# GERMANY AND GLIDERS

CCORDING to a cable message re- another pioneer in aviation, who was ceived in New Zealand on July 8, Germany is reported to be assembling gliders at an airfield mear Trondhjem, in Norway.

Whether such means of transport would be of any great value in carrying troops over water can be merely conjecture, though the Germans never do anything without having first carried out numberless experiments. Curiously enough the German experiments in gliding, in the early days of aviation, have an association with New Zealand.

Otto Lilienthal was one of the pioneers of aviation in Germany and for years he experimented with gliding as he attempted to improve his various heavier than air machines. He was also the first man to demonstrate the superiority of arched over flat surfaces and in his time the use of gliders came into regular practice. Lilienthal made over 2,000 flights and was killed while experimenting in 1896. His work was carried on in England by Percy Pilcher,

killed in 1899 during an experimental flight in a glider.

Lilienthal's sister was a musician, and came out to Australia under engagement panded the air force. to the Melbourne Exhibition. There she met a New Zealand farmer, a Devonshire man, and married him. They returned to New Zealand, and descendants speaking, a helpless individual. But there of that union are still living in North and South Canterbury. A son of Lilienthal's sister was in Germany when the last war broke out, specialising as an electrical engineer. He had married a German woman, but because of his nationality he was put in an internment camp and died there. That man's children are still in Germany.

Unless the glider is towed by a powerful airplane it is not an easy method of transporting troops. Weather conditions must be favourable, since the glider is more or less at the mercy of the winds. It must begin its flight from a height and is not able to travel any great distance, though flights have been

made in gliders across the English Channel from France to England.

Gliding has been a popular sport in the Reich for many years. Indeed, it has played an important part in making young Germans airminded and was officially encouraged as a state in airtraining in the years before Goering ex-

It may be argued that such machines are not of much use in modern war. that a man in a glider is, comparatively is one type of airman who is even more helpless than the occupant of the glider and that is the parachutist. From the time the latter "bails out" until he reaches the ground he can do nothing to save himself should a Bren gun expert, or even the local squire, get close enough range to give him both barrels.

### Glider Convoys?

After the unhappy experience of Holland, Belgium and France, Britain has taken comprehensive precautions against parachute troops and it may be expected that the enemy will try to counter these preparations by another surprise stroke. The question is, are the gliders which he is said to be assembling in Norway a clue to his next move?

What could be done with them? One thing which is not by any means outside order. the realm of practical aeronautics is that they might be towed, each with its complement of one or two heavily-armed men, most of the way across the North Sea in aerial "trains"—say a dozen gliders pulled by one aeroplane. While still a number of miles from the English have already been completed. coast, well out of range of British listening posts, the towing aeroplane could pull the gliders to a high altitude, the tow-ropes could then be slipped and while the 'plane went back for another convoy of the small machines, the first card-indexed and the work flows to an squadron of the gliders would be slipping noiselessly over our coastal defences. Once over Britain, these small machines would be, within limits, capable of being manoeuvred to wherever their crews could most safely and expeditiously be landed.

#### Saving Petrol

Such tactics are not impossible of employment. Having made Britain "parachute-conscious," the enemy might think it advisable to ring the changes and send over gliders. Further, one medium-powered 'plane might safely convoy a dozen gliders, each carrying two men, and that would be more economical than herding them in a cumbrous troop-carrying 'plane, which besides advertising its presence with its engines and presenting a bulky target to anti-aircraft and fighter-'plane fire, would use up a lot of petrol. At any rate, as a possible agent of invasion, the glider cannot altogether be disregarded.

#### Duke of Windsor's Domain

The appointment of the Duke of Windsor to the Governorship of the Bahama Islands may prove to be a turning point in the fortunes of that group. Nassau is the capital and the seat of government. The Bahamas, a line of coral islands lying off the coast of Florida and warmed by the Gulf Stream, amazing prosperity.

## Travelling Dental Unit For Overseas

FULLY equipped travelling dental hospital has been built for use with the New Zealand Division Overseas and is now at Trentham Camp. It stands on the chassis of a large motor lorry, awaiting the special chassis to which it will ultimately be fitted before leaving New Zealand,

This travelling dental unit is complete with chairs and sufficient equipment to cope with work in the field, work such as repairs, fillings and extractions. An ingenious device provides for plenty of hot water, and there is storage room for a considerable quantity of spare equipment and supplies. When it is in action the unit can move with the troops to any sphere of operations.

The dental hospital at Trentham is working to capacity. There are 17 dentists and 32 mechanics to deal with the constant stream of men requiring attention, and no man leaves New Zealand until his teeth are in first-class

Men of the 3rd Echelon units and the specialist companies are now receiving attention. Before this work is complete, 700 full or partial dentures will have been made, though many of them

The Trentham Dental Hospital is fully equipped, even to X-Ray apparatus. There is no waiting. Each man's requirements and appointments are even and regular schedule.

have a delightful climate, which attracts great numbers of American and British visitors every year. There are 20 larger islands and 653 islets and some thousands of reefs, but nowhere does the ground rise more than 400 feet above sea-level, consequently cyclones do an immense amount of damage. Sponge-fishing is the principal industry, but the production of fruits, especially pineapples, citrus fruits and tomatoes, yields almost as much revenue. In recent times thousands of acres have been planted with sisal-hemp. Turtles are caught there in large numbers, and shells, and pearls and ambergris are also important. The winter climate is mild and still; flowers bloom in profusion among the palms and other semi-tropical vegetation. On many of the tiny islands, some of which are only a few acres in extent, Americans and Europeans have built themselves most beautiful houses. The great majority of the residents of the Bahamas are descendants of liberated slaves from the Southern states of America. During the American civil war Nassau became the station for blockade-runners and for years afterwards the islands enjoyed an

