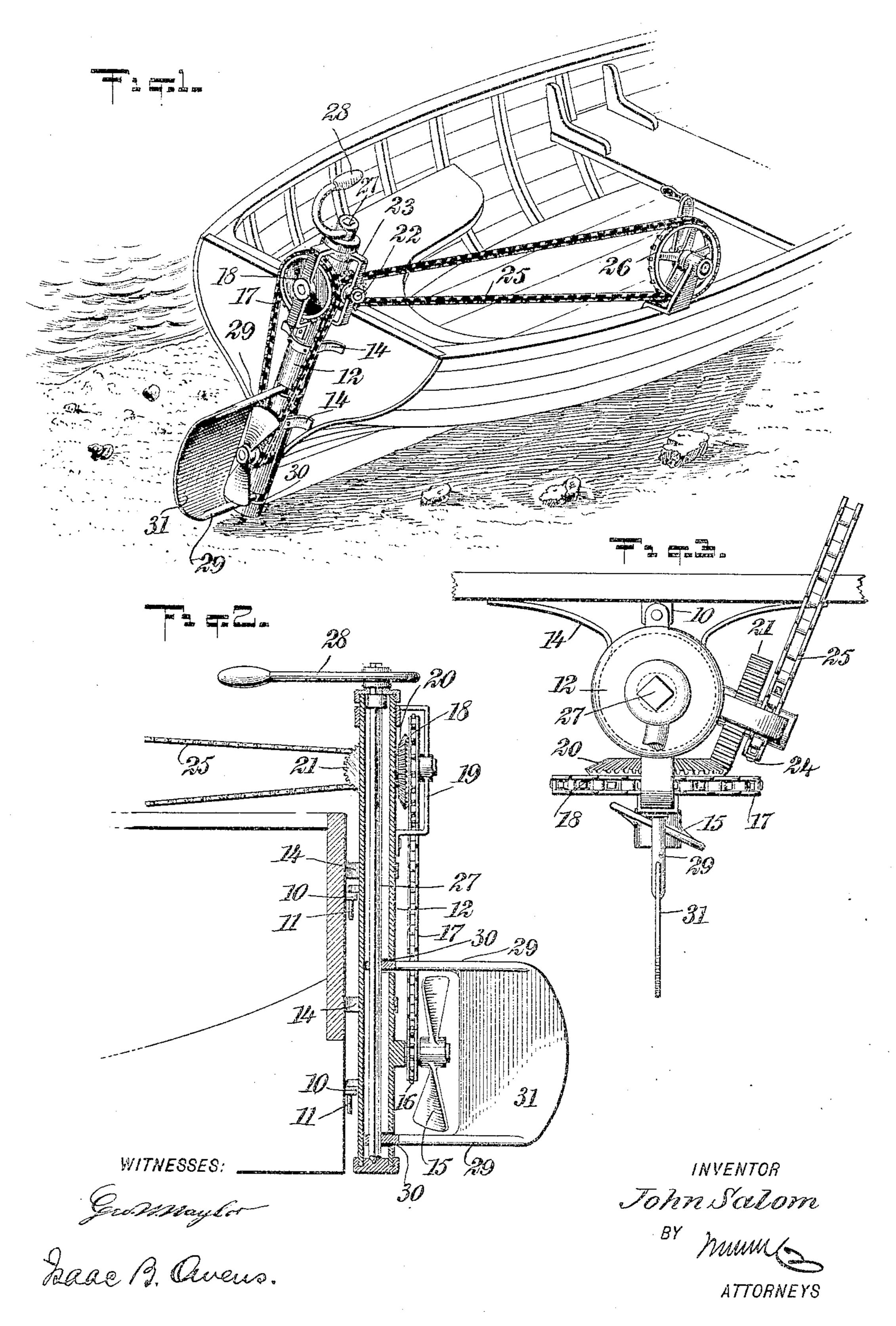
J. SALOM.
BOAT PROPELLER.
APPLICATION FILED COT. 28, 1903.



United States Patent Office.

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BOAT-PROPELLER.

SFECIFICATION forming part of Letters Patent No. 778,763, dated December 27, 1904.

Application filed October 28, 1903. Serial No. 178,869.

To all whom it may concern:

Be it known that I, John Salom, a subject of the King of Spain, and a resident of the city of New York, borough of Manhattan, in the 5 county and State of New York, have invented a new and Improved Boat-Propeller, of which the following is a full, clear, and exact description.

This invention relates to a device for propelling boats and other relatively small marine vessels by either manual or engine power: and the principal feature of the invention lies in a certain novel arrangement which enables the device to be easily and quickly applied to or removed from the transom of a boat. This adapts the mechanism particularly to boats which are to be launched frequently, and the principal advantage lies in the fact that when the boat is hauled up on the shore or in the davits of a vessel the propelling device may be removed from the transom and stowed safely away.

This specification is an exact description of one example of my invention, while the claims define the actual scope thereof

25 define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view showing my invention in operative adjustment. Fig. 2 is a vertical section thereof, and Fig. 3 is a plan view.

10 indicates the usual rudder-irons, which 35 are attached to the stern-post and transom of boats, and 11 indicates the coacting rudderirons, which are usually applied to the rudder, thus mounting the rudder. In my invention, however, the rudder-irons 11 are at-4° tached to a tubular column or support 12 and serve to mount said column, as shown in the drawings. The column 12 has transverse springs 14 attached thereto, these springs having their ends in engagement with the tran-45 som of the boat, so as to hold the column 12 yieldingly in its intermediate position. The springs 14 should be sufficiently strong to serve this purpose and yet allow the column to yield when an unusual strain is applied

thereto, thereby preventing breakage of the 50 propeller and more closely associated elements. Said column carries at its lower portion a screw-propeller 15 of any desired form. Connected to the shaft of this propeller is a sprocket-wheel 16, over which a chain 17 55 This chain extends upward to a sprocket-wheel 18, the shaft whereof is mounted in a suitable bracket 19, carried at the upper portion of the column 12. The shaft of the sprocket-wheel 18 also carries a bevel-gear 60 20, and this gear 20 is in mesh with a gear 21, mounted on a shaft 22, suitably carried in a bracket 23, also formed on or attached to the column 12 at the upper portion thereof. The shaft 22 carries also a sprocket-wheel 24, and 65 over this sprocket-wheel a chain 25 passes to any suitable source of power, it having sufficient slack to permit a lateral movement of the propeller. I have here shown a manuallyoperative device 26, mounted on the gunwale 70 of the boat or in any other convenient location. It is clear that the power from the device 26 will be transmitted by the chains 25 and 17 and their appurtenant gears to the propeller 15, thus operating the propeller 75 and driving the boat. By changing the direction of the movement of the propeller the boat may be driven forward or backward, as desired.

Mounted to turn in the hollow column 12 is 80 a shaft 27, the upper end of which is provided with a handle 28. The lower portion of the shaft 27 carries two arms 29, which play through horizontally-disposed slots 30, formed in the column, and carry the rudder-blade 31. It 85 will be seen, therefore, that the invention involves not only a propelling means, but also a steering means, and that the whole may be applied or removed whenever desired.

The advantages of this compact and effi- 90 cient propelling and steering device will, it is

thought, be apparent.

Various changes in the form, proportions, and minor details of my invention may be resorted to at will without departing from the 95 spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the intent of my claims.

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

1. The combination of a column, means for mounting it to swing on a boat, a spring for yieldingly holding the column against swinging movement, a propeller carried by the column, and means for operating the propeller.

2. The combination of a column, means for mounting the same to swing on a boat, a transversely-extending spring attached to the column and having its ends arranged to engage the boat, for the purpose specified, a propeller mounted on the column, and means for oper-

ating the propeller.

3. The combination of a column, means for mounting the same on a boat, a propeller mounted on the column, a gear mounted on the outside of the column, means for transmitting movement from the gear to the propeller, a second gear mounted on the outside of the column and meshing with the first-named gear, a sprocket associated with the second gear, a chain coacting with the sprocket, and means for driving the chain.

4. The combination of a support, means for mounting it to swing on a boat, means carried by the support and coacting with the boat for yieldingly holding said support against movement, a propeller carried by the support, and

30 means for operating the propeller.

5. The combination of a hollow column, a propeller carried thereby, means for operating the propeller, a rudder-post extending through the column, and a rudder carried by the rudder-post outside of the column.

6. The combination of a hollow column, a propeller carried thereby, means for operating the propeller, a rudder-post mounted to turn in the column, an arm attached to the post and extending through a horizontal open-40 ing in the column, and a rudder-blade attached

to the arm.

7. The combination of a hollow column, means for mounting it to swing on a boat, a spring device for yieldingly holding the column against such swinging movement, a propeller carried by the column, means for operating the propeller, a rudder-post mounted to turn in the column, an arm carried by the rudder-post and playing in a slot in the hol- 5° low column, and a rudder-blade attached to said arm.

In testimony whereof I have signed my name to this specification in the presence of two sub-

scribing witnesses.

JOHN SALOM.

Witnesses:

Isaac B. Owens, Jno. M. Ritter.