

## CHILDREN'S COUNTRY HOLIDAYS FUND.

To the Editors of THE LANCET.

SIRS,—May we call the attention of your readers to the needs of the Children's Country Holidays Fund, which sends poor children into the country for a fortnight during their summer holidays? In most of our London schools the fund has now become an institution. Parents and teachers recognise from different points of view the beneficial effects upon the children of a fortnight's residence in the country at a time when even to older persons the heat of London is oppressive. It is hardly too much to say that the Children's Country Holidays Fund has indicated one of the methods by which there is best hope of preventing that deterioration in the physique of our town population, of which the public has lately heard so much. In 1903 the fund sent away 34,000 children and in 1904 over 39,000. The increase in numbers shows that a real demand exists for its services and that it possesses the organisation by which that demand can be met. Only the money is lacking. We hope that when the public realise the work that is being done by the Children's Country Holidays Fund sufficient help will be forthcoming to allow of its maintaining and extending its operations. The address of the fund is 18, Buckingham-street, Strand, and the honorary treasurer is the Earl of Arran.

We are, Sirs, yours faithfully,

ALFRED LYTTELTON, } Trustees of the Children's  
W. F. D. SMITH, } Country Holidays Fund.

Buckingham-street, Strand, W.C., June 3rd, 1905.

## A PLEA FOR THE MORE GENERAL USE OF TUBERCULIN.

To the Editors of THE LANCET.

SIRS,—In reference to your annotation in THE LANCET of June 3rd, p. 1526, I feel convinced that many medical men who have used tuberculin will agree that a plea for its more extensive use in tuberculous affections will be a step in the right direction. There is no doubt, as you suggest, that a careful consideration and a thorough re-investigation would be the means of placing tuberculin in a position that it so much deserves. In the minds of those who have constantly used tuberculin there can be but little hesitation in giving a verdict as to its efficacy in lupus vulgaris, tuberculosis cutis, lung, and other forms of tuberculous mischief. I have used this remedy since its first discovery and have not had reason to lose faith in it or be disappointed with the good results achieved by means of its aid.

I could quote various cases of tuberculous ulcers having been permanently healed by this remedy when apparently everything else had failed and such a remedy should not be allowed to become obsolete without a thorough and impartial trial. Trusting your annotation will be the means of again bringing this remedy into prominence,

I am, Sirs, yours faithfully,

C. STANSER BOWKER.

Pontnewydd, Newport, Mon., June 6th, 1905.

## RED RUBBER: ITS POSSIBLE CONNECTION WITH APPENDICITIS AND OTHER INTESTINAL DISORDERS.

To the Editors of THE LANCET.

SIRS,—A few notes I have made on this subject may be of interest to your readers. Not long since, at 10 P.M., I called in a shop kept by one of my patients to make a small purchase. Behind the counter was a young girl whom I knew well as a patient and I was surprised to see her looking so ill. She presented a picture of perfect depression. I mentioned the fact to her and she confirmed my observation, saying that she had felt very relaxed and depressed for the last two days and that she was getting worse. Her pulse was scarcely to be felt, she was pale, heavy-eyed, with cold and clammy hands. At 1 A.M., three hours after I was talking to her, I was summoned to her house to see her. I went and

found her suffering from a very acute appendicitis. There was no pain felt prior to 1 A.M. She was removed to hospital next day and soon operated on for the removal of the appendix. This case gave me the idea that the cause of appendicitis was probably a something which produced first of all a general depression, that either the depression or that something causing the depression was the cause of appendicitis. On asking myself the question as to what the something could be my mind became riveted on antimony after dismissing other agents for the want of collateral symptoms. Then another question presented itself as to the source of the antimony. I learned from the girl's aunt, with whom she lived, that she was accustomed to drink daily about half a dozen bottles of non-intoxicating drinks which she bought from a shop next door. I also found that she was the only one out of a family of nine who drank these drinks; she was the only one in the household ever attacked by appendicitis. This occurrence led me to retrace my steps to many of my patients who had been victims of this dire complaint and I learnt from those I revisited—nine in all—that they also had been drinkers of non-intoxicating drinks from bottles fitted with red rubber rings. That this red rubber contains antimony there is no doubt. I have tested several pieces myself. It is insoluble in all solvents of raw rubber and gutta-percha. To confirm my test I took a dozen of these red rubber bottle rings to Mr. R. C. Cowley, Ph.C., analytical chemist, Principal of the Liverpool School of Pharmacy, and in a week I received the following letter:—

DEAR MR. POND,—I have by means of an alkali extracted sulphide of antimony from the rubber rings you left with me last week. I have very little doubt but that alkaline waters and those containing organic acids would have a solvent action on the antimony in the rubber, particularly after the rubber has been worn and its surface roughened. I think it is sufficiently demonstrated that rubber vulcanised by sulphide of antimony (red rubber) should never be used as fittings for aerated waters on account of the strong solvent action of alkalies and organic acids on sulphide of antimony.

I am, yours very truly,

R. C. COWLEY.

May 7th.

After receiving this letter I sent an expert in the rubber trade samples of these red rubber rings, asking him if he would kindly let me know their composition. His reply is somewhat astounding:—

May 11th.

These samples probably contain the following ingredients in this proportion: 20 pounds of rubber, 12 pounds of antimony (sulphide), five pounds of red zinc oxide, one-eighth of a pound of sulphur, and a quarter of a pound of lime.

The composition, you will note, of these red rubber rings contains not much less than one-third its weight of antimony. These red rubber rings are gradually worn down in the process of use from one-eighth of an inch in thickness to the thinness of paper, with jagged edges, and by age present innumerable cracks and become brittle. The small particles of red rubber fall into the bottles and are swallowed with the drink. I have found several particles at the bottom of beer bottles. Beer bottles and non-intoxicating drink bottles are not the only places where these red rubber rings are found. They are in syphons, sparklets, certain pickle bottles, jelly and preserved fruit bottles, &c. I have just taken from the stoppers of two beer bottles the red rubber rings. One is comparatively new, with only a slightly compressed edge but already chipped; the other is much worn as described above. These two rings are the same size in depth, thickness at unworn or upper edge, and circumference. The new one weighs 28 grains, the old one only 19 grains, due to the thinning or wearing away of its lower edge. The difference represents nine grains or its equivalent—namely, nearly three grains of sulphide of antimony.

Now a few words about the probable action. The pieces of rubber are swallowed as a rule at meal time, when the stomach is full of food, and in the process of digestion I take it the antimony is slowly separated from the rubber, is slowly absorbed, and when absorbed produces its secondary action—namely, that of depression and especially as a powerful depressant of the muscle fibre of the stomach and intestines. Now, we have two factors which together are capable of producing appendicitis: (1) a relaxed muscle fibre of bowel with partial or complete paralysis of the circular muscle fibres at the orifice of the appendix; and (2) a loaded bowel (cæcum).

Now under such conditions a slight movement of the body, such as stooping or straining, or a flow of fæces through the ileo-cæcal valve into an already overloaded cæcum deprived of its muscular contractility, is sufficient