IMPROVEMENTS IN MOTOR AMBULANCE CONSTRUCTION.

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Many designs and improvements in motor ambulance construction have been made during the present War, but there are several defects, some of which we have endeavoured to remedy.

Those to which we would call attention are:

(a) Poor seating accommodation; the seats being very low, very narrow, or insufficiently padded.

Fig. 1.—Showing upper tray lowered down with patient in position, to be lifted up.

(b) The loading of the top stretcher tray, which, on account of its height, is no easy matter, and requires the efforts of several orderlies.

The difficulty of providing a well-padded seat at a comfortable height, and at the same time keeping the under stretcher tray as low as possible has been overcome by means of a collapsible seat.

This seat folds down compactly into the well of the car when not in
use, but, if required, rises automatically when the lower tray is lifted up as shown in photographs. This is accomplished by means of levers fixed to the seat, the under side of the lower tray, and the floor of the ambulance.

It will be noticed that room can be found for ample seat and back padding without necessitating a space being set apart for this between the lower tray and the "overhang" of the ambulance; thus enabling one to place the bottom tray in its lowest possible position.

![Fig. 2.—Showing upper tray in course of being raised up.](image)

The second defect mentioned has been overcome by supporting the upper tray on hinged stanchions which permit this tray to be lowered right down on to the lower tray and to project about two feet outside the rear of the ambulance.

A patient on a stretcher can then be placed on it by two bearers and the whole raised up into position quite easily by the same two men.

This method of loading the upper tray is a great improvement, and involves far less risk to the patient and the employment of fewer bearers.

It has often been noticed that a stretcher is unavoidably tilted at a somewhat dangerous angle when lifted up by bearers of different heights, but this risk cannot occur in the method of loading shown.
Fig. 3.—Showing upper tray "right up." On the left the trays have been folded up and collapsible seat brought into position.

Fig. 4.—Shows ambulance with one side arranged for lying and the other for sitting.
The two improvements described have been made without interfering in any way with the convertibility of the ambulance from lying down to sitting accommodation, or vice versa, as the supporting stanchions of the upper tray are hinged on one side and have detachable joints on the other.

By unfastening the latter the upper tray falls down and the lower tray can then be folded up against it, bringing the seat into position.

Ambulances constructed on these lines have now been in constant use for nearly two years, and have proved in every way successful, having carried several thousands of cases. There are also several minor improvements which may be noticed, such as the method of ventilation by means of hopper windows which can be opened or closed as required, and a useful locker and orderly's seat combined placed below the door communicating between the driver and the interior.

The doors at the back of the ambulance consist of a framework of wood or iron which can be lifted off completely or folded right back against the outside of the car. They are provided with curtains which can be brailled up or down as desired.

A NOTE ON THE OCCURRENCE OF EXPERIMENTAL PARATYPHOID INFECTION IN RABBITS WHICH PROVED FATAL IN EACH CASE, WITH LESIONS RESEMBLING THOSE FOUND IN MAN.

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Having been unable to find any published report on the infection of rabbits with Bacillus paratyphosus A in which a pathological picture was produced which so closely resembled that found in man as in this instance, it was thought that a description of the infection might prove of some academical interest.

Altogether three rabbits were infected by inoculating 500 million living B. paratyphosus A into the posterior marginal vein of the ear.

Of these rabbits those referred to below as A and B had been inoculated one month previously with 0.5 and one cubic centimetre of mixed typhoid and paratyphoid vaccine with an interval of eight days between the doses; the vaccine containing 1,000 million typhoid bacilli, and 750 million each of paratyphoid bacilli A and B in a cubic centimetre.

Rabbit C was the control rabbit which had not received any vaccine. All the rabbits were inoculated on the same day, and received a 500 million dose from an emulsion of the same twenty-four hour agar slope of B. paratyphosus A. Four days later the control rabbit C was found to be suffering from diarrhoea, to be very weak, refusing food, and had lost 120 grammes in weight. On the morning of the fifth day it was found dead in its cage. As it was impossible to make a post-mortem examina-