

A TWO-SEATER NIEUPORT BIPLANE.

In the accompanying photographs is seen a biplane which has been recently issued from the Nieuport works. Hitherto the Nieuport firm have chiefly concentrated

object of improving the views from both pilot's and passenger's seats and to give a gunner as far as possible a free range of firing in any direction.

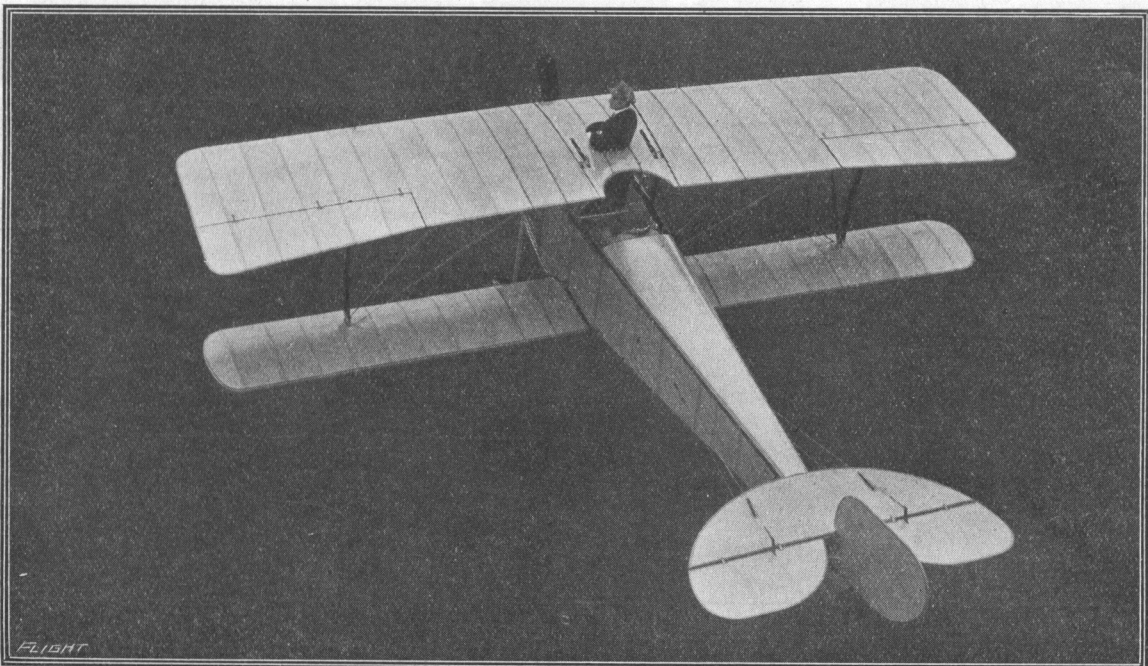


Three-quarter front view of the two-seater Nieuport biplane. The view from the pilot's seat is excellent in every direction owing to the small chord of the lower plane, whilst that of the gunner is equally good, he being able to look over the lower plane for a forward and downward view. By standing up in his seat, with his body projecting through the opening in the top plane, he is free to fire his rifle in any direction except straight downwards.

their energies on machines of the monoplane type, and with the exception of the extra pair of wings their new machine follows very closely on the lines of the monoplanes that made the late Nieuport brothers famous, and it will be noted that everything has been done with the

Generally speaking, this Nieuport military tractor biplane follows standard practice as regards the general arrangement, but upon closer examination several original ideas are noticed.

From the photographs it will be seen that only one

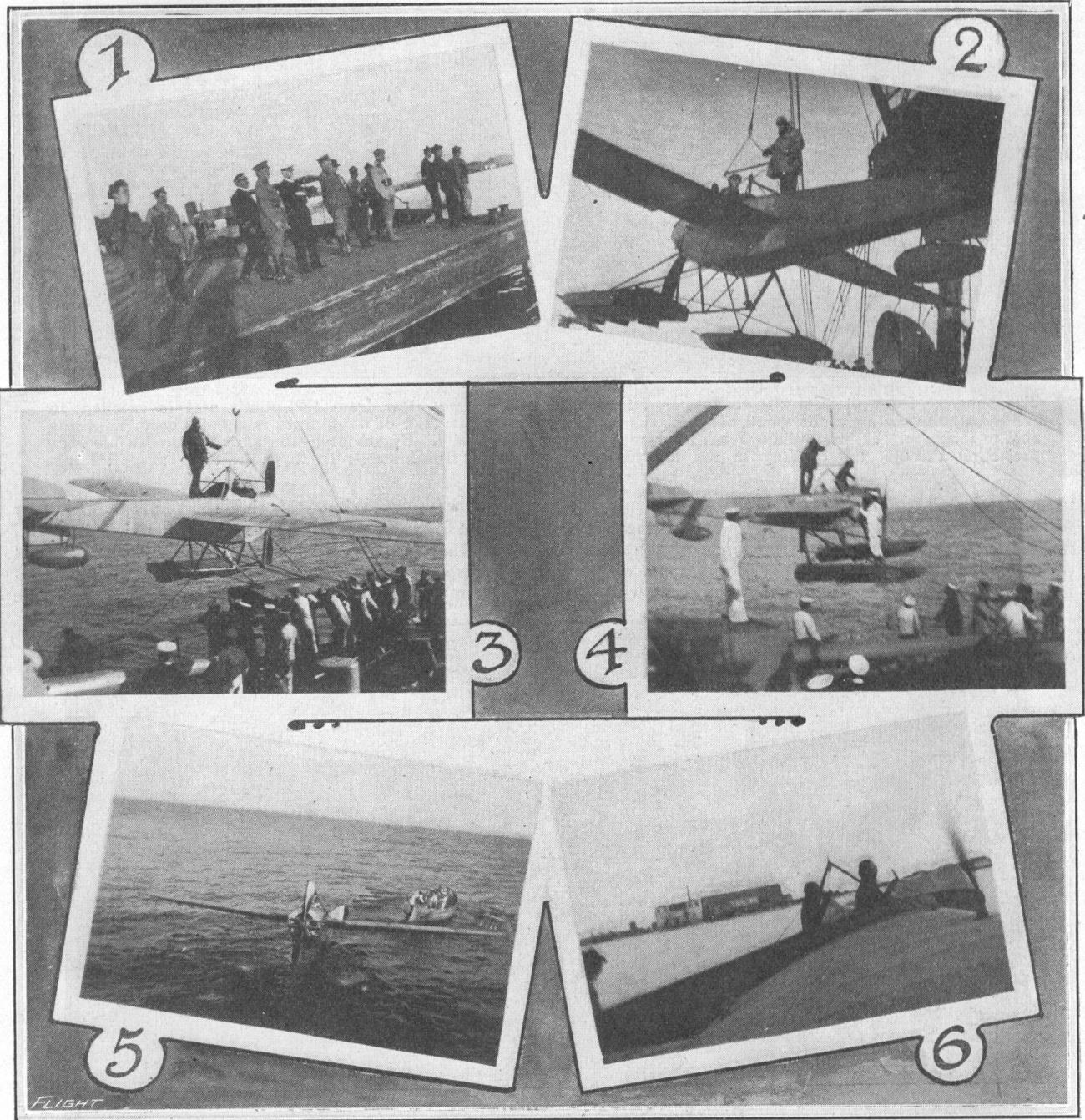


View from above of the Nieuport two-seater biplane, showing the hole in the top plane for the gunner when he wishes to fire in an upward or forward direction.

pair of struts on each side of the *fuselage* separates the two planes, and these struts, instead of being parallel to one another, as is usually the case, run to a point on the bottom plane. The reason for this is that the lower plane has only a single spar, which takes the form of a steel tube round which the wing pivots. The upper plane is fitted with two spars in the usual manner, to the rear one of which are hinged the two *aileron*s. For lateral control a hand lever in front of the pilot operates simultaneously the *aileron*s on the upper planes, whilst

warping, or, more correctly speaking, pivoting, the corresponding half of the lower plane. This system undoubtedly provides ample lateral control. In fact we should imagine that the *aileron*s on the top plane would alone be sufficient for the maintenance of lateral stability, and the chief advantage in having such a small chord to the lower plane would lie in the fact that it only obscures the downward view to a very slight extent.

As for the arrangement of the gunner's quarters, his seat is placed in the usual manner in front of that of the



UNSHIPPING AN 80 H.P. NIEUPORT SEAPLANE AT PORT SAID.—1. General Maxwell and Admiral Peise watching the operations from ashore. 2, 3 and 4. In process of swinging the Nieuport from the cruiser "Doris." 5. At rest on the sea. 6. Getting away.

pilot, and when sitting down inside his cockpit a very wide range of vision is obtained in a downward and forward direction.

In order that the propeller may be avoided when firing forward, there is a circular opening in the top plane through which the gunner can pass the upper portion of

his body when standing in his seat. In this position, the muzzle of the gun or rifle is above the circumference described by the tip of the propeller, so that the gun can be fired straight forward, or in an upward direction. Altogether the Nieuport firm is to be congratulated on the machine.

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THE AEROPLANE IN WAR— PAST, PRESENT, AND FUTURE.

IN a strikingly able article from a special correspondent of the *Morning Post*, present with the British General Headquarters, on new views in war and the aeroplane's mission, the many revolutionary lessons learned up to date through the present war are concisely summarised and some home impressions corrected. The correspondent continues:—

“Would it be wonderful then if the man had not yet arrived who could be master of to-day's conditions, since the new weapons in use are not one, but, many, and the army itself, compared with armies of the past, is indeed a new weapon, the most tremendous and exacting ever placed in a commander's hand?”

“We may, therefore, put on record the Army's conviction that the trench is not going to dominate the warfare of the future to the extent, at any rate, that it has done during the past winter, and that the old strategical problems, based on the obtaining of superiority at decisive points, by the old methods of concentration and concealment will reappear for solution. When to that one objected that, thanks to the air service, concealment could no longer be achieved, one was met with the chief of one's surprises. While in England we have been regarding the aeroplane as growing more and more mistress of the situation at the front, speculation has rather concerned itself with the means of outwitting her inquisitive attentions. Far from the aeroplane dominating more and more the enemy's movement, one was assured that with every week it finds such domination more difficult; that faced by the peril of detection, the cunning on both sides has reached such a pitch that the discovery of the positions of great guns in action has become largely a matter of luck, owing to the subtlety with which even their flashes are screened from observation, the cleverness of the German gunners being no whit behind our own.

“It was pointed out, moreover, that despite the ceaseless vigilance and the incontestable competence of our own airmen, the enemy, notably at Ypres, Soissons, and elsewhere were rather of a tactical than of a strategical character, the movement of troops by rail without even, it may be, their first line transport, and behind the shelter of trenches affording a condition of unnatural security. The real strategical objective must place reliance on vast parks of stores and heavy lines of transport which must always be on the road and are extremely difficult of concealment, and the very noise of their movement would give away their strength to a trained observer able to get, as he infallibly could, within hearing of it.

“Backed by experience and so much sound opinion, such a view must have great weight, yet it may not be presumptuous to point out some objections. In the first place, such concentrations as took place at Ypres, Soissons, and elsewhere were rather of a tactical than of a strategical character, the movement of troops by rail without even, it may be, their first line transport, and behind the shelter of trenches affording a condition of unnatural security. The real strategical objective must place reliance on vast parks of stores and heavy lines of transport which must always be on the road and are extremely difficult of concealment, and the very noise of their movement would give away their strength to a trained observer able to get, as he infallibly could, within hearing of it.

“In the second place, though cunning in concealment may increase the airman's difficulties, it seems to be forgotten that the airman at present is in offence little more than an expensive luxury, little more, indeed, than was artillery in Flanders in Tartaglia's day. He has done magnificently, more than was dreamed; but what he has done is but a trifle compared with what lies before him. He is numbered now by his tens. What will happen when he is numbered by his thousands? Is that an extravagant assumption?”

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Curtiss Factory in Canada.

ACCORDING to advices from New York, a new company, the Curtiss Aeroplanes and Motors Co., Ltd., has been registered, with a capital of \$50,000, for the purpose of starting a branch aeroplane factory and school of the Curtiss Co. in Canada. The head office is at Toronto.

tion? Surely not. The modern provision of artillery would have seemed inconceivable in the early days of the gun, and the aeroplane is of the two by far the more wonderful and by no whit the more difficult weapon. To-day the airman is only tentatively something more than a scout, dropping an occasional bomb to distract the enemy. What will happen when his scouting has ceased to count in comparison with his destructive violence; when he can be flung out over the foe in a cloud to rain fire out of heaven? Ought we not, in looking ahead, to look ahead most of all at him? While battles are fought on the earth for inches, in the air the radius lengthens by hundreds of miles. Is not that a significance? Never before could an army strike save within a short distance of its front, but now it can throw its missiles from one capital to another.

“War is just war still,” said one of our ablest genera's; ‘you won't find it changed. The armoured car? Yes, useful, no doubt, where you can use it. Not everywhere. Very effective here and there. Worth having. But only a few. The heavy howitzer? Yes, terrifying, till you get used to it, and doing extraordinary things. Shell goes into a house, and the whole house goes up. A little red dust, that's all that's left of it. Yes, it's very terrifying. One has to have them. And the aeroplane? Well, the aeroplane has done a lot for us, but we are going to outlive it. The aeroplane finds its business harder every day.’

“We were taken up almost on our arrival to the headquarters of the air fleet. A most charming situation, with as fine a turf for landing as has the Plain itself. Airmen can almost always count on salubrious quarters, and their work makes them indifferent to an excess of air. The air was shrewd and stiff that day, and one can remember how, not so long ago, not a wing would have been spread to it. Now all the heed the airmen paid was to put their nose into it as they alighted. Like thistledown they were blown off the earth into the blue air, soon to be lost to vision in the purple haze of the plain, and like thistledown others dropped out of the blue air. Anything less like war could not possibly be imagined, yet each carried deadly weapons at his disposal, each might bring news that would win a victory. How different from the scout of old days, dropping road-stained and exhausted from his trembling horse! The contrast indeed was greater, for the scout had really brought only himself home; his news he had thrown out into the air from the front, thirty miles away; it had been caught by the maze of delicate wires, and, long before the scout himself arrived, its purport had been discussed at headquarters, and an order had perhaps already been issued on the strength of it, setting troops in motion. Marvellous; but the romance of the thing was richer for that dripping horseman who had thrown soul and body into the scale against fate. The airman needs as high a courage and capacities more highly trained, but the exquisite mechanism he controls has come between him and the simpler forces, that naked touch of nature which of itself is a reward.

“On the ground there was little of novelty. Experience had confirmed the theories and the practice of Farnborough and Netheravon. The only drawback to some of our machines, we were told, was that as the machine practically flies itself there is a danger of the operator going to sleep. The operators who alighted while we were there showed at any rate no sign of sleepiness. One of them, single-handed, not so long before, had engaged two of the enemy's Taubes, each carrying an observer, and succeeded, though he had but one pair of hands for control and to fire the rifle, in driving off one of the planes and bringing down the other.

“Here were the church bells calling from the vale to prayer, and these great white-winged creatures coming noiselessly out of the air; a man might be pardoned for missing the implications of this new mode of warfare. Yet one clings none the less to a convinced belief in the revolution it is to accomplish.”

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Lincoln Beachy Killed.

CABLE messages from San Francisco state that on Sunday afternoon Lincoln Beachy met his death while making a flight from the Panama-Pacific Exposition grounds. It appears that while looping over the bay the machine fell from a height of 2,000 feet. The pilot's body was recovered later.