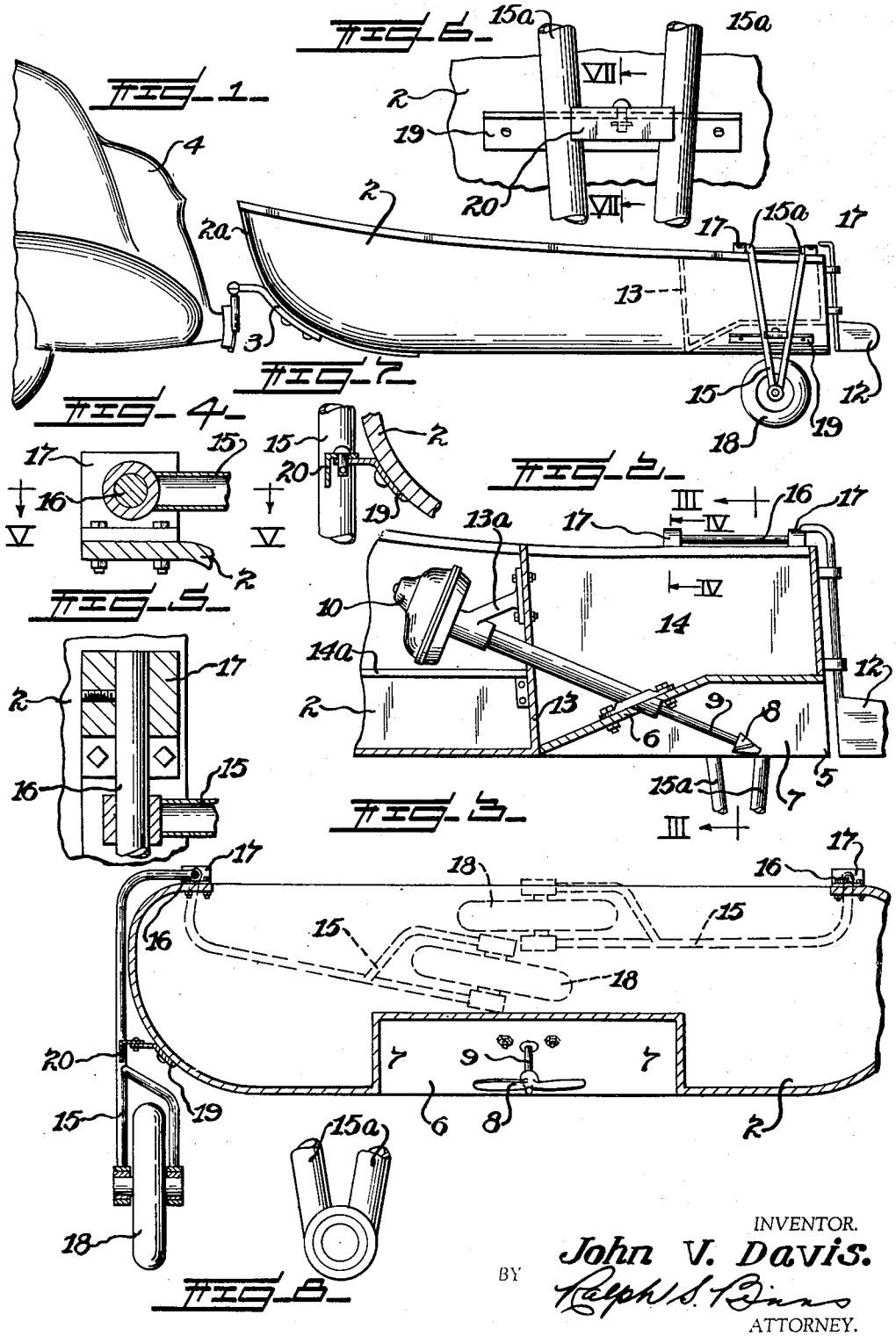
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BOAT AND TRAILER CONSTRUCTION

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BOAT AND TRAILER CONSTRUCTION

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2 Claims. (Cl. 9—1)

My invention relates to boats and an object of my improvements is an improved construction adapting a boat to be used as a trailer for automobiles.

I secure this object in the apparatus shown in the accompanying drawing in which:

Fig. 1 is a side elevation of a boat embodying my invention and so much of an automobile as is necessary to show its connection therewith;

Fig. 2 is a longitudinal section of the rear portion of the boat shown in Fig. 1;

Fig. 3 is a cross-section on the line III—III, Fig. 2;

Fig. 4 is a detail section on the line IV—IV, Fig. 2;

Fig. 5 is a section on the line V—V, Fig. 4;

Fig. 6 is a detail elevation illustrating the way of securing the wheel bracket in operative position;

Fig. 7 is a detail section on the line VII—VII, Fig. 6; and

Fig. 8 is a detail elevation showing the support for the wheel.

2 indicates the hull of the boat, 2*a* indicates a strengthening iron, supporting the bow and the fore-part of the keel, and 3 (Fig. 1) is an iron at the bow by which the boat can be attached to an automobile 4 for towing.

The bottom of the hull extends to its rear end at both sides without curving upward, as indicated at 5—5 but is curved upward between the two sides as shown at 6, Figs. 2 and 3, to form the well 7—7.

8 is the propeller having a shaft 9 which extends from the power plant 10 rearwardly and downwardly through a bearing at the upwardly sloping portion 6 of the bottom so that the propeller 11 is positioned within the well 7.

12 is the rudder, its lower edge being located at or a little above the level of the bottom of the boat at 5.

13 is a partition extending transversely across the interior of the hull at above the position where the bottom begins to rise to form the well 7. 13*a* is a bracket secured to the partion 13 and supporting a bearing for the propeller shaft. The partition 13 forms a compartment 14 at the stern of the boat. 14*a* is a seat for the operator. 15 is a bracket supporting a wheel 18 at its outer end, and at its inner end secured to a shaft 16 which bears in lugs 17—17 secured to the upper edge of the side of the boat at the rear thereof so that the bracket shall swing in a vertical plane transverse to the hull of the boat. The bracket 15 is preferably formed of two tubes 15*a* united to form a bearing at its lower end as shown in Figure 8 and diverging upward to the shaft 16.

There is a bracket 15 on each side of the hull and they turn inward when not in use, to be stored in the compartment 14 upon the portion of the bottom of the boat that rises to form the well 7 as shown in broken lines in Figure 3.

19 is a securing bracket, which is secured to the outside of the hull 2 in position to secure the bracket 15 in operative position. Said bracket has a flange extending horizontally outward and there is a bolt hole extending vertically through said flange. 20 is a locking bar L-shaped in cross-section at its center and adapted to engage the tubes 15*a* at its ends. When the bracket 15 is in operative position, the bar 20 is adjusted so that a hole in its horizontal portion registers with the bolt hole in the flange of the securing bracket 19 and its ends engaging outside of the tubes 15*a*—15*a*, and a bolt is passed through said registering holes.

The operation of the above described apparatus is as follows:

When the boat is used upon the water, the brackets 15 and wheels 18 are turned upward and inwardly and stored in the compartment 14 as indicated in Figure 3. When it is to be used as a trailer, the brackets are turned outward so that each of the wheels 18 engages the road in an approximately vertical plane, and the locking bar 20 is adjusted to place (Fig. 6) thus securing the wheels in operative position.

The bow of the boat is secured to the automobile in towing position holding it above the clear of the road bed.

The propeller and shaft are in the well 7 above the level of the bottom of the boat so that they will pass over without striking any obstruction while remaining in position adapted to drive the boat when in the water. The shape of the bottom over the well 7, in longitudinal section, is such as to conform, approximately, to the "stream-line," or motion of the passing water, as is the practice in such constructions. It is conventional to have a compartment 14 at the rear of a boat which is usually used for storage and is covered by the rear deck. Therefore the rising of the bottom to form the well 7 does not diminish the available space for the main purpose of the boat. The partition 13 and the rising portion of the bottom form a good bearing support for the propeller shaft, and the arrangement of the shaft brings it within the storage space of the compartment 14—largely under the stored wheels. When used as a boat, the land-

gear need not show at all. The boat construction shows no divergence from the conventional and the arrangement is well adapted to use as a trailer when adjusted for the latter purpose.

I claim:

1. In combination, a boat hull, a towing attachment at the forward end of said hull, a pair of brackets having supporting wheels journalled at the outer ends thereof, means pivotally attaching the inner ends of said brackets to the opposite sides of said hull at the rear end of said hull so as to swing upward and inward moving in a plane transverse to said hull so as to be stored therein, or outward and downward by transverse movement to support said hull in traveling relation, locking means for firmly securing the wheel brackets in downturned operative positions, said hull having a transverse partion forming a compartment at the rear end of said hull adapted to receive and store said wheels and brackets, the bottom of said hull being continued at the sides to the rear end of said hull without curving upward, and intermediate said sides being curved upward forming a well beneath said compartment opening at the rear end of said hull.

2. In combination, a boat hull, a towing attachment at the forward end of the hull, a pair of brackets having supporting wheels journalled at their outer ends, means pivotally attaching the inner ends of said brackets to opposite sides of said hull at the rear end of said hull so as to swing upward and inward, moving in a plane transverse to said hull so as to be stored therein, or outward and downward transversely to support said hull in traveling relation, locking means for firmly securing the wheel brackets in the operative down turned position, said hull having a transverse partition forming a compartment at the rear end of said hull adapted to receive and store said wheels and brackets, the bottom of said hull being continued at the sides to the rear end of said hull without curving upward, and intermediate said sides being curved upward forming a well beneath said compartment opening at the rear end of said hull, and a propeller-shaft bearing in said partition and the bottom of the boat where it rises to form said well and locating the propeller in said well.

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