

## Clinical and other Notes.

### THE TROJAN AMBULANCE CARRIER.

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THE International Committee of the Red Cross at Geneva have been inquiring for the past year or two into the best means of adapting motor vehicles for ambulance purposes. (Report by General Rouppert, C.I.C.R., Geneva, 1931.)

Some five various devices have been described, one of which, Colonel Tintner's apparatus, has been examined and tested by the War Office.



FIG. 1.—Loading the carrier.

This is a heavy cast-iron apparatus, made to fit into a lorry and capable of carrying four stretcher cases. No special cover has been devised, if the vehicle used is an open lorry.

In General Rouppert's report it is definitely stated that a saloon car cannot be adapted for ambulance purposes.

The ambulance carrier, here described, has passed satisfactorily all its tests and has been used successfully as an emergency ambulance car. (Fig. 1, view of complete carrier being loaded.)

The apparatus consists of detachable parts, made of tubular steel, which are fitted on to base supports, permanently attached to the chassis of any 4-5 seater type of car (of 12-horse power or over). Auxiliary rear springs should be fitted for bad roads.

Four verticals support a horizontal framework above the roof of the car. On this framework are two pairs of grooved rails to take two Service stretchers. A sheet below prevents draughts and the whole is covered by a canvas roof. Two port-holes allow of observation of the patients on the road. A light and a communication cord to the driver are easily fitted.

There is enough room to take two patients with Thomas's splints slung to a suspension bar. The apparatus allows of one stretcher to be centralized. This permits of a semi-Fowler position for an abdominal case. The stretchers can be fitted with a frame to carry mosquito netting, if required, in malarial districts.



FIG. 2.—Storage when not in use.

No difficulty is experienced in loading. If the bearers are exceptionally short men, they stand on biscuit or petrol tins for the actual loading.

The whole carrier apparatus is perfectly rigid, lateral movement is prevented by cross-bracing between the rear verticals, and fore and aft motion by forestays.

The apparatus weighs 144 pounds. It is not bulky and is conveniently stored on a stretcher or in the corner of a garage (fig. 2).

The assembly and erection can be carried out in a few minutes and are easy to learn ; little instruction is necessary.

Road tests have been carried out, and a standard saloon car fitted with the carrier has carried over rough ground two 12-stone lying cases, two sitting, a driver and an orderly, and on a good road a speed of over fifty miles per hour was attained.

The base pieces have to be prepared and fitted permanently to the particular type of car chosen. This takes a few hours. When this is done the apparatus can be erected in five minutes and dismantled in three.

It is possible to erect the carrier for use as a tent, using special base pieces which are secured by iron pins driven into the ground. A side curtain completes the tent and shelter is provided for four stretcher cases.



FIG. 3.—In use as a tent.

If required, the tent can be used as a dressing tent.

The maintenance cost of an ambulance car, garage fees, insurance charges, are eliminated, by the use of the ambulance carrier.

In any emergency it will be easy to organize an Auxiliary Ambulance Service through one of the existing First Aid Societies.

Once the base pieces are attached to a car the rest of the apparatus is standard and interchangeable.

The manufacturers can turn out large numbers of these ambulances in a short space of time.

The cost is £37 in this country and the apparatus is made by the Trojan Company, Ltd., of Croydon.