French Parliament, who has taken a great interest in the subject, was stationed at Bu-Denib. M. Tuffier watched one journey it made while he was there. The aeroplane started at 7 a.m., flew sixty-five kilometres, over country occupied by dissidents, to an advanced post, shipped two wounded men (one with a fracture of the femur, and the other with a serious fracture of the arm), and was back again at Bu-Denib at 11 a.m. The aeroplane was of special construction, but was not found very satisfactory, owing chiefly to the difficulty of lifting the wounded men into and out of the fuselage.

At Wargla, in the wild country to the south of Algiers, aeroplanes belonging to a bombing squadron have been used, sometimes to carry surgeons to the place where the wounded man lay, sometimes to transport the man to hospital. A regular route, with five landing places, has been mapped out further into the desert for 597 kilometres. Pilots carrying wounded have covered as much as 800 kilometres in seven hours, making two halts. Communications by land are often cut, but when the road, which is very rough, is open, a motor-car takes seven days, camels or mules twenty-six days. Wounded have also been brought from posts in the Sahara south of Tunis to a hospital 90 kilometres away by ordinary aeroplanes of the Farman type. The various scattered posts, often surrounded by dissident tribes, are kept in communication with head quarters by wireless telegraphy. M. Tuffier heard of no mischance in any case, but owing to the conditions of temperature near the ground flying by day is very difficult, and it is usually necessary to climb 1,500 to 2,000 metres. But this difficulty, it is said, may be avoided by flying in the early morning. The great enemy of the flying man is the sirocco, which may blow with great violence for three, four, and even six days. The clouds of sand it raises not only penetrate to every part of the machinery, but are so dense, so high, and so widespread that the pilots would not be able to find their landing places. During a sirocco, therefore, aerochairs are out of commission.

The French are giving careful study to the designing of aerochairs to afford a convenient method of transporting the wounded, but whatever success is attained, it must often happen in frontier operations such as those in Africa that an aeroplane of the special type will not be available, and improvisation will become necessary. M.M. Nemirodsky and Tilman have devised a flying ambulance to carry, in addition to the pilot, a surgeon and an x-ray operator, together with surgical instruments, sterilizing apparatus, dressings, and x-ray equipment. The total weight carried is, it is stated, about 700 kilos (about 1,500 lb.). The Canadian Army Medical Corps made some experiments in designing an aeroplane for transport of wounded, but a description is not available. A great deal of progress has been made in increasing the carrying power of aeroplanes. The new Handley Page commercial aeroplane, it is said, can carry fifteen to twenty passengers in a saloon 22 ft. long, 4 ft. 6 in. wide, and 6 ft. high.

MOTOR NOTES FOR MEDICAL MEN.

By H. MASSAC BUIST.

THE FUEL PROBLEM.

WHILE the Government inquiry into the alleged profiteering in motor fuel is welcome, the medical man, who stands in sore need of reducing his fuel bill, will be well advised not to take too optimistic a view concerning the practical outcome of the investigation. Undoubtedly there is profiteering afoot; but it is so favoured by a combination of circumstances that it is almost a case of choosing to put up with it or go without the fuel. In the first place, we are at present largely dependent for supplies on the New World, where there is a demand, under equally gainful conditions, for every gallon of fuel shipped to this country. Consequently, if we will not pay the price asked, there is a great

likelihood of our being left without it. The Exchange is strongly against us, and shipping rates are abnormally high, and these two conditions combine to aggravate the situation; while the cost of producing benzol at home under present and immediately prospective conditions will, in any case, prevent the price of the old-established rival form of fuel falling as low as it might, probably for several years. In brief, petrol has not a very close competitor in benzol, though the motoring public is quite satisfied as to the practicability of benzol, a point that has been further demonstrated by the 10,000 miles test undertaken by the standard four cylinder 80 by 150 mm. bore and stroke Sunbeam car.

The bright spot on the horizon is provided by the very rapid rate at which oil working is being developed in British possessions and spheres of influence; but here, too, we have to remember that all new machinery and tankers and transport costs are on a post-war basis. Nevertheless, this is the direction from which relief will come presently. As to supplies from the New World, the only unknown quantity is whether the Americans care to make some concessions in the present to preserve the very valuable goodwill they have established in this country.

THE AUTOMOBILE ASSOCIATION'S BENZOL TEST.

The Automobile Association's test of benzol was over a distance of 10,000 miles with spirit supplied to the National Benzol Association's standard specification by the Gas Light and Coke Company, the Staveley Coal and Iron

Company, Messrs. William Butler and Company, the Staffordshire Chemical Company, and Messrs. Bolekow, Vaughan, and Company. In other words, it is presumably of the quality supplied to any motorist who purchases the spirit manufactured by members of the National Benzol Association. The usual systems of observation, including sealed connexions and so forth, were employed. Lodge sparking plugs were used, No. 1 becoming sooted up at 4,152 miles, when it was cleaned and replaced. Otherwise none of the other plugs were cleaned in the course of 10,000 miles, so that this showing is very satisfactory for this class

Bréguet aeroplane for transport of wounded, 1919 type. Panel closed. The patient in the upper berth has raised his head but the capot will be closed before the aeroplane starts.

of engine. Vacuum A lubricating oil was used with complete satisfaction, the consumption of it working out at 1739.13 miles per gallon, which is very economical. From 20 to 25 per cent. of the roads traversed were either in good or fair condition, the rest being either in poor or bad condition. The average mean weight of the car was 1.8 tons, and the average benzol consumption 24.57 miles per gallon, which is an average of 44.22 ton-miles a gallon. Over one stage of 129.98 miles the consumption worked out as high as 18.56 miles per gallon of benzol, or 33.6 ton-miles to the gallon; while the most economical fuel consumption was obtained over a 145½ mile stage at 27.71 miles per gallon, otherwise 50.80 ton-miles a gallon. The average estimated speed of the car was 23.46 miles an hour, so that it was running somewhere near its lowest economical speed. Samples of the fuel used were taken and analysed during the test. At approximately the half stage, when the car had run 5,169 miles on benzol, the inlet and exhaust valves and their stems, as well as the valve caps and sparking plugs, were examined; and this was done again at the end of the test, which is the first official one by a recognized motoring organization of commercial benzol. Hence the Automobile Association has published a very lengthy and detailed report, which can be had on application to its Fuel Department at the head quarters, Fanum House, Whitcomb Street, London, post free for 3s. 6d. As a result of this test the public need no longer hesitate to buy benzol according to the National Benzol Association's specification.

RECIPROCITY in medical practice has been established between Japan and Mexico.

THE University of Cincinnati has established a department of industrial medicine and public health.