

FLYING MACHINE SOARS 3 MILES IN TEETH OF HIGH WIND OVER SAND HILLS AND WAVES AT KITTY HAWK ON CAROLINA COAST

NO BALLOON ATTACHED TO AID IT

**Three Years of Hard, Secret
Work By Two Ohio Brothers
Crowned With Success**

**ACCOMPLISHED WHAT
LANGLEY FAILED AT**

**With Man As Passenger
Huge
Machine Flew Like Bird
Under Perfect Control**

**BOX KITE PRINCIPLE
WITH TWO PROPELLERS**

The problem of aerial navigation without the use of a balloon has been solved at last.

Over the sand hills of the North Carolina coast yesterday, near Kitty Hawk, two Ohio men proved that they could soar through the air in a flying machine of their own construction, with the power to steer it and speed it at will. This, too, in the face of a wind blowing at the confirmed velocity of twenty-one miles an hour.

Like a monster bird, the invention hovered above the breakers and circled over the rolling sand hills at the command of its navigator and, after soaring for three miles, it gracefully descended to earth again and rested lightly upon the spot selected by the man in the car as a suitable landing place.

While the United States government has been spending thousands of dollars in an effort to make practicable the ideas of Professor Langley of the Smithsonian Institute, Wilbur and Orville Wright, two brothers, natives of Dayton, O., have quietly, even secretly, perfected their invention, and put it to a successful test.

They are not yet ready that the world should know the methods they have adopted in conquering the air, but the *Virginian-Pilot* is able to state authentically the nature of their invention, its principle and its chief dimensions.

HOW MACHINE IS BUILT

The idea of the box kite has been adhered to strictly in the basic formation of the flying machine.

A huge framework of light timbers, 33 feet wide, five feet deep and five feet across the top forms the machine proper.

This is covered with a tough, but light canvas.

In the center, and suspended just below the bottom plane is the small gasoline engine which furnishes the motive power for the propelling and elevating wheels.

There are two six-bladed propellers, one arranged just below the center of the frame, so gauged as to exert an upward force when in motion, and the other extends horizontally to the rear from the center of the car, furnishing the forward impetus.

Protruding from the center of the car is a huge fan-shaped rudder of canvas, stretch upon a frame of wood. This rudder is controlled by the navigator and may be moved to each side, raised or lowered.

START WAS SUCCESS

Wilbur Wright, the chief inventor of the machine, sat in the operator's car and when all was ready his brother unfurnished the catch which held the invention at the top of the slope.

The big box began to move slowly at first, acquiring velocity as it went, and when half way down the hundred feet the engine was started.

The propeller in the rear immediately began to revolve at a high rate of speed, and when the end of the incline was reached the machine shot out into space without a perceptible fall.

By this time the elevating propeller was also in motion, and, keeping its altitude, the machine slowly began to go higher and higher until it finally soared sixty feet above the ground.

Maintaining this height by the action of the under wheel, the navigator increased the revolutions of the rear propeller, and the forward speed of the huge affair increased until a velocity of eight miles an hour was attained.

All this time the machine headed into a twenty-one mile wind.

COAST FOLK AMAZED

The little crowd of fisher folk and coast guards, who have been watching the construction of the machine with unconcerned curiosity since September 1st, were amazed.

They endeavored to race over the sand and keep up with the thing of the air, but it soon distanced them and continued its flight alone, save the man in the car.

Steadily it pursued its way, first tacking to port, then to starboard, and then driving straight ahead.

"It is a success," declared Orville Wright to the crowd on the beach after the first mile had been covered. But the inventor waited. Not until he had accomplished three miles, putting the machine through all sorts of maneuvers en route, was he satisfied.

Then he selected a suitable place to land, and, gracefully circling, drew his invention slowly to the earth, where it settled, like some big bird, in the chosen spot.

"Eureka," he cried, as did the alchemist of old.

SUCCESS AFTER FAILURE

The success of the Wright brothers in their invention is the result of three years of hard work. Experiment after experiment has been made and failure resulted, but each experiment had its lesson, and finally, when the two reappeared at Kitty Hawk last fall they felt more confident than ever.

The spot selected for the building and perfecting of the machine is one of the most desolate upon the Atlantic seaboard. Just on the southern extremity of that coast stretch known as the graveyard of American shipping, cut off from civilization by a wide expanse of sound water and seldom in touch with the outer world save when a steamer once or twice a week touches at the little wharf to take and leave government mail, no better place could scarcely have been selected to maintain secrecy.

And this is where the failures have grown into success.

The machine which made yesterday's flight easily carried the weight of a man of 150 pounds and is nothing like so large as the ill-fated "Buzzard" of Potomac River fame.

It is said the Wright brothers intend constructing now a much larger machine, but before this they will go back to their homes for the holidays.

WHO INVENTORS ARE

Wilbur Wright, the inventor is a well-groomed man of prepossessing appearance. He is about five feet, six inches tall, weighs about 150 pounds and is of swarthy complexion. His hair is raven hued and straight, but a piercing pair of deep blue eyes peer at you over a nose of extreme length and sharpness.

His brother, Orville, on the other hand, is a blonde, with sandy hair and fair complexion, even features and sparkling black eyes. He is not quite so large as Wilbur but is of magnificent physique.

The pair have hitherto spent almost the entire fall and winter and early spring months of the past three years at Kitty Hawk working upon their invention, leaving when the weather began to grow warm and returning in the early fall to work.

Their last appearance was on September 1st, and since then they have been actively engaged upon the construction of the machine, which made yesterday's successful flight.

There was no apparatus used in yesterday's test to give the machine a starting velocity. From the top of an inclined plane, constructed upon a hill of sand the start was made.



Tap to read the full text of this article and the *Virginian-Pilot's* good-natured correction of 17 December 2003.