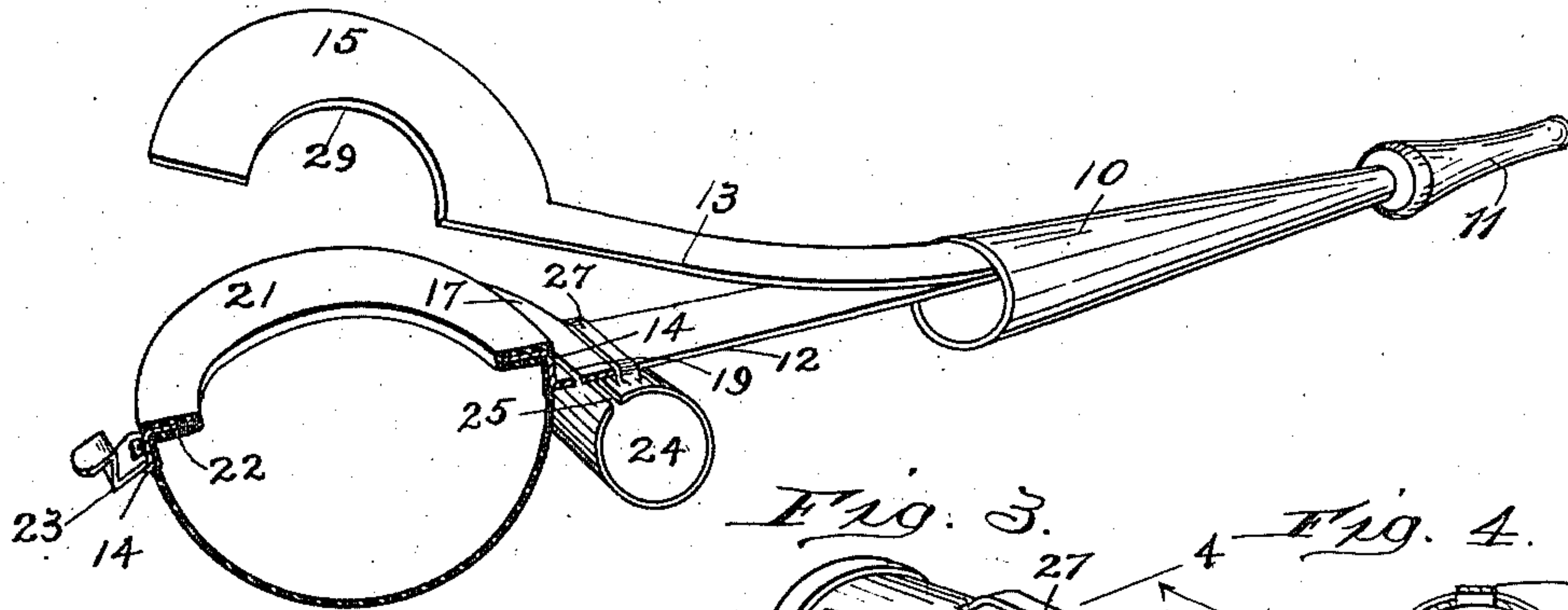


Fig. 5

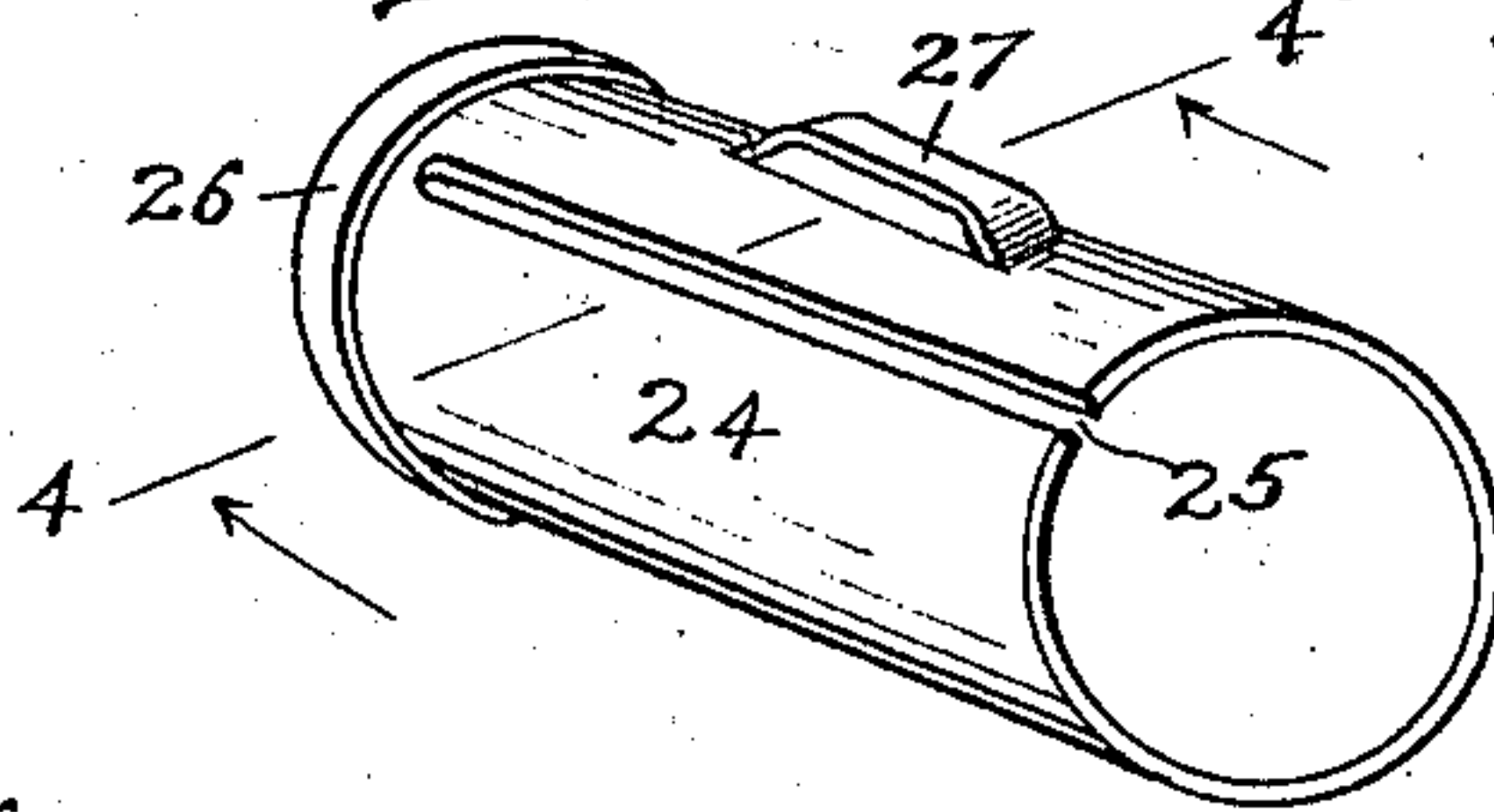


Fig. 4

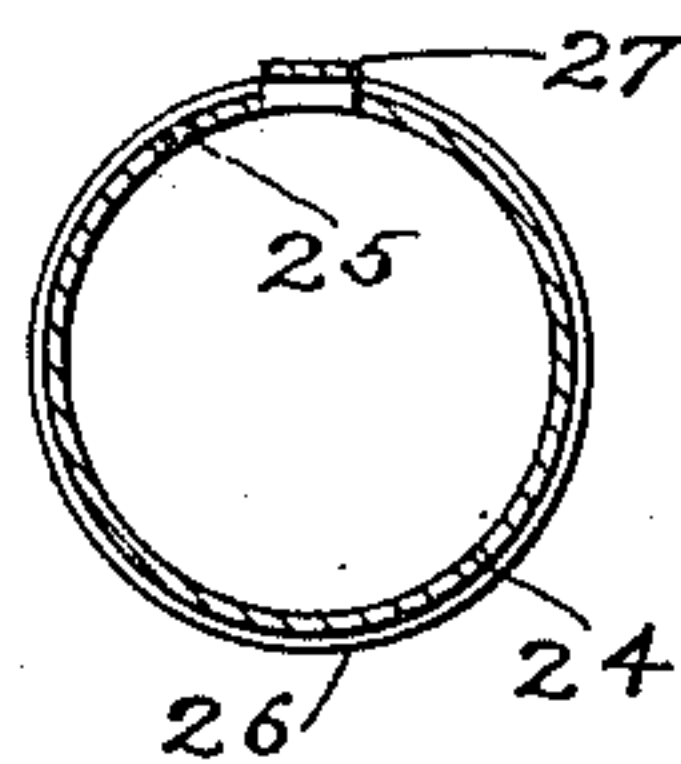


Fig. 2.

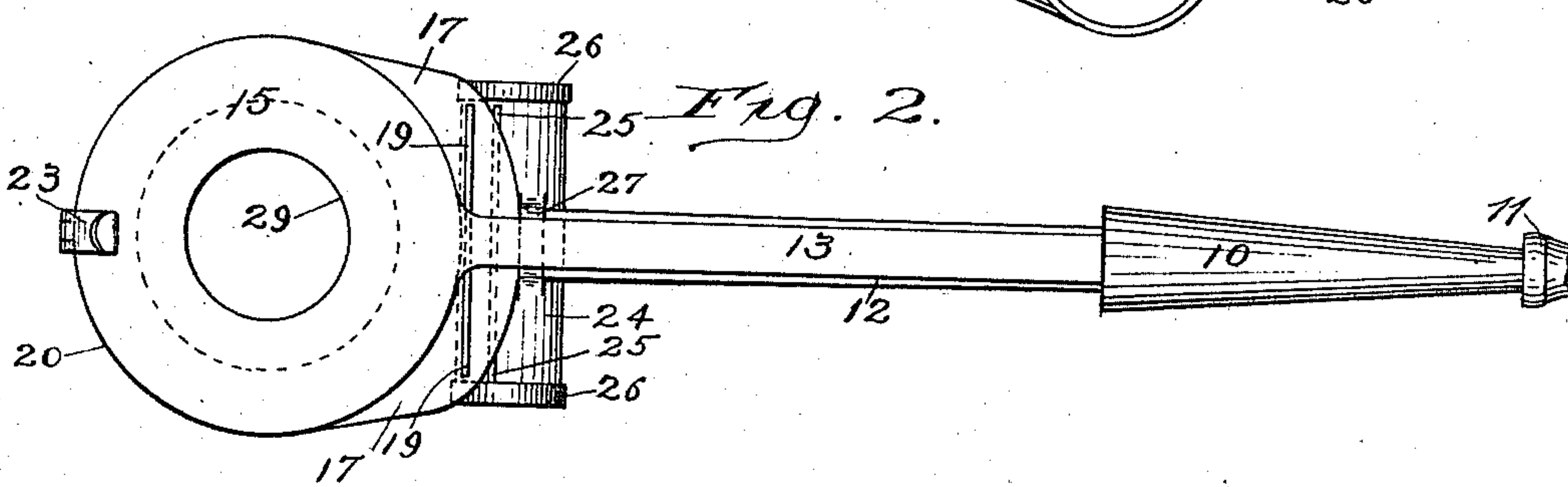


Fig. 5.

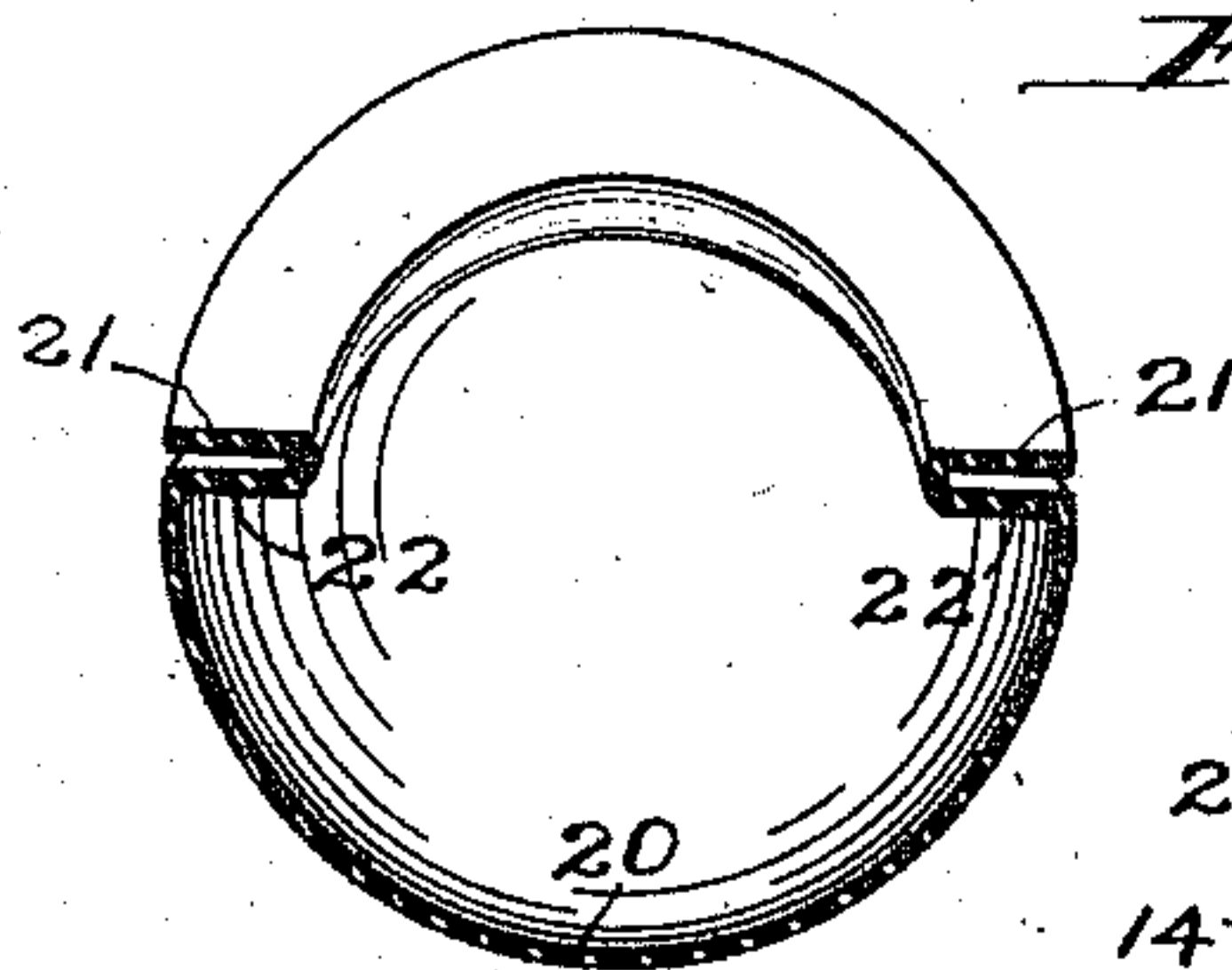


Fig. 6.

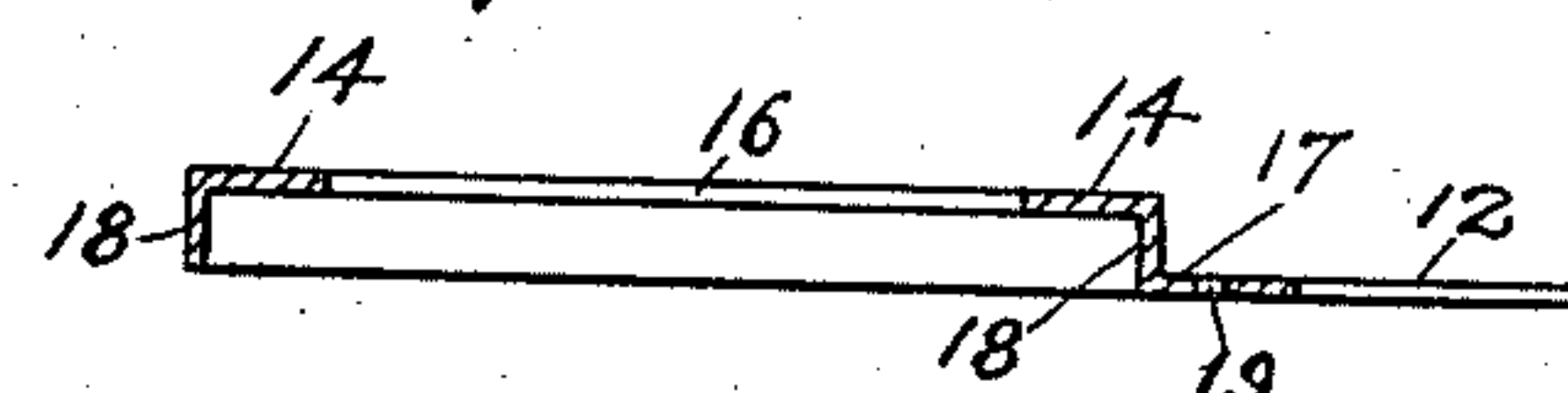
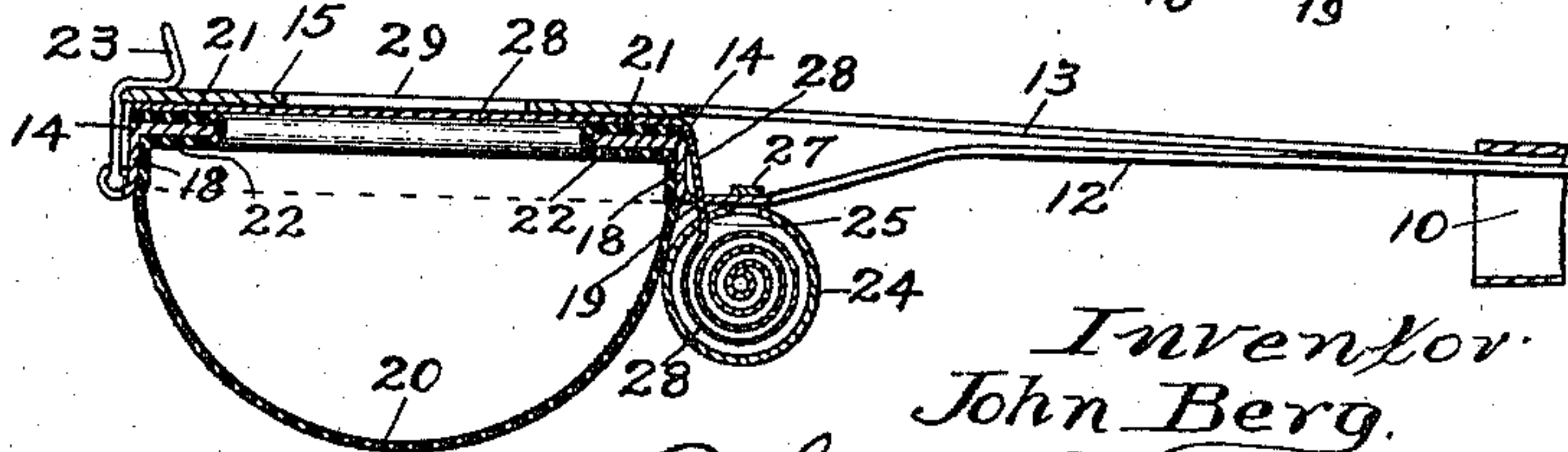


Fig. 7.



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UNITED STATES PATENT OFFICE.

JOHN BERG, OF WEST PULLMAN, ILLINOIS, ASSIGNOR TO AIR TORPEDO COMPANY, A CORPORATION OF ILLINOIS.

TOY TORPEDO.

989,829.

Specification of Letters Patent.

Patented Apr. 18, 1911.

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To all whom it may concern:

Be it known that I, JOHN BERG, a citizen of the United States, residing at West Pullman, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Toy Torpedoes, of which the following is a specification.

This invention relates to improvements in a device or toy of a type designed to produce, without the use of dangerous and injurious explosives or chemicals, a loud, quick, and resonant report or sound, similar to that of a pistol shot, or to the explosion of a torpedo, fire-cracker, and the like, and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to furnish an absolutely harmless, and perfectly safe detonating device or toy, which shall be simple and inexpensive in construction, strong, durable and efficient in operation, and if desired, may have its handle equipped with a sound producing instrument.

A further object of the invention is to provide a detonating device or toy, of the above-named character, which shall be of such construction that the report or explosion will be produced pneumatically and without creating sparks or flying fragments, which have heretofore proven so injurious, dangerous and objectionable.

A still further object of the invention is to provide the device with a receptacle for holding a roll of paper ribbon to be used as the ammunition for the instrument, from which receptacle or holder, the paper ribbon or strip, may be readily withdrawn, and placed in position for bursting.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable other skilled in the art to which my invention pertains, to make and use the same, I will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1, is a perspective view partly in section of a toy torpedo embodying the invention, showing the cap for closing one end of the receptacle for the roll of paper ribbon removed and illustrating the spring holder

or disk for the paper in its elevated position; Fig. 2, is a plan view of the complete device; Fig. 3, is an enlarged perspective view of the receptacle for the roll of paper employed as ammunition for the toy; Fig. 4, is a cross-sectional view taken on line 4—4 of Fig. 3, looking in the direction indicated by the arrows; Fig. 5, is a perspective view partly in section of the hemispherical resilient body of the toy; Fig. 6, is a sectional view of the front part of the frame to which the resilient body is secured; and Fig. 7, is a longitudinal sectional view of a portion of the device showing the parts for creating the explosion in their operative positions.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawing.

The reference numeral 10, designates the handle of the device, which may be of any suitable size, form and material, but preferably of a size and shape to be conveniently grasped by the hand. This handle may be a suitable noise producing instrument, such as a whistle or horn, and in the drawing I have shown a horn provided with a mouth-piece 11, which may have suitable reeds (not shown) for producing the noise or sound desired.

Secured to the front portion of the handle 10, and usually within the same by means of solder or otherwise, are the extensions or arms 12, and 13, of the body supporting frame 14, and the holder or disk 15 for the paper respectively. Each of these arms or extensions is preferably formed of spring or resilient material, and as is clearly shown in Figs. 1, 6, and 7, of the drawing, the arm 12, is formed integrally with the frame 14, which frame is annular in shape, that is, has a central opening 16, and is formed angular in cross-section, and has an enlargement or widened portion 17, at the lower portion of its vertical flange 18, to which the front part of the arm 12, is joined. The enlarged portion 17, of the frame is provided with a slot 19, for the purpose to be presently explained.

Secured to the frame 14, is a hemispherical body 20, of rubber or other suitable resilient material, which material is of suitable thickness to cause the body to resume its hemispherical form after it has been compressed by being struck. The upper portion of the body 20, is provided with an annular face having upper and lower flanges 21, and 22,

respectively to embrace the horizontal portion of the frame 14, as is clearly shown in Figs. 1, and 7, of the drawing. By thus securing the body 20, to the frame 14, it is
 5 apparent that the upper flange 21, will lie closely on the upper surface of the frame 14, while the lower flange 22, will lie closely against the lower surface of the horizontal part of the frame, and the walls of the body
 10 will contact with the vertical flange 18, of the frame, thus firmly securing said parts together and in such a manner that a slightly resilient covering for the frame will be presented to the strip or piece of paper which
 15 is used to close the opening in the body and its frame.

The front portion of the frame 14, has hinged thereto a catch 23, to engage and secure the holder or disk 15, in position on the
 20 upper surface of the frame when it is desired to clamp the piece of paper in position for an explosion.

Mounted on the arm 12, at the rear of the enlarged portion 17, of the frame 14, is a receptacle 24, for a roll of paper ribbon or
 25 strip used for closing the opening in the body of the device and for creating an explosion. This receptacle is provided with a slot 25, which is open at one of its ends as shown in Fig. 3, to permit the strip of paper
 30 to be readily inserted in said slot, and each of the ends of the receptacle 24, is closed by means of caps 26, one or both of which may be removable. The upper portion of the receptacle 24, is provided with a clip 27,
 35 which is extended across the arm 12, and may be soldered or otherwise secured thereto. When in position on the arm 12, it is apparent that the slot 25, in the receptacle
 40 24, will be located near the slot 19, in the enlarged portion 17, of the frame, so that the strip of paper 28, may be passed up through said slots and then forwardly over the opening in the body of the device, where
 45 it may be securely and tightly held by means of the apertured disk or holder 15, through the instrumentality of the cap 26. When the parts have thus been secured in place, it is apparent that the opening 29, in
 50 the disk or holder 15, will be located directly over the piece of paper which is extended over the opening in the body and its frame, when by striking the body 20, against an object, the air confined therein, will be compressed until the pressure in the body
 55 causes the paper to explode or burst, thereby producing a noise similar to a shot or explosion of a fire-cracker, or torpedo, or the like. After the explosion has been produced, it is evident that the body 20, will resume
 60 its normal inflated condition.

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

65 1. A toy torpedo, consisting of a handle,

an arm extended from said handle, an apertured frame on the arm, a hollow resilient body secured to said frame, a spring-supported apertured holder above the frame, means to secure the holder in position on
 70 the frame, and a paper ribbon or strip-holding receptacle mounted on the frame-supporting arm and provided with a slot for the passage of paper or ribbon.

2. A toy torpedo, consisting of an apertured frame having a widened portion provided with a slot and an arm extended from said widened portion, the said frame being angular in cross-section and integral
 75 with said widened portion and arm, a hollow resilient body having a peripheral groove in its upper portion to receive a portion of the frame, a spring-supported apertured holder above the frame, and means to secure the holder in position on
 80 the frame.

3. A toy torpedo, consisting of an apertured frame having a widened portion provided with a slot and an arm extended therefrom, the said frame being angular in
 85 cross-section and integral with said widened portion and arm, a hollow resilient body having a peripheral groove in its upper portion to receive a portion of the frame, a spring-supported apertured holder
 90 above the frame, means to secure the holder in position on the frame, and a paper ribbon or strip-holding receptacle mounted on the frame-supporting arm and provided with a slot for the passage of the paper or
 95 ribbon.

4. In a toy torpedo, the combination with an annular frame angular in cross-section, of a resilient body having a peripheral groove in its upper portion to engage the
 100 horizontal portion of said frame.

5. In a toy or noise producing device of the character set forth, the combination with a bag supporting member comprising an annular ring having a flange around the
 105 outer periphery thereof, of a bag formed of resilient material, said bag having its upper end engaging with the flange on said holding member and having an inwardly turned web engaging with the ring portion
 110 of said holding member, and means for securing said holding member and bag together.

6. In a noise producing device of the character set forth, the combination of an
 115 annular ring having a flange thereon, and an air-compressing bag of resilient material, having one end engaging with the inner walls of said flange and having an integrally formed web resting against one side
 120 of said ring, said web terminating in a central neck connecting with an outwardly extending web resting against the opposite side of said ring.

7. In a device of the character set forth, the 130

combination of a ring, and an air-compressing member of resilient material having one end formed to engage with one side of the ring, the inner periphery of said end
5 having a neck connecting with an outwardly extending flange resting upon the opposite side of said ring.

8. A resilient bag for a noise-producing device, having one end provided with an in-

wardly extending flange or web terminating 10
with an upwardly extending neck or tubular portion, said neck terminating at its upper end with an outwardly extending flange.

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