

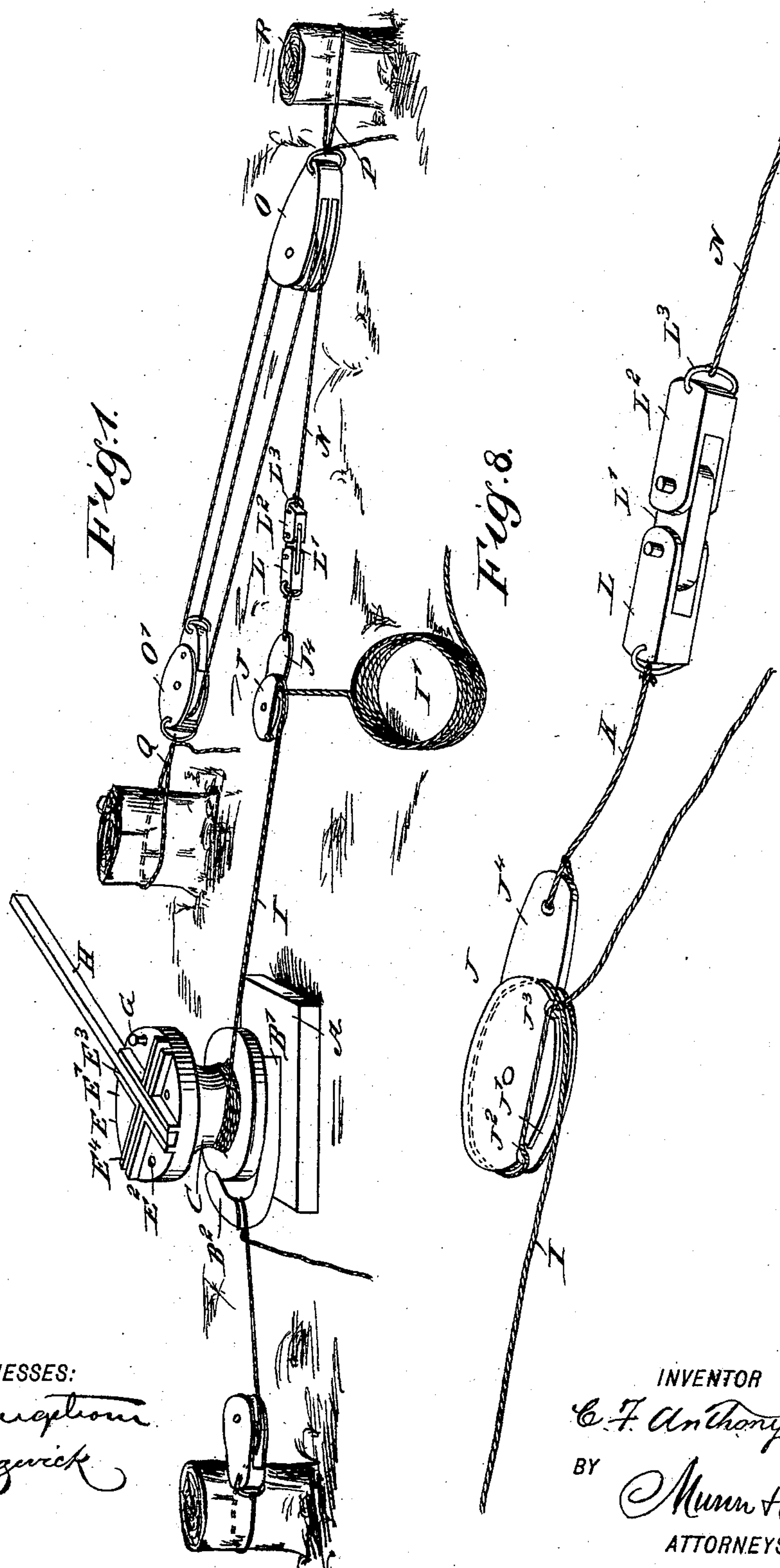
(No Model.)

2 Sheets—Sheet 1.

C. F. ANTHONY.
STUMP PULLER.

No. 539,328.

Patented May 14, 1895.



WITNESSES:

John Burdett
C. Sedgwick

INVENTOR

C. F. Anthony

BY

Munn & Co

ATTORNEYS.

(No Model.)

2 Sheets—Sheet 2.

C. F. ANTHONY.
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Fig. 2.

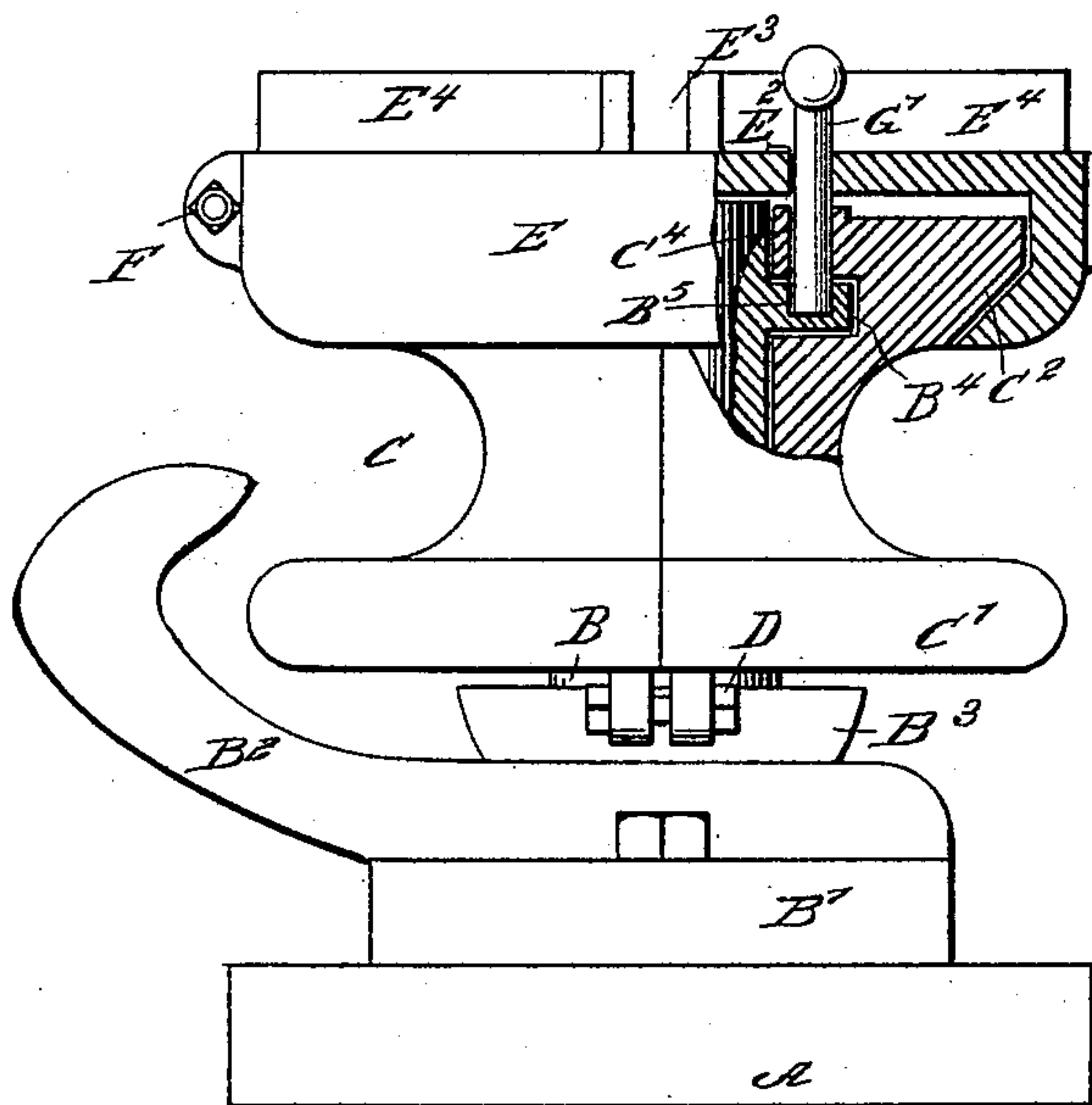


Fig. 3.

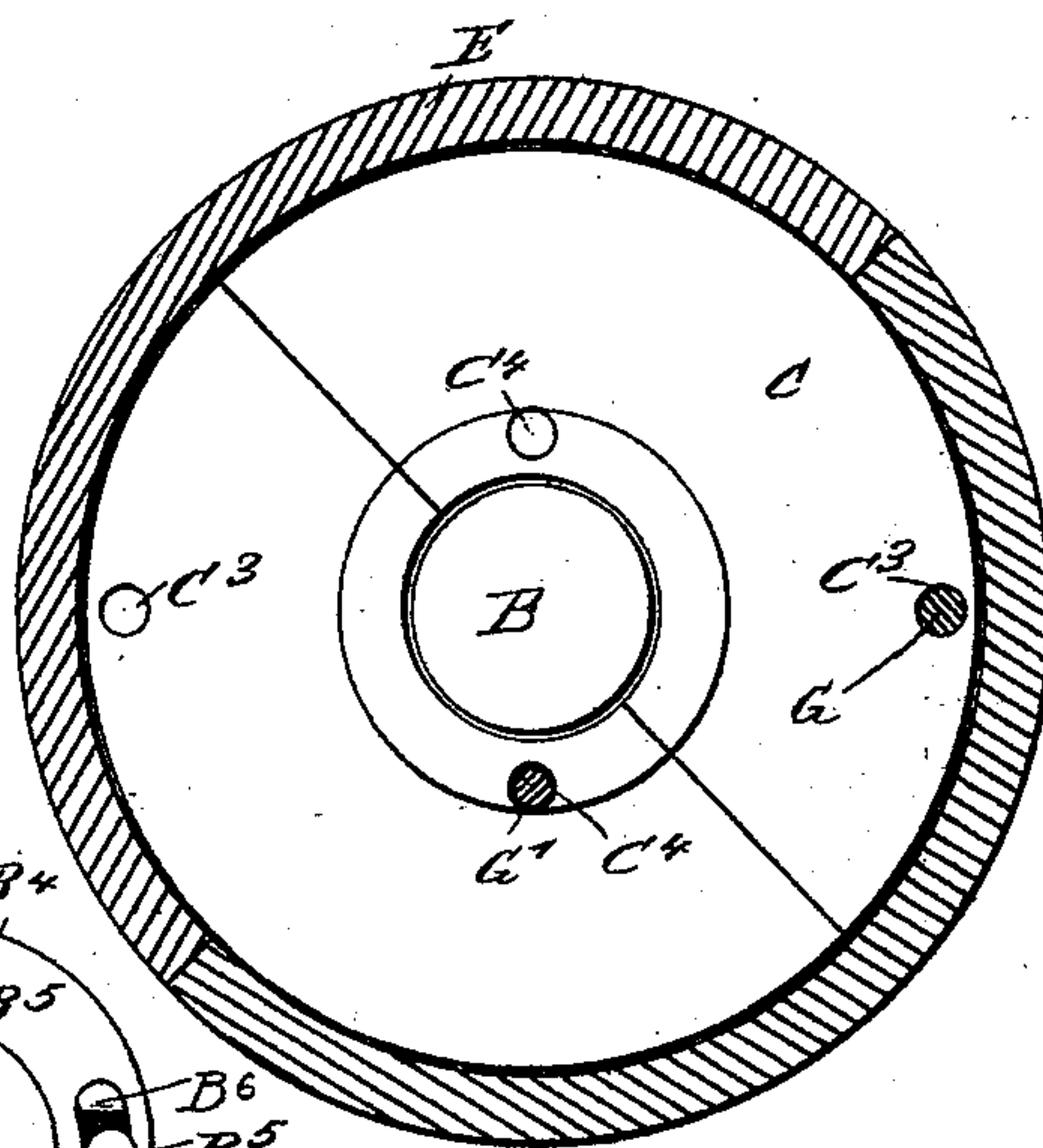
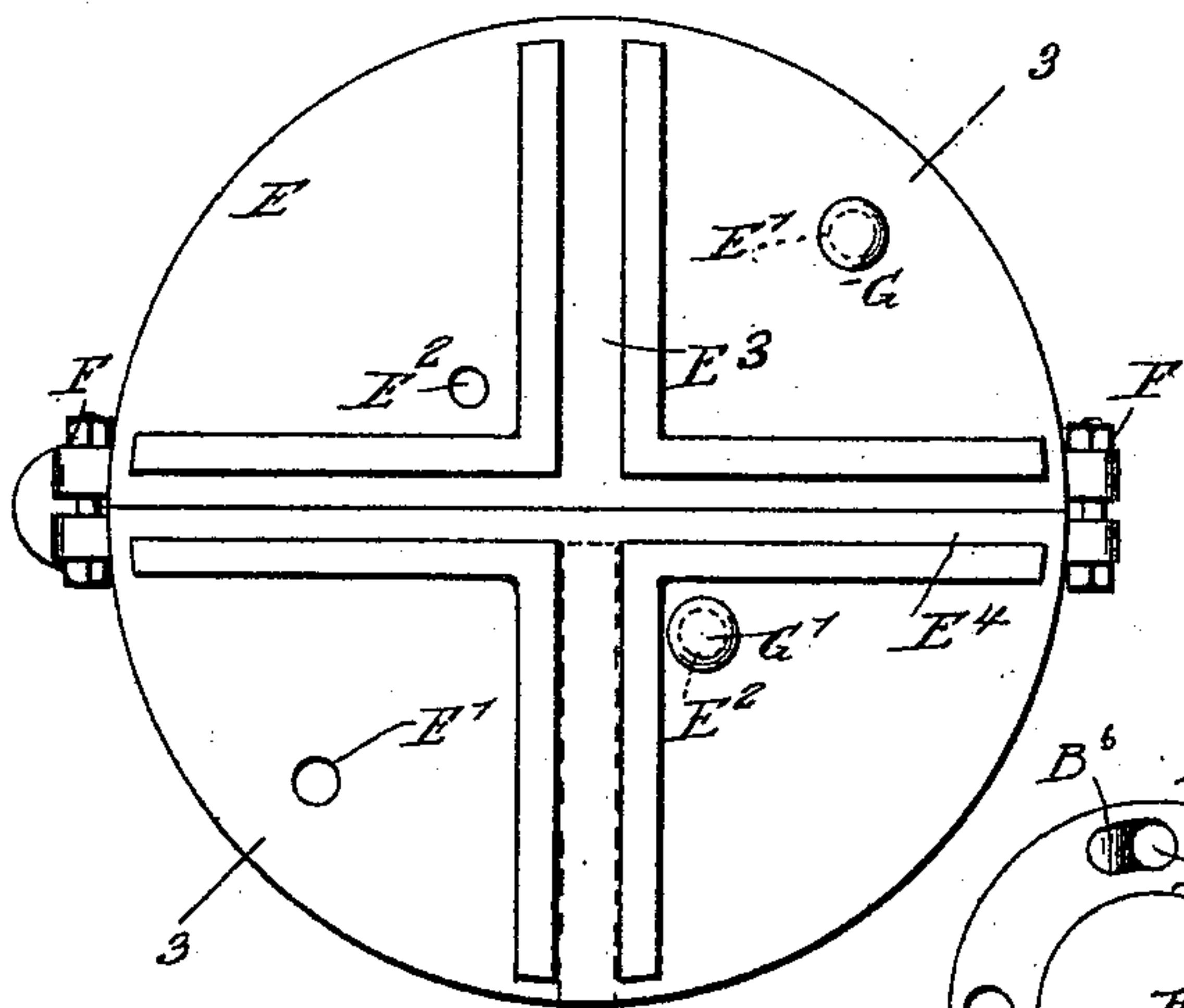
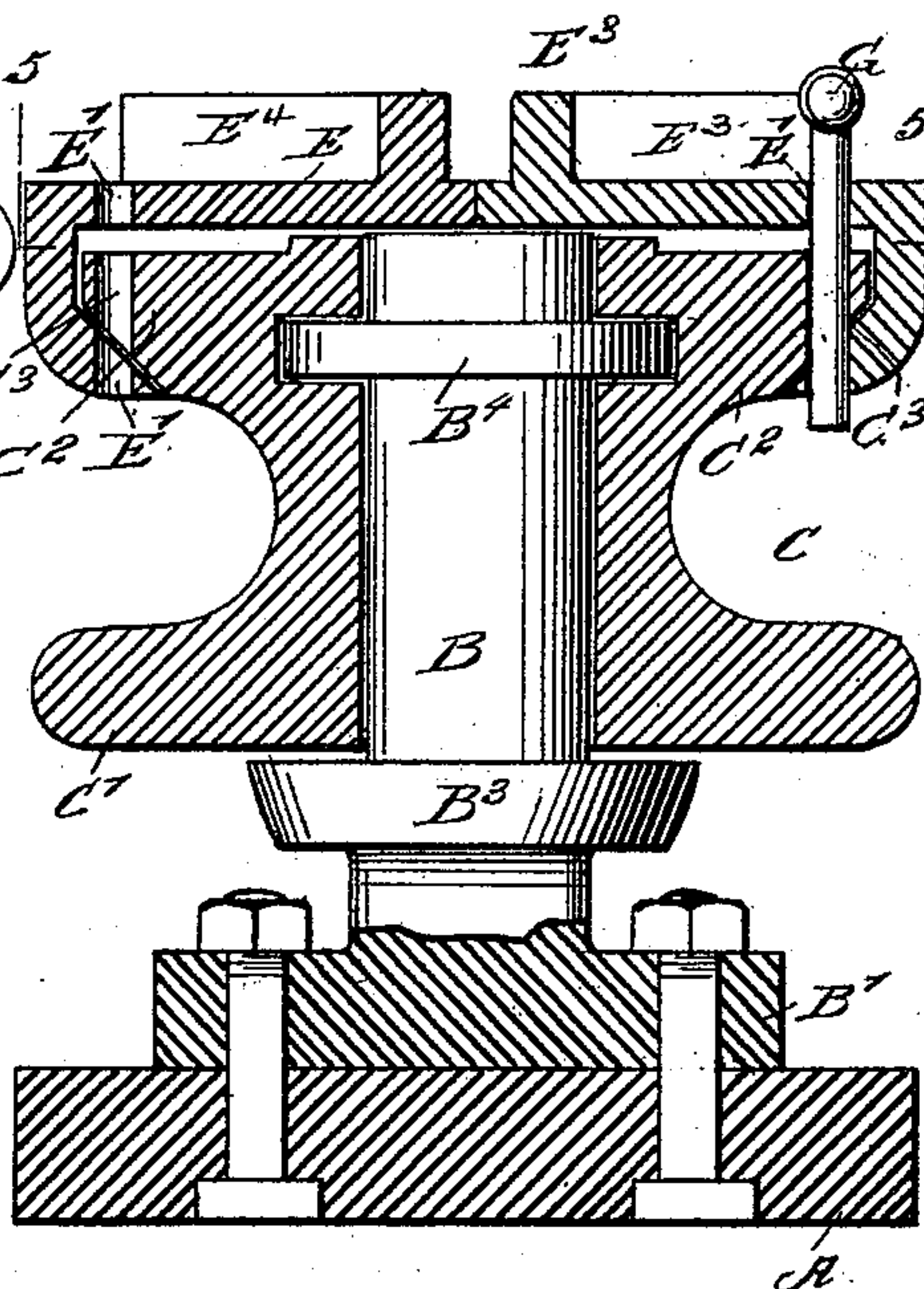


Fig. 4.

WITNESSES:

John A. Bergstrom
Theo. G. Kottitz

Fig. 6.

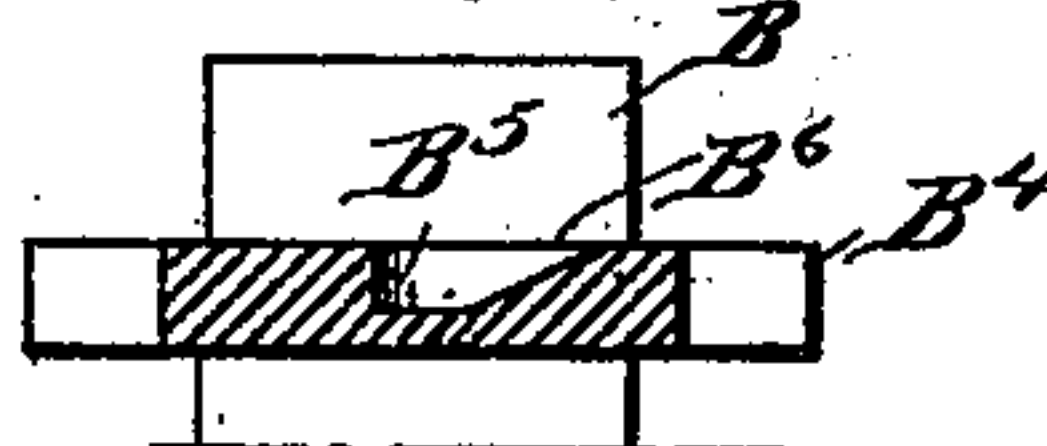


Fig. 7.

Fig. 5.

INVENTOR

C. F. Anthony
BY Munn & Co.
ATTORNEYS.

UNITED STATES PATENT OFFICE,

CHARLES FREMONT ANTHONY, OF CEDAR RAPIDS, IOWA.

STUMP-PULLER.

SPECIFICATION forming part of Letters Patent No. 539,328, dated May 14, 1895.

Application filed December 8, 1894. Serial No. 531,204. (No model.)

To all whom it may concern:

Be it known that I, CHARLES FREMONT ANTHONY, of Cedar Rapids, in the county of Linn and State of Iowa, have invented a new and Improved Stump-Puller, of which the following is a full, clear, and exact description.

The object of the invention is to provide a new and improved stump puller, which is comparatively simple and durable in construction, very effective in operation, and arranged to require but a small amount of power to pull heavy stumps.

The invention consists in certain parts and details, and combinations of the same, as will be hereinafter fully described and then pointed out in the claims.

Reference is to be had to the accompanying drawings, forming part of this specification, in which similar letters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improvement as applied. Fig. 2 is an enlarged side elevation of the windlass, with parts in section. Fig. 3 is a transverse section of the same on the line 3 3 of Fig. 4. Fig. 4 is a plan view of the sweep-cap. Fig. 5 is a sectional plan view of the windlass on the line 5 5 of Fig. 3. Fig. 6 is a plan view of the central post. Fig. 7 is a sectional side elevation of the flange of the central post on the line 7 7 of Fig. 6, and Fig. 8 is an enlarged perspective view of the device for taking up the slack in the cable or rope.

The improved stump puller is provided with a windlass, shown in detail in Figs. 2 to 5, and fastened on a heavy plank A, the said windlass being provided with a post B, having a base B' bolted or otherwise attached to the said plank A. On the base B' is formed a hook B², adapted to be engaged by a rope or cable connected with a tree or other support, to hold the windlass in position while pulling the stump, as shown in Fig. 1.

The post B is formed with a lower annular flange B³ and an upper annular flange B⁴, as plainly shown in Figs. 3, 6, and 7. On the post B is mounted to turn a spool C, made in two parts fastened together by bolts D, the said spool being formed with a lower annular flange C' adapted to be seated on the flange B³ of the post B.

Upon the upper flange C² of the spool C is

fitted a cap E, likewise made in two parts fastened together by bolts F, as plainly shown in Figs. 2 and 4, to snugly fit the said cap over and partly under the flange C², to prevent accidental displacement of the cap on the spool.

Registering apertures E' and C³ are formed in the cap E and spool C respectively, to be engaged by a pin G, to lock the cap and spool together, and a second set of registering apertures E², C⁴ and B⁵ are arranged in the cap E, flange C² and flange B⁴ respectively, to be engaged by a pin G', see Fig. 2, to securely lock the cap and spool to the post B. When both pins C and G' are withdrawn, then the spool C can be rotated without revolving the cap E, and this takes place when the cable is unwound from the spool C.

On the top of the cap E are formed transversely-crossing channels E³ and E⁴, adapted to be engaged by a sweep H, for turning the said cap and the spool C at the time the pin G engages the registering apertures E' in the cap and spool, as shown in Fig. 3. When it is desired to lock the spool in position on the post B, then the pin G' is inserted in the registering apertures E², C⁴, and B⁵, as illustrated in Fig. 2. It is understood that the flange B⁴, near the upper end of the post B, fits into an annular recess formed in the spool, so as to provide an additional bearing for the spool, and also serves to receive the pin G' as above described. The entrance to the aperture B⁵ is beveled as at B⁶, see Figs. 5 and 6, to permit the pin G' to readily drop into the aperture B⁵ when the cap is turned.

In connection with the windlass, I provide a cable I, adapted to be wound on the spool C when the sweep H is turned around and the pin G is in position, and this cable I, connects with a slack taking-up device in the form of a disk J formed with an annular groove J' for the cable I, the end of which is passed through notches J², J³, in the top of the disk J to securely fasten the cable to the disk J, as will be readily understood by reference to Figs. 1 and 8. The remaining outer end of the cable is usually formed into a coil I' resting on the ground as indicated in Fig. 1. On the disk J is formed an extension J⁴, connected by a short rope or cable K with a link L, pivotally connected by a link L' with

the link L^2 , carrying a bail L^3 connected with a cable or rope N of the tackle blocks O and O' , of which the former is connected by a rope, chain or cable P with the stump R to be pulled, and the other tackle block O' is connected by a rope or chain Q with a stump or other fixed point, to hold the tackle block O' in a relatively fixed position during the pulling of the stump.

10 The various parts are set up in the manner shown in Fig. 1 for pulling the stump R , so that when the sweep H is moved around, the cable or rope I is wound up on the spool C and a pull is exerted on the disk J , rope K , links L , L' , L^2 , so that the rope or cable N is drawn out from the tackle blocks O , O' , whereby the block O is moved toward the windlass and by its rope or chain P pulls the stump.

20 The spool C can at any time be locked in place on the post B by inserting the pin G' as previously explained, and the rope I can be lengthened or its slack taken up by adjusting the rope accordingly in the disk J .

25 Having thus described my invention, I claim as new and desire to secure by Letters Patent—

30 1. A stump puller provided with a windlass, comprising a post, a spool mounted to turn on the post, a sweep carrying cap resting upon the spool and provided with a flange extending down and partly under the top flange of the spool, the spool and cap being provided

with registering apertures, and a pin fitting in said apertures and locking the parts together, substantially as described. 35

2. A stump puller, provided with a windlass, comprising a fixed post having an annular flange, a spool mounted to turn on the said post, a cap fitted over the said spool, and a pin for engaging the said cap, spool and the post flange, to lock the parts together, substantially as shown and described. 40

3. A stump puller provided with a windlass, comprising a fixed post having an annular apertured flange, a spool mounted to turn on the post and provided with apertures, a sweep carrying cap fitting on the spool and provided with apertures, and pins, one for locking the cap to the spool and the other for locking the cap and spool to the post, substantially as described. 45 50

4. A stump puller provided with a windlass, comprising a post provided with an annular flange, a spool formed in two parts bolted together, each part being provided with a groove to receive the flange of the post, and a cap formed of two parts bolted together and provided with a flange extending down and partly under the top flange of the spool, substantially as described. 55

CHARLES FREMONT ANTHONY.

Witnesses:

E. V. EDSON,
CARL WELLS.