Locomotor Ataxia

with

Illustrative Cases,

being

A Graduation Thesis

by

Frank Rennie M.B.

1884.

Culross
Northumberland.
Perametritis may be defined as an extremely chronic inflammatory affection of the spinal cord, progressive in its tendency, resulting in a loss of co-ordinating power over the muscular movements of the lower extremities. The names Perametritis Encrusted Atrophy, Perametritis Spinal Atrophia, or more correctly Perametritis Post-zymd Atrophia, or Atrophia of the Spinal-Columnal Columns have also been applied to the disease.

Pathology. Examined macroscopically, the cord appears flattened from before backwards, the posterior columns being atrophied, if the membranes are unusually adherent, adhesions are present on the surface of the cord. On section, the posterior columns present a nearly grey lustre with invariable consistency. The lesion usually begins in the dural tuberous enlargement, the posterior root zones being the initial seat of the lesion and so has been abundantly demonstrated to be the essential marked process of the disease. e.g., in Perametritis, and in the growth of pyogenic ephilema, we may have adhesions of the posterior columns, with no atrophic phenomenon, because the lesions are limited to the posterior internal columns or columns of Pall. Again, a post-mortem examination of one of Dr. Hatt's cases showed a normal state of these columns of Pall, telencephalon as a thin lamina, only consisting in the posterior root zones of the cervical-dorsal region, the symptoms during life being want of co-ordination, shooting pains in the upper extremities. While posterior-external columns are first
attached, the protein intestine columns become involved with the
adenoma of the medulla process and according to Döderlein's
theory, the protein intestine columns are involved as well. Döderlein has traced
the medullary process in the cellular columns reaching the anterior horn.
As we have seen in the case of one of Dr. Heindel's patients, when the
protein-intestine columns in the cervical region are invaded we
have want of co-ordination in the upper extremities—just as there
is co-ordination in the lower, when the lower dorsal and lumbar regions
are attacked. If the cranial nerves are affected most
frequently, because affected with the same atrophic change,
Schwann is the name usually applied to all lesions of the cord
where the nervous intestine column is increased. It must
be noted, however, that in locomotor ataxia the lesion begins
in the nerve elements themselves, a histological difference from
that which is the case in degeneration of Schwann, where the lesion
has its origin in the connective tissue. Initial destruction
of nerve elements with overgrowth of connective tissue is the
histological characteristic of ataxia. The microscope
also reveals numerous corpora amylacea and connect
tissue granule cells.

The medullary process, then, may be defined as a chronic inflamma-
tory process, beginning in the nerve elements, causing their
destruction with chronic destruction of the same takes over
companied by increase of the fibrous connective tissue.
I have copied from a letter in 'Transactions of the Medical and Chirurgical Society of London' by Dr. Pye, 1882. (1) a representation of a transverse section through the cervical region of a healthy spinal cord, to illustrate what obtains in nature. (2) a transverse section through the cervical region of the cord in a case of tabes dorsalis. (3) a transverse section through the lumbar region of the cord in a case of the same disease. (4) a transverse section through the cervical enlargement in a case of the same. I have coloured the next three, as to represent as well as I can, the staining of the white columns with aminic acid. These colours illustrate diagrammatically all the more important histological characters of the lesion in this disease. (5) which I have pigmented to represent carmine staining in a longitudinal section through the posterior column of the cord in this disease. These representations are from sections made by Dr. Pye himself.

Figures 1, 7, and 8 are from representation from Symonds diagnosis of spinal cord disease 1883, which came into my hands lately, also pigmented to represent carmine staining.

(6) Section of the cord of the first lumbar nerves showing a diminution of the white columns in the posterior column. (Section by M. Reut, Lyon). (7) a dense band of sclerosis occupies the posterior column. (8) Syphilitic growth in posterior column, section through the cervical region of cord. It caused in-continuum disappearance of ganglionic in right arm. All these semi-diagrammatic representations illustrate well the seat of the lesion in this disease. Figure 4 shows the lesion in the cervical region as a secondary ascending degeneration, but as we have seen in M. Pye's case already, the lesion may begin in the posterior columns of the cervical region.
Transverse section through the dorsal region of a healthy spinal cord.
Magnified about 10 diameters.

All the white columns are deeply stained with the chrome acid.
The gray matter is only slightly affected by it.
Transverse section through dorsal region of cord in a case of locomotor ataxia, magnified about 10 diameters.

The lesion involves the whole of the posterior columns, which are seen to be very deeply stained by the vanic acid.
Transverse section through the lumbar region of cord in case of Ataxia magnified about 10 diameters.

The greater part of the posterior columns is invaded by the lesion and is therefore unciurated by the fluid. The part of the posterior columns adjacent to the posterior commisur is still healthy.
(magnified about 10 diameters)
Transverse section through the lumbar enlargement in a case of 'Scoliosis Atetosis'.
The lesion almost confined to the posterior internal columns, represents the neural lesion of secondary ascending degeneration.
Longitudinal section through the spinal column of the cord in Locomotor Ataxia magnified about 200 diameters.

The scar tissue has almost entirely disappeared, their place being taken by delicate connective tissue. Numerous capillaries are present through the section. These tissues are deeply stained by carmine.
Sclerotic Sclerosis - Locomotor Ataxia.

6. Section at the level of the first lumbar nerves. The posterior columns are sharply reduced throughout their entire length.

11. A dense band of sclerotic occupies the posterior column, through which the posterior nerve roots pass. The posterior-motion columns are free from sclerosis. The bands of sclerosis are very narrow, probably from contraction of the tissue, arising from the position of the septum (thickening). They appear to occupy the entire width of this column. The patient suffered from severe, partial locomotor ataxia.

(Corin & Prof. Weinst.)
Section through the cervical region of spinal cord of a man who died from encephalitis. The brain.

A growth (g) occupies the right posterior column, and has enlarged it to three times the normal size, displacing the posterior median septum to the left. The growth has invaded the right posterior horn, and extended a little way beyond it into the lateral column. It caused incoordination and partial loss of sensibility in the right arm.
Looking at this disease as it has been defined, we notice that it is chronic, that it is fungacious and without loss of muscular power, there is difficulty of locomotion from want of power to articulate groups of muscles.

Causes of Locomotor Ataxia. Syphilis is generally held to be the most common of acquired causes. Turner mentions the proportion of cases with a history of syphilis as high as 93.45% and other observers state varying estimates from 15% to upwards.

Out of 23 cases, those treated at the St. John's Hospital, Liverpool, by Mr. L. L. Thomas, only 2 had an acquired syphilis and out of 5 cases in my private practice (wherein 4 were children) only 1 had a history of hereditary syphilis.

Neurotic hereditary predisposition, must not be lost in cases tending to produce the disease. The cases I illustrate in this paper show this to be the case. Out of the 23 cases already cited, a decided hereditary neurotic history. Examples of cases of mania, where we can trace cases of syphilis, manic-depressive, hypomania, epilepsy, paresis, mental disease of one kind or other, in relatives or ancestors or numerous fit.

These from an analysis of all the cases I have heard of, that this history of hereditary trait is most important as without it, the causes which excite this malady would probably not be sufficient—else would the disease be common.

Injuries, must result as exciting causes, though with the present statistics none cannot be said. 3 out of 23 cases
had lasting of severe burns. They affected women from a Vell in the name of the town while working in a young horse, and then fell down the hole of a ship in Palermo. Sand. A man, on being in an injured ship, on a temporary team, the ship received a blow in the abdomen, which remains the memorable from that part of a case. Working in cold water in a stream of rain, is often mentioned as a predisposing exciting cause. It may be an exciting cause, especially if the boat be hard, but in Northumberland a limit which has a most memorable reputation in Almeria. I believe the boat, that we really have the disease manifested in Palermo or Menorca, yet the local region of the country and of the contiguity, commonly wet, necessitating the tanners often to lie on their sides, to be in unusual positions of streams with the other disadvantage of being wet. It seems true that if this were an important factor, we would have a greater number of cases from this class of men, as everything else removes - pitmen, tanners are born - not made. The inability gave a class of themselves (witness the long arms held almost at times) from their regular habits. One would consider them especially well. My own experience is that the Mechanical class of those whose work entails repeated standing are the most liable, e.g. Strikers of miners in Shipbuilding yards. Bradman. Letters 9th July, 1938. Out of my 23 'tine' cases, were butchers, on coal mines where there are no rains, but they stand on the buffers and getting cramped and having to jump down frequently it explains example.
3. Some astrineuric, or more... 2. Some... 3. Some cerebrose.

3. Operation to Stomach Appendicitis... 1. Formation... 2. Others... 3. In the... 4. rising... 5. In the... 6. In conclusion... We can conclude that... Tobacco... and strain... may induce the disease... It is... for it.

Other diseases... influence... e.g. spirit... pneumonia... acute bronchitis... asthma... acute pneumonia... epidemic... abortion... cough... rheumatism... This is... of the... question... in my... to relate... The former... is... in... as well.

Some... mental or bodily exertion... act both... as... and...hancing... and... cases... The latter... well known... in our... after the... of... "Explanatory General..."... They... may... that... balance... and... show... it... functional... rather... organic... that... induce... One... that... of... being... is... it... in... before... that... it... follow... General... that... be... as... they... exposed... higher... than... in... to... and... that... is... in... that... in... of... may... and... to... more... liable... as... they... also... exposed... to... than... the... proportion... of... could... not... to... and... many... other... things... and... causes... to... exercise... an... excelling... influence... of... constitution... and... in... example... Tobacco... in... example...
In looking for a causal element, it is well to notice that in many cases as in all severe febrile circumstances conditions may be at work, e.g. a man may have been as indeed have many - a hard winter, a hard winter, he may have apoplectic phenomena, and it would be difficult to infer that such their proper proportion as to cause, they must be taken together. In a large proportion of cases, no cause can be assigned. Males are much more disposed to the disease than females. Incidence of 14% were females according to England which included 149 such cases. His table shows that the disease is one of mankind's timeless life. In cases after 60 years about 3 before 20. The probable reason for the greater liability of males is the fact that they have harder hearts and are generally more exposed to the various exciting causes by the age of 20. Further Home Cases may then tabulate.

In 1880 - 3 males - average age 45.3 years.

- 1881 - 4 - 44.7
- 1882 - 7 - 39.3
- 1883 - 9 - 40.9

Out of 15 females it will be seen there were two females.

The commonly accepted causes in females seem to be, hard, obstructed labours, severe haemorrhage, emaciation, and for all cases, it may be regarded as an arsenic, though whatever excite excessively or lead to exhaustion of the functional activity of the kidneys, if the patient was a woman will act all excitants in fine shaped constellations.
The course of the disease and its symptoms may be conveniently classified and is usually divided: (1) Premonitory or incipient stage. (2) The acute or full development stage. (3) Stage of complications. It must be remembered, however, that there is no hard and fast line where stage merges into the other stages. The initial symptoms frequently remain throughout the course of the disease—these symptoms being so various that they cannot be classified. It is impossible to definitely fix their time of appearance; indeed, as we shall see, they are frequently overlooked or mistaken.

(1) Stage of Incubation, may last months or years, and varies. (a) Soreness, general sensibility, and important characteristic being long-lasting pain, often localized to some part of the body suddenly and unaccountably, occurring sometimes periodically, most commonly of variable intensity, usually in the form of distinct sharp or dull pains, but may be back, pelvic organs, chest or upper extremities lead. It is commonly described as aching, burning, or dragging pain, being compared to successive electric shocks, forked lightning, or the stinging of nettles under the skin. The pain is always complained of as being chiefly present near the bones and soft parts of the body and often local tenderness. In addition to these deep pains, lancinating pains neuralgic in character and punch-like, a particular area are frequently felt with some mild discomfort to touch. A gentle touch, a feeling as of a light cord or tendril felt was around the body of the extremities—also nervous twitches. Tingling of extremities unusual the first joint complained of then the hands. A feeling as of warmth or cotton wool or air bags—also explanation...
sometimes pain for patients. After the ground they are to feel in danger as if their foot with downy feathers, making difficult all grasping movements. Fast frequently occurring catch - may be hot, or one cold. (I)

Anesthesia or analgesia, more or less in the area of affected segments. Hypoesthesia distributed in palmar common or upper extremities, generally associated with the lightning pains.

The lightning pain depend most likely on irritation of the posterior root fibers in the posterior root zone. Muscle denervation depends on slight excitation of the anterior horn nerve roots. Feeling of heat could probably depend on a minor motor unit in (II) condition of reflexes. - Subcortical reflexes primary but posterior reflex as a rule is unipolar. In them cast. In Reflexes, posteriorly caused or secondarily conducted through the reflexes, visceral reflexes are in the adjacent fibers, entering the motor reflexes association with the posterior horn. (III) Reflexes of special senses. Osmorexia from otopathy of white matter may present complete blindness, at the early stage, perception of color will be impaired, with no light. A late abolition of the auditory sense my occur deafness as of Vestibular cases. All cases of smell was lost in one of Alzheimer's case, but slight interference with the sense of taste has been noticed when the trigeminal is involved. (IV) Paralysis of the muscles of the eyes, a temporary paralysis of the lower palpebral muscles gives rise to ptosis. has been reported in some cases during against most frequent. Hypoesthesia a common symptom may be mobile or single most frequently double, if not extreme. Probably is due to the trigeminal fibers in the inner orbital region. Hypoesthesia from irritation of a trigeminal some other.
Mysticism is obtainable in a small proportion of cases, but it is
noteworthy that it frequently characterizes dementia delirium for hours
(as is true of my one case in the Home) after an attack of organic pain.
The Angst-Adamski phenomenon is usually associated with
migraine. Hypertension is a rare symptom in dementia usually.
The hypertensive is sometimes involved in the dementia with pain as
its least common symptom. The attacks are as a rule followed by
first hypoaesthesia of the skin followed as the dementia progresses by
anaesthesia in the region of the fifth nerve. What would I like to
notice is the statement of Perrot who says that this anaesthesia
may be derivative to the posterior fiber of the spinal column.
Perrot reports a case wherein later sensory impairment.
Henderson reports a case of double facial palsy, recovery of
motion, dysphagia, partial diminution of taste, numbness. In both cases
these symptoms disappeared suddenly. (Can you imagine this case
with that of Pauli? Perrot's case began with an attack of angina
then followed the symptoms described, they disappear and the
left the atonic symptoms behind.)

V. Various Cases. (a) Case 1. Vulpinian first describes that there was
an association of heart disease in dementia. It has been shown that
insomnolence, obstinacy, etc. were not rare in dementia. In my five cases
one of my reported cases) he has a functional maximum becoming organic. In 3 of my
23 Home cases there was heart and chest tenderness. Ani
of the arch of the aorta he is blinded) when there would be 4.
1.00 at least above 2. acute regurgitation - causing the
venous of the heart & back - 1 initial insufficient.
It is right to state that other observers held that heart
pumping of age this can influence the heart & produce
charism that the association of cardiac disease with asthma came to this mind is accidental.

(1) Lunged cases, consist of shortening coughs, may cause
asphyxia & convulsion of same, for days after the voice
is almost quite lost. This was well illustrated in one of
my Cases who in the absence of any cause had two of these
spasmodic attacks with loss of voice for some days after.
about this case I could not state that it was in the labil
at the earlier period of the disease that the attacks occurred.
Charcot thinks that the cough is reflex caused by pressure
of common membrane of the lungs.

(2) Spasmodic cases. In the case of a patient under the care of Prof.
G. A. J. T. 6 years ago in the General Hospital. Remember
a pitiable case of asthma who very soon agitated suffered for
this strain. The case was thoroughly asthmatic, complaint of
esquating pains on the front tenders of abdomen before the
mucling came in if possible increased with its appearance.
In one of my studied cases a feeling of chill was accompanied
with pain came in irregularly, out of the 23 cases mentioned
I have not seen one, showing it is more an early symptom of the disease.
VII. Phthalein eluted affinities - urination may be painful, frequent or irregular as my case illustrates, or mottling may be only noticed once in about four hours as in Case 3. Want of control over bowel a common early symptom, as a rule, constipation of a very intractable kind later in the malady.

VIII. Fissures of rectum and anus. In the early stages mucous, this may go on to the necrotic stage - as in the ease of a Colitis. P. who told me it was impossible to estimate the sexton affinities as a rule in the later stages in those patients the infection.

IX. Attacks of eczema have been described by Strümm Alroy says he has observed these passing through the normal states of eczema before fading as those following ones. These also seem these patches but always considered that they were due to the cold or fever not to a mass motor disturbance. Eroseph of pains are not uncommon. Euphrosini of my case was Euphrosini present an attack of lightning pains, this the most common symptom but in my case chiefly in lower - the nails my face of, with some palor, of the feet may occur then in pancre.

X. Abnormal condition of the hair, from the frequency of hair as above mentioned. From not having seen it mention before clumps passing notice. I refer to an extremely dry state induced, hairs tend to split out separately, hair will not tie smoothly on the beard, but without (as in melaena) any tendency to fall off. Shows so frequently claimed this that in the hope of representing it shows some pencil drawings of the form.
Case I. Sketched from nature, showing the scum-like condition of the hair.
Case II, III & IV. Sketches from a photographic group of the family in my possession, showing the coxite condition of the hair.
recorded cases which show this condition. Chaucer explains trophi
changes by noticing that the catatonic trophi fatues pass through certain
particular features, except as he attributes the various series of distinc-
tions to its nature, these trophi fatues are consequently the subject to an
autonomic reaction. [CD Central nervous system abnormal. Gladness
is common in early catatonia. I would refer to the attacks in connection
with Case II of which I have given extracts. Epileptic epileptiform
attacks. Case II shows catatonia preceded by an epileptiform attack
then, then. After a epileptiform attack, my patient was accompanied
patients. The mental faculties are generally clear, but towards
day of disease, the mental faculties become quite paralyzed, as
importance gets impaired, the appetite for water may become un-
controlleable and all actions most cinemous. The foregoing are
the chief prominence symptoms that I have seen
mentioned or observed, but it must again be observed
that the disease is arbitrary as the disease stage seems not
infrequently to have no prominence stage so far as we can trace
thus the peculiar gait may be the first symptom.
2) Atatic stage or stage of full development. Weakness of co-ordinating
power is its characteristic. In standing patient keeps legs
apart to widen base of support. When great loss of ability, eyes
position unless eyes fixed is very great difficulty to remain and
without moving or even failing, when eyes closed and position im-
possible, as demonomtaries inability to stand at all same for
artificial aids. Sometimes the first indication of the disease
when patient closes his eyes he raises his face expiratory and endeavor to face forward over the barcin. the result from being too slightly dashing in first getting up or suddenly halted becomes impossible unless eyes directed to the feet of ground immediately in front, instead of the almost simultaneous giving movement of planting backward on the ground as in natural walking. the starchy has two separate movements, the legs just advance upward, the foot strikes the ground suddenly, then after an interval the sole reaches it with an abrupt jump. this is proportion to the elevation of the tactile muscular sensibility. the movements of progression have been compared to the balancing ones of tight rope walker. at this stage a stretch for a short distance is possible, but is to be noted by that the direction of the atomic patient is in a straight line. as the shallow curvature without the aid of clothes or sticks progression is impossible, there artificial supports being kept well away from the sides or as to give lateral assistance, as while further advance is made progression impossible even if supported by someone at either side, the legs are jerked in all directions in the greatest disorders of non-ordinary movement. atony of the upper extremities may now appear (if they have not been inconstant from the first) writing, buttoning boots or clothes delicate manipulation movements become in certain impossible without the aid of flags, spoon reaches the mouth by a round but series of disorderly kicks.
I had hoped to have been able to have added a number of sketches illustrating events of the voyage. However, it is too difficult to express, that nothing short of instantaneous photography will properly express them.

Just about landing foot on step.

Sketch from memory. Attractive patient attempting to enter a carriage. He is represented as having finished all the courtesies, able to step ashore without further ado.
Anemic patient is figured as about to slip off his left foot; the general position of the body, but widely separate and slightly also for lateral support can be seen. I, II, and III are from nature, but it is difficult to sketch a well marked anemic patient as he is unable to maintain one position long.
Patient is figured in the act of setting his leg outwards & forward, again stepping off the left foot. The forward position to the left of the body in order to preserve his equilibrium is seen.
Patient is stretched in the act of planting heel on the ground, the axis will follow when the trunk will be inclined more forward. The inclination of the body into the leg he is about to step off next.
Sunday 18/5/84

Dear Dr. Ronnie,

I am very sorry I was so lazy as not to write to you before. I am getting a good deal better, thank you very much for your letter; it was very kind of you to think of me here. The straight line, the circle, and the triangle.

Sincerely yours,

[Signature]

[Note: There is a handwritten note at the bottom which is not fully legible. It appears to be a mention of Martin Mayson's case.]
I've done it three times because the first were n't at all good. So many people go to Mr. Helling's now that we go at half past eight instead of nine. Both Mother & Ethel think I have grown a great deal more lately than I have ever done before in so short a sincerely

Bryan
Inc. or exciton of the vital muscles may come on, causing the same phenomena with movements of the body; or, for sensory disturbances are concerned, the lightning-panic continues forever in gravity, in respect of the hyperesthesia: such as in the young, plane & anesthetic ones. Patient with their eyes cannot tell whether he is really or only the case, or wood bark, feel their fingers handle some nugget in cotton wool.

Paralysis of sensation of every hand & combination is met with but analgesia is most common. Paralysis of sensory combination is often observed, if painless touch may be felt, but 10 or 15 seconds may elapse before pain is felt. Numbness sense becomes a paralysis I cannot distinguish between different heights. Anesthesia of urine, abdominal constipation as rule of second importance is gradually developed.

Muscles become stiff & rigid when we reach the point of 1st Extension Complications. Patient has helpleen mass, but may still be capable of pushing firmly with his legs, pronation & later, however, the muscles become more tense & the muscles under diffused atrophy. Anesthesia increases the patient cannot be with their eyes the position of his limbs. Muscular mimic, hyperesthesia are now the rule. Best comes on helium.

The Case of the patient at length succumbs to general wasting, of erythema, pneumonia or phthisis; the heart becomes more on the minor at disease, or central symptoms may develop, or the disease may extend to the tendons, etc. too easily of irruption.
Chances first traced a connection between ataxia and peculiar affection of the joints, which former observers have put down to idiocy and abnormality. It occurs in but few cases. The larger joints are the most frequently affected, bones become liable to dislocation, and the joints to undergo a form of joint effusion. Dr. Bingham says this joint affection is due to a lesion of the medulla oblongata. Dr. Bingham Bell reported cases of this affection occurring with ataxia. That the disease cannot be due to an affection of the anterior horn is proved by the fact that the affection may be an early symptom, that there is no muscular atrophy, that it has after death been found healthy in some cases. The deformity to which the disease gives rise is very great. In one of the cases a plantation—Daniel Riggs, whom I attended as medical officer of the Upperwalk Union—, notion of the legs is impossible to carry them at all. Often seen a patient—pain in indescribable muscles of the trunk—being every now and then necessary on the hypodermic injection of morphine. The pain is by no means constant, comes on a week or more at a time, is governing by cold winds and wet weather. This man is 47 years old and has been ataxic for 15 years, he is now in the last stage—severe complications have set in, attacks of dyspnea at intervals. Dysphagia—a rare symptom—is present in his case; his speech is ataxic, only soft food can be swallowed, his first symptoms were pains in his legs. He had been treated by the late Dr. Stephen of Shields for over 2 years as if hemiplegic.
Diagnosis. In the second stage, in the pulmonary stage or when disease extends beyond its usual limits difficult often in the cerebrum. In the early stage it is better not to trust to any one symptom as pathognomic, out of my 28 cases I have noted the same juxta test in all cases once. Lightning pains and juxta sensation are reliable symptoms. Loss of perception for pain kind, juxta of the cutaneous nerves. Nystagmus with the Kelly Robertan phenomena are also unmistakable anchors. The paroxysm sensations also guide our diagnosis. The tendency to oscillate when the eyes are shut. Some observers state that the lightning pains alone are sufficiently characteristic symptoms whereby to diagnose ataxia. I can only say that I have not a few cases where these were not sufficiently prominent to the conclusion and instead have seem them mistaken for pains of a phasic character from damage. It is best then to trust not to any one symptom but to groups of symptoms. This is the more important as it is the different character the symptoms assume of the irregularity with which they appear that in itself constitutes difficulty. A very careful study of the groups of symptoms consists of tissues of different segments of the cord in muscle and a central basis for diagnosis established is I think of extreme importance in this disease, as from all I can gather treatment in the pulmonary or early stage is the more likely to be followed by beneficial influence on the disease.
Promote of Potash is useful in easing the pain. It is what we always use at the Buphæm Home with good results. It is often combined with the chloride in treatment. Every Buphæm has lately been much advocated in the clinics, as also the Potassium. Lead-lime Oint is also recommended. This as my Cases show a useful adjunct. 6) Refrigerative treatment: consists in restricting the large nerve bundles. It is not attended with risk, when the pain for a few days but the results hitherto obtained are hardly such as to warrant recourse to this treatment. 7) Treatment by rest, is a very good remedy. Potassium played an unimportant part in Case #1. He was in fine oxygen air, lying on a sheet, brough from his troubled surroundings had no inconvenience to meet with much.

For individual symptoms, general principles must guide us. For pain, Promote of Potash or Morphine is effective. Some maintain that Pain is the result of joint dislocation of the spine with 4 hours till the Panmyren, Paraffin used as a paste, the first dose mitigates the severity of the pain considerably. Treatment with Chlore from the spine is of benefit in pain in the back. The compression is best done by encasing, or if too obstrusive, for such faradisation of the back may be resorted to.

The patients themselves must many times for the pains, e.g., Tepenten, putting with paraffin, cold-water clothes &c. Sea Temperature appears air best: careful dressing, planned underwear to avoid moisture changes of the foot. Paraffin should be recommended. In any old cases, relieve symptoms as they arise and try to make annoying pleasant.
Having thus given so far as I can an outline of all that is most important in relation to Dementia Paralytica, I now proceed to detail more particularly the four cases I have had occasion to allude to. I am induced to report them as Pidorián is not common in children. I find Friedreich calls attention to an affection of the spinal cord occurring very early in children which bears some a hereditary form of Ataxia. Hammar, from an experience of four cases of his own and details of two others, does not consider them to have been ataxia at all.

Incoordination was not a feature in the early development of the disease, but only muscular weakness. In Hammar's own cases, two pairs of brothers, they looked like old men, could walk as well with eyes shut as open. They could stand with eyes open without any unusual grazing of the body. His cases were all males. It will be seen from above symptoms that the special features of Ataxia are wanting altogether, as we have already seen out of 149 cases collected, I believe only 3 cases before the age of 20 years and only 1 a girl. Thus of the reported cases are members of the family and have considerable likeness to one another as by family drawing shows. The other of whom we will first treat, has an evident from the impairment under best treatment, and that too with a profuse and of symptoms usually considered to be impossible.
Marsili, Thos. A. H. 15 years of age, resided at Plymouth, brother-in-law of Mr. John A. H. Chadwick, died in the August of 1888. He was a tall, thin, anaemic boy, pale complexion, fair hair and light blue eyes, sensitive, irritable, constantly complained of feeling cold, even in bed - used to keep risa in it. His hair, was often thick in the mornings as if it had not slept, complained daily of headache after leaving school, said it was a dull, heavy, pain, became worse in the afternoon, lasting two to three days, appetite occasionally returned, a craving for building meals, stifled hunger, picking at the teeth, nothing else. It had a dull, listless look, if allowed to interest himself in anything which he fancied was worth while, their parents noticed him strangely forgetful of little acts, he had lost recently done, e.g. would find his reading times, or go again to the yard to tell the dog, his temper for from being exceptionally good, became extremely irritable, with some exceptions, all other systems, sense, circulatory, alimentary, were normal. He was by no means an advanced boy, seemed to feel this, took a turn for mechanical pursuits, particles to the left, recommended that he should be all once taken from school - a punishment where competition was thin - reading only what would interest without giving him that would interest without giving him that he should spend as much of his time as possible in the open air, taking exercise short of fatigue. As regards diet
drank 1/2 pint of milk to last a day, porridge either at breakfast or in the evening, two or three more bread (cold), tea to be made with plenty of milk, game also as a main cold-oil in teaspoonful doses after the three chief meals of the day.

Medicine—A teaspoonful of 'Camphorated Tolu' with half that quantity of the spirits. Sub-locul was prescribed in conjunction with the oil.

The cure, almost complete both with the treat more morning feeling while fasting after a month's trial of the treatment, despite a general improvement and cessation of headaches. I induced his eldest brother to sleep with him and as far as possible watch him, did not practice self-abuse advising steady continued with the building up treatment adopted. He had practiced about the dis- covered he slept I found fairly well grinding his teeth occasionally but not every night. The latter symptom together with a dryness of mouth and this experience, on the contrary, induced me to try the effect of a puromyce test without result. Things remained pretty much in the same condition till October 6th when on the morning of that day I got a hurried message to say that Mr. Salbut had taken a fainting fit in the Street. I drove rapidly to this house and found him recovered for the most part.
but nothing unusual. Now, with that peculiar delirium
best. I have frequently observed after an epileptic
person. On asking a few leading questions, it was evident
the patient had an epileptic attack. Patient was quiet,
rest in bed with a high head, and as headache was
complained of—a dull ache in back of head—pain
for it made down rafter of well by about 3 in. a
rectangular block, I gave internally gr. V of Calomel;
combined with gr. XX of Pilocarp. Comp: left and
called again in the evening, found patient had slept well
and had three relief of bowels, respiration tranquil.
Temperature taken regular, 97.5, beginning twice
same instructions gave to help way initiation in the knee.
I prescribed: Bromide of Potash: in the proportion
of gr. XV of the former to gr. V of the latter every 4 hours.
This treatment appeared nice the 17th, with the effect
of relieving the head pain on the one hand, improving
Bromide in the other, in consequence reduced the
Bromide by a half while continuing gr. V doses of the
Rectified the patient being able to get up in the
next. For the first time since the attack my
patient complained a desire to get into the dining
room. This was permitted for the morning—18th.
On visiting him that day found him sitting up, he
complained of shooting pains in his legs and orange.
in the Palmer's legs and a feeling as if a tight band
in the upper third of both thighs. He attributed the
symptoms to trying too long in bed, myself partly ac-
counting for them the same way. I inquired first of the
Bromide, or the Phenamin produced, ordered a hot foot
bath for about 10 minutes with a cold touch unapproached
soon began & discontinued the Bromide estimating
the drug: I then alone preparing the Cold oint which
had been discontinued. Three days after this I was
sitting. Suddenly I heard a faint treble sound of a
chair grasping the Palmer of his legs, tearing his
shirt up (he was wearing knickerbockers) in his attempts
to force his crying out. At first I thought he was
about to have a fit, but it was soon quelled
by the overpressed by it, possible or worse one. In about
3 or 4 minutes the pain entirely recurred & my
patient lauged for about he had now other had trauma
once his fit but never as severe as on this occasion.
I made him sit on the table with his legs dangling over the
edge having previously bandaged his eyes, although
he was close to the edge of the table, I saw from this
distance to have an ordinary power what taken by
gether with the lightning pains was sufficient
to convince me that there did with an ataxic patient.
With the end of my phthisoscope I stepped at first quietly, then firmly. He looked at the Laevicereus femoris getting to feel whether in the left knee than the slightest in the right. Adjusting him to the floor I asked him to place his hands there together, but that he might do this he had first to remove the bandage. On again and just as if I should not maintain his position--with eyes open only with difficulty. With full appeal: 'Yield at this time with open eyes was to no means such as to attract attention, progressive however with eyes shut in anything like a steady manner was impossible. There was no anaesthesia, nor indication of perceiving conduct, nor any classic eye symptoms that could be obtained or roughly tested, with impressions, finding flight. Increased the otien: 'Here: it 7r. 5 every seven times, at some time indicating that it would require to be taken for length of time to prevent this becoming more advanced also an increased dose of cod. oil to combat the emancipation. There was an appreciable change in the case nor its treatment till the 3rd of Feb. 1889, with the exception of a fortuitous cessation of the cut poten. Then its remission them combined with thomasth. all 7r. X. The lightening pains still came except irregularly, were confined to the legs. I placed only a few minutes, but nothing at night any troublesome. The hands too were becoming more definitely confined, half of
a similar patient was being introduced among other patients, and this time the opposite extremity used to obtain. On this, the patient had another epileptic fit much more severe than the first, (the attack may be characterized as one of convulsions with tonic clonic convulsions) was informed. It had lasted some two minutes, the tongue was bitten through, and the bladder had been evacuated. On my return, I found him on the floor, having refused to be put to bed. He seemed to be in pain, pupils contracted to a pin-point, complained of feeling as if he had been through a series of post-bell麻痹ias. I placed him on the edge of the bed and ordered a wine with equal parts of chloroform for the breast, Aperut (from XLI of Omar Bono). To be taken for a draught at bedtime. In the morning, has told my patient had passed a good night, having slept from 11 to 5 A.M. Ordered the g. he complained of much of the old head pain, but begged me to wait for another day before I applied the chloro, I consented and as the pain was much better and he felt as he himself expressed it, "lighter", it was not again acceded to. A tortuous careful observation showed that the chronic symptoms were becoming more marked - clouded, more absolutely lost in both legs, could not stand even
with open eyes if feels this together, characteristic first evident can be an inexperienced eye, lightening pains in legs worse, feeling of constriction was formed. ...and gave out. but constant constriction a little below umbilicus felt, pallid down had to be dressed, felt the former crop beneath his feet, pupils still contracted, reflex contraction to light interfered with. Conception of colours Red & Green last. (sensation found he had always been in great despair color-blind). Complaint of great pain difficulty in passing water, constipation only relieved by enemas of oil, swallows water.

I again presented to the combination of the Bromide with the Bismuth with intervals of a week at the end of every month went on till the end of May, by then I was satisfied that if my patient was not improving he was certainly no worse. About this time my patient's general health demanded attention, he was excessively thin costing, so decided to discontinue these remedies for a time. Trust to the Combination of Syrup of Senna, with Chemical Senna & Cod Oil, this lasted the next thirty days only, when an improvement again induced me to repeat the lotion: Senna: in four times a day ceasing for a week at the end of every four weeks, continuing as through the oil. The treatment went in the exactly a year had elapsed since the first fit and a already
movement had kept pace with its abominable state.
His friends, and to myself especially, the last two months.
His general appearance was made by improved; this
was quite alarming, though he could as yet neither stand
nor walk with eyes closed, the lightening pains occurred
at longer intervals. The duties were of short duration.
Though quite so painful, the compensation was not as
extreme; though still difficult to bear was accompanied by no pain. At this time he told a
violent fancy for a sea voyage with great delight to escape the cold in our East Coast. His father had
a desire with good cabin for a young accomodation
chartered to trade in the Mediterranean, for which
considerable reluctance concerned. This voyag
provided he was accompanied by his old comrade,
giving instructions that he was never to be allowed on the
bridge, nor even on deck unless some had held of his
arm, equipped them with a supply of the lard, which was flushed all through the voyage came
for the mouth rest, a quantity of cod oil, furnished
by the clergyman. The peace did not return till the
middle of January when I had again an opportunity
of examining my patient, the result surprised my
most optimistic expectations. He could dress himself,
pull up his trousers, face his trials stooping down.
away, too, with his eyes shut, could stand perfectly steady if the base of support was widened. His eyes often scattered at intervals to this fact. Irrespective of this, the extreme contraction of pupil gone, the white lumina shone as regards light, lightning pains had not appeared for some weeks, never an important one, so for the third day of his admission, the picture was normal, the pains for some much relieved altogether patient felt himself better both in his general health and special malady. He remained at home the remainder of January. From February clearly preceding the Dot. Patient in doses now of 8.00 three times a day, improved as before. I sought when in Shipton and the Cape, who was a great believer in glycerine had persuaded him to take some; as it was a mixture of belladonna made as adjectives, it is taken in conjunction with the cold-oil half an ounce of each. In the beginning of March another sea trip was approved of, in the same manner to blockade some ports on the Spanish Coast, they returned in June of '83, my patient remaining at home all the summer, when I again performed a voyage to Australia setting out in September, and not returning to this country till a couple of weeks ago, having taken a contract at Melbourne. Many messages received.
had been most reassuring and when he arrived home, he expressed his surprise, far more than the other medical men who saw him prior. This fact engaged with me. Naturally, with the early opportunity of applying the various tests, I found the patient as well up in them as myself. I can account for this belief, what I found to be the case. I am sure I have the tendency, which I found unpleasant, but present in both legs—(more imperfect in left knee when at first it was absolutely absent)—same the loss of perception of green and in colour (which had never been perfect), some slight bounding movement when attempting to sit, with bandaged eyes, my patient displayed his symptoms of paralysis post-zone stenosis. The best: often had been pushed all through this case from first to last, even when at rest, with the internai's stated, and was always fairly well home, (the patient was discontented in his own discretion, when he begins to feel as the expansio ... the lowering effect of the medicine).

The fact of the pain in the head and the epileptic surges, being the initial phenomena, induce me to give this case all considerable length, for though epileptic from commission rather recorded (and in one of my overseas Home Cases they were very severe) they came...
Come on after the symptoms of locomotor ataxia have been well made out. Again there is the somewhat vague interminative of the malady under a fluent instant exhibition of the Potter's bed: which I prevailed with in Learning the family history. Then there are the sea vagaries, where my patient had exercise without fatigue, change of scene. Palinate without anything likely to exhaust the functional activity of the nervous tissue.

Family History, belongs to the upper stratum of society.

Father, 57 years old, had syphilis when 25.

Mother, about 40 years old, had syphilis when she spoke.

Grandfather (maternal) died from paralysis.

Eumen (maternal) suffers from epilepsy, brought on the suppression of alcohol.

Uncle, paternal suffered from epilepsy, died suddenly. The foregoing is all I can certainly make out, while it is insufficient to indicate that my patient was not disappointed with a manic depressive position and syphilitic constitution. What nothing is more feasible than that one mental effort in a hot brow bright intellect would be a such friendly exciting cause for the development of delusions. Of course the history determined the treatment, by the foregoing premises an eight and, from justifiable in the fancy, that by removal of the exciting cause, the same for a time with the treatment fallation to the general health, the
will yet successfully combat the neuritic tendency.

The syphilitic determination of his system.

I should now call attention to three cases—members of one family who have been more or less under my care since August 1850, their present ages being 17, 11, and 7 respectively. Attention was called to the eldest case, the age of 7, when reached, in the next year. The age of 17 was attained, in the third member of the family, attention was attracted to the case after the first month of infancy, life.

The oldest boy, of these three cases, one boy.

The interesting case being that of a girl. The two boys are bright, and highly intellectual for their ages, the girl is emotional, and her father expresses it "by no means clever."

The peculiarity I have observed in many cases, especially in the cases about to be mentioned, as in the one already noticed, in the peculiarity, every hair, every hair, every appearance of the face. In the case observed in the cases of these three children, the color of the hairs is very frail, and the eyes white, light blue, all the features in the light, more than moving the head on it, more than moving the head on the axis, I have frequently heard the children of both children direct them to turn their head from left to right of the sides of their eyes when they wanted to look around with this slight stretch of the face, I have frequently heard with the
Family History: The patients whose cases have been sketched are descended on both sides from old County families, with a pronounced, malignant, genial and nervous history. It is always difficult, with a certain class of patients, to get a good family history, and it is not to one, but to various members of the family that blame rectified for the following particulars: without doubt I would never have obtained them, had they thought any one would have been made of them, as each member of the family seems to keep back something from the other. All these things however may be regarded as well authenticated. To begin with the parents—

Father, died from Carcinoma of the liver at the age of 57, he suffered many much more from God.

Mother, eldest of eight girls (her brother older) is about 48 years of age, genial and highly nervous, for an irritable disposition, has lately suffered from cerebral hemorrhage, followed by congestion of the lung, delirium tremens, excited by anxiety about her children and worry about her estate, from predispasion of genial disposition and time of life.

Grandfather (paternal) died at 72 and was paralyzed some ten years before he died.
Grandfather (maternal) has been three married, having had 10 children by his first wife and 3 by his second, is 72 years of age and is just recovering from Hemiplegia.

Grandmother (maternal) lived to an old age, died from paralysis.

Grandmother (maternal) died from enteric fever (Mania?) after the 10th confinement.

Uncles (maternal) two, both healthy, alive.

Uncles (maternal) one at age of 17 had an epileptic seizure, the others followed soon, no history of another attack. Like 18 months after, when he was drowned while canoing, having overbalanced himself in a fit.

Aunts, (maternal) one stammers slightly (jolt; deafness).

Step-aunts (maternal) two stutter badly.

Cousin (maternal) stammers very badly.

Grand-uncle (maternal) has been in a private asylum for about 50 years, was quite right till he contracted paresis in Greece when travelling with his tutor when quite a youth - he is perfectly harmless.

Great-grandfather (maternal) died from gout.

Great-grandmother (maternal) died from cancer of brain.

NB. I am credibly informed that there is a blood relation on the maternal side at present suffering from cancer, and that other relatives died from it.

The children have two older sisters, one born in June '66 who suffers from gouty eczema, the other born in August '69 who is very shortsighted.
Another sister, died aged 10 months from, as far as I can
make out, teething — after 15 hours illness when
was born in the September of '67. (Convulsion).
Such is the history, so far as I have been able to gather it
of this singular family. From observing it, together
with a cancerous history in 4 other cases, I think
we may safely assume that the offspring of parents
whose ancestors suffered from malignant, neural, or
serous affection are particularly prone disposed to the
Disease. That a very slight exciting cause is sufficient
to determine some nervous mischief is frequently seen,
E.g., meningitis, from the irritation of dentition, or intestinal
wounds, or again the eccentric irritation from dentition,
indigestion, depending on, may be an exciting cause of epilepsy,
of course the pre-disposition must be behind all this.
I think hereditary influence in the family cannot easily
be made out as the within recent years, the disease was
classed in common with many other maladies, as — paralyzing
all the history except of the great father on the paternal
cide is that he was paralysed for 10 years the length of
state. Further circumstances though but all made out declare
the to the opinion that the paralysis may have been Bismarck.
On at least four occasions, my assistant at the Prince of
Hesse have been struck with such a remark as the following from
an atomic patient. "My grandfather and his relation, just like the same way,"
"
We will first take the Case of the eldest Boy, beginning with the History obtained from his Mother.

Martin Bryan B. was born in Sept. 1870, as a child was considered very strong, had no trouble with his limbs, but is described as having always been what is called a nervous boy. Nothing called for attention till 77 when it was noticed that in walking his right foot had a tendency to turn inward, of that he often went one on that ankle. In November of the same year Dr. Robertson of Chatechel ordered him a supporter from Leeds (I cannot describe its mechanism as it had been given away before the Case came into my hands). He got no better, in fact worse, and in the early of '78 was seen by Dr. M. Hewitt who at once asked for Mr. W. Sommer in consultation, the opinion they expressed was that it was paralysis of a slight nature on one side, giving his friends the impression that it was a thing he was to be expected to outgrow. They changed the kind of support supplying patient with two as both ankles were then involved. At this time acted by Sommer's advice, shifting of the support was resolved to, in the hope of curing the extreme invariance from which patient suffered, but with no beneficial result. About this time he began to have little or no control over his bowels.

No special treatment was adopted, general tonic remedies with attention to general health. On again being seen by
Preceded Haritt in the end of July same year, the only change recommended was that the patient should stop in
Scotia's Palace. They were continued for ten months but by the end of that time little relief, as they seemed to increase
plaguing pains and Cramps from which Bryan was suffered.
These pains were always Complaints of in the legs of Canon
improperly. In May 79 she was sent to a Boarding School
at Moffat, where, while getting the Character of being an
-(clean boy, obtained) credit for remarkable ability; that
11 years old, he was kept at School of 48 boys none of
whom were 14 to 15 years of age. His handwriting was
a great Cause for Complaint as the way he jested this Arm.
In the spring of 1880, Spirit saw this patient. He was well
developed for an age tonight, put his head a
little when speaking, had a placid expression and in-
clined look, remarkably lean him and not he somewhat
head, twenty-six inch middle frame. A striking man
with the supporting frame in the habit of keeping his
joints apart. He had hardly any control over his bladder or
bowels, frequently Committed himself. The vena cava
was normal as were the respiratorv with the important exception
that every now and again he used to clasp the ground by much
lysoing his breath when crying or laughing, turning guilt-
less in the face. Only keeping his feet with difficulty,
all power apparently leaving his legs. He complained
that every now and then quick, darting pains in his legs and arms, and a feeling of pins and needles in his legs with a cramped feeling of his toes. Lactate production normal.

The difference between the two weights is evident. With the eyes closed, he felt the difference between a 100 lb. weight and a 160 lb. weight suspended in each hand. Both pupils were contracted of the perfect reflex flight test. He reflexes were very jerky, with a jerky, twitching motion, in which the eye was imprinted in both eyes of just elasticity of the ground and under tension, could not keep absolutely straight.

Want of co-ordination from the upper extremities, trying to write, just to hold the pen, great difficulty with a tendency to fall off at the end of a word unless they tied. On taking off both slippers (the ones from 180 lb. and the other with an immovable finger, had one orange metal plate with divisions all marked for division of foot), I found he could not stand under any weight or a large weight, his legs were apart (opening the back of the foot) unless the eyes were touched to this fact, with bandaged eyes he could not stand a second without fall-back shock together with still eyes come when trying to lift his foot. I asked to place his foot on a line of some height, over the index finger, he could thrust out his leg just the foot moved. When he near a dishclout down his feet with a flap, beaks in a straight line but also partial wash of harmonious control over his muscles, the leg is thrown out forward and the feet assume an (illegible)
In the face of the ground, the pole follows with a schl. This examination, showing much want of co-ordinating power, led to tendon reflexes together with the other characteristic symp.

... e.g., anterior spine, left the doctor but that the case was a well marked example of locomotor ataxia. Ex.

plained to the mother that the Lesser Thalamus which is 7 in had quite stopped the case in fact, but that as the min.

... the spinal cord was progressive she must not expect her boy improved soon, as the very nature of the disease was slow progression either recovery or the

uncure. Examinations him to be helped at home from school as that he might have an vacation - this she would not allow saying that would mean a tutor in the house which would not be agreeable, prescribed the child's

... Observer in X brain doses four times a day be.

... continued for four weeks then a multi intermittent

... for again repeated. The Doctor atHeaderText

... order when change he was placed in retiring to School which he did come after a year time wrote suggesting a consultation with Dr. King's Scottam who in consequence came saw him in October. He informed

... Williams Alagia to give a most

... unfavourable prognosis, at came time advising that if he was happy at school that he should be

... allowed to remain. He approved of a certain pron
with Mr. Potter: lord: I did not see the patient again till
the spring of '87. there was no improvement in the symptoms
just as atrophic, writing as bad as difficult, no more
control over bladder or bowels. at this time i visited his
condition; he said in extremity i found it lost. the
general way he did not seem quiet; he was much as when
some time before he consulted Phyships Lockley
in october, but bright to some extent. i suspected, then
during his easter holidays he should give up his land very
little a day after meals, this was done & a general in-
provement resulted. on returning to reclaim the old man
was reassured: all one with with the circumstances except
for some pain at midsummer. there was a very
change in the symptoms, neither better nor worse, at this time
i got a pen with a thick end handle for him, but
though he greatly preferred to use it his writing was
not improved. ensued to take him out driving with
me when going a long journey - his manner of getting
into the carriage was most characteristic: he would
catch hold of the door & edge of carriage with both hands
Helping his eyes fixed on his foot, trying to step off
me feet and if not succeeding them from off the other
with a round about stamp, a jolt of then a sudden
rush & stamp on the steps, if the horses retired.
widely greatly increased this difficulty. I found he could walk best with least fatigue (his latter always increasing the inconveniences in his gait) on the level without a gentle slope, without exerting much to-morrow. Shott from the light house at North Shields on one occasion, with much difficulty, he got half way up, when the head was on, remaining more difficulty; insomnious motion he finally with another rest he reached the top, when walking along the steps outside within the shade his faint-dullness from fatigue was more than I had ever seen it before, an observable was it, even in that tepid space. Mr. Colbourn, the light house keeper, remarked then "why but your vousnent got your memorandum?" On returning to school in addition. The memorandum instruction recommended the constant galvanic current and applied for about 15 minutes every other night along the muscular column. I was to believe faithfully carried out. I did not again have an opportunity of examining my patient the. The latter of '87. The only difference of the constant duty of his case. That was of course, was a great contraction of subjects, over the home. The members informed me that he fell down more frequently, he had however more control over his bowels, and the inconveniences of micturition had caused trouble only at night only through the day.
In April '52. Had him again under observation. The salvarsan treatment had been continued for well nigh 8 months, with a single exception when it had to be discontinued owing to a complaint against the nephritic, no improvement, still the same, walking still as bad, and what is very important the lightning pains had never been influenced, still came on irregularly, now tips, now abdomen, now arms, sometimes radiating to the fingers when they were of short duration. At other times lasting up and down the legs for hours, accompanying the electric shocks. In the most bearable, patient had no warning of their onset, they came suddenly, went suddenly. Use of hands, sensibility, greater, buttoning his clothes with the most perfect difficulty; if attempting to lace his boots must get down on the floor. Other constant with the more ordinary movements of the arms, greater retardation of reflex movements in respect of temperature of pain, quite ten seconds, the latter more delayed than the former. For the first time he complained of feeling the electric prickle sometimes at the level of the pubic region, at other times at the level of the umbilicus. Other times round the chest. When sitting on the table the patient, all occasion, my attention was directed to the way he took his food, his face was held near to the plate. The hand holding the spoon presented the same series of jerks, infallible mark that the bug did his mentioning.
The change in the condition of the patient could not be observed, although the treatment was already continued for four months longer. Hopkins, Jackson was again consulted in the autumn of 1882, he confirmed his unfavorable prognosis, and as he feared the patient palid and anemic recommended a discontinuance of the Peter's led and a cessation of the galenonic treatment, substituting the hypogly of the chloride of lime, during the winter he saw him twice again, and on seeing him in the last time in June '83, said there was nothing more he could do, that the disease could not be arrested in any case, that there was no use continuing longer this time. What he considered his case quite hopeless, and felt sure he would never reach manhood. Having two other children suffering from the same malady, the mother was greatly distressed. I could only tell her about my other case, where I was expecting good results from similar treatment to what her boy had been receiving, that a cure of the malady though not common was by no means unknown, that a spontaneous remission of symptoms and arrest of its progress had from time to time been reported. Not feeling justified in committing myself to any definite statement, was the reason Hopkins, Jackson's hopeless perswention confirmed in all respects. She determined to place her boy under the care of a Dr. Kelman, a surgeon, who
who at 29 Eaton Terrace, London, practised the manual treatment. In 1862, one of her relatives, Dr. E. G. D. Partheniapoy, had personally known, and other corroborative evidence having been forthcoming from others who in the October of 1863 hearded her son, in a private family he was this Swedish manipulator from the time of first seeing Mr. Hughes Eastham up to the time of placing him under this treatment, Dr. Partheniapoy had been having no specific medicine for the melody. Attention to diet, regimen with passive exercises having only been enjoined. I append the end of this paper on column 94, half written by the editor of "Vanity Fair," which appeared in 1863 paper of date May 5 without comment, and that the editor was a former patient of Dr. Kellogg's. After about a month of this manual treatment, certain central phenomena (of which I had no personal account) developed, and although it was the custom at this time for patients himself that all his attacks came on at school, after nearing all the headmast. I am informed that if they died they could not have been anything like as severe or prolonged. Much though the other boys had complained of him talking in the business were taken to special notice was taken. If the same treatment Dr. Kellogg's. I am afraid such manifestations would be too common to notice.
As I have been unable to get any account of these attacks or similar ones (which I may call central crises), it would be better to understand them. It will be well to give extracts with the dates when the paroxysmal excitement began. The duration of the separate attacks, for information of these attacks, I am indebted to the widow of a medical man with whom the patient boarded in Chetna Zephyr, the man Dr. Kettlemun. It will be understood these extracts though lengthy are greatly condensed.


"Bryan, to all appearance as well as usual, only this terror excitement on going to bed for a short hour. Again this morning from 6:30 to 7:30 he was as sane as any man had to watch him, but could not help him in bed. He seems to be in all the school life over again, string tunes, reciting prayers, telling in French, fighting other boys with hands and fists, so excited he that it cannot help feeling that it must come out his brain, but he comes down to breakfast quite as usual, says he did the same all School."

Dec. 15, '83.

"To stay excited, went to Dr. Kettlemun, who ordered him apples to eat, looks the talking is stopped by paper, and the depressing medicine that has been given him, he says he is not to be watched, only watched and helped in the room."

Dr. Kettlemun and one of his assistants came last night while Bryan was in his commandant report.

*He latter pronounced the physician on Dr. Kettlemun in excellent order, not better, not worse.
after watching him for a little while Mr. Kellogg began some rubbing over the chest. After a time Bryan started up, on continuing the rubbing over different parts of chest & abdomen, Bryan again went to sleep & slept till 9 a.m. During the time Mr. Kellogg watched Bryan, he was much excited, struggling hard to cause a strip wound over chest. He took in the 8th minute as part of the treatment. Two of the assistants gave him the usual rubbing last night before he fell asleep.

Dec. 19: '83. Two of the assistants came to & Bryan every evening, he goes to bed early and wakes all night. At 6:30 this morning, he got up, walked about the room, and was cooler than the morning before. He was more manageable, and we hope the attack is passing off.

Dec. 20: '83. Bryan woke up this morning at 7:30 after a long sound sleep. He was much as usual the night previous.

"This is the end of quiet attack. One quiet attack went to London, it began in the 13th and lasted like the 21st Dec. The next history of attack is 18th Dec. Sammy 15: '84. Bryan excited next morning, a Monday exactly a month since last attack, he had talked and walked away night before, just for a little more. He is one of the assistants had been here away evening twice to give him some treatment. He became quiet about 11 o'clock and slept the morning when he begins to wake at 9 a.m. from about 6 a.m. the 8th, when he gets into bed, remains a few minutes, opens his eyes, becomes wide awake, then he comes down to breakfast, looking as usual. With no recollection what has been passing, and no tired feeling. He generally imagines himself to be outside.
chats this school fellow, frights, laughs, & often says most witty and clever things.

Damy 16 74, "As usual, our morning attack lasted 4½ hours."

Damy 17 74, "Our attack last night was this morning, and it has been of short duration. No since this month. Do not think there is any danger of his lasting him self as we watch him well and he himself moves with the greatest caution."

This is the end of the attack. I may here mention that Dr. Ware learned that if any one replies to questions during the attack, he gives quite a connected history of all he is doing. E.g. If he imagine himself to be a king, that his crown is lost, offers a reward, if a cap be now given him, he will order proclamation to be made, order the minister to pay the reward and place the cap on his head.

July 13 74. Attack came on quite a week before full moon there are the day before it was full moon. The attack was all in the morning this month, the worst he had had was yesterday and when he remained in me from 8 am. till 3.20 pm. Dr. W. Ware found him 3 hours till nothing the idiot had the effect of causing all his brain, he even had his breakfast in that condition. He only came first to this one morning as he found he was warmer in waiting - not very hungry, next day he wrote at 12 noon of the three following mornings at 10.30 am."

Thus while in point of duration of whole time it is not increased, we find this month that the individual attacks were longer and more severe.
March 18th. "He began to sleep very heavily and continued not to move as it was the 14th day of full moon."

I would have noted that the patient's mother went up to town on that date, so it would seem probable that her presence, combined with the change, during about, visiting friends, etc., had been sufficient to break the patient, and ward off an attack.

April 3rd. "Attack began an hour, 3 for 10; Kellogg as he was more excited than usual, he gave him the usual manipulatory treatment. I thought I told you his eyes are always firmly shut during these attacks. He was very amusing, thought he had a bullet in his thigh, ordered the nurse to bring for the surgeon to extract it, he thought Kellogg. The assistant was gone for the operation. He told him the after where it was, in the way taking in notice, thought rubbing his neck and chest, made all kinds of remarks about them expecting to extract a bullet from the neck that had entered the thigh, but the time passing he was a general, at least he fell asleep in one of the assistant arms while the other was gently rubbing his stomach."

April 12th. "Moments after night, ride to horseback which is in the middle of the bed, tied to the horse, and the enemy, open his eye, cuts them down with his sword, gets wounded, etc., etc., no attack this month in the morning."

Last winter it will be known that all these attacks come in the morning, if not once in the morning, which hardly can be called an attack, this being of March, the attack to only come on at night.
April 18th. "Head race both to the place of the war excitement."
April 19th. "Last attack night of 14th."

Had helped to have been able to have been in London in April, as myself to have seen one of these attacks, unfortunately. Could not have any practice, but from these extracts, or any fair idea of what they are. Let it be obtained. I hope in a few months after the specified time for I shall see at some time. I have seen one more. I am sorry for my own case, again, when I, perhaps, be able to determine whether these regular phenomena and forms of periods of excitement depend on changes of the protein elements of the cord or central mischief.

In reasoning this case, the first thing should notice is the treatment and diagnosis of Leman Trench. Here is no result to any material treatment, both were applied as both and then had become invincible, they gave their opinion that it was a slight case of paralyses, and for the intimation of物 in the presence. It is highly probable that this case then was by the term of Bacthass and nearly permanent, as some of the joint leading to deformity he put on the supports mentioned. Leman Trench recognized a paralyses condition. If then we can suppose this at first it have been a case of monoplastic paralyses, of which our patients, this at first should have been a case of monoplastic paralyses, of which the supports would be recommended to prevent the affected joints to becoming joints in a bad position. Many things in itself to the opinion that this is what their diagnosis was.
The problem most of the affection (often in this disease no symptom: symptoms absent) (1) the distribution of the paralysis to functional groups of muscles. (2) Painfulness of the nervous system (3) The only treatment adopted being mechanical to prevent contraction. The affection of bladder showed no change in this disease might be explained by medullary lesion in the lower segments of the multifactor nerve cells, through which these reflexes pass.

In the beginning of November 1878, the first symptom characteristic of Babinski showed itself - lightning pain in the arms occurred irregularly. He himself noticed that a jutting of the arm had been noticed. What he found and this was complained of. As attention to the lower extremities above that caused by the pain, and it is then that the lightning pain, though very characteristic of Babinski are not always present, and are may have arisen on the arm, but they do not limit what we see in this case is, atrumatic symptoms - want of co-ordination of upper extremities - were observed by the patient's friends pertaining to Darwin's normal region of arm, while, though wonderful the pain was progressing, the symptoms of Babinski - walking pain limited to lesions in the dorsal columnar region without the atrumatic said phenomena. When Babinski is in the Darwin, say it was stated there was want of co-ordination in both extremities may attention first being from symptoms, this done to the lower. I could, then we felt the lesion in the two regions of the arm must have begun about one at the same time, or if a difference as forward in the cranio-cervical region first, we have in-coordination as a whole matter.
symptom for months before any pains in upper extremities, or before any want of co-ordination in the lower ones was observed. That this was worthy of notice as many writers would have the lesion of the cranio-cervical region of the cord and its relations to the secondary degenerative degeneration, this case, with others, proves that it may arise independently, separably from the more delicate movements demanded of the upper extremities, even when the lower extremities region is involved, be the first to show the characteristic want of co-ordination. The term of Paralysis (Central Paralyzing Effect) employed by Lessner B. Blum has its meaning limited to the anterior horn and the lesion must have been followed short of actual destruction of the nerve cells. It is just possible, however, that a more extended motor anathy may yet show that such a lesion may be the exciting cause of others.

*1st part* Call attention to the way that some lesions, even the little co-ordinating from left, were illustrated in the body of the patient up the lighthouse from the tip which I had to carry from the head accident. I cannot but regret that Agnew's Redman did not permit a persistent exhibition of this part. Potin: Treatment - it was well done - indeed he gastritis symptoms of the disease have so far appeared. I cannot but regret the loss of time in the treatment of the disease during the course of treatment he is now under, and who is under name, I have noticed under name. I have noticed at all such quick, allied to this - combining at least daily salt water affusions, down anise with the constant galvanic current.
Before finally disposing of this case, I should notice that St. Hilary notices a peculiarly of the lower extremities amounting to a decided paralysis which may be due to the early stage of ataxia, but is very

3

malignant from this paralysis, that characteristic

paralysis of the limbs itself. So gives it as his idea

that in these cases the illness had extended downwards
do so I have affected the cerebral column, and has

become limited again to the lower columns. It is quite

possible, that the case when seen by Prickett, him, was of the nature

of a passing paralysis of certain muscles, perhaps

just as we have of a crank termed symptom, in passing

process of the cerebral musculature. I regard the impossibility of

attaining information about the time, just or about

the state of the muscles, whether down the spinal cord, or any notice of

twitching or tremor. If the latter view of the case be adopted, the

simultaneous developed part of the disease

in the cranial, dorsal and lower spinal regions would be the

questionable at the most we can say is that the

ataxic phenomena just shown to unrestricted

limbs in the inco-ordination of the muscles of the

upper extremities. This is only another example of the extreme difficulty of determining in individual cases the paralyzing symptoms to differentiate the stages.
Case III.

Mrs. Aristeda B., another member of the same family, was born in June 1873, is described as having been a very strong healthy child, and neverailing anything till the winter of '99 when the family went to Eastbourne for the winter. Then she had constant diarrhoea which was attributed to the milk. At this time she also complained every new of severe, lasting pains all over the abdomen, now at one place then at another, and was constantly tumbling down when walking out of doors. She has never been strong since every month having flaming pains in the head, legs or abdomen with cramps at night. Until this last winter she never passed water more than once a day and then only to the difficulty having had the greatest objection to be made do so. Her bowels did not trouble her after leaving Eastbourne in March. I first saw this patient in July '00, along with the third member of the family about whom I will subsequently speak. On examination she appeared a sound well nourished child with fair hair and complexion, the former hand today with a tenderness to the emphysema in the head and out spreading, of a very vacillating nervous temperament extremely sensitive. On observing her position I saw that she stood with her foot well forward for aiding her to walk to the door the characteristic ataxic gait was plainly seen.
lightning pains of great severity, recurring with considerable regularity every month, less severe terminating pains however in the intervals coming on irregularly - woman complain
of pain in legs, pain in abdomen known in chest or head.
Remission of coughing and one of lower limbs will occur from frequent expectorated of mucus. Attacks of
sibilism without actual vomiting, often preceded an
attack of lightning pain if the trunk was for the time
the site of attack; again if the chest wall, a cough of hoarseness
usually accompanied the paroxysm. Bladder only em-
purized once in twenty-four hours (a probable result of an-
esthesia of the mucous membrane) attacks occur regularly.
Considerable palpation increased tenderness, hyperesthetic palpation
in vicinity of legs can scarcely bear the nurse to stay them after
a bath, with this exception tactile sensibility unimpaired.
Removal of genitae impalpable. Pelvis on ex-
amination were found to be dilated, but with no object of
accompilation accompanying the genitae. The lungs
reflexes were absolutely lost. The growing of these sympotms
satisfied me of the nature of the case. Woman treated
sparingly, special treatment, the child was so anemic,
with a hemiaui bilateral mammae - the only complication
of the normal. He was born after the area of the cord of the child.
Thinking after a consideration of the general state of the
system that it would fruit the latter to the tonic treatment.
I prescribed half quantity of the Syrup: Tonic: in conjunction with a little quantity of lanolin: Chemical Food. Three times daily in half a wineglassful of water after the three chief meals. Advised that her policeman be requested only to give her light lessons, that she be encouraged to sit with her legs up on one of the garden seats in the fine weather limited the extent of her walks, stopped her drinking—this had been suggested by another practitioner as likely to be beneficial—and recommended milk to drink in with some egg twice daily, advised exercise again to her walker’s channels as she was to have mostly passive exercises. The hotel is only a few hundred yards from theGerman Ocean. The treatment proceeded vigorously for six months only ceasing when the attacks of cramps & severe pain came on then ceased. For this length of time also keep salt water was applied down the spine every night for not less than five minutes combined with gentle stimulation by means of friction with a bath glove. My patient having undergone any treatment in her general appearance. Physical condition, evidenced by the disappearance of the natural garments. It consisted by treatment more especially to the Atlantia, pursuing 35 fathoms deep of the sea. Nikon. The swims every eight hours, rubbed up with glycerine in water, after a few days trial I found it could by his means he borne all load in con-


of sickness & pain then came on I cease). The medicine for
a while either produced a lessened state of one half in
conjunction with bromide elachi & tartar, formed the sense
of epigastric pain turning with actual vomiting & fever
that in a week I discontinued this also, particular injections
had been given as to the stated fixed times for administering
the drug. It was given every 8 hours regularly day & night,
after another attack of pain had pleased accompanied
this time with a tempestic emption on either side
following course of some intestinal move. Again prescribed
the gem: Phen: in xii grain doses every 8 hours thinking
from the largeness of the dose to commence off these im-
mediate effects of the drug in his case, but after four
doses with corrections as before officially abandoned it
altogether, having the feeling that Phen had only last found
in a general way conforming of a re-appearance of the
hemorrhagic symptom preceded attacks of pellagration
with feeling of fatigue from even gentle exercise.
Again fell back on the Serp: Feni Iod: with the chemical
food as before adopted & after a permanence with it
over the new year had the exact action of raising the patients
general health improved the hemorrhagic moves in larger
strokes. During all this time the ataxia was progressing
patient fell down more frequently, was more distrustful of
her own powers, was inclined when not well taking to lying to the
common now. The lightning pains were recurved from week
longer, lasting to more troublesome. Plantar anesthesia was no
more marked, nor dilatation of pupils contracting any
sharply by light, perfectly, the parasympathetic of pain
present the immediate action. Perception of colors
became quite good. This condition persisted even now.
In addition to Concomitancy pains of lightning, the purple
toonation is constant in a land with purple torn & on
turning pain in the toes is also nearly always present, but
resolved somewhere of the salt draining operation. At this
time I became a peculiar form of preganglionic though self
in a slight degree - if patient asked to fix the eyes on some
object at a little distance, if not herein, then at once
abducted the eyes to it, but if herein, Retaining movements to a quick
effect of willed being made is seen, the same also continues
for it is required to hold steadily at the object for a length of
time. May here mention that I trusted to the virtue of
potassium for relief of pain in the case when combined the
internal administration with external application of the constant
sodium bicarbonate when the parasympathetics came on, until
being fixed the other movements was down along the whole course
of the spinal cord, parasympathetics spread throughout
the feeling of this intense considerable tolerant, contractile plexus
throughout being administered internally. Some
wrote the cause of this which had heard much cardinal
in the nausea, it was well borne in four or five doses night
and morning for over three months, when after every dose my
patient complained that her head was so heavy she could
not sit up, and felt as if it was going to burst open.
In May '82 I discontinued this treatment and pursued
the course of the diet of from this time onwards with the drink
of malt (beer and ale could not be borne). The little patient
had fallen off every day since leaving off the iron com-
trastion, was very listless when kept to herself and slept
even thirty to forty-then quietly (no violent restless). The
ears, however, were again pretty constant, especially
all night, palpitation on the slightest exertion. For the
first time she complained of a fixed pain on the region of
the heart which was increased by the palpitation so that she
could hardly draw her breath. About the middle of May
Sphenel externally a belladonna plaster on the lower can-
dine area stopped the pain; Embolismum min. XXX
Chim. of the Linke: Tenia Belcheri: in teaspoon with a benedictful
of water every 10 hours. This I commenced with the only
intention being when the feeling of sickness increased, for two
months; at the end of that time the palpitation was much
better, the pain as much complained of was greatly
relieved. The haemie murmurs however was sometimes on
my visits quite audible at that period it was not at the
same. During this time the appearance of the skin was very
persuaded with the constant current being employed to assuage the relief of the pain. The disease symptoms were more pronounced and so my patient seemed to have gained by the treatment. But for the next four months I continued the treatment very short periods of time immediately before meals three times a day. At the beginning of November feeling that the Practically doing nothing for the disease was only in the beginning to relieve the symptoms as they occurred, I requested that Professor Stewart should see this patient along with the other cases I had mentioned. Accordingly, the patient was brought to Edinburgh as that an opportunity might be afforded of frequently seeing the cases. Owing to a fatal accident to my father, I was unable for some days to meet Prof. Stewart and had arranged, but on explanation the patient in order to some time save the cases and pronounced them to be cases of locomotor ataxia. I arrived to Edinburgh met Prof. Stewart with the patient and gave him the history of the case, as far as I knew, supplementing generally the history. The mother of the patient had been affected. Prof. Stewart while by no means helpful recommended me to keep trying until he should see the cases. Arrived in this manner the sufferer of a patient of a relative of Charles Stewart with for three weeks then...
the continuation for 10 days. Watching it carefully the whole
then beginning again for another three weeks. And so on.
The men and men and men in this as in fat two days a day
afterwards three times in the twenty four hour. This
recovery was further done for the intermediate for
more eight months, when signs of morbid condition
appearing I immediately ceased. It seems to report
that no good result was derived from this treatment.
Many have not the fact that Prof. Taylor had the
mental mess to two or three different times and again
had it. He drew attention to it particularly when I
some time my experience of it felt one ability to treat
men with fungous tonics, accordingly he recommended
in the intervals of cessation from the Silver to punish the
men of the Martian which was done. He also observed
the peculiar ill-conditioned state of the brain in this case.
In the summer of '83, possibly because the fine weather
imposed my patient to take more exercise, especially climbing
to the mountains of the disease, I could not turn one that
she was becoming more agitated, with more frequent
occurrence of falls. Complete anæsthesia of the plantar surface
as also of former hyperæsthetic patches, still more atonic
peculiar form of myalgia more easily excited, lasting
pain persistent instead all the pain-shock suppositions
intensified. Since the continuing the alcohol, hitrate the
Malattia von have been previously given, but now one of the peculiarities of the case presented itself. The miscarriage referred to from being functional, only appearing when pain not reduced, became persistent and has been always under our care. The difference in the present case is the other symptoms appeared the end of April, when the joints of the foot were become very painful; after a few days they diminished very much, but only with slight redness or pain, simultaneous with the joint pain which she described as a jumping pain, another which she compared to a male curling round her leg below the knee appeared. In about a month the patient has been taking opium combined with bromide of iodide with physicine but I cannot as far aspects of any result. This is as well of Co-ordination in the upper extremities and ankle instead of being passed on a day has during the latter stenognism been éviscerated regularly. There are fewer attacks of pain - it does not seem with the former monthly periods, but more irregularly. Though it does not last long. The feeling of itching shows also amelioration, but in the other hand, the pain is worse, she is constantly shrinking down, cannot stand in any position with the eyes shut, and slightest turning of the head is perceptible. The pain is complained of room the feet, are pointing that the little patient has passed into the fully developed chonic stage.
Before dismissing this case there is one important element which we have not mentioned. The patient of 79 was unusually cold & I have been told by their relatives that their legs were cold to the bone & that damp was very frequent. In reviewing the history, we see that the initial symptoms were the light-headedness, constant trembling down till appearing at the same time the patient of 79. The tremor was present but I have been well marked but the summer of 50, the feeling being mostly when turning changes were made on the patient. The frequency of the attacks of pain is rather uncommon. It will be remembered the attacks of tremor were often accompanied with considerable pain. The heart sound is also worthy of notice. It is consistently heard at the angle of Scapula posteriorly. There is also a palpable pulsation. The location of the heart's position seems to have been most favorably influenced by position. The patient's eye movements are not frequent, slight increases then – once before extracting teeth. They were painlessly inhaled. Sinuets exhibiting the effect for a time. Combined with the patient of 50, careful watching its effect if a good result. I propose trying again the patient has been giving every two weeks. The patient is fatigued by anything major, from family history, it would seem to be the moist likely treatment in the case. The typical or rather sudden consciousness along the whole course of the patient’s illness will be continued. And when the frequency of pain came on, the patient's energy...
Case IV

Made, April 18. The youngest member of the family was born in March 1877. He was always small and delicate looking, he had a wet nurse till he was 14 months old. He cried as babies usually do during the first month of his life, but from that time till he was 7 months old he never made the slightest noise, not even a cry or scream. He was always subject to attacks of diarrhoea for 3 or 4 weeks at a time. During the family's stay at Melbourne, he ate his food in a peculiar way, seemed to have a desire that he could not overcome it—particularly broccoli and, which he shewed still more in his mouth. Great insistence when 3 or 4 years old patient was never dry.

In July 60 [illegible] saw this patient, he looked small, tawdry, very anemic. Circulation, respirations, appetite, were normal, appetite had, but little control over the bladder either day or night, had control over the bowels. He complained of pains coming on irregularly which made him cry out, on being asked whether he put his hand in the painful part, he could at one frequency place it in one part & again on some other, usually the back, sides, or abdomen. On examining the true motor reflexes I found it unimpaired in both legs. There was a considerable degree of plantar anesthesia, but no other deficiency of sensibility—no any retardation of it. Perception
for temperature normal, abolition of pupil reflex with dilatation as in his previous case. I recommended warm
water undress, rest, passive exercise, nutritious
food, milk, e.g., bushes to avoidance of cold and damp.
For medicinal treatment, I gave the 2d. Potas, as in his
previous case rubbed up with glycerine in gr. 111. Dissolving
8 hours, giving for a month then ceasing for a fortnight
then resuming - in the interval giving Chemical food
in min. 33 in water 3 times a day. I found this week
some of the patient's general health improved. The
treatment was continued for four months. The
leptoid affection to the spine being at the same time
easily carried out for 3 minutes as bedtime with sea water.
When the painful protygones came on I gave 48 grs.
of Potas. Promote in conjunction with the Potas. God: there
was never any trouble from sick feeling or sickness in
this case. At the end of this time I could find no
appreciable change, if anything the knee joint was
becoming less responsive, and the pains were deter-
miming more frequently to the legs with cramps at night
causing him to cry out. Then tried the constant
constant acetone all along with the affusion to the spine
5 minutes as a time every other night. On examining
my little patient from time to time seemed to no change
as recorded, things went on pretty much the same, pains
Pains - in continuance of mine - requiring 4 or 5 hours within half an hour after his meals - dilatation of pupil - loss of pupillary reflex to light, almost total extinction of the pupils. The medicinal treatment was still being pursued with, was continued for quite a year, came for a few weeks in February when he had evident of intractable diarrhea with an increase of leg pains. In the summer of '87 the fever indicated the gland to pain around the umbilicus for lasting the latter of weeks although 25th of August. Up till Oct. '87 no other change could be detected, about this time the complained of pain in his head with no inclination to go abroad as he used to. I discontinued the tinct. Bur. oil discontinued with the spray: chlor. amp. and did not begin the fluoride again for two months. Then added I pains being done. It was well borne. In the Feb. of '82 I first detected what I had been looking for - an impossibility to walk with eyes shut or to stand steadily under similar conditions if placed otherwise. The finger feeling was persistent of the pains in the abdomen, back legs came on irregularly sometimes as severe as to demand special treatment and attention as other times not at severe. One thing I noticed in this case, before I decided what
to give to relieve the pain. I found that a strong
pronounce did not last many hours whereas a less
beneath me would probably be complained of a week
after. Shadows were made less faith in my treatment
or in my power to arrest the malady by its means.
This with coccus in I pursued it till the November
of 82. During this long period the disease was
alarmingly progressing: a history of falls was inter-
vened when he lost all his feet the previous week. It was
most apparent, if walking, to stagger, to step abruptly
he would in turning stagger still fall and fall. He
could not now stand with eyes shut without falling.
He could not distinguish the floor from the carpet
or the letter from the rug. Thoroughly disturbed
with both cases I also had Prof. Jenner Thomas' opinion on this case with the last detailed. He
was a master hopeless prognosis in this case as
well but recommended the whole of silver in 1/6 of
a grain every day as in the previous case advis-
ing me to treat the symptoms as they arose on
general principles. After giving the whole of
silver for a fortnight, for the first time in the history
of the patient nausea vomiting came in with pain
abdomen in the epigastric region. This I
might have exhibited it too soon after the cessation.
of the Rev. Potter. I adopted all medicinal treatment for a month. Then tried the habit of taking pills again - but had not been administered unless a repugnation of the same symptoms as alarmed his brother. That with difficulty I induced him to try once again half the quantity as before. A result followed as with considerable reluctance I abandoned the drug altogether. Though the manner of going shan't be settled, yet I am to the bed with his Chemical Story. In the summer was induced to make a trial of (oliver's) the hypo of the Hypnotomakes half - tea - spoonful every other half an hour and the return. That is still, that I am continued to this. I have good results as far as the Lumbar and Asthma is concerned. He is under care in regularity, the walking is more a chore & I am told to place - just as Pegan did. The improvement of my other patients. The slight is more prominent and even chemical treatment are all that he is gradually gaining this year in his type. There is no want of co - action in the brain or upper extremities as far. The points should direct attention to in this case are (1) the extreme youth of the patient, (2) the peculiar history of no similar being suffered, (3) the first month
of life till the 7th. — The last case of this kind I came across depended on local annoyance but this could hardly be the case here. The pain was of a reflex character as is frequently observed in cases of sciatica. However, there is a history of constant diarrhea, and this explains why the diarrhea was caused by overgrowth of some other organ. This case was not a manifestation of it. As before mentioned, Hands reports a case where the atonic appearance of the stool came on of an attack of rheumatism, with other symptoms. There were pains of long duration of sciatica, dyspepsia which symptoms disappeared as suddenly as they came leaving the atonic symptoms persistent. The difficulty of expelling may also be explained, as the dyspepsia may have been produced by partial anaesthesia of the pharynx or from spasm. The next symptom was want of control of the bladder during the day or night, therefore the characteristic pains diminished themselves and vice versa should have been the case. However, it was not so, and so far by treatment. (3) The fact that the constant current in these children mitigates the severity of the pain in the back when applied on the spine, and in the legs when applied over the same limits is worthy of notice. Several times no internal treatment was used because of the electric treatment alone adopted. The insidiousness of the pains as indications without with more
definite statements. That they dealt on the history of these
three children and considering the unusually pronounced
symptoms peculiar to the disposition, the prognosis is a gloomy
one—no thing that youth always gain one to pro-
tel this may fact your ship's doctor. The any
reverse impression, he thought such a decided
song of symptoms appearing so early, the any
least sign possible. Simic writes the cases as
clue as a very long life will permit, and as I
think it uncommon both in respect of age and sex
will not future treatment, other opinions 32 results.
I would now just refer to the manual treatment ad-
dopted by the professional doctors under whom I am now
is. It will be seen from the articles that Vani Fane that
It is essentially different from the treatment now so much
in vogue in the Continent, notably at Aix-les-Bains, whos
water of any temperature is employed, so far known an
manipulation. The treadling frame pinching with muscle
practitioner is used. It resembles that which we call 'massage'.
From what I can find I should call the method touchmese
of Dr. London 32 heretofore not introduced, mechanical
means capable of bringing into play certain groups of
muscles which may have become unsteady being employed.
This gentleman undertook to follow my patient so far in 6 months that
how it is to require 6 months longer at the end of that time.
he first sees that perfect coordinating power will be restored. From other cases received personally from friends I can easily judge that as soon as far as the atheria is concerned it is likely to take place. The thing I notice he gives Pray for exercise for joints or muscles as if the rheumatism was no rheumatism in them themselves, the patient himself with nerve pinching and rubbing the various groups of muscles. I am far from thinking highly of this form of treatment for rheumatic affections or muscular atheria dependent on rheumatism or nerve affections, but when by its means destruction nerve cells are to be restored it goes beyond credibility. I write him again by a few particulars as to how he considered the mode of operation he adopted could be effectual in accomplishing this object, he wrote me in Swedish that Mr. Bryan would soon be quite restored. I again wrote in his own language, (Mr. Lennig's Swedish course for medicine in type thirdly, putting into Swedish) that having to my questions being in English I must have understood them. He wrote me back in English that already the patient was getting over the effects of the burning treatment he had been subjected to; and again writing ten-three months ago - I have had no reply. In conclusion I can only hope that what the Editor of Vanish! says may be correct "if no good no possible harm". State one cannot but respect the loss of time with care.
THE LAST NEW CURE:

MANUAL TREATMENT.

MEDICINE is the art of curing disease by giving physic—
that is to say, of curing you of one disease by giving you
another. If you are suffering from Cholera, the Doctor gives
you Constipation; if from Constipation, he gives you Cholera;
if from Neuralgia, he gives you Morphia; if from Pain, he
gives you Unconsciousness; if from Unconsciousness, he gives
you pain. Patients are in many, and probably in the majority
of, cases created by a shake of the head of the Doctor acting
on their own fancies; and when once created they are main-
tained by Physic. There are special forms of disease, such
as Iodism and Morphia, which are now recognised as being
wholly due to special drugs. The German watering-places have
slain their thousands; the patent pills and potions their tens
of thousands; and there are few men or women—but especially
women—who when they reach middle-age are not the victims, in
some form or other, of the Pharmacopoeia.

Surgery is a different matter, and has made very great ad-
vances and brought blessed results to suffering mankind; but in
Medicine the Doctors are very much where they were when they
used to mash up toads' heads for physic. Nor is it entirely their
fault. They do the best they know according to the traditions
they have invented, and the foolish patients on whom they
depend for their fees; but the most honest of them are faint to
confess that in general the best they do is done by a grave or
a smiling face, a pat on the back, and a few bread pills.

Some shrewd unbelievers have however now got an inkling
of the real state of things, and a considerable proportion of man-
kind are agreed to escape if possible from the ordinary doctor
and his deadly potions to some new men and new method.
Hence Milk-cures, Grape-cures, Tent-cures, and the like, all
which vary from each other, but agree in excluding the Physic
that Macbeth devoted to the dogs.

One of the most notable of the new men who have
ventured to set up outside of the charmed circle traced by the
College of Physicians is Dr. Kellgren. He is remarkable in him-
self, and still more remarkable in his method of treatment. He
is a Doctor of Medicine, yet he renounces Physic. Indeed he
renounces all attempts whatever to deal in any way with man-
kind through their stomachs, and undertakes to cure their
interiors solely through their exteriors. This method he applies
to almost every kind of malady, though it is especially addressed
to affections of the muscles and nerves: and a considerable
number of persons well known in London Society testify that they
have received the most remarkable relief from it in cases of
neuralgia, sciatica, and paralysis, and even in cases of fever and
heart disease.

The point about Dr. Kellgren's system is that there is
no Physic whatever in it. It consists only of what is called
"Manual Treatment," and seems to be, in fact, no more than a
revival or scientific re-discovery and development of the system
of shampooing which has been used as a curative agent in the
East since the days of Abraham, and a combination therewith
of certain simple gymnastic exercises. Of the restorative effects
of shampooing all those who have lived in the East are well
aware. The tired rider broken with fatigue submits himself to
the cunning hand of the shampooer, and in an hour is re-in-
vigorated and fresher than ever. This same shampooing is
indeed still, for the great majority of mankind, the only curative
agent known besides a few harmless exercises of the magic arts.
The vast masses of men who live beyond the Ural mountains
have never passed through the toad's head stage, they have de-
veloped it into no 'Trades' Unions of Physicians, and they have
no Pharmacopoeia. They continue therefore to do as of old, and
when they are ill they exercise, bathe, and rub themselves well again, without drugs of any kind. This in general seems also to be Dr. Kellgren's system. It certainly appears to do as much for the patient as any physic does, and most especially in the particular department for which physic is most commonly used by all, civilised mankind. Whatever doubt may be expressed as to the results of other parts of the system, there can be no doubt whatever that it is entirely capable of replacing all the laxative pills and mixtures with which people dose themselves so liberally. Moreover, there can be as little doubt that, even if this system should fail to remove the special disease submitted to it, it does most certainly improve the system generally, and very notably improves the general health of the patient. It is, too, beyond question that, in many cases supposing to be helpless and hopeless, Dr. Kellgren has achieved most marvellous results. And finally there is this to be said of him and of his system, which can be said of no others: that, even if they do no good, they cannot possibly do any harm.

Dr. Kellgren is a Swede. He is established in a large house in Eaton Square, together with a half-a-dozen diploma'd young Swedish doctors, who carry out his instructions as to the treatment of the patients who attend there. The proceedings all take place in a large double drawing-room, which is fitted up with low benches, upright posts, and moveable cross-bars. Here any morning, beginning at nine o'clock, may be seen some score of patients stripped to their shirts and trousers, and being put through the various "exercises" by the young doctors, and by Dr. Kellgren himself. Each patient goes through ten exercises, some active, some passive; those that are active being intended to exercise the unaccustomed muscles, while, in those that are passive, the muscles and nerves are coaxed and stimulated into activity. Here you will see a man having his chest and back slapped; there lies one over whom stands a doctor pressing the muscles and nerves of the back with a cunning hand, which the patient can sometimes scarcely bear when it comes to ticklish points; there again sits a third, having the nerves of the head and face shampooed; and further, recumbent on his back, lies a fourth, undergoing the last exercise, which consists of kneading the abdomen.

It is impossible not to be struck with the general, and in some instances the exact, similarity of this treatment to Eastern shampooing. By this is not meant what is called shampooing in the Turkish baths established in England, where the operation is performed without knowledge derived either from science, as in Dr. Kellgren's case, or from tradition, as in the case of the Eastern shampooer, but blindly and perfunctorily. In the Anglo-Turkish bath shampooing is held to consist in vigorous rubbing of the skin; but in reality scientific shampooing means a pressure exercised through the skin upon the muscles, nerves, and organs that lie beneath; and the result both of Eastern shampooing and of Dr. Kellgren's manual treatment is the same. They both produce what the shampooing of the Anglo-Turkish bath does not produce, a remarkable feeling of increased vigour and lightness. The difference between Eastern shampooing and Dr. Kellgren's plan is that the Eastern shampooer never hurts you; whereas Dr. Kellgren sometimes hurts you very considerably, and one of the first lessons one learns in Eaton Square is that one has a very much larger number of ticklish places in one's body, and of what may be called screaming points, than one had ever previously suspected.

One of the best proofs that Dr. Kellgren's system is satisfactory to those who have essayed it, is the fact that many of them continue to follow it year after year. It is applied not only to men, but to women and children; and with these latter it produces even more rapid and more remarkable results than with men.