ARRANGEMENTS IN THE EMBARKATION OF INVALIDS IN TRANSPORTS.

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As Embarking Medical Officer at Cape Town since January, 1904, and in view of some changes that have recently appeared in the Regulations for His Majesty's Transport Services, the question brought forward in this article may have interest for officers of the Corps. My initial step will be to take an instance of the actual proceedings involved in the preliminary arrangements and final carrying out of the work of embarking a party of invalids at Cape Town for home. Starting from the communication received by the Principal Medical Officer, Cape Colony, from the Principal Medical Officer, South Africa, of the number of invalids to be embarked, I will follow out the steps taken before the invalid is stowed away, and the ship's head turned for home.

The detailed list is received, so many hammocks, so many cots; these numbers are put before the Resident Naval Transport Officer, and in a consultation held in his office, the accommodation to be provided for the invalids is laid down and approved by the Principal Medical Officer, Cape Colony. It must be borne in mind that a transport is intended for carrying healthy troops, and that her hospital arrangements are to cope with the sickness occurring amongst the troops during the voyage; we will take as an example the "Dilwara," embarking two regiments and sixty-nine invalids, made up as follows:

- Thirty-two tubercle cases, including ten cots.
- Thirty-seven ordinary cases, including twenty-two cots.
- Tubercle cases to receive separate accommodation.

The ship has a hospital containing thirty-two cots, the number of troops on board is 1,100, therefore we have a bare 3 per cent. as laid down in the Transport Regulations; now the question is to provide a part of the ship suitable for invalids and handy to the hospital and dispensary, so that nursing and treatment can be carried out with the least amount of time and trouble. The arrangement made is as follows: Just aft of the hospital are the women's quarters; the following sketch shows general plan of hospital and these quarters.

Compartment "A" contains two mess tables; "B" is fitted with twenty-two double tier berths; "D" lavatory and bath rooms. "A" is shut off from the hospital by a painted canvas screen fitted with a door. "B" is shut off from "C" by a similar contrivance without the door (screen stretches from deck to deck). So here in a compact space we have the twenty-two tubercle cases in a domain of their own, separated from their less infectious fellow invalids and from the healthy troops. Compartment "C" is reached from the hospital on the starboard side, and contains thirty-two double tier berths and four cots in annex 2 (this is the
women's hospital if quarters had been used for their ordinary purpose); we swing a naval cot, a very comfortable contrivance, to make up to thirty-three. Annex 3 is lavatory and bath. Now we must account for ten tubercle cot cases; they receive cabin accommodation; we take over a 6-berth and a 4-berth cabin with latrine and bathroom attached. Our sixty-nine invalids are now accounted for.

In this particular case it was found just as advantageous to treat all the invalids as requiring lying down accommodation, as to pull down the berths in the women's quarters and put up hammocks; if we had a small number of ordinary cot invalids and a large number of ordinary hammock cases, the procedure would be to take away the berths and put up hammocks and place the cot cases in cabins.

Now let us discuss what has been done. We have put invalids into double tier berths and into cabin berths. In the first number of our Journal, July, 1903, "A Report Upon Hospital Arrangements on Board Transports" was published by Captain G. B. Stanistreet; he condemns our arrangement for the following reasons:—

(1) Difficulty in moving patients in and out.
(2) Danger of patients in the lower cots receiving the dejecta of helpless enteric or dysenteric cases in the upper cots.
(3) Unpleasant results to the occupants of the lower, when patients in the upper cots are sea-sick.
(4) Difficulty debilitated patients experience in getting in or out of the upper cots.
(5) Difficulties of the medical officer in getting at the case.
(6) The loss (half) of cubic space to each patient when double tier cots are provided.
(7) Difficulty, discomfort and danger to helpless patients in conveying them from their cabin berths to the main alleyways.
(8) Increased number of orderlies required to look after and attend to patients in cabins.

It is plain that the accommodation we have provided is entirely unsuitable for a helpless sick man, therefore we must have something to fall back upon. I think most medical officers who have made trips by troopship from England to the Cape and vice versa, will agree that the 3 per cent. hospital accommodation is never fully taken up by the sick from the healthy troops on board, so that the worst cot cases can be taken into the permanent hospital and given a swinging cot. The fact of starting the voyage with an empty hospital is the saving factor, it allows the Medical Officer in charge to arrange his invalids as he likes and provides a practical certainty that he can give proper accommodation to any cases of acute illness amongst the troops as well. If the new ruling that "Helpless invalids be accommodated in the fixed hospital up to half its number of cots," and 1½ per cent. hospital accommodation only be reserved, I am afraid the Medical Officer will find himself forced to treat bad cases in cabins or double tier cots.

THE PREVENTION OF ENTERIC FEVER AMONGST YOUNG SOLDIERS IN INDIA.

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Enteric fever has been classed amongst the preventable diseases, and yet as far as India and the Tropics are concerned, we are far from realising this ideal at present. If we can tide the young soldier over his first two years of service in India, I think we shall have gone far towards solving the problem.

Amongst the fresh arrivals of all classes in the country, it cannot be questioned that the young soldier is most affected by this disease, and a study of the conditions under which he lives, in contradistinction to those of other adolescents, may throw some light on the subject.

On arrival in the country he is taken from a troop-ship, which is repainted and cleaned after each voyage, both inside and out. From here he is placed in a dirty and insanitary third-class carriage on the Indian railway, and conveyed to his destination. To those who are acquainted with the habits of the native in "squatting" on the seats of these carriages, a very probable source of early infection at once presents itself. Why should not the troop-train be treated in a similar way to the troop-ship? It has always occurred to me that the cleansing of the train is just as important as the troop-ship. The young officer or civilian travels to his destination in a fairly clean first-class carriage.

On arrival at his station what are the conditions under which the young officer, civilian or soldier, lives? The water supply is the same for