until the 28th, when at 2 P.M. he grew so much worse that, after some consultation, as a *dernier ressort*, a fine trocar and canula were introduced into the right pleura by Mr. Pollock. The canula was suffered to remain in the wound quite half an hour, and about seven ounces of greenish serum drained off. Subsequently fluid continued to ooze, until a total of sixteen ounces had flowed out. At 5 P.M. he expressed himself easier, and certainly his respiration was less impeded; and during the 29th he was cheerful, until delirium came on at night. He gradually sank, and died on December the 1st.

The examination was made thirty-six hours later. The trocar had passed far back in the seventh intercostal space. There were a few tubercles at the apex of the left lung. On cutting into the cavity of the right pleura, a considerable quantity of air made its escape. The cavity was much enlarged, its lower part contained some serum, and a large quantity of recently effused lymph was spread over the pleural surface of the lung, especially below. Towards the posterior part of the upper lobe the pleura was perforated by a hole nearly of the size of a fourpenny piece. This was found to correspond to a small vomica, which lay close to the surface of the lung in this position. There were two or three other small vomicæ in this lung, and a tolerably copious deposit of crude tubercle. The lower part of the organ was consolidated by pressure, and sank in water. There was a considerable deposit of tubercle in the liver, which weighed 4lb. 12oz. The kidneys were lobulated, large, and coarse. The spleen was softened. There was no ulceration of the larynx or intestines.

REMARKS. Although in pneumothorax the prognosis, on perforation of the pleura occurring, must depend on the state of the opposite lung, and must be favourable or otherwise accordingly, yet in acute phthisis, more especially should extreme distress of breathing occur, it may be very advisable to puncture the thoracic parietes, thus relieving the patient from imminent danger, and possibly prolonging life for a few hours or even days, a matter which is sometimes of the utmost importance in private practice. Viewed under this aspect, the results in the present case may afford the practitioner ground for less hesitation in plunging a *small* trocar into the chest, although only temporary ease can be given.

III. GLOSSITIS.

Under the care of W. E. PAGE, M.D.Oxon.

[*Communicated by* G. G. ROGERS, M.D., *Medical Registrar.*]

C. G., aged 40, a groom, was attacked with face-ache on November 26th, and on the 27th found difficulty in articulating. There was no soreness of the throat, but pain at the angles of the lower jaw, and a feeling of fulness in the throat. On the morning of the 28th his tongue swelled, and became very painful. He stated that a cat bit him in the palm of the hand on the 22nd, and that he sucked the wound, and to this he chose to attribute all his symptoms. His pulse was 76, and quiet; bowels open. The tongue was much swollen and painful, and filled the mouth so that it could not be protruded, and it was covered with thick mucus. There was intense pain on the left side of the face, around the ear, and over the temple; the submaxillary gland was also swollen and tender. He was ordered to use an inhaler; beef tea was given; and he took every six hours acetate of ammonia draught with antimony and nitric ether.

November 29th. Mr. Hawkins made a deep incision along the left side of the tongue where the swelling was most marked. The wound bled freely, and relieved him. In the course of the day two three-grain doses of calomel were given.

November 30th. The tongue was again freely incised, and five grains of calomel given, followed by a senna draught.

December 1st. A great quantity of dead cellular membrane covered the surface of the tongue. Underneath this the incisions were healing rapidly. The swelling had diminished, but he could still swallow fluids only.

December 5th. He was able to partake of solid food, and he left the hospital on the 9th quite recovered.

REMARKS. True idiopathic glossitis is of sufficiently rare occurrence in our hospitals to render every case coming under notice worthy of record. That this was such an one there can be no doubt, although at first, from the pain at the back of the fauces, and in the submaxillary regions, Mr. Hawkins was inclined to look upon the case as originating in some form of diphtheritis. But the manner in which the inflammation yielded to the treatment led to the abandonment of this view. It is the opinion of some that it is impossible to have glossitis without inflammation of the adjacent mucous or submucous structures, but this has not been an accompaniment in our medical wards; and Mr. Hewett tells me that amongst his surgical patients he has by no means as a rule found the two to coexist. Where they do the whole disorder may generally be traced to irritation from ptyalism.

In connection with this subject, and as illustrating the benefits which result from free incision, I may mention the following case which occurred in my father's practice during the past summer.

A young woman put into her mouth a piece of bread in which a wasp was concealed. Although the attendance was immediate, very great swelling and inflammation of the tongue had at once been set up. The whole neck and chest were as red as in a person suffering from scarlatina; there was extreme pain, and inability to swallow or articulate. The tongue was freely scarified, giving instant relief; an opiate was administered; and rapid recovery followed.

Original Communications.

ON DISEASES OF JOINTS.

By HOLMES COOTE, Esq., F.R.C.S., Assistant-Surgeon to St. Bartholomew's Hospital, and to the Royal Orthopædic Hospital, etc.

I. REMARKS ON THE OPERATION OF RESECTION OF THE HEAD OF THE FEMUR.

I PERFORMED, in the month of September 1857, at St. Bartholomew's Hospital, the operation of resection of the head of the femur on a pallid and emaciated boy, who had been suffering from disease of the hip, of two years duration, followed by dislocation of the head of the bone into the sacro-sciatic notch; the formation of numerous abscesses, which had left profusely discharging fistulous passages; permanent flexure of the femur on the pelvis to more than a right angle; and great distortion of the spine. The particulars of the case have already appeared in the pages of another Journal where it has been correctly recorded as one of the successful instances of the performance of this operation; and so, indeed, it may be termed; for the patient has since improved in health, the fistulous passages have healed up, the limb is coming into its proper position, and the curvature of the spine is lessened. But I write this to record a protest against the very operation which I have performed, being convinced that very many of the evils ensuing from hip-disease, especially in young subjects, and nearly all those which are supposed to indicate the propriety of resection of the head of the femur, are due to pressure and friction between the opposed ulcerating articular surfaces, which, by the application of proper instruments, and by a due appreciation of the value of patience, admit of removal more often than is supposed. And here I may remark, that surgeons would do well to study again the anatomy of joints, and the signification of the different ligaments. The researches of the Webers have not received due attention; nor have many subsequent monographs been read. It will not be generally believed that the thigh cannot be bent backwards on the pelvis—that it is immovably fixed when it falls in a straight line corresponding with the axis of the trunk. When the lower extremity is thrown backwards, as in the act of kicking, the movement is between the pelvis and the lumbar vertebræ. Nor does the thigh admit of much rotation outwards, the ilio-femoral ligament restraining motion in that direction. When the limb is extended on the pelvis, the articulating surfaces are firmly pressed together; but when the thigh is bent forwards on the pelvis, and the limb is inverted and adducted, the articulating surfaces are held loosely together; and the movements are unchecked, inasmuch as the posterior part of the capsule has no direct attachment to the femur, but forms a loose fold, like an orbicular ligament. How often do we read of bending backwards the thigh on the pelvis—of its free range of external rotation! How commonly is extension—*i. e.*, bringing the limb to the straight line with the trunk—practised in surgery! The first two movements are impossible without rupture of the capsular ligament: the last amounts to absolute cruelty to a patient suffering from ulceration of the bone.

To return to the operation of resection of the head of the femur:

The success which I have met with in the case above alluded to gives me no desire to repeat the operation; for more mature reflection and experience, combined with re-examination of pathological specimens, have led me to conclude that many of the morbid changes, and still more of the attendant suffering, are due to the imperfect carrying out of some of the most obvious and simple principles of treatment; namely, the proper application of warmth, perfect immobility of the limb, and relief of the articulating surfaces from friction and pressure. Moreover, when the head of the bone is exciting ulceration in the acetabulum, or pain and disease, after dislocation, in the neighbouring soft parts, the symptoms may be arrested, the limb may be brought into place, and the patient's health greatly improved by the application of an apparatus for extension—not forced or sudden, but slowly acting, and capable of direction in whatever way will draw asunder ulcerating and highly sensitive surfaces.

I shall be told that these principles of treatment have been long attended to. But I may question that fact. How many children, with incipient disease of the hip, have none other than their usual clothing? How often is it that the limb, somewhat colder than the opposite, has no flannel roller, nor the covering of leather or gutta percha over the joint? As for the repose of the limb, the child is daily taken from its bed to be washed and dressed, to pass its evacuations; and, among the poor, this movement goes on to a far greater extent.

I directed attention to these points in an article on Disease of Joints, which appeared in the *British and Foreign Medico-Chirurgical Review* in 1855; and I have seen no reason to change the opinion there expressed, that these points "merit, in their more complete and scientific application, greater general attention than they have hitherto received in this country."

I have not the space to enter minutely into the morbid changes in hip-disease of young subjects, concerning the origin of which so much has been written; nor to quote the opinion of those who, on the one side, say it is originally an inflammatory affection of the synovial membrane, or, on the other, that it commences in the cancellous texture of the bones. Pathological investigation shows that, however analogous the constitutional peculiarity may be in all cases, the disease does not always begin in the same way. In many cases, the inflammation of the synovial membrane goes hand in hand with a similar process in the spongy texture of the bones composing the joint; there are others in which the latter morbid changes are either absent or exist in a very slight degree. The destruction of the ligamentum teres, the exudation of pus in the bones, the ulceration of the cartilage, the separation of the epiphysis, are stages familiar to all; but the point to which I would direct attention is the following—that the more serious changes seem in great measure due to the rubbing of the ulcerated body surfaces—a process which keeps up the morbid action which is often the precursor of fatal accidents. How comes it that we sometimes find the base of the acetabulum perforated, with the head of the femur impacted in the hole (Museum of Royal College of Surgeons, No. 940); or separation of the three imperfectly united bony elements of the acetabulum, the ilium, ischium, and pubis? Is it probable that the matter, which in McDowel's case communicated with the small intestine and external iliac artery, and in R. Adams' case found its way into the vena cava inferior, would have made a passage into the abdominal cavity, had the head of the femur been prevented from rubbing against and ulcerating the acetabulum? I cannot but think that, if care to prevent these accidents be not taken, the patient is spared some risks by the actual dislocation of the bone from its articular cavity. Preparations are to be seen in the Museum of St. Bartholomew's Hospital, where the shaft of the femur had been slowly driven into a cavity in the cancellous texture of the ilium, near to the acetabulum.

The instrument in use at the Royal Orthopædic Hospital for slowly drawing the femur, when dislocated, to its proper place, or for keeping up slow extension, combined with immobility of the limb, when the head of the bone still remains in the articular cavity, is described in Mr. Tamplin's work on *Deformities*, p. 38; or may be seen at the maker's, Mr. Fergusson, of Gilt-spur Street. It is fixed to the pelvis, and attached by a broad webbing strap to the abdomen. From this a steel bar passes down the outer part of the thigh, where it is fixed by a broad leather strap. Three screws at the junction of the steel bar with the pelvic band allow of three movements—1. Flexure; 2. Abduction; 3. Elongation. "The foot, leg, thigh, and hip, must first be bandaged with a flannel roller; for, unless the natural temperature is kept up, the restorative process cannot go on." (Tamplin, *On Deformities*, p. 185.)

I will add, in conclusion, that this treatment may be daily seen in practice in the Royal Orthopædic Hospital; and that I should indisputably try it, not for weeks, nor even months, but for years, if possible, before resorting again to so serious an operation as resection of the hip-joint, which, however successful in its issue, leaves the patient in a crippled state for at least an equal period of time, and which likewise shows, in a large proportion of cases, a fatal result.

NOTES ON SEA-SICKNESS: ITS CAUSE AND ITS REMEDIES.

By J. C. NEILD, M.D., Riversdale, New Plymouth, New Zealand.

THE following notes were made during a sailing voyage to New Zealand, *viâ* the Cape of Good Hope, from June to September 1853, and occupying eighty-eight days from shore to shore.

From observations during a voyage to New Zealand, and from the remarks of others, it appears to me that the chief cause of sea-sickness is, primarily, mechanical; secondarily, physiological: whilst the cooperation of dietetic or other disorders may much aggravate the malady: and it further strikes me that, unless protracted by other agencies, its subsidence will be found commensurate with our becoming used to the motion of the vessel.

As preventives, simple diet, the avoiding of sweets and fat for a week or ten days before embarking, and the taking of a few doses of blue pill and Seidlitz powders during this interval, have been recommended. I have been unable to note appreciable benefit from these measures, the cautious and the careless seeming equal sufferers.

Another recommendation is that, on the supervening of nausea, one should lie down, and maintain the recumbent position; though for how long, is not told. I greatly doubt the wisdom of this: so long as one reclines, one escapes, to a great extent, the motion of the ship; but the needful seasoning is at the same time "shirked", or at the least postponed.

It will, I believe, be found that sea-sickness has its two conditions or stages; the first, that of excitement, in which the stomach is frequently and violently disturbed; and the second, that of habit, and some prostration: this stage being marked by retching, debility, and a sense of such misery and wretchedness, as to render the sufferer utterly indifferent to everything around him. The second of these stages is but the natural result of the first; and the first is the effect of the swinging and rolling movements of the vessel on the peristaltic action of the stomach, checking and reversing it.

If these views be correct, it follows that the cessation of sea-sickness must be looked for less from the operation of internal or external remedies than from as resolute an endurance of its cause as the sufferer can achieve. This principle is confirmed by the experience of sailors, and is in accordance with their advice; viz., persist in keeping up and moving about; take exercise; use exertion, if you can (supposing you are a passenger), because you must if you be a midshipman or sailor. Our worthy captain had his first fit of sea-sickness cured by being sent aloft when he seemed too ill for anything but to lie on the quarter-deck; and furling the maintopsail has cured many a youngster before and since.

Let us then assume that it is good to keep up and move about as much as possible, and that to yield to the inclination to lie down and keep quiet only protracts the suffering. I then proceed to consider some subsidiary agencies for better or worse.

1. *Diet.* The sailor will advise us, and correctly, to eat dry food, and avoid fluids. "Eat—get down something solid—if it be rejected, never mind. Eat again, of plain, wholesome things." My own experience coincides with this; my plate of soup has driven me from the dinner table; but this *contretemps* did not prevent my prompt return to a reasonable meal of solid food. But even this is to be taken *cum grano salis*. I query its applying well, if at all, to the first stage, and think it not available until the stomach has been fully relieved, and some degree of debility induced. Up to this point, demulcents, as gruel, arrow-root, and the like, will probably be best, and these, moreover, taken in the simplest form, without stimulants or spices, and with little or no sugar.