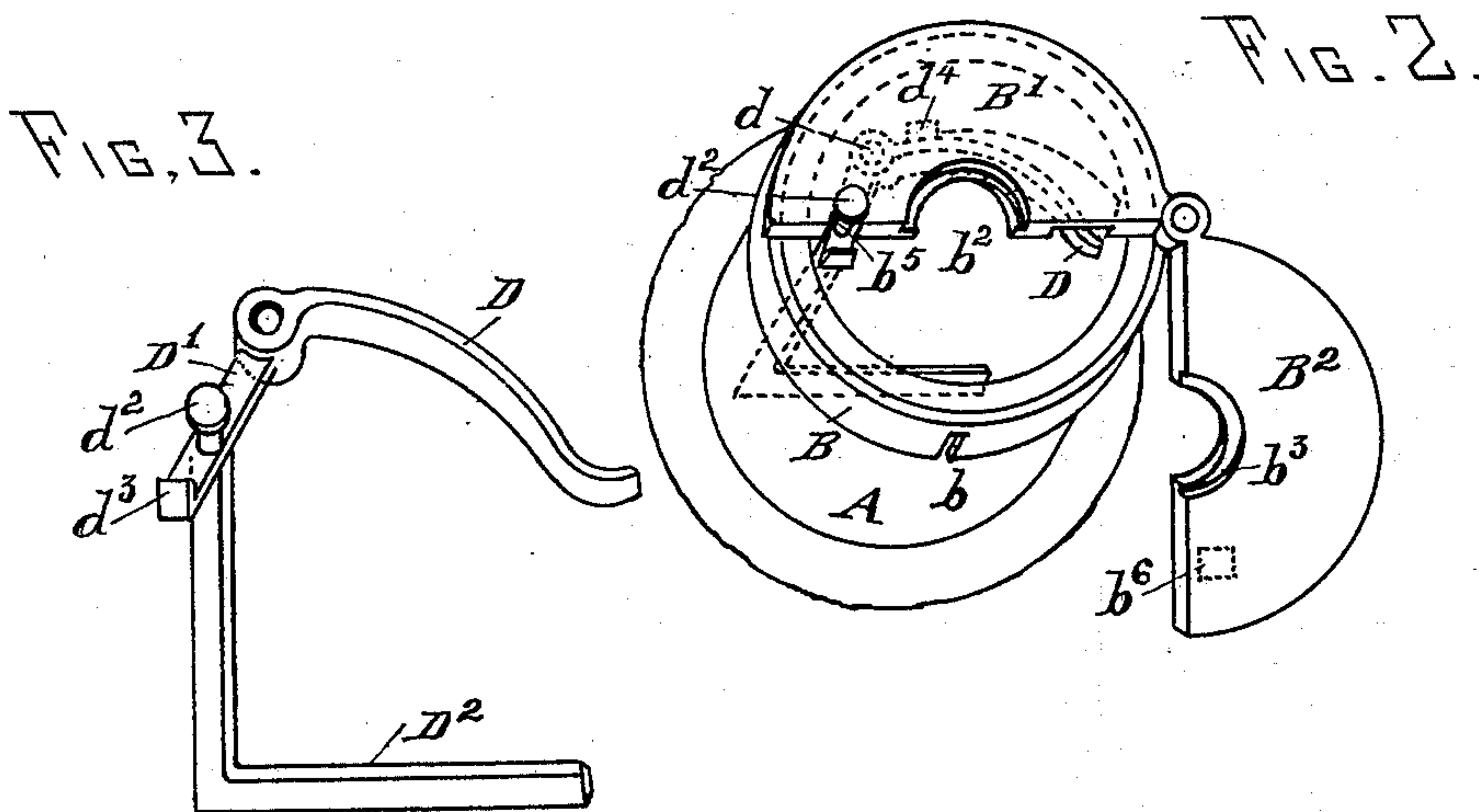
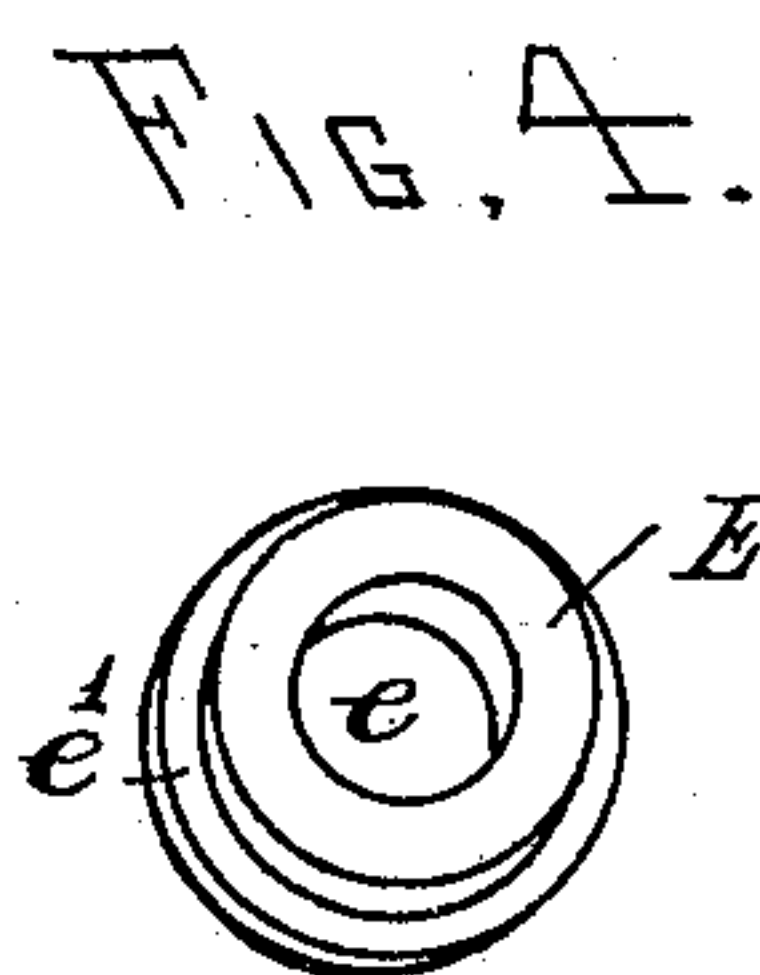
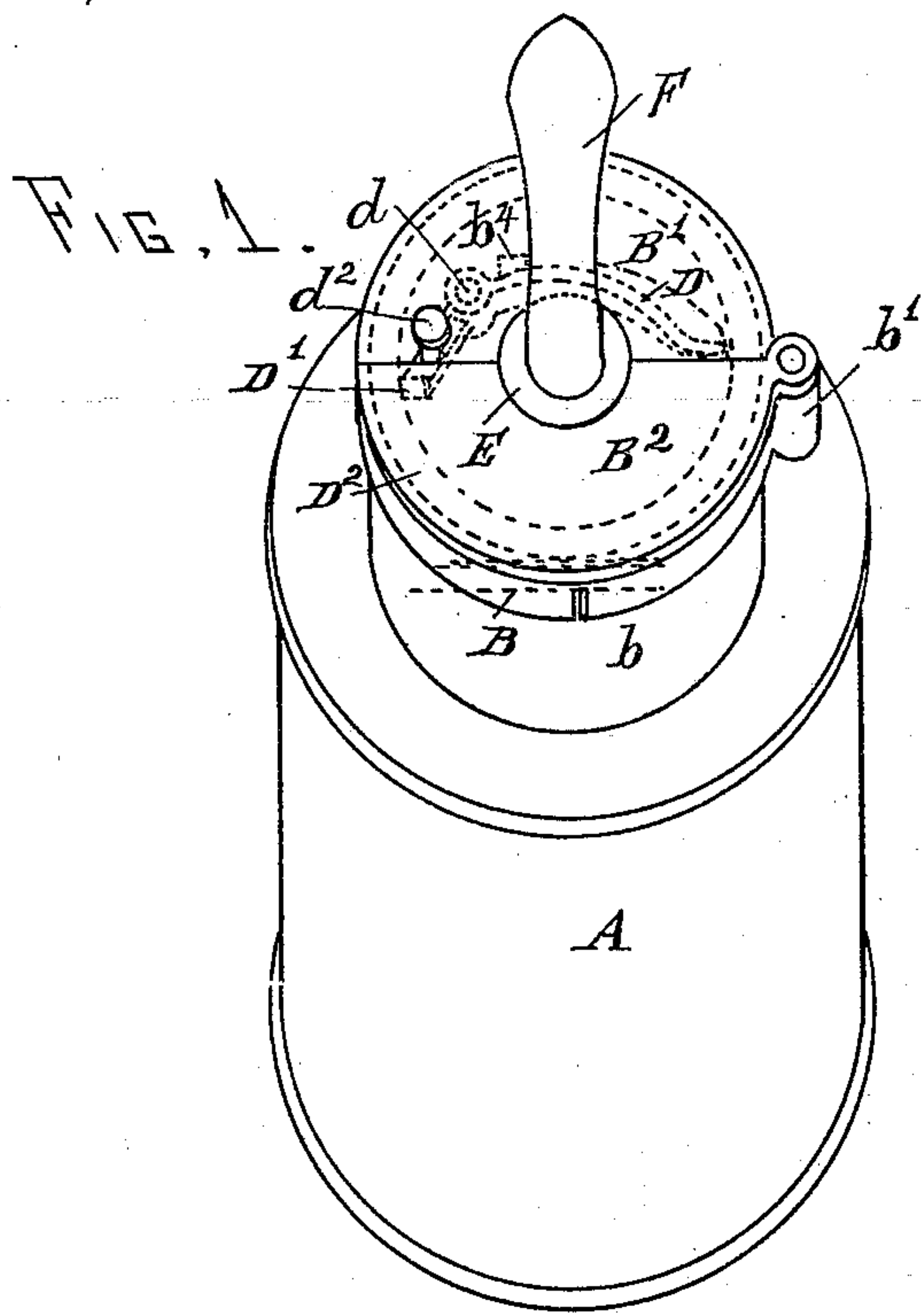


(No Model.)

W. P. BEAM.  
VESSEL CLOSURE.

No. 604,359.

Patented May 24, 1898.



WITNESSES.  
Irving Barker  
Geo. F. Weiss

INVENTOR.  
WALDO P. BEAM.  
by Atty N. D. Davis.

# UNITED STATES PATENT OFFICE.

WALDO P. BEAM, OF BEAMINGTON, ILLINOIS.

## VESSEL-CLOSURE.

SPECIFICATION forming part of Letters Patent No. 604,359, dated May 24, 1898.

Application filed May 24, 1897. Serial No. 637,851. (No model.)

*To all whom it may concern:*

Be it known that I, WALDO P. BEAM, a citizen of the United States, residing at Beamington, in the county of Sangamon and State of Illinois, have invented a certain new and useful Vessel-Closure, of which the following is such a full, clear, and exact description as will enable those skilled in the art to which it appertains to make and use my said invention.

My invention relates to closures for vessels of that class which are commonly used to contain paints, varnish, mucilage or glue, or other similar articles which are subject to injury or deterioration by evaporation or exposure to the air.

The purposes of my invention are to provide a simple and effective closure applicable to vessels of different kinds and adapted to close such vessels, so as to prevent deterioration or waste of the contents thereof, said closure being so constructed and arranged that it may be conveniently and quickly opened when access to the contents of the vessel is desired, also so constructed and arranged that when applied to and used with vessels the contents of which are used or applied with a brush—say mucilage, for example—the brush may be held by the closure and may remain immersed in the contents of the vessel when the closure is shut; to provide simple and effective means for automatically opening the closure and for locking the closure when it is shut, and to provide in connection with said opening and locking device means adapted to remove from the instrument with which the contents of the vessel may be used or applied—say a brush, for example—the surplus of the contents of the vessel adhering to the instrument.

With these ends in view my invention consists in certain novel features of construction and combinations of parts, shown in the annexed drawings, to which reference is hereby made, and hereinafter particularly described, and set forth in the claims.

Referring to the drawings, Figure 1 is a perspective view of the complete closure in position on a vessel, the closure being shown as shut. Fig. 2 is a perspective view of the closure open. Fig. 3 is an enlarged detached perspective view of the combined spring,

latch, and scraper. Fig. 4 is an enlarged detached perspective bottom view of the brush-holder.

Similar letters of reference designate like parts in all of the views.

The vessel A may be of any suitable material and of any convenient form and need not be particularly described.

The ring B fits around the upper end of the neck of the vessel and has a slot *b*, which serves to permit slight expansion of the ring, so that it may fit on vessels of slightly-different sizes and may be retained thereon by the spring-pressure of the ring.

The fixed top plate B' is preferably integral with the ring B; but it may be made separately and may be secured to the ring in any suitable manner.

On the ring B is a lug *b'*, which forms part of a hinge pivotally connecting the plate B<sup>2</sup> with the ring B. The hinge-plate B<sup>2</sup> is complementary to the plate B' and is pivotally connected with the lug *b'*, and the inner or diametric edge of the plate B<sup>2</sup> abuts against the corresponding diametric edge of the plate B' when the closure is shut.

In the central part of the plate B' is a semi-circular notch having a semicircular ledge *b*<sup>2</sup>, and in the central part of the plate B<sup>2</sup> is a corresponding semicircular notch having a semicircular ledge *b*<sup>3</sup>, which registers with the ledge *b*<sup>2</sup>, so as to form a central circular ledge on which the brush-holder E is supported when the closure is shut.

The brush-holder E is preferably of rubber or other yielding material, and has a central hole *e*, in which the brush-handle F fits snugly. It also has a circumferential ledge *e'*, which fits on the circular ledge on the plates B' and B<sup>2</sup>, formed by the conjunction of the semicircular ledges *b*<sup>2</sup> and *b*<sup>3</sup>, and the reduced annular part of the brush-holder fits snugly in the central hole formed by the conjunction of the notches in the plates in such manner that when the closure is shut and the plates locked together the brush-holder is firmly clamped in the central hole, so as to form a close joint all around the brush-holder and all around the brush-handle.

The combined spring, latch, and scraper is clearly shown in Fig. 3, and consists of three members—viz., a spring D, which acts against



the plate B<sup>2</sup> to turn it on its hinge, a latch D', which serves to lock the plate B<sup>2</sup> in its closed position, and a scraper D<sup>2</sup>, extending downward from the latch and having a lateral extension extending transversely across the inside of the neck of the vessel.

The combined spring, latch, and scraper is connected with the under side of the plate B' by a pin d or other suitable means.

10 A downwardly-extending lug b<sup>4</sup> on the under side of the plate B' serves as a stop to prevent the spring from turning on the pin, and the spring abuts against the lug. When the closure is shut, the spring is compressed 15 and the free end of the spring bears against the edge of the plate B<sup>2</sup>, and when the latch is released the spring reacts to turn the plate B<sup>2</sup> on its hinge and open the closure, as shown in Fig. 2.

20 The latch D', which is of spring material, such as steel or brass, is secured to the fixed end of the spring D, and has a button d<sup>2</sup>, which extends upward through a notch b<sup>5</sup> in the plate B'. The latch also has an upturned 25 end d<sup>3</sup>, which engages with a notch b<sup>6</sup> in the under side of the plate B<sup>2</sup>.

When the closure is shut, the end d<sup>3</sup> of the latch enters the notch b<sup>6</sup> and locks together the plates B' and B<sup>2</sup>.

30 When it is desired to open the closure, it is only necessary to press down on the button d<sup>2</sup>. The end d<sup>3</sup> will thereby be withdrawn from the notch b<sup>6</sup>, and the spring D will act against the plate B<sup>2</sup> to turn it on its hinge 35 and open the closure.

The scraper consists of an angular bar D<sup>2</sup>, secured to the under side of the latch D' and extending down into and across the inside of the neck of the vessel.

40 In practice the brush used in applying the contents of the vessel is scraped across the laterally-extending part of the scraper to remove from the brush the surplus material adhering thereto.

45 By employing the plates, the brush-holder,

and a brush having a handle fitting in the brush-holder, as described, I am enabled to produce a closure which when shut hermetically seals the vessel, so that there is no waste or deterioration of its contents, and which 50 may be very quickly and conveniently opened when desired.

I am aware that spring-actuated swinging caps or covers for bottles have been used. I am also aware that a wire extending across 55 the mouth of a mucilage-bottle has been used for scraping a brush to remove surplus mucilage. I therefore do not herein claim, broadly, the use of a spring-actuated hinged top. Neither do I claim, broadly, the use of a brush- 60 cleaner within the vessel.

What I claim as new and useful, and desire to secure by Letters Patent, is—

1. The herein-described combined spring, latch and scraper, in combination with a fixed 65 plate to which the spring member of said combined spring, latch and scraper is secured, and a complementary plate having a hinge connection with said fixed plate and acted against by the spring member of and adapted to be 70 engaged with and locked by the latch member of said combined spring, latch and scraper, as set forth.

2. In a vessel-closure, the combination of a notched fixed plate attachable to a vessel, 75 a complementary notched hinged plate connected with said fixed plate, a spring, a latch and a scraper supported on said fixed plate, and an annular brush-holder fitting in a central hole formed by the conjunction of the 80 notches in said fixed plate and said hinged plate, as set forth.

In witness whereof I have hereunto subscribed my name, at Springfield, Illinois, this 29th day of March, A. D. 1897.

WALDO P. BEAM.

Witnesses:

T. C. MATHER,  
JOHN C. SNIGG.