had been particularly directed to his tongue of late by curious shooting sensations in it, which, he said, came on if he talked much; it was not in the least sore in eating. I believe that what he complained of were purely nervous phenomena, but they had made him anxious as to the possible development of cancer. They had followed what he called "a nervous breakdown" six or eight months ago. This "breakdown" had been an attack of giddiness, attended with a feeling of nausea, and followed by great muscular weakness; he had been sent away from home, and had regained his health. I have seen this condition of general papillary hypertrophy in very many cases, and with some differences as regards the condition of papillæ involved. In most cases it is obviously the filiform ones which are chiefly implicated; these may be seen to be very much branched at their apices, looking almost like the tops of a field of oats. In the present instance there was no branching, and the surface was minutely nodular all over. When the filiform only are involved the fur usually accumulates on them, which, in this instance, it did not.

XXVI.—ON NOTCHES IN THE UPPER CENTRAL INCISOR TEETH WHICH RESEMBLE THOSE OF SYPHILIS.

There is a state of notching of the upper incisor teeth, which affects the two central ones of the permanent set, and produces a condition very deceptively like that of syphilis. The notches are central, and very conspicuous. A chief point of difference from the syphilitic tooth is that the tooth is usually wide instead of narrow at its free edge. Syphilitic teeth almost always show narrowing, like a screw-driver, as well as notching. Another point of difference is that the teeth, when looked at carefully, are seen to be craggy and very hard, not worn as the syphilitic tooth. In a very marked example of the pseudo-syphilitic notching, the father of the patient told me that the condition was hereditary, and the youth's mother had teeth of the same kind. In this instance, there was no history of fits in infancy or of the use of mercury or teething powders. Nor, indeed, were the conditions those of stomatitis, or mercurial, teeth. The defects occurred in pairs of teeth, and did not damage the whole row. Nor were the first permanent molars—the test teeth of the mercurial set—involved. I have in several other examples of craggy teeth been assured that the peculiarity was in the family. I feel certain, therefore, that we must admit inheritance as an occasional explanation of peculiarities in the form of the teeth. I was once shown, in one of the Paris hospitals, a pair of teeth such as those which I have above described, and great surprise was expressed that I could not admit that they were characteristically syphilitic.

XXVII.—THE TONGUE IN LEPROSY.

The patient whose case supplies the preceding note, Mr. D., is at present suffering from a most severe development of tubercles over the whole of his face and ears, and he has at the same time lumps in his tongue. These lumps are chiefly in the middle region, posteriorly. They project as ridges and bossy masses, which, in parts, look almost warty. There is a certain amount of induration in the substance of the organ, almost as far forwards as the tip. It is exactly the sort of ill-defined lumpy and ridgy induration which we often see in syphilis. There are fissures between the lumps, but no ulcerations. I have but very rarely had the opportunity of observing disease of the tongue in leprosy. I believe it is rare, for both at home and abroad I have seen many lepers.

XXVIII.—ON "GOING TO SLEEP" OF THE LIMBS.

The symptom which patients call "going to sleep" of the limbs, and especially when it occurs in the lower extremities, is one of considerable interest. It is a sort of numbness attended by defective perception of size, so that the limb feels unwieldy and large. There may be no actual anæsthesia, and no "pins and needles." An intelligent patient, whom I pressed to describe his sensations, said it was exactly like what one feels after the foot has been asleep from pressure on the chair, and the tingling of "pins and needles" has just passed off. The following case may illustrate this symptom.

A healthy-looking farmer, aged 40, came to me complaining chiefly of "sleepiness in his lower limbs." It had been present almost continuously for two years, being, however, at some times much worse than others. It gave him great annoyance, for although he could walk well and was accustomed to ride much on horseback, yet his legs never felt comfortable; they were always, as he said, numb, "just short of the pins and needles stage." The condition was pretty much the same in both the lower extremities, and did not affect any other part. The concomitant symptoms left no doubt that it was part of locomotor ataxy. The pupils were small and sluggish, the patellar reflex was absent, and severe pains had been experienced in the legs

on many occasions; the pains had been of the ordinary gnawing or burning kind, but it was interesting to note that they were as a rule worse in the daytime, and were better in bed. They were invariably worse when fatigued, and occasionally, when extra-tired, they had kept him awake all night. The legs were occasionally restless, and he could not keep them still for more than a few seconds at a time. The connection between the pains and want of rest was curiously illustrated by the patient's statement that if he missed an hour's sleep which he was accustomed to take in the afternoon, he invariably had a bad night from pains in the leg. It was his belief that iodide of potassium had frequently relieved his pains, but as they were of irregular occurrence, it was difficult to feel certain on the point. This patient's antecedents were of much interest, and I must suggest three causes possibly acting in combination as those to which his disease was due. He had suffered from syphilis fifteen years ago, he had been married three years, and he had on one occasion exposed himself to unusual fatigue, accompanied by wet and cold. From the occasion last alluded to he definitely dated the commencement of his ailment. He had been out at a sham fight with his corps of volunteers on a very cold and rainy day. He had been on his feet from eight o'clock in the morning till eight in the evening, wet through, and often standing still for an hour or two at a time. When he got home in the evening he found, for the first time, that the backs of the thighs were numb, and after this it soon extended to his legs. As regards the syphilis, it appeared that he had been well treated, and had no secondaries. He had one healthy child.

XXIX.—PERFORATING ULCER OF THE SEPTUM NASI IN A CASE OF COMMON LUPUS.

An interesting example of the perforating ulcer of the septum in definite connection with lupus came under my observation in March, 1886. Miss A. K., aged 30, was sent to me by Dr. Ransome, of Nottingham. She was a slim and delicate-looking woman, and although neither of her parents had died of consumption, several aunts, uncles, and cousins had done so. In early life she had suffered from chilblains, and for ten years or more she had been the subject of lupus. The disease had come to an end on her nose, having destroyed the tip and alæ, but leaving a sound cicatrix. On the right arm also there was a large area of sound scar, which had been left after lupus-ulceration. On her right cheek there was another large sound scar, but with a thick patch of non-ulcerated lupus growth, the size of a shilling, on one edge. This patch was of the ordinary, semi-transparent apple-jelly-like growth, and was conclusive as stamping the case one of common lupus.

I now come to the condition of the septum, which was the feature of most interest. There was a perforation large enough to have admitted a shilling, the front edge of which came to within an eighth of an inch of the columna, but without causing any deformity. Posteriorly its edge could be seen with tolerable ease, and although there was no thickening it was clearly not quite sound, for it bled on the slightest touch. At other parts the edge of the ulcer seemed quite healed. No bone had ever come away, and no disease could be discovered in other parts of the nares or in the mouth.

The case was a good one in proof of the association of common lupus with hereditary tendency to tuberculosis, and of the association of the perforating ulcer of the septum with common lupus. There was not the slightest reason for suspecting syphilis. Indeed the manner in which the ulceration of the tip and alæ of the nose had healed was quite conclusive as to its nature.

ON THE TREATMENT OF CONGENITAL DISLOCATION OF THE HIP, WITH TWO CASES.

By RICHARD BARWELL, F.R.C.S.,
Senior Surgeon to Charing Cross Hospital.

It is unfortunate that such a term as "congenital dislocation of the hip"¹ should be applied to a condition which is not a divulsion of parts previously in normal contact and relationship. Perhaps it may be that, in a few very rare instances of breech presentation, or of some cross-birth, a hip-joint previously normal may become luxated; but such cases—if, indeed, they occur—form but a minute portion of those that we see and know in practice by the name above given. Dislocation from intra-uterine arthritis is merely speculative pathology. The very vast majority of cases are instances of deficient acetabulum; in a certain number the head of the femur is also undeveloped and small; it is usually somewhat flat and misshapen.

¹ See Pathological Society's meeting, JOURNAL, April 23rd, 1887.

The degree of acetabular absence or deformity varies very much. In some instances there is merely a wide, shallow, triangular depression, without any projecting lip or margin; in other cases, a cavity of some depth but with little brim is present; yet this cavity is small and narrow, one of its normal constituents—generally the iliac—being excluded from its formation.

It is not, however, my intention minutely to discuss in the present paper the different anatomical abnormalities of so-called congenital dislocation. My present object is to relate certain cases of successful treatment, and to point out the clinical conditions which should render our prognosis hopeful or otherwise. Traumatic dislocation occurring during birth—which is an imaginable, if not an imaginary, lesion—might, no doubt, be reduced, if it were very soon discovered; but a congenital dislocation resulting from one of the defects in development above described is not amenable to such treatment; if we take reduction in its usual and customary sense—that is, a more or less rapid replacement and retention of the femur within its socket. The successful cases of treatment by M. Pravaz and by Dr. Buckminster Brown cannot properly be termed reduction. The former case was more than two years under treatment, and the result was not a replacement of the caput femoris into a cavity ready and fit to receive it, but the widening out of a previously narrow acetabulum. Formation of a new cavity on a previously flat, innominate bone is excluded by the remark that, when the femur was brought into place, the head seemed, after a few days, "tolerably fixed in position." This distinction is clinically most important, in the point of view both of treatment and of prognosis. The question is, can we distinguish during life such patients who have some acetabulum, however narrow, possessing a certain amount of projecting lip, from such as have, instead of a cotyloid cavity, a mere flat, or nearly flat, surface.

In all cases of congenital dislocation the thigh-bone is loose² on the pelvis in every direction save that of abduction, and there is a certain new mobility added, namely, when the child lies flat on the back one limb is found to be shorter than the other. This brevity can be increased by pressing the sole of the foot upward, and it can be diminished, or in some cases entirely eliminated, by drawing the leg down. If this task of manipulating the limb from the ankle be confided to an assistant while the surgeon keeps his hand on the great trochanter and pelvis, in such wise that he can detect the changing relationships between these parts, he will feel the former bone rise nearer to the crest of the ilium when the leg is pushed up, and recede further from it when the limb is dragged down. Moreover, in many cases he will observe, just at the moment when the limb is only very little shorter than the other, a peculiar and sometimes a well-marked impulse or jog. This the assistant will also feel, and he may at the same time remark that at this instant further descent of the limb is somewhat more resisted. In other cases no such jog occurs, but the limb glides down smoothly and evenly. This impulse is of a peculiar character, such as once felt makes a strong impression, and gives very plainly to the surgeon's hand the sense of some unevenness—of some ridge of bone. This jog or impulse marks, I believe, the presence of a certain amount of rim or lip of an acetabulum, imperfect, small probably, perhaps even partly filled with fibrous or granulation tissue; but, nevertheless, of one which may be enlarged and whose abnormal contents may be absorbed by continuous pressure of so fitting a substance as the head of the femur, if only continuous pressure can be maintained. Such were the clinical conditions in the two cases I am about to relate. But I would first point out that, although there is no spasm of muscles, there is, nevertheless, contracture, or, as Sir J. Paget would call it, "adaptive atrophy," that is to say, that the muscles have fitted themselves to the length of limb which subsists when the head lies on the ilium, and therefore are shorter than normal; it is this brevity which causes the thigh to shorten itself again when downward traction is abandoned. Also I may say that it is this muscular shortening which Pravaz and Brown overcame by long-continued traction, but which may be more quickly conquered by section, to the great saving in time and health of the patient.

A. T., aged 12, from South America, was brought to me on October 16th, 1883, by Dr. Robertson, of Dulwich. Her birth had been by head-presentation, nor was anything unusual observed until she was about two years old, when great slowness in learning to walk and much difficulty in balancing the body was noticed. She was, when I saw her, a stout, heavy child, large for her age. The symptoms, which need hardly be specified, clearly indicated congenital dislocation of both hips; the trochanters when she stood, or when, she being recumbent,

the limbs were pushed up, lay very close to the crest of the ilium; by downward traction those processes could be made to lie within a very short distance of Nelaton's line. Always, just as those parts were approaching that line, a distinct jolt could be felt; this was a little more marked on the right than on the left side.

In preparation for the proposed treatment, I had a firm belt constructed, to embrace tightly the pelvis, including the upper end of the femur, with understraps to prevent riding upwards; also the necessary appliances for prolonged weight-extension.

November 10th. With the assistance of Dr. Robertson, Mr. Braine giving ether, I operated thus: Dr. Robertson making traction and slight abduction of the left limb, I passed in a long tenotome, just outside the tendon of the adductor longus, and divided that muscle, the greater part of the short and large adductors, and the gracilis, keeping my instrument quite close to the pelvic bones. Downward traction still continuing, the rectus was observed to be very tight. I separated this muscle from the anterior inferior iliac spine, through a puncture on its outer side. The same was then done on the right limb, but, after dividing the above-named muscles, considerable tension of the gluteus medius seemed also to render section of that tendon desirable. The punctures were covered with plaster and collodion, and extension with a weight of 2 lbs. applied. No fever followed; the child had very little pain, and only an ecchymosis about an inch in diameter on the inside of the right thigh. She lay for six weeks very still, being docile and patient, the weight being gradually increased up to 4 lbs. within the first fortnight.

January 5th, 1884. I found, on cautiously attempting to press upwards the limbs, that very considerable resistance was offered; also in rotation the trochanter described an evident half-circle. Dr. Robertson undertook to see that passive motion in the manner agreed upon was carried out. I also gave orders for the construction of a machine, whereby she might get exercise without putting any weight on the hip.

March 5th. The machine answers perfectly—a sort of go-cart, with crutch-handles for the axilla, while she also supports herself by the hands on a frame of wood. With this she can go on the level; she is carried to and fro where this cannot be used.

It hardly seems desirable to carry out elaborate notes of this case. After using only this means of progression about ten months, she was allowed to have crutches, and after another period these were changed for sticks. I saw her in January, 1887, walking without support, and without limp or swaying of the body. In her clothes there was nothing unusual in her gait and mode of standing; when undressed, the projection of the nates was a little more marked than usual, but as she is fat and fleshy, it is difficult to say how much of this is merely due to size of soft parts.

F. C., aged 10, from Australia, was brought to me by his mother on May 8th, 1886. He had congenital dislocation of the left hip. The symptoms were unmistakable; on drawing down the thigh, a distinct and particularly marked jolt was felt, and at the same time increased resistance. Consultations were afterwards held separately with Sir J. Paget and Mr. Erichsen.

May 22nd. I divided the adductors and the rectus; it was not necessary to divide the middle gluteus. The child had no fever, and but very little pain; an ecchymosis about one inch and a half in a backward direction.

This patient bore the confinement well, but he was a gay, light-hearted boy, and did not keep quite as still as was desirable. Weight-extension up to 3 lbs. and the pelvic belt was kept up for five weeks. Upward pressure of the femur was at that epoch strongly resisted.

July 6th. I put on an instrument something like Pancoast's hip-splint, namely, a round steel rod, articulated by ball-and-socket joint to a metal plate at the hip, and also jointed in the sole of the boot. The metal plate was secured in place by a pelvic and perineal band, and when the instrument was in place, the rod could be lengthened by a ratchet arrangement. With this instrument, and with careful superintendence, he was allowed to go about, still wearing the belt. In the early part of August he went with his parents a tour in Scotland.

On September 30th, I tried his gait walking between two persons (without the instrument). I found that even with full weight on the limb the trochanter hardly yielded upward. The boy said he felt much more secure on the limb—felt firm and strong. After this, passive movement (the instrument being screwed to the full length of the other limb) was employed daily.

October 2nd. On this day I examined him very carefully; there was great resistant power at the hip; indeed it was impossible, unless

² Although it may be unadvisable to speak positively on this much controverted subject, yet I think I may state that I have seen two cases of, to say the least, very early luxation, or of luxation late in intra-uterine life; in both the thigh was much more fixed than in any of my other cases of congenital dislocation.

³ In order to avoid, in section of these muscles, subsequent subcutaneous oozing and ecchymosis, it is necessary rather to peel their origins from the bone, than to cut through the muscles themselves.

unwarrantable force had been used, either to press upward or to pull downward the great trochanter, which lay not more than one-sixth of an inch above Nelaton's line. He walked very well and straight arm-in-arm with persons on either side. I did not think it prudent to let him go alone. I also thought it advisable that he should wear the instrument on board ship.

Both these cases are in excellent condition; the former not leaving England, I have been able to watch longer; she is well able to go about, to take walks, to enjoy life, and has no limp. The latter I am sorry not to have longer under observation, but he was so firm and well on the limb that the result was most satisfactory.

AN OLD-FASHIONED METHOD OF TRUSSING RUPTURED INFANTS.

By WALTER PYE, F.R.C.S.,
Surgeon to St. Mary's Hospital.

THE difficulty of providing efficient trusses for the retention within the abdomen of the common inguinal hernia in infants, and especially in the case of very young infants, is too well known to stand in need of much insistence. All, even the healthiest of these patients, are incontinent, and in all the skin very easily becomes sore; but, in a large proportion of ruptured children, these difficulties are aggravated by their puny, ill-developed condition.

In most cases, no doubt, it is possible, by dint of great care on the part of the instrument-maker, to apply a spring truss of a Coles's or some similar pattern, neither so slight as to break within a week, nor so strong on the other hand as to render permanent the condition it is intended to cure; and it may be allowed, further, that abrasions may generally be prevented by great and constant care on the part of the mother or nurse, by frequent changes of napkins, careful drying and powdering of the skin, and so on.

But, for hospital cases, such carefully made spring trusses are too expensive for ruptures of ordinary severity, and those which are supplied, being of an ordinary stock pattern, are almost invariably too strong, exercising a pressure upon the soft abdominal tissues which is actively harmful. If they are not so powerful, the usual result is that they speedily break. In any event, the rate of growth of the pelvis of an infant is so rapid that in no case can a given truss be expected to fit for more than a few weeks.

It is, too, almost impossible for mothers who may have to earn their living, or who at least have to keep their house and family in working order, to devote a large share of their time to any unusual elaborateness in the toilet of the last arrival.

There are thus many objections to be urged against the use of spring trusses, although they are still the most generally used. A better pattern, in many cases, is that of an encircling strap of well-prepared rubber, with a pad inflated with air or filled with glycerine. If the rupture be double, the best shape is that of a horse-shoe truss, arching round the penis. This truss allows for tolerably rapid growth, and will retain most ruptures well enough; but in bad cases it is found that the necessary pressure involves an undue tightness of the whole girdle; moreover, even the best rubber is apt to perish by constant use.

The imperfections of the instruments are so patent, and the difficulty of properly trussing ruptured infants is a matter of such universal experience, that it is not a little curious that a method of treatment so simple and so generally efficient as the use of the woollen or worsted truss, now to be considered, should be still so little known as it is.

My own knowledge of it is derived from hearing Mr. E. Lund describe it in his Hunterian Lecture in 1885 (London: Churchill, 1886, p. 48) as an old and efficient treatment. Following up the reference he there gives, it will be found that the original account is given by William Coates, of Salisbury, who in the *Medical Times* for 1848 describes the proceeding as one employed by a "gude wife" in his neighbourhood, and says that its excellence is such that it is his duty to make it generally known. He states that the result of extensive trials has been uniformly a radical cure of the disease, and that it consists simply of a skein of Berlin wool, or, for infants, lamb's wool; this encircles the pelvis, one end is passed through the other at a point corresponding with the inguinal ring; the free end is carried between the thighs, and is fastened behind to that portion which forms the cincture. He says, further, that "This simple and cheap contrivance can be worn during the morning and evening ablutions, and then changed for a dry one. No attention is required on the part of the nurse, except at

the moment of changing, and with ordinary care the skin is never galled."

Mr. Lund's description (*loc. cit.*) is, it will be seen, similar, but more particular. "Worsted known as Berlin wool is made into a skein of twenty threads, which stretched out straight shall be about twenty-two inches long, the threads being tied across at intervals of two or three inches, to keep them together. One end of the skein is placed over the abdominal rings. The folded worsted is passed horizontally across the abdomen, over the line of the crest of the pelvis to the opposite side, round the hips, behind the pelvis and over the hip on the side of hernia. The folded end is then passed through the loop of the skein, and will here form a knot or bulged portion, which must be carefully adjusted so as to lie against the hernial opening, and, being carried down the upper part of the thigh between it and the scrotum (in the male), it is brought round the external side of the thigh near to the great trochanter, and there tied or fixed with a safety pin to the band of worsted already round the pelvis."

Inasmuch as ever since I heard this description I have used this method (with some slight modifications which I shall mention) of trussing infants, without, I think, a single exception, and as I have on no occasion felt tempted to revert to a more mechanical form of support, I ventured some few months back to ask Mr. Lund whether I might put on record from my own notes the results both as to the successful restraint of the hernia and the proportion of permanent cures. I asked him, also, whether he had any further suggestions which might be of help to me. Mr. Lund wrote to me in reply: "You will note that I was very careful to give the credit to the originator of the plan, but for years past—I almost think since the notice first appeared—I have referred to it in my surgical lectures and demonstrations. However, in spite of this, I have frequently had letters from old students, or from practitioners to whom I had shown the plan, asking how it should be done, they very generally getting 'muddled' as to the position of the loop or the length of the skein. I am glad you have found out a good quality of worsted which will wash and wear well, as I know this is a desideratum."

Mr. Lund also kindly offered me the use of the block for the accompanying illustration, which comes from his published lectures.

With regard to my own experience of the method, I find that I have employed it in altogether 73 cases, the ages of the patients ranging from 3 weeks to 5 years. The ruptures were in all cases inguinal. There were four apparently ovarian, and in two only was there a rupture on both sides. As to the retention of the rupture by the truss, I know of four cases only where it failed. One of these was the case of a syphilitic infant 4 weeks old, with a double inguinal and an umbilical hernia, which died of mal-nutrition and marasmus a week after she was brought to the hospital. Another was in a child 5 years of age, with a large hernia which no truss had retained, and for the cure of which a radical operation was afterwards performed. In the other two cases the mothers did not seem willing to undertake, or mentally capable of understanding, a manoeuvre in itself as simple as most other stages of the dressing of a baby.

On the other hand, in one case of a child 5 years old, sent up to me for an operation for radical cure in consequence of repeated failures in trussing, the worsted skein retained the rupture perfectly, and a cure soon resulted. It must be allowed, however, that the number of failures may be a little larger than my record shows, for, of the total number, eight did not appear in my out-patient room after the first time, so that for them I can only speak to the fact that at the time of first application the worsted appeared efficiently to restrain the descent of the rupture. In all of the 61 remaining cases the skein truss was found to be a permanently efficient method, except in the other case of double rupture, in which the two skeins which were required, although they retained the herniae, were too cumbersome and awkward.

With regard to the question of cure, it is, I suppose, within the experience of every surgeon that, if a rupture in an infant be properly