

Walkly (N.)

TWO YEARS EXPERIENCE

IN THE

EMPLOYMENT OF

MAGNETO-ELECTRICITY,

AS A

REMEDIAL AGENT

IN DISEASE.

BY DR. NELSON WALKLY,
TUSCALOOSA, ALA.

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INTRODUCTION.

THE following pages contain, as the title indicates, a simple record of the effects of magneto-electricity, as a remedial agent in disease, during an experimental employment of it for two years past by the author. No arguments are advanced to show the *quo modo* of its action, or upon what principle its remedial powers depend. These are subjects for future investigation, and require for their correct determination, a mass of evidence yet uncollected, or, if collected, yet undigested. It is hoped, however, that the facts here detailed may aid in the solution of these problems. It is well known that electricity and galvanism have long been employed by the medical profession in the treatment of paralysis, muscular debility, amenorrhœa, rheumatic pains, and other complaints of a similar nature.— They have, at different periods, excited considerable attention in the public mind, but from various causes have declined in favor of other and more fashionable remedies. Within a few years past, their use seems to have been revived, particularly in France, and many eminent physicians have zealously applied themselves to the elucidation of the rules which should govern us in their employment. The results of their investigations have been laid before the world in the various medical publications of the day. They have also in their communications endeavored to lay the claims of these agents before the profession, and have urged not only the importance, but the vast utility to be derived in

medical practice, from their application in diseases arising from impaired nervous action.

Magneto-electricity, however, has not until recently been known or employed as a remedial agent. Only two or three cases are on record, or at least have come to my knowledge, in which it has been used; but these are sufficient to demonstrate that all the arguments in favor of the beneficial influence of other kinds of electricity, are doubly applicable to this. The first magneto-electrical machine, known or introduced into this country, is described in Silliman's American Journal, vol. xxx. p. 100, under the head of Clark's Electro-magnetic machine. About the time of the first presentation of this machine to the public, Prof. Locke of Ohio, Dr. C. G. Page of Boston, and myself, respectively constructed ourselves one upon the same principle, but very dissimilar in structure. Since the fall of 1840, I have been in the almost constant use of my machine as a remedial agent in disease, for which purpose it is, in its form and arrangement, especially adapted. In this time I have been much more successful in the treatment of complaints originating and depending upon depraved nervous action than physicians usually are, who confine themselves to other medicaments that are offered in the materia medica, as the cases submitted in this publication will, I think, fully substantiate. In all these, the kind of electricity employed was magneto-electric,* and whenever mention is made of an

**Note.*—For machines constructed upon the principle embodied in that of Clarke's, Dr. Page and others have suggested the name of magneto-electrical, as being more appropriate and to distinguish them from those electro-magnetic machines intended to be used as motive powers, and in which magnetism is induced by galvanic electricity. These are truly electro magnetic. In machines arranged on the principle of Clarke's, however, the reverse is true. In these electricity is generated from the magnetism and is consequently magneto electric.

application, I wish this fact to be distinctly borne in mind. Without attempting to discuss the relative merits of the different forms of electricity, I will simply remark, that in my estimation this latter possesses advantages far more numerous and superior to those of any kind known at present. It has all the properties common to galvanic electricity, and by it a rapid succession of shocks, varying in intensity at the will of the operator, can be given, or a direct unbroken current, suitable for the endermic introduction of remedies into the system, when, from irritability of the stomach or other causes, this is desirable. It is always ready, without the trouble of daily preparation; is not easily deranged; and no atmospheric condition or changes affect its action. Whether it has any peculiar properties to render it superior to, or to distinguish it from, other kinds is not yet determined; but we know that by means of the magneto-electrical machine is evolved a vast amount of electricity, of high tension, under perfect control, and applicable to all cases, where its employment is in any form indicated. Why this agent has heretofore been so little used, with so great a mass of testimony in favor of its beneficial influence, can only be accounted for on the grounds of the trouble and difficulty of generating and applying it according to the ordinary modes, and the constant liability of the batteries and machines to become deranged. By the invention of the magneto-electrical machine, adapted as it is to the direct application of its power to the various forms of disease, in such mode, quantity or tension, as may be deemed most beneficial, these objections are entirely removed; so that it is now in the power of every practitioner, who may desire, to employ it in all that class of disorders whose symptoms indicate its use.

To direct more attention to this subject than has hitherto

been bestowed upon it in this country, to show the success that may be rationally anticipated, the vast amount of suffering that may be alleviated, and impaired health that may readily be restored by its judicious application and combination with other remedies, I have, in the subsequent pages, briefly enumerated the cases and results of my own limited experience, without other comment than perhaps a passing remark, or any claim to originality of invention or application. Nothing is novel except the method of generating and applying the electricity, which, beyond all dispute, is recent and of much practical importance. Whether the success consequent upon its employment has been sufficiently abundant to satisfy the expectations of the most sanguine, and to justify the importance that I, in common with many others, attach to it, is left for the intelligent reader to decide upon the perusal of the various cases here submitted.

NELSON WALKLY.

Tuscaloosa, January 4, 1844.

CASES.

THE first case which I shall mention, is that of Mr. ———. This patient had suffered for a long time from a rheumatic affection of the left eye, which had resulted in a partial paralysis of the rectus externus muscle. This occasioned considerable strabismus, and the eye was also amaurotic. April 22d, 1843, a direct application of electricity was made to the nerves, as well as the affected muscle of the eye, and continued for three weeks, once a day, each application occupying about five minutes. At the expiration of that period, the paralyzed muscle was restored so as almost entirely to remove the strabismus, and the sight was partially regained.*

CASE II.—Mrs. ———, a widow of nervo-bilious temperament and energetic habits, was seized with an attack of billious remittent fever in the summer of 1840, which after a few weeks assumed an intermitten form and continued with occasional intermissions until the spring of 1842. During the progress of the disease, her eyes became affected, and she suffered excruciating pains in the forehead and in the upper and posterior portions of the eyeballs. Various remedies were resorted to, which produced temporary relief; but upon recovery from the fever, her sight gradually failed until almost total blindness supervened. When I first saw her, which was on the 10th March, 1843, the pupils of her eyes were contracted to their utmost limits appa-

*NOTE.—The extreme meagreness of many of the sketches here given, is accounted for from the fact, that, having no intention of ever making public the cases occurring to me, I at the first only noted down a general description of them. As my practice and success increased, I became, as will be observed, more particular in this respect.

rently, and she could barely discover light by turning them directly towards the sun. The cervical glands were enlarged, and there was a constant discharge of purulent, irritating matter kept up from the nose and eyes. I found her also laboring under a profuse leucorrhœa and suppressed atamenia. Made a prescription to check the leucorrhœal discharge, and applied electricity to re-establish menstrual action. This was effected by the third application.

From this period her general health improved rapidly, accompanied with corresponding amendment of the eyes. The ichorous discharge ceased and the pupil of the right eye began by degrees to dilate. On the twentieth day, this was expanded to about half the ordinary size, and she could dimly perceive objects of some magnitude. Five days later she could distinguish persons by the color of their hair and the articles of their dress. This improvement continued gradually, so that on the fortieth day she was able to count very distinctly the seams between the layers of bricks in the houses across the street. About this period she left the place. I was informed by her four weeks after her departure, that her sight was still improving. No improvement was effected in the left eye. I dilated the pupil by means of belladonna, and found the crystalline lens perfectly opaque.

CASE III.—Mrs. —, aged 24; has been married for three years, without issue. For four or five years has been subject to severe dysmenorrhœa and violent pains in the head, apparently in the frontal sinus, or its immediate neighborhood. This had produced a very amaurotic condition of the eyes. By the use of *actea racemosa*, she succeeded in removing the pelvic and lumbar pains at her monthly periods, but the other symptoms continued very

severe and unabated. For the amaurosis she applied to me on the 3d September, 1843. I made both a general and local application, twice per day, for three days, when a profuse discharge of purulent matter took place from the nose, and continued at intervals for two days. With the commencement of the discharge the pain ceased and the sight improved. The electricity was continued three days longer, when she was discharged from my care entirely cured, in which condition she still remains.

Instances sometimes occur of partial and even perfect blindness resulting from injury of the supra or infra orbital nerves, or their branches, without any apparent change in the structure of the eye. In these cases Beer advises a complete division of the injured nerve, and states that he has practised this course with uniform success; but Dr. Hennen and Mr Guthrie, who tried it in several instances, failed altogether. Mr. Hey narrates a case of amaurosis following a wound in the forehead which was successfully treated by electricity, and Dr. Lichtenstadt another, from injury of the infra orbital nerve, which was similarly treated with a like happy result. Several cases are also given by Lawrence of successful cures effected by the same agent, and the endermic introduction of strichnine into the system. The following confirms the importance of this remedy in such complaints.

CASE IV.—MRS. ——— received a blow from a small bucket that a child of hers was swinging with a string, which produced a bruise and slightly lacerated the skin about two inches above the right superciliary ridge and on the course of the supra orbital nerve. Three days after she found great difficulty in defining objects with the right eye, and felt frequent shooting neuralgic pains through the

affected portion of the nerve. This condition continued for seven months, when I was called in. This was on the 20th of April, 1843. There was no perceptible change in the appearance of the eye from that of the healthy state. Applied electricity, with various degrees of power, every third day, throughout the course of the wounded nerve. After the second application she was relieved of the neuralgia and able to read and sew, which she had been unable to do from the date of the injury. The applications were continued semi-weekly for three weeks. She was perfectly cured.

I have a record of eleven amaurotic cases, and of these seven were permanently relieved, one temporarily, and three none at all. In those that were not benefited, application was only made for a few times, and in one these were made but weekly. With the knowledge I now possess of the effects of a continued and judicious use of electricity, I have no hesitancy in saying that the failure was owing to want of perseverance in the employment of the remedy.

AMENORRHEA.

Of this complaint my journal shows a record of forty cases, all of which have been successfully treated by means of electricity, and in a much shorter time than under the usually prescribed course of medicines. Where the suppression was of recent standing, one or two applications just before the expected period, has generally proved efficacious in removing the obstruction and inducing the discharge. This is best effected by passing a rapid succession of shocks through the uterus, until pain is felt in the

lumbar region, and this is induced in from two to five minutes by placing the negative electrode directly above the pubes and the positive to the spinal nerves of the lower lumbar vertebrae. The same object is, however, attained by placing one conductor in a warm bath with the feet of the patient, and the other to the back of the neck, or it may even be held in the hands; but in this manner longer applications are required, which in persons of plethoric habit produce considerable soreness of the muscles from the spasmodic action caused by the shocks, and the discharge is not so speedily established. It has been objected, that electricity would be much more likely to do injury, by producing abortion, in those cases where a natural cause might exist for the suppression of the catamenia than the usual remedies that are so often, and so ineffectually I may add, prescribed. I have, however, within the past year made application for several weeks in three cases where the suppression proved to arise from pregnancy, without the slightest injurious effects being observed. These were vigorous, healthy negro girls and possibly different results might have been produced upon pregnant white women of delicate health and excitable temperament. Still I have never known any injurious results to ensue from its employment in any case, unless there existed acute inflammation, which it seems to increase, or from an excessive and unwarrantable length of application, as in the instance of Mr. —, described under the head of apoplexy.— Where uterine derangement is occasioned or attended with prolapsus, and inflammatory symptoms, no relief may be expected from this agent until these symptoms are reduced by other remedies. This being effected, I have employed it with great success in restoring strength and muscular power to the debilitated and partially paralyzed parts.—

No pain or injury will result from a direct application per vagina, though this mode is rarely, if ever, necessary, except in some obstinate cases of leucorrhœa; but when thus applied, its effects are most salutary. In cases attended with chlorosis, the remedial effects of electricity seem much increased by an exhibition of such tonics as are calculated to improve and strengthen the nutritive powers of the system. Its action will be best illustrated and understood by a perusal of the following cases.

CASE V.—A young lady, 17 years of age, attended a ball in a light thin dress, on the night of the 8th January, 1842, and during the period of her monthly course. The evening was damp and rainy, and the exposure brought on a violent cold, attended with cough, which immediately checked the catamenial discharge and confined her to her room for several weeks. On the approach of spring, her cough abated, and her health so much improved that she commenced attending school. She soon found, however, that the confinement of her sight to a book produced an acute pain in her forehead, and this became at length insupportable whenever she looked at any object intently. On the 25th May I was called in. Her sight was then so enfeebled, that all objects appeared to her as if they were enveloped in a thin mist. The menses had not returned since the night of her exposure, her bowels were much constipated, and the digestive functions considerably impaired. Prescribed the following mixture: Tinct. Apocynum, 4 oz., Tinct. Sanguinarii, 1 oz.; dose, a teaspoonful, 3 times per day, before eating. Applied electricity through the system for five minutes at each application, (semi-weekly,) and recommended daily moderate exercise in the open air. The catamenia made its appearance on the sixth application.—

This was followed up by directly applying the same agent to the frontal nerves, as described in amaurosis, daily for one week, which entirely removed the cephalalgia and restored her sight. Her subsequent health has been uniformly good.

CASE VI.—Was a young lady, aged 13; has never menstruated, but instead is subject to a cutaneous eruption every fourth week. This commenced three years since, and usually continues from four to six days. Has had an epileptic attack, occasioned by a sudden disappearance of the eruption from the use of cold applications, and also a choreal affection of the left side from a similar cause.—May 11th, commenced the daily use of electricity, by placing her feet in a vessel of warm water with one conductor and applying the other to the nerves proceeding from the first and second lumbar vertebrae. This was four days previous to the usual appearance of the eruption. The fourth application was followed by the menstrual discharge in the place of the habitual cutaneous affection. No pain of the back preceded its appearance. Since then her general health has been good and her periods regular.

CASE VII.—Miss —, aged 13; was called to visit her the 20th September, 1843; found she had been attacked with intermittent fever in May preceding, from which she recovered upon the application of the usual mode of treatment. Since then, however, she has suffered from almost constant pain in the lumbar region, and was subject to frequent faintings, especially upon sitting in an upright posture for any length of time. The catamenia had never made their appearance, and she was very pale and much debilitated. On ascertaining these facts, I immediately

applied electricity through the system, daily, for two weeks, which prevented the recurrence of the lipothymiae and induced the menstrual discharge. There has been no return of the symptoms before complained of, and she is in excellent health.

CASE VIII.—A colored woman, aged 23; stout, short and of plethoric habit; has suffered from irregular menstrual action for several years. Digestion bad, and is habitually subject to severe cephalalgia and vertigo. April 11th, applied electricity through the system, and made the following prescription: R. Pulv. Ipecac, Pulv. Charcoal, a a 40 grains, honey q. s. pil. xl; take one 10 minutes before each meal, increasing the dose by an additional pill each succeeding week. 14th. Repeated the shocks through the system, in rapid succession, and as severe as the patient could endure, until perspiration was produced. This was continued every third day, until the 21st, when the menses appeared of a proper character and quantity, and four days sooner than had been usual in a healthy state. The cephalalgia and vertigo ceased from the second application, and her digestion is improved. Continued the prescription &c. until May 18th. her second period, when she expressed herself as being perfectly well. She has had no diminution of health since, and the catamenia is regular.

CASE IX.—A negro girl, 14 years of age; has never menstruated more than two or three times. During the last period, two years since, she took cold from exposure, which entirely suppressed the catamenia, and she has ever since been subject to wandering rheumatic pains; at first in the acute form, but these have gradually subsided into the chronic. Upon the clavicle, the anterior portion of the tibiae, the radius and ulna of both arms, where these pains are

most generally felt, nodes of considerable size have formed. August 10th, 1843, made 4 successive applications through the whole system, in as many days, which completely removed the rheumatic affection. Prescribed hydriodate of potassa, 2 drachms; syrup sarsaparilla, 8 oz. misce; dose, a table spoonful, to be taken three times a day before meals, and continued the electricity for eighteen days, when the catamenia appeared. She left apparently cured, and has had no irregularity or pains since, and the nodes have nearly disappeared.

A farther examination of these cases is needless, from their great similarity. Instances of this affection are chiefly confined to the females of our colored population, owing to their ignorance upon the subject and almost constant exposure. In these cases a direct application has been made to the lumbar and pubic region, and with much speedier success than by other modes.

ANGINA PECTORIS.

A few cases have occurred in my practice resembling angina pectoris. They were rather mild than otherwise, and I leave the reader to decide upon the peculiar nature and classification of the complaints, if he shall, after understanding the symptoms, feel doubtful of their present assignment.

CASE X.—This was a young lady, aged 17. In the summer of 1841, she had a severe attack of congestive fever, from which she had partially recovered, when from imprudence she relapsed. As it was late in the fall, the fever assumed a typhoid character, from which she did not entirely recover until the succeeding spring. Shortly after,

upon any unusual exertion, she experienced an acute pain just below the left mamma and extending up to the shoulder of that side, attended by a sense of stricture and great oppression of the chest. These attacks were so severe as to cause her, if she was walking, to stop perfectly still until the pain and oppression of the thorax ceased, and this was invariably followed by a pricking sensation down the under side of the left arm, and a numbness of the little finger. No palpitations or other hysterical symptoms were present, except the oppression, and the complaint had continued for eighteen months, with increasing severity of the symptoms. Aside from this, her general health was good. During one of the attacks, I made application of magneto-electricity, by placing one electrode upon the seat of the spasmodic stricture and the other to the lower cervical vertebrae, which afforded almost instantaneous relief. Afterwards, for two weeks, daily applications were made by changing the electrode from the neck to the left hand. The first application was on the 8th July, 1843, and no other remedy was employed. She has had no return of the affection.

CASE XI.—A gentleman, aged 55, of an arthritic habit, and in his younger days well versed in the qualities of different liquors, came to me, three months since, complaining of a suffocating sensation, attended with severe pain in the left side whenever he attempted to walk fast, and especially up an ascent. This prevented him from riding on horseback, and when exercising he was seldom free from pain in the side, though much less acute than under the circumstances above mentioned. Applied electricity, as in the case above, and relieved him for the day; but the last symptom returned the next morning, and was removed as before. His business requiring his presence, he left that

day, and has only experienced a few slight symptoms of the complaint since.

CASE XII.—Was a woman of a robust form and a vigorous constitution, and at the time of the affection was nursing her fifth child. This patient complained of feeling a sharp pain directly under the left breast upon walking fast or making any uncommon exertion. The pain was so acute as to cause her to drop whatever she held in her hands at the time, and to involuntarily clasp them upon the seat of pain until the paroxysm passed off. There was no dyspnoea present and but slight palpitation. General health apparently good. Electricity was employed once per day, for four days, by applying one conductor to the nerves of the lower cervical vertebrae and the other to those of the ninth and tenth dorsal on the affected side.—The first application produced immediate relief. The remedy was discontinued on the fourth day, and there has been no return of the paroxysms. I have successfully treated several cases of this latter kind in women disposed to hysteria.

APOPLEXY.

There has occurred to me no opportunity for testing the merits of electricity in a stroke of this disease. The only one that makes any approaches towards it, is the following case of paralysis resulting from it.

CASE XIII.—Mr. — of Wetumpka, aged about 35, of plethoric habit and very short neck. Four years since he had a stroke of apoplexy. By prompt antiphlogistic treatment his life was saved; but his lower extremities were left entirely paralyzed. After a long course of med-

ical treatment, he obtained a slight control over the right leg, and there was partial sensation in the left only. This he could not raise from the floor, but managed to move from one place to another by the aid of a crutch and a tripod staff. He was brought to me for the application of electricity on the 1st September last. I found him troubled with indigestion and cephalalgia for some hour or two after eating. He had an inordinate appetite, and no entreaties could induce him to forego its gratification. This evidently was one, if not the principal, cause of his situation. To obviate this I prescribed, in connexion with electricity, small doses of ipecac and charcoal, ten minutes before eating.— This checked the unnatural craving and removed the symptoms of indigestion and also the cephalalgia. He remained a month without much apparent improvement. He, however, declared he was much stronger and his faith was so much increased by its effects, that he procured a machine to use on his return home. On his departure, I gave him specific directions in reference to the subsequent application of electricity, that he should omit it in case of febrile or cerebral excitement, and the precautions to be observed in order to prevent another apoplectic attack.

He wrote me on the 1st November, stating that he was much improved, could ride very well on horseback, and that sensation was nearly restored to one leg and motion without sensation to the other. On the 25th November, while laboring under an attack of influenza, he exercised much more than usual, rode about considerably in superintending some drays, and at night ate a hearty supper, which produced a return of his cephalalgia. To remove this acute pain, contrary to my directions, he applied electricity directly to his head and continued it for nearly an hour. If he was not delirious when he commenced making the

application, he was upon its discontinuance. A physician was immediately sent for, who found him raving, pulse very quick and strong, breathing hurried, and eyeballs starting almost from their sockets. Bleeding him twice very extensively reduced his pulse and corrected the delirium; but his body was found completely paralyzed from below the dorsal vertebrae. The next day, the physician finding he had passed no urine, proposed the use of the catheter; but he was obstinate in his refusal, though admonished of the probable consequences. From some cause, forgetfulness, distrust, or ignorance of its precise effects, no application of electricity was made. On the fourth day, when symptoms of inflammation were apparent to his own sensations, he permitted the catheter to be used. A large quantity of urine, mingled with blood and pus, followed its introduction, mortification ensued and he died upon the 1st of December. These last circumstances were detailed to me by the physician in attendance, Dr. Penick. Comment is unnecessary.

ASTHMA.

I have had but one opportunity of testing the benefits of magneto-electricity in this complaint. I have, however, learned from Dr. F. L. Merriwether, of Greene County, to whom I furnished a machine, that he has successfully treated two very obstinate cases of long standing by its means. The following is a sketch of the one that occurred to me.

CASE XIV.—Mr. —, aged about 28, called on me November 1st, 1843, whilst laboring under a severe attack of spasmodic asthma. His pulse was feeble and intermitting every sixth pulsation; eyes protruding; anxious, hag-

gard look ; and could with difficulty speak so as to be understood. He had labored under this complaint for many years and the attacks had become very frequent. Almost every exposure, change of weather, &c., were liable to produce paroxysms which usually lasted for several days.

I applied electricity first through his system, to rectify the intermittent state of the pulse. This was effected in about three minutes. I then placed the positive electrode upon the spinal origin of the nerves passing to the thoracic cavity, and the other along the edge of the diaphragm below the sternum, and passed a rapid succession of shocks for three minutes longer, which had the effect to produce copious perspiration, relieve the difficulty in talking and the anxious expression of countenance.

November 2nd.—Found this morning he had rested well during the night, which is very unusual, though the affection still continues, but much reduced in violence. Repeated the electricity, changing the negative conductor to the hollow of the neck above the sternum ; and also in the evening, when I ascertained the asthma had ceased since the morning. From this time daily applications were made until the 18th, without any symptoms of its return. I heard from him a few days since, and although he was laboring under a severe cold, he had as yet had no recurrence of the complaint, which formerly visited him upon all such occasions.

In one other instance in which I made a single application, the result was unknown to me until after writing the above. It is deserving notice, and I therefore append it.—Mrs. —, applied to me for an application of electricity for a rheumatic affection, as she was passing through the city on the 3rd of October last. This was confined chiefly to the shoulder. She was also at the same time suffering from a spasmodic asthma, which she informed me had exist-

ed for two years past. * For this, as well as the rheumatism, I made a particular application, as in case xiv, without apparent benefit. As she was also laboring under indigestion and other dispeptic symptoms, I prescribed for her a mixture of tinct. apocynum and syrup of sarsaparilla, each 4 ounces, with directions to take a teaspoonful ten minutes before each meal. Saw nothing more of her until the first week of December, when she called again and informed me that the asthmatic affection ceased a few hours after the application, and had never made its appearance since. Her rheumatism had also left, and her health was excellent.

CHOREA.

I have treated eleven cases of this disease, all of which were cured, with a single exception. No other remedy than electricity was used, except occasional aperients. Of the ten cured, seven were females under sixteen years of age. The remaining one was benefitted to a considerable extent, as the following sketch of his case will show.

CASE XV.—A negro boy, 18 years of age, large, stout, and healthy looking; has a choreal affection of his entire left side, very much impairing speech and locomotion.—When awake the muscles of the deranged side of the face and neck are contracted, so as to flex his head towards the shoulder and distort his features. The hand and forearm are spasmodically coiled upwards towards the axilla, and are perfectly useless. Has a partial control of the leg and walks with an awkward and ludicrous jerk. This has been his condition since an infant, and is now supposed to have been induced by the recession of an erysipelatous or syphilitic eruption that covered him at his birth. I made daily ap-

plications to the affected parts for six weeks, with gradual improvement. The distortion of his face and wry neck were removed, his speech and gait greatly improved, and he so far obtained the control of his arm as to straighten it out at will, and to use it to a considerable extent in cutting wood, carrying water, &c. During the last eight or ten days of his stay, his improvement seemed to remain stationary, and thinking it might benefit him to work moderately, I sent him to his master. He remained in the same state apparently for two months after this, when he was attacked with a billious fever, and during its course the chorea seemed as bad as ever; but during his convalescence the affected parts broke out thickly with small biles and he was then fast improving. I have not since heard from him.

CASE XVI.—Miss —, aged about 14, was attacked with chorea of the right side in August, 1842. It was supposed to have been occasioned by fatigue, consequent upon watching in a sick family, and was of a very annoying character. It was impossible for her to keep the affected side and limbs quiet in any position when awake, though the spasmodic action was not unusually violent. On the first of October, I commenced the employment of electricity, and continued it with but little success for twelve days. A marked amendment then ensued, which was maintained until the 18th, when she was dismissed from my charge entirely recovered.

CASE XVII.—Mr. —, aged about 25, called on me April 1st, 1843, for a choreal affection of the right arm and side of the face. These parts were unaffected with any involuntary action, unless he attempted to speak or was laboring under some excitement, when they immediately

became uncontrollable. Semi-weekly applications were made in this case for three weeks, which removed the complaint, and there has been no subsequent recurrence.

CASE XVIII.—Was a lad about seven years of age ; had a choreal affection of the left side, which had continued for two months. The affected limbs were in constant motion, and the face was occasionally contorted. The disease was apparently caused from an excessive growth. Electricity was applied daily to the choreal side for one week, commencing on the 27th June, 1843. The first three days he seemed to get worse, and his parents became much alarmed at the increased rapidity of the spasmodic action ; but after this he amended very rapidly. The second week application was made only on alternate days, at the end of which he was discharged from my care entirely cured, at least there has been no relapse since.

Electricity was also employed in a case not considered among the eleven above mentioned. This was a lad about eight years old, a patient of Dr. H.'s of this city. The usual remedies had been prescribed by him for two weeks previous without effect, and these were continued until the completion of the cure. The lad evinced no improvement until the third days use of the machine, from which time he amended rapidly, and was dismissed cured on the tenth day. The case was of recent standing.

DEAFNESS.

Of seventeen cases of this affection, in which I have employed electricity, eight were relieved entirely. The others appeared to derive no benefit from its use, except in two

instances, where a slight improvement was manifest. Those cured were mostly affected in a similar manner, with the cases described below.

CASE XIX.—Mr. —, aged about 28. This patient had an attack of bilious fever in the fall of 1838. Hemiplegia of the left side followed his recovery from this disease. By judicious treatment, he was in a few months cured of the paralysis, with the exception of the auditory nerves of that side. The left ear continued perfectly deaf up to the time of his application to me, and there was also entire loss of all sensation in the meatus externus. On the 26th September, 1842, I made a direct application of electricity, by means of a piece of wet sponge introduced into the external orifice of the ear. Apparently but little effect was produced from the application, which was made in the evening; but the next morning he called upon me with his hearing perfectly restored, in which condition it remains at present.

CASE XX.—Mrs. —, aged about 36, has for several years been deaf in the left ear. The organ has been unable to distinguish any sound farther than a constant roaring, which in addition to the loss of hearing was excessively annoying. March 12th, 1843, I examined the ear and found the meatus externus presenting a dry, desquamating surface, and devoid of any secretion of wax. Electricity was passed through the organ by means of a moist inserted sponge, for about two minutes, without perceptible improvement. The next morning, however, I discovered a slight secretion of wax, and on putting a watch to the ear, the patient was sensible of the tick. The remedy was continued for three days, when a copious secretion was induced,

and the functions of the organ entirely restored, in which state it yet remains.

CASE XXI.—Mrs. —, in the fall of 1840, had an attack of billious intermittent fever, recovery from which was followed with deafness in both ears. December 23d, 1842, she called on me for a trial of electricity. I made a direct application to the auditory nerves, twice a week for three months, which gradually restored the organs to their healthy state. This continued until September, 1843, when, from another attack of fever she again became deaf. She has been for a short time past under electrical treatment, and her gradual improvement now indicates an entire recovery in a few weeks.

In those instances in which I made an unsuccessful employment of this remedy, there were impediments that did not exist in the eight that were cured. For instance, some were seemingly the result of old age and some had existed for twenty years. Others were caused by pressure upon branches of the auditory nerves from a swelling or enlargement of the cervical glands, or a scrofulous affection of the tympanum and meatus auditorious. In two instances that were particularly examined, the Eustachian tube was found closed and resisted all efforts made with a view to re-establish the communication. In the scrofulous patients temporary relief was gained, but this was destroyed upon the first exposure. It is proper to state that in all these cases, except one, the remedy was only employed for a few days, and was discontinued then at the wish of the patients, owing to their want of confidence in its virtues. I do not, therefore, consider that its powers were fairly tested, though the results might have been the same if it had. If, however, it can be

made efficacious in restoring lost hearing under any circumstances, as I have shown it has been, the fact is most valuable and cannot fail of being improved by the profession.

DYSMENORRHEA.*

In no complaint that has fallen under my treatment, has electricity proved more successful than in this. Nor is there any remedy in the materia medica, to which females may resort with greater faith, or physicians apply with more certainty in its results. True, the state of some patients is often such as to require a slight preparatory treatment before this agent can exert its full beneficial power; but this condition may be easily ascertained by ordinary attention on the part of the practitioner, and the proper means employed to prepare the system for its judicious exhibition.—Twenty-two cases have happened in my practice during the last two years, which have been treated successfully in the manner described in the following instances.

CASE XXII.—Mrs. —, aged 24, of a sanguine bilious temperament, has been married for five years without offspring. Has suffered greatly for six years past with dysmenorrhea. Her health has gradually failed; is troubled with leucorrhœa, and is much debilitated. March 9th, 1843, commenced a general application of electricity, upon alternate days, and prescribed of solution Iodide Ferri, ten drops

*The removal of amenorrhœa or dysmenorrhœa, in several instances that have occurred under my practice, where the patients had been married for several years without issue, has been almost immediately followed up by the condition of pregnancy, and this too when the cause of the previous sterility was entirely unsuspected.

twice a day. This course was continued for two weeks, when the catamenia appeared, but still painful, though much less so than formerly. Discontinued the solution, from the irritable state of the stomach, kept up by it. Directed the occasional use of Sup. Tart. Pot. and Jalep, in small doses, to prevent constipation, and continued the electricity semi-weekly, until the 20th of April. The menses then made their healthy appearance, unattended with any dysmenorrheal symptoms. Her general health was also much amended, and I ceased my visits. She has continued to improve in health, and has had no recurrence of the dysmenorrhea since.

CASE XXIII.—Miss ——, aged 16; was called to see her on the 22d of May last, and found her suffering acutely from this complaint, it being her usual period. This had been the case during the three previous occasions. Her general health good. Placed the patients feet in a warm bath with the positive electrode and applied the other to the lumbar nerves, and continued the application for five minutes, with much mitigation of the pain, which entirely ceased in about six hours. No other application was made, nor has there been any necessity for it since.

CASE XXIV.—Mrs ——, has been married five years and is the mother of two children. From some circumstance an abortion was produced sometime in the fall of 1842. Menstruation returned two months afterwards, but attended with most excruciating pains in the lumbar region, which she declared were worse than those of labour. This happened for three successive periods, when her attending physician, being unable to afford her any relief, recommended electricity. On the 18th of April, the day before her

usual period, I made a general application, which induced an immediate return of the dysmenorrheal symptoms, but with great mitigation of their severity during the discharge. During the following week, however, I was called in again and found her suffering from violent rheumatism, as she termed it, in the soles of her feet. For this I applied electricity for five days, as usual, ineffectually. Being satisfied that there existed some cause for this obstinacy, other than ordinary, I made more particular enquiry into the case, and suggested to the family practitioner that there might be a pressure upon some of the nervous twigs of the sciatic plexus, arising from a prolapsus, which would account for the obstinate neuralgic affection. Upon examination this proved to be the case, and upon the introduction of a pessary, the rheumatism instantly ceased, nor has she since had any symptoms of it or of dysmenorrhea.

CASE XXV.—Miss —, aged 17, has labored under violent dysmenorrheal symptoms for thirteen months past. These have been so severe as to confine her to her bed at least five days each period, and the discharge has been much coagulated and stinted in quantity; has resorted to various remedies for relief, but hitherto ineffectually. On the 22nd of April, 1843, electricity was applied as in case twenty-third, during the first day of her period, which relieved her in about eight minutes, and the discharge took place freely and continued without farther pain. Electricity was continued for the three succeeding days and then omitted until the 17th of May, when I again called and resumed it thro' the whole system only. The catamenia appeared on the following day of a healthy character and without pain.— There has since been no occasion for its employment.

CASE XXVI.—Miss —, aged 30, has suffered from painful menstruation for several years; complains of an almost constant dull aching pain in the small of the back.— June 3d, 1843, for the relief of this, made six applications ineffectually. Upon more particular enquiry, found she was subject to habitual constipation. To remedy this prescribed a mixture of tinct. sem. colchici, 2 ounces; tinct. apocyni, 4 ounces; a teaspoonful to be taken three times a day, alternating every three days, and discontinued the electricity. The daily use of this was, however, resumed on the 28th, and on the 1st of June the menses appeared without any dysmenorrheal affection. The further application of the remedy was omitted, nor has there occurred any occasion for its use since.

CASE XXVII.—Mrs. —, aged 28. This patient has labored under painful menstruation for ten years. She has been married seven years and as yet has no issue. For several years past she has been confined at her regular periods for several days, with excessive pain in the lumbar region and a most acute cephalalgia; and this last symptom has frequently continued from one period to another. During the last two years she has been affected with leucorrhœa, indigestion, and almost habitual constipation. Has been for long periods under medical treatment, without obtaining any thing more than a slight temporary relief.— She applied to me on the 1st of September, 1843. Upon ascertaining her situation, for the purpose of strengthening the nervous and nutritive systems, and to remove the cephalalgia and constipation, I applied electricity through the whole system daily, for ten minutes each application, and prescribed the following pill, to be taken daily also, Oxide Silver, Sulphate Quinine, Extr. Apocynum, each 20 grain.

ft. pil. xx, with Conserv. Roses. September 3d, found herself free from the cephalalgia and leucorrhœa subsiding.— From this until the 25th, she continued to amend rapidly, when the catamenia made its regular appearance unattended with any painful symptoms; whereupon the electricity was discontinued. Her health has remained unimpaired, in every respect, since.

EPILEPSY.

Seven cases of this terrible disease have occurred in my last two years experience. Four of these were permanently cured, apparently, and the others were temporarily relieved. A complete cure in all of these last, except one, I am satisfied might have been effected, had they only remained and persisted in the use of the remedy. The results are sufficient to show that it has control of all ordinary cases of this disease. Those of long standing, or dependant upon organic disease of the brain or skull, are but little affected by it, and are probably hopeless under any treatment.

CASE XXVIII.—Was a bright, nervous looking lad, about 9 years old; has been subject to epilepsy for two months past; has often had as many as eight or ten fits a day. Has been under the care of a regular physician for sometime, who has exhibited the usual remedies for the complaint, and particularly anthelmintics, without affording any relief. April 3d, I commenced making semi-daily applications of electricity. After the second day he had one or two spasms daily, so slight as not to impair his consciousness. On the fifth, he missed these; but on the eighth day, from a quarrel with another lad in the street, he had a vio-

lent fit. He remained one day longer, when his parents left. I learned that for two weeks afterwards he had occasional, though mild, spasms; but at the expiration of this period they entirely ceased.

CASE XXIX.—H——, a negro woman, 24 years of age; stout, plethoric, and apparently very healthy, with the exception of being subject to epileptic fits. These have existed now for seventeen years. When first attacked, they were frequent and irregular; but, upon her arriving at puberty, they assumed the catamenial period, and so continued until three years since, when they began to appear very violently every two weeks, and this character they have since maintained. She has also been subject to very severe dysmenorrhea for several years. On the 8th of December, 1842, the day before the usual epileptic fit, I applied electricity through her whole system; but without preventing the attack. The remedy was continued each alternate day during this month. One fit happened on the 10th; but from this she was free until the 2d of March ensuing, when she experienced a series of five or six fits in three days.—Suspecting, from her appearance, that this attack was occasioned by the presence of worms, I administered, in connection with electricity, an anthelmintic, which brought away large quantities of *ascaris lumbricoides*. The electricity was continued tri-weekly for a fortnight. She was after this hired out to work upon a plantation and sent to the country. She continued free from the epilepsy for several months; but, from excessive labor and exposure, it again returned. A physician was called in, who administered the usual remedies for the complaint, but without any success when I last heard from her. I may remark that previous to being placed under my charge, she had been sent to

Charleston and Augusta, where she had been under medical treatment without experiencing any relief whatever. Her dysmenorrhea was removed during the first employment of electricity.

CASE XXX.—Mr. —, aged about 19, of an apoplectic form, applied to me in June, 1842, for epilepsy. Had been accustomed to have fits about every two weeks, or if delayed beyond that period, he had an almost constant, dull, heavy pain in the back of his head, and occasionally shooting acutely to the eyeballs. He informed me that he had been under the care of Dr. Jackson of Boston, for two months previous, without being at all relieved. I applied electricity through his system and each of his limbs, in succession, which entirely removed the cephalalgia. As his digestive organs were somewhat impaired, I prescribed a pill containing a grain of ipecac and half a grain quinine, to be taken directly before eating. After the lapse of a week he left, having experienced no indications of a return of the disease, nor has he in any manner since.

The case of the negro woman before cited, was the most severe and obstinate of any that came under my treatment. The others who, like her, were temporarily benefitted, have from similar causes relapsed. Proper care and a farther continuance of the remedy, I am confident, would have proved as successful in their cases as in the others.

HYSTERIA.

In this disease, as will be seen below, my experience has been extremely limited, yet as a vast proportion of the cases which I have observed in the course of my life, have

been attended with uterine derangement, and all are evidently dependant upon a vitiated condition of some portion of the nervous system. I have no hesitancy in avowing my entire confidence in the ability of magneto-electricity, judiciously employed, to effect in most, if not in all instances, a complete cure. The following embodies my experience.

CASE XXXI.—Mrs. —, aged 24, has been married five years and in this time has given birth to two children, From the birth of the younger, more than two years since, she has been subject to frequent attacks of hysteria in all its protean forms. November 13th, 1842, I was called in, and found her in the following situation: she was confined to her bed, with a large blister drawn upon the lumbar region, very excitable, and averring she had the congestive fever; had suffered much during the day from palpitation of the heart, the cessation of which had been succeeded by severe abdominal pulsations. I ascertained that menstruation had been from before the first appearance of these symptoms exceedingly irregular, and had only occurred then from the use of medicine, and of very scant quantity. Also, that the hysterical symptoms were generally confined to the usual catamenial period, or were greatly aggravated by it, and that suppression had now existed for about seven weeks; her bowels were also in a very irregular, but generally a constipated state. Applied electricity through her system until copious perspiration was produced, which required about four minutes time. This quieted her nervous irritability and she soon fell into a profound sleep, not having had any before in the last forty-eight hours. November 14th. The patient rested well during the night, is free from any appearance of hysteria, pulse weak and ir-

regular, and she feels very weak and debilitated. Prescribed of the following mixture,* comp. syr. sarsaparilla, tinct. apocynum, each 4 ounces, hydriodate potassa, ii drs.—one drachm to be taken just before eating each meal. Repeated electricity, and as the catamenia had not appeared, directed it directly through the pelvis. This, however, happened during the night. I made one other visit and found her entirely relieved. She has remained well since.

CASE XXXII.—Mrs. —, aged about 45, has for many years labored under a complication of disorders, chiefly of a nervous character; has been treated for hysteria, prolapsus uteri, and during the time has continued to be subject to gastralgia, indigestion, and other dyspeptic symptoms. I was called to visit her April 1st, 1843. She was then suffering from the last named and excruciating uterine neuralgia, attended with active synocha. I immersed the patient's feet in a warm saline bath, containing one conductor and applied the other to the spinal origin of the uterine nerves. The electricity was continued for five minutes with great mitigation of the symptoms. This operation was repeated semi-weekly for three weeks, and, without the aid of other remedies, appeared to remove her anomalous nervous affection, and with most decided improve.

* The professional reader may smile, perhaps, at the frequent prescription of the components of the above mixture, and from their simplicity may inquire wherein their great virtues consist. In answer, my only reply is, that these simple ingredients have proved more efficacious, in my experience, as adjuncts to electricity, than any others I have employed. As the tincture of apocynum is not usually found in the shops, and is of variable strength, I will state that I have made it by combining a pound of the recent root, pulverized or ground, with a gallon of spirits.

ment of her general health. On the 10th of December following, however, I was again sent for, and found her troubled with a severe neuralgia of the left supra orbital nerve, attended with other symptoms resembling angina pectoris, though they had been considered hysterical—for instance, she had a painful stricture of the œsophagus, oppression of the chest, dyspnoea, and occasional pains shooting from the cardiac region to the left shoulder. Her attending physician had prescribed frequent and full doses of morphine, which had kept her stomach in an irritable condition and nauseated. I made the usual application to the cerebral and dorsal nerves, with but little mitigation of these symptoms, except removing the œsophageal stricture.—December 9th. Found her vomiting this morning. She had taken a dose of charcoal, which from the excessive irritability of her stomach was rejected. Has passed a sleepless night. The neuralgia continues unabated—the other symptoms have greatly decreased. Repeated the application of yesterday with more effect, though acute pain was produced by the operation along the course of the affected nerves. 10th. Symptoms mostly abated—continued the remedy. 11th. Found her up and entirely free from the complaint. Applied the electricity through her system generally, as well as locally. She has since remained well.

As hysteria had been her most prominent complaint for several years before, and she is now wholly relieved from all symptoms of that affection, I have placed the above case under that head, though it more resembles those of neuralgia and angina pectoris.

CASE XXXIII.—Mrs. —, aged 54, of a nervo-billious temperament, has been subject to frequent and most violent

attacks of hysteric colic for several years; has resorted to the usual medical treatment, but without any permanent effect. August 21st, 1843, I was called in and found her suffering great pain in the epigastric region, attended with rumbling of the bowels, frequent eructations, and globus hystericus. Immersing the patient's feet in a warm saline bath, along with the positive pole, I passed and repassed the negative pole along the spine, and particularly to the roots of the nerves supplying the parts chiefly affected, for ten minutes. This relieved her of every symptom of the complaint. On the 16th October, I was again called in for a similar attack, which was also relieved by a single application. I then prescribed one of the following pills to be taken three times a day: R. oxide argent., sulph. quinia, a. a. 30 grs., conserv. ros. q. s. ft. pil. xxx. Continued electricity daily for a week thereafter. She has been in excellent health since.

INTERMITTENT FEVER.

In this disease I have not had sufficient opportunity to determine the precise effect of magneto-electricity. That it has great control over ordinary chills, is certain, from its results in several cases which I have applied it; but to what extent, generally, it may prove efficacious, is not yet demonstrated. Numerous persons, laboring under tertian or quartan ague, have often called and applied electricity on the day of its usual appearance, just before the time, or at the commencement of their chill, which it has generally either prevented or checked within a few minutes. In such cases perspiration is quickly produced, and little or no fever succeeds the operation. In a few instances it has failed of producing these effects, but the circumstances under which

it was applied were unpropitious, nor was the application persevered in sufficiently, in my opinion, to test its virtues in these particular cases. But a single application was in most instances made, and though this generally, as was stated before, either prevented or broke the chill for that time, it did not always prevent its return. That it possesses great remedial virtue, however, in chronic ague, or chills supervening upon the usual fevers of the country, is evidenced from the cases appended below. The results in these, will at least warrant its employment in all similar instances.

CASE XXXIV.—Mr. —, applied to me on the 27th November, 1842, for treatment of chills and fever. The paroxysms were at first tertian, and were for a time removed by the use of tonics and alteratives. They, however, returned upon him in the quartan form, and showed no disposition to remove, although urged to do so by the exhibition of quinine, arsenic, and the various other remedies usually prescribed. They had now continued for three months. I applied electricity on the regular day of the chill and a few minutes before its expected appearance, by placing in his hands one conductor and passing the other down the course of the spine. Copious perspiration was induced in five minutes and the chill did not make its appearance. The same application was made on the next period for its recurrence with a similar effect. It was then discontinued, nor has the complaint ever returned.

CASE XXXV.—Mr. —, aged 24; has been subject to a quotidian intermittent for a few days only. Electricity was passed through his system, on the 8th December, 1842, during one of his chills. In ten minutes, perspiration

was induced, followed by no fever. The application was made by putting his feet in a bath with one conductor and placing the negative electrode to the back of the neck.—The next period it appeared as usual. An immediate application was made with the same success as the day before upon the chill. From this he has had no farther attacks.

CASE XXXVI.—Miss ——, aged 10 years, has been subject to quartan ague for eight months past, which has obstinately resisted the ordinary remedies for the complaint. On the 12th March, 1843, applied electricity by simply placing a conductor in each hand for five minutes, which prevented the chill. It however returned at the succeeding period; but was prevented on the next by an application similar to the first. For several periods this continued, but from taking cold the chills again made their appearance. My machine being absent in the country, I made a common tonic prescription, which removed them altogether. It is probable the electricity had prepared the system for the beneficial influence of this simple prescription.

Whether this agent can be made efficacious in the treatment of our ordinary fevers, especially of that class which seem more particularly to depend upon nervous prostration or depraved nervous action, may be inferred to some extent from its effects in two or three instances in which it has been employed. That it will in all diseases and under all circumstances prove an infallible specific, would be absurd to suppose: yet it will be seen in the following cases, that at least its preventive and salutary powers are worthy of notice. I regret that I have not had opportunities sufficient to determine its specific action and influence in these diseases.

CASE XXXVII.—Mr. —, aged 24, of a sanguine bilious temperament, was attacked June 20th, 1843, with bilious fever. June 23d, I visited him and found him laboring under the following symptoms: intense pain over the eyes and posterior part of the head, dull, heavy aching of back and limbs, tongue thickly coated, eyes tinged of a yellowish hue, skin dry and hot, and pulse ranging at 103 strokes per minute. Electricity was employed at his request, by placing his feet in a basin of cold water, along with the positive pole, while the negative was passed down beside the spine, and applied particularly to the origin of the nerves proceeding to the stomach and liver. This, within a few minutes, induced a most insupportable nausea, retching with slight emesis, and a profuse perspiration, followed in five minutes by an evacuation from the bowels. The aching of the bones, &c., was entirely relieved and the pulse soon moderated down to 85 strokes per minute. I then prescribed a cathartic dose of Cook's pills. In the afternoon, the fever rose and the pain of the head and back returned, though less violent than before. These were reduced by the means employed in the morning. June 24th, found the patient free from fever, but complaining of considerable acidity of the stomach. The pills had acted freely during the night. Prescribed magnesia and applied electricity. The fever returned slightly during the evening, but soon subsided. In a day or two, without the use of other medicines, he was about and able to attend to his usual occupation.

CASE XXXVIII.—Mr. —, aged 32, was seized August 12th, 1843, with a sudden and severe chill, accompanied with the usual symptoms of the common or congestive fever of the country. During the continuance of the ague,

electricity was powerfully applied to the system and along the course of the spine. In the course of ten minutes a free perspiration was induced and the chill checked. An active cathartic was administered and the use of quinine directed. An hour afterwards a high fever succeeded, attended with intense pain in the head and limbs. These gradually subsided, and the next morning I found the cathartic had operated properly and he was free from fever. There being symptoms of a return of the chill, electricity was again applied, which removed them and produced perspiration. This was continued twice a day for four days, without the use of other remedies, when he was able to attend to his ordinary employment.

It would appear from the above, that this remedy may be of valuable service, if employed in the commencement of fevers; but what influence it may exert in its advanced stage, I am unable to say.

NEURALGIA.

Ordinary affections of this character are often met with and readily yield to the influence of magneto-electricity. Severe paroxysmal cases of tic doloieux are, however, less manageable without the strictest attention to the habits of the patient and the aid of adjuvant medicines. Many cases have been treated by me, all of which were relieved, and those who made a fair trial entirely cured. Among the following are sketches of those least relieved and the treatment employed.

CASE XXXIX.—Mrs. —, some years since, in attempting to catch a falling sash, thrust her right hand

through a pain of glass, which partially severed the superficial palmar artery and accompanying nerves. The bleeding was staunched and the wound healed after the usual manner, but was soon after followed by an aneurism of the injured artery. This was reduced by compression. From the date of the first healing of the wound, there was an acute sensibility of the fingers, which produced such exquisite pain upon touching any thing, that she frequently fainted. This was her situation when I saw her on December the 11th, 1842. Upon the first application, by means of a moist sponge, along the course of the nerves as in amaurosis, syncope ensued from the severity of the pain. Daily employment of the remedy for three days resulted in the entire removal of the neuralgia, and she was able to make any ordinary use of the hand, to sew, &c. In March following, she received an injury of the wrist, which provoked a return of the affection. This was promptly removed by the same agent, and she has remained until now entirely free from any neuralgic symptoms.

CASE XL.—A young lady applied to a dentist of this city to extract a tooth, having suffered for several days, as she declared; from the toothache. He examined her teeth and finding them entirely sound, advised her to call upon me, which she immediately did. She complained of a throbbing pain, shooting upwards to the canine tooth on the left side of the under jaw. This she had drawn and replaced a few days previous, without any mitigation of the pain. As it was evidently a neuralgic affection of a branch of the inferior dental nerve, I placed my finger upon the mental foramen and passed a succession of shocks through it for the space of a minute and afforded her entire relief. She has had no recurrence of the attack.

I have had a multitude of nearly similar cases of tooth-ache, as they are termed, and all are promptly relieved, unless they are attended with inflammation about the roots of the teeth. If so, little if any benefit is produced until this obstacle is removed.

CASE XLI.—Was that of a young lady, aged 17, of delicate constitution, but enjoying good general health, who was suffering under a neuralgic affection of the left infra orbital nerve, of two days standing, and which was completely removed by two applications.

From frequent trials, I have found that nervous kinds of cephalalgia, such as those commonly termed sun pains, periodical, sympathetic, or sick headache, are mostly relieved by one or two applications of electricity, unless there is considerable congestion of blood to the head, or indigestible food in the stomach.

CASE XLII.—Mr. —, aged 21, called on me for treatment of an anomolous neuralgia, affecting at various times his arms, legs, or scalp. This distressing complaint had continued with more or less severity for several years. It was located in the posterior portion of the left side of the scalp, on the 22d September, 1842, when I applied electricity, by means of a moistened sponge, directly to the cervical nerves, supplying the affected part. Three minutes application was sufficient to effect a dislodgment of the pain. On the 29th, he called again. The neuralgia had now changed its locality to the right hip joint and appeared more of a rheumatic character. Ten minutes application to the limb and joint also relieved this attack. Slight symptoms of the neuralgia, however, made their appearance on the scalp again, on the 10th of October, which another ap-

plication removed. This was now continued daily for a week afterwards, and chiefly through the spinal cord. So effectual was this continued use of it, that he has had no return of the complaint.

CASE XLIII.—Mrs. ——. This patient, a married lady, aged 35, resides about twelve miles out of the city—is of robust constitution and enjoys good health, aside from a neuralgia of the glosso-pharyngeal nerve, which manifested itself by shooting pains through the tonsils. The pain was generally most exasperating, and she was under apprehension lest it should prove to be the nucleus of a cancer, from which disease her father had died, although physicians had informed her to the contrary. The affection was of some two years standing. The act of deglutition, during the intermissions of the exacerbation, was attended with acute lancinating pains, extending in the direction of the external orifices of the ears. She had been under the usual medical treatment, but had derived from it no relief. Upon examining the palate and tonsils, no change indicating disease was apparent. Applied electricity during an exacerbation, which procured for her a speedy relief of the symptoms. As it was a case of long standing, I advised her to remain some weeks; but she thought it impossible to leave home, and so left town the same day. Four days afterwards she returned, suffering from another attack, which was removed as before. Returning home, on horseback, after this application, she was overtaken by a heavy shower and thoroughly drenched. This produced a return of the neuralgia, and she called on me again two days after. I once more relieved her, but refused to do so again unless she would stay in the city and make a fair trial of the benefits of the machine. She left on the evening of the same

day, and I have seen her but once since. The neuralgia was much removed, and she only occasionally felt it in the palate, and declared her intention of coming to remain under my care until she was permanently cured. Her not returning, is evidence that the affection is either cured or greatly mitigated.

CASE XLIV.—Mr. ——. This patient was about 60 years of age, and for a considerable time had suffered from tic doloreux. For six weeks previous to my being called in, he had been under medical treatment in this city, and had obtained no apparent relief of the paroxysms. These were periodical, occurring regularly at 2 o'clock in the morning and continuing six hours, then intermitting until 5 o'clock in the evening, and then returning for two hours. Narcotic medicines had been freely given to allay the pain, until the digestive functions were deranged to a considerable extent. After exhibiting the usual remedies relied upon in such complaints, without effect, the attending physician proceeded to sever the frontal branches of the fifth pair of nerves. This produced a temporary relief in the course of the divided nerves and somewhat mitigated the pain in the other branches, probably from the loss of blood caused by severing the accompanying arteries. However, the attacks soon returned with undiminished violence, and I was sent for on the 6th of July, 1843. I found him in the midst of the morning paroxysm. Shooting pains were constantly darting in almost every direction through the scalp, forehead and eyeballs. Tears flowed freely; extremities cold, and the pulse feeble and intermitting every fourth stroke. (I have found this last symptom to be an almost invariable attendant in severe cases of tic doloreux.) I first applied electricity through the whole system, to equalize the circu-

lation, and then by means of a moist sponge along the course of the affected nerves. The paroxysm was removed in about five minutes, and did not return until two hours later than usual on the 7th. This I also broke in the same manner as before, and to restore the nutritive functions of the system I prescribed a mixture of comp. syr. sars. 6 oz., hydriodate potassa, 2 drs., to be taken in table-spoonful doses thrice a day, and enjoined the strictest quiet. July 8th. Has had no paroxysm. Continued the before mentioned adjuvant and the electricity. In the evening, contrary to my injunction, he rode out to a relative's, five miles in the country. On the 10th, he returned suffering very severely from the neuralgia. The exacerbations had now no regular periods, but were induced by the slightest exercise.—Relieved him as usual by a single application. Prescribed the following pill: oxide argent. 10 grs., ext. apocyn. and sulph. quinia, aa. 20 grs., ft. pil. xxx; dose one, repeated every four hours. July 11th. Feels an occasional lancinating pain in the scalp. Continued the applications for two days, and as there was no pain, omitted it for three. On the 17th, contrary to my advice, he went up the country to his plantation. Was absent twenty days; when he returned the complaint having renewed its appearance apparently with undiminished violence. On this occasion, the pain was more obstinate and refused to entirely cease its exacerbations until the fifth application. I then placed him under a course of tonics and mild alteratives, and again enjoined quiet. I did not again visit him. He shortly returned to his plantation, and for some weeks afterwards a slight paroxysm would be induced whenever he took any unusual and severe exercise; but is now apparently freed from all symptoms of the complaint.

From the history of these last two cases, it is apparent

that as much care is requisite to prevent a relapse in this complaint, as would be in that of intermittent fever, especially as regards active or severe exercise. In all instances of intermittent neuralgia which I have observed, exercise has either induced a return of or much increased the intensity of the paroxysms.

PARALYSIS.

I have treated many cases of this complaint in its various forms of hemiplegia, paraplegia, and the partial or complete paralysis of one or more muscles of the body or limbs. That electricity is a most invaluable remedy, if not the only certain one, in this helpless affliction, may be strongly argued from its general happy effects in the cases here submitted, and also affords us just grounds for doubting whether recovery from the horrors of palsy is as hopeless as we are accustomed to consider it.

CASE XLV.—Mr. —, a young man aged 25; history is as follows: From exposure to cold, damps, and various hardships, whilst travelling in company with some emigrants to Texas, seven years since, he was prostrated by complete hemiplegia of the right side, which destroyed his speech and much impaired his mind. By means of medical treatment he was able to hobble about to some little extent and to mutter very indistinctly. He applied to me on the 25th September, 1842. He could not then articulate so as to be understood, except by his brother, nor manage to control and masticate his food without the aid of his hand; and complained of a constant heaviness and oppression over his eyes. The limbs of the affected side were much atrophied and retracted, and entirely devoid of sensation. He

had a slight control over the muscles of the leg, which was exerted in his attempts to hobble along. I made daily applications through the affected side for two months, with a gradual and constant improvement; sensation was partially restored to the whole side, he articulated much more distinctly and ate with less difficulty, the limbs became nearly of their natural size, and the control over the affected leg was increased so much that he walked with ease, but very awkwardly. He now left for home, but returned on the 20th of March following, without having lost any of his former improvement. Indeed, he had continued to gain, though slowly. Continued electricity during his stay, which was until the 10th of June. Result: the heaviness and oppression over the eyes entirely removed and intellect clear, increased improvement in his gait and partial control of his arm regained. He attended a school during the latter part of the time and manifested good improvement in writing and arithmetic; but his articulation, though greatly amended, was still imperfect.

CASE XLVI.—Mr. —, aged 38, received an injury in the back four years since, which produced an immediate and entire paralysis of the nerves of sensation and voluntary motion, below the last dorsal vertebra. His fecal and urinary passages were made involuntarily and without warning, the palsied parts were wasted away, he suffered from dyspepsia, and from the point of paralysis a tumid and exquisitely painful ring surrounded his body. This was his deplorable condition when I commenced making applications of electricity through the affected parts, on the 15th of June, 1842. These were continued for fifteen minutes, three times per day. June 18th. Sensation restored down to the upper third of the thighs. Discontinued the applica-

tions from the soreness occasioned by the number and severity of the shocks. June 25th. Resumed the use of the machine. July 10th. Found the limbs enlarged and exhibiting the appearance of cellular dropsy. Prescribed a hydropogue cathartic. July 15th. Having neglected to follow my prescription, he was to-day seized with a violent diarrhea. Being absent myself, Dr. Guild was called in, who prescribed calomel and Dover's powders; this relieved him. July 18th. Has regained control over the sphincter ani, urinary passages, &c. Limbs have resumed their natural size and sensation is gradually extending down the thighs, and digestion much improved. Shortly after this, by my aid, he made a machine and removed from under my care. I have, however, called on him occasionally since, and found his general health excellent and sensation restored to the whole paralyzed limbs. There his improvement seems to have ceased, and from several symptoms it is evident that there is a pressure upon the spinal cord, at the point of the original injury, which cannot be removed, as this point is continually very sensitive and liable to be inflamed at every change of weather, or at least to become more irritable.

CASE XLVII.—Mr. —, a painter by trade, from the effects of the white lead used in his occupation, had lost the use of both arms, or rather he had what is termed *dropped arms*. If any thing was placed in his hands, he could grasp it apparently as firmly as ever, but had no farther control over them. This situation had continued for several years. June 22nd, 1843, I commenced applying to the affected limbs continuous and powerful shocks, twice per day, for about ten minutes each application. The paralysis was gradually removed, and on the 14th day he was discharged from my care entirely restored.

CASE XLVIII.—Was a negro woman who called on me the 25th of July, 1843. Her right shoulder had been dislocated upwards and forwards, nearly three months before, in which condition it remained for three weeks. She then applied to Dr. Haywood of this city, who reduced the dislocation. The arm, however, continued in a paralytic state after the reduction, and was consequently useless. I made six semi-weekly applications of about five minutes duration each, through the affected limb, as severe as she could well endure, which entirely removed the paralysis.

CASE XLIX.—Mr. —, aged about 55, formerly of intemperate habits. His right leg had been paralyzed for fourteen years, and was much atrophied; the left had been in a similar condition for five years, and the right arm for seven. These were wasted to a considerable extent.—Control and sensation of the genital organs and urinary passages were entirely lost. His bowels were constantly constipated, and were regularly moved by means of laxatives. In this truly lamentable condition, I applied electricity through the system, as well as the affected parts, on the 1st of December, 1842, and continued it semi-weekly for two months, with the following result. On the fourth application sensation and control were restored to the bladder and genitals, and his constipation yielded. At the expiration of two months, his usual health appeared so good, and the paralysis was so far removed from the right arm and left leg that he determined to remove to his farm in the country, under the impression that the moderate exercise of superintending it would perfect their restoration. His expectations, however, have not been realized, though he has slightly improved. He has since applied to me for a machine, under the impression that its constant use will at length effect a cure.

The most difficult cases are above described, that have come under my care, except the one under the head of apoplexy. In several other instances of partial paralysis, electricity was employed, and generally with complete success. Its beneficial powers in such complaints are undoubted.

RHEUMATISM.

During the last eighteen months, I have treated about forty cases of this complaint, of sufficient severity to deserve recording. The results in the majority of these cases were most satisfactory, and in some of them extraordinarily so. Enough at least has been demonstrated in these instances to warrant the assertion that in this affection magneto-electricity is a sovereign remedy; one that speedily and most effectually controls this distressing and painful affection in all its common and in a vast majority of its uncommon forms. In recent cases of nervous rheumatism, unattended with inflammation, only a few applications have been found necessary to effect a cure, and in many instances but a single one has proved sufficient. Others of long standing and more deeply seated in the fibrous tissues, were more obstinate, requiring occasional applications for several weeks and a few adjuvant medicines. The instances cited are among the most difficult ones, and will serve to illustrate the general success and mode of treatment employed in the rest.

CASE L.—Mrs. —, aged about 35, and mother of four children, has been afflicted with a rheumatic affection since 1832. This has so affected the muscles of the back as to produce a great distortion of the spine, which led to the suspicion that it was a spinal, instead of a rheumatic affection. I visited her first on the 10th of January, 1843, and

found her suffering from acute lumbago. After ascertaining that this did not arise from uterine derangement, I had the patient's feet placed in a vessel of tepid water, containing a conductor from the positive side, while I with the other passed a rapid succession of shocks along the whole length of the spinal cord and branches, but particularly through the lumbar region. By this means a profuse perspiration was produced, and relief obtained within the space of five minutes. Jan. 11th. Found the rheumatic pain had returned, but was less violent, and confined entirely in its location to the left hip joint. Repeated electricity in the same manner as on the 10th, which afforded complete relief. This continued for several weeks, when the affection, from a sudden change of weather and exposure, returned and seated itself in her right shoulder. This was also relieved in the manner above stated. Since then she has occasionally used electricity as a preventive, and has had no farther symptom indicating a return of the complaint.

CASE LI.—Mr. —, about 40 years of age, has suffered from a rheumatic affection for several years, which has been chiefly confined to his ancle joints. Applied to me on the 12th of November, 1842. He then complained of lumbago; his ancles were stiffened so as to entirely prevent the turning of the soles of the feet inwards, and he walked with considerable difficulty. The rheumatism was most severe in damp weather. He was dyspeptic and in the daily habit of resorting to aperients to relieve the constipated state of his bowels. Ten minutes use of electricity removed his lumbago. Two days afterwards, he again applied, for a sciatic affection of the left hip joint. I now applied electricity through the stiffened ancles, and the hip, with the usual happy effect. I found, upon enquiry, that

the previous application had aroused the liver* from its torpid condition, and superseded the use of aperients. The remedy was continued semi-weekly for several months, which has resulted in the entire cure of his rheumatism.— His ancles are perfectly sound, the tone of his digestive organs restored, and his general health vastly improved.

CASE LII.—Mr.——, called on me December 9th, 1842: He had been attacked, six months previous, by an acute inflammatory rheumatism of the right arm and leg. The pain was soon removed by the usual course of treatment in such attacks; but the extensor muscles of both limbs were left entirely paralyzed. From this cause the leg was flexed towards the thigh, and when standing upon the other could not be brought within six inches of the floor. The hand and forearm was doubled inwards and drawn up towards the axilla. I applied electricity through the affected muscles for six weeks; but only semi-weekly. At the expiration of that period, he was able to straighten, and use his arm to some considerable extent, and to walk without the aid of crutches. At the expiration of this time he left. I have heard from him recently, and learn that he is almost entirely recovered and in excellent health.

BILLIOUS RHEUMATISM.

CASE LIII.—Mr. ——, a man of irregular habits; constitution impaired from the too free use of mercury in a ve-

*I have observed that this effect is produced in a majority of the instances where the agent has been applied, especially upon its first and second employment. In several cases of chronic hepatitis, it has proved highly beneficial, and seems particularly useful in giving effect to the ordinary remedies of this disease.

nereal disease. Was called to visit him on the 14th February, 1843. He complained of excruciating rheumatic pains, affecting all his limbs and back, which were greatly aggravated upon the slightest motion. His pulse was rapid and full, and other symptoms of active synocha were present. I proposed the administration of a mercurial purgative; but he obstinately refused, declaring he would sooner die, nor would he permit venesection. I then placed one electrode of the machine, wrapped in a wet cloth to the soles of his feet, and the other in his clasped hand, and transmitted as powerful and hasty shocks through the system as he could endure, until moisture was produced in the palm of his hands, then shifting the electrode from his hands to his neck, I passed it down the spine. The pains were removed in about ten minutes. Prescribed a mixture of equal quantities of tinct. apocynum and vinum colchici, to be taken in doses of a table-spoonful three times a day, the quantity to be increased if nausea was not produced. Feb. 15th. Found the patient free from general fever, though the rheumatism had returned, but was confined to the right hip joint, which was somewhat tumid and extremely painful. Applied electricity as before, and mullin leaves steeped in vinegar, to the inflamed hip. Continued the mixture. Feb. 16th. Tumidity of the hip reduced, but some slight soreness remained, attended with a partial paralysis of the neighboring muscles. Applied the machine to the affected limb and muscles for five minutes, and as the mixture had operated freely upon the bowels, directed its discontinuance for two days. Feb. 17th. Free from most of his former symptoms; continued the electricity. Feb. 18th. Walked half a mile and called at my office for the usual application. This was made for eight days longer, and the mixture was also continued in half doses; when his perfect cure was effected.

CASE LIV.—Mr. —, an Irishman, 35 years old, had an attack of billious remittent fever; became convalescent, but from imprudence relapsed twice. I was called in upon the second relapse, March 7th, 1843, and found him laboring under a high fever, and rheumatic pains over his entire body and limbs. These last were so violent as to produce spasms and short interruptions of consciousness. Pulse quick and tense, skin dry and hot, and his tongue thickly coated, except the edges, which were intensely red. Had his feet placed in a foot bath of as high a temperature as could be borne, and employed electricity through his whole system, as powerful as could be endured. In eight minutes free perspiration was induced and the pains ceased. The nervous irritability being quelled, the patient immediately dropped into a quiet sleep, and ten minutes after the application his pulse was reduced to eighty strokes per minute. Directed a pill containing quinine, ext. apocynum and pulv. rhei., each 1 gr., to be taken every hour during the intermission of the fever. Employed electricity for four days in the manner described above, when he was able to walk about, and on the seventh day he returned to his ordinary occupation entirely cured.

CASE LV.—Mr. —, aged about 30, applied to me on the 16th March, 1843, having suffered for several months with wandering rheumatic pains, principally affecting his spine, neck, shoulders and ancles. To relieve the severity of these pains, he had made free use of opiate. These had produced much derangement of his digestive organs, and he was consequently laboring under dyspepsia. To restore these to their appropriate functions, I prescribed the daily use of decoction sarsaparilla and hydriodate of potassa, in addition to electricity. This was continued for three weeks,

when he left apparently cured. I have heard from him lately and he still remains so.

CASE LVI.—Mr. —, applied to me on the 9th June, 1843; had suffered for some months from sciatica of the left hip, which was much stiffened. He walked with considerable difficulty by the aid of a cane, and was totally unable to ride on horseback. I made one application through the affected part by putting the foot in a bath and passing shocks through to the lumbar region. This single operation relieved him in eight minutes. As a proof of his perfect cure I may add that four months afterwards he ran away to Texas, starting in the night on horseback, and evaded all pursuit. I have been equally successful in several similar cases with a single application.

CONCLUSION.

FROM the preceding abstract of cases that have occurred to me during so limited a period as that embraced, it cannot be denied but that magneto-electricity is most efficacious in the various diseases enumerated, and that too to an extent hitherto generally unknown. Both my means and advantages have been circumscribed, so that it has in many instances been impossible for me to pursue my investigations as far as was desirable; consequently, a mass of facts has accumulated upon my hands which will require much time, comparison, and classification, before they can be reduced to the harmony of a rational arrangement, and made the supporters of any existing, or the demonstrators of a new theory, respecting the remedial qualities of this agent, or the particular mode of its action. What is here crudely presented to the public, is not for the purpose of an ostentatious and empirical display; but simply to induce an interest in favor of the remedy, among others, better qualified than the writer, by their talents, attainments and opportunities, to pursue inquiries upon so important a subject to their true and legitimate results. This is, now, a pursuit not unworthy the attention of the highest order of intellect of which the profession can boast, and the solution of even one of the problems involved in its renovating action upon the diseased organism, will confer lasting honor upon the demonstrator, however humble his present station may be. Heretofore, there has existed an unaccountable apathy upon the entire matter under consideration, on the part of the profession. A vague idea that it was possessed of some salutary pro-

perties, seems to have been prevalent: but this has led to few if any practical results. Even where there is sufficient proof afforded of the remedial powers of magneto-electricity, and its superior advantages over the old forms, there still seems to exist great incredulity and a manifest unwillingness upon the part of the majority to take any active measures to make themselves fully acquainted with the truth, or in their practice to avail themselves of its advantages. It is to be earnestly hoped that intelligent men will not permit themselves to be deluded into the idea that our ancestors have discovered *all* that is valuable in medicine, and that, consequently, there is nothing remaining for us to do, but to follow out their prescriptions. It seems to me that from the recent discoveries in organic chemistry, and the advancing state of other sciences, there is thrown open to the physiologist an almost unlimited sphere for the free scope of his entire powers, the active employment of which cannot fail of evolving the most practical, beneficial, and highly important truths. Advancement in knowledge is characteristic of our age, beyond all others, and the rejection of any facts, or salutary truths, simply because of their recent discovery or application, appears to me exceedingly irrational and unwise, aside, frequently, from its extreme folly and baneful effects. An undue precipitancy in the adoption of assumed premises, and of theories arising therefrom, are equally injurious. It is, therefore, much desired that those who may peruse the writer's remarks, should endeavor, by such means as may be in their power, to test, to their own satisfaction, the merits of this powerful agent by a personal employment of it in the various diseases in which it is here stated to have been successfully or unsuccessfully exhibited. That it is deserving of especial notice, at the hands of the profession, is my decided though humble opin-

ion. That this is also the opinion of others, distinguished for their efficient labors in behalf of medical science, I am happy to be informed.

The following notice of the writer's efforts and experience, from the able pen of Dr. Daniel Drake, the senior editor of the *Western Journal of Medicine and Surgery*, is extracted from the editorial columns of that valuable periodical, page 472. It exhibits the favorable view in which he regards the subject, and is here submitted as an additional inducement in favor of its more extended consideration by the profession and the public.

“Electro Magnetism.—In Tuscaloosa we were asked to look at a small electro-magnetic machine, which an ingenious citizen of that place, Dr. Nelson Walkly, had constructed, and was applying to the cure of diseases. Dr. Walkly was an inquisitive and scientific mechanic who turned his attention to medicine, which he studied for the purpose of making a systematic trial of electro-magnetism in the treatment of diseases. Within the last twelve or eighteen months, he has used it in chorea, epilepsy, neuralgia, palsy, chronic rheumatism, deafness, torpor of the liver with constipation, amenorrhœa, dysmenorrhœa, and several other complaints. Of his success and his failure, he gave us a detailed account, apparently with great candour; and we feel it a duty to say that he seems to have effected a cure, or afforded palliation, in several cases of those very intractable affections. It must certainly be admitted, that the profession has not yet made a full and fair trial of this agent, and we take great pleasure in commending Dr. Walkly's enterprise to the patronage of the physicians, and of the community in general, through this country.”

ion. That this is also the opinion of others distinguished for their eminent labors in behalf of medical science, I am happy to be informed.

The following notice of the writer's efforts and exertions from the able pen of Dr. Thos. Drake, the editor of the Western Journal of Medicine and Surgery, is extracted from the original columns of that valuable periodical, page 172. It exhibits the favorable view in which he regards the subject, and is recommended as an additional inducement in favor of its more extended publication by

Dr. Drake, in his issue of the 1st of January, 1841, in which he alludes to a small electro-magnetic machine, which he says is about others of that kind. Dr. Drake, who had been consulted, and was applying to the cure of disease. Dr. Drake was an impatient and bold practitioner who turned his attention to medicine, which he studied for the purpose of making a systematic trial of electro-magnetic treatment of disease. Within the last twelve or eighteen months he has had a number of cases, some of which he has treated with success. In some cases he has used the machine, but in others he has used the galvanic battery, chronic rheumatism, deafness, dropsy of the chest, with a suppurating aneurism, dyspepsia, and several other cases. Of his success and his views he gives us a detailed account, especially with regard to deafness, and I will not say that he seems to have effected a cure, or effected palliation, in several cases of deafness, but he has not. It must certainly be admitted that the machine does not make a full and true trial of the machine, and we have great pleasure in expressing our views on the subject to the management of the journal, and of the community in general, through the columns of the Western Journal of Medicine and Surgery.