GENERAL REMARKS.

It is obvious that the hydro-surfaces employed in experiment I are more efficient than those in experiment 2 and more efficient than the reefing hydro-surfaces employed Nov. 7 (Bulletin XX, pp36-37). In fact they are the most efficient that have yet been produced and are perfectly satisfactory so far as lift is concerned. They are deficient however in stability and this is probably due to their arrangement (see Bulletin XVIII, p.30).

On the other hand the reefing hydro-surfaces (see Bulletin XX, p. 37) when arranged with one set at the bow and two sets aft about under the center of gravity one on either side of the boat seemed to possess stability without great lift suggesting the idea that the lack of stability noted in experiment I might be remedied by employing three sets of the most efficient hydro-surfaces copying the arrangement employed with the reefing hydro-surfaces.

Having obtained hydro-surfaces that are satisfactory in lifting power the idea is to let well enough alone and instead of spending too much time upon trying to improve the good lifting power obtained tackle the question of stability.

G.H.B.

(Approved).F.W.B.

Nov. 28, 1908:-The following were the conditions of to-day's experiments. Three sets of straight-edged hydro-curves 3 ft. by 3 1/8 in. with three vertical supports in each. The curvature was one in fifteen at 1/3 from leading edge. Two sets