## ELECTRICITY IN RHEUMATISM.

In acute articular rheumatism electricity in any form is of doubtful value. In any event, it is very difficult to make satisfactory applications to the inflamed joints and sensitive muscles. While general and local pallative treatment may give great comfort to the patient, and may occasionally prevent complications, it is yet doubtful whether an attack of acute rheumatism can be much shortened by any method of treatment. I have, however, seen unmistakable evidences of the benefit to be derived from the use of electricity after the decline of the acute symptoms, and a subsidence of the excessive tenderness of the joints. In my own experience, this point has been satisfactorily determined by observations in cases where, in repeated previous attacks, convalescence was more prolonged than after resort was had to treatment by the method of general faradization.

Subacute articular rheumatism is far more favorably affected by electrical methods of treatment than the acute form, but even in these cases it must be admitted that the remedy acts with a degree of capriciousness that is often very discouraging. There are some cases that will not be benefited at all by electricity, and I have known a number in which increased pain, heat and redness were occasioned by any and every attempt in the use of this agent. These unsatisfactory results must be attributed not so much to the disease itself, as to the peculiar individual idiosyncrasies that occasionally assert themselves vigorously under electrical treatment. There exists a class of cases of the subacute variety of rheumatism, which has served an excellent purpose in fostering the credulity of those who make of electricity almost a panacea in the treatment of rheumatic conditions.

Under any circumstances, either with or without treatment, the duration of these cases is exceedingly short, in many instances not exceeding two or three days. Now, in an attack of this kind, if one is so fortunate as to see the case ab initio, and electricity is employed, to electricity is given the entire credit of the cure. I well remember a perfectly honest but ignorant so-called electrician. into the mysteries of whose practice I gleaned some insight many years ago. He believed electricity to be an unfailing remedy in rheumatism, and this belief was shared by a multitude of people influenced by his success in these transient subacute cases of rheumatism which came to him in large numbers, and as soon as the first symtoms of pain manifested themselves. But there is another not infrequent group of rheumatic cases of the subacute variety in which electricity serves a most excellent purpose, allaying irritability, lessening the heat and pain in the joints, and ap-

preciably shortening the duration of the attacks. It does more than this. From a considerable experience, I can confidently assert that by its use the severity of subsequent attacks will be greatly lessened, even if the tendency to recurrent paroxysms is not entirely destroyed. I am well aware that these cases of subacute rheumatism occurring in persons approaching middle life, or beyond it, tend in subsequent attacks to lessen in severity sometimes, but careful observation in many cases enables one to discriminate between what is and what is not the result of the treatment administered.

According to my own experience, the one satisfactory method of electrical treatment in these cases is the method of general faradization. Purely local applications, while perhaps not altogether useless, are by no means so efficient as the general methods. I have, time and time again, because of the labor entailed and the objections of patients to disrobing, confined my efforts to applications to to the joints alone, but always with results unsatisfactory when compared with the general method of treatment. Muscular rheumatism is also, in many cases, obedient to some form of electricity in a very marked degree.

We have here a condition affecting mainly the fibro-muscular structures, associated with pain and sometimes spasm of the affected part. The exciting cause is most frequently exposure to draughts, and such exposure is especially apt to be followed by severe and persistent attacks, if associated with it there has been any strain or sprain of the fibromuscular structure. Another condition favorable to sudden rheumatic attacks is the lithic acid diathesis. If there exists defective oxidation of the nitrogenous elements of food, the waste products fails to reach the ultimate stage of urea and circulate in the blood in the form of uric acid, and it only requires a local slowing of the circulation, or a temporary cooling of an extremity, in order to have a deposit of the sharp-pointed crystals in the joints, ligaments or muscles, which cause such excruciating pain. It is unnecessary to enter into any detailed description of the symptoms of muscular rheumatism.

As a rule, although not in every case, rest greatly alleviates the pain, while movement of the affected muscules is attended by sudden spasmodic pains of a severe character. It hangs on with varying degrees of persistency, from a few days to weeks or months, and in some of the more severe cases, involving the fibro-muscular structures, it has been known to occasion years of suffering. All three forms of electricity—galvanic, faradic and static—are of value in the treatment of muscular rheumatism; but taking the cases as we find them, I myself have not only found that static electricity is the most efficacious of all the electrical methods, but among those who have experience with the