On the next day, July 3rd, she appeared a little better; respirations 25 to 30; pulse 120. The stopper was withdrawn, and the remainder of the pus, nearly a pint, was evacuated; whilst this was being done, air entered freely into the chest. The affected side was now examined; the dulness of the lower part, anteriorly, was replaced by a degree of clearness greater than natural; the tympanic sound in its upper part was much less marked; respiration could not be heard, anteriorly, in any part of it; the metallic tinkling continued, but the *bourdonnement* was faintly heard; the heart's beat was felt to the right of the sternum; her extreme prostration of strength was then alarming; the redness of her tongue, irritability of her bowels, and want of appetite, prevented us from giving her very nutritious food, obliged us to be very cautious in the use of stimulants, and induced us to omit the morphia. Six or eight ounces of highly offensive pus escaped every morning when the stopper was taken out of the tube.

On the 6th, her perspiration being profuse, we directed that she should be sponged, night and morning, with a nitro-muriatic lotion.

On the 9th, she appeared a little heated, her tongue was very red and glazed, and

On the 10th, diarrhoea came on; this was checked by chalk mixture and hydrocyanic acid, and rice-jelly as food.

On the 12th, the tongue became apthous, evacuation offensive, and the pus withdrawn in the morning smelled strongly of sulphuretted hydrogen; her countenance was anxious, and her feebleness as well as emaciation were so alarming that Mr. Wigan and I were convinced she must soon sink, unless some other measures could be adopted to increase her strength, and enable her to bear up against the daily drain upon her system, caused by the secretion of several ounces of purulent fluid; and as the weather was fine, we resolved to try the effects of the open air. She was carried down stairs, and laid upon a sofa for a couple of hours in the garden at the back of her father's house, and she seemed so much revived when she was brought to her bed-room, that she was taken into the garden daily. In a few days she could sit up, and she was then drawn out in an easy chair.

On the 16th, she was driven out in a close carriage, though the discharge was, on that morning, thin, bloody, and offensive.

On the 21st, she was taken, in an invalid carriage, twenty-six miles into Essex, and bore the journey well; but her mouth being apthous, and tongue red, one grain of oxide of silver, and one-sixth grain of sulphate of copper, were given three times a day.

Next day she was very much depressed; the discharge from the wound was copious, and more offensive than usual; tongue red, and bowels irritable.

On the 24th, she appeared very ill, and a pint and a half of foetid, sero-purulent fluid was evacuated. The bowels being still irritable, the medicine was repeated. The chest was now measured over the ensiform cartilage, and the left side found to be an inch and a half smaller than the right.

On the 25th, a remarkable change for the better took place. The fluid evacuated was much less in quantity, thicker, and less offensive, and her bowels were quiet.

From this day she went on gradually improving; she took a drive out daily in an open carriage; ate tolerably heartily, and slept well; the *bourdonnement* ceased to be heard; the discharge became every day more serous; the piece of gum-elastic catheter was withdrawn, and a piece of rolled lint introduced; the unnatural clearness of sound on the upper part of the left side gradually lessened, but no respiration could be perceived on the anterior part of it until the end of August, when it began to be faintly heard at the apex of the left lung; but the position of the heart, even at that period, remained little altered.

During the month of September, attention was devoted to her general health; she took little medicine, and vesicular respiration became gradually more perceptible in the left lung.

On the 5th of September, about half an ounce of healthy serum was evacuated; the heart had then moved considerably towards its natural position, and a probe could not now be passed an inch into the pleura.

After this period, the discharge soon ceased, and the wound was allowed to close. She began to ride on horseback, and went to Brighton, on the 29th of September, for change of air. She returned on the 28th of October. I saw her a few days after, when I found her looking healthy and well; the drooping of the left shoulder was slight, the curve of the spine was trifling, and the heart was nearly in its proper position.

On reviewing the circumstances of this very interesting

case, it will be observed that no expansion of the affected side had been noticed at any time, and that a contraction of it, to the extent of an inch and a half, had taken place on the 24th of July. How is this consistent with the notion that air had entered through an opening in the pleura? That there was air in the pleura was evidenced by the preternatural clearness and total absence of respiration in the upper part of the left side. It must have been generated either by the decomposition of the pus which was found in the pleural cavity, or have entered through the lung. The absence of all odour in the air which escaped when the fluid was evacuated, is opposed to the first supposition, and the *bourdonnement* which was heard, distinctly, though faintly, favours the second. It appears to me that the opening in the pleura was so small, that very little air could enter its cavity; that the adhesions of the lung along the back prevented that small quantity from dilating the side, as it usually does; and that the extending of those adhesions, together with the falling in of the thoracic parietes, effected its contraction. Had the air been produced by the decomposition of fluid, I think the lung would have expanded as soon as that air had been withdrawn, and respiration would have been heard in the anterior part of the chest; whereas several weeks elapsed before it could be even faintly, and a still longer time before it could be distinctly, heard in that situation. The sound of air entering the lung seemed to extend gradually from the posterior to the anterior part of the chest, as if the adhesions which had taken place in the former situation had been creeping forwards, and bringing the lung everywhere into contact with the parietes. It will also be observed that the *bourdonnement* had ceased some time before respiration could be perceived in the place where that sound had been heard; consequently the opening which it indicated must have been closed either by cicatrization or the formation of a false membrane, and not by the adhesions of the pleura. The entrance of air into the pleura in this case did no harm whatever, for the fluid which was discharged from it gradually diminished in quantity, and improved in quality, till it became serous.

The affected side now measures as much as the other, and no curvature of the spine has taken place. There is reason, therefore, to believe that the lung has been restored to perfect health, has expanded to its original size, and that the thoracic parietes have again become dilated.

The successful issue of this case affords a strong argument in favour, not only of tapping, but of leaving the wound open, in similar instances. This lady is now, in 1851, a handsome, well-made, healthy young woman, without a trace of her former malady.

Upper Brook-street, 1851.

ON TWO CASES OF STRANGULATED HERNIA.

By JOHN MOUNTFORD, Esq., M.R.C.S.,

HOUSE-SURGEON TO THE LONDON HOSPITAL.

SOME short time since, I took advantage of your pages to record what to me seemed a very valuable case of strangulated hernia. Two cases have occurred lately, in the practice of this hospital, different in character, and, I am happy to say, in result, which tend forcibly to illustrate one point in the remarks which I appended to the former paper—viz., the importance of operating early; not that I would advocate haste, or give less than their fair value to the means most likely to promote reduction; yet I would at the same time express my firm conviction, that if the knife were in many cases used more promptly, life would more frequently be saved.

Maria B—, aged thirty-eight, was admitted, Dec. 3, 1850, with a small tumour in the right groin, presenting the characteristics of a strangulated femoral hernia. She stated that she was the subject of double rupture, the hernia on the left side having existed upwards of twenty years; that on the right, for fourteen years. Until within the last two years and a half, neither had given her any trouble; but since that period she had been compelled to wear a double truss. For about three weeks previous to her admission, she had suffered from an attack of rheumatic fever, which compelled her to keep her bed. A week after she was laid up, she found some difficulty in returning the hernia on the right side, and this continued until Saturday, Nov. 30th, when she was attacked with great pain throughout the whole abdomen, but more particularly about the umbilicus; she was troubled with a sense of fulness, and nausea came on in the course of the day, succeeded by vomiting; yet her bowels continued to act up to the time of her admission, and even once after. When ad-

mitted, she complained of great pain in her back and abdomen, and the vomiting continued. The tumour was about the size of a small walnut, very firm and incompressible, and being evidently one of the class of herniæ which is so much damaged by delay and the unnecessary use of the taxis and its auxiliaries, I deemed it proper to send for the surgeon of the week. Mr. Luke being absent from home, Mr. Critchett attended, and having examined the case, at once advised an operation, which was, after some hesitation, consented to. An incision was made, about an inch and a half in length, commencing an inch above the upper margin of the tumour; the subjacent cellular tissue and fascia were then divided down to the sac. Mr. Critchett passed his finger to the seat of stricture. (which was in this case Gimbernat's ligament,) and returned the gut without opening the sac. There was a little arterial hæmorrhage; but as no vessel could be perceived, the wound was plugged with lint. The patient was then placed in bed, and ordered an opiate.

December 4th.—She has passed a favourable night. The lint was removed, and the edges of the wound brought together. She continued to go on well, with the exception of a little return of her rheumatism, and a slight attack of diarrhœa, until January 15th, 1851, when she was discharged cured.

The second case, which was under the immediate care of my colleague, Mr. Prater, presented some similar features. The patient was a woman, aged 47, who had been the subject of hernia for four days only, having first perceived it while carrying some water up stairs, following her occupation of a nurse. On examination, a tumour about the size of a bantam's-egg was found in the right groin, not very tender, but tense and unyielding. She complained of pain over the whole abdomen, and had vomited frequently during the day. The bowels had been relieved in the course of the morning. Mr. Curling, who saw her shortly after her admission, recommended the use of ice, and requested, that if after the lapse of a few hours, this produced no effect, Mr. Critchett should be called, as the latter gentleman had seen the patient previous to her coming to the hospital. The symptoms did not abate, and Mr. Critchett, on examining the patient, recommended an operation, which was at once proceeded with. After the preliminary steps, Gimbernat's ligament was divided, but the hernia could not be returned, and Mr. Critchett, on passing his finger backwards, found the obstruction to be a small band of condensed fascia, on freeing which, the gut was reduced without opening the sac. The after-treatment was much as usual, and the patient left the hospital cured, January 15th.

In each of these cases it will be perceived that the bowels were relieved a very short time before the operation was performed, and in neither was the sac opened. It is only, I think, by collecting a number of cases, that the relative value of operating with or without opening the sac, can be determined; and a wish to prove the superiority of the latter operation must, in some measure, be my apology for troubling you with this paper.

London Hospital, 1851.

P.S.—I find, by the record of operations, that Mr. Luke has operated on seventeen cases of femoral hernia since 1843. In fifteen of the cases the sac was not opened, and but two of them proved fatal.

POISONING BY THE BITE OF AN ADDER.

By GEORGE LAMBERT, Esq., London Hospital.

HAVING observed in THE LANCET a statement of a case of poisoning by the bite of an adder, I beg to forward the following outline of a similar case:—

George R—, aged twenty-three, weaver, was admitted into the London Hospital, May 18, 1851, under the care of Mr. Adams. The patient states that while walking in Epping Forest, near Chigwell, he heard a rustling in the bushes, and on going to see what caused the noise, observed what he thought was a common snake. He attempted to catch it, and was bitten on the ring finger of the right hand. He was much alarmed at the time, and about twenty minutes afterwards vomited a large quantity of bitter yellow fluid; was much purged; had desire to micturate, but could not; felt very faint and sleepy, and seemed as though he were deprived of sight. A countryman who was near the place applied some adder's fat and chewed ash-leaf to the finger, but the patient did not experience any benefit. Being unable to procure any conveyance to London, he was obliged to wait till a cart passed, which took him to Ilford, whence he came by

rail to the hospital, which he reached about six hours after the injury had been inflicted.

Appearance when admitted.—The patient feels cold and sick; great anxiety expressed in the countenance, and the pulse small. The finger was white, but little swollen; the back of the hand very much swollen; red lines reaching to the elbow; forearm not much swollen or discoloured, but rather tender. A wet bandage was applied to hand and forearm, and the extremity was placed upon an inclined plane. Ordered three grains of sesquicarbonate of ammonia and an ounce of camphor mixture every four hours, and four ounces of brandy to be given during the night.

19th.—Ten A.M.: Has not slept; suffers no pain; pulse improved; arm much swollen and ecchymosed, the discoloration extending to the axilla; the glands in that region also much swollen and inflamed. Apply soap-liniment to the axilla; continue the medicines and bandage; also envelop the extremity in flannel. Nine P.M.: Inflammation subsiding; ecchymosis extended down the side to the crest of the ilium; bowels not having been relieved, one scruple of a powder composed of calomel with jalap is ordered.

20th.—Improving in health; ecchymosis deepening in colour.

22nd.—Quite well in health; arm and side of a deep purple hue.

24th & 25th.—The same.

26th.—Colour decreasing, and becoming browner.

28th.—The forearm and elbow feel very hard, and the patient complains of pain and stiffness on attempting to bend the elbow. Ordered the arm to be rubbed with soap-liniment. The discoloration and stiffness gradually disappeared, and the patient was discharged cured, June 3.

The circumstances which are the most worthy of remark in this case are the extreme prostration of strength and the extensive ecchymosis, which exceeded in intensity of colour and extent anything I have ever seen.

CASE OF COMPLICATED GUN-SHOT WOUND OF THE LEFT ARM AND SHOULDER,

FOLLOWED BY SECONDARY HÆMORRHAGE FROM THE AXILLARY ARTERY, AND THE SUCCESSFUL APPLICATION OF A LIGATURE TO THE LEFT SUBCLAVIAN ARTERY.

By JOHN CRAWFORD, Esq.,

ASSISTANT-SURGEON HONOURABLE EAST INDIA COMPANY'S SERVICE,
BOMBAY PRESIDENCY.

(Continued from p. 413.)

26th.—No re-appearance of the hæmorrhage; the patient passed a good night, and says his strength is considerably restored; appetite good; tongue white, but clean; no thirst or headache; pulse 118, firmer to the feel; countenance pale and somewhat anxious; wound over subclavian uniting kindly; removed the sutures this morning; old wound discharging bloody serum and unhealthy matter; left arm pale, but its temperature not diminished, and there is a slight purr or thrill in the radial artery, which occasionally amounts to slightly sensible pulsation; sensation in the hand and forearm remains as before the operation; no action of bowels. Ordered, infusion of senna, three ounces; gentian and quassia, of each one ounce and a half; tartrate of soda and potassa, half an ounce; tincture of senna, three drachms; solution of acetate of ammonia, six drachms. Mix: one ounce and a half to be taken every six hours until the bowels are opened. The mixture to be stopped so soon as one motion shall be produced.

27th.—The patient passed a good night, and the general symptoms are improved this morning. However, upon examination of the wound over the subclavian, I found that the discharge, though of a good colour, was *rather thin*, and the incision, which was united in its whole extent yesterday, had opened at two points, the edges of which were pale and flabby. The old wound had begun to resume a healthy action again; the arm still retained its warmth, and the same degree of sensation, and there was an occasional faint, but perceptible pulsation at the wrist, which was synchronous with the heart's action. There was also one good natural dejection, accompanied with tapeworm; no thirst; no headache; the skin soft, and not much beyond the natural temperature; tongue moist, slightly furred; appetite good; pulse 120, quick, but soft. The fracture is quite disunited, and the extremity of the upper fragment projects through the wound; nor have I considered it safe or advisable, since the occurrence of the hæmorrhages, to