

E. J. BROOKS.
CORDING SEAL.

APPLICATION FILED JAN. 16, 1906.

Fig. 1.

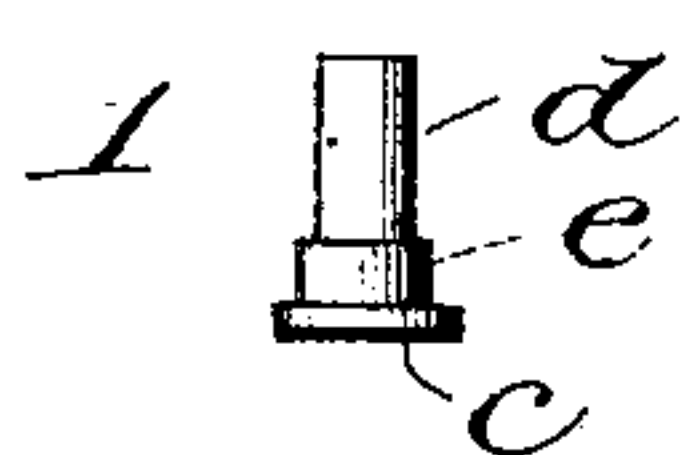


Fig. 2.



Fig. 3.



Fig. 4.

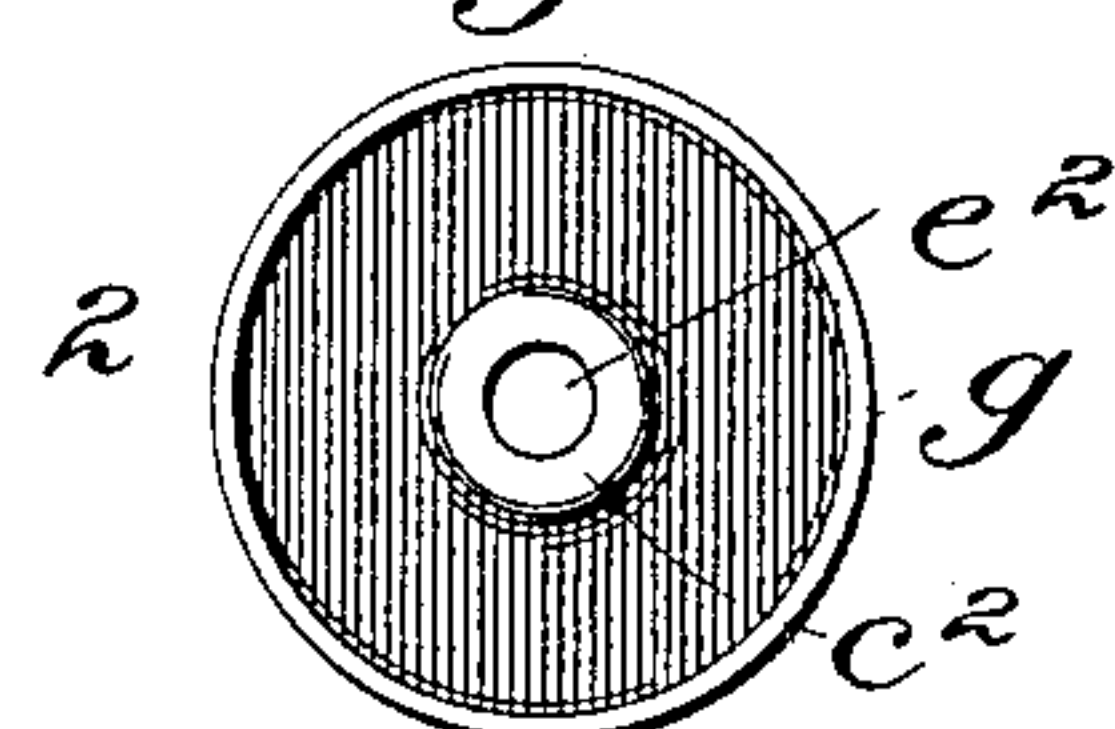


Fig. 5.

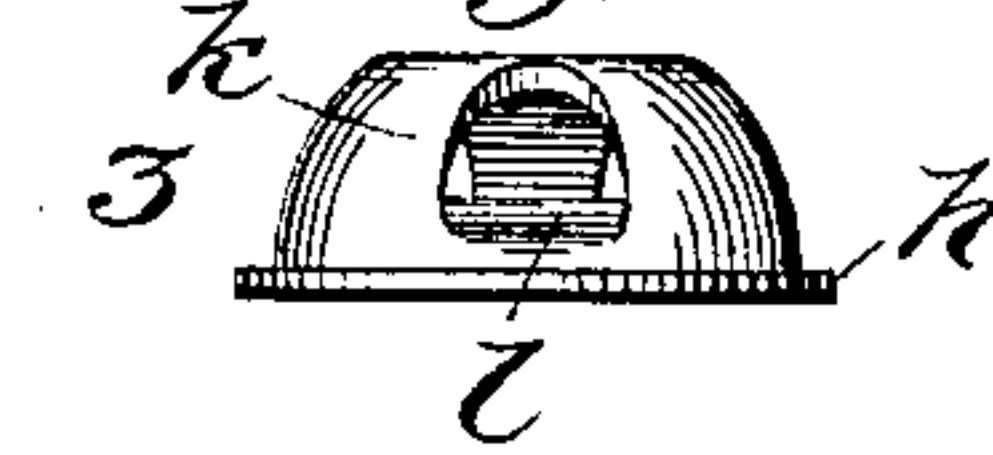


Fig. 6.

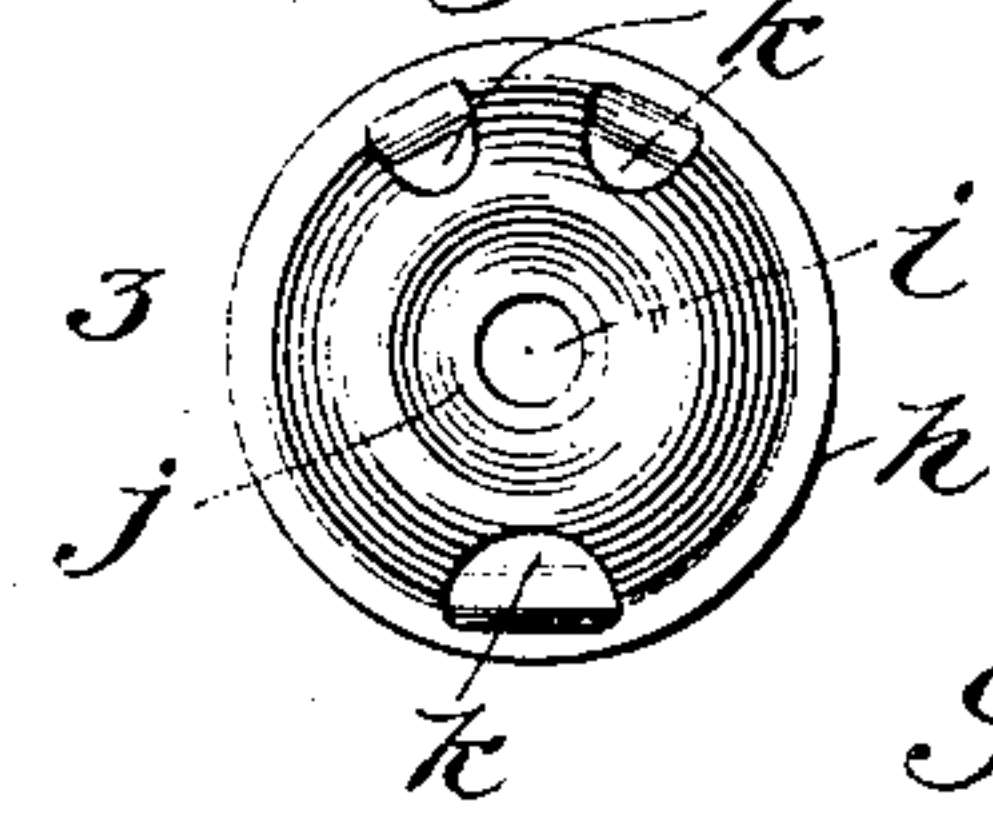


Fig. 7.

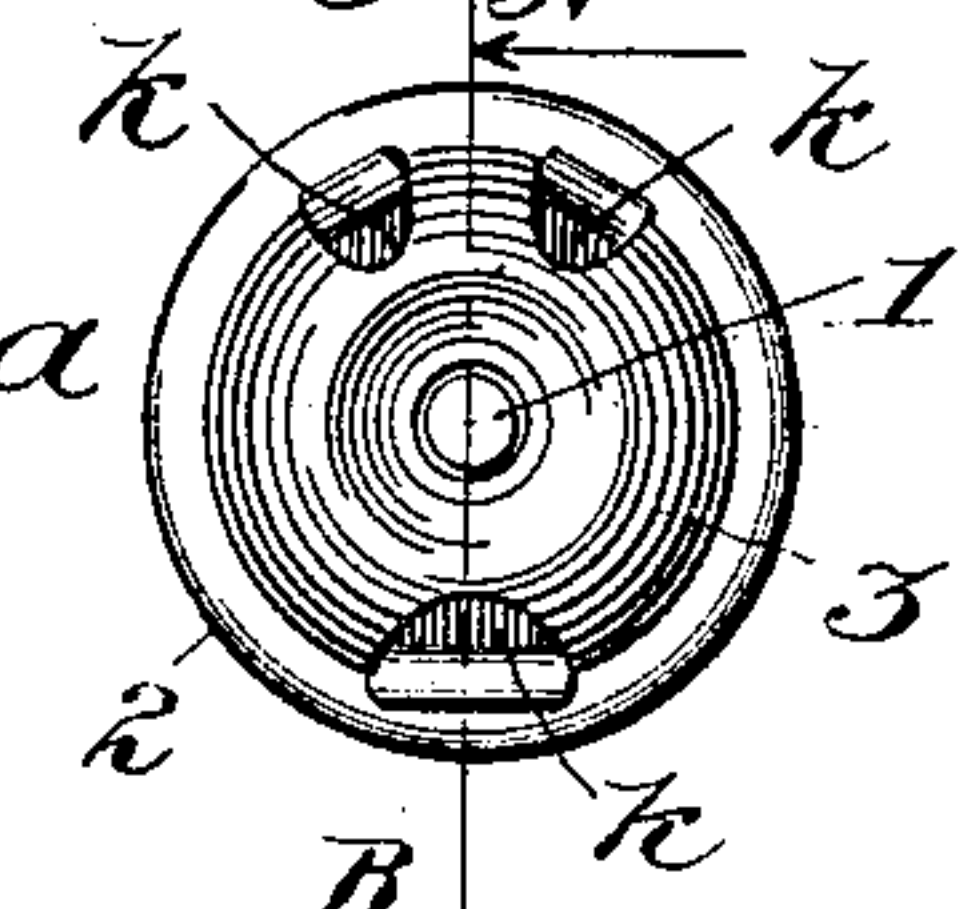


Fig. 9.

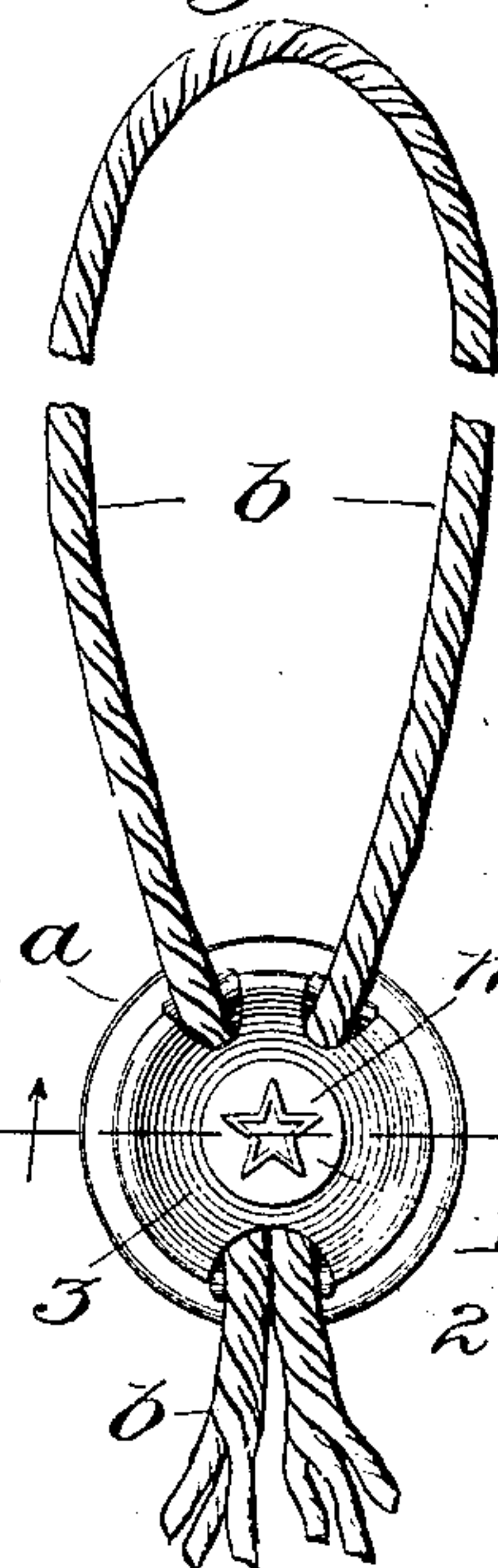


Fig. 10.



Fig. 11.



Fig. 12.

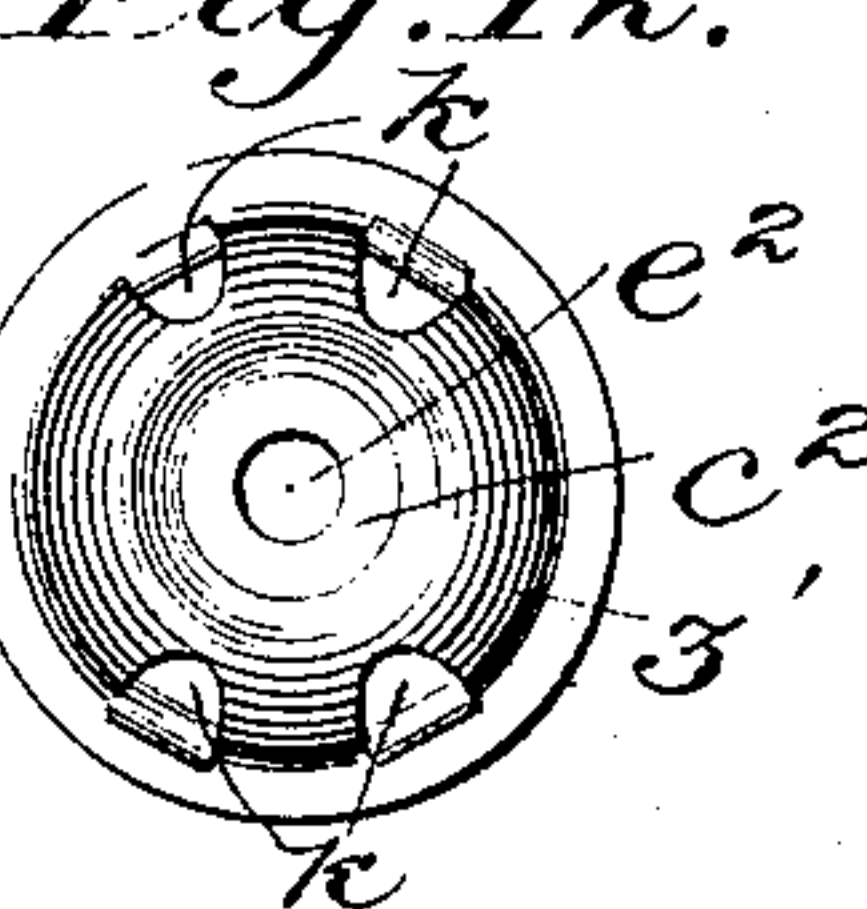


Fig. 8.

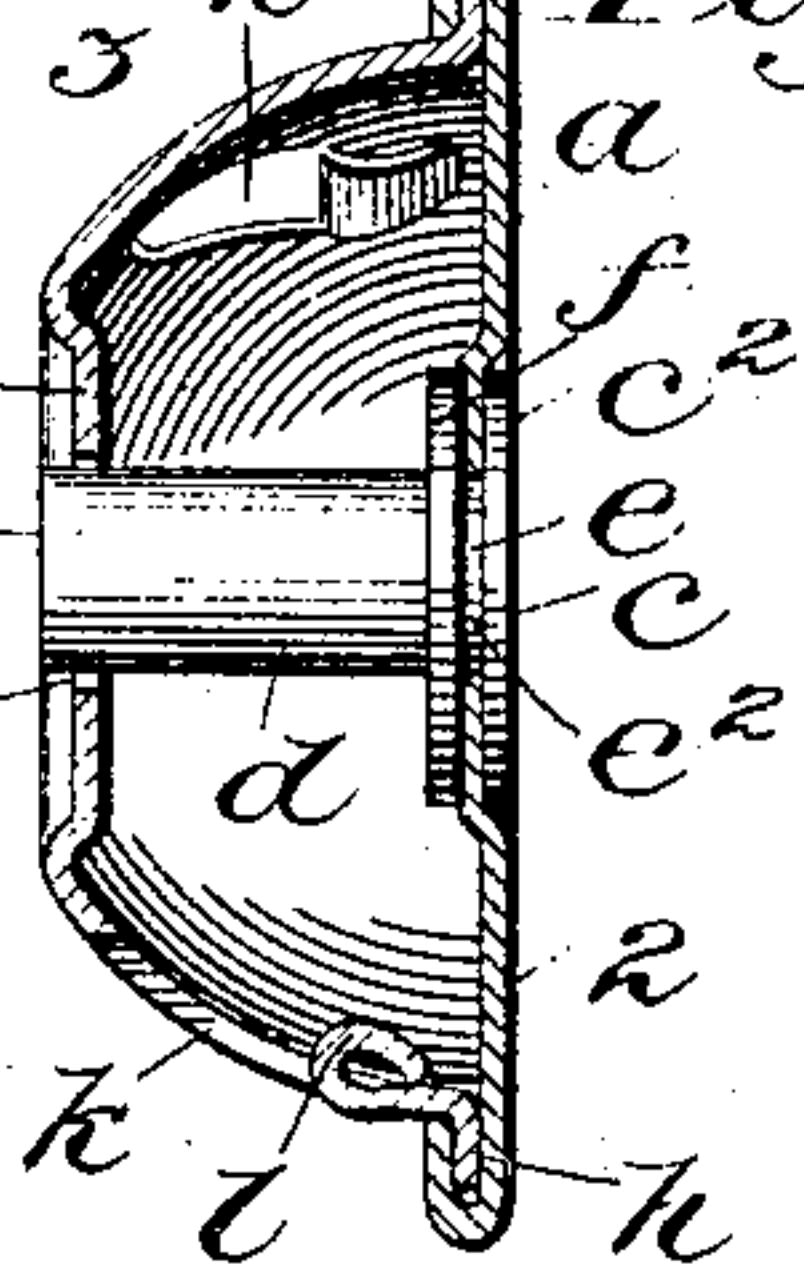


Fig. 13.

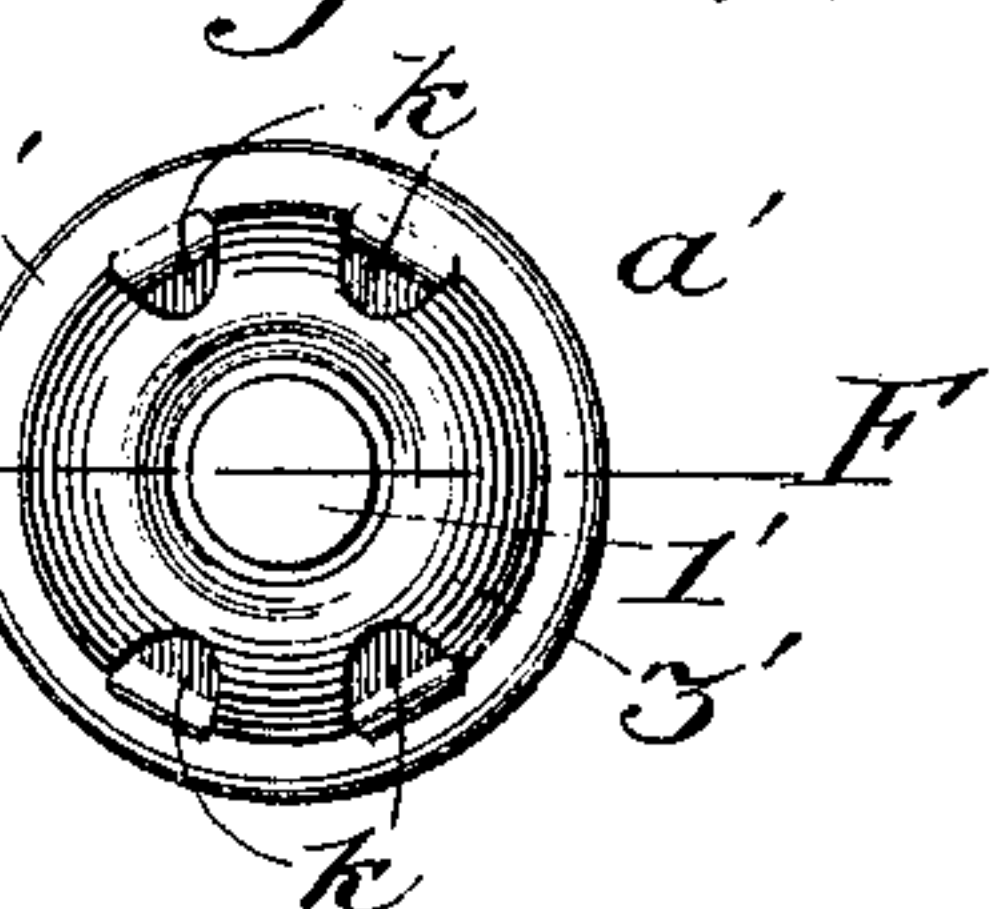


Fig. 14.

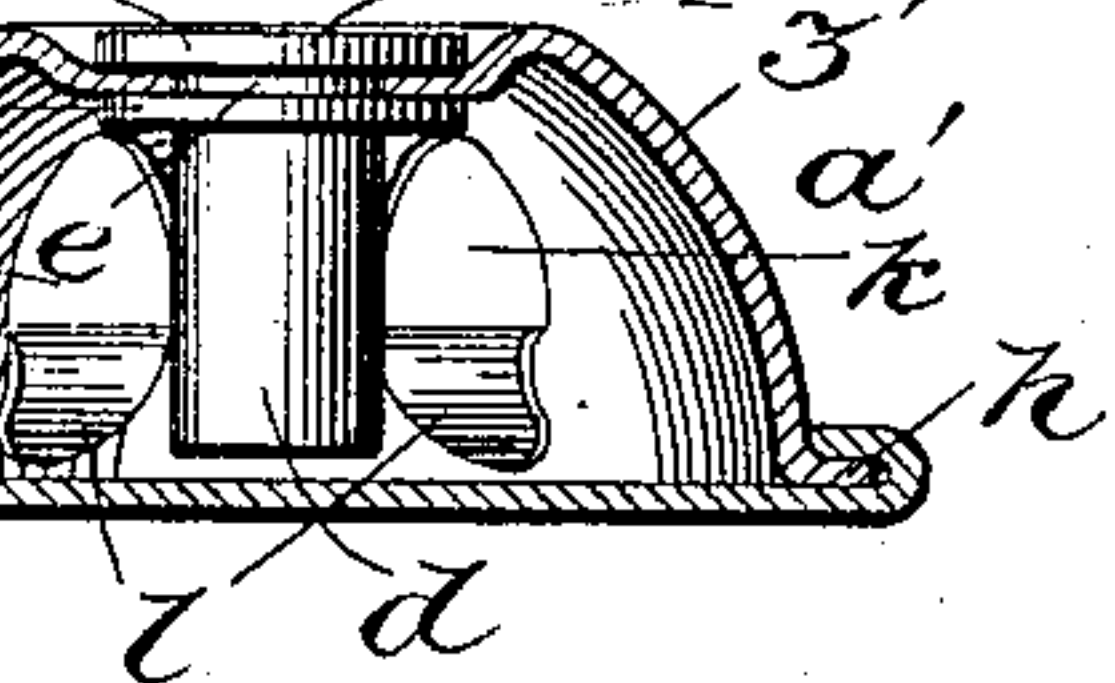


Fig. 15.



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UNITED STATES PATENT OFFICE.

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

CORDING-SEAL.

SPECIFICATION forming part of Letters Patent No. 792,193, dated June 13, 1905.

Application filed January 16, 1905. Serial No. 241,323.

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 Cording-Seals, of which the following is a specification.

In common with the improvements in cording-seals set forth in my specification forming part of Letters Patent No. 704,673, dated July 15, 1902, and previous specifications therein referred to this invention relates to those devices for sealing commercial packing-cases, baggage, &c., in which more or less compressible twine or cord constitutes the shackle of the seal.

The seal proper or "seal-disk" of the improved seal is partly of tin or other suitable sheet metal and partly of lead or equivalent compressible metal, hereinafter referred to as "soft metal."

The invention consists in certain novel combinations of parts hereinafter set forth and claimed whereby such seals are provided in a new and highly-effective way with a soft-metal rivet to supplement the sheet metal in securing the cord within the seal-disk and to facilitate providing one or both sides of the seal-disk with distinguishing press-marks, so as to afford additional security against the fraudulent duplication of a violated seal-disk.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 are side and end views of the supplemental rivet or soft-metal portion of the seal-disk. Figs. 3 and 4 are like views of what is herein termed the "flat" disk part of one species. Figs. 5 and 6 are like views of what is herein termed the "convex" disk part of the same species. Fig. 7 is a view of the completed seal-disk of that species from its convex side. Fig. 8 represents a section on the line A B, Fig. 7, enlarged one diameter. Fig. 9 is an elevation of the pressed seal, showing the same side as Fig. 7. Fig. 10 represents a section on the line C D, Fig. 9, enlarged one diameter. Figs. 11 and 12 are face views corresponding, respectively, with Figs. 4 and 5, illustrating a second species. Fig. 13 is a face view corresponding with Fig.

7 of the complete seal-disk embodying the parts represented by Figs. 11 and 12. Fig. 14 is a section on the line E F, Fig. 13; and Fig. 15 represents a like section through the pressed seal-disk of the second species.

Like reference characters indicate like parts in all the figures.

In either species of the improved cording-seal the seal-disk *a* or *a'* is composed of three parts 1, 2, and 3 or 1', 2', and 3', preliminarily united with each other in the unpressed seal, as in Figs. 7 and 8 or Figs. 13 and 14, and the seal-disk is interlocked with the cord *b* by threading the ends of the cord through the seal-disk and flattening the seal-disk upon the ends of the cord by means of a seal-press in the customary manner. In both species the soft-metal portion 1 or 1' is a rivet originally of the shape represented by Figs. 1 and 2—that is to say, having at the intersection of its head *c* and stem *d* a shoulder-forming enlargement *e*, so that the metal around the stem can be upset by a hollow punch to form a collar *f*, Figs. 8 and 14, on the stem, by which the rivet may be securely fastened to one of the sheet-metal parts 2 or 3', such part being constructed with a central depression *e'*, occupied by the rivet-head *c*, and a central hole *e''*, loosely fitted to the stem enlargement *e* of the rivet. Around this hole *e''* the stem-collar *f* projects within the seal-disk, as shown in Fig. 8 or Fig. 14. After the rivet 1 or 1' is so attached the sheet-metal disk parts 2 and 3 or 2' and 3' are united with each other at the perimeter of the seal-disk *a* or *a'* by interlocking a crown-flange *g* on one of them with the flat marginal rim *h* of the other.

In the species represented by Figs. 1 to 10, inclusive, the rivet 1 is so attached to the flat disk part 2 and the extremity of its stem *d* projects at the opposite side of the seal-disk through a central hole *i* within a depression *j* in the convex disk part 3, as best shown in Fig. 8.

In the second species (represented by Figs. 11 to 15, inclusive) the flat disk part 2' is made without the depression *e'* and hole *e''* of the first species, and the rivet 1' is fastened preliminarily to the convex disk part 3' and projects inwardly, as shown in Fig. 14, the rivet-

head c occupying a depression c^2 and hole e^2 , similar to the hole i and depression j in the convex disk part 3 of the first species.

In both species the threading-holes k are formed in the convex disk part 3 or 3', and the tongues l , formed by the metal cut from the several threading-holes, are preferably and conveniently turned back inside the seal-disk, as shown, so as to economize space within the seal-disk and facilitate threading the seal.

When the seal-disk a or a' is pressed, as illustrated by Figs. 9 and 10 or by Fig. 15, said convex disk part 3 or 3' is flattened, as heretofore, and at the same time the rivet 1 or 1' is compressed and provided with a distinguishing press-mark m on one or each side of the seal-disk. In the first species, Figs. 9 and 10, such mark may conveniently be the same at both sides of the seal-disk. The surplus lead escapes laterally within the seal-disk a or a' and materially assists in fastening the ends of the cord b against withdrawal.

The form and arrangement of the threading-holes k may be varied, as illustrated by Figs. 12 and 13, as compared with Figs. 6 and 7. The sheet-metal disk parts 2 and 3 or 2' and 3' may be provided at the factory with marks supplemental to the press-marks m . The latter may of course consist of or include words as well as symbols of any description, and other like modifications will suggest themselves to those skilled in the art.

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

1. A cording-seal having two sheet-metal disk parts permanently united with each other at the perimeter of the seal-disk and a soft-metal rivet preliminarily attached to one of said sheet-metal parts by the head of the rivet and an opposing collar integral with the stem of the rivet, the head of the rivet being exposed externally and adapted to receive a distinguishing press-mark at the fastening operation.

2. A cording-seal having a flat sheet-metal disk part and a convex sheet-metal disk part permanently united with each other by interlocked flanges at the perimeter of the seal-disk, and a soft-metal rivet arranged centrally

and perpendicular to said flat part and preliminarily attached to one of said sheet-metal parts by the head of the rivet and an opposing collar integral with the stem of the rivet, the rivet-head being exposed externally and adapted to receive a distinguishing press-mark at the fastening operation.

3. The combination, in a cording-seal, of a flat sheet-metal disk part and a convex sheet-metal disk part permanently united with each other at the perimeter of the seal-disk and one of them constructed with a central depression and a hole within said depression, and a soft-metal rivet having its head within said depression and its stem extending through said hole and provided with a collar opposed to said head whereby the rivet is preliminarily fastened in place.

4. The combination, in a cording-seal, of a flat sheet-metal disk part and a convex sheet-metal disk part permanently united with each other at the perimeter of the seal-disk and constructed in common with central depressions and central holes within such depressions, and a soft-metal rivet having an externally-exposed head within the depression of one of said sheet-metal parts and a stem projecting through the holes of both parts, and preliminarily fastened in place at its head end.

5. The combination, in a cording-seal, of a flat sheet-metal disk part and a convex sheet-metal disk part permanently united with each other at the perimeter of the seal-disk and constructed in common with central depressions and central holes within such depressions, and a soft-metal rivet having an externally-exposed head within the depression of one of said sheet-metal parts and a stem projecting through the holes of both parts and preliminarily fastened in place by a collar integral with said stem and opposed to said head of the rivet, both ends of the rivet being exposed externally and adapted to receive distinguishing press-marks at the fastening operation, substantially as hereinbefore specified.

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