MOTORING and CYCLING

(CONTINUED.)

According to a Christchurch writer, it is possible that the presidency of the New Zealand Automobile Union will go this year to Canterbury, as a compliment to the oldest and most virile branch of the union. The president, Mr. McLean, has indicated that he does not wish to continue the office, and it is his view that Canterbury should accept the presidency. The matter will be decided at the annual meeting in Wellington on July 27, when many important matters will be discussed.

* * * *

The list of motor racers who have signed up for war services in America numbers 400. They have the selection of two divisions to work in, the aviation and motor car department.

* * * *

A large training camp for aviators has been established on Long Island, near New York, by H. P. Davison and J. P. Morgan and Co., who have equipped a plant to train 100 men.

* * * *

In a motor car dispute case that was being heard in the Supreme Court at Wellington the other day before His Honor Mr. Justice Hosking, a witness said that his firm was not charged for space for a particular new class of American car shown at the Carterton show, and did not know who paid for it. His Honor remarked that it appeared to him that the arrival of a new motor car created more excitement than the arrival of a noted general.

* * * *

The Ministry of Munitions at Home has issued a notice drawing attention to the urgent necessity of exercising the utmost economy in the use of calcium carbide, either for use for illuminating purposes or for oxy-acetylene welding. It is added that every opportunity should be taken to employ substitutes for calcium carbide wherever possible, as it is only by such means that the serious shortage threatened can be averted.

* * * *

While travelling by motor car from Whakatane recently, a party of Gisborne people met with an unenviable experience near the Motu. Approaching Otoko the motorists had to cross a stream running into the Waihuka River. Swollen by the recent rains, the crossing was higher than usual, and the car stopped in mid-stream. Wading ashore the party set out for assistance, which was eventually obtained from a neighbouring homestead. On returning to the stranded car, however, the motorists had the mortification of finding that the creek had risen, and that their rugs, coats and luggage had floated out of the car, and were being rapidly washed down stream. Strenuous efforts to recover the gear were unsuccessful, and the weather-bound travellers, who were detained for three days, were hospitably entertained. Eventually, by covering part of the distance on foot, the party reached Te Karaka, having then to procure another car.

TRAINING AVIATORS IN FRANCE.

The announcement that America is to manufacture 1000 aeroplanes per month for despatch to the Allied fronts does not come as a surprise to those who are at all conversant with the remarkable growth which aviation has made throughout the United States of late years. It is well known that a large number of Americans have been serving in the French air service since the early stages of the war, but few persons have any conception of the training these men have had to undergo before they are ready and in a condition to meet the requirements of active service. On arrival in Paris the candidate for admission into the Franco-American Flying Corps makes a formal application to the Ministry of War, and after passing a physical examination at the recruiting office is accepted formally at the Invalides as a second-class soldier of the Foreign Legion, and is attached to the first aviation group, with headquarters at Dijon. He does not go to Dijon, however, but is sent to the training school at Buc, a few miles west of Paris, where the Bleriot factory and school is located. Subsequently he proceeds to the Pilotage, which is the office of the chief pilot responsible for all school work. He then takes up actual work, commencing at 7.30 in winter and earlier in summer. He stops work at 10.30 a.m., has breakfast at 11 a.m., and resumes at 1 p.m., training being carried on until 5 o'clock. From 5 till 9 p.m. the pupils are at liberty to visit the villages in the neighbourhood, while lights at the school are extinguished at 9.30 p.m. promptly. All training is given on Bleriot monoplanes.

The student gets first a machine known as a penguin, on which he learns to make a straight line on the ground, to maintain his line of flight and to use his engine controls. He is taught to use his rudder by reflex movements, and should master all these elementary matters in about twenty trips. Having passed the first stage, he is advanced to a larger machine of about the same power and speed that can actually fly. He is forbidden, however, to get into the air at this stage, but must drive his airplane over the ground at full speed, keeping the tail at the correct position, thus learning to judge the speed of his machine and the force of the wind. With this machine from three to six trips are generally sufficient. At the end of this time the pilot should be able to guide a machine along the ground by the rudder.

The next machine is a higher-powered airplane, usually fitted with a six-cylinder 45 h.p. Auzani air-cooled engine. In this class the pupil learns to have his machine thoroughly in hand, to run at top speed along the ground, to get off the ground and keep a horizontal line of flight, to land, to turn, to change his direction in the air. The first stage with this machine is called straight lines, and consists of flying 60 inches from the ground. A landing is made by combining the weight of the machine with its acquired speed, landing by switching the ignition off and on. During the short period when the ignition is cut, the weight of the machine causes it to drop to the ground, but this does not prevent it keeping its line of flight.

LEARNING TO LAND.

During the second stage the pilot flies at a height of not less than 5ft., and not more than 50ft. from the ground. The machine is then too high to land by cutting out the ignition, and too low to land by tipping forward. It is, therefore, necessary to lose height without cutting out the ignition, coming down very gradually, and then, when 5ft. from the ground, regaining the normal line of flight, maintaining it for a few seconds, and finally landing as learned in the first stage.

In the third stage the pupil has to make a landing from a height of more than 50ft. He does this by causing the machine to dive, switching off the ignition immediately, bringing the machine to its normal position very gradually, so that the movement is imperceptible to the eye of a spectator, and at 5ft. becomes parallel with the ground. Then as the speed gathered in the descent is acting against gravity the machine lands in its line of flight, tail up, which brings the pupil back to the landing in the first stage, but in this case it is done without using the switch. This method of landing is known as an airdrome landing.

The fourth stage is known as a field landing, the object being to come down as slowly as possible, and, consequently, to roll as short a distance as possible on the ground. This system is intended for use on rough ground or very small fields, where a long roll might cause a capsize. To get this result, the nose of the machine is turned down and the ignition cut at the same time. As soon as the machine is 5 feet from the ground, instead of allowing it to land in its line of flight, it is placed as if to rise slightly and kept there by the elevating planes, thus checking speed very rapidly. The wheels will touch the ground at the same time as the tail does, the drag preventing the machine from rolling for any distance.

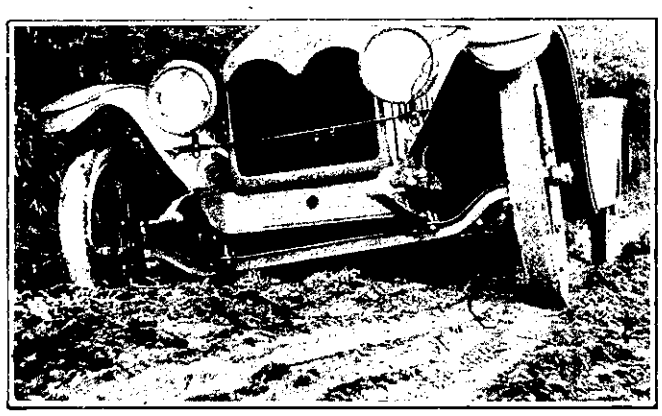
A trip round the aerodrome has to be accomplished in the fifth stage. This must be made at a height of about 330 feet. The machine should rise and make its turns in a progressive manner. In turning the machine should not be made to rise, but its nose should be kept a trifle below that of the line of flight. A trip round the aerodrome should usually be made after 60 straight-line trials.

Up to this stage all the training has been carried out on monoplanes of the cross-channel type, but now the pupil goes to a much larger and heavier machine, equipped with a 50 h.p. Gnome engine and having greater speed and climbing power. This class perfects the pupil in landing at higher speed, it teaches him to turn his direction in the air by fairly sharp turns, and to fly at altitudes of 600 to 2000 feet. The pupil also learns to work adjustments on the gas and air controls and to use the switch on long dives. In this class the student should make an average of twenty trips, following a fixed route set by the instructor.

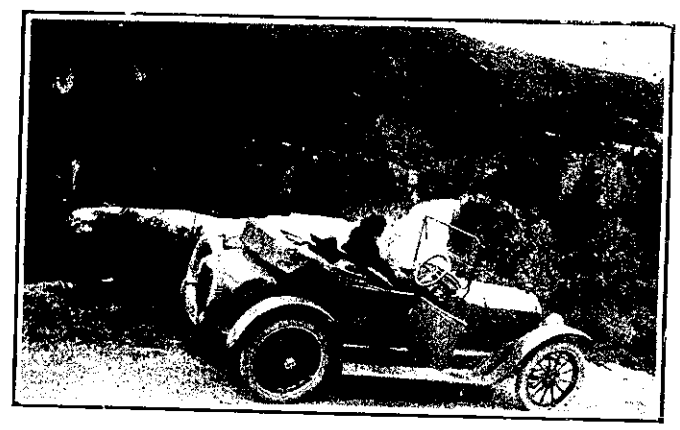
In the following class use is made of a machine of the same general size, but with a still larger engine, usually a 60 h.p. Gnome. Here he learns to perform long spirals, hair-pin descents, etc., from heights of 3500 to 6800 feet, and having passed this stage successfully, usually after fifteen trips, is ready for the height test.

A barograph in a sealed case is hung round his neck, to the back, and he is expected to attain a height of 6600 feet, and having attained this to remain there for an hour. If for any reason beyond his control he is unable to remain at the minimum height for a full hour he may descend and finish the remainder of the time on a second attempt. After this he is ready for his pilot's test, which consists in flying cross-country over a triangle with an average of 190 miles, arriving and leaving from the military flying grounds indicated on the trip. For this test 24 hours usually are considered sufficient. Three of these triangles have to be made, each one over a different course. On the successful completion of these he is given his military pilot's certificate and the rank of corporal.

There are, of course, further stages in other schools, most of these being aerial acrobatics, while machine-gun practice is another of the higher branches of the instruction.



On the road to Wellington.—A sample of some of the roads the Briscoe ploughed through without assistance. The average petrol consumption during the trip from Auckland to Wellington worked out at 30 miles to the gallon.



A 1917 Briscoe three-seater, photographed at Huka Falls, Wairakei, en route to Wellington from Auckland, whence it was driven by Mr. G. B. Holmes, Wellington agent, during the coal strike and shortage of shipping space.

PROGRESSIVE PALMERSTON N. MOTOR AGENT.

THE MAXWELL CAR.

Mr. W. H. Palmer, whose name has been a household one in Palmerston North and district for some years past in connection with motor cars, and who during the last five years has put up a unique record by disposing of approximately four hundred motor cars, has an important announcement on the opposite page. Mr. Palmer intimates to our many readers in the Manawatu, Wanganui and Taranaki districts that he has accepted the agency for the Maxwell car at Palmerston North, where he will at all times be pleased to meet prospective buyers and give demonstration runs to prove what a splendid proposition the Maxwell car is as a road and hill-climber. The petrol consumption works out at 28 miles to the gallon. The cost of a two or five-seater Maxwell has been fixed at precisely the same price, viz., £285.

Mr. Palmer intends to push the Maxwell for all it is worth, and he recognises that his agency will play a very important part in the motor industry in the North Island. Prior to the intended erection of large premices for himself, Mr. Palmer has secured the garage of Messrs. Reardon and Clapham, in Grey Street, Palmerston North, while his telephone number is 216. He will at all times be glad to answer all inquiries and correspondence addressed to the firm.