17. Has had no headach since last visit ; slept well last night, and is refreshed, composed, and cheerful. Take one pill night and morning.

18. No return of headach ; feels perfectly well, and is anxious to resume business. Pills produced no greater action upon the bowels than what an ordinary laxative might have been supposed to have induced.

24. Continues free from headach up to this date.

Remarks.—That the benefit in this case was owing to the croton oil is evident, I think, from the circumstance, that this medicine was the first thing to make an impression on the disease, which had resisted ordinary purgatives and the application of leeches to the head ; and further, that when the oil was intermitted, the headach returned with its former intensity—yielding neither to arsenic—valuable so frequently in such cases—nor to that excellent anodyne, the aconitum napellus. Secondly. That the beneficial effects of the remedy were not owing to its action as a *mere purgative*, but to something specific in regard to the disease for which it was administered, appears likely from the circumstance, that this patient had previously had recourse to the more usual purgatives, had induced profuse catharsis, yet experienced no mitigation of suffering. Thirdly. In what this speciality of the croton tiglium consists, or through what media it develops itself, I am unable to say ; but I cannot help calling attention to the circumstance, that the urine was increased in quantity, and was evidently denser than usual, and that the alvine evacuations were of a “ yellow colour and most offensive smell.”

Now these are precisely the more important physiological actions of *colchicum autumnale*, so valuable an agent in articular rheumatism, to which, in my opinion, neuralgia bears a strong resemblance. The seat of this latter ailment is, I conceive, in the fibrous neurilema, while under the influence of that modified form of inflammation which is set up in the fibrous structures of the joints when they are attacked with rheumatism. Not only does identity of tissue support this view of the pathology of the disease, but similarity of symptoms also, particularly the characteristic tendency in both maladies to periodical exacerbations and to intervals of comparative repose. Dr. Lewins, of Leith,* has demonstrated from chemical analysis, that by the exhibition of the meadow-saffron the specific gravity of the urine occasionally rises from 1.009 to as high as 1.037 ; and that the cause of this increased density is the augmentation of urea and of urate of ammonia, results which Dr. Lewins tells us have been verified by Professor Chelius, of Hei-

delberg. By the influence of colchicum also, as well as by that of croton tiglium, the alvine evacuations assume a bright yellow colour, the liver being stimulated apparently through the duodenum, in accordance with the physiological law, that when a membrane is irritated on which an excretory duct opens, the gland from which that duct proceeds is excited to unusual secreting activity. Can it be then that the croton tiglium is similar in its action to the colchicum autumnale, and that it does good in *tic douloureux* by inducing the same effects that colchicum does when it alleviates the sufferings of the gouty and the rheumatic—by eliminating urea and uric acid salts through the urine when these highly nitrogenous productions of the blood are in excess, and thereby the sources of constitutional irritation, and also by causing a supersecretion of bile? We know that colchicum is an invaluable remedy in fibrous or articular rheumatism ; and if I am correct as to the pathology of neuralgia, and if croton oil is beneficial in that disease, is it unreasonable to suppose that two remedies which cure similar complaints should do so in a similar manner?

This case and these speculations have been published chiefly for the purpose of directing the attention of the profession to this subject, to the effects especially of croton oil on the kidney, and to the character of the urine under its influence ; for I feel conscious that I did not in the above case examine that excretion so minutely, as to warrant me in trespassing any longer on the indulgence of the reader.

Anderson's University,
Dec. 24, 1841.

REMARKS ON CLUB-FOOT AND ANALOGOUS DEFORMITIES, ILLUSTRATED BY CASES.

By ROBERT MURRAY, Esq., Surgeon,
Aberdeen.

THE cure of club-foot and analogous deformities by the Thilenian method has of late years, by the writings of Stromeyer, Bouvier, Dieffenbach, Guerin, &c., on the continent, and of Little, Krauss, and one or two others in this country, excited a deep and growing interest in favour of this important discovery ; a discovery second to none, in value and utility, in the annals of modern surgery. It is remarkable that it should have remained so long in abeyance after the ingenious Thileneus, its discoverer, had proved to demonstration the union of a ruptured or divided tendon by the deposition of new matter analogous to, if not actually of the same nature as, the tendon itself ; and on the same prin-

* On Colchicum Autumnale, in the Edinburgh Medical and Surgical Journal for July, 1841.

ciple that callus is thrown out from the fractured ends of a bone, for the union of such fracture. It is doubtful whether Thileneus was aware of the now well-ascertained fact, that a redundancy of tendinous matter is at all times effused from the cut ends of a tendon, the ignorance of which fact might have deterred him from essaying the extension of divided tendons. Certain it is that such ignorance prevailed until within the last few years, when the celebrated Stromeyer revived the operation. The success which attended his indefatigable labours, as well as those of others of his continental brethren, in the cure of club-foot, has attracted the attention of several British practitioners to its vast importance. The British public is deeply indebted to Dr. Little for having been the first to introduce the operation into this country; at least, he was the first to call the attention of the profession to it. His writings, illustrated by numerous cases, first published in *THE LANCET*, and also his excellent treatise on club-foot, have done much to impress on the minds of general practitioners the perfect safety and efficiency of the operation.

Unlike the humbug stammering operation of Yearsley notoriety, and the still more equivocal one for the cure of strabismus, neither of which is based on sound physiological principles, and in most instances they have proved failures; unlike these, the club-foot operation has already secured a place among the permanent triumphs of modern surgery: but still there is a mountain of prejudice against the operation, requiring the united efforts of surgeons to break down. If, however, surgeons themselves are the abettors of such prejudice, how is it to be overcome? I hope the liberal and enlightened members of the profession will absolve me from anything like a vindictive feeling or want of candour towards them, when I affirm that many practitioners, from selfish motives, no doubt, dissuade those unfortunate individuals who are the subjects of deformity, from submitting to what they, in the plenitude of their ignorance, are pleased to term *no operation at all*, or, at best, one fraught with danger, and totally impracticable. But *magna est veritas et prevalebit*; and I am convinced that this valuable operation will, in a few years, become general, and the boon it will confer on suffering humanity will be duly appreciated.

Having, during the last twelve months, devoted considerable time and attention to the subject of club-foot, &c., and having assisted at numerous operations, and watched their after-treatment, besides operating on several cases, the details of which will be given below (see also *LANCET*, July 3, 1841), I would beg to offer a few remarks on the nature and cure of these deformities. My remarks will apply more particularly to deformities of the feet.

There are two grand divisions of deformed or contracted joints, namely, congenital or natural, and non-congenital or acquired; the first existing from, and prior to, birth; the latter occurring at any period subsequent to birth. Great doubt and obscurity exists as to the cause of the former of these malformations: many physiologists and pathologists believe that the pressure of the uterus upon the foetus is a frequent cause; while others maintain that they arise, for the most part, from a spasmodic contraction of certain muscles of the inferior extremities, consequent on some latent derangement of the nervous system during foetal life. Both of these theories may be right, or they may be wrong; the latter, however, seems to be the more rational. But I believe a hereditary predisposition can be traced in most cases: be that as it may, it is of little moment in a therapeutical point of view.

Non-congenital or acquired contraction of joints arises from various causes, such as fevers, hooping-cough, abscesses of the lower extremities, burns, &c.; their *modus operandi* is by producing shrinking and atrophy of muscles.

The different deformities of the feet are four in number,—First. *Talipes equinus*, retraction of the heel, and consequent walking on the toes. Second. *Talus*, or walking on the heel, and turning up the toes. Third. *Talipes varus*, club-foot, properly so-called, turning in of the foot, and walking upon the outside of it. Fourth. *Talipes valgus*, the reverse of the last, turning out, and walking upon the inside, of the foot.

These several varieties of malformation might be noticed separately in detail, but as they are all produced by the same cause, viz., shortening of particular tendons and laxation of the various tarsal bones, it would be superfluous in me to occupy space with matter, the gist of which can be comprehended in a few words. Suffice it, therefore, to say, that when a forcible attempt is made to bring a foot, say deformed by *pes equinus*, into a normal position, the proximate cause of the deformity will be at once apparent, by the wire-like tightness of the Achilles tendon. The diagnosis of congenital and acquired club-foot, &c., is extremely simple; in the former the degree of deformity is always the same, whereas in the latter it is slight at first, but by degrees it in many cases assumes the highest degree of deformity.

The treatment of all of them is now so very satisfactory, and so far superior to the murderous practice hitherto pursued, of *scobbing* the feet, as it is popularly termed, that it merits particular notice here. It may be divided into two kinds, surgical and mechanical. The first consists in dividing the contracted tendons, and the latter in extending them after they are divided. Various modes of dividing the tendons have been recommended and adopted by different writers.

Some prefer introducing the knife horizontally under the tendon, and bringing its point out at the opposite side; then rotating the knife, so as to bring its cutting edge to bear on the internal surface of the tendon, make a section of it. Others introduce the knife over the tendon, and do not bring out the extremity at the opposite side, thereby making only one puncture: the tendon being rendered tense by an assistant, the operator cuts inwards, and it gives way usually with a snap.

I give the preference to the latter mode,

and invariably adopt it. The instrument I use is Liston's club-foot knife, which I consider superior to Little's, inasmuch as its point is exactly midway between the edge and back of the blade. The advantage of this construction is, that no other structure but the tendon is wounded. The position of the patient, during the operation, is of paramount importance: by far the most advantageous position of the body is the horizontal, it being at the same time in a state of pronation. By these means the tendons are rendered tense, and easily got at.

Fig. 1.

Pes Equinus Apparatus.

a, a. Footboard, padded inside.

b, b, b. Leather straps, with buckles, binding the foot to it.

c, c. Lower part of *c* is a piece of iron fixed to the board, reaching as high as the malleoli. Upper part is a wooden splint, attached to the former by means of an iron pin, which allows motion in a longitudinal direction only.

d. A strap and buckle, to bind the splint to the leg.

e, e, e. Cords and pulleys to extend the foot and leg, and bring down the heel.

f. A knob for fixing the cords.

Fig. 2.

Club-foot Apparatus.

a. Footboard.

b, b, b. Straps and buckles to bind the foot to the board.

c, c. Lower part of *c* is a strong piece of iron attached to the footboard, by means of another piece of iron, *d*, into which the screw, *e, e*, is inserted, which screw, *e*, brings the foot from a vertical to a horizontal plane.

Upper part of *c* is a wooden splint attached to the lower, as in fig. 1.

f. Strap and buckle to fix the splint to the leg.

I now come to speak of the mechanical, or after-treatment, and if it be not assiduously attended to, and followed up by the surgeon, the case will inevitably turn out unfavourably. Traction should be made at least once in twenty-four hours, until the cure is completed. The different forms of apparatus in use for extension are numberless, each practitioner thinking his own the best. The subjoined are drawings of two which I am in the custom of using; they have cheapness, efficiency, and simplicity to recommend them.

The period at which traction should be commenced, after the section of tendons, depends much on the age and constitution of the patient; in the young and robust, extension may be begun on the second day: although Bouvier and some others recommend immediate extension, yet I think it better to allow a little time for the effusion of new tendon. In old and debilitated habits it is better not to commence traction till the third or even the fourth day. The time when it should be discontinued must be determined by the discretion of the surgeon.

I will now subjoin the results of five cases (one a contracted finger), treated successfully by me, while lately on a visit to my native town, Peterhead, in Aberdeenshire. I am at present engaged with similar cases, the first, I believe, of the kind operated on in Aberdeen. The example now set in the north of Scotland will, I trust, stimulate general practitioners in this part of the kingdom to think favourably and impartially of the operation, and ultimately to practise it.

I.—*Congenital Varus of Right Foot cured by Operation.*

Aug. 1. Richard Williamson, ætat. 10 months, a fine, plump, healthy child; has got no teeth. The deformity in this case appears to arise from contraction of the tendo Achillis only, which is fully two inches shorter than the one on the opposite limb. The friends were desirous to have the deformity removed, and on August 2nd I divided, in the presence of Mr. Anderson, surgeon, the tendo Achillis. Its division was indicated by a snap, and not a single drop of blood was lost.

3. Puncture entirely cicatrised; deposition of new matter copious; applied the club-foot apparatus, and made gentle extension; not the least symptom of constitutional irritation present.

7. Scarcely any trace of deformity in the foot is observable; it is straight, with the sole and heel perfectly down; traction continued.

12. Cured. When the foot is taken out of the apparatus the child naturally inclines it inwards; this, however, will be obviated, for I have ordered a steel boot to be worn night and day, till the child learns to walk.

The only thing worthy of remark in this case is the circumstance of the section of the Achilles tendon sufficing to cure the deformity. In very young subjects this, in general, is all that is required, if the after-treatment be strictly attended to.

II.—*Acquired Semi-varus complicated with Pes Equinus of the Right Foot cured by Operation.*

Miss M., ætat. 19, in appearance rather delicate, but on the whole healthy; was born between the sixth and seventh month; when an infant she had measles and hooping-cough, the debilitating effects of which prevented her from walking until the fourth year: about that period her friends observed the whole of her right side evidently affected, simulating slightly hemiplegia. As she grew up, actual deformity began to manifest itself in the right foot, and now partial varus and pes equinus of a high degree are developed. The deformed foot is two inches shorter than the other, and the leg attenuated. Her gait is most painful to witness, the part of the foot that reaches the ground being the ball of the little toe. The knee is also contracted, preventing her from lying on her back; and, in fact, the whole body has a distorted appearance. Miss M. and her friends being exceedingly desirous to have the deformity removed, I, on the 12th of August, at eleven, a.m., in the presence of her father and mother, and of Mr. Anderson, surgeon, divided in the usual manner, first the tendo Achillis, which is broad, and adherent to the surrounding tissues; next, the plantar fascia and abductor pollicis pedis muscle; and, last of all, the tibialis posticus. Very little hæmorrhage occurred, and she bore the operation with great fortitude. I merely enveloped the limb loosely in a bandage till the evening.

Eight, p.m. Feels quite comfortable; will not commence extension till to-morrow.

13. Passed an excellent night; can now lie on her back with ease; she could not do so before, on account of the contracted tendo Achillis producing partial flexion of the knee-joint; wounds cicatrised; new tendinous matter effused. Applied the apparatus, and began extension; it caused a slight degree of pain.

14. The traction, which has been kept up since yesterday, has made a visible improvement on the foot. Undid the bandaging, &c., and reapplied them, increasing the extension considerably at the same time; effusion of new tendon copious; pain trifling; health good; lies on a sofa.

16. Extension all but completed; the foot is now at a right angle with the leg, and inclines *outwards*; the toes, which before inclined upwards on the dorsum of the foot, can now be fully extended; health always good. Traction continued.

19. Always progressing. To-day she,

with some assistance, walked the length of the room, with the heel perfectly down, and the foot straight.

23. The extension is now complete, and the foot two inches longer since the operation; but in consequence of oedematous swelling of the foot and leg, both of them are bandaged, and the apparatus still applied. She walks, with the aid of a stick, about the room.

On the 4th of September she was cured: she was, however, prevented from walking by a small ulcer, formed by pressure on the ball of the great toe; but since that period up to the present time (Oct. 13,) she has daily improved, walking about town, occasionally with, and sometimes without any support whatever. She wears a steel boot. The improvement in Miss M.'s personal appearance is striking: her figure is taller, more erect, and symmetrical; her gait is comparatively graceful, with little halt, and I have no doubt she will, ere long, be able to mingle in the dance, and other active amusements, from which her lameness has hitherto debarred her.

III.—*Non-congenital Pes Equinus of the highest degree of Deformity cured by Operation.*

Jessie Mitchell, ætat. 15, of spare habit, and nervo-sanguineous temperament, states that, when three and a half years old, she suffered much from pain and debility in the lumbar region. Various remedies were made use of for her relief: among others a plaster, which entirely removed the complaint. Six months subsequent to this period, a small swelling, not larger than a pea, presented itself a little below the right inguinal region; it quickly increased in magnitude, until it became a large abscess, and at the end of three weeks burst spontaneously. A quantity of very unhealthy pus escaped from the opening, which gave great relief. The abscess was not long in healing; but, soon afterwards, contraction of the tendo Achillis and plantar fascia began to be manifested, by the drawing up of the heel and the inward inclination of the foot. The shortening of both kept gradually increasing, and now (August 28, 1841,) pes equinus of the highest degree of deformity is developed. When standing in an erect posture, the plantar aspect of the heel measures from the ground upwards of five inches. The contraction of the abductor pollicis pedis and plantar fascia gives the foot an inclination to *varus*. All the toes, in consequence of her walking on them, incline upwards upon the dorsum of the foot. There is considerable hypertrophy of the integuments of the balls of the great and little toes. The astragalus is dislocated forwards, and presents a convexity, on the dorsum of the foot, as large as a peach of the largest size. The foot is attenuated, and shorter than the left one by two inches and a half. The

muscles of the leg and thigh, especially the former, are very imperfectly developed; the diameter of the limb being one-half less than that of the sound one. When both legs are extended, and placed in juxta-position, the internal malleolus of the affected limb is half an inch above its fellow of the sound limb. She has considerable lateral motion at the ankle-joint. The girl's general health is not good, but being desirous to have her foot righted, I operated on her, August 28, at eleven, a.m., in presence of my friends, Messrs. Dalrymple and Anderson, surgeons. I made a section of the tendo Achillis, plantar fascia, and abductor pollicis pedis. The operation was completed in a few seconds; and the hæmorrhage did not amount to more than a few drops. I applied pieces of dry lint to the punctures, and enveloped the foot and leg loosely in a bandage.

29. Slept soundly all night. Wounds entirely cicatrised; the spaces between the divided tendons occupied with a copious secretion of new tendinous matter. Twenty-six hours after the operation, applied the *pes equinus* apparatus, and made smart extension. Heel is already down one inch. Free of pain.

Evening. Complains of uneasiness over the tarsus, ascribed to the firm pressure made on it by the bandage.

Sept. 2. Heel down three inches; foot elongated; the astragalus, which formed the projection on the instep, has nearly disappeared; toes lengthening out; deposition of new tendinous matter abundant; health improving. Continue the traction.

4. Going on favourably; foot at an obtuse angle with the leg; the luxated astragalus completely reduced, and altogether the appearance of the foot is most satisfactory. Continue as before.

11. Foot at a right angle with the leg, it is now fully an inch longer than before the operation; the heel is also getting well developed; extension still kept up; the foot and leg to be immersed in warm salt-water every day.

Oct. 21. Cured. The cure was somewhat retarded by an ulcer forming over the apex of the dislocated astragalus, and one on the ball of the little toe. These ulcers are easily accounted for by the circumstance of the pressure being greater at those points than elsewhere. The foot is now entirely sound, and has assumed a handsome appearance. She has great power over all the muscles, and, in particular, the extensors; the leg is getting brawny, and her health is better than ever; she walks with very little lameness, which will soon disappear altogether; wears a steel boot.

IV.—*Congenital Varus of the highest degree of Deformity cured by Operation.*

Mary Hunter, ætat. 30, a strong healthy woman, of swarthy complexion and active

habits, states, that the deformity has existed from birth. The right foot presents all the appearances of an extreme case of varus, and is shorter than the other by two inches. It is worthy of notice, that all the tendons, with the exception of the abductor pollicis, are very imperfectly developed; the tendo Achillis can scarcely be felt, being buried deeply amid cellular and adipose tissues. There is a large cicatrix running in an oblique direction across the anterior aspect of the ankle-joint, caused by an incised wound she received there many years ago. At the urgent request of the woman, I proceeded to operate upon her, August 19, in presence of Messrs. Jamieson, Johnston, Anderson, and Robb, surgeons. I made a section of the following parts: tendo Achillis, tibialis anticus, plantar fascia, and abductor pollicis pedis. As usual, very little hæmorrhage followed, and the operation was completed with little pain to the patient.

20. Applied the club-foot apparatus, and made some degree of extension, which was attended with slight uneasiness.

21. Not much improvement in the foot, in consequence of the woman interfering with the bandaging; next day she peremptorily refused to allow further extension of the foot, I therefore deemed it judicious to discard so unreasonable a patient.

Oct. 8. The woman, having repented of her folly, has been most importunate ever since I abandoned her, to have the operation again performed, promising, at the same time, to do all in her power to further the cure. I in consequence this day redivided the plantar fascia, abductor pollicis, and also made a section of the tendon common to the flexor communis. My object will now be to convert the foot into a case of pes equinus, and afterwards divide the tendo Achillis, and bring down the heel. It may be remarked, that there is a decided improvement in the appearance of the foot, consequent upon the first operation; the tarsal bones are not nearly so prominent, neither are the balls of the great and little toes so much on a vertical plane as formerly.

9. Commenced traction.

18. The foot now presents a case of pes equinus in a high degree. Assisted by my friend, Mr. Dalrymple, surgeon, I made a section of the tendo Achillis, about two-thirds of an inch above the first division; it was imbedded deeply in cellular and adipose tissues, and gave way with a snap; I also divided the flexor longis pollicis, it being tight. The foot was then enveloped in a bandage.

28. The foot has progressed considerably towards a cure; active extension has been daily kept up, and now the foot is at a right angle with the leg; the sole is flat down, and instead of the balls of the great and little toes being, as heretofore, on a vertical, they are on a horizontal plane.

The prominence, so conspicuous along the outer margin of the foot, is fast disappearing; the semi-luxated tarsal bones having formed for themselves new articulations, there is scarcely any perceptible inward inclination of the foot; she can stand erect, and even walk with the heel and sole perfectly down; slight ulceration has taken place on the cicatrix already mentioned: there is also a small ulcer on the ball of the little toe, caused by pressure. Continue traction.

Nov. 12. A cure is almost effected. In consequence of being obliged to leave Peterhead, I have entrusted the case to the charge of my friend, Mr. Anderson, who, I do not doubt, will do it every justice. The patient is permitted to walk occasionally, and I have recommended the extension to be kept up for a month longer, and then to wear a boot, with a steel spring attached to it along the outer side of the leg.

V. *Acquired Contraction of the Phalanges of the Ringfinger cured by Operation.*

Miss. C., ætat. 16, healthy, and of florid complexion, states, that when a child she was in the custom of *sucking* her fingers; the consequence was ulceration and exfoliation of about one-half of the distal phalanx of the ringfinger. The surgeon in attendance, while the healing process was going on, inadvertently allowed the finger to contract. To such an extent has the contraction reached, that the middle phalanx is closely applied to the proximal, and the apex of the distal to the palm of the hand. The deformity has increased considerably within the last year or two.

August 20. I divided the tendons midway between the proximal and distal extremities of the proximal phalanx; I carried the knife down to the periosteum, so as to make sure of dividing completely the stricture. There was some bleeding from the puncture, which was suppressed by compression and a bandage.

Seven, p.m. Free from pain; spontaneous extension has taken place to the amount of an inch; applied a wooden splint on the dorsum of the hand, and extended the finger upon it.

29. The traction has been daily kept up, and now the finger is nearly straight with the exception of some oedema; there is no untoward symptom. Continue the traction.

Sept. 13. Excepting the last phalanx, the finger is perfectly straight. Discontinued the splint during the day, and ordered to exercise the finger *ad libitum*, and to bathe it night and morning in warm salt-water.

On the 9th October, an ulcer, which had formed some time previously on the tip of the finger, healed, and I divided the tendon of the superficial flexor a little way below the last joint. Commenced traction.

18. Perfectly cured ; she can, with the aid of the adjoining fingers, flex and extend the finger at pleasure ; she can also use it at the piano, and grasp objects firmly.

Aberdeen, Dec. 3, 1841.

CONTRIBUTIONS TO MEDICINE.

By JAMES B. THOMPSON, A.B., M.D.,
Surgeon, &c.

"CHOREA SANCTI VITI," WITH CASES AND
OBSERVATIONS.

Utility of the Secale Cornutum, or Ergot of Rye, in Chorea ; Paralysis from Lead, and the Paralysis Agitans or Tremens in Elderly People ; Treatment, &c. &c.

FIRST CASE.—Having some time since been called to see an interesting little girl, ætat. 6, who had suffered from this disease for six weeks previously ; she was of a scrofulous diathesis, and evidently affected with worms ; I tried mild emetic and aperient medicines at first, and afterwards put her on the mercury with chalk powders with the senna and scammony powders alternately, allowed her a very nutritious diet, not exciting nor stimulating. She had the disease in a very marked form, principally confined to the left arm and leg, and was generally seized with it in the afternoon ; the circulation was not much affected unless during the paroxysm of the attack, which seldom lasted longer than twelve or fifteen minutes. Having attributed the disease in this case to the presence of worms, with the constitutional affection above alluded to, I attended principally to the improving the general health and removing the exciting cause, which afterwards proved to be the worms, for when oil of turpentine was given, large quantities of slimy, muco-purulent-like collections of darkish-coloured stuff were passed, and in this was observed at each stool, often in considerable number, the kind of worms usually present in the intestinal canal. This treatment was continued for about a fortnight, when a more tonic plan was pursued, occasionally returning to the powders and turpentine. The child eventually got well, and has not had any return of the disease for the last twelve months, and is considerably improved in her general health.

SECOND CASE.—The next case is one of more interest, as it occurred at a more advanced period of life, and in which a more complicated treatment was requisite. It occurred in a young lady, ætat. 16, of leucophlegmatic temperament ; she was labouring under it for eighteen months previously to my seeing her, and was under the care of the family medical man, who had tried the usual plans suggested, namely, emetics, purga-

tives, emmenagogues, &c. In this case the right arm and lower extremity were affected, and occasionally the muscles of the neck and of deglutition became engaged during the attack, which was more frequent, often twice in the twenty-four hours, and lasted sometimes nearly from twenty minutes to half an hour, during which time the arm would be tossed across the chest, and the leg involuntarily shook about in a manner most ludicrous, but painful to witness. I directed in this case a course of bitters and tonics at first, occasionally giving an aloetic and myrrh pill after the prima via had been well and freely cleared out ; ordered the hip-bath and warm salt-water stupes and some leeches to the sacrum : we tried the carbonate of iron in powders. This line of treatment was pursued for nearly three weeks : there evidently was an improvement, inasmuch that the attacks were become less frequent and milder, still they continued, and there was no apparent tendency to the catamenia ; to the absence of which we attribute, in a great measure, the disease in this young lady's case. It was at this period that I was induced to recommend the "secale cornutum," and in the following manner, which I consider preferable to the usual mode of giving it in powders : I directed a drachm of the recently-powdered ergot to be infused in three ounces of water, at boiling temperature, and allowed to infuse for twenty-five minutes ; then adding to this a little new milk, which, I think, makes it more palatable, and less likely to be rejected or disagree with the stomach, which I have observed it do in many cases when given by way of powder. It was directed to be taken as follows ; viz., a dessertspoonful three or four times a-day, gradually increasing it for a few days, and then returning to the previous tonic medicines. I gave in this case the sulphate of quinine in Madeira wine, which seems a real and agreeable way of giving it. This practice was continued for about a fortnight, when we were informed that there was a very slight appearance of the catamenia ; but whether to attribute this to the ergot of rye, or to the previous treatment or both, I am not disposed to say. However, this young lady got well, and has not had the least appearance of this affection for the last two years, and is now a very healthy-looking subject.

General Observations.

The disease to which the name of "chorea sancti viti" was first applied, very nearly resembles that produced by the bite of the "tarantula." This disease in its simple form occurs more frequently in persons whose vital powers are depressed, the entire class of vital organs performing their functions imperfectly, and thereby occasioning an increased and morbid sensibility of the nervous system. This disease seems not only