impossible although in this case there were no hydro-surfaces to interfere with the steering action. The omission of the hydro-surfaces materially impaired the stability of the boat. A.G.B.

Flexible hydro-surfaces on the Dhonnas Beag.

Jan. 5, 1909:- The Dhonnas Beag no longer being needed for Baldwin's experiments, she was to-day fitted with flexible hydro-surfaces as suggested in Editorial Oct. 17, 1908 (see Bulletin XVI pp 8-9).

Mr. Bedwin designed and made the hydro-surfaces from the general description given in the Editorial, and without any specific instructions concerning dimensions etc. He has supplied the following details illustrated by a blue print.

Dimensions:- Hull 20 ft. long; distance between the trusses supporting the hydro-surfaces 8 ft. 6.5 inches; normal angle made by the hydro-surfaces with the deck of the boat 60°. There were six hydro-surfaces in the front set, and two in the after set - made of wood.

In the front set the outer pair of surfaces were 4 feet 9 inches long and two and a half inches wide. They were 11/16 of an inch thick at the top tapering to 3 /16 of an inch thick at the bottom. The intermediate pair were four feet long, two and a half inches wide, and 5/8 of an inch thick at the top tapering to 3/16 of an inch thick at the bottom. The inner pair were three and a half feet long, two and a half inches wide, and 7/8 of an inch thick at the top tapering to 3/16 of an inch at the bottom.

In the after set there was a single pair each four feet nine inches long, two and a half inches wide, and 11/16 of an inch thick at the top tapering to 3/16 of an inch thick at the bottom.

Weight:- Total weight of Dhonnas Beag fitted with flexible hydro-surfaces 200 lbs. (Hull 90 lbs, outriggers and floats 28 lbs, forward truss and attached hydro-surfaces 41 lbs, after truss and hydro-surfaces 26 lbs, piece of iron used to balance boat properly 13 lbs. total 200 lbs).