

the results of our experiments upon a large scale and under appropriate circumstances upon large animals (horses). We are especially studying the possibility of the production of a practical remedy—perhaps a serum against scarlet fever.

We are, Sirs, yours faithfully,

Dr. Med. ADOLF BAGINSKY,
E. O. Professor of the Diseases of Children at the University of Berlin and Director of the Emperor and Empress Friedrich Children's Hospital.

Dr. PAUL SOMMERFELD,
Assistant to the Hospital.

Oct. 22nd, 1900.

* * The paper above referred to by Dr. Baginsky and Dr. Sommerfeld has been reprinted. Their work shows much painstaking investigation, and the pamphlet is well worthy of perusal by those especially interested in the subject.—
ED. L.

"THE ETIOLOGY OF RHEUMATIC FEVER."

To the Editors of THE LANCET.

SIRS,—No one has read the article by Dr. F. J. Poynton and Dr. A. Paine upon the etiology of rheumatic fever¹ with greater interest and feeling of satisfaction than myself. In the brief outline they give of the history of the bacteriology of rheumatic fever they go no further back than 1892, and work done previously to this is unnoticed. They acknowledge that this history is not exhaustive and it does not appear from it that anyone in this country has worked at the subject. Although I think I can claim that I was the first to demonstrate bacteria in rheumatic fever in this country, and I am not aware of it having being demonstrated before in any other country, I refrained from writing to advance any priority until reading Mr. E. F. Grün's letter in THE LANCET of Oct. 13th (p. 1098) which has led me to break silence. I quite well remember Mr. Grün's letter to THE LANCET of May 7th, 1892, p. 1063, stating that he had found cocci in the blood of patients suffering from acute rheumatism when with your usual fairness you appended the following note to the letter.

"Dr. Mantle of Halifax read a paper at the British Medical Association, at the meeting held in Dublin on the Etiology of Rheumatism, considered from a Bacterial Point of View. He also published an article in 1885 on Rheumatism with Infectious Sore-throat.—ED. L."

It was, then, *eight years* before Mr. Grün's observation that I had demonstrated bacteria in rheumatic fever.

Being thrown for some years into the midst of a dense colliery population in the county of Durham in which infectious disease was very rife I was much impressed with the amount of acute rheumatism in the district and its apparent infective character. I also noted its association with tonsillitis of an infectious² and non-infectious type, as also with erythema nodosum and scarlatina³ the latter being acknowledged a microbic disease.

This large clinical experience compelled me to come to the conclusion that we must seek a bacterial causation of acute rheumatism. After getting some instruction from Mr. Watson Cheyne in the methods of bacterial research, which was then in its infancy, I found bacteria both in the blood and joint effusions of rheumatic patients which I was able to cultivate. At the meeting of the British Medical Association at Brighton (not in Dublin) in 1886 in the section of medicine, over which Sir William Broadbent presided, I read a paper⁴ in which I advanced this theory with more or less fear and trembling. As a reference to this paper will show, I stated that I had found "two kinds of bacteria, a micrococcus and a small bacillus"—cover-glass preparations of blood and serum showing cocci, singly and as diplococci and short thick bacilli also. After much difficulty I obtained permission from the Home Office to have a very limited number of experiments with cultures of the bacillus, but the two animals inoculated were practically no worse. The greatest difficulty in being allowed experimentation and other things prevented my continuing that part of the research, and I am thankful to find that it has been now clearly demonstrated by the experiments of Dr. Poynton and Dr. Paine

that the diplococci alone or with other micro-organisms are the cause of rheumatic fever and its complications. It is ample repayment for much laborious work which I have bestowed upon the subject to read this and to feel that one's work has been recognised by yourselves and others, as shown by my being invited to take part in the discussion upon the Causes of Acute Rheumatism opened by Dr. Cheadle at the meeting of the British Medical Association in London four years ago and to its being referred to again this year in the discussion opened by Dr. Ewart upon the Treatment of Rheumatism at the Chelsea Clinical Society and before that in Dr. Newsholme's Milroy Lectures at the Royal College of Physicians of London.

My clinical experience continues to emphasise the truth of my theory, and it is somewhat remarkable that the bacteriology of the two diseases so closely associated as I have shown acute rheumatism and scarlatina to be should in the same number of THE LANCET, by Dr. Poynton and Dr. Paine in the case of rheumatism and by Dr. W. J. Class⁵ in the case of scarlet fever, be pronounced as due to a diplococcus which has fulfilled respectively all of Koch's laws. I would again suggest that these organisms may be generically related and that one of their chief toxins is lactic acid.

I am, Sirs, yours faithfully,

ALFRED MANTLE, M.D. Durh., M.R.C.P. Lond.,
Physician, Royal Halifax Infirmary.

Halifax, Oct. 16th, 1900.

PRIVATE MUNIFICENCE TO MEDICAL CHARITIES.

To the Editors of THE LANCET.

SIRS,—In the first of your leading articles in THE LANCET of Sept. 22nd, page 882, you mention the names of several institutions founded by private munificence, but the most notable institution of all such in the United States as to the amount so given is the Leland Stanford University of California, which escaped your attention. The said institution has already received about \$25,000,000 and has the strong probability of receiving within a few years almost as much more as the aforementioned endowment, all this the earnings of one man—the late Leland Stanford of California. But something still more remarkable is the founding and up-building of Cooper Medical College of San Francisco, California, which has already received about \$600,000, the earnings of one physician and surgeon, Levi Cooper Lane, M.D., &c., of San Francisco. He is a nephew of your great London Coopers. "Blood tells!" Of course we are all proud of such men. May they increase and multiply greatly.

I am, Sirs, yours faithfully,

Austin, Texas, Oct. 5th, 1900.

Q. C. SMITH.

THE TREATMENT OF SPINAL CARIES.

To the Editors of THE LANCET.

SIRS,—In your issue of Sept. 15th (p. 789) I notice the report of an address given in Canada by Mr. Edmund Owen, who therein expressed in somewhat vehement terms a disapproval of "all sorts of schemes, corsets, apparatuses and braces (as my American friends call them) for treating spinal caries without keeping the child flat." As it stands this passage expresses a misapprehension which I should like to correct. One of these spinal splints, the antero-posterior support introduced about 1850 by the late E. J. Chance at the City Orthopaedic Hospital, in my experience is at least as useful an adjunct to treatment in the recumbent or prone position as either of the more recent devices, Thomas's double hip-splint with headpiece and Phelps's box, of which Mr. Owen expresses his approval. Chance's splint has, as I have recently pointed out in an article in the *Medical Press and Circular* (Oct. 3rd, 1900), a distinct advantage in that after it has done duty in overcoming muscular spasm and fixing the spine during the period of recumbent treatment the same instrument can be used when recovery is sufficiently far advanced for the patient to be allowed to sit and later to walk. In this way the period during which the patient is continuously confined to bed is shortened in some cases by many years and the patient's education is interfered with to a much less extent than when recumbent treatment alone is employed. With all deference

¹ THE LANCET, Sept. 22nd (p. 861) and 29th (p. 932) 1900.

² Infectious Sore-throat in which Rheumatism played a Prominent Part, Brit. Med. Jour., 1885, vol. ii., p. 960.

³ Scarletinal Rheumatism, Quarterly Medical Journal, vol. ii.

⁴ The Etiology of Rheumatism considered from a Bacterial Point of View, Brit. Med. Jour., 1887, vol. i., p. 1381.

⁵ THE LANCET, Sept. 29th 1900, p. 927.