

908,945.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 1.

Fig. 1.

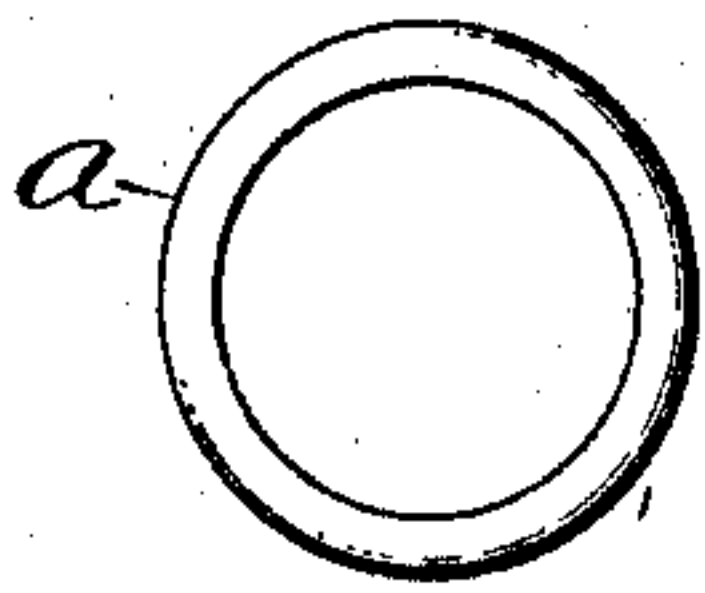


Fig. 2.

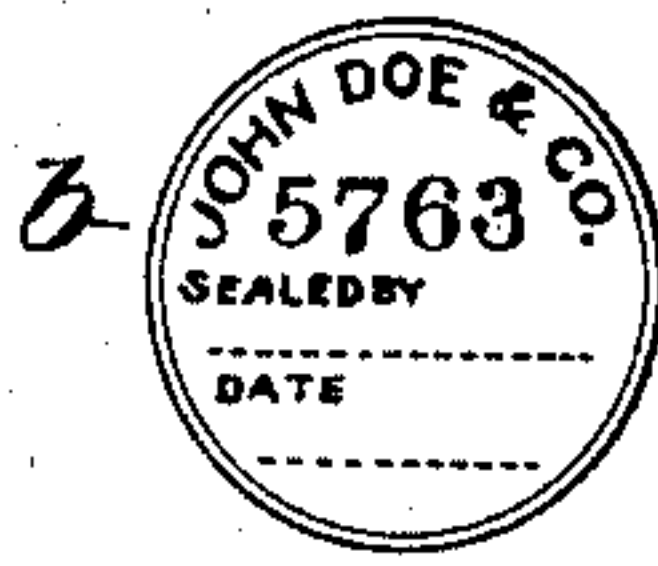


Fig. 3.

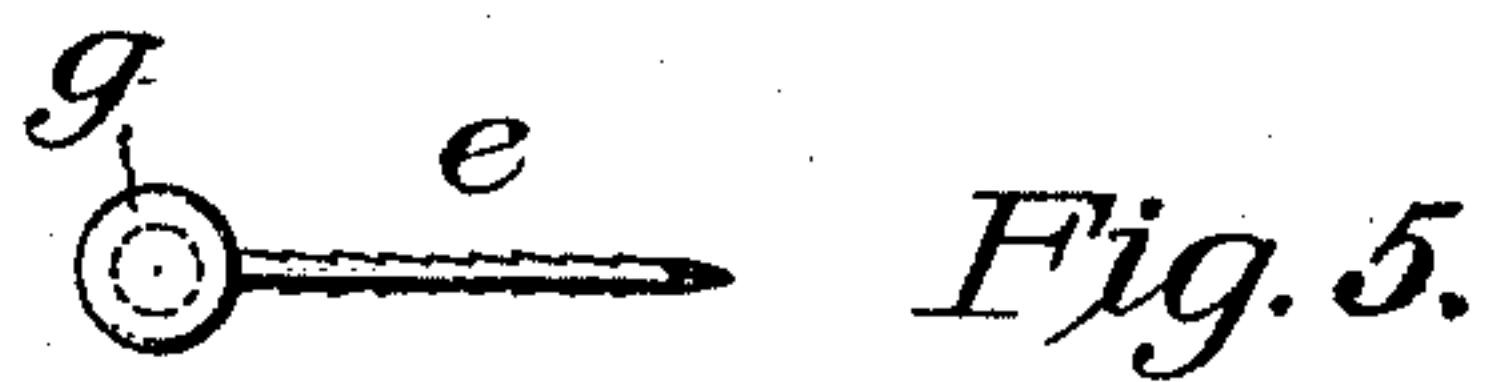
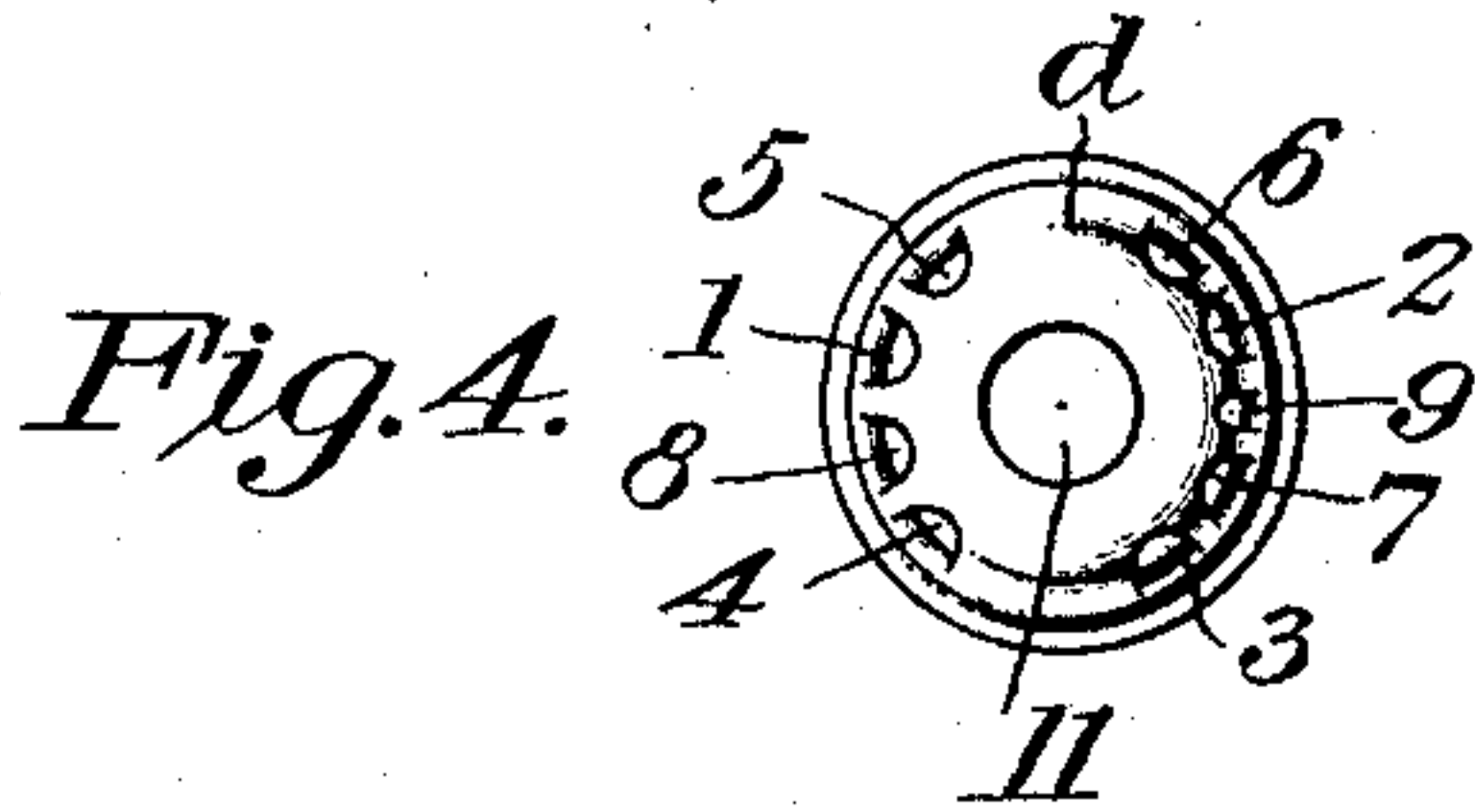
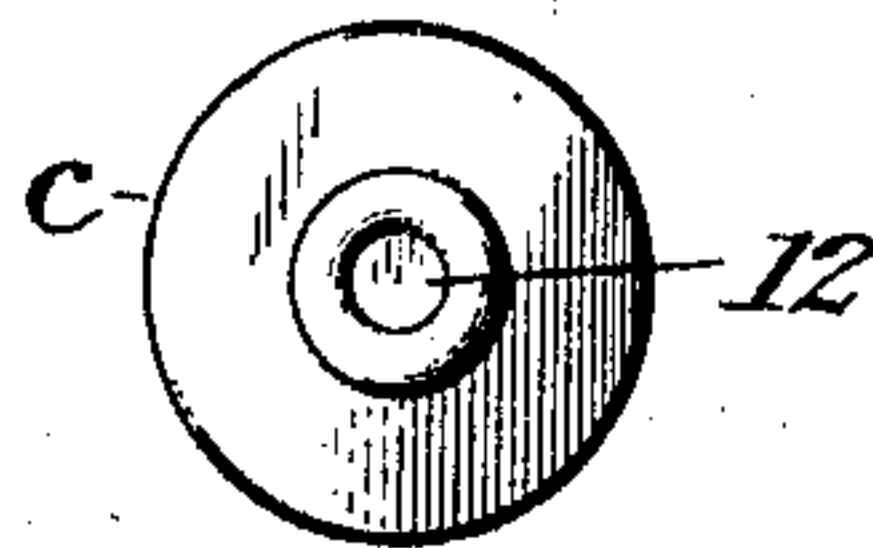


Fig. 6.

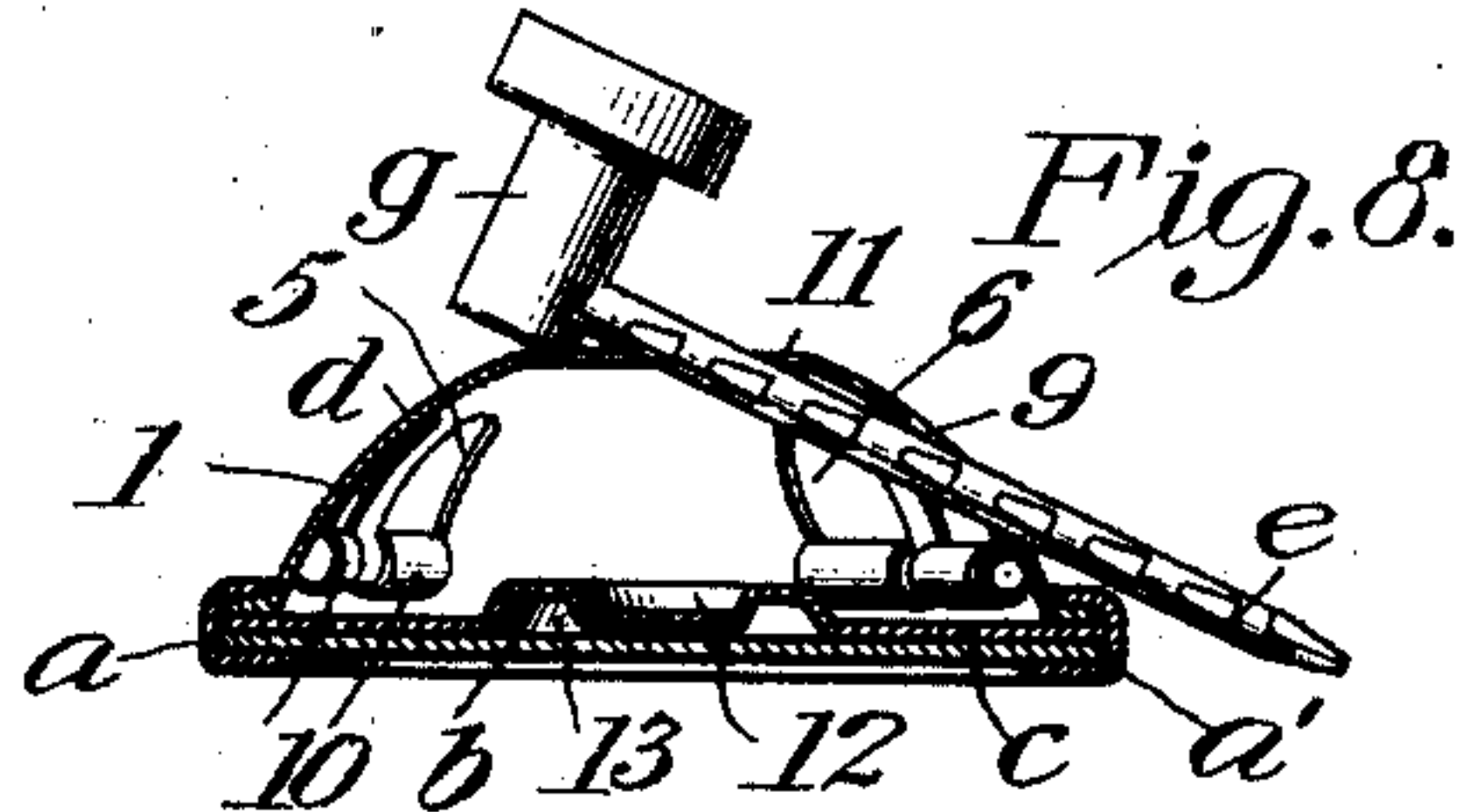
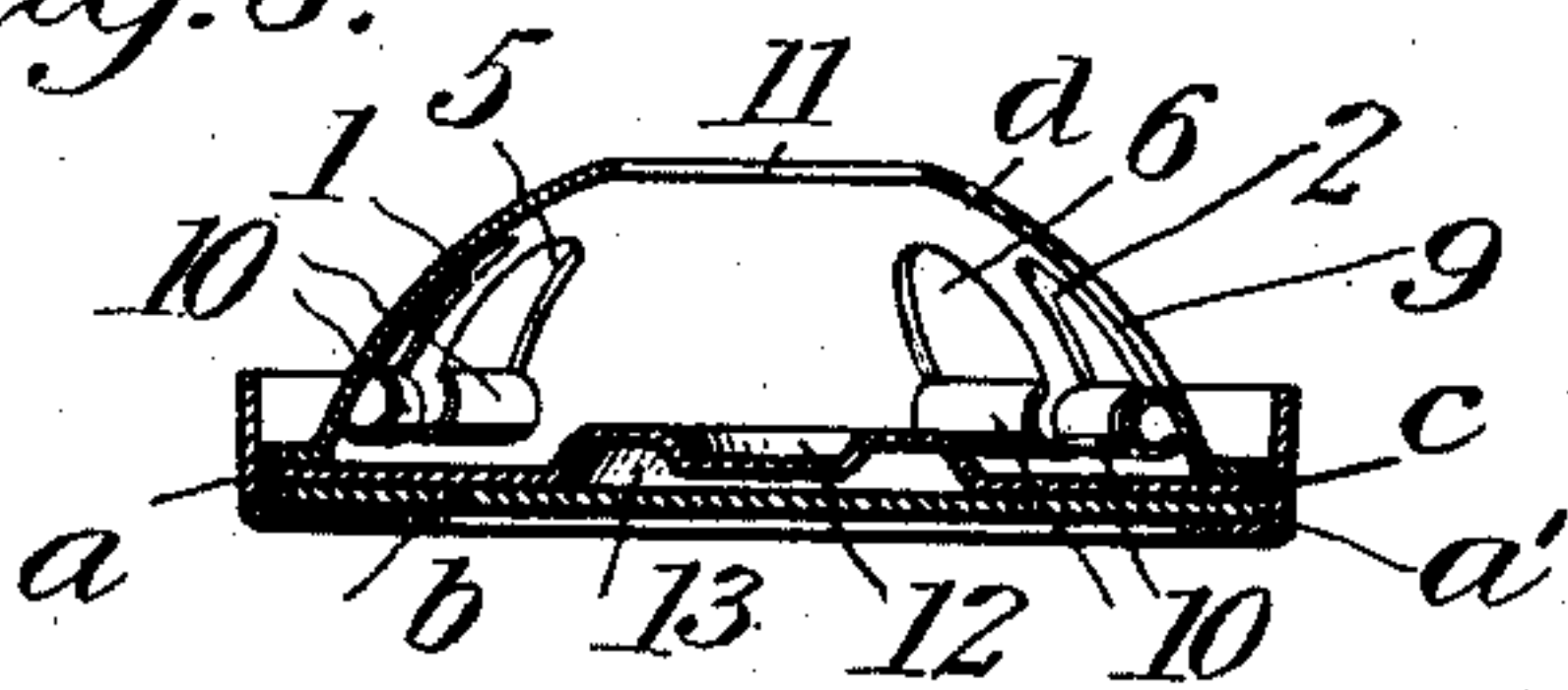


Fig. 7.

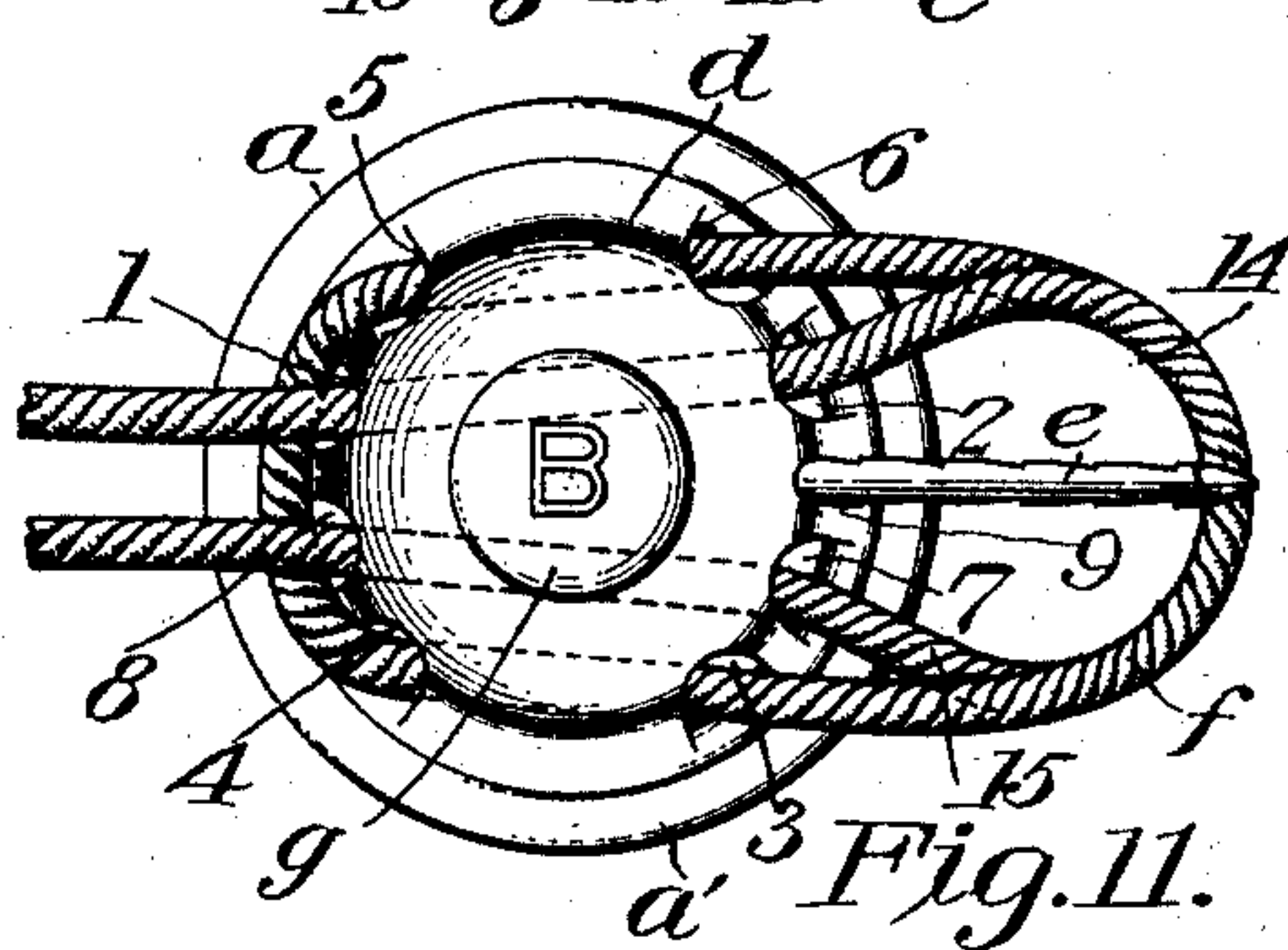
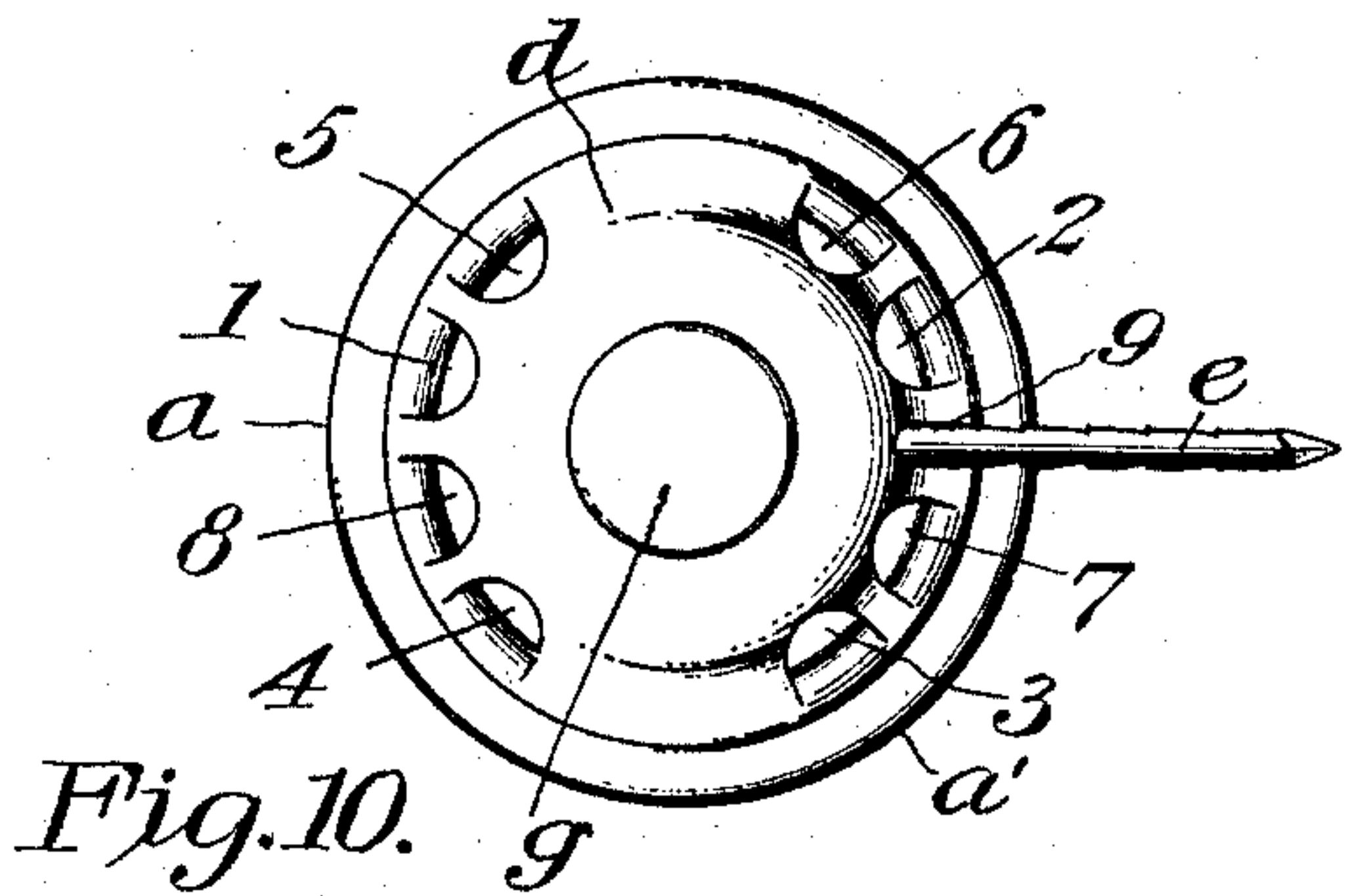
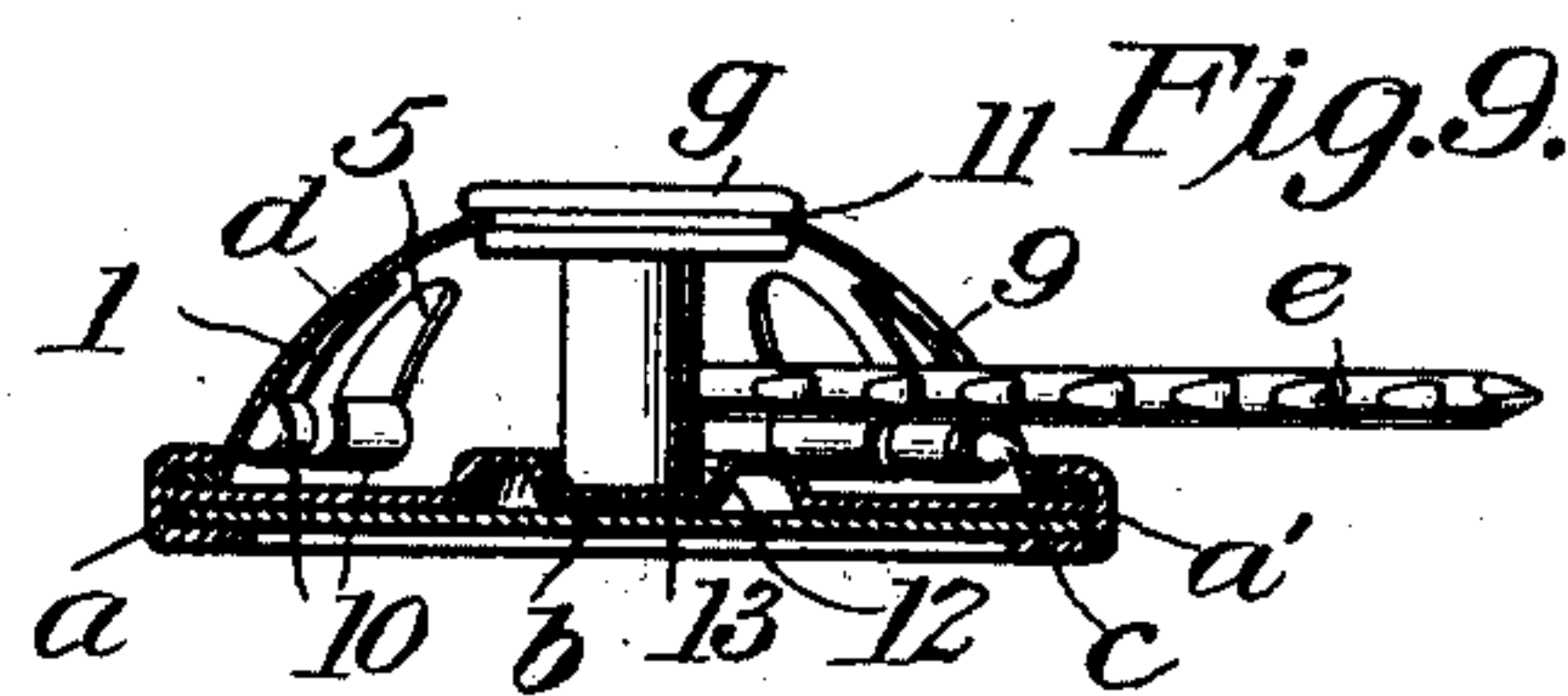
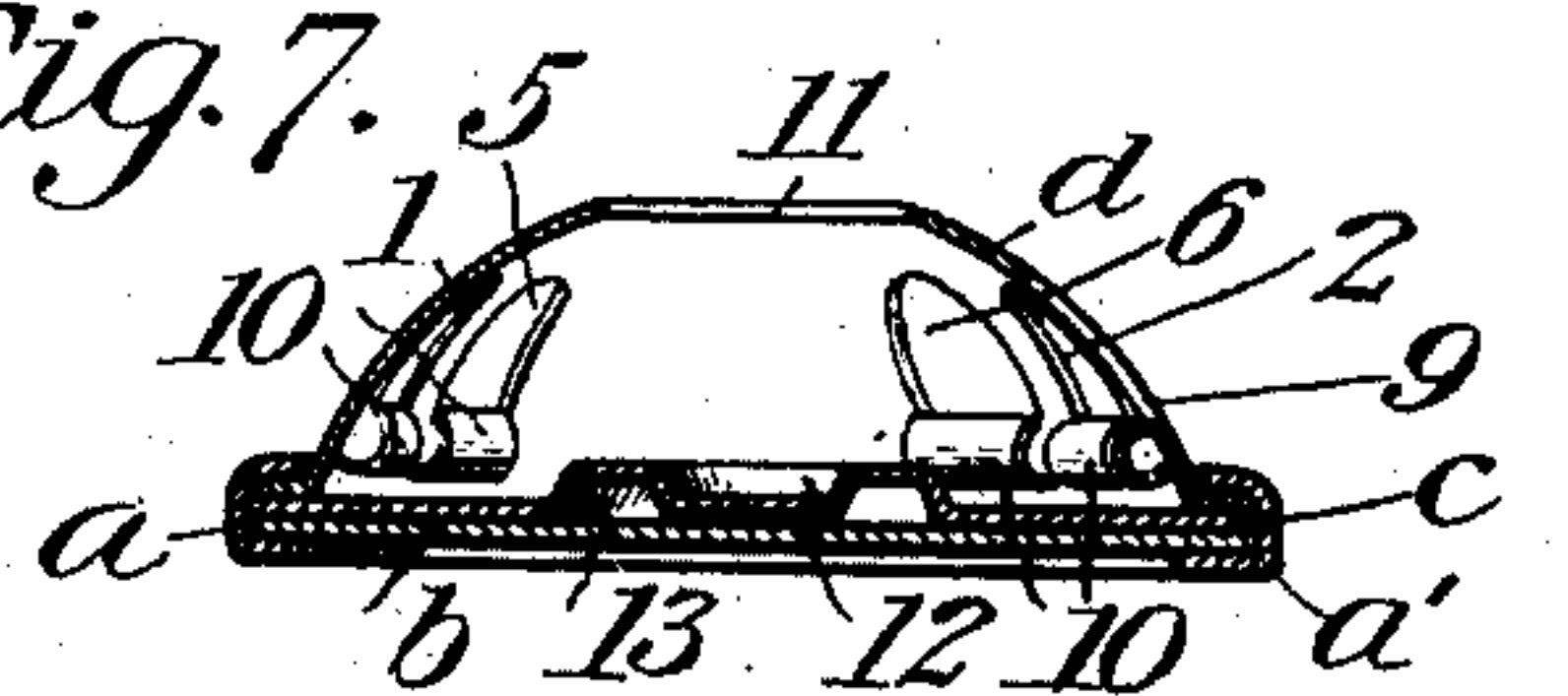
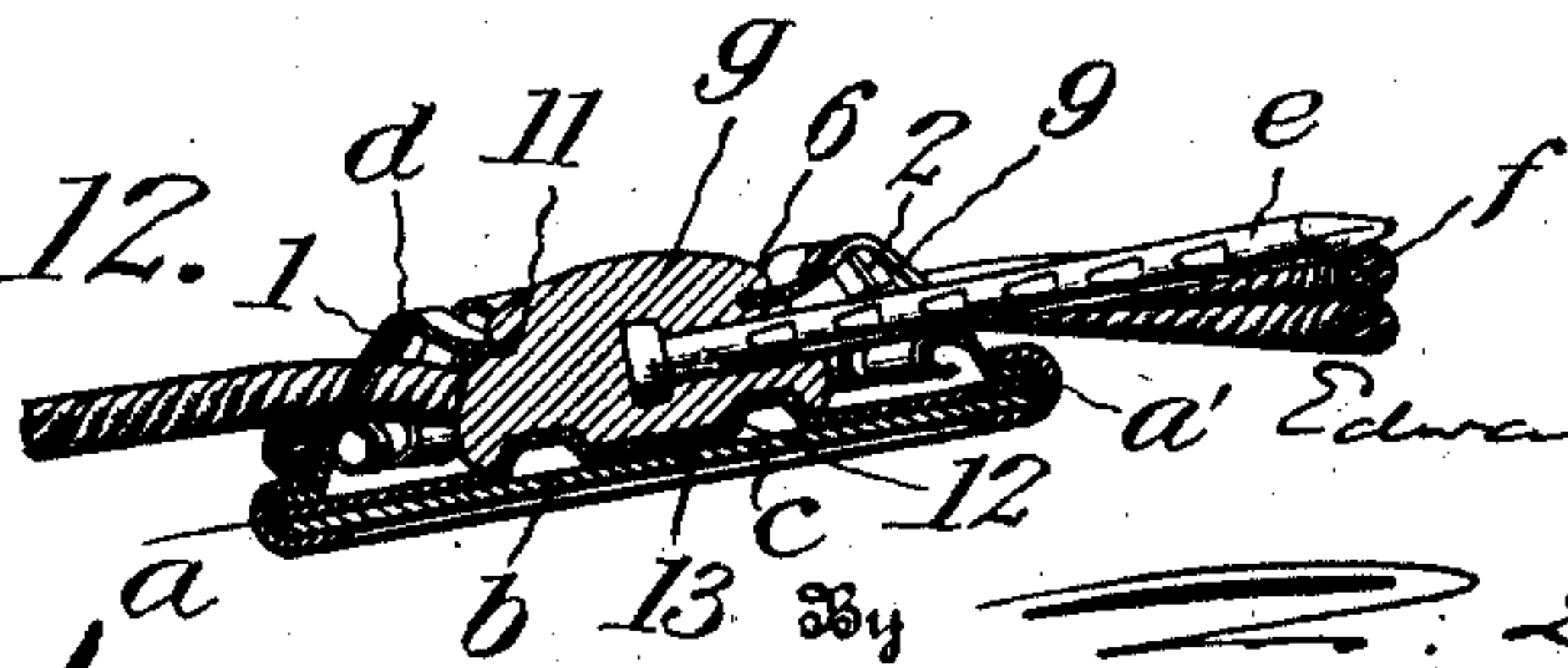


Fig. 12.



Witnesses

F. S. Belt.
M. E. Smoot.

Inventor

Edward J. Brooks

Attorney

E. J. BROOKS.
BAG SEAL.
APPLICATION FILED NOV. 6, 1908.

908,945.

Patented Jan. 5, 1909.

2 SHEETS—SHEET 2.

Fig. 13.

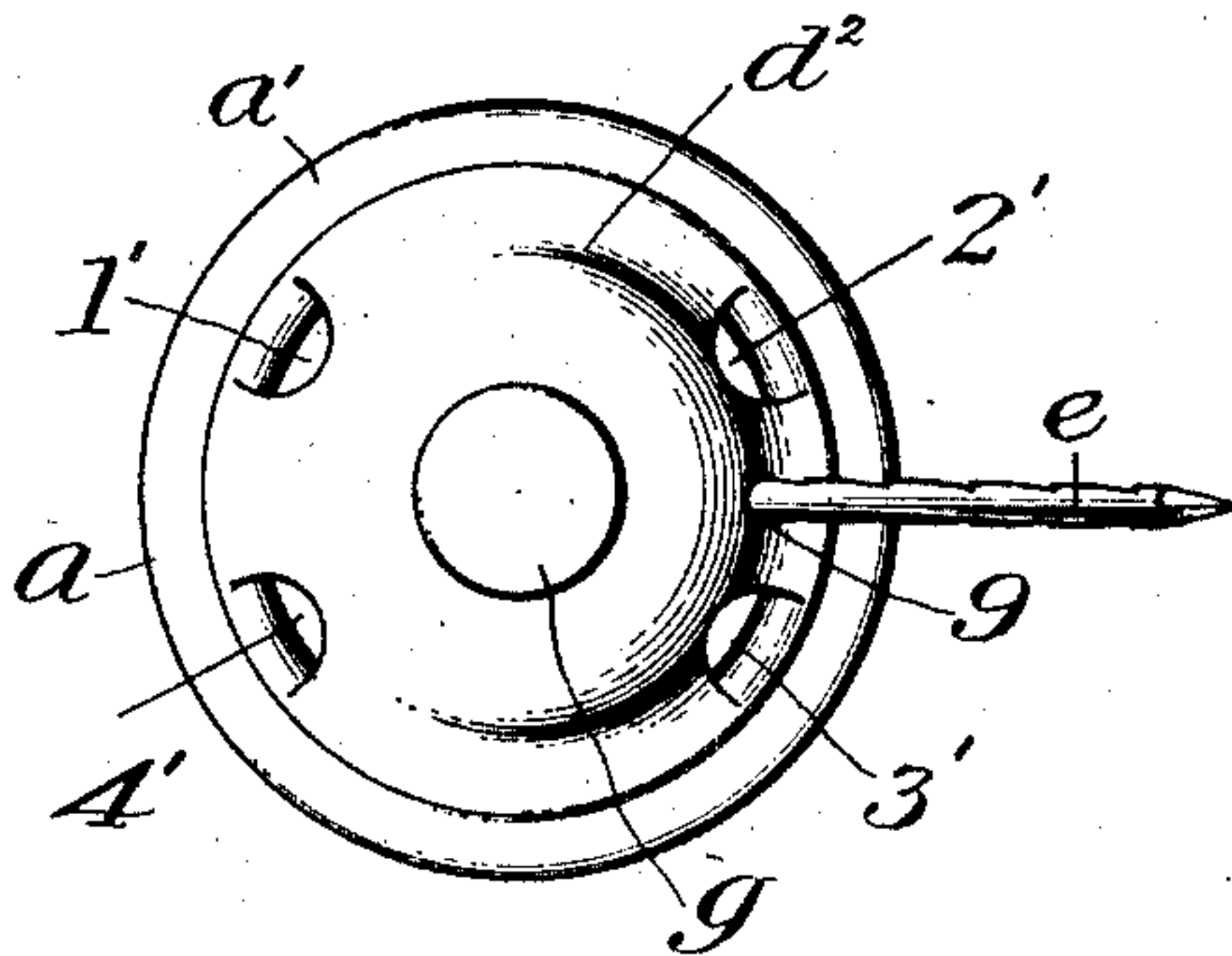


Fig. 14.

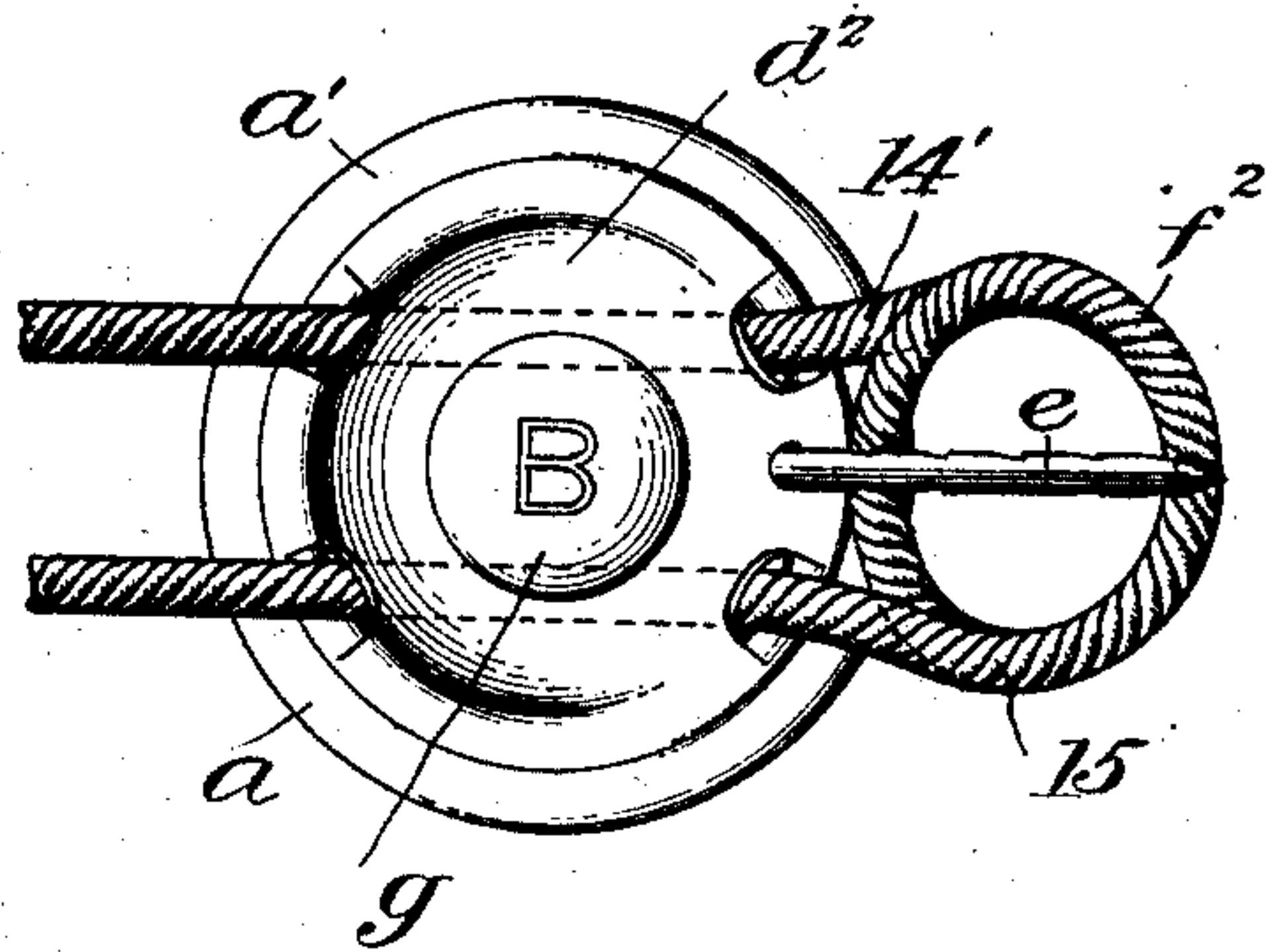


Fig. 15.

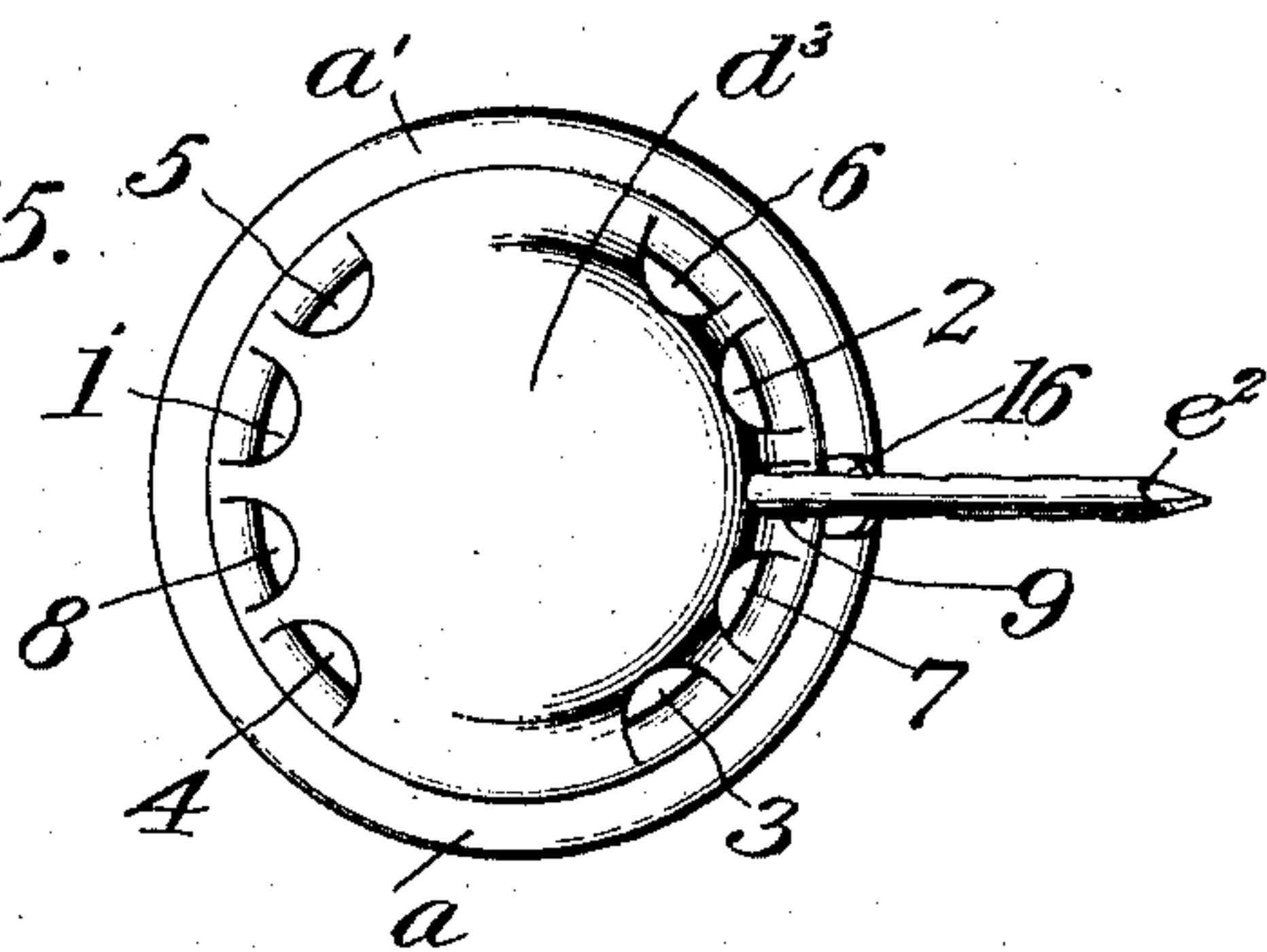


Fig. 16.

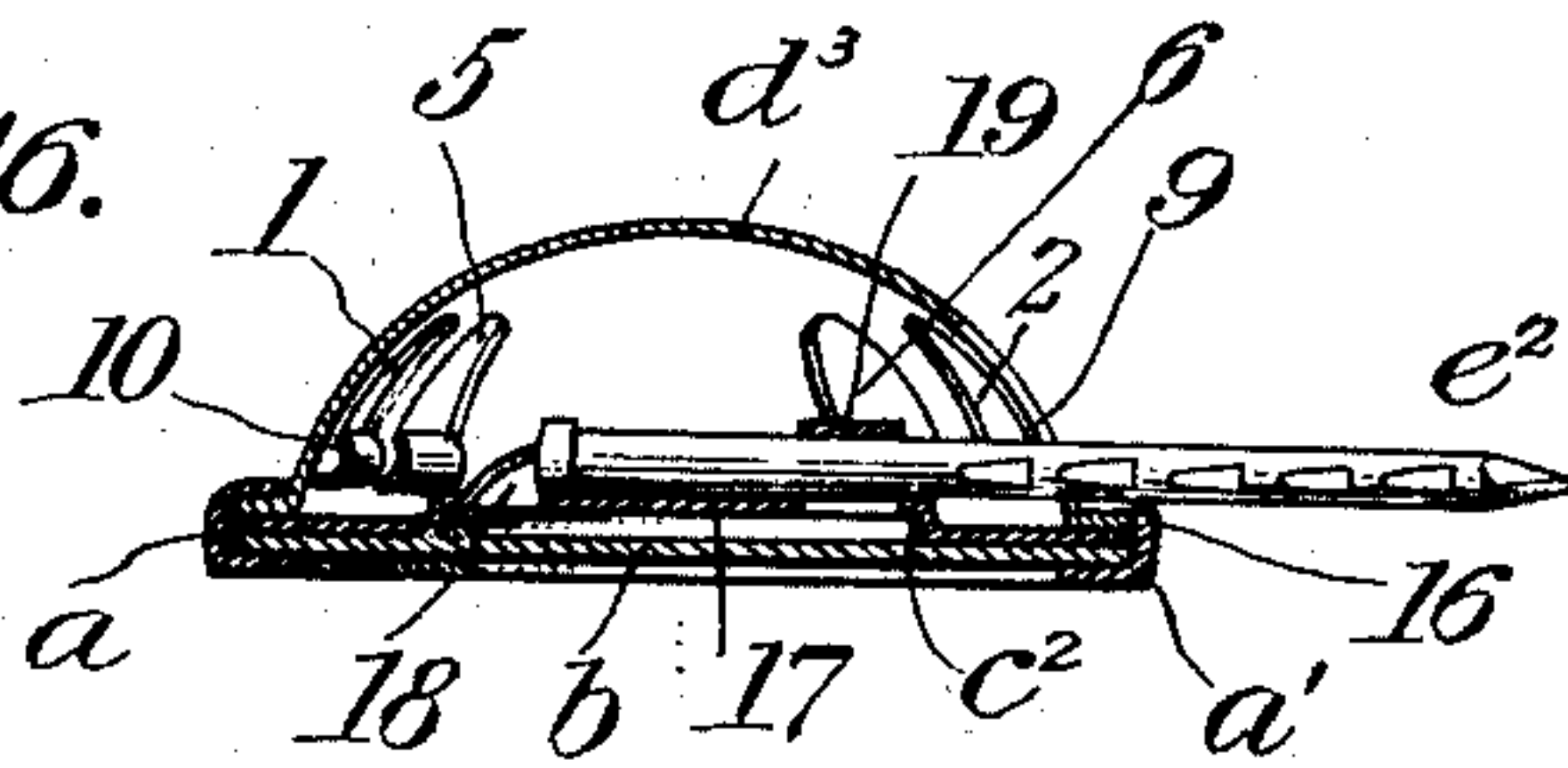
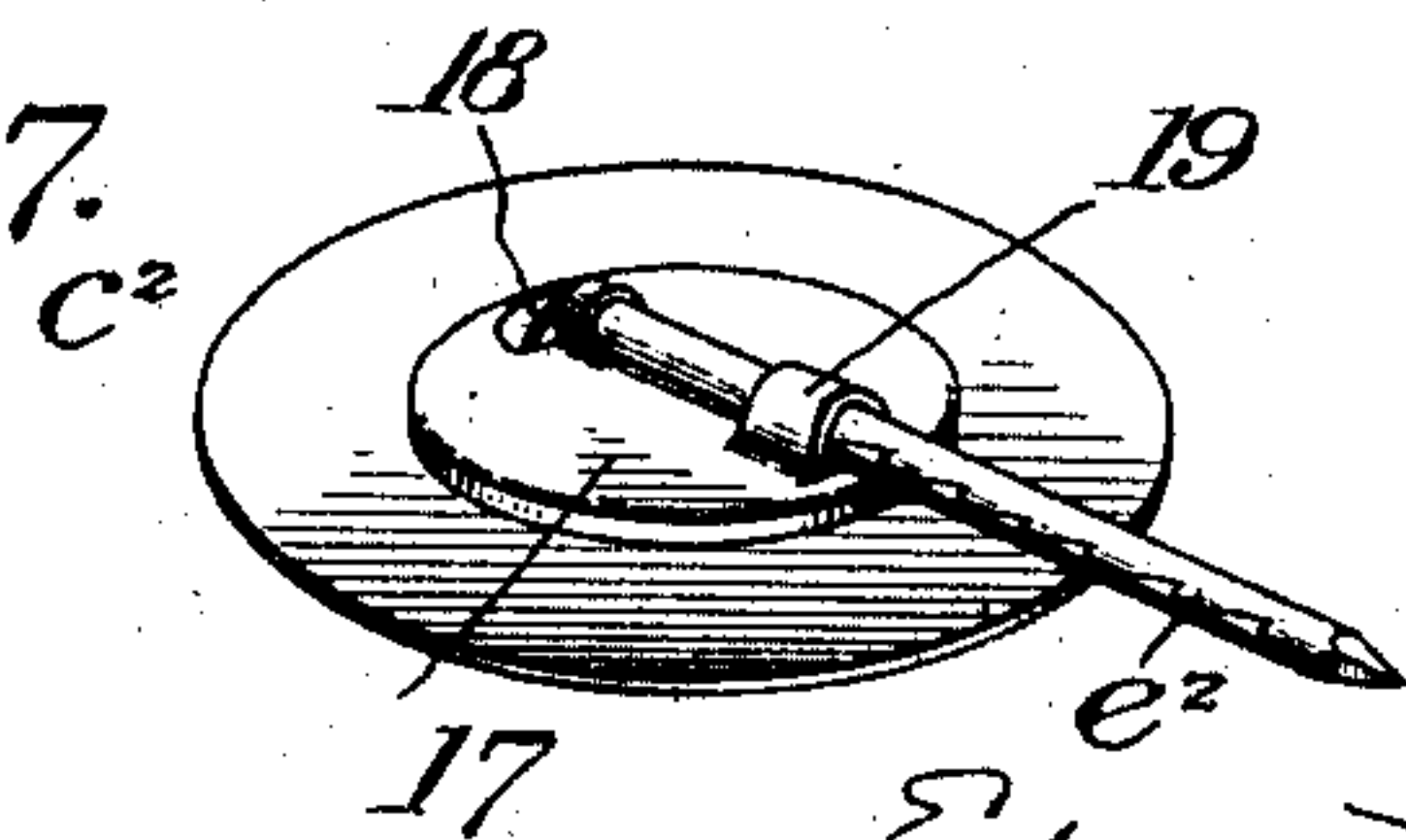


Fig. 17.



Witnesses

F. S. Belt.
M. E. Smoot

Inventor

Edward J. Brooks

334

W. E. Davis

Attorney

UNITED STATES PATENT OFFICE.

EDWARD J. BROOKS, OF EAST ORANGE, NEW JERSEY.

BAG-SEAL.

No. 908,945.

Specification of Letters Patent.

Patented Jan. 5, 1909.

Application filed November 6, 1908. Serial No. 461,411.

To all whom it may concern:

Be it known that I, EDWARD J. BROOKS, a citizen of the United States of America, and a resident of East Orange, in the State of New Jersey, have invented a new and useful Improvement in Bag-Seals, of which the following is a specification.

This invention is additional to the improvement in seals for bags described and claimed in my specification forming part of United States Letters Patent No. 836431, dated November 20, 1906, and relates therewith to press fastened or press fastenable cording seals constructed mainly of sheet metal, and to seals adapted by means of a pin or "spear" part to securely fasten the necks of bags containing gold or silver coin and like valuables.

The present invention consists in an improved bag seal of that kind, provided in a novel manner with such spear part; and in each of certain novel combinations of parts, formed therein; all as hereinafter more particularly described and claimed.

The leading object of the present invention is to rigidly hold a radially protruding spear part within a relatively thin seal disk constructed mainly of sheet metal, as aforesaid, and having two or more pairs of threading holes cut in its circumferential sides in one and the same plane and an additional hole in the same plane through which the spear part protrudes.

Other objects are to simplify assembling the disk parts by adapting all of them, with or without a label disk of paper, cloth or the like, to be permanently united before attaching the spear part; and, by the same means, to expose a relatively large surface of a soft-metal part hereinafter termed the lead part, attached to the spear part, so as to facilitate providing the same with a letter, symbol or other distinguishing mark at the final press-fastening operation.

Other objects will be set forth in the general description which follows.

Two sheets of drawings accompany this specification as parts thereof.

Figures 1, 2, 3 and 4 are face views of what are herein termed the disk parts, and Fig. 5 is a corresponding view of the spear part and the lead part attached thereto as they appear before being assembled; Figs. 6, 7, 8 and 9 represent sections on a larger scale showing respectively (Fig. 6) the disk parts

assembled and ready to be united, (Fig. 7) the same parts permanently united with each other, (Fig. 8) the insertion of the spear part and lead part, and (Fig. 9) the combined seal disk, spear part and lead part as it leaves the factory; Fig. 10 is an elevation corresponding with Fig. 9; Fig. 11 is a like view showing the neck-embracing cord in position, and the seal disk and lead part as they appear after the final press-fastening operation; Fig. 12 represents a section through the press fastened seal as shown in Fig. 11; Figs. 13 and 14 are elevations of a modified seal, showing the combined seal disk, spear part and lead part as it leaves the factory, and as it appears with the neck-embracing cord in position after the final press-fastening operation; Figs. 15 and 16 are respectively an elevation and a sectional edge view illustrating another modification; and Fig. 17 is a perspective view of the spear-part holding means represented in Figs. 15 and 16.

Like reference characters refer to like parts in all the figures.

The improved seal disk with pin or "spear" attachment, to which the novel construction is confined, includes in each of the species represented by the drawings an annular sheet-metal rim part, *a*, of any desired diameter, a label disk, *b*, of paper, cloth, or the like, an inner sheet-metal disk, *c* or *c*², a dome-shaped sheet-metal disk, *d* or *d*² or *d*³, a spear part, *e* or *e*², and means within the hollow seal disk for rigidly and inseparably attaching said spear part; the disk parts being inseparably united with each other by a circumferential seam, *a'*, formed by said rim. Another feature of construction common to all the species is the provision of said dome-shaped disk part *d* or *d*² or *d*³ with threading holes, 1, 2, 3, 4, 5, 6, 7 and 8, or 1', 2', 3' and 4', together with an additional hole, 9, through which the spear part *e* or *e*² protrudes; all of said holes being formed in one and the same plane around the circumferential sides of the disk part in its dome form by a single punching operation, which preferably and conveniently leaves the displaced metal attached and curled into an abutment, 10, at that edge of each hole adjacent to said inner disk part *c* or *c*², as shown in Figs. 6-9 and Fig. 16; said threading holes 1-8 or 1'-4' interacting respectively with a

neck-embracing cord suitably threaded and looped as shown alternatively at f , Figs. 11 and 12, and at f^2 , Fig. 14.

In the species represented by Figs. 1 to 12 inclusive, the disk parts b , c and d (Figs. 2, 3 and 4) are assembled within the rim part a (Fig. 1) as in Fig. 6, on the table of a reciprocating punch, and are then shoved beneath the punch and inseparably united by the conversion of the rim a into the circumferential seam a' , as aforesaid. The seal disk proper as thus completed is represented by Fig. 7, and includes in addition to the features already mentioned a large central hole, 11, in the dome-shaped disk part d . Compare Figs. 4, 6 and 7. Also an internal central socket, 12, Fig. 3 and Figs. 6-9, formed in the inner sheet-metal disk c , and offset from its back, as shown at 13 in Figs. 6-9, so as to be removed from contact with the label disk b .

Taking a seal disk of above description, a spear part e , Fig. 5, having a rivet-shaped lead part, g , cast fast on its heel end, is inserted point forward through said central hole 11 and the hole 9 before mentioned, as represented by Fig. 8, the head end of the lead part being outermost; and by a suitable tool these parts are made fast within the seal disk by driving said head end of the lead part g into said central hole 11 to which it is tightly fitted, and the stem end of the lead part into said socket 12 of the inner disk part c . The combined seal disk spear part and lead part, as represented by Figs. 9 and 10, is then ready to leave the factory. In using the same, in combination with a neck-embracing cord (f) as a bag seal, the cord having been threaded through the holes 1 to 8, inclusive, in their numerical order, as represented in Fig. 11, or so as to form a pair of tightenable loops in any suitable way, but with its loops 14 and 15 larger and loose, the loops are slipped over the neck of the bag, and at the same time the spear e is thrust obliquely upward through the bag neck so that the loops 14 and 15 may be tightened beneath its point as in Fig. 12. When the loops are sufficiently tightened, the dome-shaped disk part d is crushed inward upon those portions of the cord within the seal disk to fasten the cord, and the lead part g is at the same pressing operation compressed so as to reinforce the fastening of the spear part e , and to assist in fastening the cord, as represented in Fig. 12, and at the same time is conveniently stamped with a letter, symbol or other distinguishing mark, as represented by the letter "B" in Fig. 11, sufficient lead protruding from the large central hole 11 to receive such mark. A suitable seal press for tightening the cord and pressing the seal disk and its lead part is set forth in my specification

forming part of United States Letters Patent No. 844095 dated February 12, 1907; but, for the purposes of the present invention, the seal press may be of any known or improved construction.

In the species of the improved bag seal represented by Figs. 13 and 14, the dome-shaped disk part d^2 is provided with four threading holes, 1', 2', 3', 4', instead of the eight shown in Figs. 4, etc.; the cord (f^2) being wound around the neck of the bag to form an effective double loop, 14', 15', Fig. 14. Otherwise the seal may be identical with that represented by Figs. 1-12, including the lead part g as above described.

In the species represented by Figs. 15, 16 and 17, the rim part a is constructed with a notch, 16, to provide for forming the circumferential seam a' after the spear part e^2 is added; the inner disk part c^2 is constructed with a relatively large offset central portion, 17, Figs. 16 and 17, having an abutment, 18, and a staple, 19, integral therewith, to attach the spear part e^2 , as best shown in Fig. 17; and the dome-shaped disk part d^3 is constructed without the central hole 11 of the first and second species, owing to the omission of their lead part g .

The dome-shaped disk part d^3 of the third species as shown is provided with eight threading holes, 1-8, as in the first species. It may obviously have instead the four threading holes 1'-4' of the second species; and other like additional modifications will suggest themselves to those skilled in the art.

The spear part e or e^2 is intended to protrude just far enough to interlock with the tightened loops of the neck-embracing cord as shown at f and f^2 , without endangering the hands by contact with its sharp point. It will consequently be made of different lengths for different makes of bags; and the combined seal disk and spear part as a whole may vary in size and weight, size of hole, etc., to any required extent.

Having thus described said improvement, I claim as my invention, and desire to patent under this specification:

1. A press fastenable cording seal for securing the necks of bags having, in combination with a suitable neck-embracing cord, a hollow compressible seal disk composed of disk parts permanently united with each other by a circumferential seam and including an inner disk part, a dome-shaped disk part the rim of which adjoins said inner disk part, and which is provided circumferentially with punched threading holes for the cord arranged in one and the same plane, with an abutment at that edge of each hole adjacent to said inner disk part formed by the metal displaced at the punching operation, and with an additional hole in the same plane adapted to be simultaneously

punched, a spear part protruding through the hole last named, and means within the seal disk for inseparably and rigidly attaching said spear part.

5 2. A press fastenable cording seal for securing the necks of bags having, in combination with a suitable neck-embracing cord, a hollow compressible seal disk composed of
10 disk parts permanently united with each other by a circumferential seam and including a dome-shaped disk part provided circumferentially with threading holes for the cord arranged in one and the same plane and with an additional hole in the
15 same plane, a spear part protruding through the hole last named, and means within the seal disk for inseparably and rigidly attaching said spear part, including a rivet-shaped lead part fast on the inner end of said spear
20 part and having its head end outermost, said dome-shaped disk part having a central hole tightly fitted to said head and exposing the same.

3. A press fastenable cording seal for securing the necks of bags having, in combination with a suitable neck-embracing cord, a hollow compressible seal disk composed of
25 disk parts permanently united with each other by a circumferential seam and including a dome-shaped disk part provided circumferentially with threading holes for the cord arranged, in one and the same plane and with an additional hole in the same plane,
30 a spear part protruding through the hole last named, means within the seal disk for inseparably and rigidly attaching said spear part, including a rivet-shaped lead part fast on the inner end of said spear part and hav-

ing its head end outermost, said dome-shaped disk part having a central hole 40 tightly fitted to said head and exposing the same, and an inner disk having a central socket which interacts with the inner end of said lead part.

4. The combination, in a press fastenable 45 cording seal, of an annular rim part of sheet metal, a label disk of paper or the like, an inner sheet-metal disk backing said label disk and having a central socket portion offset out of contact with the label disk, a 50 dome-shaped disk part having threading holes in its sides and a central hole, and a rivet-shaped lead part the stem of which is seated in said socket, the head of said lead part being tightly fitted to said central hole 55 and exposed thereby.

5. The combination, in a press fastenable cording seal, of an annular rim part of sheet metal, a label disk of paper or the like, an inner sheet-metal disk backing said label 60 disk and having a central socket portion offset out of contact with the label disk, a dome-shaped disk part having threading holes and an additional hole in its sides and a central hole, a spear part protruding 65 through said additional hole, and a rivet-shaped lead part, fast on the inner end of said spear part, the stem of which lead part is seated in said socket and its head tightly fitted to said central hole and exposed there- 70 by, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:

W. M. BROOKS,
ELLEN J. BROOKS.