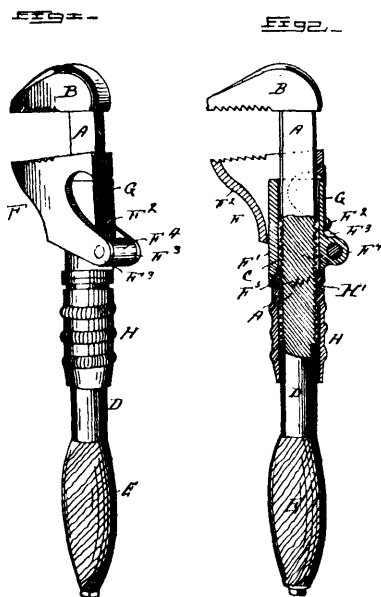


**No. 67,200. Wrench. (Errou.)**

67200

James Alexander Montgomery, Brookwood, Alabama, U.S.A., 2nd May, 1900; 6 years. (Filed 28th March, 1900.)

**Claim.**—1st. The herein described wrench, comprising a shank having a fixed jaw and threaded for a portion of its length, a sleeve nut fitted on said shank and screwing on the threaded portion thereof, and a movable jaw constructed in sections, one of which is slidably fitted on the shank and completely incloses from its upper to its lower edge, the shank, and is in engagement with said sleeve nut, the upper edge of said sleeve nut fitting closely upon the lower edge of the section and the combined length of the section and nut being so much greater than the length of the threaded portion of the shank that such threaded portion will always be covered, and the other section of the movable jaw being pivoted upon the slidable section and spring pressed, as and for the purpose set forth. 2nd. A wrench, consisting of a threaded shank having a fixed jaw, a sleeve nut working on said shank, and a movable jaw constructed in sections, one of which is slidably fitted on the shank and secured to the sleeve nut, said section being formed with a bearing on its rear face, the other section being formed with rearwardly extending ears pivotally connected to said bearing, and a spring secured to the first named section and bearing against the rear face of the pivoted section, as and for the purposes set forth.

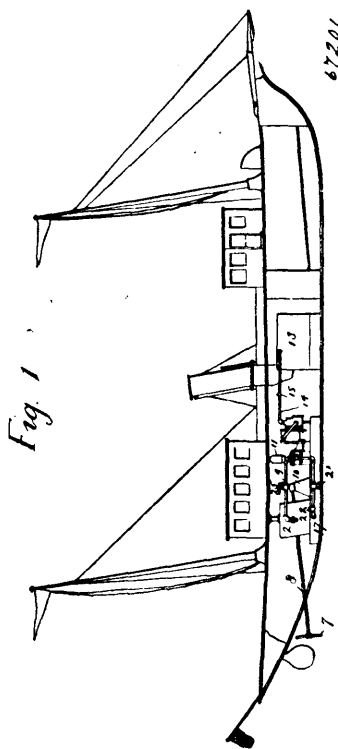
**No. 67,201. Mechanism for Marine Propulsion.**

(*Mécanisme pour propulsion de vaisseau.*)

Henry Arthur Maurer, assignee of Almerin Hubbell Lighthall, New York City, New York, U.S.A., 2nd May, 1900; 6 years. (Filed 2nd May, 1899.)

**Claim.**—1st. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel provided with buckets or vanes arranged on the inner portion of the shaft, and means for projecting water under pressure against the buckets or vanes, substantially as described. 2nd. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel provided with oppositely arranged buckets or vanes arranged on the inner portion of the shaft and nozzles for directing water under pressure into the buckets or vanes, substantially as described. 3rd. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel mounted on the inner portion and provided with bucket or vanes, a casing surrounding the water wheel, and nozzles for projecting water under pressure against the buckets or vanes, substantially as described. 4th. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel provided with buckets or vanes arranged on the inner portion of the shaft, a casing enclosing the water wheel, and nozzles arranged on opposite sides of the wheel for projecting water against the bucket or vanes in opposite directions for rotating the wheel in one direction or the other, substantially as described. 5th. A marine

engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of



the shaft, an impact water wheel having buckets or vanes and mounted on the inner portion of the shaft, nozzles for directing water under pressure against the buckets or vanes, pumps for supplying water under pressure to the nozzles, a well situated below the wheel, and a connection between the well and the pumps, substantially as described. 6th. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller arranged on the outer portion of the shaft, an impact water wheel mounted on the inner portion of the shaft, and provided with buckets or vanes, nozzles for projecting water under pressure against the buckets or vanes, pumps for supplying water under pressure against the buckets or vanes, a well situated below the wheel, connection between the well and the suction end of the pumps and connections between the suction ends of the pumps and the outside of the vessel, substantially as described. 7th. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel having buckets or vanes arranged on the inner portion of the shaft, nozzles for projecting water under pressure against the buckets or vanes, pumps for supplying water under pressure to the nozzles, and connections provided with valves between the suction end and discharge openings of the pumps, substantially as described. 8th. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion, an impact water wheel provided with buckets or vanes mounted on the inner portion, a casing surrounding the water wheel, water chest arranged in the sides of the casing, nozzles connected with the water chests for projecting water against the buckets or vanes, valves governing the flow of water from the water chests to the nozzles, and pumps for supplying water under pressure to the water chests, substantially as described. 9th. A marine engine comprising a propeller shaft extending from the interior to the exterior of a vessel, a propeller mounted on the outer portion of the shaft, an impact water wheel mounted on the inner portion of the shaft and provided with buckets or vanes, a casing enclosing the water wheel, nozzles for projecting water against the buckets or vanes, water chests arranged in the casing and communicating with the nozzles, valves for governing the flow of water from the chests to the nozzles, rods connected to the valves each provided with a piston head, cylinders having ports at each end receiving the piston heads, and pipes for conducting water under pressure to and from the ports of the cylinders, substantially as described.

**No. 67,202. Trolley Stand. (Support de trolley.)**

Frank Pfent, Conner's Creek, and Louis A. Moran, Grosse Pointe, and Max Kettel, Detroit, all in Michigan, U.S.A., 3rd May, 1900; 6 years. (Filed 19th February, 1900.)

**Claim.**—1st. The combination with a rocking device, of rock shafts connected therewith, means to retract the rock shafts, a