E. J. BROOKS.

SEAL.

APPLICATION FILED JAN. 26, 1911.

990,629. Patented Apr. 25, 1911.

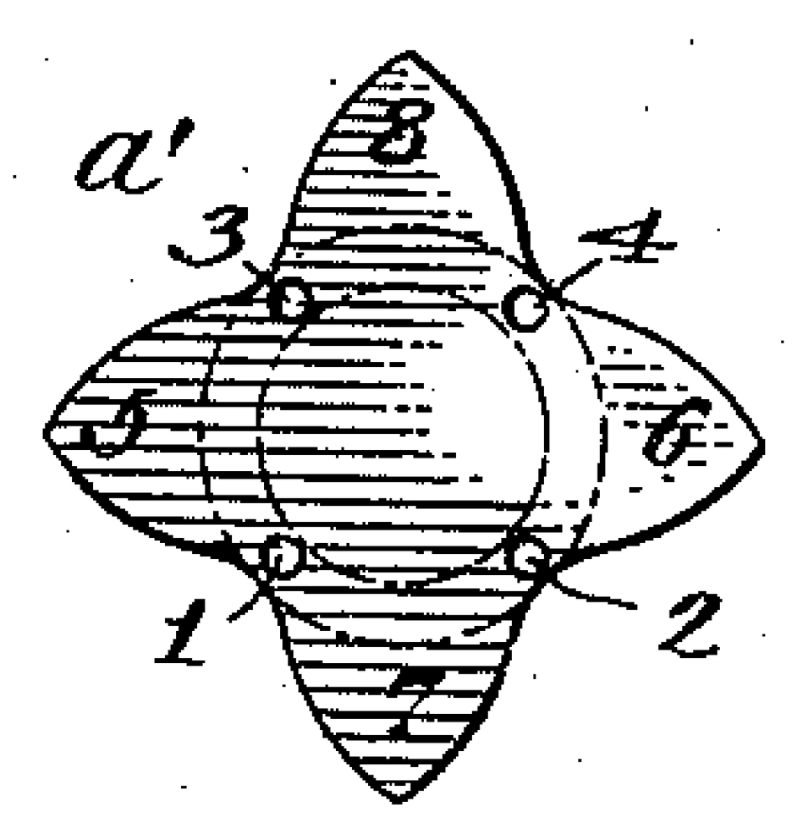


Fig. 1.

Fig. 2.

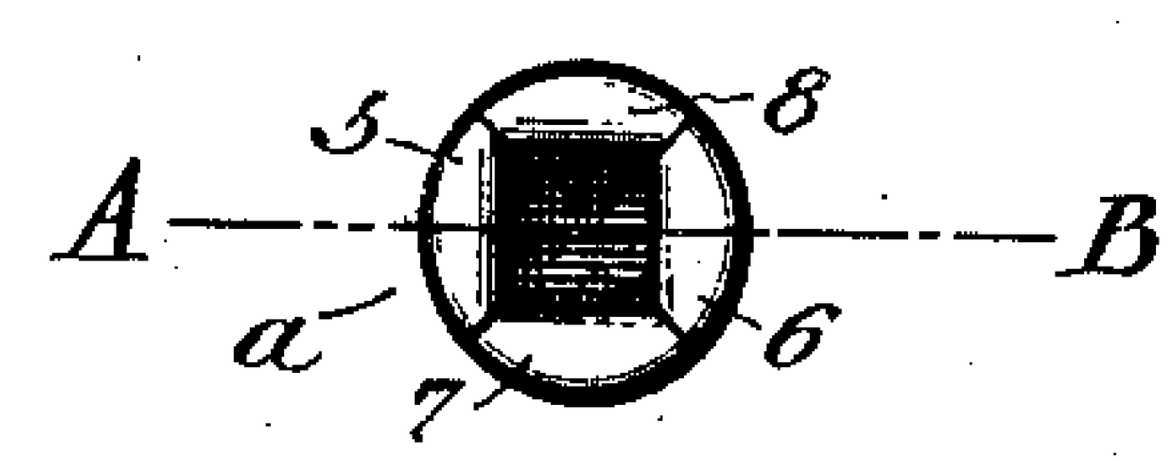


Fig. 4.

Fig. 3.

Fig. 5.

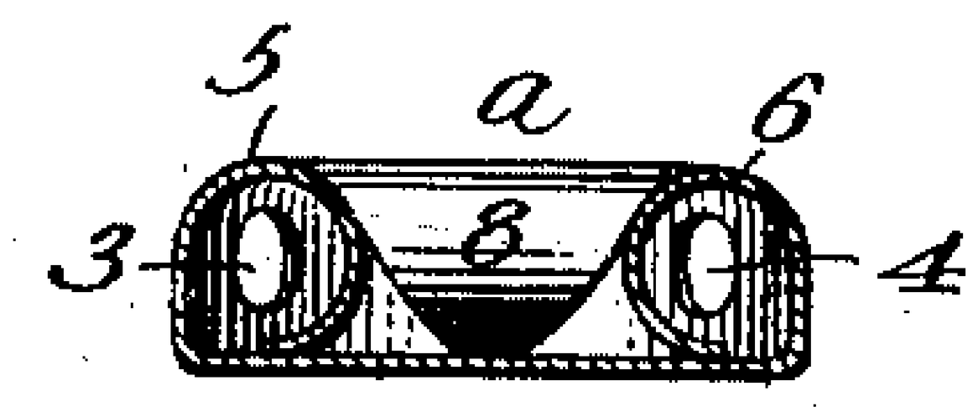


Fig. 6.

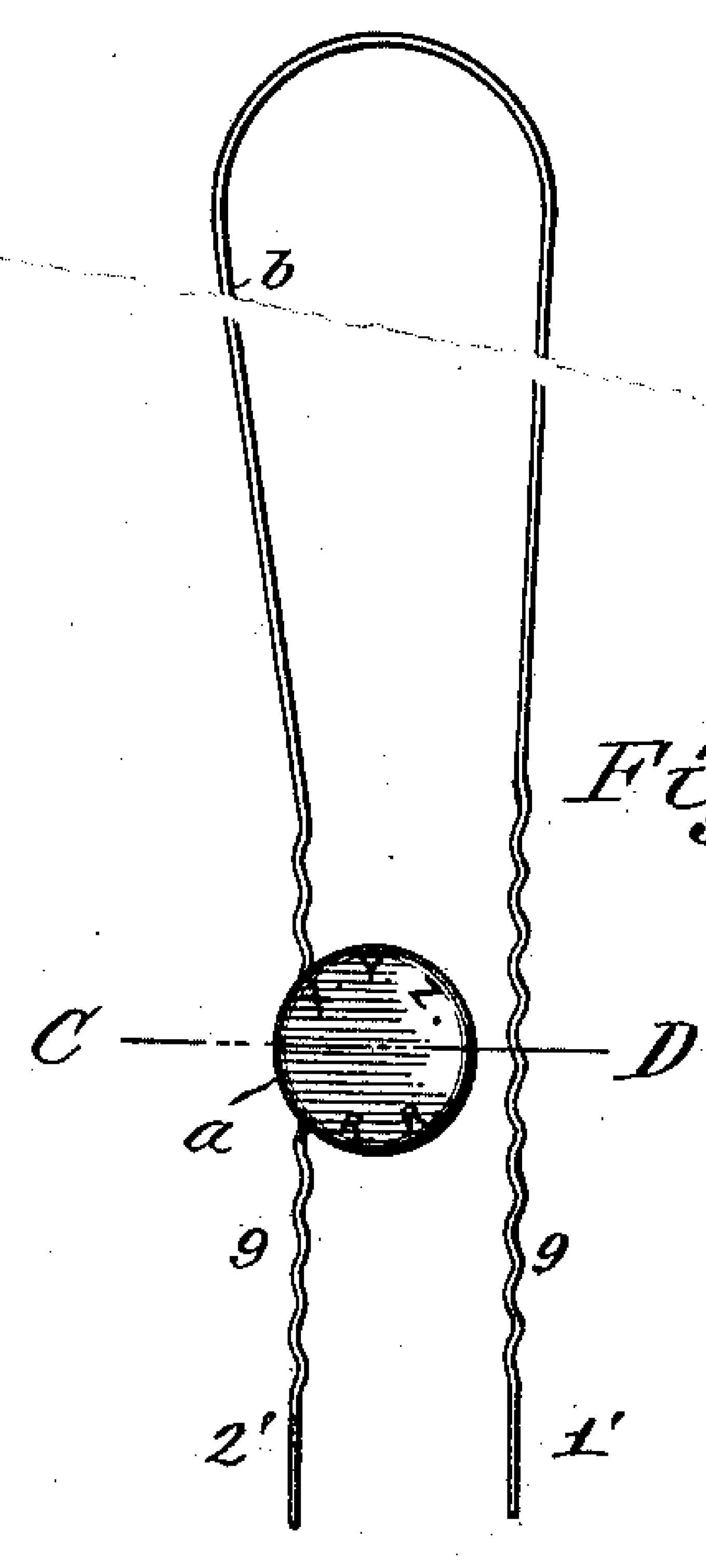


Fig. 7.

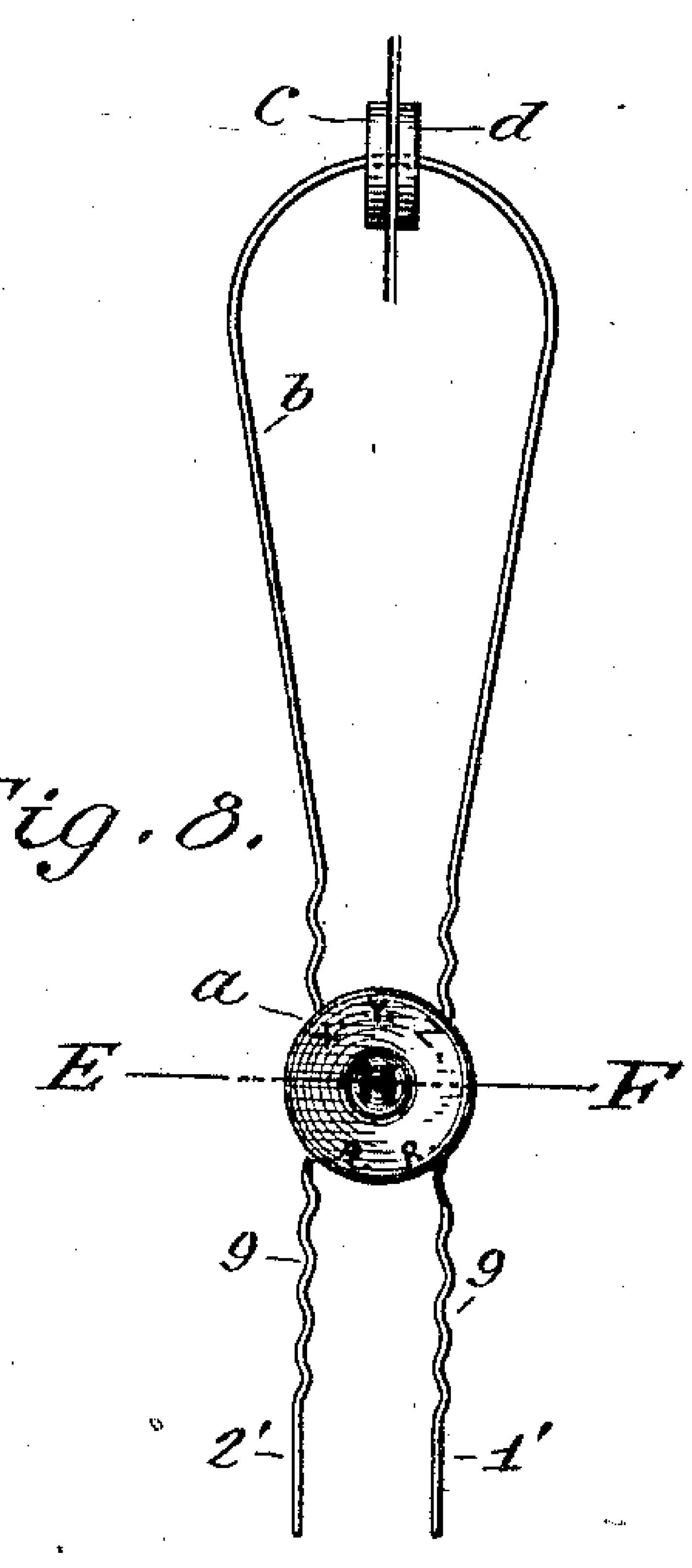


Fig. 8.

Fig. 9.

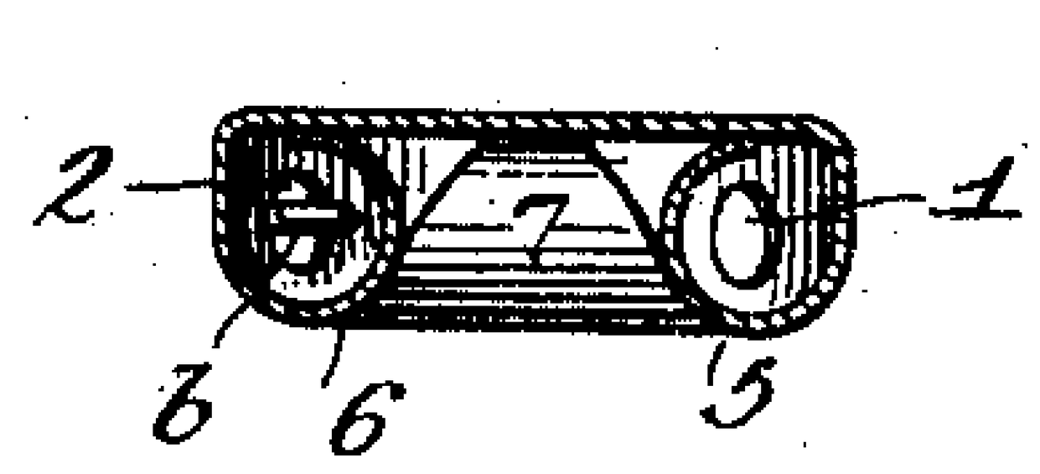
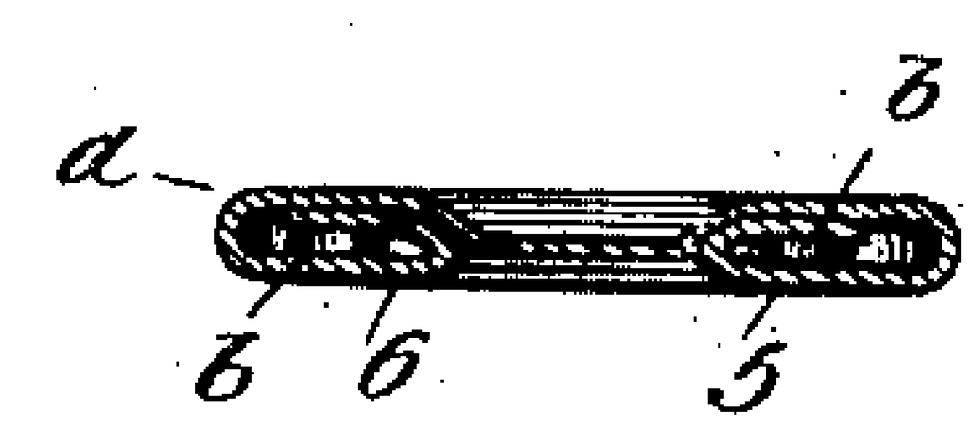


Fig. 10.



WITNESSES

M. E. Smoot

INVENTOR

Edward J. Brooks

Attorney

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

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

SEAL.

990,629. Specification of Letters Patent. Patented Apr. 25, 1911.

Application filed January 26, 1911. Serial No. 604,785.

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 Seals, of which the following is a specification.

In a previous specification forming part of United States Letters Patent No. 961,931, dated June 21, 1910, I have set forth an improvement in "Cording Seals" characterized by a seal part made of nearly rigid sheet-metal and constructed with substantially parallel lips arranged at opposite sides of an open front, and a second pair of lips substantially at right angles to those first-named; the lips first named being adapted to be coiled around the respective ends of the cord by the action of a suitable seal press; and in my specifications forming part of United States Letters Patent Nos. 982,121 and 982,122, dated January 17, 1911, I have set forth additional press-fastenable seals having sheet-metal seal parts constructed on the same principle.

The present invention relates to another type of press-fastenable seals; and it consists in a seal of that type having a sheet-metal seal part constructed on the aforesaid principle in part and adapted to have a flexible shackle either of cord or of wire; also in the improved seal part and in certain novel combinations of parts embodied in the improved seal; all as hereinafter particularly described and claimed.

The leading objects of the present invention are to adapt seal parts of a given size to be made of lighter sheet-metal than would otherwise be required for security, and thus to facilitate embodying the aforesaid principle in part in small and light-weight seals.

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

Referring to the accompanying sheet of drawings—Figure 1 is a plan view of the flat blank of the improved seal part; Figs. 2 and 3 are respectively "face" and side views of the blank as it appears after being stamped or pressed into cup shape; Figs. 4 and 5 are face and side or edge views of the seal part as completed at the factory; Fig. 6 represents a magnified section on the line A—B, Fig. 4; Fig. 7 is an elevation showing the same seal part fast on one end of a shackle of "indented" wire; Fig. 8 is a like elevation of the seal so completed as it appears after being applied and press-fastened; and Figs. 9 and 10 represent magnified sections on the lines C—D, Fig. 7, and E—F, Fig. 8, respectively.

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

The improved seal is composed of a sheet-metal seal part, *a*, and a flexible shackle, *b;* the latter of any suitable wire or cord.

The flat blank *a'*, Fig. 1, of the seal part *a*, is stamped from suitable "tin" (tin plate) or other sheet metal; which, owing to the improved construction, may be of lighter weight than that called for by the previous specifications first hereinbefore referred to; and the blank is at the same operation provided with punched holes, 1, 2, 3 and 4, located coincidently with reference to the notches which separate the pairs of lips 5—6 and 7—8 as shown in Fig. 1. All the lips are preferably and conveniently of one pattern and of uniform dimensions, so that either pair may be used to embrace and fasten the shackle ends 1′ and 2′ of the shackle *a*. The lips 5, 6, 7 and 8, in common, are coiled into the recess of the seal part *b*, as represented in Figs. 4, 5 and 6, at the factory, so as to form passage-ways between the holes 1, 2, 3 and 4, which facilitate threading the shackle ends 1′ and 2′ through the seal part, especially if the shackle be of cord. One shackle end, 2′, is preferably and conveniently so threaded at the factory if the shackle *b* is of wire, as represented in Figs. 7 and 9, so that each seal is handled as one part; and if the shackle ends have zig-zag indented portions, 9, as represented in Figs. 7 to 10 inclusive, the parts are not liable to accidental separation. Such separation may be prevented by a preliminary compression of that one of the curled lips which embraces the preliminarily threaded shackle end 2′, if necessary. After threading the other shackle end 1′ through a pair of car-door staples, *c—d*, Fig. 8, or the like, and then through the passageway formed by the curled lip, 5, parallel with the one already appropriated, a suitable seal press is applied to the seal part, and the seal is press-fastened as represented in Figs. 8 and 10. At this operation, the lips 5, 6, 7 and 8, or that pair at least by which the shackle ends are embraced, are flattened so as to permanently tighten the seal part upon the inclosed portions of the shackle ends, and the central portion of the seal part is indented

to assist in preventing access to the extremities of the compressed lips as represented in Fig. 10.

The seal part *a* may be provided at the stamping operation with any required distinguishing marks, represented by the lettering "X. Y. Z. R. R." in Fig. 7; and it may be further provided at the press-fastening operation with a distinguishing press mark, represented by "H" in Fig. 8.

The seal-part lips 5, 6, 7 and 8 may be made in two pairs differing in dimensions as set forth in my previous specification first hereinbefore referred to; the distinguishing marks may be changed to any extent or omitted; 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. An improved press-fastenable seal composed of a seal part of sheet-metal constructed with two pairs of threading holes and two pairs of lips adapted to be curled inward and to form passage-ways between said holes, and a flexible shackle the ends of which are adapted to be threaded through said pairs of holes respectively and through the communicating passage-ways formed by a pair of the curled lips parallel with each other and to be secured against withdrawal by the compression of the lips last named in a seal press.

2. A sheet-metal seal part for a press-fastenable seal constructed with two pairs of threading holes and two pairs of lips adapted to be curled inward and to form passage-ways between said holes.

3. The combination, in a press-fastenable seal, of a sheet-metal seal part constructed with two pairs of threading holes and two pairs of lips adapted to be curled inward and to form passage-ways between said holes, and a flexible shackle of indented wire having a zig-zag portion adapted to become self-fastened in one of said passage-ways to preliminarily unite the parts, the parallel passage-way being available for threading the other shackle end preparatory to the press-fastening operation.

4. The combination, in a press-fastenable seal, of a sheet-metal seal part constructed with two pairs of threading holes and two pairs of lips adapted to be curled inward and to form passage-ways between said holes, and a flexible shackle of indented wire having threading ends constructed with zig-zag portions adapted to be threaded through said holes within a parallel pair of the curled lips and to be permanently fastened therein by compressing the lips last named, substantially as hereinbefore specified.

EDWARD J. BROOKS.

Witnesses:
MARIE C. DEMPSEY,
GEO. R. FORD.