

he has recently placed the truss directly beneath the engine, and now uses the deck of the boat as a seat where it has been strengthened by a beam placed across it, a little in front of the engine-bed. This is also advantageous by bringing his own center of gravity lower down than before.

4. In the experiments Aug. 26 and in the earlier trials the outrigger-truss used terminated at either end in a point, or narrow nose, which rested upon one of the floats at about its thickest part. The float had some liberty of rocking upon the end of the truss as an axis. The longer floats developed a tendency to dive (Aug. 26), and one of them tore loose from its attachment. The truss also did not seem to possess sufficient rigidity against twisting motions, although it had been strengthened by a zig-sag beading of metallic tubing (aluminum).

To remedy these defects a new outrigger-truss has been made, not terminating in a narrow nose, but of equal dimensions from one end to the other. Like the old truss it is triangular in cross-section. It is much superior in rigidity to the old truss employed and permits of a more rigid connection with the outrigger-floats. It was used in the experiments (Aug. 29).

5. The Dhennas Beag, when traveling upon a straight course, exhibits a constant tendency to depress its right or starboard float, a result attributed to the torque produced by the left-handed rotation of the propeller.

Mr. Baldwin has hitherto neutralized this tendency by leaning over to the port side; but it is now proposed to do away with torque altogether by employing two propellers rotating in opposite directions upon the same axis. Double propellers are being arranged for a trial.