

No. 835,530.

PATENTED NOV. 13, 1906.

J. N. HUFF.
BOAT.

APPLICATION FILED APR. 21, 1906.

2 SHEETS—SHEET 2.

FIG. 5.

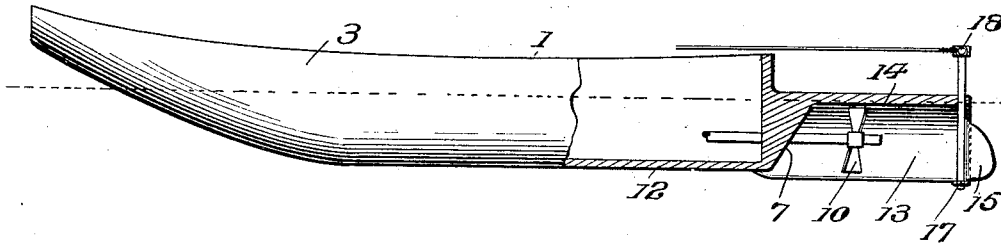


FIG. 6.

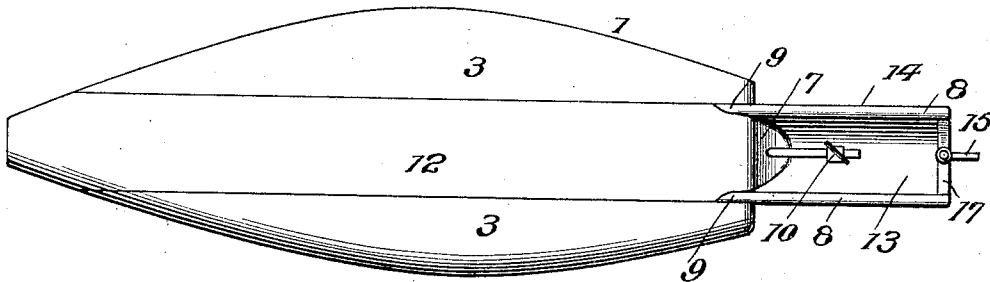
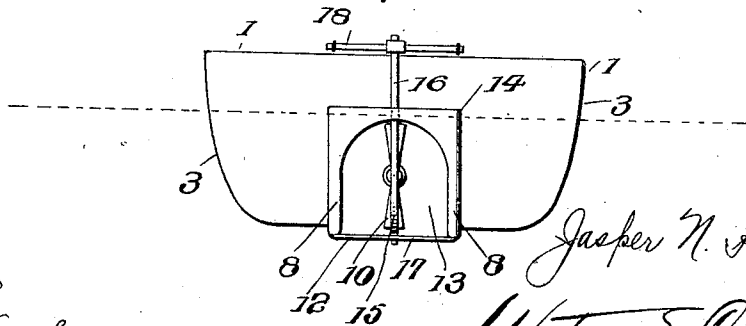


FIG. 7.



Witnesses

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UNITED STATES PATENT OFFICE.

JASPER N. HUFF, OF CONFLUENCE, KENTUCKY.

BOAT.

No. 835,530.

Specification of Letters Patent.

Patented Nov. 13, 1906.

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To all whom it may concern:

Be it known that I, JASPER N. HUFF, a citizen of the United States, residing at Confluence, in the county of Leslie and State of Kentucky, have invented certain new and useful Improvements in Boats, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in boats, and more particularly to that kind adapted for navigation on swift but shallow mountain-rivers and the like.

One object of the invention is to provide a flat-bottom boat with a screw-propeller so mounted that it will lie above the plane of the bottom of the boat to enable the latter to be used in very shallow water, and so mounted that the least possible space in the boat will be occupied by the propelling mechanism.

Another object of the invention is to improve and simplify the construction and operation of boats of this character, and thereby render the same more durable and efficient and less expensive.

Other objects and advantages of my invention, as well as the structural features by means of which these objects are attained, will be made clear by an examination of the specification, taken in connection with the accompanying drawings, in which the same reference characters denote corresponding parts throughout the several views, and in which—

Figure 1 is a vertical longitudinal sectional view through my improved boat. Fig. 2 is a bottom plan view of the same. Fig. 3 is a detail sectional view showing two propellers mounted in the chamber in the bottom of the boat. Fig. 4 is an elevation of the rear end or stern of a boat, showing two chambers in its bottom. Fig. 5 is a view similar to Fig. 1, showing the screw-propeller chamber mounted in an extended portion of the bottom of the boat to provide more space within the latter. Fig. 6 is a bottom plan view of the boat shown in Fig. 5, and Fig. 7 is an elevation of the rear end or stern of the boat shown in Figs. 5 and 6.

Referring to the drawings by numeral, 1 denotes a boat having a flat bottom composed of a broad, flat, centrally and longitudinally disposed timber or plank 2 and a plurality of planks or boards 3, which are secured to the sides and ends of the boat, the seams or joints between the planks being packed and treated

in the usual manner to render the boat watertight. The central plank 2 is preferably formed from a single piece of timber, as shown, and has at its rear, upon its upper side, an enlarged portion or block 4, which is hollowed upon its underside to form a bottomless chamber 6. The latter is open at its rear end, and its front wall or end is inclined upwardly and rearwardly, as at 7. Its side walls 8 extend downwardly beneath the plane of the bottom of the plank 2 and hence of the boat, and their front ends have their lower portions flared outwardly, as shown at 9, so as to deflect the water into the chamber 6. The normal level of the water in the latter is below its top, but owing to the inclination of the end wall 7 and the flared portions 9 of the side walls 8 the water will be caused to entirely fill said chamber when the boat is in motion, and thus surround a screw-propeller 10, which is located therein. The level of the water when the boat is in motion is indicated by the dotted lines in several of the views in the drawings. The propeller, which may be of any suitable form and construction, is mounted on a shaft 11, projecting into the boat and operated by a gas-engine or a motor of any description, and, if desired, two propellers may be mounted upon the same shaft, as shown in Fig. 3. If desired, I may also provide two or more of the chambers at the rear of the boat, as shown in Fig. 4, and mounted one or more propellers in each chamber.

In Figs. 5, 6, and 7 of the drawings I have shown another modification of the invention in which the central plank or timber 12 is extended beyond the rear end or stern of the boat, and the chamber 13 is formed in the enlargement or block upon this extended portion 14. The construction of the chamber in this form of the invention is identical with that of the chamber 6, previously described, and its operation is also the same. By providing the chamber in this extended portion 14 of the timber 12 it will be seen that more space may be provided within the boat for the motor, gasoline-tanks, and the like.

A rudder 15 of any suitable form is preferably mounted at the rear of the chamber 2 or 13. As shown in Figs. 5, 6, and 7, it is secured upon a vertical shaft 16, which extends through a bearing in the rear of the top of the portion or extension 14, and has its lower end mounted in a transverse bearing plate or bar 17, which connects the side walls of the cham-

ber 13 at their lower rear ends. Upon the top of the shaft 16 is a cross-bar 18, by means of which the same is oscillated to swing the rudder.

5 The construction, operation, and advantages of the invention will be readily understood from the foregoing description, taken in connection with the accompanying drawings. By mounting the propeller in the chamber
10 above the plane of the bottom of the boat the latter may be used in very shallow water, and there is but little danger of the propeller-wheel becoming clogged with weeds and vegetable growth in the water.

15 Various changes in the form, proportion, and minor details of construction may be resorted to without departing from the spirit or sacrificing any of the advantages of the invention as defined by the appended claims.

20 Having thus described my said invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A boat having in its bottom a longitudinal plank or timber formed with an integral
25 enlarged portion projecting beyond the rear end of the boat and provided with a propeller-chamber, the latter having an open bottom and rear end, an upwardly and rearwardly inclined front end wall and parallel
30 side walls having portions extended below

the plane of the bottom of the boat and flared outwardly at their front ends to direct the water into said chamber, substantially as shown and described.

2. A boat having in its bottom a longitudinal
35 plank or timber formed with an integral enlarged portion projecting beyond the rear end of the boat and provided with a propeller-chamber, the latter having an open
40 bottom and rear end, an upwardly and rearwardly inclined front end wall and parallel side walls having portions extended below the plane of the bottom of the boat and
45 flared outwardly at their front ends to direct the water into said chamber, a shaft extending through the front end wall of said chamber, a screw-propeller upon said shaft in said
50 chamber, a cross bar or plate connecting the lower rear portions of the side walls of said chamber, a vertical shaft journaled in said cross-bar and in the top of said chamber, and a rudder upon said vertical shaft, substantially as shown and described.

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

JASPER N. HUFF.

Witnesses:

HARRISON CAMPBELL,
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