

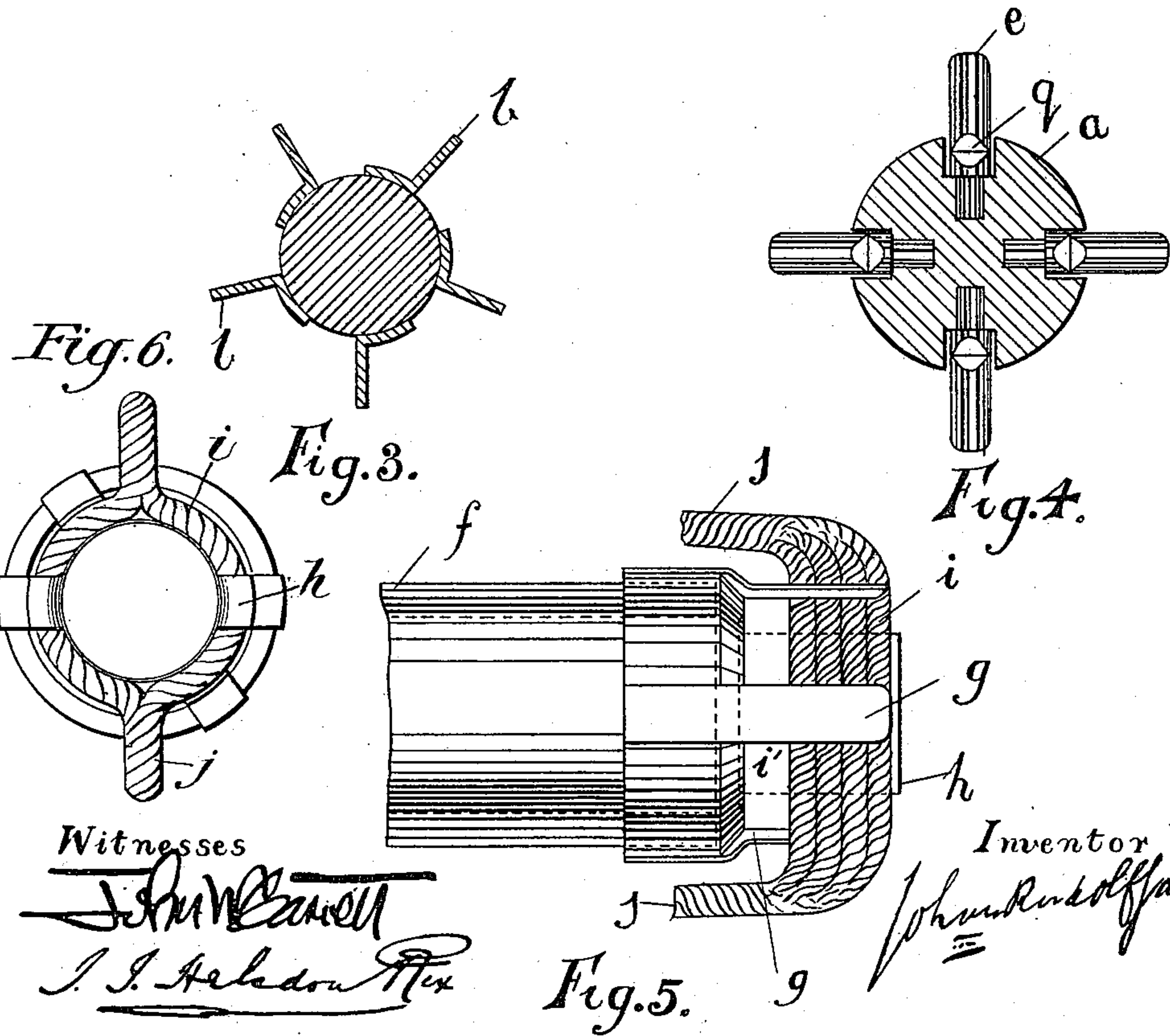
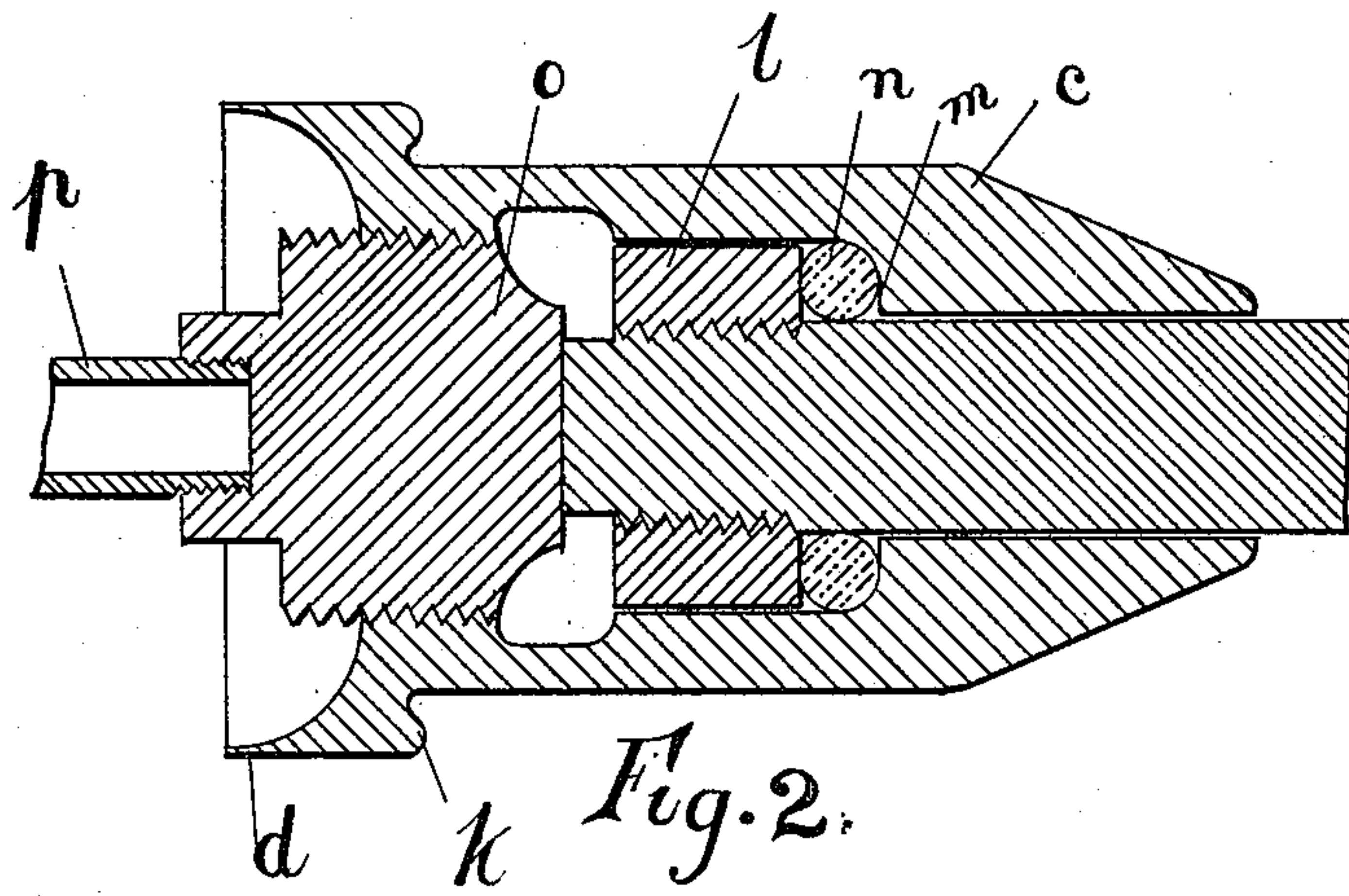
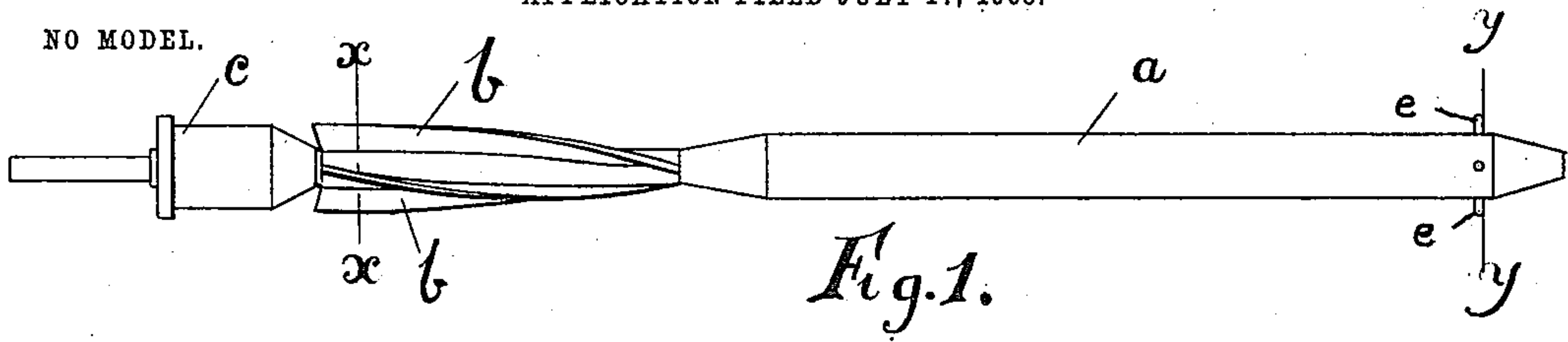
No. 753,272.

PATENTED MAR. 1, 1904.

J. R. JACOBS.  
PROJECTILE.

APPLICATION FILED JULY 17, 1903.

NO MODEL.



Witnesses  
*John W. Barrett*  
*J. J. Anderson*

Inventor  
*John R. Jacobs*



# UNITED STATES PATENT OFFICE.

JOHAN RUDOLF JACOBS, OF THE HAGUE, NETHERLANDS.

## PROJECTILE.

SPECIFICATION forming part of Letters Patent No. 753,272, dated March 1, 1904.

Application filed July 17, 1903. Serial No. 166,005. (No model.)

*To all whom it may concern:*

Be it known that I, JOHAN RUDOLF JACOBS, a subject of the Queen of the Netherlands, residing at 123 Regentesselaan, The Hague, in the Kingdom of the Netherlands, have invented certain new and useful Improvements in Projectiles Whereby a Line may be Carried to a Stranded Vessel or other Distant Point, of which the following is a specification.

This invention relates to projectiles for carrying a line to a stranded vessel or to one which is difficult of access or other distant point. It has been found that with the rockets and grenades usually used for this purpose the range is often insufficient and the aim inaccurate; and the object of this invention is to furnish a projectile whereby these deficiencies may be remedied.

In the accompanying drawings, Figure 1 is a view of my projectile; Fig. 2, a section through the after part thereof; Fig. 3, a section on the line *xx* in Fig. 1; Fig. 4, a section on the line *yy* in Fig. 1. Fig. 5 is a detail view showing the rope ring and clip at the front end of the gun, and Fig. 6 a front view corresponding with Fig. 5.

My improved projectile is intended to be discharged from a gun, and one which is specially applicable for this purpose is described in the specification to Letters Patent, dated February 7, 1899, No. 619,026.

The projectile itself may comprise a cylindrical rod *a*, provided with vanes or wings *b* for rotating the said projectile, and thereby permitting the use of a smooth-bore gun-barrel, and a body *c*. The rod *a* is rotatably mounted in the body *c* by means of the collar *l* screwed on the said rod, between which and the shoulder *m* of the body *c* are the balls *n* for reducing the friction, the block *o*, supporting the tailpiece *p*, being screwed into the rear end of the body *c*. The rear edge *d* of the body *c* is formed in such a manner as to serve as an expansion-ring, and this body *c* during the flight of the projectile serves to carry the line without communicating to the latter the rotary motion imparted to the cylindrical rod *a*. The front end of the rod *a* is centered in the barrel *f* by means of pins *e*,

and at the end of the said barrel is provided a suitable clip *g*, in which a holder *h*, supporting the ring *i*, formed in the rope *j*, to the ends of which the line is secured, is held in a central position with relation to the bore of the barrel *f*. When the projectile is discharged, the pins *e* on the fore end of the rod *a* come in contact with the holder *h* and are bent back to allow of the said holder, with the ring *i*, passing to the rear of the projectile and of then being withdrawn from the clip *g* by the action of a shoulder *k*, formed on the expansion-ring *d*, whereby the line is carried to its destination. To facilitate the pins *e* being bent back, the notches *q* are cut in their front faces, as shown in Fig. 4. A ring *i'*, of caoutchouc or the like, may be inserted between the line-ring *i* and a flange at the rear of the holder *h* in order to absorb the shock occasioned by the projectile striking the holder.

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

1. A projectile for carrying a line to a distant point, comprising a rod provided with vanes and a body portion in which the rear end of the rod is rotatably mounted.

2. A projectile for carrying a line to a distant point, comprising a rod provided with vanes, pins for supporting the front end of the rod in a central position in the gun-barrel, a body portion in which the rear end of the rod is rotatably mounted and an annular projection on the body portion forming an expansion-ring.

3. A projectile for carrying a line to a distant point comprising a rod provided with vanes, pins having notches cut therein at the front end of the rod, a collar secured to the rear end of the rod, a body portion provided with an annular projection forming an expansion-ring, balls located between the collar and a shoulder in the body portion, a block in the rear end of the body portion and a tailpiece carried by the block.

4. The combination with a projectile comprising a rod, a body portion in which the rod is rotatably mounted and an annular projection on the body portion, of a clip secured to the

front end of the gun-barrel, a holder supported in the clip, a rope ring on the holder and a line attached to the rope ring.

5     5. The combination with a projectile comprising a rod having notched pins centering its front end, a body portion in which the rod is rotatably mounted, an annular projection on the body portion, of a clip secured to the front end of the gun-barrel, a holder supported  
10   ed in the clip and provided with a flange, a

rope ring supported by the holder, a yielding ring between the holder-flange and the rope ring and a line attached to the rope ring.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

JOHAN RUDOLF JACOBS.

Witnesses:

JOHN W. GARRETT,  
I. I. HELSDON RIX.