

Enclosure 3 in No. 34.

REPORT by the SURGEON of the s.s. "Mongol."

I HAVE the honor to present my report of the voyage of the s.s. "Mongol," of which I was medical superintendent, from Plymouth to New Zealand.

The "Mongol" sailed from Plymouth on 23rd December, having on board 313 emigrants received from the depôt the preceding day. Of this number 188 were adults and 125 were children under 12 years of age; the latter being made up of 75 between 12 and 4 years, 39 between 4 and 1 year, and 11 infants under 12 months. It will thus be seen that the proportion of children to adults was very large.

Two cases of scarlet fever had already appeared in the depôt and had been removed, and one case of measles. The scarlet fever was confined to one family, and another member of this family had suspicious symptoms when received on board; but these did not develope, and she was allowed to proceed on the voyage. I may add that this person did not fall ill with the disease. A medical inspection of the immigrants took place on the morning of the 22nd, at which I was present. Two families were sent on shore, a child in one being at the time ill with scarlet fever, and the children in the other apparently only lately recovered from it. The ship sailed on the 23rd.

On the 24th a case of measles appeared among the single women and was removed to hospital, and on the 25th two cases of scarlet fever also amongst them were removed there. The latter cases occurred in the family already attacked on shore. On the 26th a child in the after part of the ship, where a few married people were placed, was also attacked with scarlet fever, she being likewise placed in the hospital. In the after compartment referred to there were but a few families, shut off from the compartment occupied by the single women, the main body of the married people and all the single men being removed forward from them by a large space including the engine-room.

As no disease had appeared forward, I therefore determined, with the captain's help, to maintain a strict isolation of the two parts of the vessel, the one from the other. School which had just commenced was broken up, and two deck constables appointed to prevent all communication of emigrants forward and aft.

This cordon was established on 26th December, and was well and efficiently maintained. On 1st January another case of scarlet fever appeared, also among the single women, and was immediately transferred to hospital, making in all four cases up to that date. Strict isolation of the two parts of the ship was preserved up to 10th January, when, as no new case had manifested itself, it was somewhat relaxed, and on that date school was commenced.

During all this time measles had been steadily spreading through all the compartments, and up to 19th January fifty-one cases had occurred.

Almost all of these did well, the weather being warm and favourable to a mild attack.

On 21st January a child forward was most violently attacked with malignant sore throat, and from this date onwards scarlet fever of a severe type continued prevalent there.

The only patient leaving the hospital up to the re-appearance of the epidemic, did so cured of scarlet fever on 1st January. Her bed was retained in the hospital, and her clothes were passed through a solution of carbolic acid. In addition to this, a measles case was discharged cured on that day, and her clothing treated in a similar manner, her bed being also retained. With these exceptions, no patient left the scarlet-fever compartment of the hospital up to the second appearance of the epidemic.

These are the facts connected with the re-appearance of scarlet fever; and in view of them, it is to be regretted that the strict separation of the two parts of the vessel was not maintained during the whole of the voyage. On the other hand, no effort could have stayed the progress of the measles, the cases occurring in all parts of the ship, and in numbers far beyond our hospital accommodation.

The total number of deaths during the passage was sixteen: of these, three were due to bronchitis, four to measles, and five to scarlet fever. The remaining deaths resulted from—Ulcer, one; inanition, one; sunstroke, one; diarrhoea, one.

The total number of cases occurring on board, of the three former diseases, were—Bronchitis, eight; measles, sixty-seven; and scarlet fever, twenty-one. Two births took place on the passage, and both the children were landed in good health.

In the face of the severe epidemic recorded above, and of the mortality resulting therefrom, I would desire, with some distrust from my limited experience, but with a weighty sense of the importance of all inquiry into the subject, to place before you some observations on the apparent cause of it, and also to suggest some remedies which may possibly lessen mortality in the future.

Among the causes may be placed the following:—

1. A want of due care in the selection of emigrants, and a want of due inspection on being placed on board. Some of the families placed under my charge were of highly weak constitution, and apparently unable to stand against even the trials of a sea voyage. In one family all the children (three in number) died, their deaths being placed under the heads of inanition, measles, and bronchitis; the real cause of death being the want of bodily vigour to withstand even a slight attack of disease, combined with a want of attention on the mother's part to their food and general comfort. Another death, registered as from ulcer, affords strong proof of the necessity of careful medical inspection before embarkation. When about a week at sea, a mother showed me her child, an infant of 12 months, with two immense ulcers in its groin, arising from want of due care in dressing. These sores were wholly beyond cure, and must have been in existence before the ship sailed, when a careful medical inspection would have at once detected them. Another instance of want of care in selection is afforded in the case of an old woman and her husband proceeding to children in the Colony. The woman's age is returned as 48, but she appears to be about 65. She is tottering and feeble, has had a paralytic seizure on board, and was with difficulty landed alive.

2. Absence of hospital accommodation at Plymouth. The emigrants for the "Mongol" were placed in the depôt along with those for the "Scimitar." Scarlet fever broke out amongst them, and when I requested that the sick be placed in the hospital, I discovered that, owing to overcrowding in