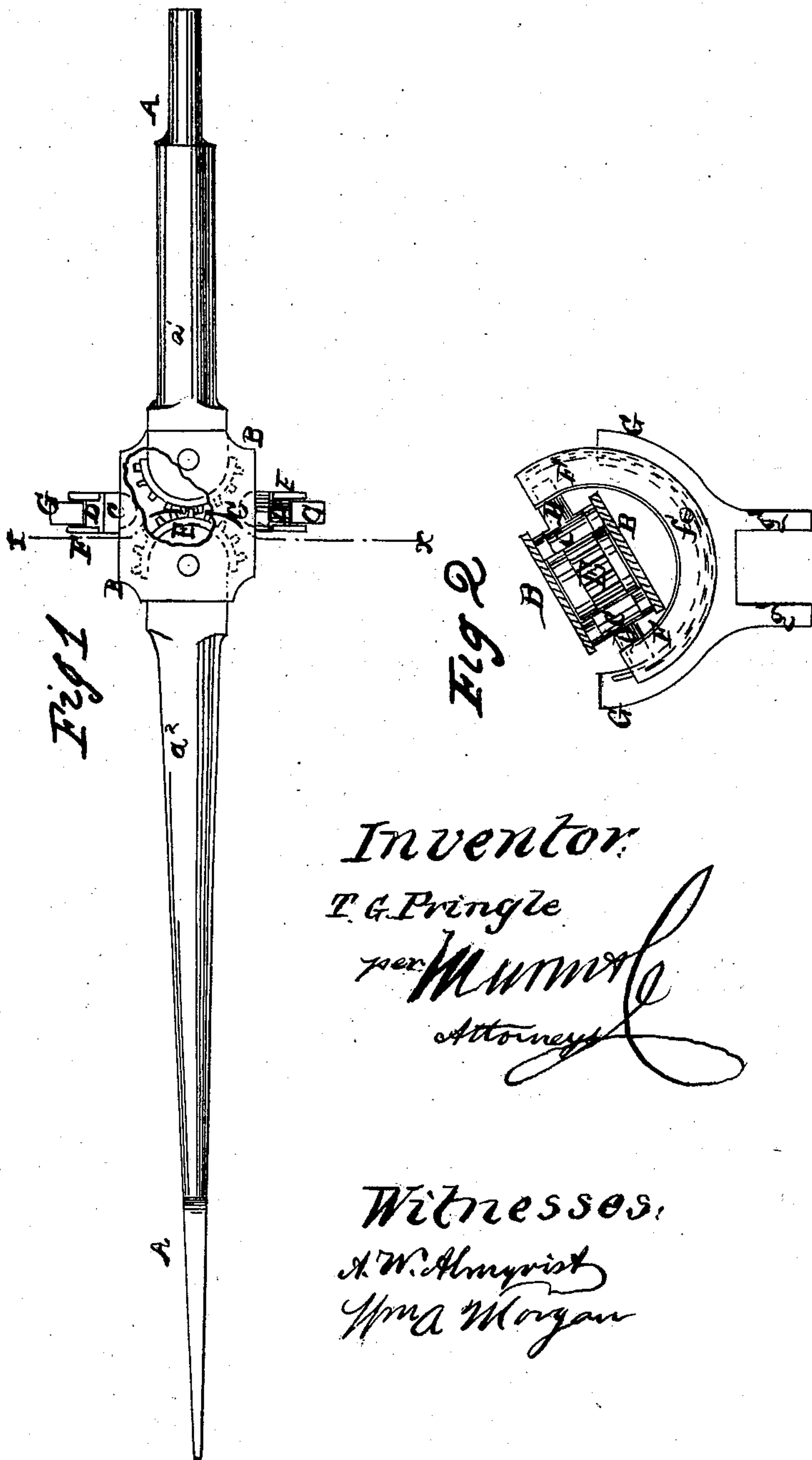


T. G. PRINGLE.

Improvement in Propelling Boats by Oars.

No. 116,095.

Patented June 20, 1871.



*Inventor*

*T. G. Pringle*

*per Munnell*  
*Attorneys*

*Witnesses:*

*A. W. Almyrist*

*Wm Morgan*

# UNITED STATES PATENT OFFICE.

THOMAS G. PRINGLE, OF NEW YORK, N. Y.

## IMPROVEMENT IN PROPELLING BOATS BY OARS.

Specification forming part of Letters Patent No. 116,095, dated June 20, 1871.

*To all whom it may concern:*

Be it known that I, THOMAS G. PRINGLE, of New York, in the county of New York and State of New York, have invented a new and useful Improvement in Propelling Boats by Hand; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawing forming part of this specification, in which—

Figure 1 is a top view of my improved device, part being broken away to show the construction. Fig. 2 is a detail sectional view of the same taken through the line *x x*, Fig. 1.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved means for the propulsion of boats by hand, which shall be so constructed and arranged that the rower when propelling his boat may sit with his face toward the bow so as to look in the direction in which his boat may be advancing, and which shall at the same time allow him to feather his oars in rowing; and it consists in the construction and combination of the various parts, as hereinafter more fully described.

A is the oar, which is made in two parts,  $a^1$  and  $a^2$ , the adjacent ends of which are pivoted to and between two plates, B, by bolts or rivets, as shown in Figs. 1 and 2. The plates B are also connected and held in their proper relative positions by studs C, upon the outer sides of which are formed the pivots or journals D, by which the oar is connected to the oar-lock. Upon the adjacent ends of the parts  $a^1$  and  $a^2$  of the oar A are formed, or to them are attached, segments of gear-wheels E, the teeth of which mesh into each other, as shown in Fig. 1. By this construction the handle and blade of the oar will move in the same direc-

tion, enabling the rower to sit with his face to the bow of the boat while rowing. The row-lock is made in two parts, F and G. The interior part F, in bearings in the ends of which the pivots of journals D work, is made in the form of an arc or semicircle, as shown in Fig. 2. The convex side of the semicircular piece F is grooved to fit upon the concave side of the part G, as shown in Figs. 1 and 2, and is secured to said piece G, while, at the same time, it is left free to slide longitudinally by a set-screw, *f*, which passes through the side of the piece F, and the forward end of which enters a groove in the side of the piece G, as shown in dotted lines in Fig. 2. Upon the middle part of the convex side of the piece G are formed arms *g*, by means of which the row-lock is attached to the boat. This construction enables the oars to be feathered conveniently by the oarsman when desired. When it is not desired to feather the oars the piece F may be immovably secured to the piece G by simply tightening the set-screw *f*.

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

1. The oar-lock, formed in two parts, F G, constructed and arranged as and for the purpose specified.

2. The combination of the row-lock F G, constructed as described, journals D, studs C, plates B, and segmental gear-wheels E with each other and with the adjacent ends of the parts  $a^1$  and  $a^2$  of the oar A, substantially as herein shown and described, and for the purpose set forth.

THOS. G. PRINGLE.

Witnesses:

ALEX. F. ROBERTS,  
JAMES T. GRAHAM.