

No. 818,344.

PATENTED APR. 17, 1906.

E. J. BROOKS.

SEAL.

APPLICATION FILED AUG. 26, 1905.

Fig. 1.

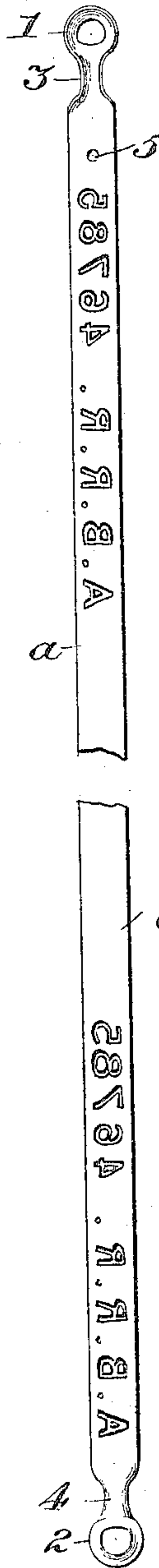


Fig. 2.

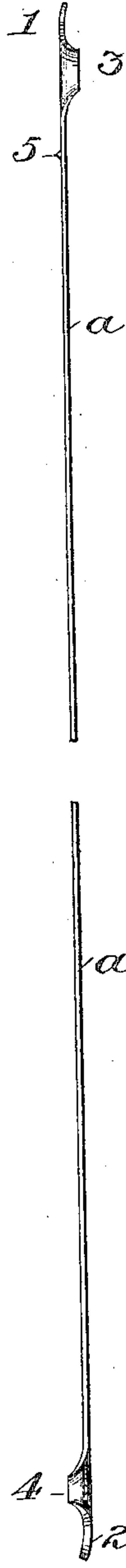


Fig. 3.

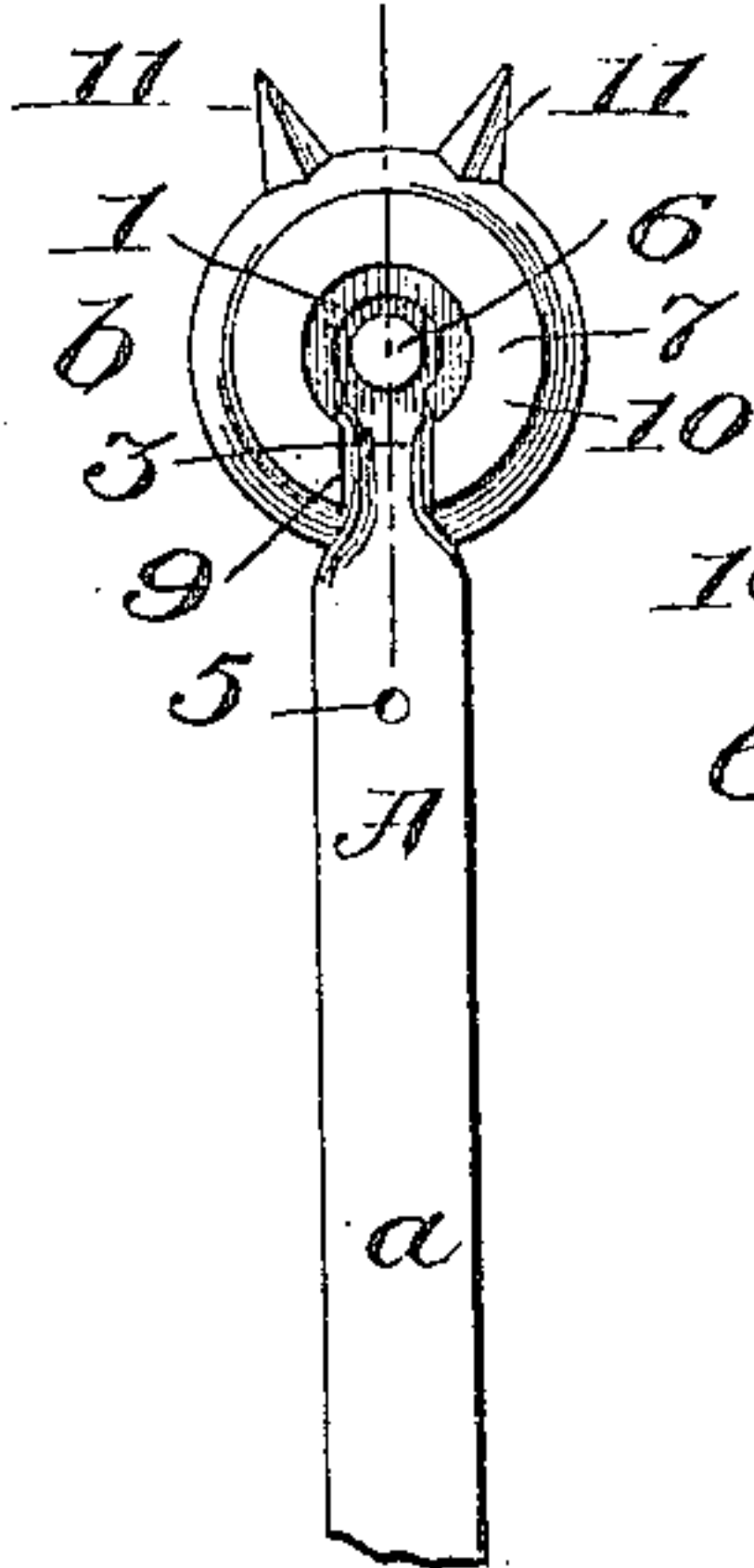


Fig. 6.

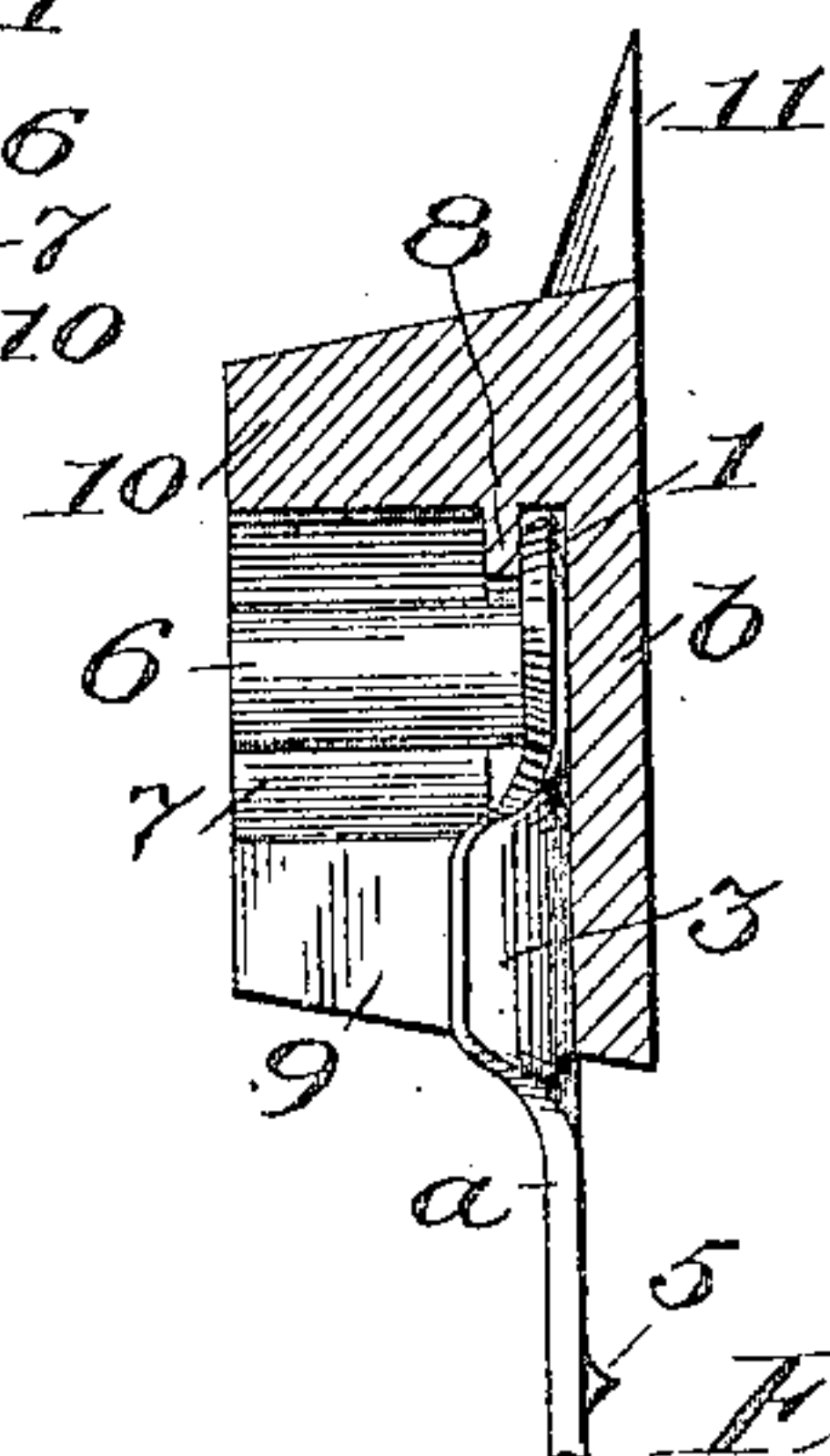


Fig. 7.

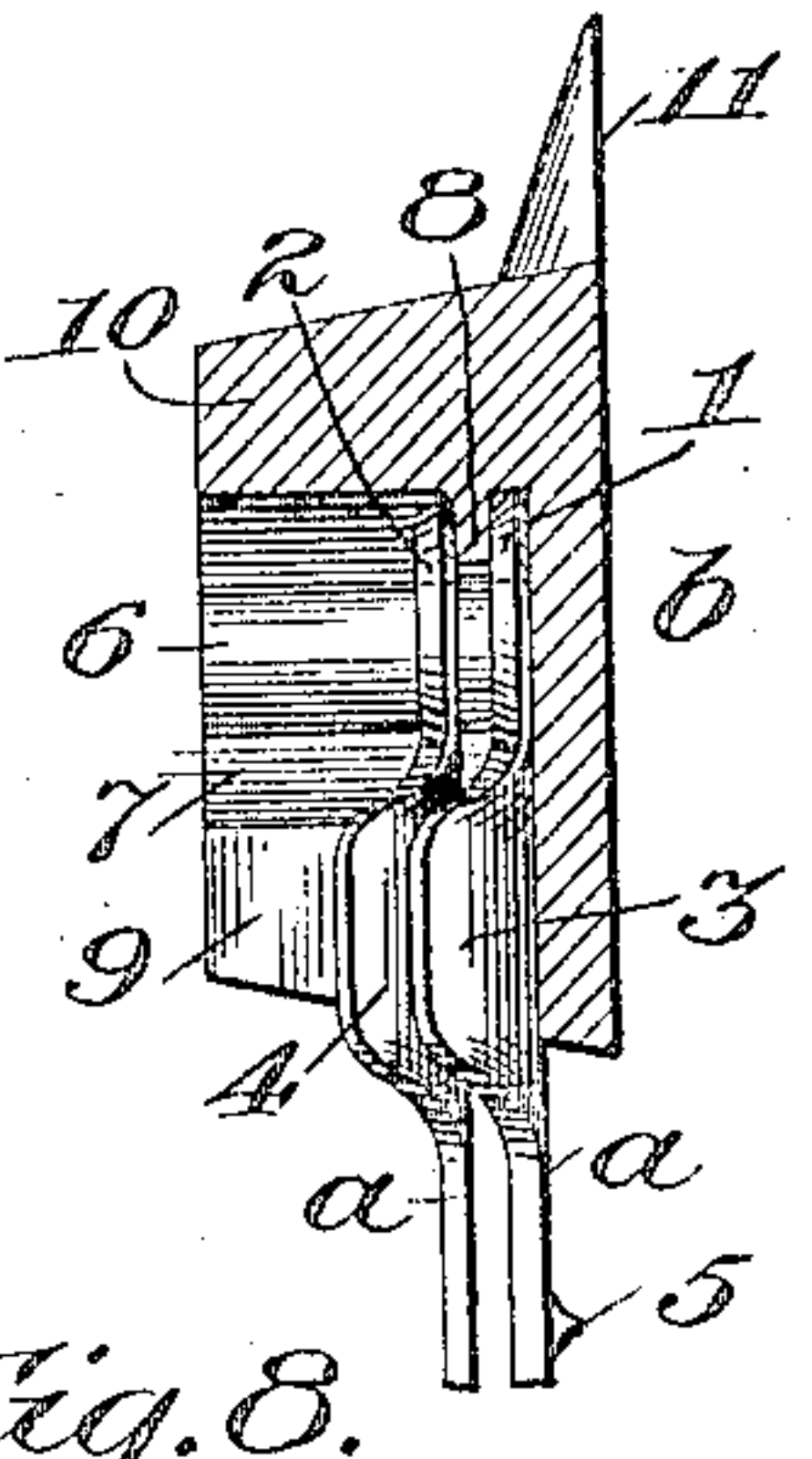


Fig. 4.

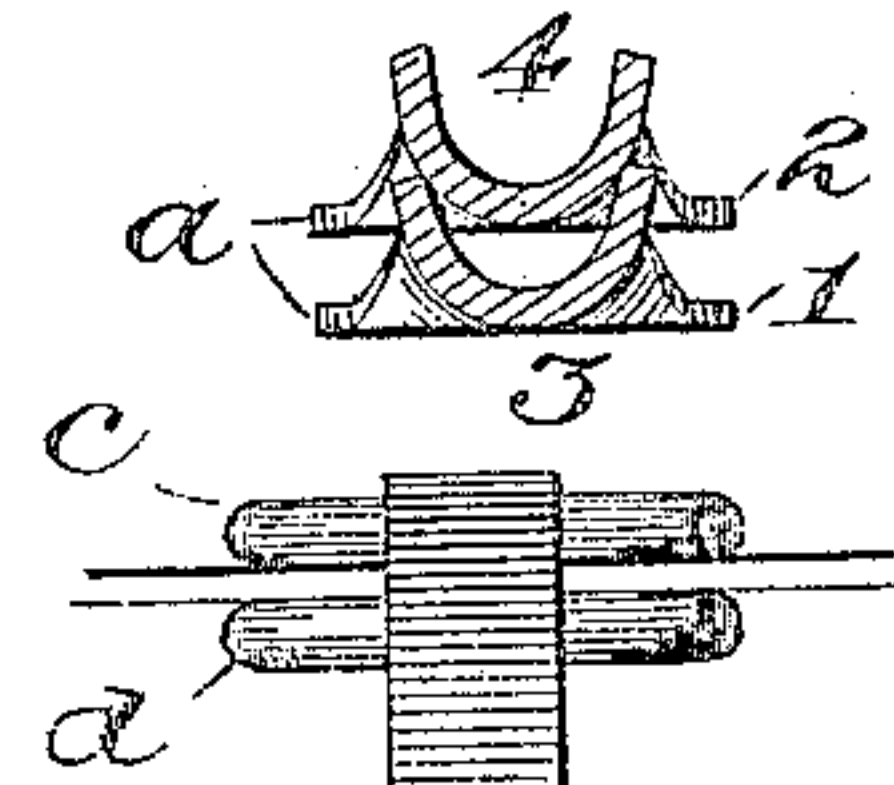
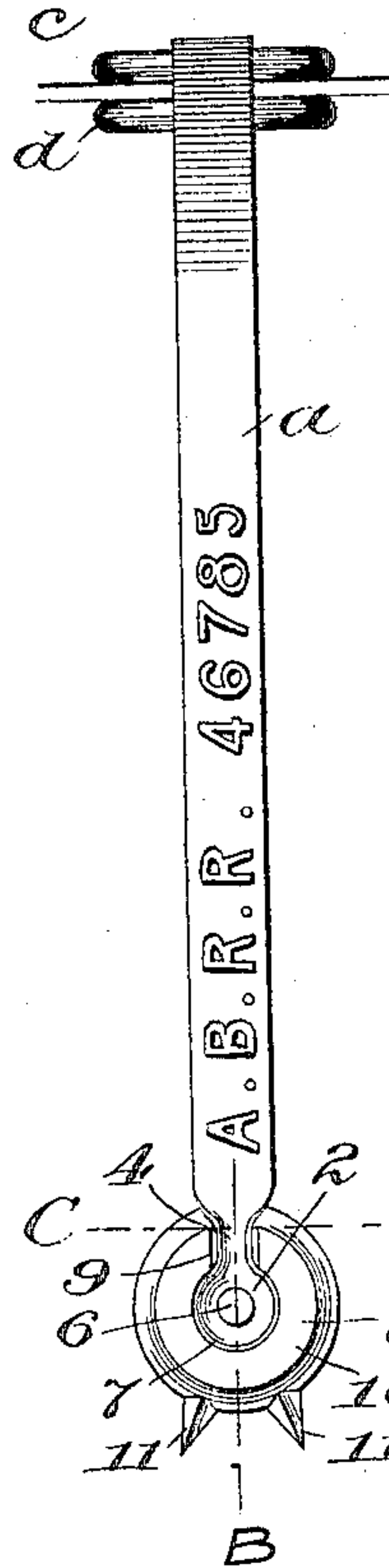


Fig. 5.

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UNITED STATES PATENT OFFICE.

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

SEAL.

No. 818,344.

Specification of Letters Patent.

Patented April 17, 1906.

Application filed August 26, 1905. Serial No. 275,964.

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.

This invention relates to those press-fastened seals in which a compressible seal part of suitable soft metal, hereinafter termed "lead," serves to inseparably unite the ends of a flexible shackle when solidified and stamped by a suitable seal-press.

The present invention relates more particularly to that form of such seals in which a free-ended stud-pin at the face of the seal part coacts with eyes at both ends of the shackle to form an effective union between the seal part and shackle without threading either shackle end into and through the seal part. Such seals are set forth in my specification forming part of United States Letters Patent No. 611,889, dated October 4, 1898, and previous specifications therein referred to, particularly No. 294,576, which see. As set forth in said previous specifications, I have heretofore combined with the seal parts of such seals flexible shackles of various kinds, including sheet-metal shackles, as shown in said Letters Patent No. 294,576. Shackles of this kind are preferred by some users owing to their cheapness and their adaptation to carry upon their sides lettering and numbering, either or both, in sufficiently bold characters to adapt them to be easily identified. A serious objection, however, to their use in seals having seal parts of lead has been the fact that it was possible by passing a knife between the shackle ends, as opposed sidewise to each other in the press-fastened seal, to cut into and through the lead, and thus to open the seal without so marring it as to insure immediate detection. The same objection has heretofore militated against the use of the shackles of flat wire set forth in said specification forming part of Letters Patent No. 611,889.

The objects of the present invention are to prevent so opening a press-fastened seal of the kind hereinbefore indicated having a "flat" shackle, either of sheet metal or of flat wire, and thus to provide for the effective use of these kinds of shackle in such seals.

The invention consists in a flexible flat

shackle of novel construction in combination with a peculiarly-constructed seal part of lead, as hereinafter described and claimed.

A sheet of drawings accompanies this specification as part thereof.

Figures 1 and 2 are "back" and edge views of a flat shackle of sheet metal as it appears before it is attached to the seal part. Fig. 3 is a face view of the seal part as preliminarily fastened upon one shackle end at the factory. Fig. 4 is a face view of the improved seal ready for the seal-press. Fig. 5 is a like view of the press-fastened seal. Fig. 6 represents a section on the line A, Fig. 3, enlarged one diameter. Fig. 7 represents a like enlarged section on the line B, Fig. 4; and Fig. 8 represents a cross-section at C C, Fig. 4, on the same scale as Figs. 6 and 7.

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

The blank of the flat shackle *a* is preferably sheared from a sheet of suitable tin-plate ("tin") or other sufficiently thin and flexible sheet metal. Both ends are then rounded and punched to form eyes 1 and 2 at the respective extremities of the shackle, and interlocking neck portions 3 and 4, adjoining said eyes, are formed by pressing the metal edgewise into U shapes in cross-section with the edges of the respective neck portions projecting from opposite sides of the straight shackle, so that when the shackle is properly bent the two neck portions 3 and 4 will interlock with each other, as in Fig. 8, and in close contact after the seal is pressed. The proper shackle end to be preliminarily fastened in the seal part *b*, as in Figs. 3 and 6, is indicated by an indentation 5 in the metal.

The seal part *b* is molded as heretofore with a central stud-pin 6, surrounded by a chamber 7, open in front, within which one shackle eye 1 is made fast at the factory by an overlying flange 8, Figs. 6 and 7, formed by a hollow punch from the lead of the seal part, the adjoining neck portion 3, occupying the customary embrasure or notch 9 in the body of the seal part, which forms a nearly circular outer wall 10 and is preferably and conveniently provided with gage-studs or "horns" 11, as heretofore.

The improved seal leaves the factory in the condition last described, as illustrated by Figs. 3 and 6, the shackle *a* having been further provided with any desired lettering,

numbers, or other distinguishing-marks, represented by "A. B. R. R. 46,785." These marks are preferably and conveniently repeated, so that they will appear on both sides of the fastened seal, Fig. 5, and may be embossed, as indicated in Fig. 1, or printed in any approved way.

The free end of the shackle *a* is passed through a pair of car-lock staples *c d* or the like, and the second eye 2 and neck portion 4 are then interlocked with the pin 6 and notch 9, as in Figs. 4, 7, and 8, preparatory to applying a suitable seal-press. The press-fastening operation completes the interlocking of the neck portions 3 and 4 with each other, solidifies the lead around them and around the eyes 1 and 2, and stamps the lead with a station-number "300" or other press-mark, as illustrated by Fig. 5.

The shackle *a* may be made of flat wire in the manner set forth in my specification, forming part of said Letters Patent No. 611,889, with the addition of interlocking neck portions, as above described, 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 flexible shackle of flat metal having its ends provided with eyes and with interlocking neck portions adjoining said eyes, in combination with a compressible seal part of lead having a stud-pin at its face adapted to be embraced by said eyes and a wall surrounding said stud-pin provided with a notch adapted to admit said neck portions and to support the same.

2. An improved seal composed of a flexible shackle of sheet metal having its ends provided with eyes and with laterally-compressed interlocking neck portions U-shaped in cross-section adjoining said eyes, and a compressible seal part of lead having a stud-pin at its face adapted to be embraced by said eyes and a wall surrounding said stud-pin provided with a notch adapted to admit said neck portions and to support the same, substantially as hereinbefore specified.

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