splint. The pressure was relieved at times by small tufts of cotton-wool, and by wearing an old splint at night; but, during the latter part of the time, nothing was worn at night—thus, abrasions from continued pressure were avoided entirely.

The patient now walks well, and is not particular as to distance; but still wears a contrivance to support the knee-cap, and limit the movements of the joint. The advantages claimed for the appliance are these.

1. As soon as the primary inflammation has subsided, and the apparatus firmly and properly adjusted, the patient can begin to move about, and in a short time follow his usual business pursuits.

2. The long confinement to bed is avoided; thus the patient retains his health and strength; and the condition is more favourable to the repair of tissues.

3. Easy adjustment of fragments, and the keeping of them in good position, without fear of slipping when the patient is walking.

4. The slight movement of knee in walking about prevents a stiff joint, and keeps up sufficient activity in the parts to complete the union.

Lastly, but not least, as far as the patient is concerned, the "doctor's bill" is reduced, as he will require much less attention.

I consider the case here mentioned to be a good test case for trying the merits of the invention; for, if the surgeon can secure a good union in a re-fracture, and under such adverse circumstances, surely the results will be far superior in the case of primary fracture.

SEA-SICKNESS.

By T. M. KENDALL, B.A.Sydney, L.R.C.P.Ed.

MANY remedies have been suggested for the prevention of, and much time and patience have been expended in the attempt to relieve, sea-sickness. During a recent voyage, I had under my care about 200 cases of sea-sickness, and, from treating them, I learnt the following facts.

Many people, as soon as sea-sickness commences, have recourse to oranges, lemons, etc. Now oranges are very much to be avoided, on account of their bilious tendency, and even the juice of a lemon should only be allowed in cases of extreme nausea.

Champagne, too, is a very common remedy, and, without doubt, in many cases does good; but this appears to be chiefly due to its exhilarating effects, as, if it be discontinued, the result is bad, and a great amount of prostration follows.

Cresate is a very old but still very good remedy, and, in cases accompanied by great prostration, is very useful; but, if given in the early stages of sea-sickness, it is often followed by very bad results, and even increases the nausea.

Bicarbonate of Soda is useful in slight cases, as it relieves nausea, and checks the frequent eructations which often follow attacks of sea-sickness; but, in severe cases, it is absolutely useless, and, in fact, it very often prolongs the retching.

A very good remedy in the earlier stages of sea-sickness is a teaspoonful of *Worcester Sauce*. How this acts I cannot say; but it, without doubt, relieves the symptoms, and renders the patient easier. Its action is probably of a stimulant nature.

Hydrocyanic Acid is of very little service, and most acid mixtures are to be avoided, except that perhaps, for drinking purposes, when it is best to acidulate the water with a small quantity of hydrochloric acid.

Of all the drugs used, I found that the most effectual was *Bromide of Sodium*. When bromide of sodium is given in doses of 10 grains three times a day, the attacks entirely subside, the appetite improves, and the patient is able to walk about with comfort.

In all cases of sea-sickness, it is very desirable that the patient should take sufficient food, so that at all times the stomach may be comfortably full, for by this means, overstraining during fits of retching is prevented, and the amount of nausea is diminished. The practice of taking small pieces of dry biscuit is not of much use; as, although the biscuit is retained by the stomach, yet the amount taken is never sufficient to comfortably fill the stomach. Soups, milk-puddings, and sweets are to be avoided, as they increase the desire to be sick, and are followed by sickening eructations. Fat bacon is easily borne, and does much good, if only the patient can conquer his aversion to it. When taken in moderate quantity, it acts as a charm, and is followed by very good results.

But of all food, *Curry* is the most useful in sea-sickness, and is retained by the stomach when all other food has been rejected.

Next to curry, I would place small sandwiches of cold beef, as they look nice on the plate, and are usually retained by the stomach.

In conclusion, I would advise that brandy should be used very sparingly, as, in many cases, it induces sea-sickness; and its chief use is confined to those cases where the prostration is very great, and even then, champagne is more effectual.

ON OCCIPITO-POSTERIOR CASES.

By CHARLES ROBERT THOMPSON, M.R.C.S., Westerham.

THE occipito-posterior position of the fetal head is by far the most frequent cause of tedious, lingering, exhausting labours. This position is estimated to occur, at the beginning of labour, in about one of every four cases; as the head passes through the pelvis, rotation takes place in about ninety-six per cent. of these cases, the remaining four per cent. being expelled with the occiput still posterior.

In cases of the first and second cranial positions, as the head enters the pelvis, the occiput presses against the pubes, whilst the wide forehead is in contact with the posterior wall of the vagina. As labour proceeds, the forehead advances much more rapidly than the occiput, and occupies fully the highly sensitive (excito-motor) posterior vaginal wall, sweeping along and distending it as the head gradually extends itself in an arc of a large circle, of which the occiput pressed against the pubes is the centre, thus irritating and exciting the expulsive uterine efforts.

On the other hand, when the forehead is against the pubes, and the head being gradually forced downwards, the tendency is, not for the occiput to extend itself and sweep over the hollow of the sacrum, but for the forehead and face to be more and more advanced below the pubes; the relations of the head for its movement of flexion and extension (Tyler Smith) being reversed. Thus, the posterior vaginal wall is not pressed on; the expulsive efforts fail to be excited; and the labour is tedious, unless rotation of the head take place, when the forehead is brought into the hollow of the sacrum, and active expulsion generally follows.

The obvious remedy would be to pull down the occiput, to make it occupy the hollow of the sacrum, whilst the forehead is necessarily made to recede, the head being flexed forwards by the movement. It is not easy to accomplish this with the forceps; when traction is made, the whole head is advanced in its faulty position, and it is very difficult to bring the occiput down, to flex the head forwards.

I have for many years adopted the plan of delivering these cases with the whalebone fillet. The position of the head being exactly ascertained, the fore and middle fingers of the left hand are passed up until the posterior fontanelle is reached, and, if possible, are pressed against the occipital bone. The fillet, held in the right hand, is compressed, and advanced gently along the left palm and palmar surface of the fingers till it rests on the head. It is now allowed to expand, and is guided upwards and directed by the fingers until it is felt to embrace the occiput, on which it is generally possible to obtain a firm purchase. Gentle traction is then made during each pain, the fingers of the left hand being still on the head to inform the operator of its exact position; the occiput is brought down, the forehead recedes, expulsive pains are immediately excited (in some cases spontaneous rotation takes place, although this is rare), and the labour is quickly terminated.

I select a few, from among a great many in my case-book, as examples of the result of this treatment.

CASE I.—Second labour, at full term. Pains began at 4 A.M. At 10 A.M. I found the os dilated, the membranes protruding; the head at the brim, in the third position. I ruptured the membranes, passed the fillet over the occiput, and made slight traction with each pain, which brought the vertex down at once. Forcing pains were caused, which expelled the child at 10.15 A.M., with the face towards the pubes.

CASE II.—Ninth labour, at full term. At 4 P.M. I found slight pains, at long intervals; the os was half dilated, and the head in the fourth cranial position; the eyebrow was to be felt at the right side of the pubes. At 5 P.M. the os was fully dilated. I passed the fillet over the occiput, and made traction with each pain. The head advanced rapidly, and a large child was expelled, with the face forwards, at 5.30.

CASE III.—Twin case, at seven and a half months. The first child was a footling; the second child was in the third cranial position. There had been forcing, but inefficient pains, for some hours, under chloroform. At 5.45 I passed a fillet over the occiput, and made

traction during two pains, with no effect; then I rotated the head with the fillet, so as to turn the face to the left of the sacrum, and by the following pain, at 5.55, the child was expelled.

CASE IV.—Fifth labour, at full term. Small woman. The former labour was long and severe. At 10.15 A.M. I found the os dilated, the parts lubricated and soft, and the head at the brim in the fourth position. I ruptured the membranes and put a fillet on the occiput, making slight traction at each pain. The pains became expulsive directly; and, in twenty minutes, a large boy was born, with the face forwards.

CASE V.—Third labour, at full term. At 11.15 A.M. I found the pains regular, the os dilated, the vagina moist and capacious; the head coming in the fourth position. I ruptured the membranes, and put a fillet on the occiput. With slight traction at each pain, the child was born in seven minutes. In coming through the pelvis, the head rotated spontaneously, and was expelled with the face to the perineum.

CASE VI.—Third labour, at full term. I found the os half dilated, the head in the fourth position; the pains regular, but slight, and at long intervals. After she had walked the room an hour, I found the os dilated, the head at the brim, with the anterior fontanelle under the right side of the pubes. I passed a fillet over the occiput during a pain. At the next pain, with slight traction, the head came well into the pelvis. At the following pain, it distended the perineum, and, with a long expulsive effort, the child was born, face forwards, within ten minutes of the adjustment of the fillet.

SURGICAL MEMORANDA.

LIGATURE OF THE OCCIPITAL ARTERY: A DISSECTING-ROOM OPERATION.

SEVERAL operations are performed in the dissecting-room which are seldom, if ever, brought into more practical use. Properly carried out, at least two important purposes are served by their performance; surgical dexterity is acquired, and anatomy is learnt in a highly practical manner. To fulfil these conditions, the operation should not be too easy; it should present certain difficulties. If the ligature of an artery be in question, it is best to practise upon a vessel which is not too accessible. Definite landmarks should be obtainable, and the anatomy of the region should be well-marked and constant. The method of ligature of the occipital artery which is about to be described seems to fulfil these conditions. Its relations are very constant; its surgical landmarks are well defined; and it affords certain difficulties to be overcome. It possesses another advantage, from the point of view of a dissecting-room operation, that it requires an anatomical knowledge of a region of the body greatly overlooked by students. The reason for this may be, that no formal operative proceedings are undertaken in this region.

Before describing the operation of ligature of the occipital artery, it may be as well to glance at its anatomy. After its origin from the back of the external carotid, the artery ascends to the groove in the temporal bone beneath the mastoid process. After emerging from beneath this prominence, it lies in a triangle not usually mentioned. The boundaries of this triangle are as follows: above is the attachment of the splenius capitis to the superior curved line of the occipital bone and mastoid process; in front, the trachelo-mastoid; and behind, the complexus. The triangle is covered in by the scalp and splenius. In it, the occipital artery lies upon the occipital bone and superior oblique muscle. A line drawn from the apex of the mastoid process to the external occipital protuberance would indicate the course of the artery at this point.

To accomplish ligature of the occipital artery as it emerges from beneath the mastoid process, the following directions may be followed. The scalp having been shaved, an incision an inch and a half long should be made in the line of the artery from behind the mastoid process backwards towards the external occipital protuberance. To enable the operator to do this, the body must either be placed upon its face or the head turned strongly to one side. The scalp having been cut through, the fibres of the splenius are seen ascending, and should be divided layer by layer. The artery will be found beneath, lying in its triangle. No particular directions are required for the passing of the ligature. Although so briefly described, this operation will be found by no means easy to accomplish.

Circumstances can be imagined under which this method of operation might be of practical use. The thickness and great vascularity of the scalp would be sources of difficulty; but another

objection would certainly be, that, at the point of ligature, a branch is given off—the princeps cervicis. In practice, this branch might easily be included in the ligature.

C. B. LOCKWOOD, F.R.C.S., Surgeon to the Great Northern Hospital; Demonstrator of Anatomy and Operative Surgery in St. Bartholomew's Hospital.

THE INFLUENCE OF POSITION DURING MICTURITION AS AN ALLEGED CAUSE OF STONE.

IN THE BRITISH MEDICAL JOURNAL of June 30th, Surgeon Barnes, who appears to be serving in a part of India where stone is prevalent, attributes it to the combined action of hot curries, dāl (split peas), water of bad quality, and a squatting position during micturition, especially to the latter cause. India is, however, a large country, or rather collection of countries; and, while the factors he has enumerated are common to the whole of India, the prevalence of stone is far from being general. In the south of India the people eat hot curries, in which split peas are as common an ingredient as in Bengal; the water is, to my personal knowledge, no better than elsewhere, and the men, as elsewhere, micturate in the position which is only usual with women in Europe. And yet stone is remarkably rare; the series of the *Madras Medical Journal* would show that it is a rare disease among the thirty or forty millions of southern Indians. My own impression is that stone is very prevalent in certain districts of northern India (in the N. W. provinces if I mistake not), but not elsewhere. Mr. Barnes is probably stationed in one of those districts. I can imagine that a Hindoo medical graduate visiting the hospital at Norwich might attribute the prevalence of stone to the unnatural English mode of passing urine standing, acting on constitutions predisposed by a diet of beef and beer; but a more extended acquaintance with European hospitals would show him the error of his reasoning. After all, the error is of the same class as that which commonly ascribes the goitre which is endemic in some parts of India to the use of water containing salts of lime in solution; this idea would have been dispelled by examination of the drinking water in parts where goitre was unknown, for comparison with the results of examination in the places where it was endemic.

EDWARD NICHOLSON, S.Sc.Camb.,
Surgeon-Major, A.M.D., Guernsey.

DETECTION OF STONE IN THE BLADDER IN CHILDREN.

THE bimanual examination of the bladder of children, in cases of stone, is mentioned by a much earlier author than any of those referred to by Mr. Edwards in the *JOURNAL* of June 30th.

Celsus, the earliest writer who describes the operation of lithotomy, suggests that the proper subjects for it are children between the ages of nine and fourteen. He directs that, previously to being cut, the boy is to be placed in the lithotomy position, with assistants on each side to keep him steady. Then the surgeon, having carefully pared his nails, is to introduce first the index, and afterwards the second finger of the left hand, into the anus, and to make pressure over the bladder with the right. In this way, the stone is to be felt for and brought down to the neck of the bladder, and its general shape ascertained. If it be found to be oblong, it is to be placed so as to come out endwise; if flat, in a transverse direction; if larger at one end, the smaller end is to be placed to come out first. Celsus later on says that the operation for stone must not be undertaken till the calculus has been actually felt by the fingers, although other symptoms should indicate its presence.

EDWARD E. MEERES, M.D., Plymouth.

OBSTETRIC MEMORANDA.

CASE OF PROTRACTED GESTATION AND UNUSUAL WEIGHT OF THE CHILD.

ON the 15th of April, 1883, I was engaged to attend a stout healthy young woman, aged 23, in her second confinement, which was expected about May 20th, her last period having occurred on August 16th, 1882, and, according to her own statement, she quickened a few days after Christmas last. The labour, however, did not set in until June 20th, 1883, at 10 A.M., and delivery was completed at 3 A.M. on the 21st *idem*.

It was prolonged in the second stage, and the head rested on the perineum for fully two hours, though the pains were very strong during the whole time. The head presented in the first