P. T. Share.

Steering.

No. 2,865 Patented Nov. 28, 1842.

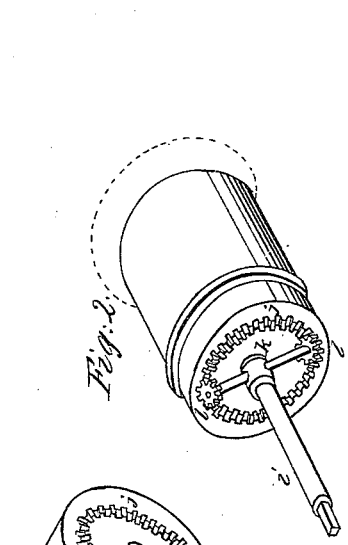


Fig. 2.

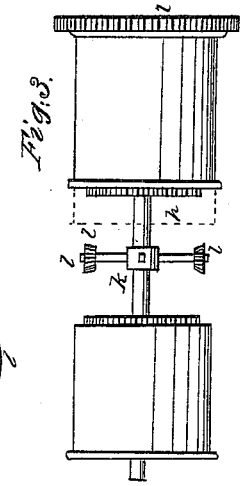


Fig. 3.

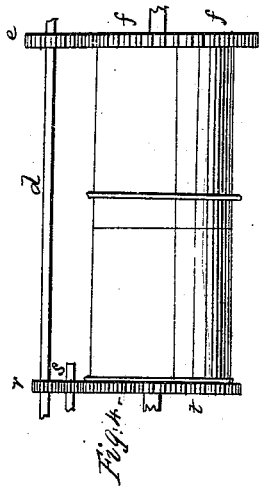
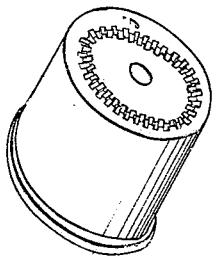


Fig. 4.



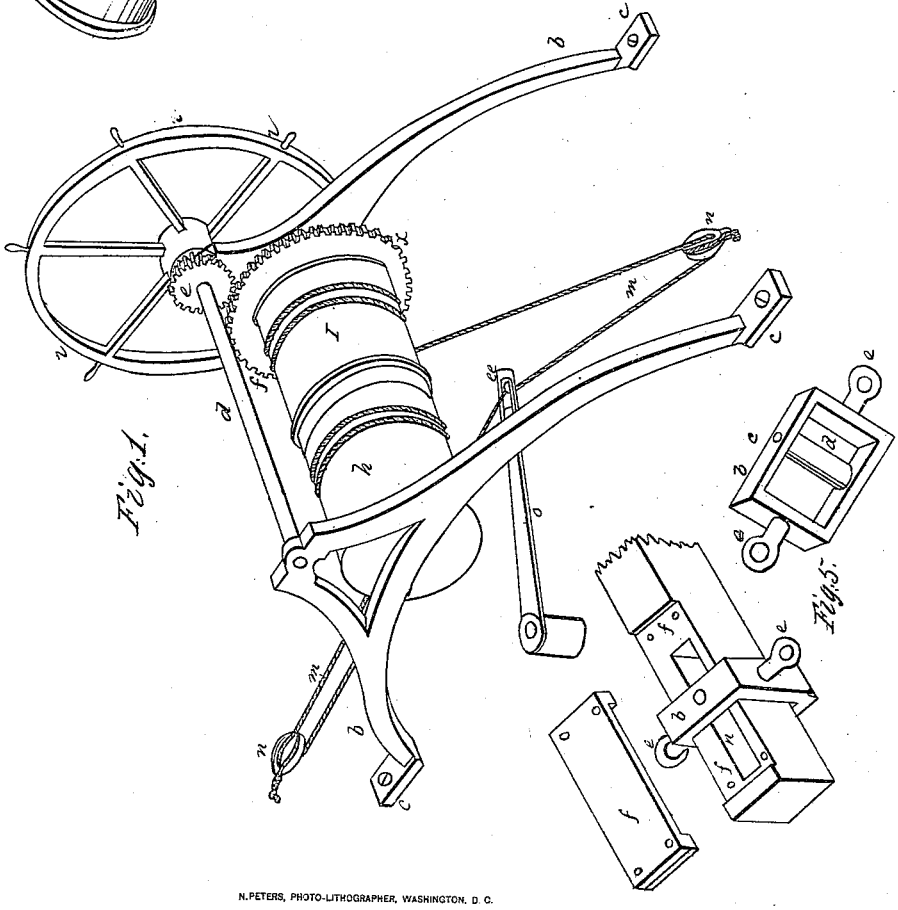


Fig. 1.

Fig. 5.

UNITED STATES PATENT OFFICE.

PHILIP T. SHARE, OF BALTIMORE, MARYLAND.

STEERING-WHEEL FOR VESSELS.

Specification of Letters Patent No. 2,865, dated November 28, 1842.

To all whom it may concern:

Be it known that I, PHILIP T. SHARE, of the city of Baltimore and State of Maryland, have invented a new and useful Improvement on the Steering-Wheel for Ships and other Vessels; and I do hereby declare that the following, with the accompanying drawings, is a full and exact description.

My improvement is as follows: The steering wheel *a*, *a*, *a*, Figure 1 is supported on a stand *b*, *b*, which is bolted to the deck (as at *c*, *c*,) &c. The wheel has a shaft *d*, on which is the driving pinion *e;* this pinion works in the cogwheel *f*, *f*, which cogwheel is on the drum *g*. *h*, is another drum resting on the same shaft; a part of which is at *i*, Fig. 2. This shaft is stationary on the frame *b*, *b*. These drums are to move around in opposite directions. *h*, moves contrary to *g*, by means of the inner cogwheels represented at Fig. 2, and as follows: *j*, *j* are two miter wheels on the inner ends of the drums. On the shaft as at *k*, is fixed an armed projection with the miter pinions *l*, *l*, turning on the ends of said arms. The pinions work into the wheels on the drums and by the motion of the wheels *a*, and *e*, it will be seen that the drums move in opposite directions. The drums receive the ropes *m*, *m*, from the blocks *n*, *n*, and from the tiller *o;* the pulley blocks being fastened to the deck. By the use of this arrangement the steering wheel is both more ready and manageable; the ropes being always tight and not subject to become slack, as has been the case with the usual steering apparatus. The vessel will be governed by the tiller the instant you lay hold of the wheel, and this is the great advantage this plan has over the common wheel, and is the reason the usual hand tiller has been preferred.

Fig. 3, represents a side view of the drums (as Fig. 2) separated, showing the cogwheels on the drum and the pinions on the arms. The tillers in both figures refer to the same parts. The dotted lines Fig. 3 show an inner lap of the drum from the right, so as to hide or inclose the cogwheels. The part represented by the dots passes within the left drum and has the usual sniff-box fit. *q*, is the cogwheel *f*, Fig. 1.

Fig. 4 represents the drums without the inclosed wheels, but having cogwheels of suitable size to get the required motion, as *r*, on the shaft *d*, Fig. 1, and *s*, on another shaft; the cogwheel *s* working into a cogwheel *t*, on the end of drum *h*, Fig. 1.

Fig. 5 shows the form of the end of the tiller, the object of which is to effect an equal line and tension of the rope between the pulleys, as from *n*, to *n*, Fig. 1, and to equalize the effect of the action of the ropes and drums *a*, *a*, *a* vertical slots through the tiller, in which works back and forward the slide *b*, *b*, which is seen detached as at *c*. It has a vertical roller *d*, which runs in the vertical slot *a*, to ease the running. *e*, *e*, &c., on both pieces are iron eyes to which the ropes are attached as at *e*, *e*, Fig. 1. *f*, is a cap to cover *f*, *f*.

What I claim as my invention and desire to secure by Letters Patent, is—

The combination and arrangement of the parts, consisting of the steering wheel and its shaft and cogwheels, and the drums and the gearing to drive them in different directions; and the construction of the tiller; all as represented in the 5 figures operating as, and for the purpose, before described.

PHIL. T. SHARE.

Witnesses:
JOHN W. POST,
JOHN H. BRAUN.