number of instances to free the system from excess of uric acid and to restore the body to its normal weight, whether the previously existing dyscrasia have resulted in excessive deposit of fat or in loss of weight. In the last-named cases a liberal quantity of milk may be taken in one of the many forms in which it can be prepared for the table without admixture with farinaceous substances.

I will now only turn for a moment to the objection most frequently advanced against the effects which it is claimed that the therapeutic movement has upon the dimensions of the heart, namely, that the diminution of the area of cardiac dulness is due to increased pulmonary inflation. In reply, it may be pointed out in the first place that increased inflation of the lung would not account for the indisputable physiological and therapeutic results of the treatment; that where the horizontal plane of the diaphragm changes as the result of the movements, it is found to rise and not to fall. There is one argument, however, which appears to me to be conclusive. It is that, under the influence of both baths and exercise, an apex beat appreciable by sight as well as touch may be observed in a few minutes to migrate towards the mesial line and at the same time to increase in force.

NOTE ON THE TREATMENT OF DILATED HEART AS PRACTISED AT NAUHEIM BY DR. SCHOTT.

By W. ALLEN STURGE, M.D., F.R.C.P.,
Nice.

At the recent meeting of the Association at Bristol an account was given by Dr. Wethered of a visit he paid to the baths of Nauheim for the purpose of studying the influence of the saline waters, combined with the system of gymnastics advocated by Dr. Theodor Schott, of Nauheim, upon diseases of the heart.

As I went through a course of these baths (but without gymnastics) in the past summer for a dilated and irritable condition of the heart, it may interest the readers of the *BRITISH MEDICAL JOURNAL* to have a short account of my experiences. I was seized with influenza in February, 1894, which took the form of acute muscular rheumatism (with alkaline phosphatic urine), pneumonia of a low type; and, later, moderate dilatation of the heart, with quick irritable, somewhat feeble pulse. As I found that no treatment would reduce my pulse below 100, I decided to go to Nauheim. There Dr. Schott found the apex beat to be about 2 centimetres outside the nipple line. I began to take baths on June 15th, and continued them three days out of every four until July 21st. After the bath I had massage according to Dr. Schott's special method. I made notes of my pulse (1) in the early morning, (2) before and after the bath, (3) before and after massage, (4) after going to bed at night.

The first marked change was in the early morning pulse, which, after three baths, was on June 19th, 64—a very marked descent in rapidity. The bath pulse (after walking) remained about 100 until towards the end of the treatment, but on July 17th it had come down to 96, and on July 21st to 88.

The after-massage pulse (lying down), which on June 20th was still as high as 82, was on June 22nd 72, and 64 on July 8th, at which point it remained stationary. It is worthy of note that though the massage was vigorously carried out, it produced a slowing, and not a quickening, of the pulse.

The evening pulse (lying down), which varied from 82 to 86 during all the earlier part of the treatment, came down suddenly on July 13th to 72, and rarely much exceeded that rate afterwards.

At the end of the treatment Dr. Schott noted that the apex beat was one centimetre within the nipple, and the sphygmograph showed a pulse of good average fulness and tension.

It is a fact of some interest that on each occasion when there was a sudden drop in the pulse rate, namely, on June 19th, when the early morning rate (which had hitherto ranged between 80 and 90) dropped to 64; and again on July 13th, when the evening rate dropped suddenly to 72, the sudden drop was accompanied by an absolutely sleepless night, with great nervous erythema. This fact points to a pos-

sible explanation of the action of the baths—the explanation, in fact, put forward by Dr. Schott. This is, the soaking of the skin in very strong, warm brine, produces a powerful stimulant effect on all the surface nerve endings. This in its turn being passed up to the nerve centres, acts as a strong tonic on them. Hence the good effect produced on weak centres—such as the heart centres in cases like mine. When the stimulation was so great as to produce a sudden marked change in the pulse, the general centres being over-stimulated would behave as mine did on these two occasions.

The gymnastics, about which so much has been said in connection with the Nauheim treatment, were tried in my case, but they seemed to irritate the heart, and were discontinued. This was probably due to the fact that the muscles of the limbs were still to some extent under the influence of the rheumatism from which they had suffered, and owing to stiffness the resistance they offered to movement was greatly augmented, and hence the increased heart's action under gymnastic treatment.

THE MILROY LECTURES ON THE NATURAL HISTORY AND AFFINITIES OF RHEUMATIC FEVER.

Delivered before the Royal College of Physicians of London, 1 March, 1895.

By ARTHUR NEWSHOLME, M.D. LOND., M.R.C.P.,
Medical Officer of Health for Brighton.

[ABSTRACT.]

LECTURE I.

AFTER a brief sketch of the history of the word "rheumatism," the lecturer outlined the different theories of its causation, and stated that his lectures would be restricted strictly to the consideration of rheumatic fever, which he regarded as a specific febrile disease, caused by a pathogenic micro-organism, endemic throughout Europe and America and other parts, and at times becoming epidemic, or even pandemic. Such a view did not exhaust the entire causation of the disease. It had certain relationships to season, locality, weather, climate, and ground water. It occurred chiefly in certain predisposed persons, under the influence of certain excitants, as injury or fatigue.

EPIDEMIOLOGY OF RHEUMATIC FEVER.

Epidemics were described by Pringle, Stoll, Mertens, and others in the eighteenth century. Their true character was doubtful. Senator had described unusual prevalence of the disease in certain years, but denies "the essential feature of an epidemic-infective power." Longstaff had noted the occurrence of four periods of excessive mortality shared by scarlet fever, erysipelas, pyæmia, puerperal fever, "rheumatism accompanied with heart affection," and five other diseases. Lange, of Copenhagen, Hirsch in Berlin, and others had described local "epidemics." There had, however, so far as the lecturer was aware, been no general investigation of the epidemiology of rheumatic fever. The word "epidemic" was used in these lectures to mean excessively prevalent, the question of infectivity being left for consideration later.

EVIDENCE FROM DEATH RETURNS.

The curve of death-rate from rheumatism in England and Wales from 1851 to 1892 showed crests in 1855 (15 per cent. excess), in 1859 (18 per cent. excess), in 1864 (23 per cent. excess), in 1869-70 (18 per cent. excess), and in 1875 (52 per cent. excess above the respective preceding minimal years). This curve dealt with "rheumatism," the separation into (a) rheumatic fever and rheumatism of the heart, and (b) rheumatism was not made until 1881. For the remaining years the two curves ran parallel, and (a) forming 73.5 per cent. of the whole is the predominant partner.

The curve of death-rate from rheumatism in London showed similar maxima to the above in 1864, 1868, and 1875 and 1884. The 1868 maximum replaced the 1869-70 maximum for England and Wales. Curves for large provin-