

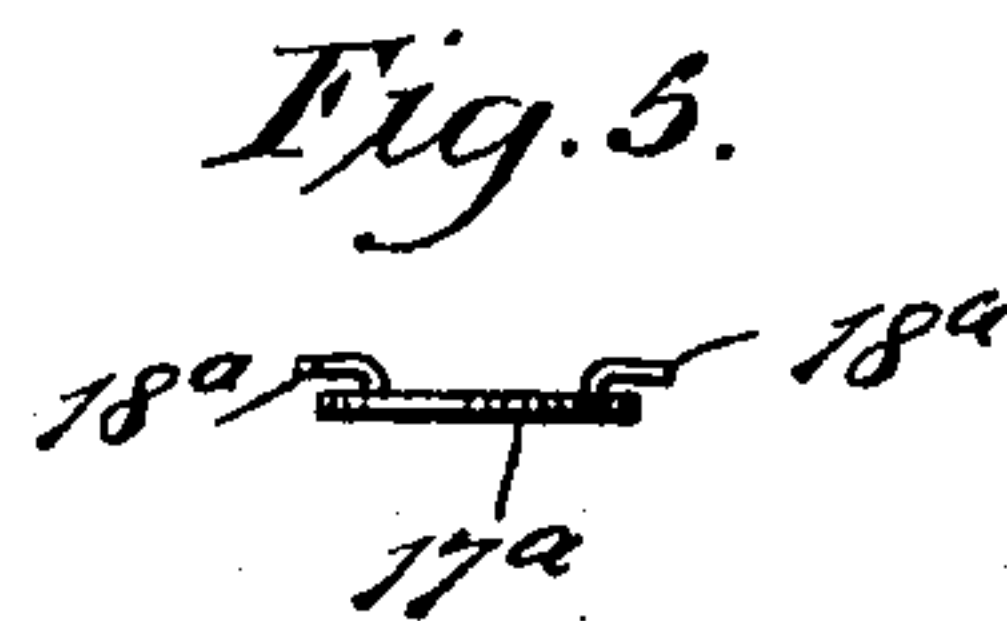
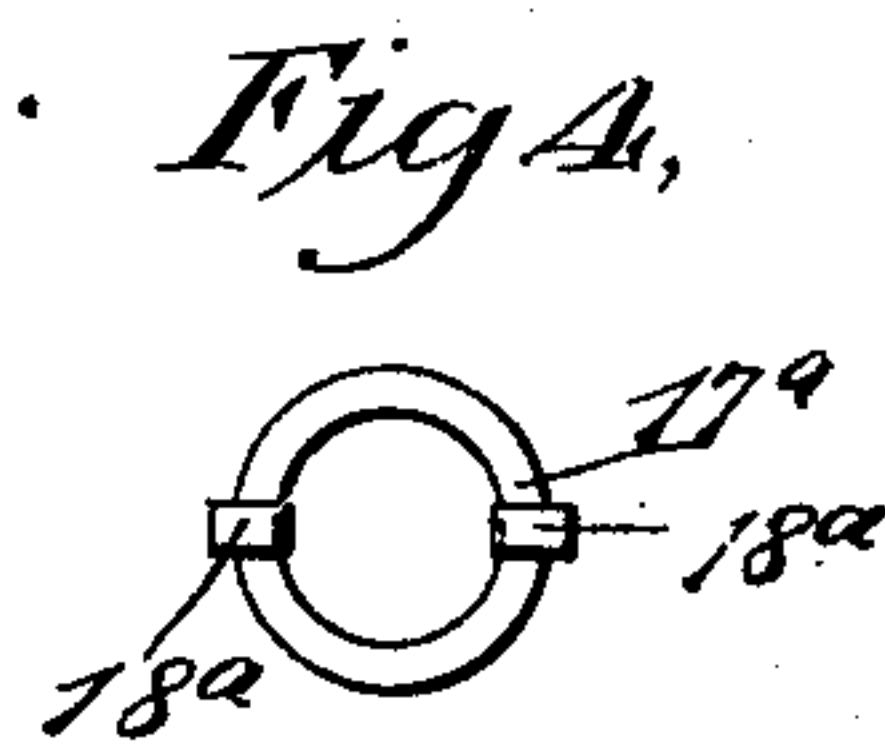
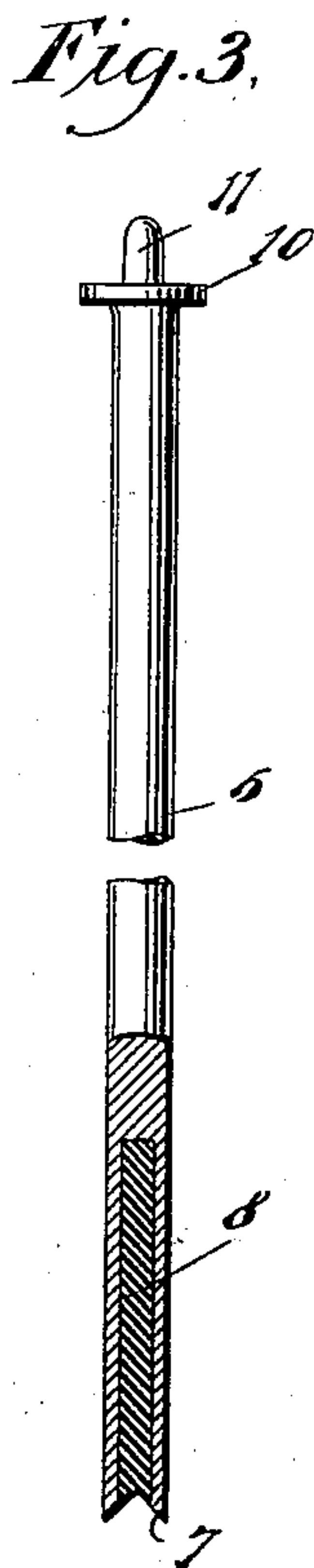
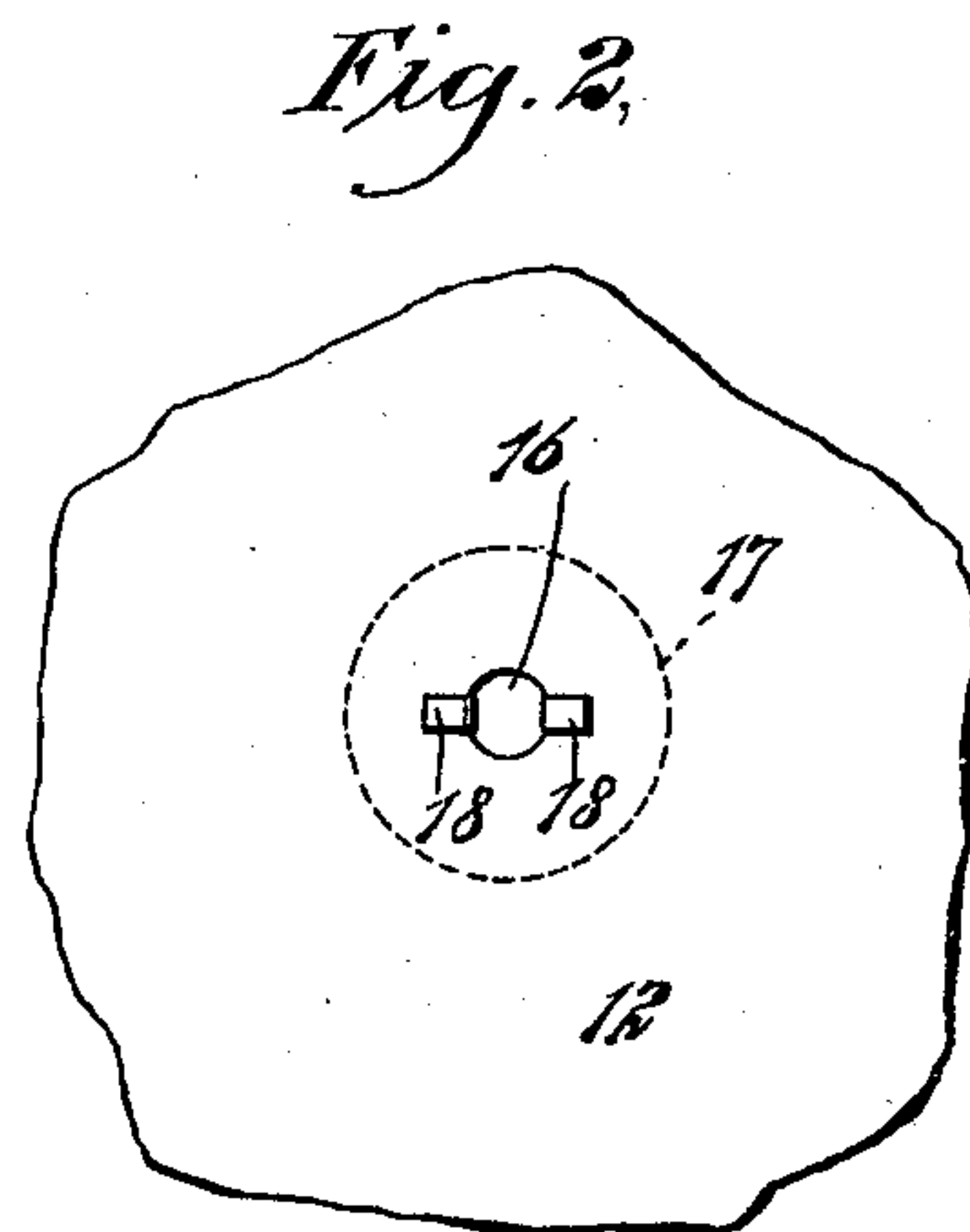
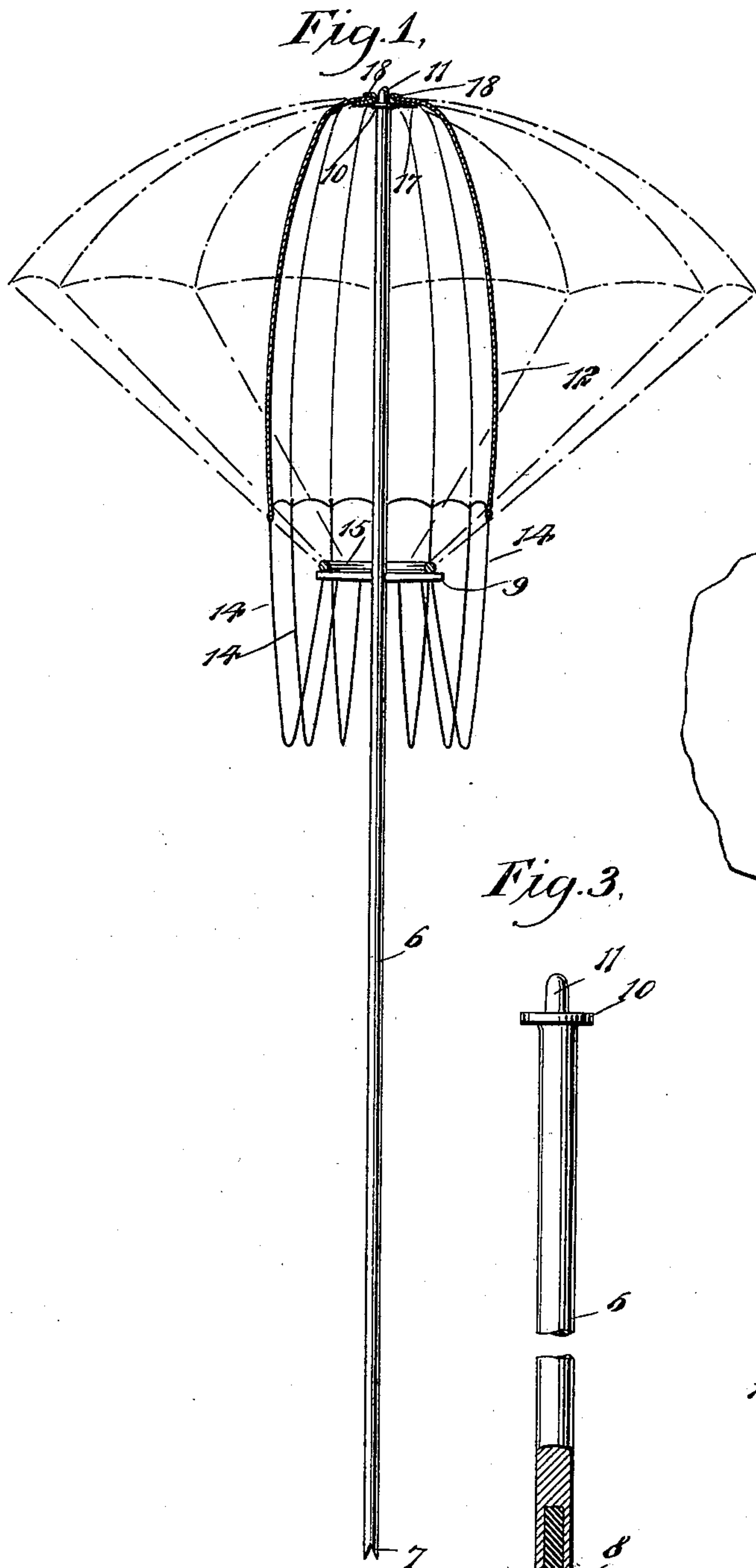
No. 629,653.

Patented July 25, 1899.

J. Q. BROWN.
TOY.

(Application filed Dec. 6, 1898.)

(No Model.)



WITNESSES:

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JOAB Q. BROWN, OF BETHANY, MISSOURI.

TOY.

SPECIFICATION forming part of Letters Patent No. 629,653, dated July 25, 1899.

Application filed December 6, 1898. Serial No. 698,441. (No model.)

To all whom it may concern:

Be it known that I, JOAB Q. BROWN, of Bethany, in the county of Harrison and State of Missouri, have invented a new and Improved Toy, of which the following is a full, clear, and exact description.

This invention relates to a toy parachute constructed to be carried into the air by an arrow or dart, the arrangement being such that the arrow or dart will release the parachute at the height of its flight, the arrow or dart then returning rapidly to the earth and the parachute being left to return slowly in the manner usual with parachutes.

This specification is the disclosure of one form of my invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the figures.

Figure 1 is a vertical sectional view of the invention. Fig. 2 is a fragmentary plan view showing part of the parachute. Fig. 3 is a fragmentary view of the arrow-staff with parts in section, and Figs. 4 and 5 are detail views showing parts of the parachute proper.

The arrow-staff 6 has a kerfed bowstring end 7, which end is loaded with a weight 8, causing the said end to point downward in the descent of the staff. As shown in Fig. 1, the staff 6 is provided near its front end with a cross-arm 9, and the front extremity of the staff 6 has a collar 10 adjacent to the point 11.

The parachute has the usual folding body 12, to which are connected the cords 14, which cords are also connected with a weighted ballast-ring 15. The upper portion of the parachute is provided with an orifice 16, adapted to receive the point 11 of the arrow-staff. This orifice 16 is faced by a disk 17, with a central orifice matching the orifice 16, and has pliable tongues 18, which are passed through the orifice 16 and bent down on the upper surface of the material forming the parachute, so as to clamp the disk 17 firmly in place. According to the size of the opening 16 the flight of the parachute in dropping will be regulated. As a small opening 16 will offer but a small passage for the wind, consequently the resistance of the parachute to the air will be greater and the descent slower, and a large orifice 16 will permit a greater quantity of air to pass, and consequently the parachute will descend more rapidly. In Figs. 4 and 5 a modifica-

tion of the disk 17 is shown. In this form the disk or ring 17^a has a much larger orifice than the disk 17. The sizes of these disks may be regulated at will. The collar 10 should always be constructed with sufficient breadth to engage the disk 17 and support the parachute. The disk 17^a is secured in position by pliable tabs 18^a, similar to those before described.

In the use of the device the parachute is hung on the arrow, as shown in Fig. 1, and the ballast-ring 15 is supported on the cross-arm 9. The arrow shot from the bow will upon reaching the height of its flight fall backward much more rapidly than the parachute and will drop from engagement with the disk 17 and ring 15. The parachute now opens, as indicated by the dotted lines in Fig. 1, and begins its slow descent, the arrow meanwhile having dropped rapidly to the ground.

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

1. In an aerial toy, the combination of an arrow-staff, a collar secured to the staff adjacent to its front end, a cross-arm secured to the staff, a parachute-body portion with an opening therein, a disk secured to the parachute and having an opening registering with the opening in the body portion thereof, the disk bearing on the collar of the staff, and a ballast-ring connected with the parachute-body and normally sustained on the cross-arm of the arrow-staff.

2. An aerial toy having an arrow-staff, a collar secured to the staff and adjacent to one end thereof, a cross-arm secured to the staff, a parachute-body bearing on the collar of the staff, and a ballast-ring supported normally by the cross-arm of the staff and having connection with the edges of the parachute-body.

3. In a toy, the combination of an arrow-staff, a parachute with which the staff is detachably engaged, and ballast connected with the parachute, the ballast being rested loosely on the arrow-staff independently of the parachute, whereby as the parachute opens the staff is automatically detached from the parachute and ballast.

JOAB Q. BROWN.

Witnesses:

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