

calculated to be 20 miles an hour. The experiment was of such short duration that data as to the lift of the aeroplane was not obtained. A new propeller shaft was soon constructed of solid material, instead of the steel tubing formerly used, and on Sunday afternoon, November 29th, the second trial was made. The wind was blowing directly down the Lake with a velocity of five or six miles an hour. The auxiliary ports in the engine which were closed on the former trial, were now opened up, and it was anticipated that the speed of the engine would be greatly increased. As before, Mr. Curtiss tuned up the motor and Mr. McCurdy operated. We had agreed to try running down the Lake with the wind and back again against the wind, to ascertain whether there was any difference in lift due to the wind. It seemed that after running about 100 yards "The Loon" obtained her maximum lift. By "shooting" her, (by suddenly elevating the bow control), the bows would entirely lift out of the water without any depression at the stern which would be the result in the case of an ordinary motor boat. We took a course a mile down the Lake, turning in coming back against the wind, thus covering a distance of two miles in 4 minutes and 26 seconds. This gives a speed of over 27 miles an hour. It was calculated by Mr. Selfridge that the speed required to lift the "June Bug" off the ground was about 23 miles an hour, and although the weight of "The Loon" was very little more than the "June Bug", still an increase of speed of four miles on 23 was insufficient to cause her to take the air. This seems to indicate that the suction of the water in holding down