G. A. & G. C. PENNY.

STEERING WHEEL FOR BOATS.

APPLICATION FILED SEPT. 21, 1915.

1,167,108. Patented Jan. 4, 1916.

Fig. 1.

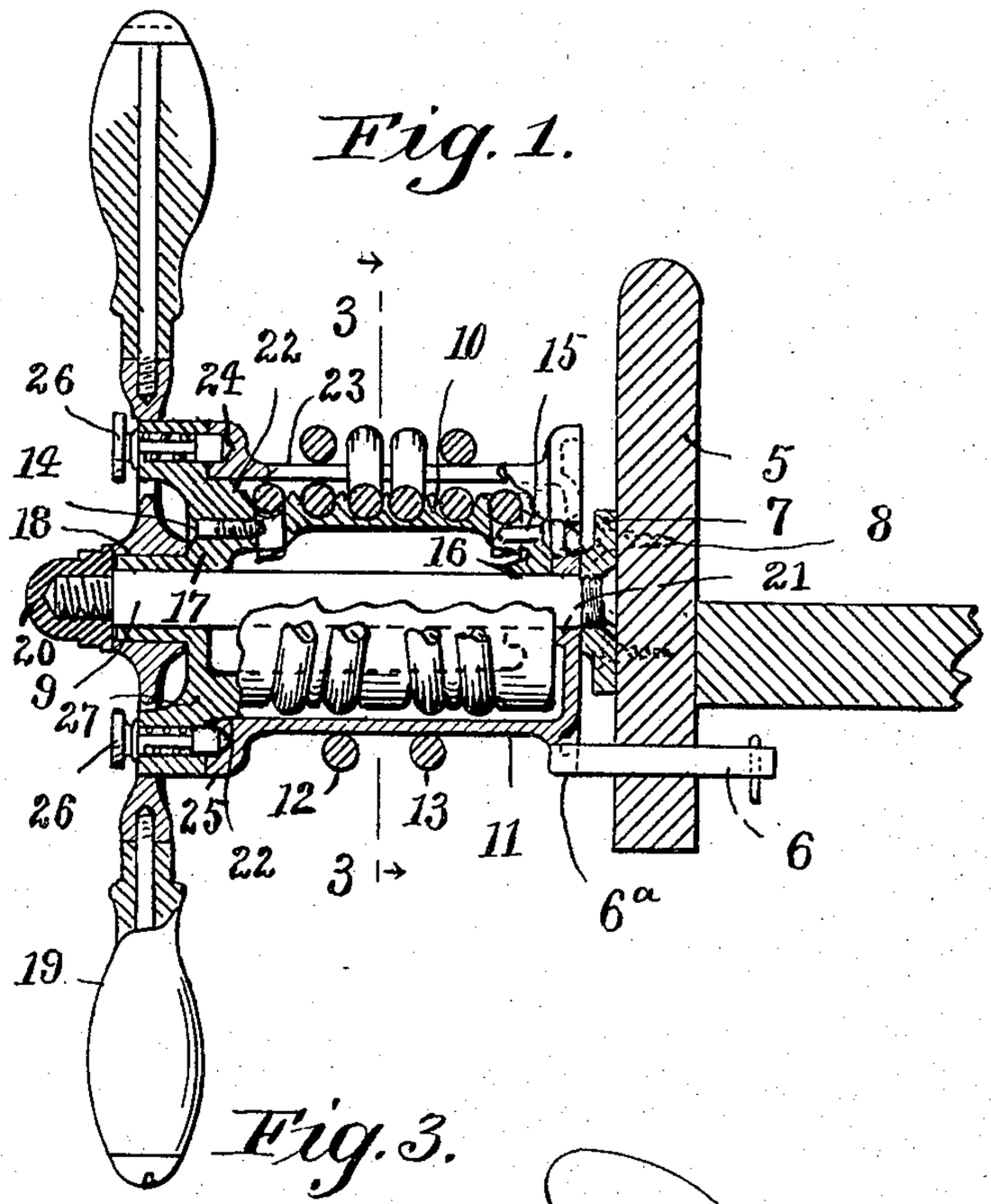


Fig. 2.

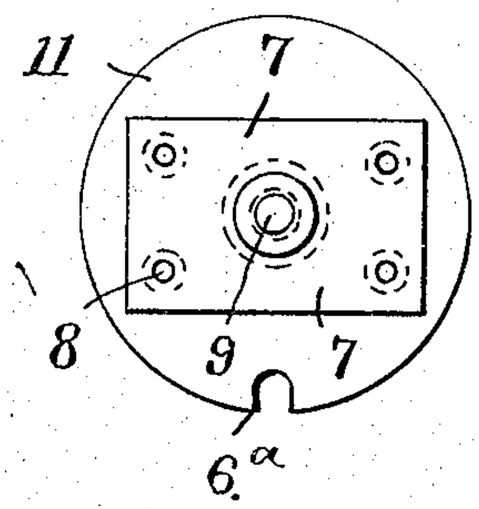


Fig. 3.

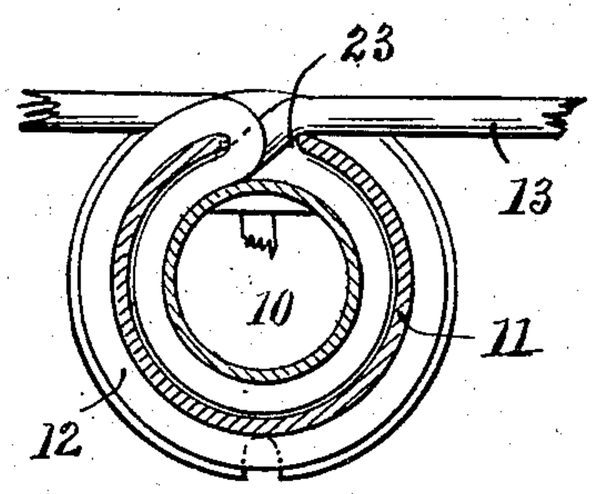
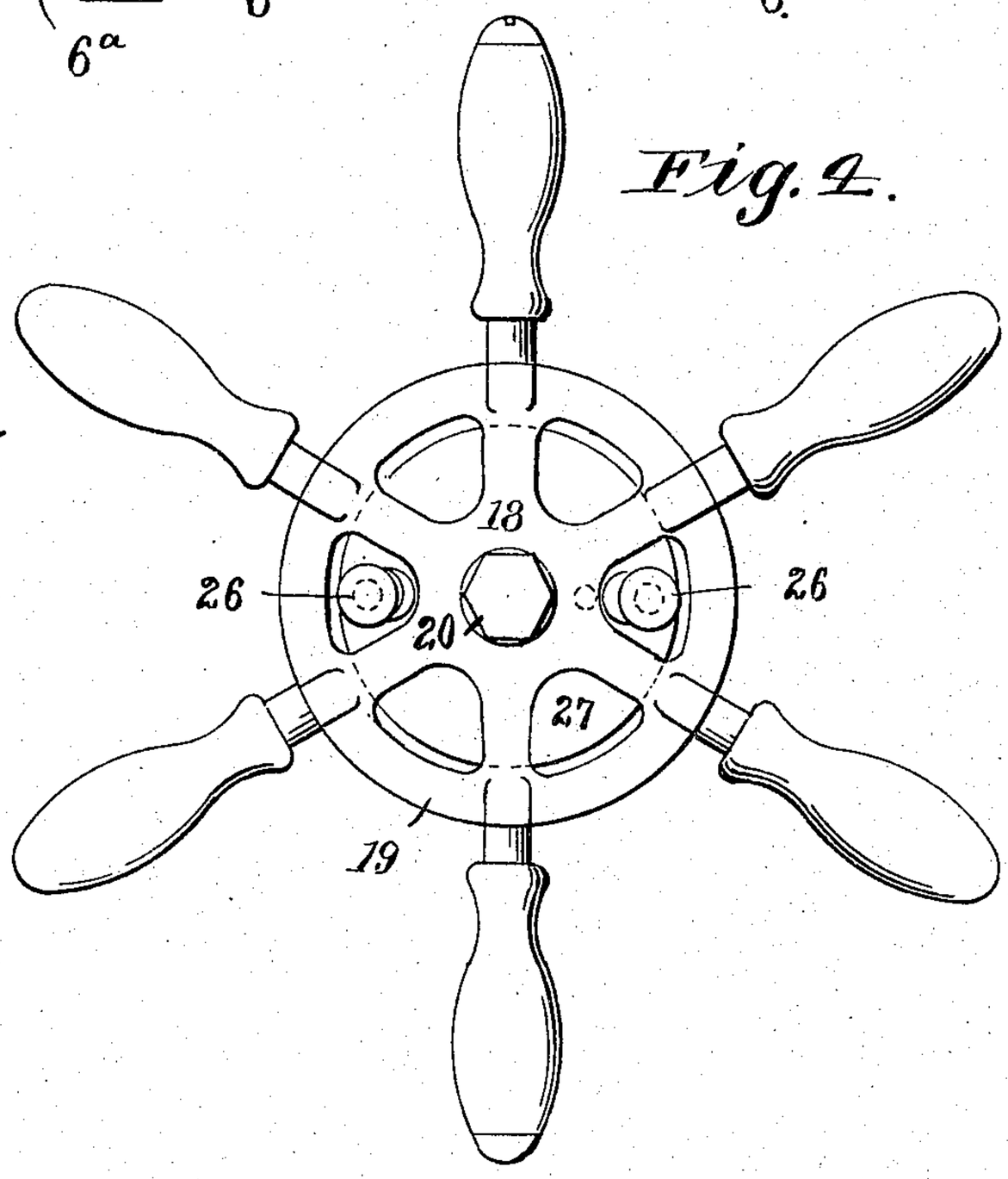


Fig. 4.



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STEERING-WHEEL FOR BOATS.

1,167,108. Specification of Letters Patent. Patented Jan. 4, 1916.

Application filed September 21, 1915. Serial No. 51,758.

To all whom it may concern:

Be it known that we, GILBERT A. PENNY and GEORGE C. PENNY, citizens of the United States, and residents of Good Ground, in the county of Suffolk, Long Island, and State of New York, have invented certain new and useful Improvements in Steering-Wheels for Boats, of which the following is a specification.

Our invention relates to new and useful improvements in steering devices for boats, being particularly designed for use upon motor boats and adapted to be placed in the bow of the boat and connected by ropes with the rudder for operating the same.

It is the purpose of the invention to provide an improved form of steering device, including a hand wheel, whereby the ropes may readily be adjusted from time to time in a manner to take up the slack, or to let out the rope as occasion may require, to design the same so that it will be compact and practicable; further to form the same of a comparatively few number of parts made in an inexpensive and durable manner.

With these and other objects in view the invention resides and consists in the construction and novel combination and arrangement of parts hereinafter more fully described, illustrated in the accompanying drawings, and pointed out in the claims hereto appended, it being understood that various changes in the form, proportion, size and minor details of construction within the scope of the claims may be resorted to without departure from the spirit or sacrificing any of the advantages of the invention.

Similar characters of reference denote like or corresponding parts throughout the several figures of the accompanying drawings forming a part of this specification and upon which,

Figure 1 shows a central vertical longitudinal sectional view of our improved form of boat steering device. Fig. 2 is a front view of the base plate, supporting post and flange of drum forming a part of the invention. Fig. 3 illustrates a transverse cross section taken on line 3—3 of Fig. 1 and Fig. 4 shows a front elevation of the operating wheel and connected parts of the steering device.

Referring in detail to the reference characters marked upon the drawings 5 represents a part of the bow of a boat to which the device is attached and 6 a locking pin that is slidably mounted in the part of the boat and adapted to be shoved backward and forward in a manner to engage and disengage a notch 6^a in one of the rope drums to secure the same in position.

7 represents a plate which is designed to be attached to the fixed part of the boat structure by means of screws 8. This plate receives the threaded end of a supporting post 9 which extends out in substantially a horizontal position and serves as a spindle upon which the rope drums turn. There are two of these rope drums one of which is arranged within the other. The inner one is designated as 10 and the outer one as 11. The inner drum is provided with a right and a left hand peripheral groove to receive the ropes 12 and 13 and is further provided with a binding screw 14 and 15 by means of which the ends of the two said ropes are secured to the inner drum.

16 represents the inner hub and 17 the outer hub of the inner drum which are fitted to turn on the spindle 9 before mentioned. The peripheral surface of the outer hub is shaped to receive the hub 18 of the operating wheel 19 that is keyed or otherwise secured thereto. A nut 20 is threadably attached to the outer end of the post 9 and serves to retain the inner drum and wheel upon the spindle.

The outer drum is also provided with an inner hub 21 that has its bearing upon the inner end of the post 9, while the outer inner portion of the same drum is supported upon an annular shoulder 22 upon the periphery of the inner drum. A longitudinal slot 23 is formed in the surface of the outer drum and serves as an opening through which the two ropes 12 and 13 are threaded preparatory to being wound upon the outer surface of the outer drum. A series of holes 24 are formed in an annular flange 25 of the outer drum and serve to be engaged by the inner ends of the spring actuated pins 26 mounted in the annular flange or head 27 of the inner drum, said head fitting against the end or face of the flange of the outer drum.

As shown in Fig. 1 the inner and outer drums are locked together by means of the said spring actuated pins 26 and are also

locked in position with reference to the fixed part of the boat by means of the before mentioned locking pin 6.

As before stated the ends of the ropes are secured to the inner drum and are wound around the same more or less as required and then passed out through and around the outer drum, said ropes being carried away from the drum in opposite directions so that the turning of the drum upon the post will tend to wind up one rope and run out the other. If it is necessary to take up the slack in the rope, or perchance to let the rope out a bit as a result of it being too tight then the operator simply draws out the spring actuated pins and adjusts the inner drum with relation to the outer drum thereby winding in or running out the ropes in a way to bring the same to a proper and equal degree of tension after which the pins are freed and allowed to seat themselves again within the adjacent sockets 24 of the flange thereby again fixing the two drums together so that the turning of the wheel will turn both drums and wind or unwind the ropes upon the outer drum without affecting the position of the ropes upon the inner drum. It will thus be seen that the independent turning of the inner drum with respect to the outer drum is only for the purpose of taking up or letting out the rope in a way to adjust the tension of the same.

Having thus described our invention what we claim and desire to secure by Letters Patent is:—

1. In a steering wheel of the class described, the combination of a rotatable drum, a second drum within the first named drum, a wheel attached to the inner drum, means for detachably connecting the inner and outer drum, and ropes secured to the inner drum and extended out through and over the outer drum.

2. In a steering wheel of the class described, the combination of a post, a drum rotatably mounted thereon, a second drum within the first named drum and having a flange to overlap the outer drum, a wheel secured to the inner drum and adapted to turn therewith, means for detachably connecting the inner and outer drum, and means for securing the outer drum in position.

3. In a steering wheel of the class described, the combination of a rotatable drum having a side opening, a second drum within the first named drum, a wheel secured to one of the drums and adapted to turn therewith, means for detachably connecting the two drums, and ropes secured to the inner drum and extended out through and over the outer drum.

4. In a steering wheel of the class described, the combination of a post, a drum rotatably mounted thereon, a second drum within the first named drum, a wheel secured to one of the drums and adapted to turn therewith, means for detachably connecting the two drums, and ropes secured to the inner drum and extended out through and over the outer drum.

5. In a steering wheel of the class described, the combination of a post, an outer drum rotatably mounted thereon, an inner drum within the first named drum and also mounted on the post, a wheel secured to one of the drums and adapted to turn the same, means for detachably connecting the two drums, ropes secured to the inner drum and extended out through and over the outer drum, and means for securing one of the drums in a locked position.

6. In a steering wheel of the class described, the combination of a rotatable drum, a second drum within the first named drum and having annular grooves formed in its peripheral surface, a wheel attached to one of the drums, means for detachably connecting the two drums together and ropes wound in the grooves of the inner drum and extended out through and over the outer drum.

Signed at Good Ground in the county of Suffolk and State of New York this 13th day of Sept., A. D., 1915.

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