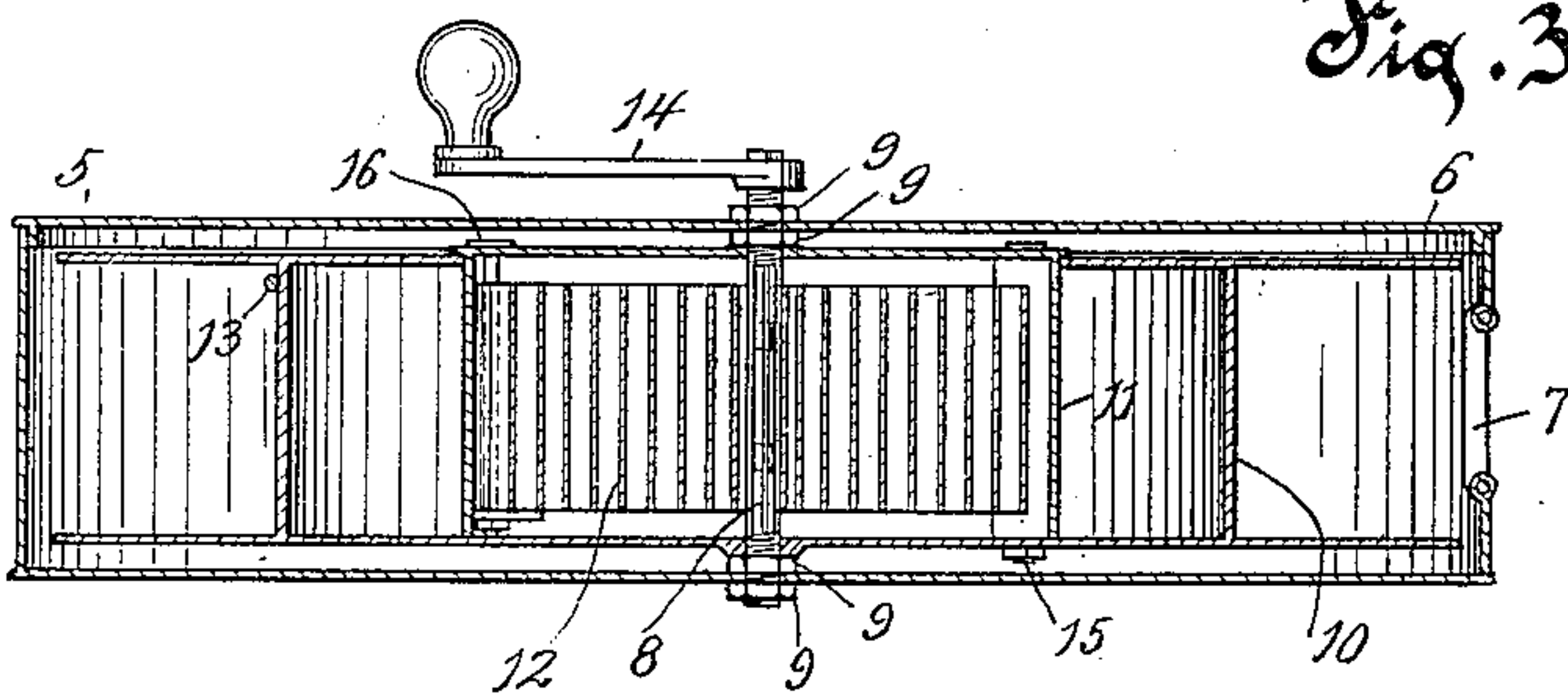
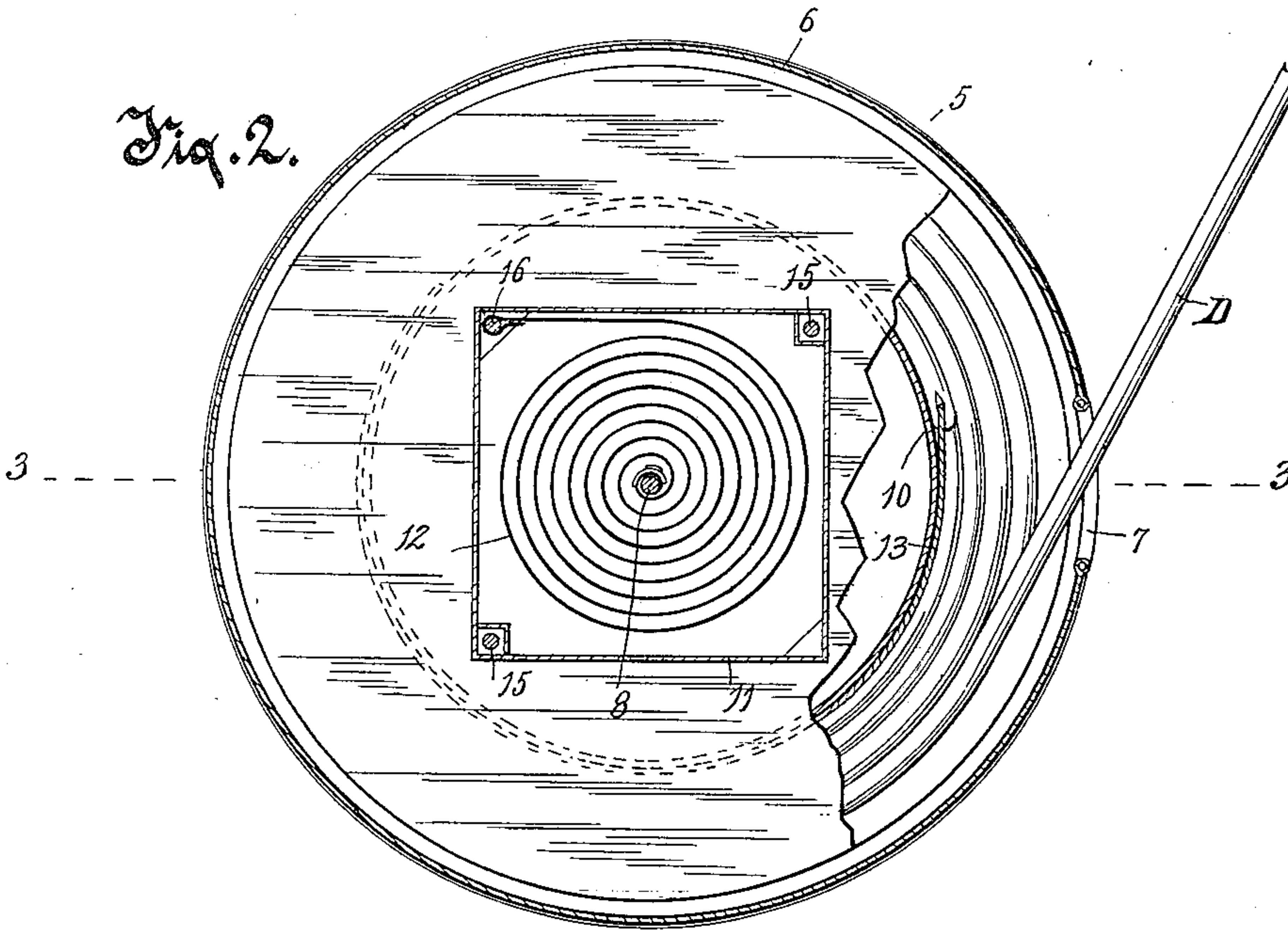
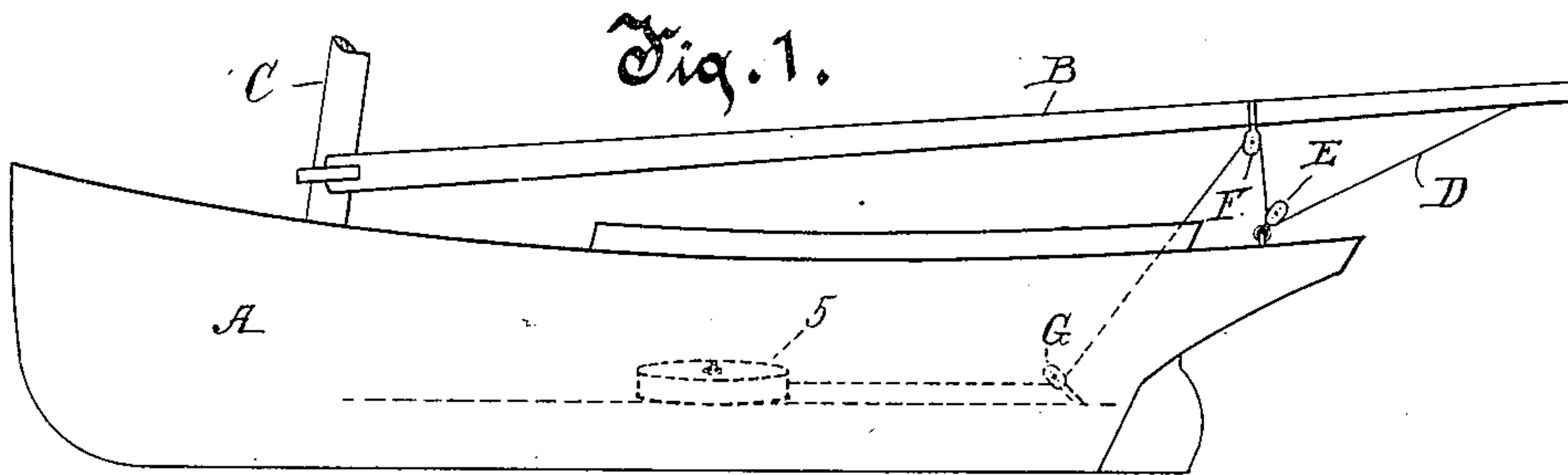


T. F. McKEY.
BOAT ROPE REEL.

(Application filed Mar. 9, 1900.)

(No Model.)



Witnesses.

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UNITED STATES PATENT OFFICE.

THOMAS F. McKEY, OF WHITEWATER, WISCONSIN.

BOAT-ROPE REEL.

SPECIFICATION forming part of Letters Patent No. 663,509, dated December 11, 1900.

Application filed March 9, 1900. Serial No. 7,989. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. McKEY, of Whitewater, in the county of Walworth and State of Wisconsin, have invented a new and
5 useful Improvement in Boat-Rope Reels, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

On sail-boats and employed in sailing them
10 there are many ropes or lines that at times have slack or loose ends that are not constantly in use, which loose end or excess portion of the rope or line is liable to be a burden or in the way and may require considerable
15 manipulation to properly care for it and keep it in position where it will not be a nuisance while unused and in such condition as to be ready for use when required. This is especially the case with the boom-rope on a sail-
20 boat.

My invention relates to devices and apparatus for taking care of the slack or excess of ropes or lines on a vessel, and especially on a sail-boat.

25 The invention consists of the devices and apparatus and their combinations, as herein described and claimed, or the equivalents thereof.

As my invention is especially adapted for
30 use in a sail-boat for taking care of the loose end or excess of a boom-rope, I have illustrated it in the drawings in connection with an outline of a sail-boat and its boom-rope, though not intending to limit my invention
35 to employment with this particular rope, for it may well be employed in a similar manner in connection with other ropes on a vessel.

In the drawings, Figure 1 is an outline of the hull or body of a sail-boat with a frag-
40 ment of its mast and the boom thereon, with which my improved devices and apparatus are shown in a proper relation thereto. Fig. 2 is a section of my improved device for taking care of the loose end of a ship's rope. Fig. 3
45 is a transverse section on line 3 3 of Fig. 2.

In the drawings, A is the hull of a sail-boat. The boom B is pivoted at one extremity on the mast C and swings thereon in the usual manner of booms on sail-boats. The main-
50 sheet or boom-rope D is secured at one end to the boom near its extremity, and runs thence through a pulley-block or tackle F, attached

to the boom, and thence through a tackle G, attached to the boat, preferably at or near its bottom, and thence to the improved device 5
55 for taking care of the slack or excess of rope. It is not important that the main-sheet or boom-rope should run from the boom to the device for taking up the excess in the particular manner here shown; but any similar
60 or equivalent method may be adopted for employing the rope in connection with the boom and the means for taking care of the slack. Neither is it important that the device 5 should
65 rest on the bottom of the boat, as it is shown as doing in Fig. 1; but the device may be located in any convenient or desirable position.

The device for taking care of the slack of the rope consists of a case 6, conveniently made of galvanized sheet iron or steel, preferably in cylindrical form and provided with
70 a rope-aperture 7 in its periphery. One end of the case is in the form of a cover and is detachable. A transverse post 8 is inserted centrally in the case and is secured releas-
75 ably thereto by lock-nuts 9 9, turning on the post, one nut on the outside and another on the inside of the wall of the case at both sides of the case. A reel 10, preferably made of
80 sheet metal in the form of a grooved drum, is fitted revolvably in the case 6 and is provided centrally with a removable box-like core 11 also preferably made of sheet metal. The core 11 is preferably though not neces-
85 sarily of square form in cross-section, but in whatever form is fitted into the reel 10, so as to be withdrawable therefrom endwise and so as when in place in the reel to be held to rotation therewith. Within the core there is
90 a coiled strap-spring 12, secured at its inner end to the post 8 and at its outer end to the core 11. The reel 10 is adapted to take the rope D thereon by its being wound about the reel. The rope D is attached to the reel at
95 its extremity, conveniently by being secured to a metal cord 13, that at one extremity is fastened to the reel.

In using a crank-handle 14 is applied temporarily to the faced extremity of the post 8, the lock-nuts 9 9 exterior to the case are loos-
100 ened, and then holding the reel against revolution the spring is wound up by rotating the post 8 by means of the handle 14. Thereupon the nuts 9 9 are turned down against

the case, securing the post 8 rigidly to the case. The rope D being secured to the reel, (by means of the cord 13,) the action of the spring will wind up the rope on the reel sufficiently to take up any slack in the rope. In this condition the device is ready for use, it being adapted to permit of the unwinding of the rope under pull thereon and to take up the rope when there is slack in the rope or when but slight tension exists thereon.

Although the core 11 cannot escape from the reel 10 when the members are in the case 6, still it is desirable to secure the core to the reel releasably, and for this purpose bolts 15 are employed, which, passing through the core and through the opposite wall of the reel, are secured in place by nuts turning thereon. Also the spring 12 is preferably attached to the core 11 releasably by a bolt 16 passing through parts of the core and medially through a loop therefor in the end of the spring.

What I claim as my invention is—

1. The combination with a boat's rope secured at one end to a shifting member of the boat's appendages, a considerable portion of

the other end of which rope in use becomes at times unemployed slack rope, of an automatic slack-rope-taking device, comprising a case or frame, a post secured to the case or frame, a reel rotatable in the case on which the rope winds, and a spring in the reel secured to the reel and to the post adapted to rotate the reel to wind up the rope.

2. In combination, a boat's rope secured at one end to a shifting member of the boat's appendages, a cylindrical case provided with a removable end and with a rope-aperture in its periphery, a central transverse post through and secured removably to the case, a rope-reel in the case rotatable about the post, a square or faced core fitted removably in and rotatable with the reel, a spring in the core about the post and secured to the post and detachably to the core.

In testimony whereof I affix my signature in presence of two witnesses.

THOMAS F. McKEY.

Witnesses:

H. O. HAMILTON,
OLOF WORM.