

(No Model.)

J. B. KIBLER.

PROPELLER FOR SMALL BOATS.

No. 300,982.

Patented June 24, 1884.

Fig. 1.

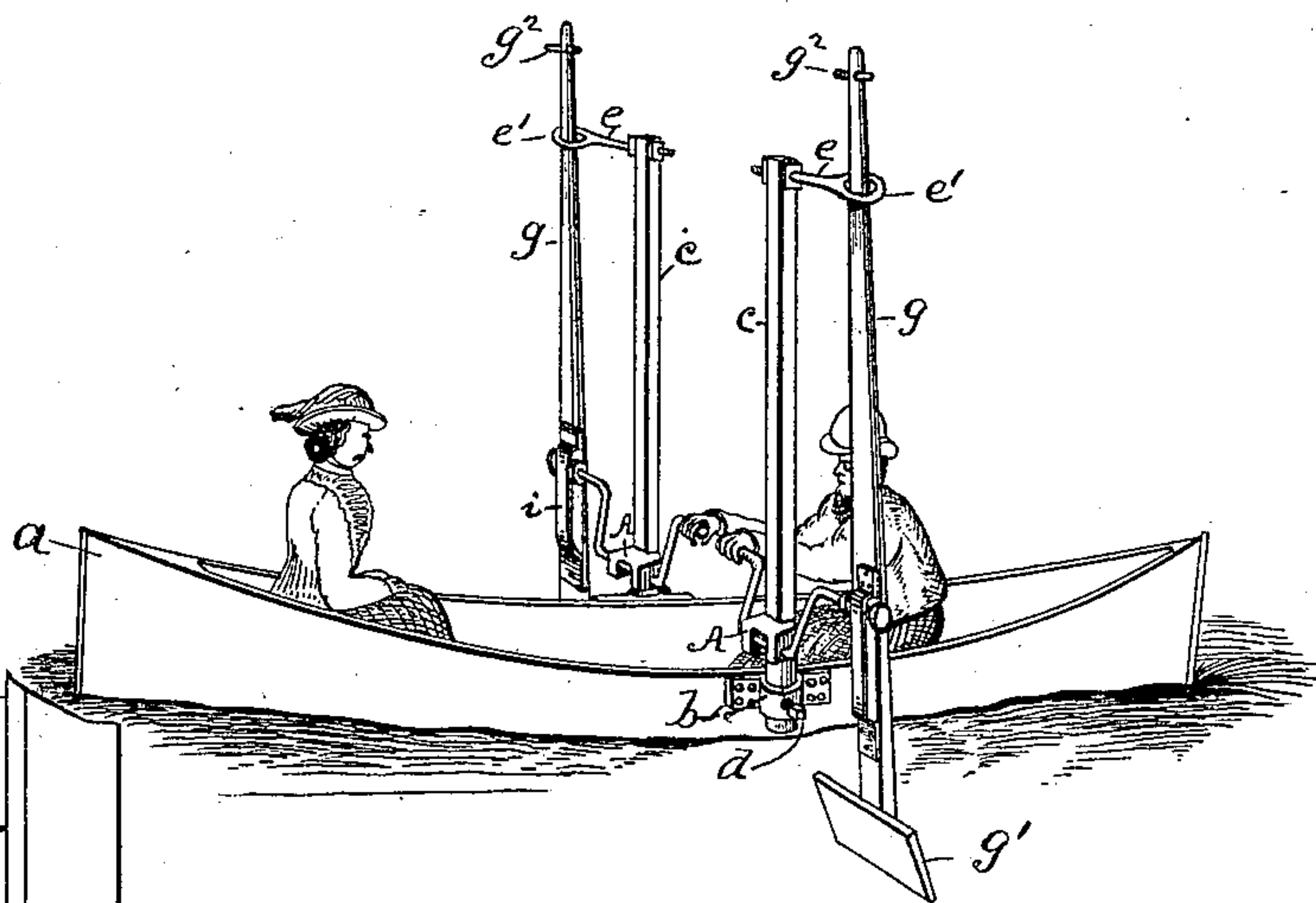


Fig. 2.

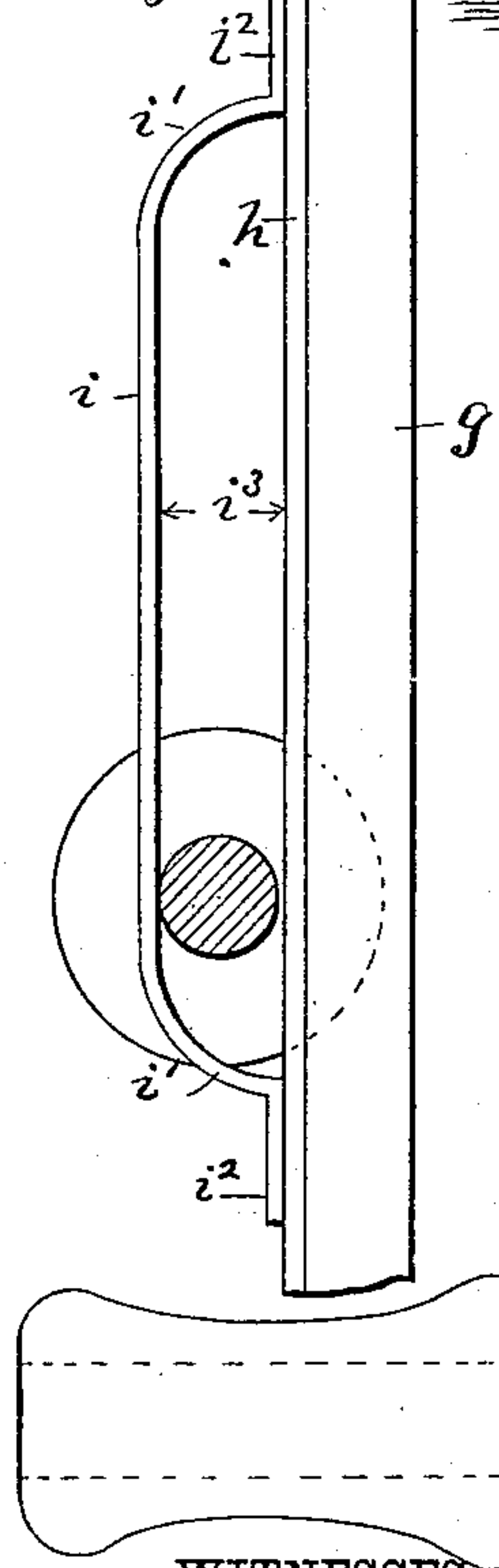
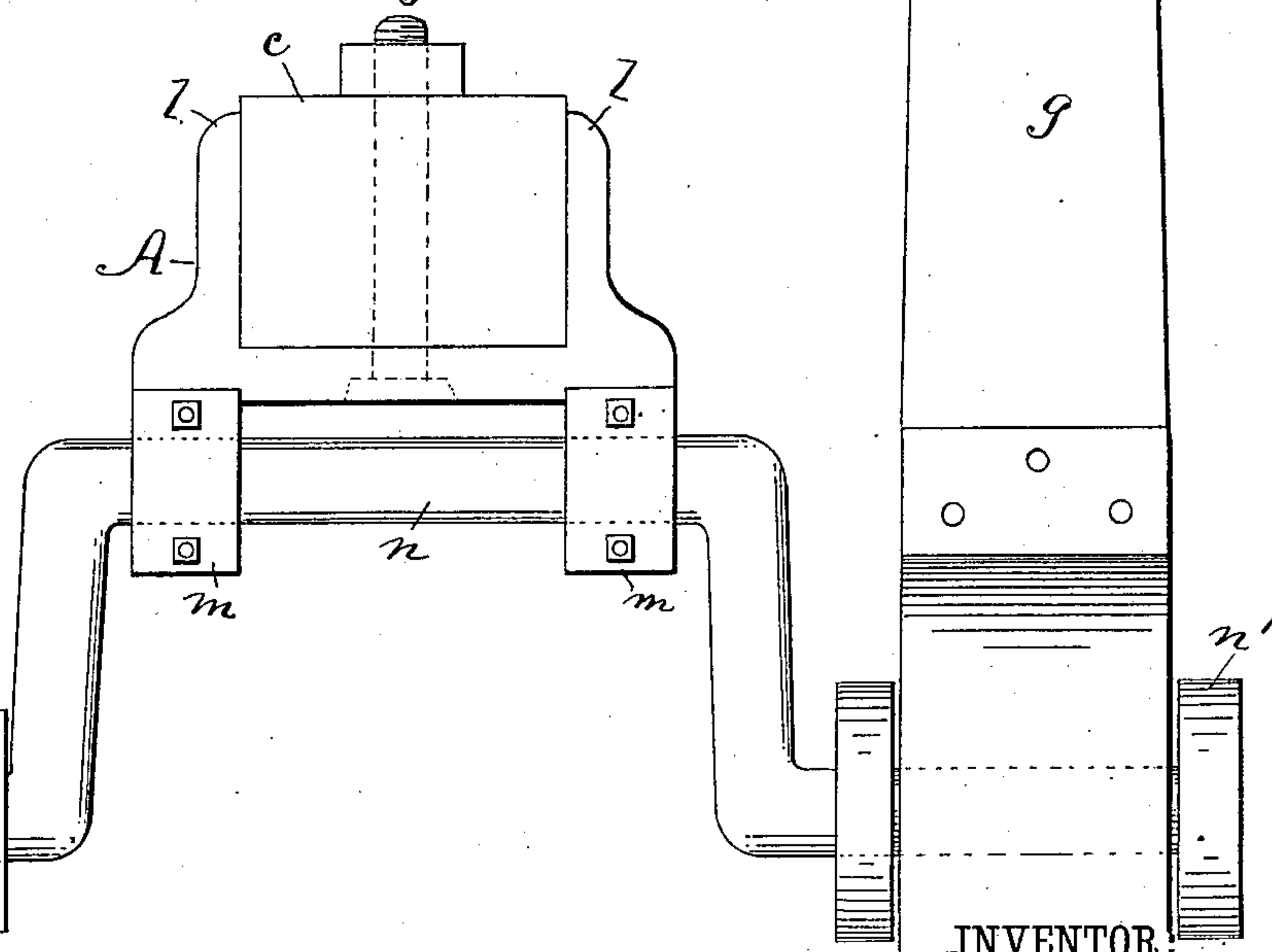


Fig. 3.



WITNESSES:

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# UNITED STATES PATENT OFFICE.

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## PROPELLER FOR SMALL BOATS.

SPECIFICATION forming part of Letters Patent No. 300,982, dated June 24, 1884.

Application filed March 27, 1884. (No model.)

*To all whom it may concern:*

Be it known that I, JOHN B. KIBLER, a citizen of the United States, residing in Minneapolis, in the county of Hennepin and State of Minnesota, have invented certain new and useful Improvements in Propellers for Small Boats, of which the following is a description.

Figure 1 is a perspective view of my improved boat, and Figs. 2 and 3 are detail views. My invention relates to improvements in propellers for small boats; and it consists in the peculiar construction and arrangement of the parts, as hereinafter more fully set forth, and pointed out in the claims.

Referring to the drawings, *a* represents a small or row boat, to which the propeller is to be applied.

*b* represents a bottomless socket or strap, secured to the outside or inside of the boat by screws or bolts, and adapted to receive a removable post, *c*, which may be adjusted vertically, as desired, by means of a set-screw, *d*. The upper end of the post *c* is provided with an arm, *e*, secured to it. The outer end of the arm *e* has a loop, *e'*, for the passage and play of the paddle-bar *g*, provided at its lower end with the paddle *g'*, having an inclined position relative to the surface of the water. The upper end of the paddle-bar *g* is provided with a cross-pin, *g''*, above the loop *e'*, to act as a stop-pin for the paddle-bar *g*. To one edge of the paddle-bar *g* is secured a plate, *h*, to prevent wear of the parts in operating the paddle.

*i* represents a plate provided at its ends with shoulders *i'*, having flanges *i''*, provided with holes, whereby the plate *i* is bolted to the edge of the paddle-bar *g*, over the plate *h*, thus forming a slot, *i'''*, in the connection with the paddle-bar without weakening the latter by forming a slot in it.

*A* represents a block provided with the flanges *l l*, embracing the opposite sides of the post *c*, and secured thereto by a bolt and nut. The block *A* is also provided with two bearing-arms, *m m*, in which the crank-shaft *n* is journaled. The outer end of the crank-shaft *n* is provided with a lug or projection, *n'*, permanently secured thereto. The crank-shaft *n* is placed against the bearing-plate *h*, secured to the edge of the paddle-bar *g*, when the plate

*i* is removed, so that the lug *n'*, permanently secured to the crank-shaft, is in place, and the plate *i* then secured in place over the bearing-plate *h*. By this construction, in lieu of a removable nut usually employed in such constructions, there is no liability of the crank-shaft becoming detached from the slot by the unscrewing of a nut, as in the ordinary construction, because the lug or projection *n'* is permanently secured to the crank-shaft. By this construction, by turning the crank-shaft, the boat may be propelled in any desired direction.

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

1. The combination, with a bottomless socket secured to the side of a boat, of an upright post adjustably secured in said socket, and provided with a guide for the paddle-bar at its upper end, and a crank-shaft for operating the paddle-bar journaled in the upright post, substantially as shown and described.

2. The combination, with bottomless socket *b*, secured to the side of a boat, and a removable post, *c*, adapted to be vertically adjusted in said socket, and provided with an arm, *e*, having a loop, *e'*, at its outer end, of the slotted paddle-bar *g*, block *A*, and crank-shaft *n*, substantially as shown and described.

3. The combination, with the paddle-bar *g*, provided with a plate, *h*, of the removable plate *i*, provided with shoulders *i'*, having flanges *i''*, substantially as shown and described.

4. The combination, with the paddle-bar *g*, provided with the plate *h*, of the removable plate *i*, provided with shoulders *i'*, having flanges *i''*, and crank-shaft *n*, having projection *n'*, substantially as shown and described.

5. The combination, with the adjustable and removable post *c*, of the block *A*, provided with flanges *l l*, embracing the post, bearings *m m*, and crank-shaft *n*, substantially as shown and described.

The above specification of my invention signed by me in the presence of two subscribing witnesses.

J. B. KIBLER.

Witnesses:

SOLON C. KEMON,  
CHAS. A. PETTIT.