My invention relates to propeller attachments to motor boats and has a particular reference to arrangements in which the motor shaft is located higher than the propeller shaft. The object of my invention is to provide a convenient means for transmitting power from the motor shaft to the propeller shaft when the motor shaft is located too high to be directly connected with the propeller.

In ordinary motor boats the motor is usually placed at a certain distance from the stern and often amidship, in an inclined position, so as to bring its shaft extension below the bottom of the boat to be direct connected with the propeller. This arrangement requires a special hull construction.

With my arrangement the motor can be placed in a hull of an ordinary construction, for instance, in a row boat and at the stern with the shaft extending outside. I provide a special bracket which can be attached to the stern of the boat, with a reduction drive to transmit the power from the motor shaft to the propeller below.

The same bracket which supports the propeller also supports the rudder. Another object of my invention is to provide an arrangement whereby the propeller and the rudder are prevented from getting damaged in case when the boat strikes the bottom in a hollow place.

For this purpose I mount the propeller bracket on a hinge from the stern and extend the bracket below the propeller and the rudder. A breakable clamp or similar connection retains the bracket in an operating position until the propeller strikes the bottom. The safety clamp or connection then breaks, allowing the bracket with the propeller and the rudder to become deflected or swung out.

The bracket can be also raised when it is desired to pull the boat ashore.

My invention is more fully described in the accompanying specification and drawing in which—Fig. 1 is a sectional elevation of my device, and Fig. 2 is an elevation of same in an inoperating or raised position.

My attachment consists of a bracket 1 pivotally supported on a pin 2 on an extension 3 on the stern 4 of a boat 5. The bracket is hollow inside and has bearings for a jack shaft 6 and for a propeller shaft 7. These shafts have sprockets 8 and 9 connected by a chain 10. It is understood, of course, that any other suitable transmission can be used, for instance, bevel gears with intermediate shaft between them.

The propeller shaft supports a propeller 11, and the jack shaft has a tapered extension 12 with splines or keys 13. This extension fits into a socket 14 at the end of a shaft 15 of an internal combustion motor 16 supported in the boat 5. The plug 12 with the socket 14 form a detachable coupling for transmitting power from the motor to the propeller through the jack shaft.

A hook 17 is pivoted on a pin 18 on the bracket 1 and is adapted to engage an eye 19 on the boat. This hook keeps the bracket 1 in an operating position. The hook itself and its pin 18 are made sufficiently strong to retain the bracket in its operating position under ordinary condition when the power from the motor is transmitted to the propeller, but they will break if a greater strain is imposed, for instance, if the lower extension 20 of the bracket 1 strikes the bottom. The hook or its pin then break allowing the bracket with the propeller to swing out on the hinge 2 into inoperating position as shown in Fig. 2. The coupling becomes disconnected by simply pulling apart the plug 12 and the socket 14.

A rudder 21 is mounted on the bracket 1 and can rotate with its shaft 22 in bearings 23. Its upper end is pivotally connected with a rod 24 slidably fitted in a tube 25.

The end of the tube 25 is held in a rod or rope 26 connected with a steering wheel. Its position remains unchanged when the rudder with the bracket 1 are raised into inoperating position.

My propeller attachment has important advantages that it can be attached to any ordinary boat in connection with an ordinary motor placed on the bottom of this boat, also that it is not necessary to make a special shaft.
installation under the bottom of the boat. Another important advantage is that the propeller and the rudder can be raised when it is desired to beach the boat or to pull it out on the shore. The propeller and the rudder also automatically become raised out of the way if the boat strikes a shoal, the propeller being fully protected from a damage in such cases.

I claim as my invention:

In a propeller attachment for a boat, the combination with a bracket, of a propeller rotatively mounted in said bracket, said bracket extending below said propeller, a hinged connection between the upper portion of said bracket and the stern of a boat, an operative connection between said propeller and a motor in said boat, a releasable means to retain said bracket in its operative position, a rudder operatively supported in said bracket, said rudder being adapted to be raised together with said propeller on said hinged connection, and a telescoping member connecting said rudder with the steering wheel on said boat, said telescoping member being adapted to maintain an operative connection between said rudder and said steering wheel when said bracket is raised on said hinged connection.

In testimony whereof I affix my signature.

GUSTAV NEUMANN.