

The operation performed by Mr. Heath is one suggested and carried into practice by Professor Esmarch, of Kiel, with most satisfactory results in cases similar to the following. In that gentleman's cases the operation was complicated by the disease having destroyed a portion of the cheek, which required a plastic operation for its restoration; but in Mr. Heath's, the sloughing of the integument had fortunately been of small extent, and had healed up with only a slight contraction and puckering of the angle of the mouth. So far as we are aware, Mr. Heath's is only the second operation of the kind undertaken in this country, Mr. Mitchell Henry having performed a similar one at the Middlesex Hospital a few weeks before, but that case terminated fatally from causes not directly connected with the operation.

Barton B—, aged fifteen, admitted July 1st, 1862, into Mark ward, with closure of the jaws. In the winter of 1855, the boy, whilst living in Cosham, Hants, suffered from extensive necrosis of the upper and lower jaws, but whether the direct result of a blow or the consequence of fever is doubtful. He came under the notice of Mr. Martin, of Portsmouth, in the beginning of 1856, and that gentleman removed several pieces of bone, including the first permanent molar and undeveloped bicuspid of the upper, and two temporary molars of the lower jaws of the right side, besides several smaller pieces. Contraction of the cicatrices within the mouth supervened, and he was unable to unclose the jaws. In this state he was sent up to Mr. Fergusson, at King's College Hospital, in July, 1856, and that gentleman divided the cicatrices within the cheek, and screwed the mouth open, but without permanent benefit; for in a fortnight his condition was nearly as bad as before, and he has for the last six years imbibed the whole of his nourishment between his teeth, or by putting soft food through an aperture between the teeth on the right side.

On admission, the mouth was firmly closed, the upper teeth overlapping those of the lower jaw. There was a cicatrix at the right angle of the mouth, and a dense band could be felt within the mouth on the same side. The boy was feeble, and complained of not being able to fill his stomach with food.

FIG. 1.



Fig. 1 shows his condition at this time, when it was only by drawing the lip down with the finger that the teeth could be brought into view, the lower incisors being partially hidden by the upper, which were closed firmly upon them.

On the 8th of July, the boy having been placed under the influence of chloroform, Mr. Heath made an incision, two inches long, at the lower margin of the jaw on the right side, in front of the masseter. The facial artery was divided, and a ligature at once applied; after which the tissues were dissected up, and the jaw exposed. The cicatrix of the lip having been divided so as to give more room, a narrow saw, with a movable back, was passed through the first incision, and up under the cheek, and a cut made in front of the rigid band of cicatrix and molar teeth. Mr. Heath soon found that he was cutting against a tooth imbedded in the jaw, and therefore at once removed it with the elevator, after which the section was rapidly completed. The mouth was now opened, and it was found that the jaw in front of the section was devoid of teeth for half an inch; the saw was therefore applied again immediately behind the canine tooth, and a wedge-shaped piece of bone re-

moved. The hæmorrhage from the dental artery was free for a moment, but was arrested by pressure with the finger. The piece of bone included the entire thickness of the jaw, and measured rather more than a quarter of an inch along the upper, and half an inch along the lower border. It contained the mental foramen, and the end of the fifth nerve. The wound was plugged with lint, a bandage applied, and the patient carried to bed. In the evening there was a little hæmorrhage, which was controlled by removing the plug of lint, and replacing it with a dry piece. The boy was comfortable, and able to take fluid nourishment. He was ordered twelve ounces of wine, and a morphia draught at night.

July 9 h.—Has had a good night. The face and jaw are tender and a little swollen. The plug of lint was removed from the mouth, as it produced pain.

10th.—Wound healthy. Ordered myrrh lotion to wash out the mouth.

14th.—Takes bread, arrowroot, and beef-tea. Is able to masticate readily. Ordered middle diet and extra bread. Can open the mouth to the extent of about an inch. The wound is granulating healthily, and the ligature has come away.

17th.—Ordered hard biscuit to eat, in order to exercise his jaw and keep his teeth in order.

24th.—State of mouth very satisfactory; he is able to open it to the extent of nearly an inch, though the movement is necessarily one-sided. The first molar tooth of the right side was seen growing into the mouth; it was therefore extracted by Mr. Clendon. Wound of face granulating.

Aug. 7th.—Discharged to go to Walton for a month. The movement of the jaw is most satisfactory. Wound healthy, but not yet healed. Health much improved.

Sept. 2nd.—Returned from Walton quite stout, and able to open his mouth most satisfactorily. When opened to its extreme limit (Fig. 2), the distance between the teeth is seven-

FIG. 2.



eighths of an inch. The amount of lateral movement is more than might have been anticipated, and the new joint gives no inconvenience. The amount of anæsthesia consequent upon the division of the nerve is very small, only extending close around the incision, where he has an occasional numbing pain.

GREAT NORTHERN HOSPITAL.

STONE IN THE BLADDER; LITHOTOMY; SECONDARY HÆMORRHAGE; PYÆMIC SYMPTOMS; RECOVERY.

(Under the care of Mr. T. CARR JACKSON.)

J. M—, aged thirty-six, a porter in the employ of a wholesale druggists' firm, which occupation he has followed for twenty-one years; is of strumous habit, and bears evidence of early rachitic disease of the lower extremities. In consequence of debility he was a trouble to his mother from infancy up to four years of age, and at that period he also suffered from calculous symptoms, such as passing blood with his urine, difficult micturition, and prolapsus ani, which continued up to seven

years of age. From that time up to twenty-five he scarcely felt any disturbance. He then married, soon after which he suffered great pain and difficulty in passing his urine, and urgent straining after micturition had ceased; the urine all the while depositing a copious sediment of a dark slate colour. During the last two years these symptoms have increased; and in August, 1861, after a long walk and drinking somewhat freely of ale, he had complete retention of urine which was relieved with the catheter by Mr. Greatrex, of Holborn. He resumed his work in a fortnight. In October, all these symptoms and attacks were renewed, and with such frequent recurrence up to the present time (April, 1862,) that Mr. Greatrex sent him to Mr. Jackson for examination, who, detecting the existence of a stone, admitted him into hospital for operation. The calculus was supposed to be round, and about an inch in diameter; it gave a clear ringing sound when struck, and was lying to the left side of the base of the bladder.

April 10th.—Mr. Jackson performed the lateral operation, using a staff of the largest size—a No. 14 (one, in fact, which belonged to the late Mr. Liston), and which readily entered the bladder,—and extracted a stone of the mulberry kind, round, hard, and tuberculated, weighing seven drachms eight grains. A little bleeding occurred in the evening, which, however, readily ceased on exposing the perineum to a current of air.

The patient progressed satisfactorily until the evening of the eighth day (April 17th), when he suddenly lost a large quantity of blood, perhaps fifteen ounces, by the wound, which depressed him greatly. It ceased, however, on the application of ice; and he was rallied by the administration of brandy in small and frequently-repeated doses, which was continued during the night in combination with tea, eggs, and milk. He was likewise ordered five grains of tannic acid every three hours.

18th.—At midnight about four ounces of clot were passed by the wound, into which a saturated solution of alum was injected.

22nd.—The hæmorrhage recurred this evening by clot estimated at six ounces, causing excessive pain and desire to pass urine, which gushed in great force from the penis and wound, extruding clot in abundance from the latter. Mr. Jackson therefore introduced a catheter by the penis, and having thoroughly washed out all the remaining clot, injected a strong solution of alum, which escaped by the wound. All hæmorrhage ceased from this time. The patient was collapsed, and apparently sinking; he rallied, however, considerably under the liberal use of support and alcoholic stimulus; but his pale, sallow, lemon-coloured aspect and anxious countenance, with hurried breathing, denoted great prostration of vital powers.

He continued much in this state until May 6th, when he had a severe rigor, lasting twenty minutes, succeeded by profuse sweating of an intensely sweet smell. On the 7th he had another rigor of fifteen minutes' duration, and one again on the 8th of twenty minutes. Examination failed to detect any collection of pus. Free discharge of urine occurred from the wound, the latter being flabby, bloodless, and patulous. The urine examined by Dr. Cholmeley was of low specific gravity, slightly alkaline from the presence of volatile alkali, with no albumen nor pus, and not much mucus; it effervesced freely with nitric acid, the deposit consisting of white amorphous lithates, crystals of the triple phosphate, a few epithelial scales, and uriniferous tubule casts. During this state of matters, he took freely eggs whipped up with milk, beef tea, mock-turtle soup, and brandy—of the latter from six to eight ounces per hour; also two grains of quinine, five grains of citrate of iron, and half a drachm of sulphuric ether, every four hours. This scale of support was steadily pursued for ten days, during which he manifested symptoms of broncho-pneumonia, which, however, never ran to excess, and which was treated by copious stipping with turpentine.

May 19th.—First signs of improvement apparent in diminished cough, expectoration, and sweating; the pulse had fallen to 100, and he had slept well; the countenance is improved, being less anxious, and of a healthier aspect; the wound also has put on a healthy granulating appearance, and urine passes freely both by it and the natural channel. The brandy was therefore reduced to six ounces, and two pints of stout substituted, and he moreover expressed a desire for, and partook of, some bread and fish.

From this time he gradually became convalescent, the wound ultimately healing firmly, and he was discharged with perfect power of retention on June 12th.

The chief points of interest in this case are—first, the occurrence of secondary hæmorrhage so late as the eighth and

twelfth days, without any adequate cause, no difficulty or delay having occurred either in the cutting process or extraction of the stone; secondly, the apparent existence of the pyogenic process, as denoted by the severe and recurring rigors, the great prostration, the profuse sweet-smelling sweat, but entire absence of suppurative foci, unless the broncho-pneumonia and its attendant expectoration be regarded as the representative of such formations; thirdly, the large quantity of nutriment and alcoholic support consumed; and fourthly, the perfect recovery.

GUY'S HOSPITAL.

SIX CASES OF STONE IN THE BLADDER OCCURRING WITHIN ELEVEN WEEKS; REMOVAL BY OPERATION; RECOVERY IN ALL.

(Under the care of Mr. COOPER FORSTER.)

THE following six cases of vesical calculus came under the care of Mr. Forster from July 14th to Oct. 3rd, one of them occurring in the Children's Hospital and the other five in Guy's. Four were submitted to the cutting, and two to the crushing operation, with the best results. In one (Case 3) a piece of bougie formed the nucleus. On a former occasion also a number of cases of stone in the bladder, following close upon one another, came under the care of the same gentleman during the summer months, which he attributes to the fact that in the warm weather the urine becomes concentrated, and therefore irritating, conjointly with the stone. Within the past three weeks many cases of stone have been submitted to operation in the hospitals of the metropolis.

The notes of the subjoined cases were furnished by Mr. Walter Thos. Beeby, Mr. Forster's dresser.

CASE 1.—Wm. T—, aged three years, was admitted into the Children's Hospital, Waterloo-road, July 14th, 1862, for stone in the bladder. He was submitted to the lateral operation, and a lithic acid calculus extracted. He was discharged cured on Aug. 2nd.

CASE 2.—Henry M—, aged twenty-five, admitted into Petersham ward July 27th. Lives at Ashford. Stated that he had been ill six years, but since childhood had been troubled with symptoms of stone. A singular fact existed in this case: a fistula had formed (evidently Nature's attempt to get rid of the stone), opening on the right of the perineum, and discharging urine. He was cut soon after admission, and the stone extracted. He progressed slowly, but favourably, with the exception that one testicle swelled, which, however, soon regained its normal size on the application of a lotion and bandage. He was discharged well at the end of September.

CASE 3.—George R—, aged sixty; lives at Deptford. Admitted Aug. 1st into Luke ward, where Mr. Forster performed lithotripsy. He had all the symptoms of stone in the bladder, but during the operation only very small pieces were broken off. It was ascertained, however, when the patient had been removed into Petersham ward, that some time previously he had made for himself a gutta percha bougie; that a child unfortunately mistook the instrument for a piece of pipe liquorice, and half divided the bougie with his teeth; and that consequently, on the man passing it into the urethra, a portion remained in the bladder. But this was not proved to be the case until a small piece of gutta percha came away in the lithotrite. The first time he passed urine after the crushing, a piece about an inch in length came away, after which he rapidly improved, and was discharged to attend as an out-patient. Several pieces of detritus came away also, and he is now free from stone.

CASE 4.—Towell Y—, aged one year, admitted July 19th, with symptoms of stone; but on account of ill health he was sent out for some time and readmitted Aug. 4th. A stone was extracted by the lateral cutting operation, about the size of a horse bean, with but little loss of blood. The patient, however, through want of power, had but a slow convalescence, and could not be discharged until after a somewhat longer period than usual.

CASE 5.—Richard B—, aged fifteen, admitted Sept. 17th. Two years ago he underwent the operation of lithotomy in India, when a moderate-sized stone was extracted. Since then he has suffered no pain until about two weeks before admission, when he was attacked with incontinence of urine at night and very severe pain. Mr. Forster extracted a very large