

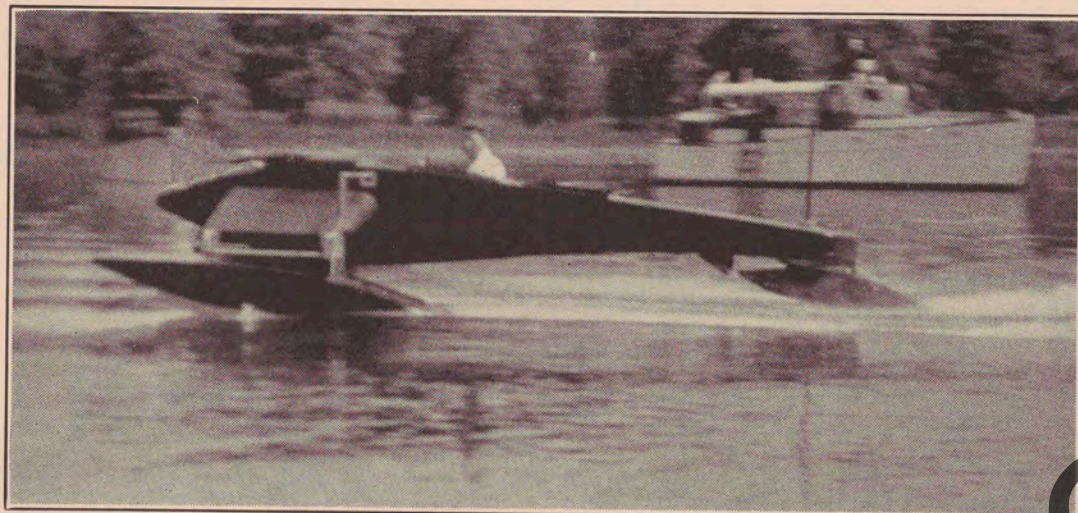
A REVELATION IN WATER TRAVEL

A new type of water vehicle, embodying airplane-control, aerodynamic-streamlining and automobile riding comfort.

SPEED

SAFETY

COMFORT



PATENTED

EXCLUSIVE

FEATURES

Original Test Boat Planing at Full Speed

The Aerodynamic Boat

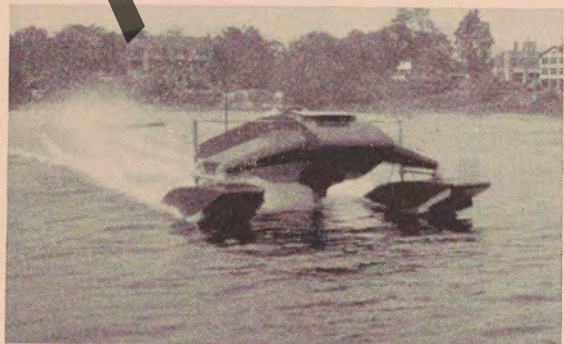
BOATING POPULARITY

One of the oldest means of transportation, after centuries of retarded development, now steps out of the "ox-cart age" to become a member of the modern fleet of fast, safe and comfortable transportation units, comprising Streamlined Airplanes, Streamlined Trains, Streamlined Automobiles and STREAMLINED BOATS.

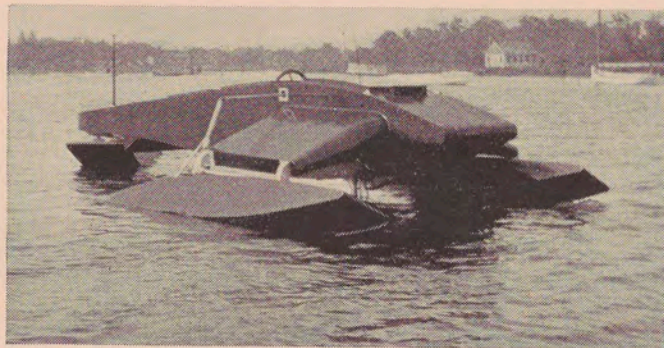
Boating is becoming more and more popular each year. Because of traffic conditions, innumerable accidents and congestion on our motor car highways, thousands are now turning to motor boating for greater thrills, safety, recreation and commuting. Millions of dollars are spent annually on motor boats. In the United States last year's increase in Federally registered motor boats alone was more than 14,500 compared to an increase of about 5,000 for 1932. Government figures reveal there was more than 300,000 such craft, which ply Federal waterways, in use on January 1, 1935. Add to these Federally registered boats the thousands of unnumbered craft turned out each season on lakes and rivers all

over the country and you have a tremendous potential market which will continue to grow year by year. The boating industry is entering an era of wide expansion similar to that afforded the motor car industry about twenty years ago. Mass production, sales, distribution and service will follow the example set by the automobile industry. To promote increasingly greater interest in boating and to meet the standards of speed, safety and comfort set by modern automobiles an entirely new type of water vehicle is being developed which, in addition to high speed, will provide greater safety and greater riding-comfort than has heretofore been obtainable with any ordinary types of boats.

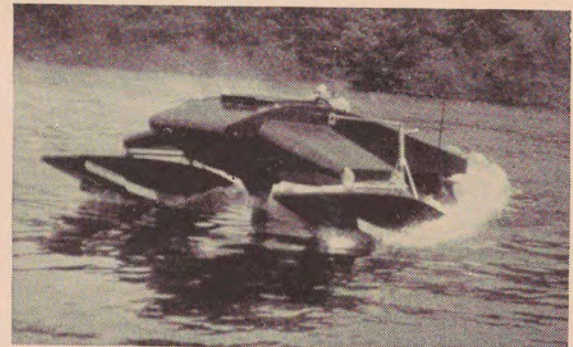
(Whether or not you are a boating enthusiast, an owner or a prospective purchaser, you should keep posted and informed regarding all improvements or changes in the various fields of transportation. This folder explains the unique and patented features of a remarkable new type of water vehicle which embodies aerodynamic, hydrodynamic and automotive engineering to provide greater Speed, Safety and Comfort in water travel.)



Front View, at Full Speed



At Rest, Showing Floats "Banked"



Turning at Full Speed

The Aerodynamic Boat

Thomas A. Edison Lake is the inventor of this new type of water vehicle, technically described as a "Pontoon-hydroplane Boat" in United States Patent No. 1,846,602 under which The Aerodynamic Boat Corporation has an exclusive license covering manufacturing and sales rights. This invention is the result of deliberate research and development to produce a type of boat not subject to the dangers of ordinary speed-boats, their lack of comfort and therefore restricted marketability, but instead to provide a type of boat that insures safety, comfort and speed to such a degree as to greatly increase its marketability—engineered for mass production instead of being limited to old-fashioned boat building methods, sales and distribution.

Mr. Lake's original experimental model was exhibited at the National Motor Boat Show in New York where it created tremendous interest among naval architects, engineers and thousands of visitors and boat buyers. The inventor was invited to describe his invention before the Society of Automotive Engineers in New York and the original craft was shown in newsreel moving pictures in this country and abroad, besides being described and illustrated by newspapers and magazines all over the country.

The Aerodynamic Boat is not a "freak" design, but instead is a practical application of aeronautic and automotive principles combined with fundamental boat design to provide a type of water vehicle having valuable and exclusive features not found in any other known type of speed-boat or means for water transportation. It is not an untried invention. It is a practical and proven development which has thoroughly demonstrated all of its special and patented features. Broad and basic Patent Rights have been granted to the inventor.

The Aerodynamic Boat does not resemble the ordinary boat in appearance. It is more like an airplane using hydroplane floats instead of wings, or it may be referred to as an automobile having hydroplane floats in place of wheels. Its steering and "banking" features are similar to the control of

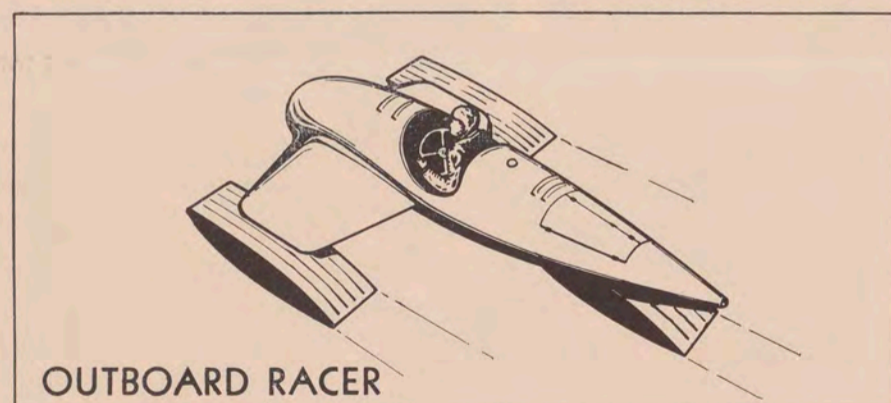
an airplane in flight. Its body design, appointments and riding comfort are not unlike the modern automobile. The use of a water-chassis to which various styles of bodies may be attached is in direct line with automobile practice. The streamlining of the bodies follows present day efforts to reduce the air resistance of all types of vehicles to enhance speed performance.

The main features of this development are the separation of the body and the floatation system to permit of more efficient and individual treatment with regard to the mediums (air or water) in which they operate, to provide resilient shock-absorbing connections for riding-comfort, the three-point contact with the water for greater stability and safety, and the banking and steering of the hydroplane floats to prevent skidding or capsizing when making sharp turns at full speed.

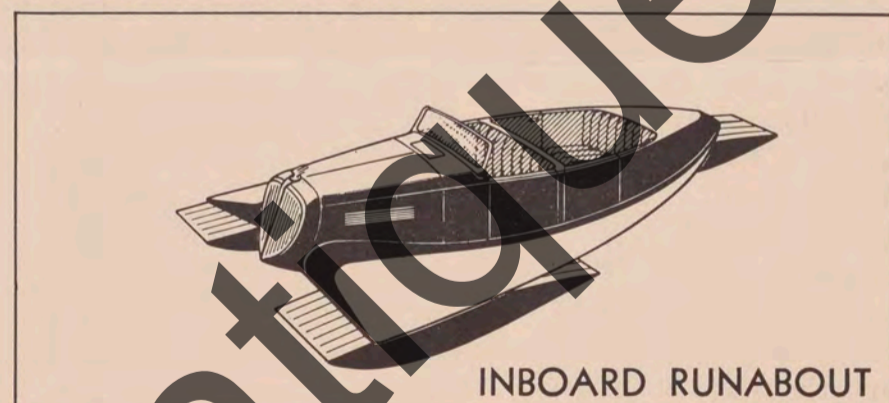
There is no limit to the size or use of these craft. However, it is believed that their greatest market will be in sizes matching the seating capacity and power of modern automobiles, ranging from small outboard-motor powered racers to large inboard-motor powered sedans and commuters as well as water taxis. Special high-powered racers may be built and a wide variety of bodies may be designed for both the outboard and inboard powered chassis. Portable models may be built with retractable or detachable wheels to permit such craft being towed overland behind an automobile to various water resorts or racing meets.

The craft may be powered with airplane motors and propellers for use on very shallow water. They can be designed for military use—the wide spread of the floats providing a very steady platform upon which to mount a gun or from which to launch an airplane. Future developments may include designs for fast overseas transportation and large cruisers. Airfoils may be added for increased lift and partial flight. Combination land, air and water vehicles are also a possibility for future development.

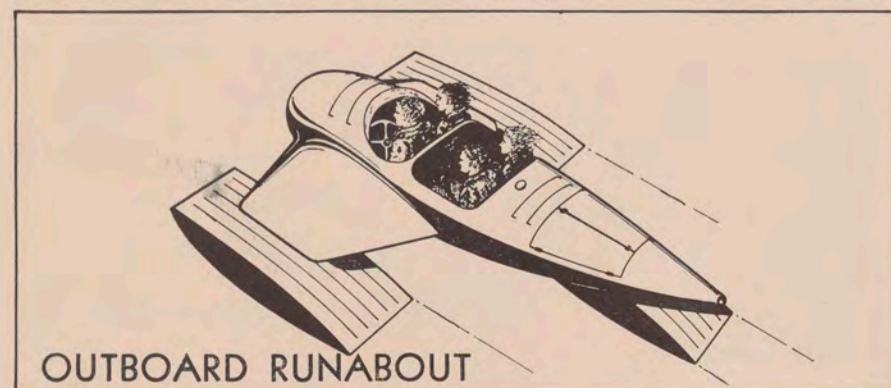
SOME ADAPTATIONS OF AERODYNAMIC BOATS



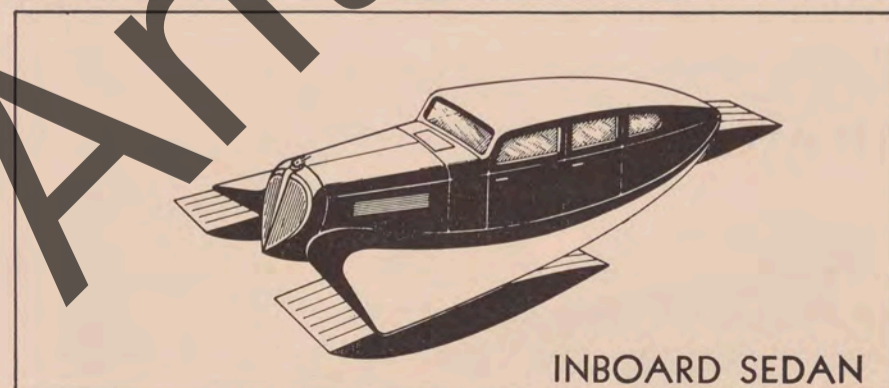
OUTBOARD RACER



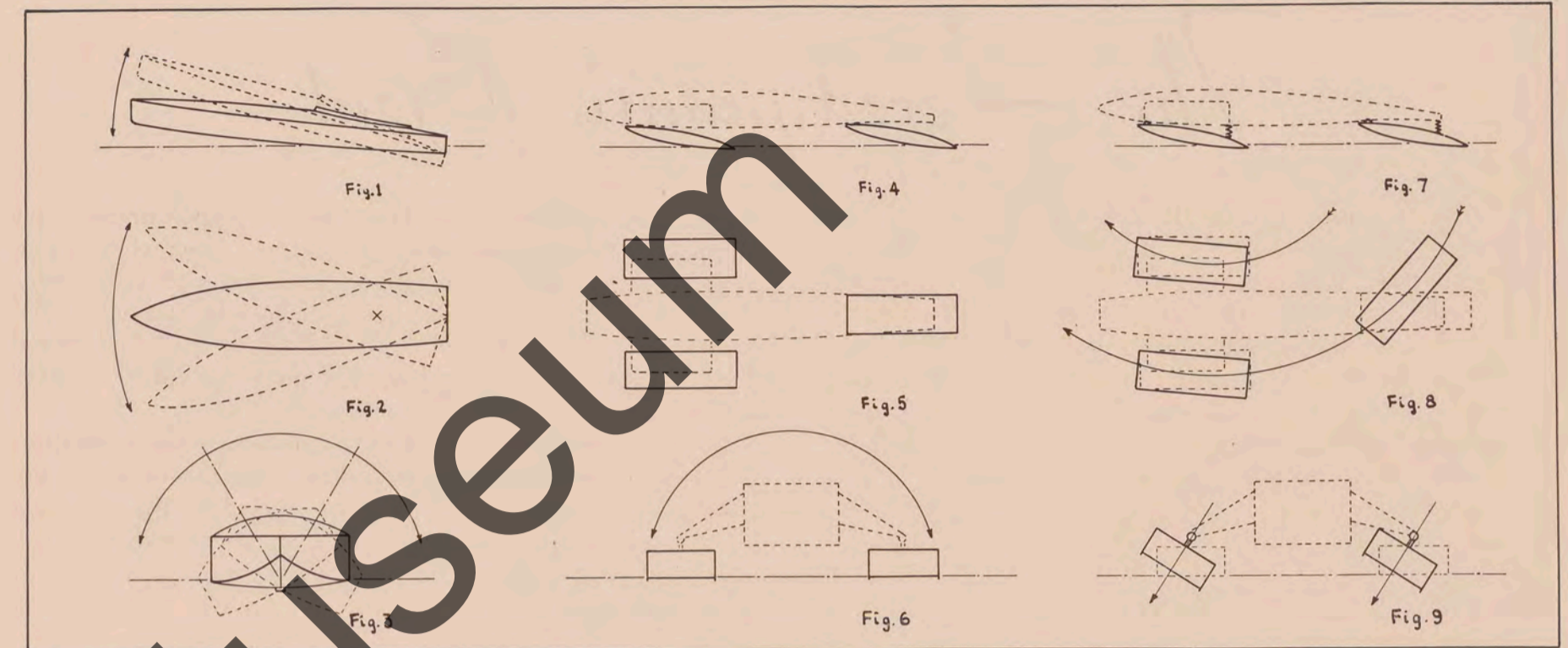
INBOARD RUNABOUT



OUTBOARD RUNABOUT



INBOARD SEDAN



DIAGRAMMATIC SKETCHES ILLUSTRATING SPECIAL FEATURES OF THE AERODYNAMIC BOAT

In the above sketches Figs. 1, 2 and 3 illustrate an ordinary type of speed-boat, for comparison with the special features of the Aerodynamic Boat illustrated in Figs. 4 to 9 inclusive. The dot and dash line represents the water-line in each case. In Figs. 4 to 9 inclusive, the body portion is dotted in to more clearly indicate the positioning of the hydroplane floats (heavy lines) and their adjustments.

ORDINARY SPEED-BOAT:

Any ordinary or conventional type of boat may be considered safe enough and comfortable enough at slow speed. The danger and lack of comfort increases with higher speed. Ordinary boats at high speed are lacking in inherent stability—particularly when making turns and when traveling over rough and choppy water. They undergo great structural stress and their terrific pounding and vibration afford the passengers no comfort. As illustrated in Fig. 1, an ordinary boat at high speed raises its bow and contacts the water in a concentrated area at the stern. The bow jumps and pitches, as indicated by the dotted lines and the arrow, causing the hull to pound and slap the water. Since there is no separation between the body and the planing surface all the vibration and pounding is transmitted to the passengers. The uncontrollable and constantly changing planing angle of the hull, together with the jumping and pounding, lessens the speed possibilities of such craft. Fig. 2 represents a bottom view of the same boat. At speed it contacts the water at "X" and the arrow and dotted lines indicate how it has a tendency to yaw or swing from side to side, making it hard to hold to any desired course and always in danger of suddenly changing its course with disastrous results. Fig. 3 represents an enlarged bow view of the same boat, indicating by the arrow and the dotted lines how, since it contacts the water in the center, it is free to roll and when taking turns at speed is very apt to capsize due to insufficient lateral stability.

THE AERODYNAMIC BOAT:

Figs. 4 to 9 inclusive illustrate the special features of the Aerodynamic Boat. For a direct comparison note how, in Figs. 4, 5 and 6, there are three separate planing surfaces in constant contact with the water instead of only one concentrated area of contact as in Figs. 1, 2 and 3 illustrating an ordinary type of boat. The Aero-

dynamic Boat, as illustrated in Figs. 4 to 9 inclusive, would have much greater longitudinal and lateral stability with no greater buoyancy, displacement or planing surface than the ordinary type of boat illustrated in Figs. 1, 2 and 3. The Aerodynamic Boat has inherent stability and the three floats maintain three-point contact with the water whether the craft is at rest or planing at full speed. Fig. 6 is an enlarged front view showing the wide spread between the floats and how the body is supported above the water. It is practically impossible to capsize the Aerodynamic Boat and there is no tendency to pitch and jump or yaw and swing from side to side as is the case with the boat illustrated in Figs. 1 and 2. Figs. 7, 8, and 9 illustrate the steering and banking features as well as the cushioning connections between the floats and the body. (A general description and explanation follows.)

STREAMLINED BODIES and WATER CHASSIS:

One important feature of The Aerodynamic Boat is the separation of the body from the floatation system. (In ordinary boats the hull and body is a single structure.) Separation of the two permits of complete aerodynamic-streamlining of the body independent of the floatation system itself. It also permits of a standardized water-chassis to which may be attached a variety of streamlined bodies—either open or closed models—similar to modern automobile practice. The body itself does not rest upon the water. It may be supported high above the water to prevent spray from reaching the passengers and to permit a clearer view in all directions. Being separated from the body, the floatation system can be given independent and more effective treatment for buoyancy and planing efficiency as well as air and water resistance, permitting the use of completely enclosed (watertight and unsinkable) hydroplane floats, which need be no larger than required for maximum buoyancy to support the fully loaded craft at rest. (Ordinary open-hull boats require a lot of freeboard to prevent water from coming up over the sides and sinking the craft.)

RIDING-COMFORT:

Another important feature of The Aerodynamic Boat is the resilient shock-absorbing connections between the body and the floatation system. Each of the hydroplane floats, comprising the floatation system, are independently connected to the chassis or body by cushioning springs and shock-absorbers, as indicated by Fig 7 of the diagrammatic sketches. (As previously stated, in ordinary boats the body and the buoyant planing surface is a single unit with no means for preventing the pounding or vibration from being transmitted to the passengers.) In the Aerodynamic Boat each float reacts to waves and other "water-bumps" independent of the other floats. They are self-adjusting to load or shock and provide riding-comfort for the passengers similar to that provided in an automobile equipped with "knee-action" springs, snubbers and balloon tires. No ordinary type of boat can provide such riding-comfort for its passengers.

SAFETY AND STABILITY:

The three-point arrangement of the hydroplane floats and their control gives this design a claim for inherent stability and safety that cannot be matched by any known single-hull type of boat. There are two floats in front and one at the rear. Since the two front floats are so far apart and since the rear float is so far behind, there is provided a maximum of stability both laterally and longitudinally. The wide spread between the two front floats prevents capsizing and the distance between the two front floats to the rear float prevents pitching, nosing over or riding on the stern. All of the floats maintain constant contact with the water, whether the craft is at rest, traveling at full speed or making sharp turns. The cushioned connections of the floats and the three-point arrangement relieves the chassis of considerable structural stress as well as the damaging effects from traveling over rough water. This permits of much lighter construction than would otherwise be the case. All of this in addition to the unusual riding-comfort afforded the passengers.

STEERING AND BANKING CONTROL:

As previously indicated, the cushioning and shock-absorbing action of the floats is automatic. The manual control comprises "banking" the two front floats and steering the rear float for making turns. When making a turn the two forward floats are "banked" and the rear float is steered like a rudder. Even the two front floats turn a little when banked, as indicated in Fig. 8 of the diagrammatic sketches. All of the action is simultaneous with the turning of the steering wheel. The mechanism is so balanced as to require little effort by the oper-

ator. Banking and steering of the floats makes it possible to make quicker and sharper turns at full speed without the slowing up and drag caused by the use of the usual rudder on an ordinary boat. Steering the rear float allows the stern of the craft to swing around by its own momentum. Banking of the floats prevents skidding or capsizing on the turns. This patented exclusive feature does much to insure the safety of the Aerodynamic Boat and its performance cannot be equalled by any other known type of water craft. The body of the craft maintains an even keel at all times—even when the floats are banked for a turn. Most of the weight of the craft is supported by the two front floats with the rear float acting as a stabilizer and rudder. In Fig. 9, of the diagrammatic sketches, note how the outside float swings out from the body and the inside float swings in when making turns—the equivalent of moving the weight of the body toward the inside of the turning radius. Also note that the body remains level when the floats are "banked".

SPEED AND EFFICIENCY:

Speed, while desirable, must take third place in importance to Safety and Comfort. Racing plays a very small part in the general use of motor boats. Without genuine safety and comfort there would be a very limited market for fast boats. With all three combined there will be a much larger market. On the basis of overall dimensions, displacement and power, it is believed that this new type of boat has greater speed possibilities than any other known type or design. Cushioning of the floats gives them greater planing efficiency, the three-point arrangement gives each float undisturbed water contact and the banking and steering of the floats permits full speed turns without the danger of skidding or capsizing. Motors could be mounted in the floats to eliminate considerable weight in the body structure for racing purposes. Streamlining increases the speed possibilities.

SUMMARY:

The Aerodynamic Boat has been developed to meet the demand for speed combined with genuine safety and riding-comfort. Its unique style and exclusive patented features should make it the first choice of boating enthusiasts and buyers. It can be manufactured under mass-production methods and wide distribution. It permits of the replacement of parts such as bodies, floats, etc. Either metal or wood construction may be used. The novel appearance, choice of body designs, safety and unusual performance should create a tremendous demand and profitable market, protected by patent rights.

The Aerodynamic Boat Corporation

(A CONNECTICUT CORPORATION)

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