Sept. 20, 1932. K. M. GRIER 1,878,393

MOTOR BOAT TOP

Original Filed Jan. 11, 1930

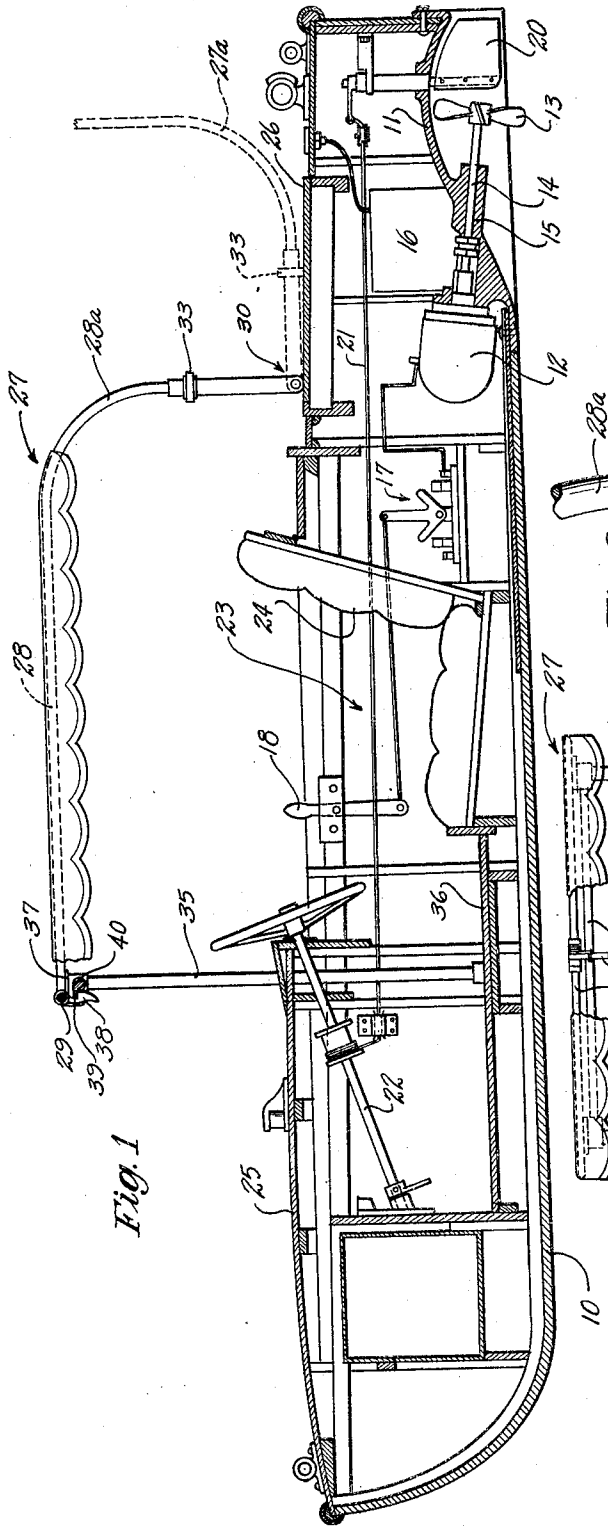


Fig. 1

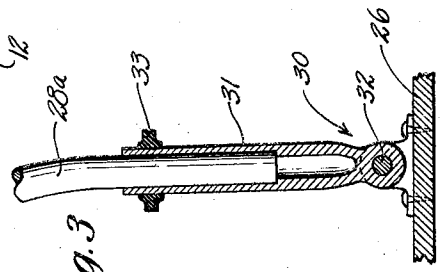


Fig. 3

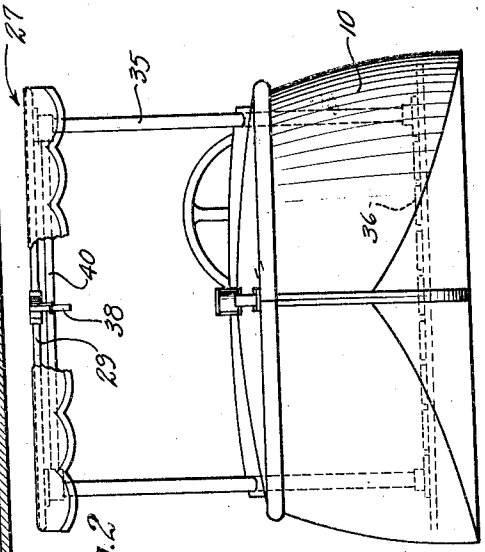


Fig. 2

Inventor
Kenneth M. Grier.

James T. Barkelew

Attorney.

Patented Sept. 20, 1932 1,878,393

UNITED STATES PATENT OFFICE

KENNETH M. GRIER, OF NORTH HOLLYWOOD, CALIFORNIA, ASSIGNOR TO KAYMO ELECTRIC SPEED BOAT CORPORATION, LTD., OF LOS ANGELES, CALIFORNIA, A CORPORATION OF NEVADA

MOTOR BOAT TOP

Original application filed January 11, 1930, Serial No. 420,114. Divided and this application filed September 18, 1931. Serial No. 563,479.

This invention relates generally to motor driven boats of a type adapted for use as rental and pleasure craft, in parks, lakes, and other similar places, the present application being divisional of my copending application Ser. No. 420,114, filed January 11, 1930, on Electric motor boats. The copending application referred to deals primarily with an electric drive for such boats and the arrangement and mounting of the drive parts upon the tunnel portion of the hull at the rear thereof; while the present invention is directed particularly to an improved form of top construction for the boat.

The general construction of boats of the present type may be described as comprising a hull having a seat containing cock-pit intermediate its ends, the hull being covered with decking forwardly and rearwardly of the cock-pit. In the course of loading and unloading passengers from such boats, the latter are drawn alongside a wharf or loading platform, the level of which ordinarily is somewhat above the top decking surface of the boat, with the result that access to and from the cock-pit of the boat is had by stepping directly down into the cock-pit or upwardly therefrom onto the wharf. It is a general purpose of the invention to provide a top structure which normally extends above and covers the cock-pit, but which is readily adjustable to permit loading and unloading of passengers without interference with the top. In accordance with the invention I have provided a top structure of a tilting type so arranged and mounted relative to the cock-pit, that the top may be tilted clear of the cock-pit to permit unobstructed entrance and exit of passengers. My improved top in its preferred form comprises a frame pivotally supported at the rear of the cock-pit, and preferably upon the decking, and suitable supporting means for the forward portion of the top at points advanced from the rear pivotal mountings, the forward supports being preferably located in front of the cock-pit.

The invention embodies numerous additional features of improvement, such for example as the particular structural characteristics of my preferred embodiment of the invention. These, however, as well as the more general characteristics of the invention above mentioned, will be most readily understood from the following detailed description. Reference is had throughout the description to the accompanying drawing, in which

Fig. 1 is a longitudinal sectional view showing a boat equipped with my improved form of top;

Fig. 2 is a front elevational view of Fig. 1, as viewed from the left; and

Fig. 3 is an enlarged fragmentary sectional view showing one of the rear pivotal supports for the top.

Referring first to Fig. 1, numeral 10 indicates the hull of the boat, the rear bottom portion of the hull being formed by a tunnel-shaped casting 11, upon which an electric motor 12, driving the propeller 13, is mounted. The propeller shaft 14 extends through an elongated bearing portion 15 of the tunnel 11, and as will be noted, by virtue of the tunnel shaped characteristics of the casting 11, the propeller 13 is substantially entirely contained therein. The motor 12 is supplied with current from a storage battery 16, and the operation of the motor in reverse directions is controlled by a switch mechanism 17 operated by lever 18 mounted within the hull at one side of the cock-pit. Rudder 20, also contained within the tunnel casting 11, is operated by way of cables 21 attached to the steering wheel shaft 22. The various advantages and novel features embodied in the illustrated tunnel casting, and the mounting of the drive motor and the propeller thereon, are fully described in my copending application, Ser. No. 420,114 and will require no further mention herein.

The cock-pit generally indicated at 23, and containing the seat 24, is located intermediate the forward and rear ends of the hull, the latter being covered by decking 25 and 26 forwardly and rearwardly of the cock-pit. A top structure, generally indicated at 27, normally extends horizontally over the cock-pit in the position shown, the top preferably being supported both at the front and rear of the cock-pit, and being tiltable about its

rear support to the dotted line position indicated at 27*a*, to permit of access to the seat 24 by stepping directly down into the cock-pit.

The top structure 27 comprises a frame having a pair of parallel side rods 28, interconnected at their forward ends by a transverse rod 29. The side frame members 28 are curved downwardly along their rear portions as at 28*a*, and have suitable pivotal connections at 30 with the decking 26 at the rear of the cock-pit, as will permit rearward tilting of the top. Although in the broad aspects of the invention any suitable type of support for the top at the rear of the cock-pit, may be had to permit such tilting movement, I preferably utilize the form of support shown in detail in Fig. 3.

The curved end portions 28*a* of the side frame rods are inserted within socket sleeves 31 pivotally attached to the decking 26 by hinged connection 32. Rubber buffer rings 33 are placed upon sleeve 31 as protection to the decking when the top is tilted back to the dotted line position of Fig. 1. As will be seen, the top 27 may be readily disconnected from its rear support 30 simply by withdrawing the side frame rods from the pivoted socket sleeves 31. The top frame is covered by a suitable fabric which is shown to extend only rearwardly to the curved portions 28*a* of the side frame rods, although the covering may be extended further down at the rear if desired.

The forward end of the top is supported on a pair of standards having footings on a raised floor 36 at the bottom of the hull. Standards 35 have enlarged flanges 37 at their upper ends, and upon which the side rods 28 of the top frame rest substantially at their juncture with the forward transverse frame member 29. From the foregoing it will be understood that the top simply rests upon the upper ends of standards 35, and that the top may be tilted rearwardly to openly expose the cock-pit, by swinging the top to a position of rest on the rear decking 26 as shown by the dotted lines 27*a*.

I preferably provide means for releasably securing the top against being tilted backward as a result of wind pressure directed against its under side. As typical of such means I show a spring pressed latch 38 adapted to engage a forward projection 39 carried on a rod 40 extending between the standards 35 directly below the forward frame member 29. As will be seen, as the top is swung down to a position of rest upon standards 35, the latch 38 automatically engages lug 39 to prevent raising of the top until the latch is manually released. Latch 38 preferably is located centrally of the forward end of the top so as to be readily accessible to an attendant on the wharf from either side of the boat.

While I have chosen to describe the invention in connection with a particular and preferred embodiment thereof as shown in the drawing, it is to be understood that in its broader aspects, the invention is not to be regarded as limited to the particular features shown and described and that the invention is to be regarded as limited only in respect to those limitations expressed in the appended claims.

I claim:—

1. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, means for supporting said top on the decking at the rear of the cockpit, said top being tiltable rearwardly of the cock-pit to permit access thereto, and a pair of standards extending above the decking at the front of the cockpit and supporting the forward portion of the top.

2. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top comprising a frame having a pair of side rods interconnected at their forward end by a transverse rail, means for pivotally and releasably supporting said side rods on the decking at the rear of the cockpit, and a pair of standards extending above the decking at the front of the cockpit and supporting the forward edge of the top.

3. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top having a frame comprising a pair of side rods, the rear portions of which are curved downwardly to the decking at the rear of the cockpit, means for attaching said curved portions of said side rods to the decking to permit tilting of the top rearwardly of the cockpit, and means for supporting said top at points forwardly of the rear of the cockpit.

4. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top having a frame comprising a pair of side rods, the rear portions of which are curved downwardly to the decking at the rear of the cockpit, means for attaching said curved portions of said side rods to the decking to permit tilting of the top rearwardly of the cockpit, said means comprising a pair of socket tubes pivotally attached to the decking and receiving the ends of said frame rods, and means for supporting said top at points forwardly of the rear of the cockpit.

5. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top having a frame comprising a pair of side rods, the

rear portion of which are curved downwardly to the decking at the rear of the cockpit, means for attaching said curved portions of said side rods to the decking to permit tilting of the top rearwardly of the cockpit, said means comprising a pair of socket tubes pivotally attached to the decking and receiving the ends of said frame rods, and a pair of standards extending above the decking forwardly of the cockpit and supporting the front portion of the top.

6. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, means for supporting said top on the decking at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, a pair of standards extending above the decking at the front of the cockpit and supporting the forward portion of the top, a transverse member interconnecting said standards, and means for releasably attaching the top to said transverse member.

7. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top having a frame comprising a pair of side rods, the rear portion of which are curved downwardly to the decking at the rear of the cockpit, means for attaching said curved portions of said side rods to the decking to permit tilting of the top rearwardly of the cockpit, said means comprising a pair of socket tubes pivotally attached to the decking and receiving the ends of said frame rods, a pair of standards extending above the decking forwardly of the cockpit and supporting the front portion of the top, a transverse member interconnecting said standards, and means for releasably attaching the top to said transverse member.

8. In a boat of the character described, a hull and decking on said hull, a cockpit within the hull, a top extending above said cockpit, means for pivotally supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and means for supporting said top independently of the first mentioned supporting means at points forward of said pivotal supports, said top comprising a pair of rigid side members having vertically extending rear portions adapted to be supported on the decking at the rear of the cockpit when the top is tilted rearwardly, said members extending forwardly to said supporting means.

9. In a boat of the character described, a hull and decking on said hull, a cockpit within the hull, a top extending above said cockpit, means for pivotally supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and means for supporting the forward portion of said top at the front of said cockpit, said top comprising a pair of rigid side members having vertically extending rear portions adapted to be supported on the decking at the rear of the cockpit when the top is tilted rearwardly, said members extending forwardly to said supporting means.

10. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat at top extending above said cockpit, said top having a rigid frame, means for supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and a pair of top supporting standards projecting above the cockpit at the front thereof.

11. In a boat of the character described, a hull and decking on said hull, a cockpit within the hull, a top extending above said cockpit, means for pivotally supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereo, and means for supporting said top independently of the first mentioned supporting means at points forward of said pivotal supports, said top being disengageable from said supporting means.

12. In a boat of the character described, a hull and decking on said hull, a cockpit within the hull, a top extending above said cockpit, means for pivotally supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and means for supporting the forward portion of said top at the front of said cockpit, said top being disengageable from said supporting means.

13. In a boat of the character described, a hull and decking on said hull, a cockpit intermediate the ends of the boat, a top extending above said cockpit, said top having a rigid frame, means for supporting said top at the rear of the cockpit, said top being tiltable rearwardly of the cockpit to permit access thereto, and a pair of top supporting standards projecting above the cockpit at the front thereof, said top being disengageable from said standards.

In witness that I claim the foregoing I have hereunto subscribed my name this 21st day of July, 1931.

KENNETH M. GRIER.

CERTIFICATE OF CORRECTION.

Patent No. 1,878,393. September 20, 1932.

KENNETH M. GRIER.

It is hereby certified that error appears in the printed specification of the above numbered patent requiring correction as follows: Page 3, line 77, claim 10, for "at" read "a"; and line 91, claim 11, for the misspelled word "thereo" read "thereto"; and that the said Letters Patent should be read with these corrections therein that the same may conform to the record of the case in the Patent Office.

Signed and sealed this 27th day of December, A. D. 1932.

M. J. Moore,
Acting Commissioner of Patents.

(Seal)