ANALYTICAL AND BIBLIOGRAPHICAL NOTICES.

ART. XXIV.—*First Medical and Surgical Report of the Boston City Hospital.*
 Edited by J. NELSON BORDLAND, Physician; DAVID W. CHEEVER, Surgeon.
 Large 8vo. pp. 688. Boston: Little, Brown & Co., 1870.

THIS volume has been issued, as regards mechanical execution and artistic illustrations, in so very costly a manner, as to justify the inference that this hospital has been endowed by the citizens of Boston with extreme liberality, thus presenting a striking contrast to the limited means of most other hospitals in this country, which, indeed, have not sufficient funds to satisfy the urgent claims of charity, much less to publish reports, except of the briefest kind and in the most modest style.

These reports were prepared by the medical staff at the request of the trustees of the hospital, who desired "an enlarged and consolidated report," which should be of general interest to the medical profession. The volume is prefaced by a history and description of the City Hospital, from which we learn that the building was begun in 1861 and completed in 1864, and consists of a central building which connects by corridors with two pavilions. It has also a contagious ward and out-patient building, a smallpox hospital, and cholera wards. The hospital accommodates 230 patients.

The opening paper of the volume is on—
Perinephritic Abscess; its Complications and its Treatment, by HENRY J. BOWDITCH. This extremely interesting paper is a clinical study of ten cases of perinephritis, seven of which are published for the first time. In none of the works on practice of medicine in our language is any but the most meagre notice of this disease to be found, and we therefore think that a sketch of its clinical history, diagnosis, and treatment will be of interest to our readers. For the material for this we are chiefly indebted to Dr. Bowditch's article, the title of which heads this paragraph, and to an extremely valuable paper on the subject by Trousseau, which appeared in *Schmidt's Jahrbuch* for 1865.¹

Perinephritis is an inflammation of the adipose tissue surrounding the kidney. As regards the locality of the disease there can be no doubt, and we are therefore surprised to find that Dr. Flint, an authority usually so very accurate, has defined it an "inflammation of the peritoneal covering of the kidney."²

The *clinical history* of the disease may be given as follows: If the perinephritis arise in the course of a kidney affection, we have the peculiar symptoms belonging to that affection, and in addition pain, swelling, and redness in the region of the loin. But frequently the kidney does not participate in the disease. In some cases it comes on after unusual labour; or it may be the result of injury. The disease usually manifests itself by slight soreness, or sharp, or it may be dull, heavy pain in the loin of the affected side. This pain may be paroxysmal, and it generally increases in severity up to the time of the evacuation of the abscess. In addition to the pain, there appear rigors, followed by fever and loss of appetite, weakness, and constipation. The urine is generally unaffected in cases uncomplicated with renal disease. In from about eight to fourteen days the characteristic local appearances set in—a tumour, evident to the sight and touch, in the normal depression between the crest of the ileum and the edge of the thorax, with redness of the skin, œdema, and

¹ Bd. 126, s. 299.

² Practice of Medicine, third ed., p. 745.

tenderness on pressure; finally, distinct but deep fluctuation is detected; or, instead of the fluctuation, we may only obtain a soft, slightly elastic, doughy feeling. In some cases which have been observed, the abscess was so large as to reach nearly to the umbilicus. The renal tumour, when there exists a passage between the abscess and the urinary tract, may diminish in size every few days, with a coincident increase of pus in the urine (as noticed every third day in Case 5 of Dr. Bowditch). Lameness, with contraction of the thigh, the result of the burrowing of pus along the course of the psoas muscle, was observed in a number of cases. With the formation of pus, hectic becomes marked, and delay in opening the abscess will now endanger the life of the patient.

The results which may follow in the course of perinephritis are various. Sometimes the inflammation undergoes resolution; most generally, however, it advances to suppuration, forming an abscess, which may point externally in the region of the loin; or in cases of delayed opening, the pus may burrow downward along the track of the psoas muscle to the groin, or pass around to the gluteal region, to the trochanter minor or the hip-joint; or it may obtain exit by perforating the bladder, vagina, or, very rarely, the colon. In two cases in which this last result ensued, emphysema of the cellular tissue was observed,¹ and was due probably to the escape of gas from the intestine. In other cases the pus advances upwards along the course of the diaphragm into the pleural cavity, constituting an empyema; or, if pleural adhesions exist, into the bronchi, giving rise to grave pulmonary symptoms. The emptying of the abscess by any of these ways relieves the abdominal symptoms, and the walls of the abscess may contract.

Of the complications which occur in the course of this disease, the thoracic are of most frequent occurrence; they may come on in an entirely insidious or latent manner, and they should always be sought for even when the symptoms point exclusively to the abdomen, because the fact of the existence of abnormal thoracic signs has an important bearing on the treatment and prognosis of every case of perinephritic abscess. On the other hand, the thoracic symptoms may completely mask the renal. In two of Dr. Bowditch's cases they were the sole symptoms for which he was summoned in consultation; "they masked all others, and had become in reality the most important, and alone called for treatment, and they were the chief cause of death."

The *diagnosis* of perinephritis rests mainly upon the peculiarity of the pain, the fever, and the inflammatory swelling. *Typhus* fever in its early stage has similar pain and fever, but has not the characteristic swelling. *Neuralgia* runs its course without fever. *Nephritis* and *calculous pyelo-nephritis* are accompanied with renal colic, violent nausea, and vomiting; the pain, however, leaves immediately after the passage of the calculus into the bladder, and only when the stone obstructs the ureter, so that the flow of the urino-purulent fluid is impeded, is the diagnosis uncertain. Under these circumstances, however, a pyelo-nephritis may lead to the establishment of a perinephritic abscess.² From *Hydronephrosis* and *cancer of the kidney* the diagnosis is not difficult, since both run an essentially chronic course. The former, it is true, yields a sense of fluctuation, but then the tumour is frequently lobulated, and runs its course without fever, and cancer is characterized by the hardness of the tumour and frequent and profuse hæmaturia. *Tumours of the liver* are movable with respiration. *Tumours of the spleen* distinguish themselves by their sharp boundary. *Perityphilitis* is confined to the right iliac fossa and the inferior pelvis, but rarely advances into the region of the loin, and there only can give rise to the symptoms of perinephritis. *Fæcal tumours* are preceded for some time by sluggishness of the intestines, and the tumour is hard on palpation, and diminishes after the use of purgatives. *Fæcal abscess*, if perforation occur, is characterized by the fecal smell and intestinal flatus.

Sometimes, as before mentioned, the symptoms of perinephritis, when seen in a later stage, are entirely masked by those of the complication. In two of Dr

¹ Schmidt's Jahrbüch., 1865, Bd. 126, s. 299.

² As observed in case 13 of Trousseau, op. cit. s. 302.

Bowditch's cases (cases 4 and 8), when called in, he found his patients suffering as in an advanced stage of phthisis, with orthopnœa, and at times having copious discharges of fetid sputa. From an inquiry into their history, he found that this condition was the result of the emptying of a perinephritic abscess into the lung.

The *prognosis* of primary perinephritis occurring in otherwise healthy persons is favourable, provided that the abscess is evacuated sufficiently early to prevent any complication arising. In other cases it depends upon the gravity of the complication.

The danger that exists of chest complications in connection with and in consequence of the abscess below the diaphragm is a point upon which Dr. Bowditch lays particular stress. "These complications are often very latent in their progress, and they really at times become the more important features of the case; they may sometimes cause death, and they are certainly liable to produce long-continued, wasting diseases, which have a very slow or, perhaps, imperfect cure, even if absolute death do not result with so-called tuberculosis of the lungs, etc."

The *treatment* should have for its object, if the patient be seen in the early stage, the resolution of the inflammation. To this end embrocations, subcutaneous injections of morphia or atropia, wet cups, flying blisters, etc., to the loins, and purgatives should be administered. If the inflammation should advance to suppuration, and the fever and chill increase, then, when the first physical signs of pus are present (swelling, œdema, pain, redness, fluctuation, etc.), the abscess should be opened. The importance of an early and thoroughly radical operation, whereby the pus in the abscess should be allowed to escape, is strongly urged by Dr. Bowditch. The operation, he thinks, may be required even before the common rules of surgery, as now held, would permit of it. These rules suggest delay till some pointing or actual distinct fluctuation occur in some part of the region occupied by the inflammation. This delay, if strictly adhered to by surgeons, Dr. Bowditch believes, will be fatal in its effects upon many future cases. The existence of thoracic physical signs is an important indication for the operation, as it proves that the inflammation is extending upwards, and might, at any time, show itself by very serious thoracic symptoms.

All of Dr. Bowditch's cases fully sustain the advice of an early puncturing, or more free laying open of the abscess. His ten cases he arranges into three classes: 1st. Those in which the pain, swelling, fluctuation, etc., in the renal region plainly indicated the operation, which gave immediate and great relief (two cases). 2d. Those where the indications for operating were much less—in which the tumour was deep-seated, was not distinctly fluctuating, was not pointed, and did not present any of the usual signs of a "ripe abscess," yet in all of them the operation was crowned with success (three cases). In two of the cases all serious symptoms disappeared after the operation, although no pus was discharged at the time, and the operators considered that their labours had been in vain. In this, however, they were mistaken, "for in both instances a suppuration was induced, under which the original tumour gradually melted away." 3d. Those in which no operation was performed upon the nephritic region (two cases). Death occurred in one case, and long-continued disease, with possible death by phthisis, may be the ultimate result in the other case.

The final inferences which Dr. Bowditch draws from his cases, and which will govern him hereafter in the treatment of perinephritic abscess, are as follows:—

"*First.* Operate as early as possible after a distinct tumour is formed, and the other signs seem not to militate against the idea of inflammation being its cause. Especially shall I urge this measure as soon as a tumour forms in the renal or the iliac region, extending from front to the back, and which is large enough to be felt easily in those parts by two hands placed, one in front of the abdomen, and the other in the renal region. I shall urge this, even if there be none of the usual signs of actual suppuration, such as fluctuation, pointing, etc.

"*Second.* For a still greater reason shall I urge the operation in such cir-

circumstances, if there be any affection of the corresponding pleura or lung, even if the thoracic symptoms be slight; and, *a fortiori*, if those signs be manifest and severe.

"Third. In case there be little or no discharge of pus at the time of the operation, I shall advise the keeping the wound open, and that suppuration should be promoted either by a seton or by tents, etc.

"Fourth. I would urge this early opening of the abscess in the same way, and for a similar reason, that modern surgery directs the free opening of a felon on the finger, to relieve the unusual distension of the surrounding parts, and to prevent serious burrowing of pus, and its getting into the peritoneum, bladder, or rectum, below, or into the pleura or lung above. * * * * If ever there be occasions for a *cautious boldness* on the part of a surgeon, these abscesses present them."

The mode of operating is of importance. In five of Dr. Bowditch's cases the bistoury was used, and a free incision made to a certain depth, opening the abscess in four of them, while in the fifth, neither by bistoury nor by the exploring trocar, subsequently passed in various directions, could pus be procured. In all, the operation was the first step toward cure, although in one (of the four) severe secondary hemorrhage occurred. In two cases the trocar was used, but in both the subsequent keeping open of the wound was found necessary. In one of these it was done by means of a seton three inches in length, and introduced ten days after the first tapping. As regards the relative value of the two modes of procedure, Dr. Bowditch agrees with Trousseau in deeming the bistoury the more dangerous, from its causing a liability to secondary hemorrhage; it is more speedy, however, though perhaps not more effectual, than the trocar or seton.

Of course the opening should be made where the tumour points. Dr. Bowditch advises that the renal region be chosen in preference to all others, in case the tumour lies in part in that region, for here there is less liability of wounding the peritoneum than when operating more in front.

Dr. Bowditch thinks that his arguments and conclusions in reference to perinephritic abscess are equally applicable to pericæcal abscess, and justify the following opinion: "1st. That abscesses about the peritoneal cavity tend usually either to death or long-continued disease; unless, 2d, an earlier operation be done than the usual rules of surgery will at present allow."

Cases of Pneumonia, by J. N. BORLAND. This paper is based on a study of 190 tabulated cases of pneumonia, admitted and treated expressly for this disease in this hospital in its first annum. Of these cases 118 were males and 72 females, and the average age of both sexes was $31\frac{1}{2}$ years. These cases of pneumonia, Dr. Borland states, are $19\frac{1}{2}$ per cent. of the entire number of patients (3709) admitted into this hospital, and "this may be taken as an approximation to the amount of pneumonia which ordinarily exists in this city." This startling statement we are happy to find the author's own figures disprove; he seems to have forgotten that lesson of his youth, which taught him that to reduce a vulgar fraction to a decimal, "divide the numerator by the denominator, and the quotient will be the decimal," which, the cases of pneumonia being $\frac{190}{999}$ of the entire number of cases admitted, would give us about $5\frac{1}{2}$ per cent. as an approximation to the amount of pneumonia which ordinarily exists in Boston. This percentage appears to be in excess of that which generally prevails in the large hospitals of other cities.

The cases of pneumonia were admitted according to seasons, as follows: In the winter, 62; the spring, 64; in the summer, 19; in the autumn months, 45. Pneumonia is thus seen to be most prevalent during the spring months, when dampness is superadded to a low temperature. 107 of the cases were of pure pneumonia, while 83 were complicated with other diseases, chiefly as follows: with phthisis, 22; pleurisy, 13; bronchitis, 5; rheumatism, 11; typhoid fever, 11. The duration of the pneumonia in these tabulated cases, calculated from its commencement (the rigor) to its disappearance (covering the time of convalescence) averaged in the uncomplicated cases, $34\frac{1}{2}$ days; in the complicated cases, 42 days.

Of the 107 uncomplicated cases 44 were double, 59 single, and in 4 the locality

is not stated. Of the cases of double pneumonia the two lungs were equally affected in 17; in 19 the right lung was most involved; in 8 the left lung. Of the cases of single pneumonia the right lung was involved in 40 instances, the left lung in 19. Of the 83 complicated cases 37 were double, 46 single. Of these cases of double complicated pneumonia the two lungs were equally affected in 17, in 9 the right was most involved, in 11 the left. Of the cases of single complicated pneumonia the right lung was involved in 22 instances, the left lung in 24.

Hence it will be seen that in the cases of uncomplicated pneumonia the right lung has shown the stronger tendency to become diseased in 59 cases, the left in 27; while in the complicated cases the right lung showed the stronger tendency in 31 (not 39, as stated in text) cases (37 per cent.), the left in 35 (42 per cent.). The small percentage in favour of the left lung observed in the complicated cases, it is thought, may be owing to the character of the complicating disease, which in nearly one-half of the cases was pulmonary, and of these 22 were phthisis. This view is strengthened by Dr. Bennett's statistics of his complicated cases, which show a much greater tendency to disease of the right lung only than exists in his uncomplicated cases. Thus in 25 complicated cases the percentage was as follows: right lung, 64; left lung, 20; both lungs, 16.

Dr. Borland's statistics give a smaller percentage of cases in which the right and the left lung are attacked, separately, and a higher percentage of cases in which both lungs are attacked, than those of other authors, as will be seen from the following table, which we have made. (In support of his own figures, the author states that in Dr. Flint's² cases the right and left lung suffered in "nearly the same proportion observed in our series," which, as will also be seen, is incorrect. Dr. Borland's arithmetic seems here to have again deceived him.)

Authority.	Number of cases.	Right lung, per cent.	Left lung, per cent.	Both lungs, per cent.	Reference.
Fuller	139	55 $\frac{1}{10}$	36 $\frac{6}{10}$	7 $\frac{9}{10}$	Fuller on Lungs, p. 243.
Fuller	1710	53 $\frac{1}{10}$	30 $\frac{1}{10}$	16 $\frac{3}{10}$	" " " "
Bennett	129	48	28 $\frac{1}{10}$	23 $\frac{1}{10}$	Bennett's Pract. Med., p. 698.
Flint	121	61 $\frac{1}{10}$	31 $\frac{1}{10}$	7 $\frac{1}{10}$	Am. Jour. of Med. Sci., N. S., vol. xli. p. 28.
Borland	186	33 $\frac{3}{10}$	23 $\frac{1}{10}$	43 $\frac{6}{10}$	Med. and Surg. Rep., Bost. City Hosp., 1st Series, p. 112.

In the above table are statistics of 2285 cases of pneumonia, in about 50 per cent. of which, in round numbers, the disease was limited to the right side, in about 30 to the left, and about 20 per cent. were cases of double pneumonia.

The greater proportion of these cases, the author states, have been treated by the restorative method of Dr. Bennett; the essential part of which "consists in the rest, nourishment, and support given to the body throughout."³ In addition, the "poultice-jacket" of flaxseed, which has been so highly, and we think justly, recommended by Dr. Chambers,⁴ was used in many cases. When convalescence seemed likely to be protracted from any cause, cod-liver oil, iron, quinia, etc., were given, as judged necessary. In a number of cases, wine of antimony was given in minute doses of six to eight drops every hour, with the belief that the capillary bloodvessels are reduced in size by the action of

¹ Practice of Medicine, p. 698.

² Am. Jour. of Med. Sciences, January, 1861, p. 28.

³ The Restorative Treatment of Pneumonia, by J. Hughes Bennett, M.D., 3d ed., p. 52.

⁴ Lectures Chiefly Clinical, by Thomas King Chambers, M.D.

antimony on the vaso-motor nerves, and that thus the inflammation is summarily put an end to. In the cases in which it was tried, the drug was found, the author states, to act like a true tonic. Its use, of course, rendered the treatment "mixed" and no longer purely "restorative," and its value we shall discuss further on.

The results of the treatment of the cases were as follows: of 190 cases treated, 152 were cured, 10 relieved, 1 not relieved (discharged by request), and 27 died; or one death to every $7\frac{1}{2}$ cases. Of the above cases 107 were uncomplicated; of these, 95 were cured, 2 relieved, and 10 died; or one death to every $10\frac{7}{10}$ cases. These statistics are far from being as favourable as those of Dr. Bennett, the advocate of "the restorative method." The restorative treatment (pure) in his hands has been attended by a mortality of only 1 death in every $32\frac{1}{4}$ cases. "But when it is considered," states Dr. Bennett, "that four deaths resulted from pathological complications unconnected with the pneumonia, this treatment may be said to render the mortality in true cases of pneumonia nil." Of 105 uncomplicated cases occurring consecutively in the wards of the Royal Infirmary of Edinburgh, under Dr. Bennett's care, during a period of sixteen years, all recovered. It is proper, however, to state that, as generally occurs in all similar cases, we know of no statistics of this treatment given by any other author, which are as favourable as those given by its chief advocate.

Of the 22 cases treated with minute doses of antimony frequently repeated, 17 recovered, and 5 died; or one death in every $4\frac{2}{3}$ cases; a result very similar to that obtained with large doses of tartar emetic by Rasori (648 cases with 143 deaths, or one in every $4\frac{1}{2}$ cases), and not so good as obtained by Thielmann (110 cases with 12 deaths, or one in every $9\frac{1}{3}$ cases), and by no means so good as the author himself obtained by the restorative treatment, notwithstanding his statement that "our cases treated in this way [with antimony] have been very satisfactory."

We cannot close our notice of this paper without adverting to the number of numerical inaccuracies which it contains. A statistical paper, above all others, should be free from such blots.

Treatment of Acute Rheumatism, by JOHN G. BLAKE. The author has tabulated in this paper 300 well-marked cases of acute articular rheumatism from over 500 admitted to the hospital during the first five years of its existence, with a view of determining the value of some of the methods of treatment now advocated. The treatment here used may be briefly divided into the alkaline and non-alkaline; the latter including iodide of potassium, colchicum, opium, guaiacum, syrup of lime, and blistering, according to the method of Dr. Herbert Davies.

The alkaline treatment of Dr. Fuller (see number of this Journal for April, 1869, p. 535, and July, 1869, p. 196), somewhat modified by the diminution of the dose (3ss to ʒij of salts of potassa and soda every three or four hours, until urine becomes alkaline), was used in 125 cases. The chief objection to this treatment was found to be the irritability of stomach and bowels to which the alkalies give rise when taken in doses of a drachm and upwards, and which rendered, in the author's experience, Dr. Fuller's treatment inapplicable to the majority of cases.

In all the cases attention was paid to local treatment, either by the application of opiated alkaline lotions, or of iodine, lanthanum, hot sweet oil, &c. &c. When a single joint, only, was affected, it was found that encircling the limb in its neighbourhood with blistering plaster, and producing decided vesication, did, in most cases, give prompt relief, if not permanent cure.

Of the 125 cases treated by alkalies 18 developed disease of the heart during their stay in the hospital; of these, 13 were endocardial, and 5 were pericardial; two of the latter terminated fatally. The endocardial murmur is said to have disappeared in seven of the cases before their discharge. The patients were detained in the hospital from seven to fourteen days after the rheumatism

¹ Op. cit., p. 46.

was cured. The average stay in the hospital of the patients under the alkaline treatment was 24 days.

By the non-alkaline plan 175 cases were treated. In 18 of these some form of heart complication was developed during their stay in the hospital, and in 5 of them the murmur had disappeared at the time of discharge. The average stay in the hospital of the cases under this treatment was 35 days.

From the above statistics it is evident that the best results were obtained from the alkaline treatment, and in the inference drawn therefrom as regards the value of the alkaline treatment, we are confirmed by the statistics of Drs. Fuller¹ and Dickinson.²

We regret that this paper, also, is blurred—we might even say, its value impaired—by numerical inaccuracies. The text, the tables, and their summary fail to agree in several important particulars; and errors discovered in some of the author's figures give us a feeling of distrust, unjust it may be, in the accuracy of all of them.

Treatment of Skin Diseases, by HOWARD F. DAMON. This paper is a report of the variety and number of skin diseases treated among the out-patients of the hospital. Eczema appears to have been the most frequent affection treated (about one-fourth of the entire number), then impetigo, syphilodermata, furunculosis, erythema, etc. As the treatment of the various cutaneous diseases which the author notices is not mentioned, we fail to see the propriety of entitling the article, "*Treatment of Skin Diseases*."

Typhoid and Typhus Fever, by J. BAXTER UPHAM. In this interesting article are tabulated 152 undoubted cases of typhoid fever occurring in 86 males and 65 females. The sex of one, a child, is not stated. The age was noted in 148 cases; the average age of both sexes was $22\frac{36}{100}$ years, being about one and a half years greater than the mean age of 1772 cases observed in the London Fever Hospital (twenty-one and one-fourth years),³ and nearly half a year less than the mean age of 291 cases observed in the Massachusetts General Hospital.⁴

As regards the season of the year when admitted, we find that 27 cases were admitted in the spring, 35 in the summer, 74 in the autumn, and 16 in the winter months. The average duration of the cases from the first access of the premonitory symptoms to convalescence was, for the males, $32\frac{1}{4}$ days; for the females, $36\frac{91}{100}$ days, being much larger than the average in 255 cases given by Jackson (22.019),⁵ or that given by Murchison (from three to four weeks). The average duration of convalescence was seventeen days.

Some of the more marked symptoms, in the early stages, were as follows, in the order of their frequency: Headache, chills, anorexia, pain in the back and limbs, diarrhoea (51 cases), malaise, sense of weakness, epistaxis, abdominal pains, vertigo, constipation (23 cases), etc. Of the more prominent symptoms, in the advanced stages, the following were noted in the order of their frequency: Rose spots, abdominal tenderness, constipation (63 cases); increased heat of surface, insomnia, tympanitis, cough, diarrhoea (48 cases); gurgling, flushed face, delirium, brown and dry tongue, etc. The large proportion of cases in which constipation existed in the advanced stages of the fever, is very unusual, and the author cannot otherwise explain the frequent mention of a symptom so much opposed to previous observation and experience, than by the "belief that in very many cases, absence from diarrhoea, or what would in most diseases be termed a normal quietude of the bowels, has here been put to the account of constipation;" but this explanation does not, to our mind at least, satisfactorily account for the unusual proportion noted. In but 7 of 100 cases noted by Murchison, did diarrhoea not exist at any stage of the disease; and in but 4 was constipation observed.

The average time at which the rose-coloured spots were first seen, was

¹ On Rheumatism, Phila., 1864, and Am. Journ. of the Med. Sciences, 1869, N. S., vol. lvii. p. 535.

² Lancet, 1869, vol. i.

³ Murchison on Continued Fevers, p. 409.

⁴ Report of Cases occurring in Mass. Gen. Hosp., by James Jackson, M.D., p. 25.

⁵ Op. cit., p. 31.

between the twelfth and thirteenth days, which is later than is given by Murchison (between the seventh and twelfth day, inclusive).

Of the 152 cases recorded in the tables, 131 recovered, and 21 died (13½ per cent.). This proportion is the same as was had in 303 cases treated in the Massachusetts General Hospital,¹ and is much less than was obtained in 2505 cases treated in the London Fever Hospital, in fourteen and a half years, the mortality there being 18½ per cent.²

The most frequent complications noted were pneumonia, bronchitis, and incipient phthisis. The treatment was mainly expectant.

The number of cases of *typhus* fever, of which a tabular history is given, is 38. Of these, 20 were males, 18 females. The average age of the cases was 25.66 years; of the 10 fatal cases, the average age was 36.12 years. 10 of the cases were admitted in the winter, 10 in the spring, 15 in the summer, and 3 in the autumn. The average duration of the cases, counting from the first appearance of the premonitory symptoms to the time at which convalescence was established, was 18.96 days.

Some of the more marked symptoms of the early stages were, in the order of their frequency, as follows: Headache, pain in back and limbs, anorexia, chills, increased heat of surface, malaise, constipation, soreness of muscles, vomiting; of the advanced stages, mulberry-coloured eruption, hot skin, brown and dry tongue, constipation, delirium, dusky hue, suffused eyes, sordes, flushed face, foul odour of surface. The onset of the disease was generally sudden and severe; the approach of convalescence was well marked, and heralded by a decided relief and subsidence of the symptoms; it was sometimes accompanied with profuse diaphoresis. The time of the first appearance of the rash was not noted with sufficient accuracy to warrant any reliable deductions. Murchison places it between the fourth and seventh days, usually on the fourth or fifth. Of the 38 cases, 28 recovered, and 10 died (26½ per cent.), a mortality in excess of that observed in the cases admitted in the London Fever Hospital from 1848 to 1862 (4787 cases with 1000 deaths, making a mortality of nearly 21 per cent.).³

The last medical paper of the volume, on *Peri-Uterine Inflammation*, by A. D. SINCLAIR, is a clinical report of 23 cases, which present details of much interest to the practitioner.

We have thus passed in review the papers which form the medical portion of the first series of the Boston City Hospital Reports; some of them, as our readers will see from the analysis given, are valuable contributions to medical literature, the others—we regret to be compelled to express it—do not come up to that standard of excellence which the nature of the volume, the resources of the hospital, and the reputation of its staff lead us to expect. I. M. H.

We shall now invite the attention of our readers to those papers which appear to be particularly addressed to *surgeons*. These papers are seven in number, and, with two exceptions (the reports of the Eye and Ear Departments), are all from the pen of the same writer.

On *Excisions of the Joints*, by DAVID W. CHEEVER. During the past five years, twenty-eight excisions of the larger joints have been done at the Boston City Hospital, and the ratio of mortality of the whole number is given as “.43 per cent.,” which, taken literally, would imply that about an eighth of one patient had died; by referring, however, to the cases as given in detail in the succeeding pages, our minds are relieved by finding that in reality eight patients died, the death-rate being, therefore (according to our computation), 28.57 per cent. The elbow was excised ten times, with four subsequent amputations, and two deaths (one after amputation); the wrist once, with a fatal termination; the hip eleven times, with four deaths; and the knee six times, with one death, and two subsequent amputations. The recoveries, therefore, were for the elbow, five; for the wrist, none; for the hip, seven; and for the

¹ Jackson, op. cit., p. 24.

² Murchison, op. cit., p. 217.

³ Murchison, op. cit., p. 528.

knee, three. Scrutinizing the hip excisions a little more closely, we find that of the seven patients reported as recovered, only *two* were able to walk without support, and had their wounds entirely healed; two more walked without support, though sinuses persisted; one walked with a cane, one with crutches, and one was still confined to bed when the report closed. Dr. Cheever differs from the majority of modern writers upon hip-joint excision, in advising that the greater part of the trochanter major should be left, and that the acetabulum should not be gouged, even although it be found diseased. On page 93, Dr. Cheever gives what professes to be a "résumé of all those who have published tables" of hip-joint excisions, beginning with Fock, and ending with himself; but ignores the table of 242 cases (nearly as many as are embraced in Hodges' and Good's tables put together), which were published in 1869, by a Philadelphia surgeon, in an obscure and now defunct serial, called the "Pennsylvania Hospital Reports," as well as the still more extended statistics published by the same writer in the number of this Journal for January, 1870 (page 209). The more recent statistics of Dr. Leisrink¹ have, we suppose, appeared since the termination of Dr. Cheever's labours; otherwise (being published in a foreign language, and at a distance of several thousand miles) the labours of the German surgeon would, we are confident, have received due notice.

This paper is adorned with one lithographic and two photographic illustrations.

Displacement of the Upper Jaw, by DAVID W. CHEEVER. In this paper, Dr. Cheever describes the case of a patient from whom he successfully removed naso-pharyngeal polypi, by the method known as *osteo-plastic resection*, on two separate occasions; in another case, in which the operation involved both upper maxillæ, death ensued on the fifth day. Dr. Cheever's operation differs from that of Langenbeck, in that while the latter surgeon temporarily displaces the maxilla *inwards*, Dr. Cheever bends it *downwards*, into the mouth. The patient being etherized, an incision is made from just below the inner canthus of the eye, downwards, following the naso-labial fissure, to the corner of the mouth; the inner flap being dissected up to the symphysis, and the outer so as to expose nearly the whole upper jaw, the maxilla is divided by a narrow-bladed saw, transversely, about half an inch below the floor of the orbit. The saw is then plunged into the zygomatic fossa, and the front and back walls of the antrum sawn through "*horizontally*," the line of section passing from just below the articulation with the malar bone, to the anterior nares at the lower end of the nasal bone. The central incisor of the affected side being extracted, the alveolus is divided with cutting-pliers, the hard and soft palate being untouched. Displacement is then readily effected by seizing the alveolar process with forceps, and depressing the bone.

By the term "*horizontally*," in the description from which that above given is abridged, we suppose *transversely* is meant; the application of a saw to the skull in a *horizontal* direction, might, unless the position of the head itself were carefully watched, lead to rather unpleasant consequences.

A lithographic plate accompanies this communication.

Reproduction of the Tibia, by DAVID W. CHEEVER. This paper contains an account of one case, with a brief reference to two others, in which subperiosteal resection was practised upon the shaft of the tibia. In the case which is given in detail, almost the whole diaphysis, together with the lower epiphysis, were removed, the length of bone excised being nine inches. Eight months after the operation there was considerable reproduction of bone, and the patient was able to walk by the aid of mechanical support. This case is illustrated with a lithographic plate and a wood-cut.

Ophthalmic Report, by HENRY W. WILLIAMS. This short paper gives tables of "ophthalmic operations" and of "ophthalmic out-patients from June 1st, 1864, to June 1st, 1869." The importance of the ophthalmic department of the hospital may be inferred from the fact that in the five years, the statistics of which are embraced in these tables, as many as 833 operations were performed,

¹ Archiv für Klin. Chirurgie, Bd. XII., Heft I., 1870.

no less than 269 of these having been for cataract. The results of the cataract operations were as follows:—

Operation.	Total.	Successful.	Unsuccessful.	Partially successful.
Flap extraction with suture .	102	85	9	8
“ “ without suture	104	87	10	7
Scoop extraction	12	9	3	5
Discision	51	43	3	20
Total	269	224	25	

“Those cases of extraction are reported as successful where the patient was able to read ordinary print.”

Our readers will observe, from the above statement, that Graefe's operation does not appear to have been resorted to in any case, while the results of the traction method (25 per cent. of failures) were certainly not very gratifying. With regard to the use of the *suture* after flap extraction, an addition to the ordinary operation, introduced by Dr. Williams himself, the author remarks that this “modification, * * * practised on a large scale at this hospital, has given such results as to encourage the hope that the safety of such operations may thus be increased.” Dr. Williams will pardon us for saying that the statistics here published do not seem to us at all conclusive upon this point—the extractions without the suture having furnished a slightly larger percentage of successes than those in which this modification was employed. In the hands of so skilful a surgeon as Dr. Williams, we doubt not that either plan might be adopted with equal safety; but we cannot help thinking, that, for less practised operators, every additional complication of the manual procedure is a positive disadvantage.

Report of the Aural Department, by J. ORNE GREEN. The period to which this report refers extended over $4\frac{1}{2}$ months only, the number of patients treated during this time being 158. A tabular list of cases is given, and some brief but judicious remarks are appended, in which the author discusses the treatment of aural polypus, of acute purulent inflammation of the tympanum, of catarrh of the Eustachian tubes, etc. In the treatment of the latter affection, Dr. Green has derived great advantage from the application of astringents by Gruber's method; this consists in injecting a small quantity of the medicated fluid through the nostril into the pharynx, the head being inclined to the affected side, so as to bring the solution into contact with the aperture of the Eustachian tube; by inflating the tympanum, a few drops of the liquid can be made to enter its cavity.

A curious case of *neuralgia* of the ear is mentioned, in which the pain apparently arose from and subsided with scrofulous inflammation of the cervical lymphatic glands.

Two Cases, by DAVID W. CHEEVER. I. *Encephaloid Tumour of Tonsil*.

II. *Occlusion of the Vagina*.
I. The first case is one of much interest. The patient was a sailor aged 43, who suffered from a rapidly growing tumour of the left tonsil, which after removal was found to be of the nature of medullary cancer. The treatment adopted in this case was excision by external section, and the result was extremely satisfactory, the wound closing entirely in thirty-one days. The operation consisted in making two incisions, one parallel with the fibres of the sternomastoid muscle, and another joining the first, and passing along the lower border of the jaw; the flaps thus marked out being dissected up, an enlarged and cancerous lymphatic gland was first enucleated, and the dissection then continued until the tonsil was reached; the digastric, stylo-hyoid, and stylo-glossus muscles were all divided, and the pharynx opened by picking apart the fibres of its superior constrictor with a director. The diseased tonsil was readily enu-

cleated with the finger. Twelve ligatures were required, and a single suture was used to close the transverse, or, as Dr. Cheever calls it, "horizontal" incision. Slight facial paralysis existed for a short time after the operation.

II. The result of Dr. Cheever's second case was as melancholy as that of the first was gratifying. Misled by the statements of the patient that on a previous occasion she had been operated upon with success, an attempt was made to reach what was supposed to be the os uteri, by dissecting between the bladder and rectum; the operation was brought to a sudden termination by the discovery that the peritoneal cavity had been opened, and death from peritonitis followed four days afterwards. A post-mortem inspection revealed a malformation of the womb, analogous to that described by Rokitsky as 'tripartite uterus;' the appearance of the specimen is shown in a wood-cut which accompanies the paper.

Surgical Abstract, by DAVID W. CHEEVER. In this paper of over 180 pages, Dr. Cheever discourses successively of aneurism, ligature of vessels, cases of cut-throat, tracheotomy, foreign bodies in the œsophagus, perineal section, lithotomy, radical cure of hernia, strangulated hernia, fractures, fractures of spine, compound fractures, and amputations. The limited space at our command forbids a detailed examination of this paper, which, we may mention, contains a number of tables compiled by Dr. Frank W. Draper, House Surgeon in 1868.

1. *Aneurism*.—Three cases of *popliteal aneurism* are narrated, one cured by the *flexion* method of Mr. Ernest Hart, and one by the application of *acupressure*; another case, treated by *acupressure*, having terminated fatally in the course of the fifth day. In a case of *innominate aneurism*, an operation was undertaken with the intention of tying the right common carotid and subclavian arteries; the carotid could not be found, and in passing the aneurismal needle behind the subclavian artery, the vein was ruptured, profuse hemorrhage ensuing, and cutting short the further progress of the operation; the patient died in two hours, not, however, Dr. Cheever thinks, from loss of blood, but from asphyxia due to the pressure of the aneurism on the trachea and recurrent laryngeal nerve.

2. *Ligature of Large Vessels*.—Thirteen cases, of which seven were fatal, are reported under this heading. The common carotid was tied four times, once successfully, and three times with a fatal result, in each instance from secondary cerebral complications.

3. *Cases of Cut-throat*.—Fourteen cases, with five deaths, are recorded. In one instance the pneumogastric nerve was severed, no marked symptoms occurring in consequence; the internal jugular vein was tied at the time of the patient's admission, and the common carotid six days later from secondary hemorrhage; death from pyæmia and cerebral abscess followed on the forty-second day.

4. *Tracheotomy*.—Fifteen cases are recorded, nine, with five deaths, being for croup, and six, with one death, for other causes.

5. *Foreign Bodies in the Œsophagus*. *Three Cases of Œsophagotomy*.—We observe with regret that the criticisms which we felt called upon to make (in reviewing Dr. Cheever's essay on Œsophagotomy) in the number of this Journal for April, 1869 (p. 511), do not appear to have given the author entire satisfaction; we regret this the more because it now becomes our painful duty to point out that, in the present version of his table of cases, Dr. Cheever has not profited as much as might have been hoped, from the suggestions which we then made to him. With regard to Syme's first and second cases, which we showed were "not fairly to be classed as cases of œsophagotomy," Dr. Cheever says: "We can only say that the distinguished surgeon places them under that caption in his works." With all due respect to Dr. Cheever, we think he might say more; he might say, for instance, that although Mr. Syme records these cases under the caption of "Œsophagotomy" (just as under the caption of "Fissure of the Anus" he records cases which he distinctly declares should be called, not fissures, but ulcers of the anus), yet that, in point of fact, in neither case was the œsophagus cut, the foreign bodies having escaped, in one instance partially, and in the other completely, through the walls of the gullet

into suppurating cavities from which they were removed. He might further add that, in recording these very cases, Mr. Syme asserts that "entring through the coats of a sound œsophagus, for the removal of some foreign body lying within it, is an operation that can hardly ever be required, since before it is warranted there will almost necessarily have elapsed such a period of time as must allow ulceration and suppuration to be induced by the intruder, compressed, as it cannot fail to be, by the surrounding muscular fibres."¹ Indeed, until Mr. Syme met with his *third* case, in which he really did perform a true œsophagotomy, he would appear to have entertained very much the same opinion of the operation as that held by Sir Wm. Fergusson, who, though he describes how "the proceeding may be done in the dissecting-room," at least implies a doubt whether it be ever really called for in the actual practice of surgery.²

To show his readers that his labours are appreciated abroad, if not at home, Dr. Cheever adds a note to the effect that his table "has been incorporated into the second edition of Holmes's Surgery in England, and also into M. Terrier's monograph in Paris." M. Terrier certainly does speak of Dr. Cheever's production with the characteristic politeness of a Frenchman, and yet in the same breath, as it were, claims to have added "*quelques faits*"—Dr. Cheever, indeed, confessing that one case has been added by the foreign author: Mr. Durham, who contributes to the second edition of *Holmes's System of Surgery* a most exhaustive essay on "Injuries of the Neck," says of his own table of cases of œsophagotomy, that (the italics are ours) "in compiling it, free use has been made of the table in Dr. Cheever's excellent monograph, *than which, however, it will, I believe, be found more correct.*" This sentence, we may add, is not quoted by Dr. Cheever.

We must give the author credit for his foresight in one respect, which is that in the present version of his table, lest he should be caught tripping as before in the matter of references, he prudently omits the references altogether.

6. *Perineal Section*.—We should like very much to know what Dr. Cheever means by the following sentence: "The operation for perineal section, however performed, has been disclaimed by the distinguished surgeon who gave his name to it," &c. If Mr. Syme is the distinguished surgeon referred to, and this seems probable from the somewhat confused manner in which "Syme's operation for perineal section" is mentioned, we need scarcely remind our readers that *perineal section*, properly so called (*i. e.*, external perineal urethrotomy without a guide), was a well-known operation long before the days of Syme, having, indeed, according to Thompson,³ been performed by Wisemau in the 17th century, and afterwards adopted by Solingen, Tolet, Colet, Petit, Ledran, Hunter, Grainger, Arnott, and many others; while "Syme's operation" (external perineal urethrotomy with a guide) was distinctly called by its introducer, not perineal section, but *external incision*, or *external division*; moreover, if Mr. Syme ever "disclaimed" this operation, the fact has escaped the attention not only of American surgeons generally, but of the most recent British authorities on the subject. With regard to "Cock's operation," which Dr. Cheever also calls "perineal section," it need only be said that Mr. Cock, in describing it, particularly deprecates any attempt to divide the stricture by perineal or other section, and, "for the sake of distinction," calls this method "tapping the urethra at the apex of the prostate, unassisted by a guide-staff."⁴ Mr. Cock does not advise to "make a bold thrust into the perineal centre, carry the back of the knife down upon the finger in the rectum, until we open the membranous urethra, and then guide the knife on into the bladder," but expressly recommends that with a *double-edged* knife the urethra should be tapped *behind* the stricture (the lower extremity of the wound reaching "to within about half an inch of the anus"), and that then the knife should be *withdrawn*, a *probe-pointed*

¹ Observations in Clinical Surgery, 1861, p. 95.

² System of Practical Surgery, 5th ed., p. 566.

³ Holmes's System of Surgery, 2d edit., vol. iv. p. 973.

⁴ Guy's Hosp. Reports. 3d ser., vol. xii. p. 272.

director guided into the bladder, and along the groove of this the canula passed, which is to be subsequently retained.

7. *Lithotomy*.—Five cases are reported, all being successful.

8. *The Radical Cure of Hernia*.—Twenty-five operations upon twenty-four patients (one having double hernia) are reported, Wood's method having been adopted in most instances. The twenty-four cases gave three cures, three "fair results," two deaths, and sixteen failures.

9. *Strangulated Hernia*.—Three cases were relieved by taxis, and ten were treated by herniotomy, the operation in seven of these being followed by death.

10. *Fractures*.—A table is given of 1046 cases of fracture. We cannot understand Dr. Cheever's arithmetic; 46 cases of fractured skull (on page 544) are reduced to 33 (on page 545); and the mortality of 12 cases, not trephined, is given as "59½ per cent." which is equivalent to saying that seven and fourteen-hundredths out of twelve patients died.

We observe that Dr. Cheever makes the not unusual mistake of saying Colles's instead of Colles's fracture.

11. *The Spine. Five Cases of Dislocation and Fracture of the Spine. Trephining the Spine in Two Cases*.—All of these cases ended in death, those in which trephining was resorted to proving fatal at least as rapidly as the others; yet Dr. Cheever thinks that he has discovered "reasons enough, surely, to follow up the operation of trephining the spine in an uncomplicated case." It will nevertheless, we think, require stronger arguments than Dr. Cheever's two fatal cases to establish spinal resection among the approved operations of surgery.

12. *Compound Fractures*.—Thirty-nine compound fractures of the upper extremity gave sixteen deaths (41 per cent.), and eighty-one of the lower extremity gave forty-nine deaths (60 per cent.). Dr. Cheever deprecates the performance of amputation before the establishment of complete reaction; and there can be no doubt that the statistics of the operation will be better where the cases are thus selected. We are not sure, however, that by always waiting "until reaction is well established," a certain number of patients will not be left to perish, whose lives might possibly be saved by a resort to the operation even during the existence of a moderate degree of shock.

13. *Amputation*.—The number of cases reported is 137, distributed as follows:—

Shoulder	11	cases,	7	deaths, or	63	per cent.
Arm	27 ¹	"	10	"	38	"
Forearm	17	"	2	"	12	"
Hip	2	"	2	"	100	"
Thigh	41 ¹	"	22	"	55	"
Leg	34	"	11	"	32	"
Foot	5	"	2	"	40	"

From the remarks upon "other surgical cases" we learn that four cases of *ovariotomy* all terminated fatally, and that while *pyæmia* caused death in thirty cases, it was recovered from in but one.

The concluding article embraces the *General Medical and Surgical Tables*, and recapitulates a good many points which have been already considered.

In taking leave of Dr. Cheever, and of the *Medical and Surgical Report of the Boston City Hospital*, we beg to be permitted to express the hope that the aim of any criticisms which we have offered will not be misunderstood. We have certainly no desire to detract from Dr. Cheever's reputation as a judicious surgeon and skilful operator; and that he merits both these titles we have no reason to doubt. When, however, he leaves his hospital wards, and assumes to instruct the profession in monographs and essays, as one entitled to speak *ex cathedra*, he fairly exposes his published teachings to criticism, and has no right to complain because an independent reviewer differs from him in his conclusions, or points out errors and omissions in his work; moreover, we may add, he need not expect either to disarm or to intimidate his critics by flaunting before their eyes the compliments which may have been bestowed upon his writings by the courtesy of foreign authors.

J. A., JR.

¹ One case not terminated.