summation"! But surely no observer, no worker at science, will feel satisfied with such statements as these; and a few will probably agree with me in thinking that, although it be in a sense unphilosophical, it is neither inconsistent nor absurd, to entertain the opinion that the vital phenomena of living matter which was derived from pre-existing living matter are due to a peculiar power; although at the same time I object to accept the view that the action of a steam-engine, which was not produced by a pre-existing steam-engine, is due to a "steam-engine principle"; and I confess it appears to me very extraordinary that many advocates of the physical theory of life cannot be convinced that the analogy they draw between a machine, which does not make itself, or grow, or multiply,—and living matter, which seems to do all these things, is so very slight as to be beyond every limit except that of the fancy. If those who support the view which Dr. Ferrier so strongly advocates could explain by physics and chemistry (a) *the movements*, (b) *the growth*, and (c) *the division of any particle of living matter of any organism in this world*, they might have some excuse for the very positive statements they make about the *physical theory of life*.

People are beginning to doubt whether, after all, living things are really so like machines and crystals and physical bases, and complex albuminoid matters in a state of rapid chemical change, as they have been led to believe them to be. And people are also beginning to doubt if those who have spoken so positively on the physical side really know much more than any one else knows about the nature of life; although, from their very decided manner, it was natural to believe they possessed very peculiar and perfect knowledge of the subject. Whether the physical theory of life would have resisted much better the "*furious onslaughts*" that have been made against it, if some other course had been pursued, is a matter of opinion; but it is quite certain that some of the strongest supporters of the doctrine are modifying their views, and are preparing to modify them still further. Those who have watched for ten minutes, under a high magnifying power, the varied movements of living matter, and have thought a little over the question of the nutrition of that living matter, will not easily be brought to believe that such phenomena are due to physical and chemical changes only. The number of such observers increases daily.

CASE OF RHYTHMIC CHOREA OF THE RIGHT ARM AND HAND: WITH PARTIAL PARALYSIS OF THE RIGHT SIDE OF THE HEAD AND THE LEFT LOWER EXTREMITY.*

By R. H. B. WICKHAM, F.R.C.S.Ed.,

Assistant Medical Officer of the Royal Edinburgh Asylum for the Insane.

G. J., aged 77, was admitted into the Royal Edinburgh Asylum on the 22nd July, 1870. He is married, a baker, and resided last in St. Cuthbert's Poorhouse. About three weeks before admission, his mental health, which had previously been good, gave way, and he was admitted to this asylum labouring under the following delusions. He thinks himself the proprietor of the hospital attached to the poorhouse, and the owner of considerable property besides. He orders the other patients about to do his bidding. He says he is a Jew, and that his brother Jews are keeping guard over his money, which is locked up by them in Edinburgh Castle. Certain spirits appear to him from time to time, and put poison into his legs, and tell him to go to hell, for he has no business to go to heaven, as he is not a Jew. They also put searching questions to him about his estates, which he refuses to answer, being of opinion that they inquire for no good purpose.

The patient is a hale-looking old man, of rather above the average height, being about five feet ten inches. When spoken to, he answers questions readily and intelligently. He stoops a little in walking, but not more than usual in men of his age. The right side of the face droops slightly, especially at the eyebrow and the angle of the mouth. The tongue, when protruded, keeps well in the middle line, except for about an inch at the tip, which turns off at a sharp angle to the right. This state of matters is not affected by pinching and kneading it, nor by forcibly directing it to the left side, as it immediately returns to its former position. On examining the inside of the mouth, the uvula is observed to droop to the right side, and the arch of the right half of the posterior buccal orifice is about the eighth of an inch or more lower than on the left side. The pupils dilate equally, and the hearing is good on both sides.

The arm on the left side presents no peculiar features, except slight tremulousness; but that on the right is markedly tremulous, and is being

constantly put through a series of rhythmic movements, beginning when the patient converses and ceasing when his conversation is over. These movements are made in the following order. He holds the right arm at semiflexion, the hand being supinated, and the humerus being nearly perpendicular from the shoulder. He then draws back the elbow, and when it is at its full retraction he suddenly pronates the hand, raising the elbow at the same time until it is on a level with the shoulder, when he brings the arm forward until the humerus is restored to its perpendicular position, finishing the movement with a rapid supination of the hand. During this evolution the fingers perform independent motions, the forefinger not moving so freely as the others. These movements are confined to a flail-like action of the middle, ring, and little fingers, the forefinger and thumb being held steady. From time to time the arm is not concerned in the evolution at all, the movements being confined to the forearm and hand. When the patient is silent no movement of the arm is observed, but he seems quite unable to speak without performing the automatic actions already described. When answering simple questions, he confines himself to the movement of the hand and forearm; but, when he is pressed on the subject of his delusions, the upper arm is called into requisition.

In walking, the left leg drags very much, and he is unable to place it in front of the right. He seeks support from objects such as the wall, chairs, tables, etc., using either hand indifferently, and apparently deriving as much support from the one as the other. He seems to experience considerable difficulty in sitting down—standing with his back to the chair, and leaning back without bending the hips, until his hands touch the seat, when he lets himself drop. In getting up again, he pushes himself up off the chair with a jerk.

There is no history whatever of the case; but I have little doubt that the patient has suffered from a paralytic seizure at some period of his life; and, from its not being referred to in his schedule, I am inclined to think that it cannot be recent, as such an occurrence would in all probability have been mentioned by the parochial officers. The most important feature in the case is his inability to carry on any conversation without performing the movements which I have endeavoured to describe. It would appear that he has partially lost the power of procuring proper words at command to express his ideas, and endeavours to make up for the want of them by these gestures. When talking about his age, or other simple matter, he only uses the hand and forearm, as I have said, and when he becomes interested in a subject he brings the upper arm into play. But he does not appear to be capable of being interested in anything except the subject of his delusions; and, consequently, the regularity of the movements may be accounted for (if they are emotional) by the fact that he is incapable of more than one series of emotions.

A NEW INSTRUMENT FOR SECURING THE PEDICLE IN THE OPERATION OF OVARIOTOMY.*

By GRAILY HEWITT, M.D., F.R.C.P.,

Professor of Midwifery in University College; Physician-Accoucheur at University College Hospital; etc.

SURROUNDED as this operation of ovariectomy is with difficulties of various kinds, one of the greatest of these is unquestionably the treatment of the pedicle: not merely the securing of the vessels enclosed therein in such a way as to prevent hæmorrhage, but the dealing with it in such a manner as shall best conduce to the prevention of the pyæmic complications attendant or liable to be attendant on the healing of the wound.

For the purposes of the present paper, I assume that the best method of securing these two results consists in bringing the pedicle to the external wound, and there fixing it; considering as I do that, on the whole, this method is attended with less risk of secondary hæmorrhage; while it does not appear to be, judging from the results—the magnificent results, they may be termed—of Mr. Spencer Wells's practice, more liable, at all events, than others to the pyæmic complications. Mr. Wells has largely employed, as is well known, the *clamp* in his operations. My experience, a far more limited one than Mr. Wells's, has made me acquainted with difficulties which seem inseparable from the present manner of clamping the pedicle, and which have given me no little trouble in some of the operations I have performed, and in which the clamp was used. The clamp, by its shape and form, hides from view the part of the wound immediately beneath it, and it is diffi-

* Read in the Psychological Section at the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

* Read in the Midwifery Section before the Annual Meeting of the British Medical Association in Newcastle-upon-Tyne, August 1870.

cult to dress it and keep it clean and dry; while in cases of short pedicle it produces troublesome pressure on the edge of the wound, and leads occasionally to ulceration and sloughing from such undue pressure. The newest form of clamp, though less liable to these objections, has another, which I have practically had experience of—viz., that it is liable to slip, and allow the pedicle to escape altogether.

The instrument and method I now suggest may be described as follows. A framework of steel, shaped something like a shoe-buckle, measuring two inches and a half by one inch and three-quarters; the piece of steel of which the framework is made being two-eighths of an

The accompanying wood-cut shews the instrument the actual size. A piece of leather is represented tied in the manner the pedicle is intended to be secured.

inch wide and one-eighth of an inch thick, is provided with studs or buttons eight in number, three on two sides, and one on each of the other two sides. These buttons project three-eighths of an inch from the steel framework. It is to be used in the following manner. The pedicle, having been roughly trimmed, is perforated by a needle, armed with a double strong thread or whipcord ligature in two or three places, according to the width of the pedicle. It is then tied in segments; and the opposite ends are secured to the buttons of the framework above; one by one. The pedicle is now surrounded by the framework, while the cut edge of the pedicle is freely open to inspection and treatment in the centre; the tightness with which the ligatures are applied keeping the pedicle from slipping into the abdomen. In fact, the ligatures now act precisely as the tongue of a shoe-buckle.

The advantages of this method are, I think, sufficient to commend it. The wound can be more readily dressed; the pedicle is at all times accessible; the framework makes no pressure whatever on the edge of the wound at the point where the pedicle emerges; and the healing and covering in of the whole wound will be facilitated. There can be no question that dryness of the parts around the wound is most essential to the prevention of pyæmia; and it is exceedingly difficult to secure this with the ordinary clamp.

My first idea was to employ wire for the pedicle; but I find that strong twine is preferable, and infinitely more manageable. Messrs. Mayer and Meltzer have constructed the instruments herewith exhibited.

PROPOSED TESTIMONIAL TO DR. DUDFIELD.—A subscription has been entered upon in order to present Dr. Dudfield with a testimonial on his resigning the office of Honorary Secretary to the Poor-Law Medical Officers' Association, which office he has discharged for four years with the greatest zeal, tact, and ability, and thus contributed in no small degree to the success of the Association. Mr. Benson Baker, 42, Grove Road, Regent's Park, has consented to be treasurer to the "Dudfield Testimonial Committee," and will receive subscriptions.

HOSPITAL SUNDAY IN MANCHESTER.—The Society promoting this institution met lately at the Town Hall, Manchester; Mr. J. Grave, the mayor, presided. It was said that the total raised last year in support of the hospitals by collections in places of worship and by subscriptions was £5,540, and it was resolved that the third Sunday in December next be fixed upon as "Hospital Sunday" for this year, when a more extended effort on behalf of these charities should be made. It is proposed that this effort should cover a circuit of thirty miles round Manchester.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS OF GREAT BRITAIN.

HOSPITAL FOR THE EPILEPTIC AND PARALYSED.

NOTES ON CASES OF DISEASE OF THE NERVOUS SYSTEM.

(Under the care of Dr. HUGHLINGS JACKSON.)

Hemiplegia from Cerebral Hemorrhage in cases where there is Valvular Disease of the Heart.—The mere fact that hemiplegia has occurred in a person, even a young person, the subject of valvular disease of the heart, must not alone lead one to the diagnosis of embolism. The mode of onset is the important matter in the diagnosis of the nature of the lesion in all cases of hemiplegia. If we learn that the patient had been deeply insensible for many hours, or, more generally, if he had been for some time in the "apoplectic condition", the diagnosis of cerebral hemorrhage is at least as likely as that of plugging, notwithstanding that there is valvular disease. The bleeding is from an aneurism of the middle cerebral artery, or from a branch of it. It is true that, as a rule, such aneurisms burst outside the brain, and do not produce hemiplegia, but now and then they imitate, so to speak, ordinary cerebral hemorrhage, and break up the motor track. Dr. Hughlings Jackson's observations confirm the opinion of Dr. John W. Ogle and Dr. Church as to the association of aneurisms of the larger cerebral arteries with vegetations on the heart's valves. Dr. Hughlings Jackson thinks that the kind of defect of speech which sometimes accompanies hemiplegia is useful evidence as to the *pathological* nature of the lesion. *Loss of speech*—loss excepting the patient's stock word or phrase—is in favour of hemorrhage. Still, plugging will produce complete and permanent loss of speech. If the patient recover, and if during recovery he make frequent mistakes in words—the so-called loss of memory for words—articulating them clearly, Dr. Hughlings Jackson thinks the diagnosis of plugging more warrantable than that of clot.

Differences in Nervous Symptoms from Differences in the Pathological Nature of Lesions.—It may seem at first glance that the *pathological* nature of the lesion is of no consequence so far as the kind of symptom goes. Of course, if the very same part of three nervous systems were suddenly destroyed by three different lesions, the resulting symptoms would be the same in the three cases. But practically this does not happen. Although clot, softening from embolism, and tumour, may each damage the region of the corpus striatum, they do not affect the very same parts of this region, and they do not act on it in the very same way. For instance, clot destroys locally, it destroys suddenly, and it squeezes quickly. It mostly destroys more or less of the corpus striatum, and mostly leaves convolutions undamaged, although split off from the motor centre. Softening from plugging occupies arterial districts, and different districts, according to the branch of the Sylvian artery plugged. It may affect convolutions as well as the motor centre. Moreover, it will alter the nutrition of some parts whilst it arrests that of others. After partial, or seemingly complete, recovery from hemiplegia due to embolism, the patient becomes occasionally liable to chronic convulsive seizures, beginning in the face, or arm, or leg of the side previously paralysed. This liability does not occur from clot. A tumour may grow anywhere in the district; and, if it grow to a large size very slowly, even in the convolutions near to the corpus striatum, it need produce no symptoms. Nervous organs bear slow squeezing very well indeed; they resent sudden squeezing. The slow growth of tumours may, Dr. Hughlings Jackson thinks, account for the absence of speech-defects in some cases of disease (especially syphilitic disease) near to the left corpus striatum.

The altered nutrition above spoken of is probably owing to blocking of small arteries, which leads to congestion and even to extravasation beyond the block. Hence, in cases of embolism of a large branch of the middle cerebral artery, we occasionally find not only softening and destruction of fibres, but also evidences of rupture of small vessels—"red softening" in the convolutions. Sometimes a considerable part of the pia mater is stained of an ochre colour from old extravasation. The expression "altered nutrition" is used because, although "increased nutrition" will result from a locally increased quantity of blood, such congestion will in all probability lead to new matter of Composition, differing from, although of the same Constitution as (using these words in their chemical sense), that of health.

Does Disease of the Cerebellum lead to Loss of Sight?—The difference betwixt a tumour and softening from embolism, with regard to the