any disposition of that part, even when no structural change is apparent in it, to occupy the room provided. The sock may easily cause sufficient pressure to prevent this, and the best plan is to cut a hole in it, in that way setting perfectly free the great toe, which may be clothed with a few turns of bandage tied around. In time, socks may be substituted having a straight inner line, or, better still, a separate stall for the great toe. The invitation to occupy the space provided in the boot must also be kept open; the leather must not be allowed to fall in, but be frequently pressed upwards, and may, when the boot is not in use, be supported by wool stuffed within. Better still, of course, is the use of a well-made boot-tree. More generally the loss of the power of voluntary action of the flexor muscles is the explanation why the great toe shows no disposition to return to its proper place, and it is with difficulty that this power can be restored. The best way to practise the movement is with bare feet; the assistance of the eye in the attempt to do it is very great. In time the habit of walking with firm pressure of the great toe against the ground in every step becomes even automatic. Given sufficient patience and determination, and it is surprising how bad a condition may be removed, and perfect recovery of outline and of function attained by these means alone. Of course, all this holds good in less degree in proportion to the amount of structural change in the joints. It is important, I should add, that, in walking, the feet should be directed forwards, not everted when, as already stated, the action of the flexors is impeded.

The connection of the deformity described by Mr. Davies-Colley with flat-foot arose at the Clinical Society's meeting. I recognise with him that generally or frequently they are not found together. It is rather in cases where the long flexor muscle consents, so to speak, to entirely suspend its functions that the additional deformity occurs. In such cases the bowstring or tie-rod effect (as I have called it) of the long flexor is lost, and the arch sinks for want of the persistent bracing which vigorous action of that muscle affords.

STIFFNESS OF THE GREAT TOE IN ADOLESCENTS.

By J. M. COTTERILL, M.B., F.R.C.S.E.,
Assistant Surgeon, Edinburgh Royal Infirmary.

CONSIDERABLE doubt and difference of opinion have been expressed by various surgeons as to the precise pathology of this condition, which consists of an apparent flexion of the great toe, accompanied by stiffness, and frequently by pain, in its metatarso-phalangeal joint. There seems to be no mention of the subject in any standard work on surgery, but I do not consider it a rare condition; for instance, I have seen three cases during the last month.

Mr. Davies-Colley, in a paper read before the Clinical Society of London, is reported to have attributed it to one of two causes; either (1) injury to the joint followed by contraction, or (2) pressure of short rigid boots upon an abnormally long great toe. Rheumatism, gout, contractions of tendons and ligaments, are amongst other causes suggested by various authorities. Mr. Symonds says: "It occurs in young boys, especially those with flat feet. Some of the boys had a long great toe." The general consensus of opinion seems to have been strongly against the idea of flat foot being an important factor. Mr. Davies-Colley "did not think flat foot had much to do with it"; while another speaker stated that this deformity was unknown in barefooted races, though flat-foot was common with them.

I am convinced that most, if not all, typical cases are dependent upon a combination of flat foot (or a tendency to it) with rigid and short boots. Flat foot alone will not produce it; ill-fitting boots alone will not do so; it requires a combination of the two. A short boot might perhaps set up irritation in the joint, but will not cause the disarrangement of parts peculiar to this disorder. The process, then, I take to be as follows: The patient has a short, shallow, and rigid foot, which firmly grasps the toe, making it an absolutely fixed point. Given, then, the condition of flat foot, or even that of an undue laxity in the ligaments which should support the instep, the patient on walking causes depression of the proximal end of the first metatarsal bone. This necessarily alters the relations of the structures at the distal end of the bone; that is at the metatarso-phalangeal joint, as follows: (1) The articular cartilage of the metatarsal bone is uncovered on its dorsal aspect, as would happen in strong flexion of the toe (this I have verified on a good dissected specimen); (2) the dorsal portion of the capsular ligament is at the same time put severely on the stretch. These fibres do not at any time admit of great movement of the toe in flexion, and the pain referred to the part, and sub-inflammatory changes taking place in it are, I believe, amply explained by these two circumstances. I need not remind any practical

surgeon of the severe pain caused by the continued stretching of ligamentous structures.

In the early stages the only symptom is slight pain, referred to the dorsal aspect of the joint (as one would expect), and increased on movement. A little later one finds swelling of the soft parts, or of the bone itself, with redness and inflammation. This may go on to general involvement of the joint, with more or less complete fibrous ankylosis in the distorted position, and contractions of plantar ligaments and muscles. Not infrequently in old-standing cases there appears to be an atrophic condition of the parts concerned, rather than an increase in their size. It is now easily explained why barefooted races are exempt from this disorder: the element of the fixed toe is wanting. The apparently abnormal length of the great toe sometimes noticed is caused by the lengthening of the inner side of the foot by the conversion, more or less complete, of the arch of the instep into the straight line of flat-foot. It, moreover, may occasionally happen that the inflammation caused by the deformity, existing as it does in close relation to the epiphyses of young and rapidly growing bones, stimulates them to an increased growth.

Mr. Davies-Colley suggests the name "hallux flexus." I must beg to protest against the adoption of this term, as, if my pathology be correct, it implies a misconception of the truth: for it is not in reality a flexion of the hallux, but of the metatarsal bone. I would suggest the name "hallux rigidus," as free from the above objection.

Rheumatism and gout have, I believe, nothing beyond an accidental relation to this disorder.

In confirmation of the views expressed above, it must be borne in mind that "hallux rigidus" always occurs in young growing people, who are constantly on their feet—in short, the very class which supplies nearly all our cases of flat-foot. Another, and to me, at least, a most convincing argument, is that I have never failed to cure any case of early disease (that is, before ankylosis) by taking proper means to support the instep.

In more advanced cases, where the pain is severe and swelling considerable, fomentations, rest, gentle support with light splints, and other such means will suggest themselves. When the more severe symptoms have responded to this treatment, the important point is to keep up the instep.

In the third and most advanced set of cases, where firm ankylosis is present, with contractions of muscles and ligaments, little, if any, real improvement can be expected from blistering, tenotomy, and the like; while the routine practice of using splints for an indefinite period is, as might be expected, merely palliative, and as a cure is as unsatisfactory as it is irrational. The proposal made by Mr. Davies-Colley is probably the correct one, namely, to excise the proximal half of the first phalanx; and I should treat the case in such a way as to ensure a certain amount of movement in the new joint.

REMARKS ON THE TREATMENT OF QUINSY, ESPECIALLY IN INFANTS.¹

By W. E. GREEN, M.R.C.S.

THE subject of quinsy is one which has had a special attraction for me for many years, on account of its painful nature, its frequent recurrence in the same individual, and the rarity with which one was able to abort a case, or do more than wait until Nature came to the relief about the ninth day, or we were able to shorten the sufferings by the knife, often a most difficult matter, owing to the impossibility of opening the mouth. We were not idle even then, the treatment often commencing with free scarification of the tonsil or a blister behind the ear, and steam inhalations, while drugs of many kinds were used, of which aconite was the favourite, and was followed or given either with chlorate of potassium, perchloride of iron, or bark, and, to promote suppuration, one-tenth of a grain of calomel every hour. Even with these heroic procedures, we rarely cut short a case.

In 1875 I filled up a return on the subject, issued by Dr. Brunton in the *Practitioner* (this being one of the first attempts at collective investigation of disease). It was not until the following year, when, in talking over the subject with my cousin, the late Dr. Maund, he told me he found guaiacum give more relief than any other drug. From that time I have nearly always used this drug, but have not found the desired result from it alone. Then I was led to give aconite with it, and have found this treatment increasingly efficacious; but by experience have come to the conclusion that it is better to give the drug more and more frequently, until at the present I am of opinion

¹ Read at the Ryde meeting of the Isle of Wight District of the British Medical Association.

that one ought to be able to abort about nine out of every ten cases, provided the case is seen within the first forty-eight hours. My present prescription is: $\mathcal{R}$ Tr. aconiti $\mathfrak{z}$ ij; tr. guaiaci $\mathfrak{z}$ ss; glycerinæ ad $\mathfrak{z}$ j. Twenty drops every hour in sweetened water till easier, then every four hours till well. The patients always say that the first dose gives relief, and each successive dose more and more.

Between December 29th and January 14th I had a run of nine cases, one on the fifth and one on the sixth day of disease, and every one of these had been cut short, two or three even going on with their usual duties. One of this series of cases was an infant aged 8 months, which brings me to the subject of this communication.

On Sunday, January 9th, I was asked to see a baby who was ill. I found a very fat child, suffering from difficult breathing, quick pulse, temperature 100° , apparently in considerable pain. The appearance of the child pointed apparently to a trouble in the throat, and there was a good deal of swelling below the angle of the jaw on the left side. On placing a finger in the child's mouth, a swelling of the left tonsil extending almost across the fauces was felt. The parents said the child had been bad since Friday, the 7th, and could not now take the breast or swallow easily. I ordered a mixture containing one grain of carbonate of ammonia, half a minim tr. aconiti, and one minim tr. guaiaci, in a drachm of sweetened water every hour. At night the child was worse, almost livid, but the parents had given the mixture regularly. The temperature was 101.6° . I thought it would be necessary to perform tracheotomy unless improvement took place, as the nostrils were too small to pass a proper sized tube.

January 10th. The temperature was 105.6° ; the breathing was somewhat easier; and the swelling below the jaw somewhat less. There was a good deal of bronchitis, and the child was in a critical condition. I ordered one minim and a half tr. aconiti every hour; and, as the guaiacum was adhering to the bottle, two minims of the tincture to be given in each dose of medicine. In the evening the little patient was better; the temperature was 103.4° .

January 11th. The temperature was 101.4° ; the swelling had almost disappeared, and the child was much better. In the evening the temperature had fallen to 100° . I directed that the medicine should be taken every four hours; and next day, with the exception of bronchitis, the child was practically well. It has since made an excellent recovery.

The large amount of aconite that the child took is worthy of note; I believe its life was saved thereby. One minim and a half was given every hour for thirty-six hours, half-minim doses having failed to check a rapid rise in temperature. I have often seen these large doses well borne by infants and young children, but I always prescribe a stimulant with the aconite. I give ammonia to very young children and either strychnine or nux vomica to older ones.

I have never known or read of a case in so young a child, and therefore thought these notes might be interesting.

OBSTETRIC MEMORANDA.

LABIAL AND VAGINAL THROMBUS.

THE infrequency of thrombus of the genitals in connection with labour may be inferred from the fact that M'Clintock and Hardy make no mention of it in their observations on 6,634 consecutive deliveries, while Sinclair and Johnston, in their analysis of 13,748, record only seven cases, of which all were labial, three occurring before delivery, and forming more or less of an obstruction, and four after delivery. The following cases I had an opportunity of seeing within a fortnight of one another, and they illustrate very well the two great dangers of the accident, namely, acute anæmia from hæmorrhage, and septicæmia.

CASE I.—Pluripara, aged 34 or 45 (variously stated), had in two previous labours suffered from *ante-partum* hæmorrhage, the fœtus on one occasion being dead-born; she had also miscarried five times. In this, her twelfth or thirteenth pregnancy, there was considerable *ante-partum* hæmorrhage during ten hours, after which a dead fœtus and a fatty placenta were expelled unaided, followed by slight *post-partum* hæmorrhage. The perineum was sufficiently ruptured to require a stitch, and a walnut-sized thrombus was then observed in the right labium majus. Six hours later the thrombus, equal to the head of a new-born babe, and occupying the right half of the vulva and the right half of the perineum, resembled a huge scrotal tumour, the vulvar orifice being pushed quite out of sight and in contact with the left thigh, while the swollen translucent labium minus rested on the top of the tumour like a penis; there was an exceedingly abrupt and well-defined line of demarcation between the majus and minus labium,

the outer part having a natural skin tint, the inner a bright red, like a blood-clot covered with the thinnest of transparent pellicles, threatening rupture in two places. The patient was catheterised to obviate straining, and put under the influence of opium. Two hours later the thrombus was still somewhat larger, and the inner red part had in some places taken on a blue tint. Two hours later the thrombus ruptured in the threatened spots, plenty of blood and clot came away, but hæmorrhage ceased spontaneously without any bleeding vessel being detected. The patient was extremely anæmic and exhausted, and for some days there was a feeling of fullness in the right groin, apparently from extension of the thrombus up into the iliac fossa; but under stimulants and antiseptic dressings she made an excellent recovery, without any noteworthy rise of temperature, got up on the fifteenth day, and on the twenty-second required no further attendance.

CASE II.—Primipara, aged 23; a female, breech-presenting, child was easily delivered after fifteen hours in labour. Two hours afterwards the patient had become anæmic and faint from the considerable hæmorrhage that had since set in; the uterus was well contracted, but there was still oozing. On passing the finger into the vagina there was found occupying the lower half of its right wall a smooth, immovable body, of the size of a hen's egg, with an aperture below, evidently a thrombus which had ruptured into the vagina. A tampon was left in for twelve hours to check further hæmorrhage, after which carbolic douches were used twice daily for many days. Nevertheless, from the third to the seventh day inclusive, the temperature was between 103° and 105° morning and evening, after which it gradually fell to normal; on the fourteenth day she first passed urine without the aid of a catheter, and the next day she was up and quite well.

Manchester. WM. RUSHTON PARKER, M.A., M.D. Cantab.

OPHTHALMOLOGICAL MEMORANDA.

SPASMODIC ENTROPION: NEW METHOD OF TREATMENT.

I SAW at the Bolton Eye Hospital, in May last, a man aged 60, who had a spasmodic entropion of the left lower eyelid, and an affection of the left eye requiring an iridectomy. The entropion was successfully treated in the following way: the edges of the upper and lower lids were brought into, and kept for six days in, close apposition by a single suture placed midway between the commissures. Some days after the removal of the suture I performed an iridectomy on the left eye, and during the patient's residence in hospital there was no return of the entropion, and months afterwards he reported that the lid had not given him any trouble. The time during which normal fixation must be maintained in order to overcome the morbid condition will vary with the patients, and circumstances may render a more or less peripheral suture desirable.

This new method of treatment is likely not only to diminish the number of spasmodic entropions requiring operation, but also to be useful in some cases of ectropion.

Manchester.

DAVID MCKEOWN, M.D.

THERAPEUTIC MEMORANDA.

INTOLERANCE OF IODIDE OF POTASSIUM.

T. Y., one of my patients, a well-developed man about 40 years of age, suffering from ulcerated sore-throat and fibrinula, of fair average good health, and presenting no indications of any grave constitutional disease, had been treated by me for a considerable time with iron and potassic chloride combined with quassia. The results were satisfactory so far as the febrile condition was concerned, but by no means so with respect to that of the throat, the ulcerated state of which seemed rather aggravated than alleviated by this method of treatment. As this morbid condition presented a syphilitic aspect (the patient having suffered from it in the past), I had recourse to anti-syphilitic remedies, iodide of potassium with bichloride of mercury, and induced thereby a marked improvement in the state of the throat, but which was attended by a most serious condition of collapse. Obligated, therefore, to reject this therapeutic course of action, I speedily restored the patient's strength by reverting to the original treatment; but, by a provoking reversal of order, the throat now grew worse again in proportion. Again was the treatment altered to meet this annoying dilemma, syrup of iodide of iron being administered, combined with mercury; but before the patient took his first bottle of this fresh prescription he fell suddenly into so alarming a state of collapse, that I was summoned hastily in the