

L. G. HEUSTED.

STEERING GEAR.

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978,746.

Patented Dec. 13, 1910.

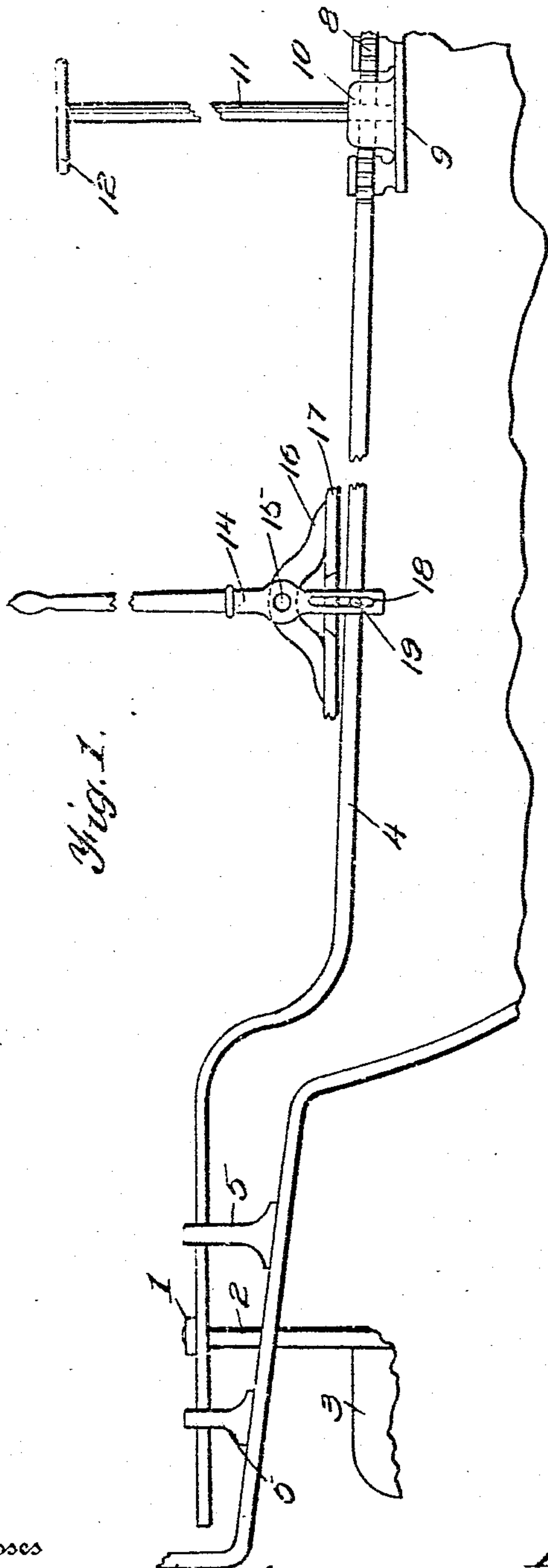


Fig. 1.

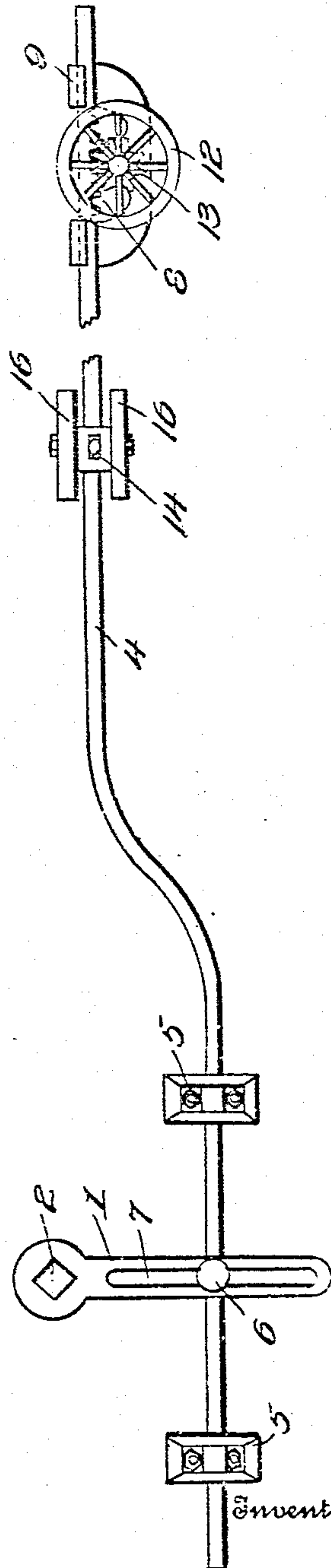


Fig. 2.

Witnesses

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LUMAN GEO. HEUSTED, OF CHARLOTTE HARBOR, FLORIDA.

STEERING-GEAR.

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Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, LUMAN GEORGE HEUSTED, a citizen of the United States, residing at Charlotte Harbor, in the county of De Soto and State of Florida, have invented new and useful Improvements in Steering-Gear, of which the following is a specification.

This invention relates to improvements in steering gears for vessels, and comprises, in combination with a tiller disposed at right angles to a rudder and having a longitudinal slot, a longitudinally movable rod having a device operating in the slot of the tiller and connecting the rod thereto and means to actuate said rod as hereinafter described and claimed.

In the accompanying drawings:—Figure 1 is an elevation of a steering gear constructed in accordance with my invention, as applied to the rudder of a boat. Fig. 2 is a plan of the same.

In accordance with my invention, the tiller 1 which is attached to the rudder head 2 is disposed at right angles to the rudder 3 so that the tiller is disposed athwartship, instead of extending fore and aft when the vessel is proceeding on a straight course. I also provide a longitudinally movable rod 4 which is mounted in suitable guides 5 with which the vessel is provided. The said rod has a pin 6 which extends upwardly through and operates in a longitudinal slot 7 with which the tiller is provided so that the said rod is connected to the tiller and longitudinal movement of the rod will cause angular movement of the tiller and rudder as will be understood. The rod is provided on one side near its front end with a series of rack

teeth 8 and the front portion of the rod is mounted in a guide 9 which may be secured on the deck, or on a thwart, beam, or other supporting object. The said guide is provided with a bearing 10 for a vertical shaft 11 which is here shown as having a steering wheel 12 at its upper end and is provided at its lower end with a pinion 13 which engages the rack portion of the rod so that the rod may be moved longitudinally to steer the vessel, by means of the steering wheel, the said shaft 11, and the said pinion 13. I also show a lever 14 which may be employed to operate the rod 4. Said lever is here shown as pivotally mounted as at 15 in bearings 16 on a suitable support 17 and as provided with a longitudinal slot 18 which is engaged by a pin 19 that operates in said slot.

What is claimed is:—

A steering mechanism for water craft comprising a rudder, a tiller connected with the rudder and arranged at a right angle thereto and having a longitudinal slot, a rod arranged longitudinally of the craft in a plane about parallel with the plane of the rudder when the latter is set straight ahead, a pin attached to the rod and arranged to operate in the slot of the tiller, guide means for causing the rod to move in a rectilinear line, and means for moving the rod rectilinearly to effect angular movement of the rudder.

In testimony whereof I affix my signature in presence of two witnesses.

LUMAN GEO. HEUSTED.

Witnesses:

E. O. CORAM,
J. I. WALDEN.