

ORVILLE WRIGHT ON AEROPLANE IN EUROPE'S WAR

INVENTOR THINKS ONE FLYING MACHINE OUTVALUES SQUADRON OF SCOUTS.

By EARL N. FINDLAY.

THE most tremendous conflict in human history has reached a condition of stalemate because of the aeroplane, invented by Wilbur and Orville Wright, at Dayton, Ohio.

Man's oldest game, war, has been checked by his newest.

It was decided to try to interview Orville Wright at his home. A publisher recently offered him \$500 for 500 words on the stabilizer, but Mr. Wright did not accept. He has a most irritating trait where newspaper and magazine men are concerned. To him it is more pleasant to experiment than to explain. One dollar a word did not move him. Why, then, should he consent to be interviewed, when all he could hope to get out of it was an interruption in his work?

It is another of those justly famous Wright mysteries.

The original Wright Mystery began in 1903, and continued unabated on through to 1908, although they were continuously flying. When asked by their neighbors and by representatives of foreign governments what they were doing in those days they always told the truth. That is, they said they were flying—when conditions were favorable.

That was the cue for Homeric laughter.

THERE ARE QUIETER MEN, BUT, AS MARK TWAIN SAID, THEY ARE DEAD.

If any one should ask Orville Wright if he enjoys being interviewed for publication he would probably tell the truth about it, just as he and his brother did in the early days about their flights. But no one is likely to ask him for the truth—no one who has a job of interviewing to do. It would be a poor interviewer who would need verbal confirmation.

The writer took out his pad and pencil once in Dayton. And then he put them back again. No one asked him to do this. Hope seemed to point that way.

Asked for an expression of opinion as to the part played in the war by the flying machine, Mr. Wright said:

"If Germany had had aeroplanes and the others hadn't, Germany would have been on England before this. The country short on aeroplanes would have been in a nice mess. If any nation now fighting had been without aeroplanes when the war began she would not be fighting now."

We were sitting in the office of the Wright company. Not far away was the Soldiers' Home, filled with men who had known no stalemate because of motor-driven wings of gauze that carried scouts through the air at the rate of two miles a minute.

WHEN FIRING ON AEROPLANES ONE'S AIM IS OF NO CONSEQUENCE.

Mr. Wright was asked what he thought of the theory that the only fire effective against an aeroplane is that of a regiment of infantry, in which there is a very large percentage of poor shots, the resultant wide dispersion increasing the probability of the aeroplane's being hit in a vital spot, despite the usual error in estimating range. This theory has been advanced in a recent book.

"The time will come when they will learn to shoot at aeroplanes," he replied. "During the Civil War we would have thought it impossible ever to shoot at something we could not see. Now we have the range, and don't need daylight."

He has been diverted by the suggestion of a French savant who raises the question: "Why worry over the air raids?" This man argues that whenever an attack is made from the air rifles and mitrailleuses are put into action.

Every bullet fired into the air, he takes pains to assert, falls back with a speed, according to the Frenchman, in the neighborhood of 200 metres a second—that is to say, with the speed of a revolver bullet; consequently sufficient to kill a man. So the number killed by French bullets, this scientist tries to prove, must have exceeded the number slain by German bombs.

Elementary scientific reasoning, he declares, would have prevented this accident.

"I think that idea is very ingenious," said Mr. Wright, "but there is some doubt in my mind as to the speed of the descent—600 feet a second."

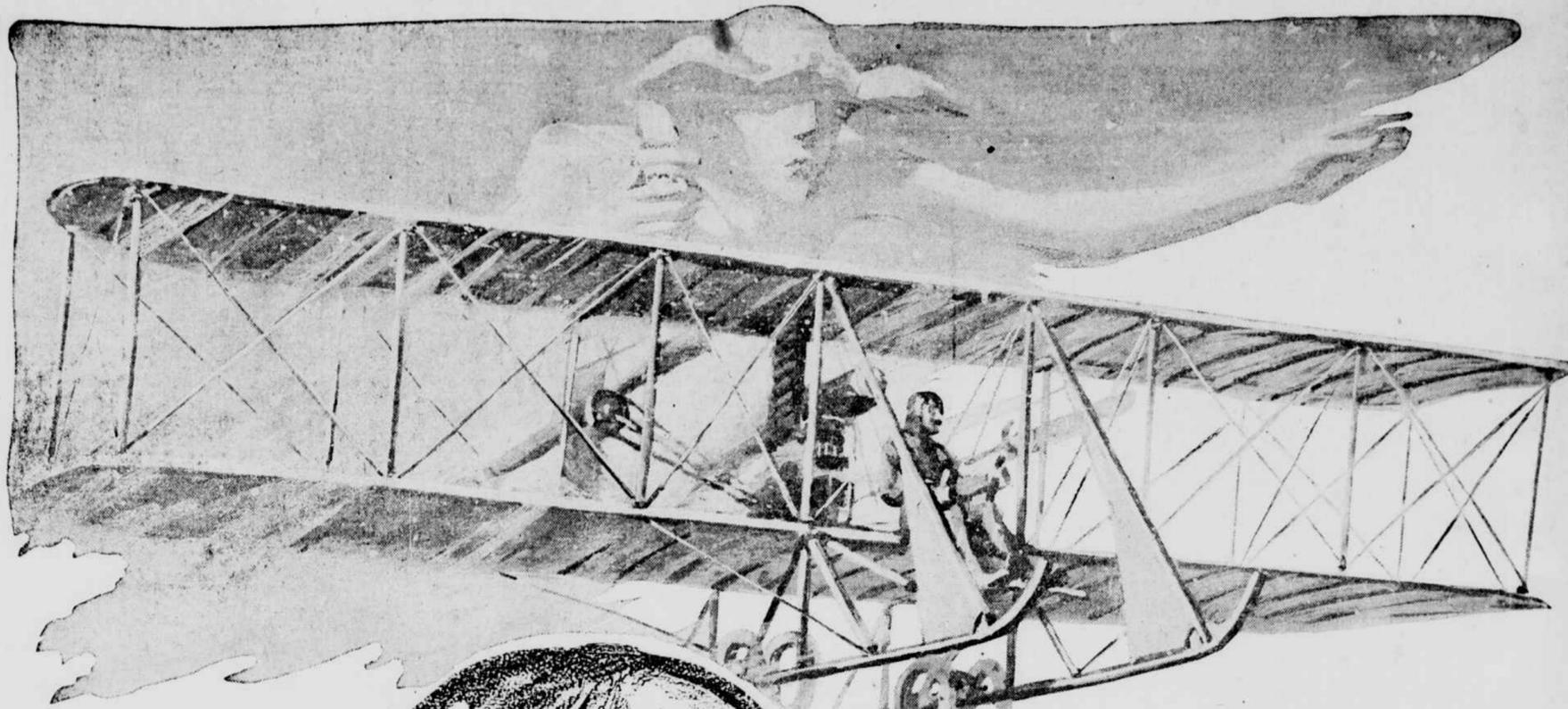
FEATS OF THE EYE ACCOMPLISHED IN THE AIR.

The war has brought from one source the statement that on a day of average atmospheric transparency an observer in a machine flying at a height of 2,000 feet could make out a fleet of vessels at a distance of at least fifty nautical miles.

This prompted Mr. Wright to relate some personal experiences on which he bases his belief that the aeroplane as a scouting agent is the most efficient yet produced. From a height of 100 feet at Kill Devil Hill he could see vessels at a distance of ten miles, the vessels being small sailing craft.

Submarines can be discovered readily by men flying above them. Army men have found that unless the water is very muddy, at an altitude of about 700 feet submarine mines are distinctly visible from the air above, and that from an altitude of 2,000 feet the movements of a submarine torpedo boat may be easily observed.

"Is it not true," Mr. Wright was asked, "that if an aviator flies low enough to make



the observations desired he is in constant danger of being shot by the enemy, and that if he ascends to a safe altitude he is unable to distinguish those things, such as the nature of the country and the massing of troops, that his commanding officer most wants to know?"

"When I flew over Dayton," he replied, "I was a mile high, and I could pick out a cow. At that height, which is comparatively safe from earth attack, if a man on the ground moves you can see him without glasses. You can distinguish at that height whether the person is a man or a woman. But if two persons were standing together you might not be able to tell them from a horse."

WHAT HAPPENS TO A LANDSCAPE ONE MILE BELOW.

"But here's the thing. At one mile you can't pick out the hills. The country looks perfectly flat. We see pictures in the magazines and newspapers said to have been taken from a mile in the air, but it is true in most cases, as an experienced flier can see at a glance, that they were taken about four hundred feet up, because the hills and other features of the landscape are shown clearly."

"Except for this inability to distinguish the nature of the land, whether hilly or flat, the higher up you go the better view you get."

"You have no sense of speed when flying high. Even at 1,000 feet you can't appreciate the fact that you are going more than three or four miles an hour. You begin to lose the sense of swift movement from the time you leave the ground. At that moment you seem to be travelling very fast. But when you leave the earth it begins to spread out, and everything slows down in proportion to the altitude you attain."

The conversation turned to the French and British aeroplane raids in Belgium, particularly as to the reported dropping of 240 bombs in one attack.

"All the bomb throwing from aeroplanes and dirigibles—what has it amounted to?" he inquired. "Granted a new high explosive which would produce the effect desired when dropped from an aeroplane, one has still to hit the mark."

THIS MATTER OF BOMB DROPPING IS A DELICATE AFFAIR.

It was suggested that some of those bombs must have hit the enemy in a vulnerable spot.

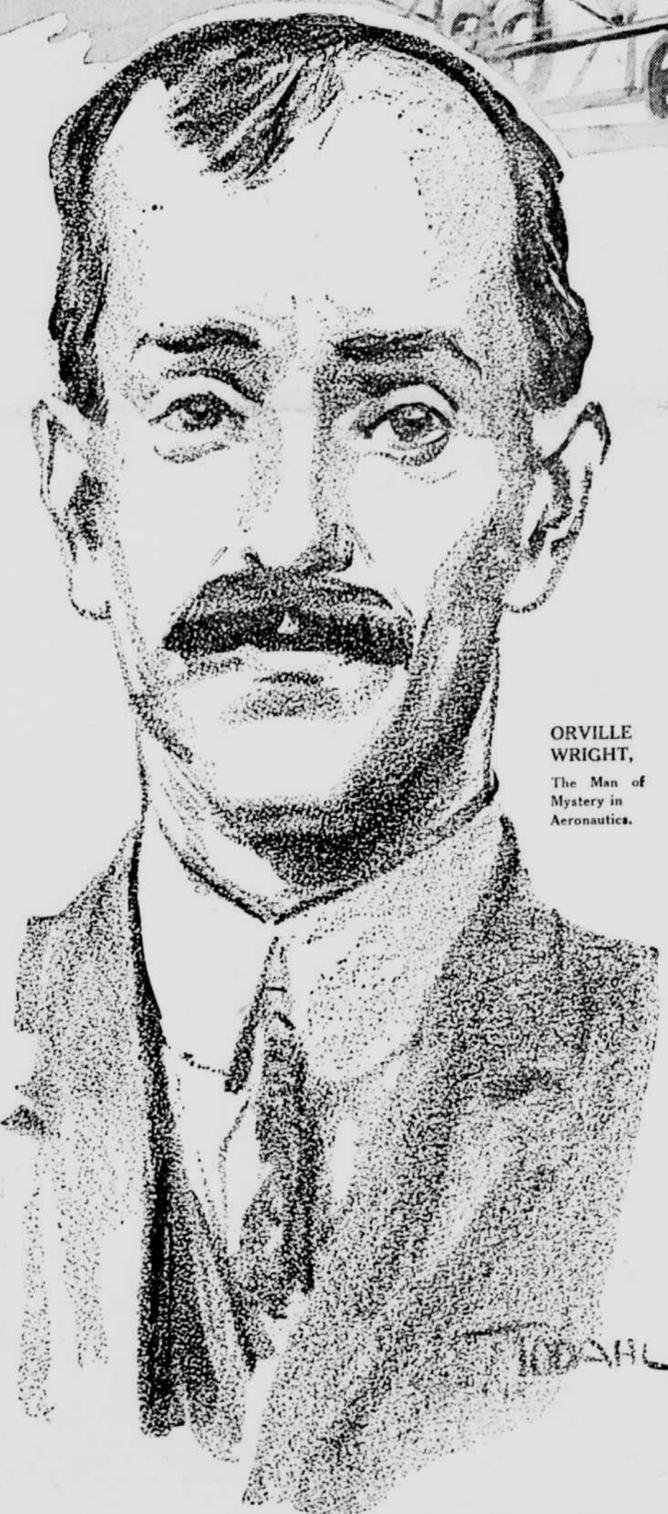
"Bomb dropping is out of the ordinary; it receives more attention, that is all," he continued. "But they haven't so far been able to put the bombs where they wanted them. The skill of the operator hasn't been sufficient for bomb dropping in this war. I think they will be a good deal more skilful when the war is over than they are now."

"It must be absolutely quiet to do it. It takes very little wind to change the course of a bomb. One of the great troubles with the wind is to judge your aeroplane speed over the ground. You have to make allowance for the wind. If you are going with the wind it will carry the bomb over the mark, unless its speed and your own have been calculated to a nicety."

"For instance, if you should try to touch a certain spot when jumping off a fast moving train it is probable you would not touch it. Your momentum is your speed over the ground, and that depends, in an aeroplane, on whether you are travelling with or against the wind. They will get instruments some day that will show them all these things."

THE ENEMY HAS NOT LANGUISHED THROUGH LACK OF ATTENTION.

It is definitely known that each side has been continuously engaged in experiments upon the other by means of bombs. What Mr. Wright had said was interesting in the light of reports by trained observers, one of whom asserts that the French, at least, have indicated they will give this up as a bad job. According to this man, even the moral effect has worn off. In the daytime marching troops have had no



ORVILLE WRIGHT,

The Man of Mystery in Aeronautics.

Nation Short of Craft Which Have Produced Stalemate in Strife Would Be "in a Nice Mess."

treath through the enemy's lines in safety, and by frequent trips to and from the Russian base they kept the column supplied with ammunition.

"That is why the countries engaged in this war are adding to their aeroplanes as rapidly as possible," said Mr. Wright. "In England, which was not as well prepared in this respect as the other countries, they have been turning out sixty aeroplanes a week, according to advices I have received from London."

"During the last three years Germany has spent between \$5,000,000 and \$6,000,000 a year in the aeronautical department, France has spent a like amount and England the same."

"Two hundred and twenty-five thousand dollars to \$250,000 in the United States has been our biggest appropriation up to this year."

"The three foreign countries mentioned have been spending between \$15,000,000 and \$20,000,000 a year for aeroplanes and dirigibles—chiefly aeroplanes. And Germany, with all her faith in the dirigibles, has spent as much on aeroplanes as any other country. Russia has been doing a lot in the last year or so, but I don't know how much. We don't hear so much from Russia and Austria."

An official statement giving statistics concerning the flights of the French airmen during the eight months of the war, says:

"Approximately 10,000 aerial reconnaissances have been made, amounting to 18,000 hours in the air. The distance covered was 1,800,000 kilometres (over 1,115,000 miles, which would amount to about forty-four times around the earth."

A QUESTION TO WHICH THE SILENT COUNTRIES GIVE NO ANSWER.

"What type of aeroplane is doing the best work in the war?" Mr. Wright was asked.

"We'll have to wait awhile before we can know what's happened," said Mr. Wright.

"It will be most interesting when we get the official reports. We can't find out much by reading the newspapers. Countless scouting expeditions in the air are being made of which we hear nothing at all. The very nature of the activity makes it impossible that we should be informed about it."

"I think the most important part played by the aeroplane in this war is something of which, up to date, no real details have been told us. Scouting trips that have brought all the armies to standstill will not be described perhaps until after the war is over, but there can be no question that they are being made constantly and are of the utmost value. But scouting expeditions are not being described by the generals for publication."

"France, Germany and England each claim their machines are doing the best. Nearly all the German machines are slow—about sixty miles an hour. Some few fly seventy, and a very few above that. A big percentage of French machines are biplanes; what percentage I don't know."

"But all the newer, later types have been biplanes. They are turning to them for strength, and because they are more compact. You can build fast biplanes. There is very little difference, however, except in trussing. But in a biplane an observer's view is far less obstructed. And, too, the weight carrying

efficiency at high speed is greater with a biplane than a monoplane.

"Flying is going to be a great sport some day, but just now the whole trend of the war machines is for speed. Flying will never be a great sport until sportsmen fly for the love of flying."

"The wrong way for a man to go about it is to purchase a speed machine so powerful he must employ some one to operate it for him. I have known cases of the sort where men who in other respects were splendid sportsmen have failed to develop the proper enthusiasm for flying because they devoted all their energies at first to buying the most powerful motor on the market. They were without experience in flying, and hired aerial chauffeurs to carry them about, with the result that they soon tired of the experiment."

"Flying must be something that a man wants to do in the same way he yearns for a game of golf, and he must have the same desire to play his own game."

"There is no doubt that aeroplanes will be used for carrying mails before long. It will be only a very few years. The only thing that is holding it back now is the necessity for a more reliable machine."

"The mail carrying flyer must go more like clockwork. It is only a mechanical problem. Our school machine has been in use since 1910, and is about as good as it ever was. Motors are being improved to-day all over the world."

"When you remember that the early motor car had a beer keg for a radiator—I had a photograph of such a contrivance, but it was lost in the flood—the development of the aeroplane has been more rapid in details than the automobile."

A MOTORLESS MACHINE STATIONARY IN AIR FOR ONE MINUTE.

It was evening. In the afternoon we had visited the field where the Wright brothers carried on their early experiments. It is only eight miles northeast of Dayton. A trolley line passes it, the same trolley line that passed it then; two roads meet there, roads on which farmers drive to town and back again, now as they did then. Nothing could be more open and accessible than this eighty-acre field. Nothing could be less mysterious. It is as prominent in its way as the Woolworth Tower.

Mr. Wright pointed to a machine in the shed. It was the one in which he made the experiments at Kitty Hawk, N. C., in 1911, when he remained stationary in the air for one minute and hovered over one spot fifteen feet in diameter for ten minutes and one second, in a wind blowing at the rate of fifty miles an hour. This feat was accomplished without power—the machine was motorless.

That was the longest step thus taken in the direction of enabling man to hover over a given spot motionless, with or without power, as long as he desires.

"When will you continue those experiments, Mr. Wright?"

He could not say. Lawsuits, those who have enjoyed them know, take most of one's time.

After dinner Bishop Milton Wright, the father, eighty-six years old, physically and men-