

(No Model.)

S. B. GREACEN.

FRICTION LOCK FOR STEERING WHEELS.

No. 249,517.

Patented Nov. 15, 1881.

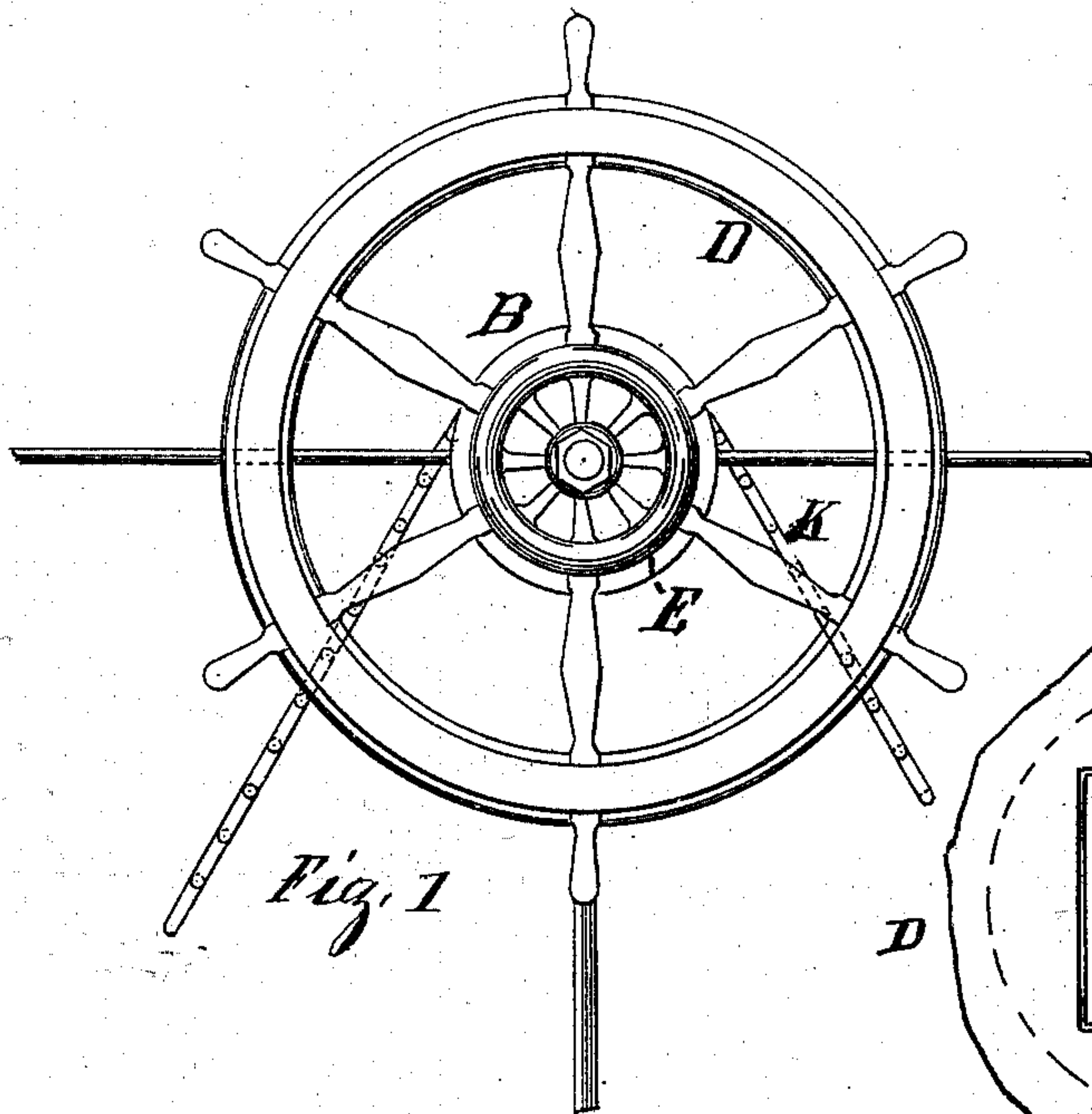
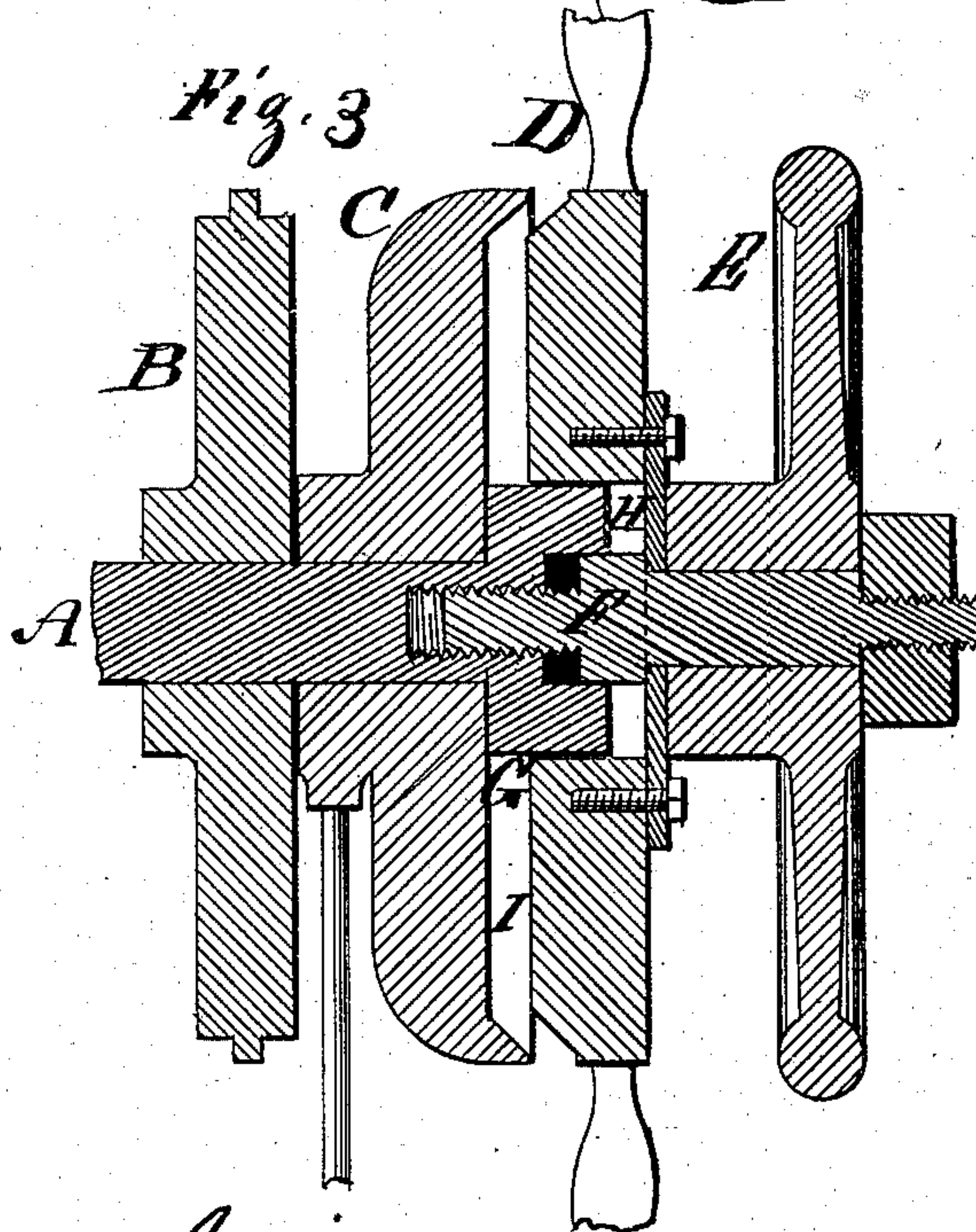
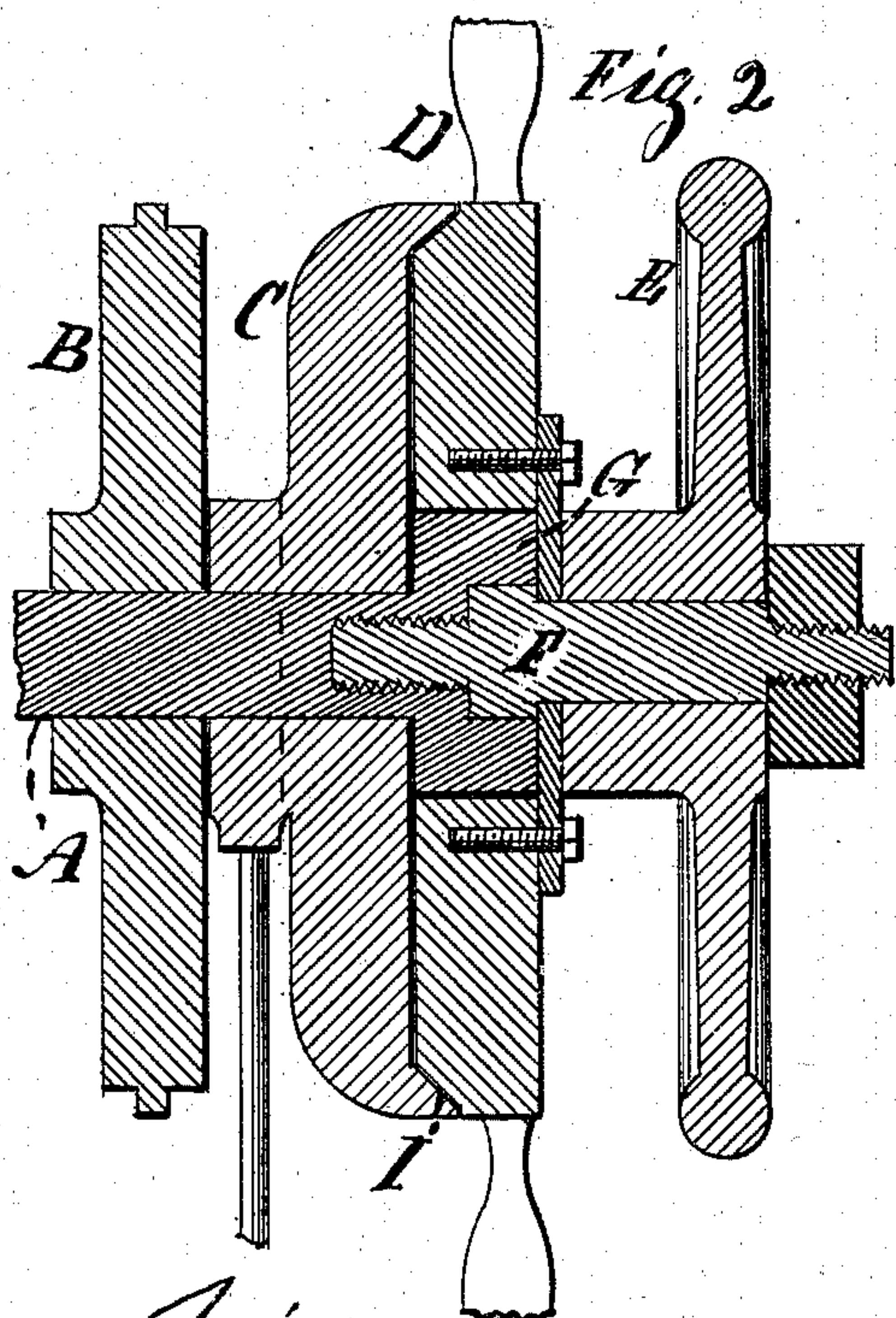
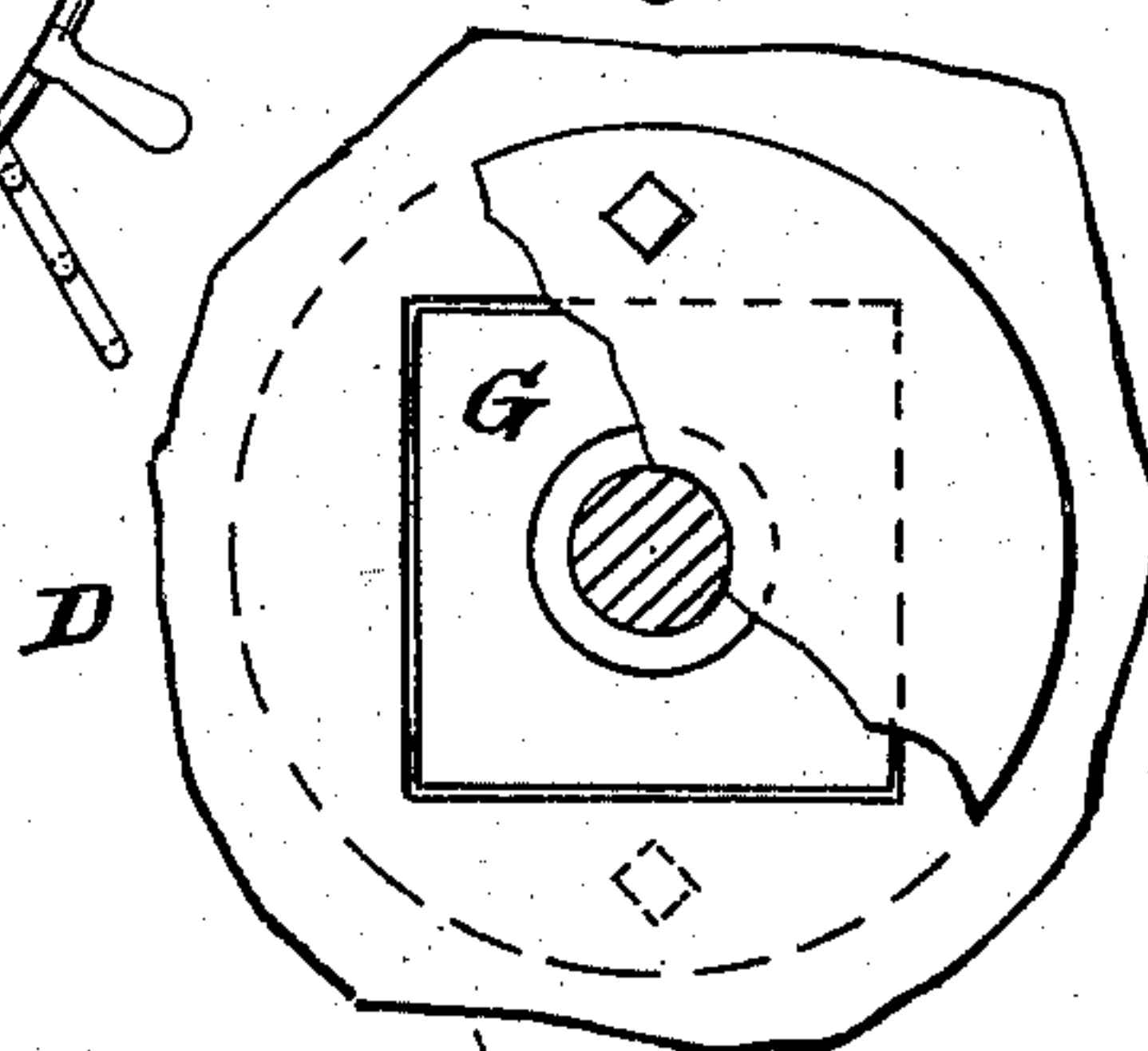


Fig. 4.



Witnesses
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UNITED STATES PATENT OFFICE.

STEPHEN B. GREACEN, OF PERTH AMBOY, NEW JERSEY.

FRICTION-LOCK FOR STEERING-WHEELS.

SPECIFICATION forming part of Letters Patent No. 249,517, dated November 15, 1881.

Application filed July 8, 1881. (No model.)

To all whom it may concern:

Be it known that I, STEPHEN B. GREACEN, of Perth Amboy, in the county of Middlesex and State of New Jersey, have invented a new and useful Improvement in a Friction Becket or Lock for Hand Steering-Wheels, of which the following is a specification.

My invention relates to a friction becket or lock to be used with the hand steering-wheels of all vessels, either sail or steam, whereby the labor of a pilot is greatly lessened and the wheel is held securely in any position, being instantly locked or unlocked; and it consists in a friction plate or plates working in combination with the bearing and hub of the steering-wheel.

Figure 1 is a front elevation of a steering-wheel. Fig. 2 is a sectional elevation showing the wheel locked. Fig. 3 is the same showing the wheel unlocked.

In my construction, A is a center shaft, on which the apparatus revolves.

B is the wheel or gear to which the rope or chain K is attached for moving the rudder.

C is a journal and friction plate combined.

D is the steering-wheel.

E is a hand-wheel, which, together with the screw F, to which it is secured, works the steering-wheel out or in upon a square hub or boss, G, on the central shaft, there being a square hole, H, in the steering-wheel to fit the square hub G.

In Fig. 2 the apparatus is shown locked, which is done by drawing the convex disk of the steering-wheel, by means of the hand-wheel and screw, into and upon the concave disk I of plate C.

Fig. 3 shows the whole apparatus unlocked and free to revolve in either direction—star-board or port.

Fig. 4 is a partial front view of steering-

wheel, showing the square hub herein referred to.

There may be some modifications of the mechanism for forcing a friction-bearing against or upon the steering-wheel and center shaft and the same result be secured—viz., of instantly locking the wheel by the hand of the pilot.

I claim—

1. In combination with a steering-wheel, D, of a hand steering apparatus, a friction becket or lock connected with a hand-wheel and uniting-screw, and adapted by the turning of said hand-wheel to form a locking contact with the friction-plate C, the screw F turning in the square hub G and forcing the wheel D, sliding on the hub, against the plate C, substantially as specified.

2. In combination with the shaft A, having the square hub or boss G and carrying the friction-plate C, the steering-wheel D, having in its inner face a square hole, H, adapting it, by the movement of the hand-wheel E, as above described, to slide upon the square hub G, substantially as set forth.

3. In combination with the shaft A, having the square hub, substantially as described, and convex friction-plate C, the concave face of the steering-wheel D, adapted, by the movement of the hand-wheel E, as above described, to form a locking connection with the plate C, substantially as specified.

4. In combination with the shaft A, plate C, and steering-wheel D, constructed and arranged substantially as set forth, the hand steering-wheel E, provided with the screw F, substantially as and for the purpose specified.

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Witnesses:

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