great purpose of the plan is to save lives, in the case of injuries, by the prompt and intelligent use of modern principles of treatment such as could be reasonably applied by an ordinary train crew, the contention being that an injured person under such circumstances will be able to reach the nearest hospital in a far better condition, and that his chances in all respects will be correspondingly heightened.

CORRESPONDENCE.

INFANT MORTALITY.

SIR,—I shall be much obliged if you will allow me to make use of your columns to thank Sir William Gairdner for his very kind letter (BRITISH MEDICAL JOURNAL, August 30th, p. 642) in reference to a paper read by myself before the British Medical Association.

The figures I quoted were taken from the last report of the Registrar-General, and while I am glad to think that there are counties where there has been a reduction in infantile mortality yet there are others in the reverse position. The figures given in the last report for the whole country are as follows:

Year.	Annual mortality of Infants under one year per 1000.
1838-42 (five years)	152
1847-50 (four years)	154
1871-60	154
1871-80	149
1881-90	142
1891-1900	154
1891	149
1892	148
1893	159
1894	137
1895	161
1896	148
1897	156
1898	160
1899	163
1900	154

It will be noticed that in the years 1895, 1898, 1899 the mortality is 160 and upwards, between 1860 and 1870 the ratio of 160 was reached three times, but in the last half-century was never exceeded except in the decade 1891-1900.

Since Sir William's letter appeared I have had the pleasure of reading his most interesting paper, and no doubt the figures he gives are encouraging so far as many of the counties are concerned, but I am afraid that if you turn to one of the districts like London, Yorkshire, and Lancashire the reverse will be found to be the case. London from 1841 to 1850 had an infant mortality of 157, from 1891 to 1900 it was 160.

Sir William Gairdner appears to lay stress upon home industries as pernicious, and no doubt they are so, but I am afraid that those industries that compel the mothers to leave their infants at home are at least equally pernicious. In my paper I drew attention to the low mortality amongst the Jewish as compared with Christian children in Manchester, a condition of affairs I had found to prevail in some parts of the Continent. The *Richmond Dispatch* (United States) of August 17th, in a leading article on the paper, points out that the same low mortality occurs amongst the Hebrew race in New York. Dr. Manuel Fishburg, who practises in East Side, New York, states that the wretched wards largely inhabited by Russian Jews, who live amid insanitary surroundings, had a mortality of only 15.92, while that for the whole of New York was 18.53. How far environment and how far food is the cause of the mortality I am not prepared to say, but I think the evidence we have is sufficient to prove that the frightful mortality prevailing amongst infants (specially amongst illegitimate children) requires the immediate attention of Parliament. In the last report of the Registrar-General it appears that pulmonary phthisis accounted for 43,000 deaths; 143,000 children died before they were 1 year of age! If His Most Gracious Majesty could only have his attention drawn to this question, and would only take it up in the practical way he took up the phthisis question, I should have good hope that some real effort might be made to stop the slaughter of the innocents that goes on year by year.

Again thanking Sir William for his letter, which will doubtless do much to help on the cause we both have at heart, I am, etc.,

Didsbury, Sept. 7th. JNO. MILSON RHODES, M.D.

RETURN CASES OF SCARLET FEVER.

SIR,—In the BRITISH MEDICAL JOURNAL of August 16th you published a paper by me on the above subject, in the closing paragraphs of which I stated:

> I wish to point out, however, that this calculation only has reference to the part played by hospital-infecting cases in the home. But the potentiality for mischief of these cases is limited so far as the home is concerned, whereas outside the home it may be unlimited. As Dr. Niven says: "A case known to be in the infective stage of scarlet fever ceases to be dangerous to children outside the home, as a rule. But overlooked cases, and cases returned from hospital in an infective condition, mix freely with persons outside, and are in a position to do much greater harm." ..... "It seems reasonable, therefore, to suggest that, when the community as a whole is considered, infection carried from hospital may do even more harm than is indicated by the figures having reference to the home only, and that it may, indeed, in some cases entirely neutralize the advantage otherwise obtainable by hospital isolation."

At the time of writing this I was not aware of a valuable report made to the Local Government Board by Dr. Darra Mair (dated May 10th, 1902) on "a prevalence of throat illness in and near the Ditcham Park Estate, Hampshire." As this report supports my contention somewhat strikingly I venture to call attention to its essential facts. On May 23rd a child named Case arrived on the Ditcham Park Estate after being discharged from the Portsmouth Isolation Hospital, where she had been isolated for scarlet fever since April 9th; thirteen days later (June 3rd) a child with whom she had been playing was attacked with "sore throat," and five days later still (June 10th) another child in another house, with whom the Case child had also been playing, developed scarlet fever.

These 2 cases were the beginning of an outbreak, consisting altogether of 22 cases, 6 of which were scarlet fever, and 16 "sore throat" (presumably diphtheria). Some of the latter were severe, and two proved fatal.

Dr. Darra Mair had no difficulty in connecting the source of the outbreak with the Case child who had been passed through the Portsmouth Isolation Hospital. Other sources of infection could be practically excluded, excepting, of course, the imperfectly disinfected clothing theory. Post-scarlatinal diphtheria existed at the Portsmouth Isolation Hospital, and about a week prior to the child's discharge she had suffered from "adenitis." Dr. Mair concludes:

> That the Case child retained scarlatinal infection on discharge from the Portsmouth Hospital, a contingency which happens with some frequency in spite of great care in connexion with isolation hospitals, seems to be probable from the facts I have recorded; and if it be assumed that she also retained, even in small degree, diphtherial infection, the course of events following her arrival at Woodcroft becomes easy of comprehension. That she became the origin of a series of cases of scarlet fever, and at the same time of a series of cases of diphtheria, is an elucidation of what occurred which would not be difficult to maintain.

The point I wish to bring out is this. None of these 22 cases of illness happened to occur in the actual house to which the Case child returned from hospital. Hence there was technically no "return case" as usually defined and recorded. Had the outbreak occurred in a large town, instead of in a sparsely-populated rural district, there would have been no Local Government Board inquiry, no "return case" would have been recorded, and probably the real source of infection would never have been suspected. Is it unreasonable to believe that the part played by infection carried from hospital in spreading disease is not yet fully understood?

I would mention incidentally that Professor Simpson in his investigation into the subject of return cases for the Metropolitan Asylums Board ruled out all supposed return cases in which the disease was not of the same nature as that for which the original case was admitted to hospital. Thus one of his cases, Frederick J. (p. 9 of his report), was treated in hospital for scarlet fever, and detained seventy-five days. Within eighteen days of his return five persons in the house were attacked with diphtheria. A pure culture of diphtheria bacilli was found in Frederick's throat. Yet the cases were ruled out, and not counted as "return cases."—I am, etc.,

Leicester, Sept. 6th. C. KILLICK MILLARD.