young surgeon at all events, his remarks are likely to bring confusion instead of light at a critical moment of anxiety. Here, Mr. Prescott Hewitt comes to our relief, for he plainly says, (Holmes' vol. II, p. 271) that in compound depressed cranial fractures without symptoms, "we are to operate, and at once." His reason being that intra-cranial suppuration is an almost certain result, but he makes three exceptions—1*st*, slight depression of thicker parts of skull; 2*ndly*, in driving over frontal sinus; and 3*rdly*, "should a compound fracture with depression chance not to fall under the notice of the surgeon until some days after the accident, he ought, if there are no signs of inflammation, to abstain from operating." Under this last exception our present case comes.

All the text-books convey the old principle that as little bone as possible should be removed by the operation. It is, of course, apparent that more bone than necessary should not be removed, but I think too much stress (I write as a junior for juniors), has been placed upon this rule. Surely, it is better to remove too much than too little. How would it have been in the present case to have left behind from timidity, hurry, the fear of making too large an aperature, &c, some of the spongy comminuted fragments, as might easily have occurred, at the ends of the fracture, where there was hardly any depression? The flaps can, without difficulty, except at their apices, be kept sufficiently close together to prevent bulging of the dura mater or brain substance, so that the loss or otherwise of a little additional bone support cannot make much difference. The object is to cure the patient, and not to speculate as to the amount of skull which will be left to him.

It is for a moment worth considering what might have been the result had this patient been trephined, immediately after the accident. We now know that the dura mater had been penetrated,—would not a hernia have been a very likely result, had the trephine been applied on January 3rd. If this question is to be answered affirmatively, we must doubt the wisdom of the universal application of Mr. Hewitt's rule to "operate, and at once." We all know, Colles' precept not to remove a penetrating fragment, when there are not urgent symptoms, for a few days till the brain substance has had time to consolidate. In this case, presuming the dura mater to have been penetrated in any case, I cannot but think the penetrating fragment proved, so to speak, of great use, though not by producing consolidation; but its result, *viz.*, the abscess, prevented apparently the possibility of hernia—a fact, if fact it be, accidental, and, of course, in no way bearing out Colles' theory; the opening into the dura mater going directly into the cavity of the abscess, had no pressure to support from inside as soon as the abscess was emptied; and that this cavity filled up slowly, and not from any sudden bulging of the brain substance into it, is apparent from the probe examinations noted. Probably connective tissue has filled up the gap. We can hardly doubt, too, that this abscess possessed a cyst of considerable thickness. All these circumstances were, it would seem, the cause of the absence of hernia cerebri.

The obscurity of the symtoms of approaching abscess of the brain is too well illustrated by this case.

The case appears to me to convey lessons of importance, 1*st*, that it is advisable in all cases where it is necessary to adopt such a proceeding, to make as minute on opening as possible in the dura mater; and 2*ndly*, that it is important in the after treatment of such cases to permit a perfectly free exit to the pus, by keeping the scalp flaps separated at the point of orifice of the abscess.

BARRACKPORE: *April 30th*, 1872.

CASES FROM PRACTICE.

By Assistant Surgeon K. P. GUPTA, M.B.,
In medical charge, Depôt, 4th Goorkhas, Bukloh.

CASE OF EPISTAXIS FROM LEECHES IN THE NOSTRILS.

LUTTA THAPPA, a Goorkha wood-cutter, came to hospital on about the 10th February last, as an out-patient, complaining of epistaxis, from which he had been suffering for about two months. He had lost a good deal of blood, and in consequence felt so weak and giddy that he was obliged to stop work, and to resort to medical advice. The native doctor before whom he presented himself examined his nostrils, and failing to discover anything, advised cold applications to the forehead and nape of the neck, and gave him an injection of alum lotion. Two or three days afterwards he came, and shewed a large leech which he had pulled out of the left nostril. He said, as he was lying down he felt something creeping in his nose, and as soon as the leech had protruded itself, he pulled it out with his fingers.

He also affirmed that there was still another in the same nostril, for he had felt something creeping within his nose after the exit of the first leech.

I examined his nostrils very carefully, but failed to see anything. As the man was positive in his statement, I directed the native doctor to inject a solution of turpentine two or three times in the course of the day.

The epistaxis was now greatly diminished, and he felt so much better that he was able to resume his work, and went to the jungles to cut wood. As he was engaged in cutting wood; and swinging his head and body backwards and forwards, a second (dead) leech was jerked out and flung on the log of wood he was splitting.

I need not here dwell upon the usual causes of epistaxis; but it will be admitted that epistaxis from the presence of leeches in the nostrils is a very rare occurrence.

The following is probably the natural history of the case.

The jungles, where wood-cutters gather wood, abound with leeches, which are generally very small, and like hair or very fine thread. Their common habitat is water or moist earth. When people out in the jungles feel thirsty, they usually close the two palms of their hands, so as to form a hollow for holding water, and dipping their mouth and nose, drink out of it. While the nose is in contact with the impure jungle water, the young leech imperceptibly finds its way into the nostrils. This is not an imaginary account, but a real fact, as many of the Goorkha sepoys have often assured me that they generally detect hair-like leeches in jungle water. Having once entered into the nostrils, a leech may easily find its way into the meatuses or frontal sinus. With regard to its nourishment, it has only to draw from its unfortunate host, and to suck his life-blood.

I imagine that so long as the unwelcome guest continues small, and is satisfied with very little blood, it causes no trouble; but when it grows and requires more blood to distend its capacious stomach, it begins to make the host feel its presence, and gives notice of leaving, though after having caused great annoyance.

In the present case, epistaxis had commenced two months before he applied for advice, and the quantity of blood lost, though at first inconsiderable, was latterly so profuse as to tell on him. He felt so weak and giddy that he was compelled to stop work.

The leeches must have perforated into the meatuses or frontal sinus, because the most careful examination failed to discover their presence. The two leeches, which came out, were of the ordinary size that are now occasionally used in our hospital, and consequently they did not feel quite so comfortable as when they first took up quarters. The turpentine injection might have had some influence in making their habitation disagreeable to them.

CASE OF GRAVEL.

On 17th January, 1867, H. N. B., a wing writer in a native regiment, was attacked, towards evening, with a severe, pain in the back, over the left lumbar region. The gentleman under whom he served gave him some anodyne medicine, and not being able to relieve his pain, sent him to the regimental hospital. A mustard plaster, applied by the native doctor, failed to give any relief, and the poor man screamed all night. The next morning, when the surgeon went round the hospital, two more sinapisms and some mixture were ordered. The pain became a little easier. He remained in the hospital for a few days, and was then discharged well, when he resumed his office work.

About three months after he had another attack, for which he was cupped. He would then suffer from similar paroxysms of pain, at intervals of two or three months. He remembers to have been free from pain only once for nine months together. But, in 1869 and 1870, he used to suffer once or even twice a month. He describes the pain as if a wooden peg was being driven "into the loins, and as if something was going to burst inside. Whenever he had the pain he became quite furious and insane-like"—would run about, and once or twice tried to destroy himself. For this latter object he once jumped into a deep well, but fortunately he was seen by some people, who dragged him up, and thereby saved him from drowning.

He tried both native and European medicines to no effect.

He had been under several medical officers connected with the regiment.

In December, 1870, I saw him for the first time in a paroxysm of pain, which he referred to a situation about midway between the margin of the ribs, posteriorly, and the superior border of the innominate bone. He was breathing very hard —rather panting for breath. He could not, I should say, continue in one posture for two minutes at a time; was constantly writhing and contorting his body.

Dry cupping was ordered. I asked the native doctor, who had seen the case from its commencement, about the former symptoms, treatment, and the opinion of the different medical officers who had seen him before me.

As usual with his class, he could not give satisfactory answers, but babbled something of muscular pain. I asked the patient about the nature of the pain; he described it as a tearing pain, as if something was bursting in his inside. I at once suspected gravel, and questioned him about his urine, and gave direction to collect it in a bottle. The next day it was shown to me: the urine was of pale color, without any sediment. When boiled with nitric acid, there was no albumen. I could not determine the other clinical characters, because native regimental hospitals are generally deficient in the necessary apparatus: there was not even a test tube in this particular hospital.

Assuming that the cause of the pain was the passage of gravel from the kidney through the ureter to the bladder, I ordered an alkaline mixture of the salts of potash. After taking the medicine for a few hours, the patient apparently felt benefited and the pain gradually left him; strict directions were given to collect all the urine, and to look for gravel. But no gravel was found. The potash mixture was continued for some time, but when the pain had quite gone it was omitted, and mineral acids ordered, following the recent mode of treatment of such diathetic diseases. After this he had another attack in the middle of February, which was soon relieved by the potash mixture.

On 2nd April, 1871, he experienced the severe pain and some difficulty in micturition. At last, towards night, he had complete suppression of urine. On the morning of the 3rd, he sent me a message that his urine had stopped, and he was in great distress. I could not go and see him at once, as I had to attend the annual invaliding committee then sitting, but I told my native doctor to take the catheter case to his house and await my return. He exceeded my instructions, and attempted to pass the catheter, which, after much difficulty, (because there was a large piece of gravel within an inch from the meatus) he succeeded in getting down into the bladder. There was some bleeding on the withdrawal of the instrument. The most curious thing was, that the native doctor did not feel the presence of the gravel, which had impeded the passage of the catheter, and I only wonder that he did not force it back into the bladder.

On my return, I took a No. 10 catheter, and on introducing the end into the meatus, I struck upon the gravel, which gave a metallic tinkling sound. I instantly withdrew the instrument and, explaining the matter, put the man under chloroform at his earnest request, and succeeded by a little manipulation in extracting the calculus with a pair of dressing forceps. It was nearly an inch long, ¼ inch broad, very rough, of dark-brown color—in short, a characteristic mulberry or oxalate of lime calculus. He passed a much smaller one in the afternoon with his urine.

I prescribed some mineral acid in a bitter infusion, and cautioned him against the use of sweets, acids, &c., &c.

It is more than a year, and he has been quite free from pain, and from any more gravel.

I have no doubt in my own mind that the gravel was the cause of the pain from the beginning of his complaint, and I believe that the medical officers who saw the case before me were probably of the same opinion. I heard from the officer whom he then served that the doctor whom I succeeded had told him that his Baboo was subject to gravel, though I could not find out, by strict enquiries, that the patient's attention had ever been drawn to the point. He must have passed, from time to time, some small piece of gravel after the attacks of pain, though he did not know it, because his attention had not been directed to the real cause of his malady. There is no history of gravel in his family.

Bukloh: *April*, 1872.

CHITTAGONG DEPÔT HOSPITAL.

SURGICAL CASES.

By Surgeon W. E. Allen, F.R.C.S.

I purpose to place on record some of the more important surgical cases which have passed through my hands whilst in medical charge of this hospital, in connection with the Chittagong column of the Looshai Expeditionary Force; and begin with the following short series of "gun-shot" wounds.

Case I.—Paul Sing, a Nepalese, aged 25, of one year's service in the "Hill Tracts" Police, received a bullet wound on 17th January, in an attack made on an outpost near Bunderbund, and was admitted into the depôt hospital, Chittagong, ten days afterwards, *i.e.* on 27th January. The ball had struck the back of his right hand, about the middle of the metacarpal bones, which had apparently escaped any material injury. The course of the ball had apparently been from the inner to the outer side; the extensor tendons of the middle and ring finger were completely divided, and that of the little finger partially so. A splint was placed along the front of the hand, and poultices applied till the wound cleaned, after which it was dressed with ordinary zinc wash. It progressed very favorably.

18*th March*.—Wound quite healed; to leave off splint and bandages.

22*nd*.—A small piece of bone extruded from the wound, which has re-opened to a small extent.

4*th April*.—Wound quite healed; is rapidly regaining power over the hand; power of extension of middle and ring finger is considerably diminished, but it is anticipated that he will be soon able to perform all his duties. Discharged.

Case II.—Goda Ram, a native of Gowhatty, aged 36, in an attack by Shindoos on the outpost Pindoo, received a bullet in his face: admitted into depôt hospital on 27th January. The ball had traversed the face from the right to the left cheek, ploughing up the hard palate in its course; it entered the right cheek immediately below the malar bone, traversed the floor of the nose, and made its exit at the left cheek, on a level with the ala of the nose, and just below and internal to the malar bone. In this course the bones were extensively fractured, a portion of the alveolar process on the right side, with the two bicuspid teeth attached, being driven inwards, and the hard palate on its oral aspect being extensively splintered; the portion of alveolus with teeth attached was removed, and the wounds carefully kept clean by means of a small syringe. He was therefore kept for many days on fluid food, and took large quantities of milk. He went on very well.

15*th March*.—Wounds entirely closed; there is considerable unevenness of the hard palate. On careful examination with probe, the nasal partition appears quite perfect, though in its course the ball must have passed immediately below it through the substance of the palate processes of the superior maxilla. On careful measurement, the aperture of entry is found to be 1¼ inch lower than that of exit. Can now masticate soft food.

3*rd April*.—Discharged to duty.

Case III.—Hera Sing, naick, aged 30, native of Comillah, was wounded in the same affair as the last case, and admitted into depôt hospital on 27th January. A ball had traversed his thigh, just above the left knee, entering on the inner side and making its exit on the outer side, close to the upper edge of the patella. On admission, there was considerable swelling about the knee and some fluid in the joint, which it was at first thought had been opened. A back splint was applied and cold water assiduously used; the swelling quickly subsided, and it became evident that the joint had escaped injury.

He made a good recovery, and returned to duty on 11th March, there being scarcely any stiffness remaining.

Case IV.—Jai Narain, aged 20, wounded in an attack on an outpost near Bunderbund; admitted into the Chittagong depôt hospital on 27th January. A ball had traversed the outer aspect of the right fore-arm, about two inches below the elbow joint; the wound granulated quickly, but there was for some time difficulty in fully extending the fingers, in consequence, probably, of the *extensor communis digitorum* having been partially divided. This difficulty, it was anticipated, would soon disappear, and this was the case; for, on the 11th March, he was discharged to duty, having regained complete use of the hand.

All the above injuries seemed to have been inflicted with a small round ball, which accounts for the small amount of damage done to the bones.

In my next communication I hope to give the particulars of a case of resection of the elbow joint (for disease) which has done remarkably well.