

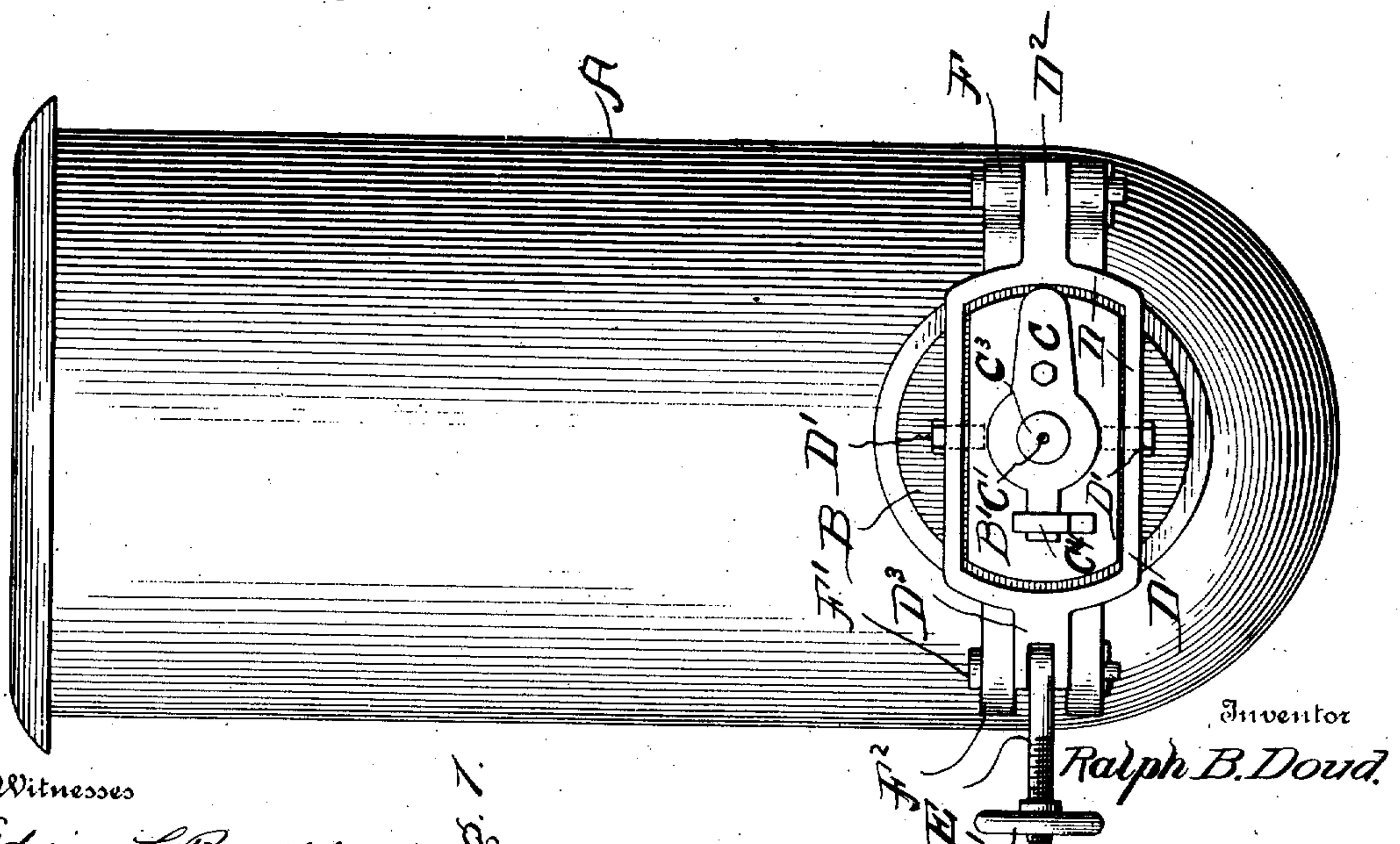
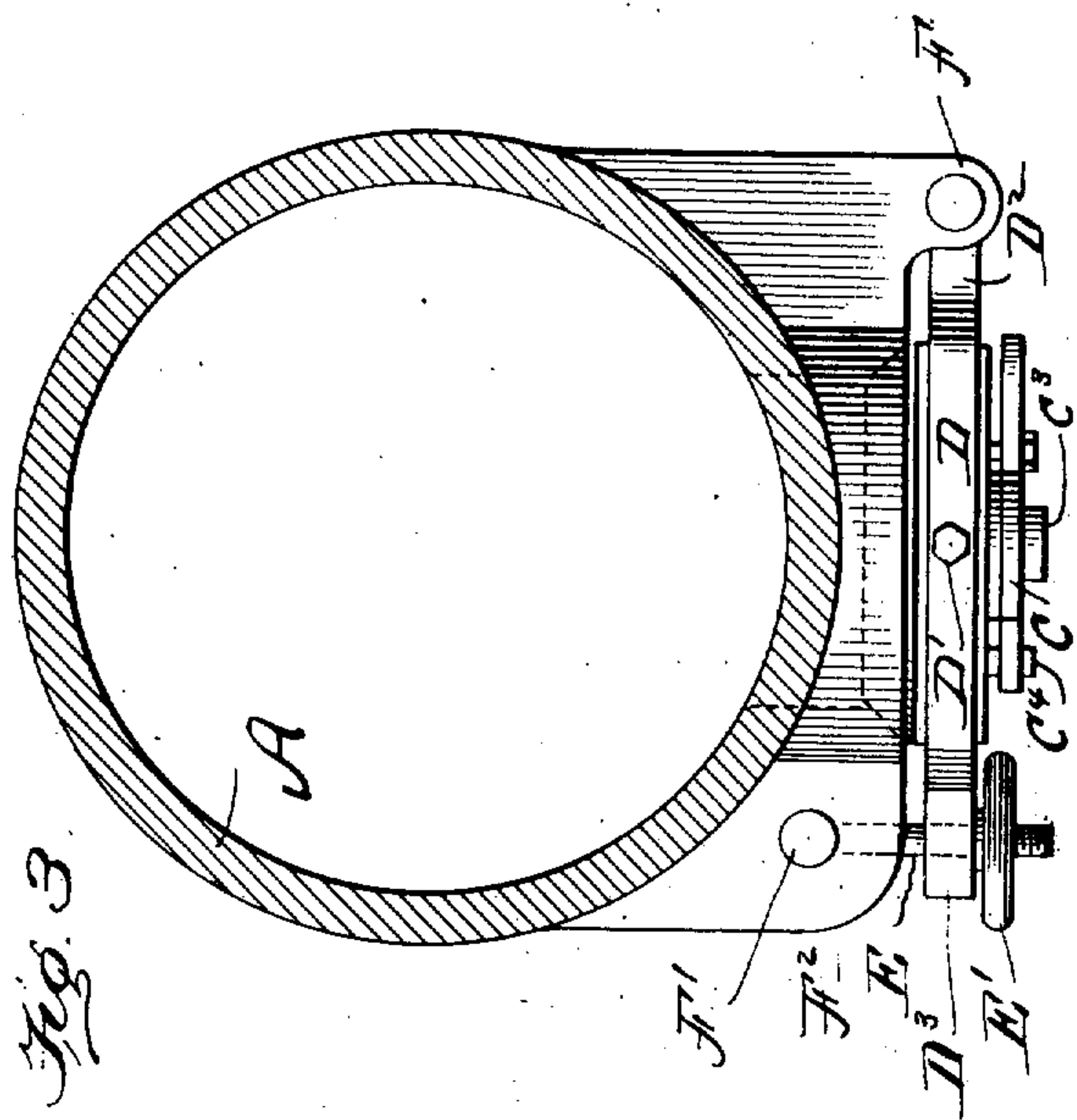
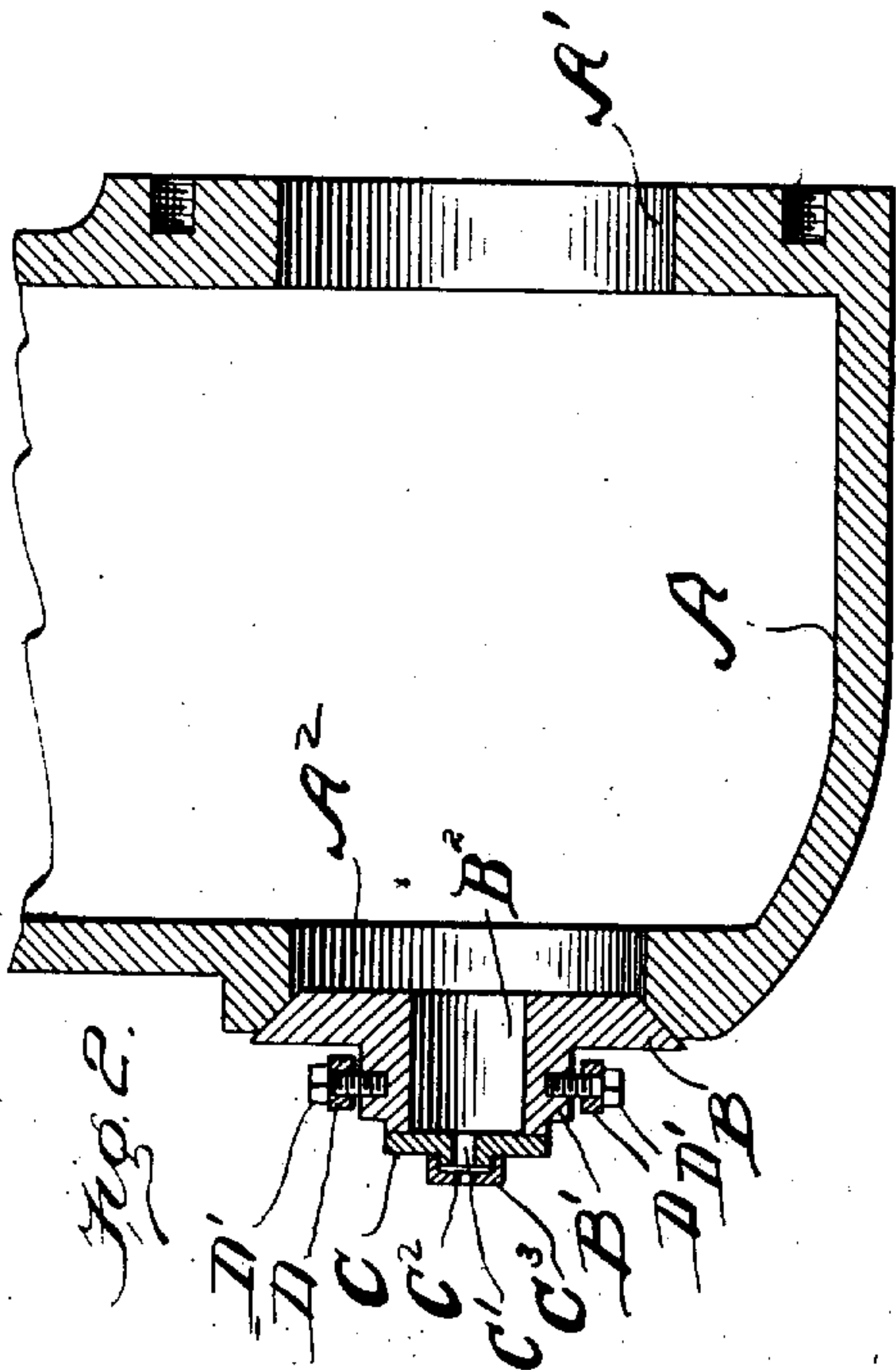
No. 891,151.

PATENTED JUNE 16, 1908.

R. B. DOUD.

TWYER STOCK CAP.

APPLICATION FILED AUG. 31, 1904.



Witnesses

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# UNITED STATES PATENT OFFICE.

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## TWYER-STOCK CAP.

No. 891,151.

Specification of Letters Patent.

Patented June 16, 1908.

Application filed August 31, 1904. Serial No. 222,855.

*To all whom it may concern:*

Be it known that I, RALPH B. DOUD, a citizen of the United States, residing at Sheffield, in the county of Colbert and the State of Alabama, have invented a new and useful Improvement in Twyer-Stock Caps, of which the following is a specification.

This invention relates to a cap designed to close the opening in the twyer stock, and adapted to be quickly and conveniently opened in order that the blow pipe may be cleaned out.

The object of the invention is a cap which can be opened without requiring the use of a wrench, or the removal of pins or nuts, which are liable to become lost in the dirt and slag surrounding the vicinity of a blast furnace.

The invention consists also of the novel features of construction and combination of parts hereinafter described, pointed out in the claims and shown in the accompanying drawings, in which,

Figure 1 is a vertical elevation showing a face view of my twyer cap, Fig. 2 is a vertical section through the lower portion of the twyer stock, and Fig. 3 is a horizontal section taken through the twyer stock above the cap.

In the drawings A represents a twyer stock having a blow pipe opening A' and alining with the same an opening A<sup>2</sup> which is closed by the twyer cap B. The cap B has a central boss or outwardly extending thickened portion B' in which is formed the snuffing opening B<sup>2</sup>. This opening B<sup>2</sup> is closed by the usual form of latch C provided with the peep hole C' covered by a tinted glass C<sup>2</sup> and held in place by the cap C<sup>3</sup>. The latch C is pivoted to the boss B' and engages a keeper C<sup>4</sup> also carried by the boss.

To support the cap B I employ a frame D which incloses the sides of the boss and is secured to the same by the screws D'. At one end the frame has a rearwardly extending arm D<sup>2</sup> pivoted between lugs F carried by the

twyer stock. At the opposite end of the frame is a forwardly extending arm D<sup>3</sup> bifurcated at its outer end. A rod E is secured by a pivot pin F' between lugs F<sup>2</sup> and is adapted to swing in and out of the bifurcated portion of the arm D<sup>3</sup>. The outer portion of the rod E is threaded and a hand wheel having a threaded bore works on this threaded portion, as shown at E'. In Fig. 1 I have shown the rod E swung outwardly or into a position to unlock the twyer cap B and permit the same to be opened. To lock the cap the rod is swung into the position shown in full and dotted lines in Fig. 3 and the hand wheel screwed down. This twyer cap can be used with any form of twyer stock, the arm D<sup>2</sup> being shaped to cooperate with the lugs, or, in case the latter are missing, a plate having suitable lugs thereon can be bolted or riveted to the twyer stock in the proper position relative to the opening A<sup>2</sup>.

Having thus fully described my invention what I claim as new and desire to secure by Letters Patent is:

The combination with a twyer stock having a suitable opening, a twyer cap having a central boss and an opening formed through the boss, a latch carried by the boss and having a peep hole formed therein, a frame inclosing the boss, screws working through opposite sides of the frame and engaging the boss, an arm extending from one end of the frame, said arm being pivotally connected to the twyer stock, the bifurcated arm extending from the opposite end of the frame, a rod pivotally mounted adjacent the said end of the frame and adapted to swing into and out of engagement with the bifurcation, the outer end portion of the said rod being threaded, and a locking wheel working upon the threaded portion of the rod.

RALPH B. DOUD.

Witnesses:

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