

1896 and 1900 may be gathered from the above, a great deal of which was original. Their glider was constructed so that it could fly loaded in an 18 mile wind. They found from the very first that the calculations of early investigators were going to be of little assistance, and between 1900 and 1903 they practically went over the whole ground in their own Laboratory. For their outdoor experiments they moved to the Kill -Devil Hills of North Carolina, where they spent their summers gliding from the tops of Sand Dunes. They continued this during 1901, 1902, and 1903. Their machine differed but little from that of 1900. Early in 1901 they tried increasing the curvature in their surfaces, but found that this detracted greatly from the longitudinal equilibrium possessed by their 1900 glider, whereupon they returned to that of the latter. In 1902 they added a vertical tail to augment the steering from right to left derived from their system of twisting the surfaces and to counteract the tendency of the machine to turn at each attempt to right it. Toward the end of 1903 they had practically completed their gliding experiments and had constructed a power-driven model carrying an engine of 12 horse-power. With this they made a flight on December 17th, 1903, the second men in the world to get in the air in a dynamic flying machine, and the first to fly in a machine supplying its own power. They continued their work on the subject in 1904, making short flights, and striving to overcome the many difficulties which they encountered. They did not attain any great measure of success until 1905, when, on September 26th, they made a flight of 11 1/8 miles with a