

three times daily, receiving each time 1 pint of milk, 2 switched eggs, brandy $\frac{3}{4}$ j, and digitalis π x. This treatment was continued for three days, when her mental condition began gradually to improve, she became quiet, and was able to take food in the ordinary way. After this she had a daily douche of hot boracic lotion, the ostium vaginæ being kept open during the douching by means of a cage-like nozzle so as to prevent undue pressure upon the tender cicatrix. From this time she made an uninterrupted recovery, generally as well as locally.

It should be mentioned that from the time of the operation until her mental condition returned to normal the epileptic seizures were in abeyance, a condition not uncommon in the experience of alienist physicians, and one which has occurred in this patient on previous occasions during periods of temporary insanity.

REPORTS OF SOCIETIES.

ROYAL MEDICAL AND CHIRURGICAL SOCIETY.

Tuesday, May 10th, 1898.

T. BRYANT, M. CH., F.R.C.S., President, in the Chair.

INTRAPLEURAL TENSION.

DR. SAMUEL WEST, who read this paper, said that "intrapleural tension" was for all practical purposes equal in amount to the elastic contraction of the lung, but opposite in direction. The respiratory movements caused constant variations in this tension. Besides this, the air was somewhat hampered both in its entrance and in its exit from the air tubes to the extent of half a millimetre of mercury on inspiration and one and a-half to two millimetres on expiration, causing a respiratory oscillation equal to about two inches of water. Normally, both on inspiration and expiration, the intrapleural tension was negative. During forced inspiration the negative value was increased, but during forced expiration the negative value might be converted into a positive one; but as long as the two layers of the pleura were in contact this positive pressure during expiration was supported by the chest walls, and did not, except theoretically, affect the pleura. Under pathological conditions, if the pleura contained air or fluid, this pressure would affect the contents of the pleura also. The effects produced varied according as the pleura was occupied by incompressible fluid or by compressible air. The methods of estimating intrapleural pressure were mainly two: first, by measuring the elasticity of the lung, as Donders did; and, secondly, by direct investigations by passing a trocar into the pleura through the chest walls. Perle's observations were referred to, and various conclusions which might be drawn from them were stated with comments. When one side of the chest was opened, this went a long way to satisfy the elasticity of the lungs on both sides. Where the two layers of the pleura were more or less adherent, the intrapleural tension was more or less diminished. Where the pleural cavity was obliterated, and the one lung contracted while the other had become enlarged, the elasticity of the sound lung was greatly increased, proving that this was a condition of complementary hypertrophy, and not, as it was often called, complementary emphysema. Arguments were adduced to show that the contractility of the lung was probably not purely elastic, but partly muscular, and that there was such a thing as "pulmonary tone." Under pathological conditions the two layers of the pleura might be separated either by fluid, which fluid had weight, but was practically incompressible, or by air, which was compressible, while its weight might be disregarded. With fluid, therefore, the height of the column above the point of the trocar would affect the manometer reading. With a small punctured wound, or where the lung was injured, the air did not often enter the pleura, but made its way to the subcutaneous tissue. Where there was an opening through the chest walls at least as large as the cross-section of the trachea, air passed in and out easily during respiration, and no effect was produced upon the lung, which collapsed by virtue of its own elasticity, but not completely, for in such cases the lung was not infrequently considerably expanded and quite near to the chest walls, especially if there were forced expiratory efforts, as in coughing. Where the opening

in the chest walls was not large enough to allow the air to pass freely out during expiration the pressure within the pleura rose during expiration, and tended to compress the lung; this was almost always the case where the perforation of the pleura was from within. During inspiration the air entered the pleura as long as the pressure within the pleura was below that of the atmosphere. The inspiratory pressure, therefore, could not exceed that of the atmosphere with air alone, or very slightly where there had been deep inspiratory efforts. If the respiratory pressure was permanently raised some other factor was necessary to produce it, generally the presence of effusion. The expiratory pressure in pneumothorax was always positive, and might be high if the expiration were forcible. On the affected side the chest was usually in the position of maximum inspiratory expansion, and on the opposite side, owing to the displacement of the mediastinum, the expiratory contraction of the lung was diminished. These statements were founded on 20 paracenteses performed in 11 cases of pneumothorax. In 2 the inspiratory pressure was zero, but in the rest it was positive. It was probable that the pleura was kept dry in health by the action of what had been described as the "lymphatic pump," namely, the stomata, and the valved lymphatics into which they led, worked by the respiratory movements. Fluid might be poured out in larger quantities than the pump could remove, or the amount of fluid might not be above the normal, but the pump defective. When fluid collected in the pleura it fell by its own weight to the lower part, and it was the lower parts of the lung, consequently, that became more collapsed; but the tension in the upper part was also reduced. In estimating the intrapleural pressure with serous effusion, something depended upon the seat of puncture, and allowance had to be made for the height of the column of fluid above the mouth of the trocar. Observations upon the pressures in pleural effusion showed that with serous effusion the pressures varied greatly and irregularly. The respiratory oscillation was generally reduced, and might be completely absent. When absent at the commencement of paracentesis, it often returned at the end, showing that the lymphatic pump had been set to work once more. This explained why the removal of a small amount of fluid often determined the rapid disappearance of the rest. Intrapleural pressure in empyema was much simpler than in serous effusion. In all the cases observed, the pressure was considerably increased, the lowest being + 3, and the highest + 16; but, as might be expected, small effusions were quite as likely to have high pressures as large. The respiratory oscillation was practically absent. The bearing of these various facts upon practice was referred to in the course of the paper.

DR. W. S. LAZARUS-BARLOW did not think it was proved that when one pleural cavity was obliterated the sound lung on the other side was in a condition of complementary hypertrophy, or that the manometric readings recorded showed that its elasticity was increased. The recoil in the manometer tube might well be due in part to the resilience of the chest wall. Again the greater recoil of the sound lung might be due to the fact that it had previously been over-distended rather than to its elasticity being increased. As to complementary hypertrophy of the sound lung, it seemed unlikely that real hypertrophy of such a complicated structure as the lung should occur; the same improbability existed about new formation of yellow elastic tissue, and hyperplasia of fibrous tissue would not lead to any increase in pulmonary elasticity. With regard to the existence of pulmonary tone, he had from histological examination come to the conclusion that there was no muscular tissue in human lung tissue apart from that in the vessel walls. Cohnheim had found that experimentally it was practically impossible to increase the pressure of air inside the pleura of dogs since it was so rapidly absorbed; from this it would appear that the positive pressure observed in some cases of pneumothorax was due to a pathological condition of the pleural surfaces. With regard to the absorption of fluid from the pleural cavity, Dr. West said the lymphatics were the important channel. Starling's researches showed that absorption from serous cavities took place chiefly by the veins, and he was inclined to the same view.

DR. NORMAN MOORE said that the paper was valuable in

directing attention to the mode of entrance and exit of air from the pleural cavity. Formerly it was thought that a serous effusion after a certain time became purulent; now, of course, microbic intervention was recognised as the cause. More empyemata than were generally recognised were tuberculous in origin.

Dr. CALVERT, from laboratory experiments, had shown that in effusion the lung contracted as a whole. It was not absolutely true, as was often said, that a positive pressure in the pleura could not be obtained until the lung was completely collapsed, for the pressure in one part of the pleural cavity, for example, under certain conditions near the diaphragm, might be positive without its being so elsewhere. With regard to the occurrence of positive pressure in cases of pleural effusion, this might be due to lymph uniting the two layers of the pleuræ, and thus leading to localised collections. He thought that in a hydrothorax, where there was no lymph, the pressure would probably not be positive. When a negative pressure was found to coexist with a large pleural effusion, it was probable that the pressure had been positive at a previous stage, but that absorption having begun, the lung had not expanded, and that a negative pressure was thus brought about. In the author's cases of pleural effusion where the pressure was negative at the first paracentesis and positive at a later time, it was possible that in the interval coughing had torn through adhesions, limiting the expansion of the lung, and that this increase in size of lung explained the altered pressure.

Dr. J. ROSE BRADFORD agreed with the last speaker in thinking that positive pressure in a pleural effusion depended on the latter being localised. From a clinical point of view a localised pleural effusion resembled an empyema. If the effusion was localised the lung could not collapse as it would when the effusion was free, and so the pressure was raised. Physiologists generally agreed that absorption from serous cavities took place mainly by the blood vessels. It was possible that, when a small quantity of fluid was removed and the remainder became absorbed, the absorption was partly due to the lung expanding; the circulation through the lung was increased and absorption by its blood vessels thus rendered more active. Veterinary surgery had, in fact, shown the remarkable power of absorption possessed by the lungs. He thought the valvular view of pneumothorax rather theoretical. In association with Mr. H. P. Dean he had performed experiments which showed that the vessels in the lung were under the control of the nervous system, but not to the same extent as the blood vessels elsewhere. There was a possible fallacy in these experiments; this was that the hepatic circulation might be controlled by nerve fibres leaving the cord at the third and fourth dorsal vertebra.

Mr. A. PEARCE GOULD inquired what were the factors determining the displacement of the heart and mediastinum in pleural effusion, for the author stated that its occurrence did not correspond to position pressure in the pleuræ. He had found markedly positive pressure in a case of traumatic pneumothorax where there was no evidence of liquid in the pleuræ.

Dr. S. WEST, in reply, thanked the speakers, and said that the paper was written rather from a clinical standpoint. With regard to complementary hypertrophy, *a priori* considerations did not render it improbable, for it occurred in the kidney. He was familiar with Cohnheim's experiments, showing the difficulty of keeping up pneumothorax in dogs, but his own results from men were useful for comparison. The rôle of the lymphatics in leading to absorption was one which could not be eliminated.

MEDICAL SOCIETY OF LONDON.

A. E. SANSOM, M.D., President, in the Chair.

Monday, May 9th, 1898.

TREATMENT OF TUBERCULOUS DISEASE OF THE BLADDER.

Mr. C. MANSSELL MOULLIN agreed that constitutional treatment ought in every instance to have a thorough trial before recourse was had to any other measure. Drainage was at best only a palliative; sometimes, indeed, it only made matters worse, the track of the drainage tube becoming infected in its turn. The only procedure that in suitable cases held out some hope of cure, or at any rate of considerable

relief, was suprapubic cystotomy, which gave access to the disease. Against this operation had been urged its danger; that even after it had been done the removal of the tuberculous material was almost impossible; and, lastly, that as the growth in the bladder was most often secondary to disease elsewhere, the effect of the operation must be practically *nil*. Taking these points *seriatim*, he observed that, if properly performed, suprapubic cystotomy was virtually unattended by risk. The removal of the tuberculous disease might indeed present considerable difficulty in certain cases, especially in those in which the diagnosis had been made too late. He insisted on the necessity of arriving at a diagnosis much earlier than was usually done. The disease was one which manifested itself from the very beginning by irritability of the bladder and hæmaturia. The cystoscope enabled one to detect ulceration of the bladder at once, and the detection of the bacillus, even when present in small numbers, was rendered easy by the centrifugal machine. It was a very different disease when diagnosed as it ought to be from what it was as usually diagnosed; in fact, this tended to prove that if the disease had been allowed to progress beyond a certain stage it was not easy to deal with. He believed that the bladder was nearly always infected through the blood vessels and lymphatics, for when intact the epithelium was a sufficient protection against direct infection, so that it could spread from the kidney to the bladder without infecting the ureter. When this was the case the disease was usually situated on or near the orifice of the ureter, and when he found the ulcer in this situation he regarded it as presumptive evidence of tuberculous pyelitis. The trigone was most frequently attacked in the other cases simply because it was physiologically the most important part of the organ. During the last few years, since, in fact, one had paid more attention to the subject, the proportion of cases of primary disease of the bladder had gone on increasing, and operations had been performed with a fair measure of success. He himself had operated in three cases. The first, though still sometimes obliged to get up once in the night, was in good general health. The second was a boy who had remained well ever since, and the third was too recent to form an opinion about. He had come across two cases in the *post-mortem* room in which he felt sure that if the diagnosis had been made early enough the patients might have been spared terrible suffering, even if the fatal termination had not been thereby averted.

Mr. FREYER remarked that there was, perhaps, no other such debatable surgical subject as that of surgical interference with tuberculous disease of the bladder, except, perhaps, senile hypertrophy of the prostate. The diagnosis was obscure and the symptoms closely resembled those of stone. It was true that there was rarely sudden stoppage of micturition in tuberculosis of the bladder, but that symptom was not altogether frequent with stone. While, however, frequent micturition in tuberculosis of the bladder persisted by night as well as by day, that was not the case with stone. His own experience led him to believe that tuberculosis of the bladder was almost invariably secondary to tuberculosis of the epididymis, of the vesiculæ seminales, the prostate, the testicle, and, lastly, of the kidney. He himself had opened the bladder in 6 or 7 cases, and in only 1 had he had occasion to regret having done so. His opinion, however, and that of his colleagues at St. Peter's Hospital was in favour of abandoning the surgical treatment of this affection. The disease generally increased after operation, no matter what they did, and the suprapubic wound was often very long in healing. He challenged the author's view that suprapubic cystotomy was without risk, and he referred to the experience of Barling, of Birmingham, who had lost 20 cases out of 40 or 50 children operated upon in this way for stone in the bladder, though this was much less severe than the operation for tuberculosis of the bladder.

Mr. BATTLE divided the cases into two classes according as there was chronic ulcer or granulations involving a larger area. Few cases of primary tuberculous disease of the bladder came under observation, but such cases were, he thought, distinctly amenable to surgical intervention. He himself had operated on six cases, two females and four males. In none of them had he been able to find evidence of tuberculous disease elsewhere, but he admitted that it was often

difficult to say whether the disease was primary or secondary. Personally he had not seen any grave results following mere opening of the bladder, unless one had attempted to close the suprapubic wound too soon.

Dr. CLIFFORD BEALE remarked that on looking through numerous *post mortem* records there was not a single instance in which tuberculosis of the bladder was associated with tuberculous disease of the lungs.

Mr. MANSSELL MOULLIN, in reply, thought that if they could save even a few lives by operating it was worth attempting in view of the miserable plight of such patients. If the epididymis or the vesiculae seminales were implicated he would not hesitate to clear them away as well.

RECURRENT HÆMATEMESIS DUE TO COMPLETE HEPATOPTOSIS.

Dr. MACNAUGHTON JONES related the case of a married woman, aged 36, the mother of seven children, who at 18 years of age was treated for severe gastrodynia with vomiting, followed by amenorrhœa and anæmia. She had hæmatemesis for the first time the following year, and was treated for gastric ulcer. She had good health after that until she married when 23. Five months after her first labour she again vomited blood. There was nothing abnormal in any of her labours. In 1895 she had a miscarriage, which was followed by metrorrhagia, and in December of that year there was again hæmatemesis. In June, 1896, she had typhlitis, followed by severe metrorrhagia. In July, 1897, the hæmatemesis recurred, and had continued up to the time of his seeing her in consultation with Dr. W. Barker, of West Hampstead. On examining the abdomen, he found resonance everywhere except in the right hypochondriac, lumbar, and inguinal regions, and within the dull area he defined a fairly large movable mass, the edge of which was felt extending from the lower ribs to the inguinal region. This felt like an enlarged spleen. There was neither renal nor hepatic line of demarcation. He inclined to the diagnosis of a renal tumour. He did not see the patient again until September, when he advised abdominal exploration. He opened the abdomen by the ordinary Langenbuch's incision for nephrectomy; but he soon discovered that it was the edge of the liver he had felt, the right lobe being in the right iliac fossa. He passed his hand under the diaphragm and found the vault empty. The liver was raised and examined. It was darker than usual and the surface somewhat deeply injected. Both kidneys were normal. The liver was resting almost directly on the right kidney. It was replaced and the stomach taken out, laid on the abdominal wall, and closely examined, but nothing abnormal was found. The patient made an excellent recovery without any complication. There had been no return of the sickness, and she had gradually returned to ordinary diet. He gave a brief epitome of the literature of the subject, and remarked that from a perusal of the various cases reported the symptoms depended on the hepatic complications of the displacement, the association of a displaced or mobile and enlarged kidney, and upon the degree and position of the displacement. Jaundice and ascites were rarely present, gastric disturbances with epigastric and hypochondriac pain being the most frequent consequences. Whenever, therefore, one met with these symptoms associated with the presence of a tumour simulating an enlarged kidney, hepatoptosis should be suspected. This suspicion would be strengthened by finding undue resonance in the hepatic region.

Mr. BATTLE mentioned a case at present under observation. The patient was a woman aged 45, who came complaining of abdominal pain on the right side. On examination he found that when lying on her back there was a large tumour which ran transversely across into the right flank from the umbilicus, extending towards the kidney region. He could pass his hand under the swelling, and under the ribs on the right side, apparently over the convex surface of the liver. When the patient stood up the tumour sank down until it rested on Poupart's ligament. Besides the pain, there was a certain amount of gastric disturbance. He had applied an ordinary flannel bandage, which gave her much relief, and her appearance had since changed for the better.

The PRESIDENT remarked on the fact that the dislocation which produced hæmatemesis had not produced ascites.

Dr. MACNAUGHTON JONES, in reply, said the principal interest of the case to him was the very close resemblance which it presented to a previous case of his own, in which

the tumour proved to be a carcinomatous kidney. He presumed that the hæmatemesis was due to congestion resulting from some twisting of the ligaments and their vessels.

OBSTETRICAL SOCIETY OF LONDON.

C. J. CULLINGWORTH, M.D., President, in the Chair.

Wednesday, May 4th, 1898.

PRIMARY CARCINOMA OF THE FALLOPIAN TUBE.

Dr. HUBERT ROBERTS reported this case. The patient, aged 43, had been married seven years, but had not been pregnant. She had been in good health till March, 1896, when she had a violent attack of abdominal pain accompanied by a vaginal discharge. Other similar attacks occurred in July and November, and gushes of watery fluid were noted. On admission in February, 1897, the patient was thin, and the uterus was displaced to the left side by a fixed mass, the size of a hen's egg, felt in the right fornix, not tender. There was a watery vaginal discharge. The right tube, enlarged to the size of a Bologna sausage, was removed by Mr. Meredith on February 24th, 1897; it was full of papillomatous-looking growth, which microscopic sections showed to be carcinoma. Reference was made to published cases of primary carcinoma of the Fallopian tube. Removal was advocated, the prognosis being by no means gloomy.

Mr. ALBAN DORAN gave a short history of the literature of primary carcinoma of the Fallopian tube with a table of the 23 cases published up till April, 1898, to which he now added a twenty-fourth case reported by Jacobson in *La Gynécologie* for April, 1898. The tube was removed through a vaginal incision, and, as in other reported cases, the uterine end was free from disease. The patient was sterile, and it was interesting to note that out of the 24 cases only 3 had borne so many as three children. Mr. Doran had recently operated on a woman, aged 45, who had been twelve times pregnant. On March 13th she had an attack of labour-like pains, a similar seizure occurring two days later; with each pain much water escaped, till at length she was drenched as in an ordinary labour. A large tender mass could be felt in the right fornix, and a smaller body on the opposite side. The symptoms suggested papilloma or cancer of the tube, but he simply found tough tortuous tubes, with their canals undilated, closely adherent to the uterus and adjacent structures. He believed that primary cancer was commoner than papilloma of the tube, or that the latter was very liable to malignant degeneration. Of 7 authentic cases of papilloma, 2 had died of the operation, whilst 1 (Watkin, New York) was very recent; Kaltenbach's case (No. 3 in the tables), had proved malignant, whilst the earliest of all the papilloma series (Spencer Wells, 1879) was alive and in excellent health in 1897, though the clinical symptoms before operation were very grave. He agreed with Dr. Stevens that cancer of the tube might arise from Wolffian tubes included in the tubal wall (Von Recklinghausen). In order to gain as precise knowledge as possible about recurrence, Mr. Doran had communicated with all the authors of cases where the report was incomplete. As for surgery, removal of the tube alone through the vagina seemed questionable, as the state of surrounding parts could not readily be ascertained. Watkins and Schauta removed the uterus with the cancerous appendages. This operation was questionable, however, when the uterine end of the tube was free from disease, and useless when the outer end had infected structures to which it had become adherent.

Dr. PETER HORROCKS pointed out that carcinoma of the cervix was common, and nearly always occurred in parous women; carcinoma of the body of the uterus was much rarer, and occurred chiefly in multiparæ; whilst carcinoma of the Fallopian tubes was the rarest of all, and occurred in sterile women chiefly. Clinical evidence showed that tissues which were used much and were liable to damage, were more prone to carcinoma than others, and this rather favoured the idea that carcinoma was due to, or in some way associated with, a microbe which would first meet with the cervix, and if that were damaged (split cervix) elect the damaged part for its growth. But if it were a multiparous cervix then the microbe might travel into the body or Fallopian tube. It was better to remove this growth in the tube by abdominal than by vaginal section.

Dr. AMAND ROUTH alluded to the difficulty of diagnosis. In Case 2 in Mr. Doran's table, which had occurred in his own practice, and in the majority of those in the table, there was usually early continuous pelvic pain, simulating acute salpingitis with slight perimetrial extension, and when this was associated with sanious, often offensive, discharge, together with a tubal swelling, the diagnosis of some new growth in the tube was probable, and fairly certain if by a preliminary dilatation the uterus could be excluded as the source of the discharge.

Dr. ADDINSELL drew attention to the fact that in nearly all the recorded cases the most noticeable clinical features were pain and watery discharge, and pointed out that the presence of these symptoms could not be considered pathognomonic of either primary carcinoma or papilloma of the tube, as they occurred in some cases of hydrosalpinx.

Dr. GILES drew attention to the unfavourable prognosis in cases of cancer of the Fallopian tube. Of the 23 cases in Mr. Doran's table in 2 no operation was performed, or it was incomplete; in 2 which recovered the patients were lost sight of; in 2 the operation was fatal; of the remaining 17 cases recurrence took place in 10, the time of recurrence averaging six to eight months after operation; of the 7 cases reported as remaining well, there was only 1 that could be safely pronounced to be cured (seven years after operation); in the others the time was too short to allow of a positive statement, the longest time being nineteen months.

Dr. ROBERTS and Mr. DORAN replied.

SPECIMENS.

The following specimens were exhibited: Mr. TARGETT: Intestinal Obstruction following Ovariectomy.—Dr. PETER HORROCKS: Fibromyoma of the Uterus with Sarcomatous Degeneration.—Mr. ALBAN DORAN: Hæmorrhage from the Fallopian Tube without evidence of tubal gestation.

HARVEIAN SOCIETY OF LONDON.

JAS. F. GOODHART, M.D., President, in the Chair.

Thursday, April 28th, 1898.

TREATMENT OF STONE IN THE BLADDER.

MR. FREYER read a paper entitled "My Latest Series of One Hundred Cases of Stone in the Bladder, with some Practical Remarks Thereon," which will be published.

Mr. SWINFORD EDWARDS was thoroughly in accord with everything which had fallen from the lips of Mr. Freyer. Though in skilled hands litholapaxy was easy to perform and gave the best results, he considered that for surgeons who had not some experience in the operation, complicated or difficult cases would be best treated by suprapubic lithotomy. In his own last 100 cases of litholapaxy there were 5 deaths, in 4 of which the fatal termination was due to advanced renal mischief.

The PRESIDENT asked whether Mr. Freyer ever met with stones which it was impossible to crush on account of their hardness. He asked for details as to the method of washing out the bladder. In experiments in the cadaver he had sometimes found great difficulty in emptying that viscus.

Surgeon-Colonel CALDECOTT spoke of the success which attended litholapaxy in India as compared with the results of other operative procedures.

Mr. TEMPLE MURSELL remarked upon the rapidity with which cases of vesical calculus complicated with cystitis of long standing recovered after litholapaxy, without drainage, and frequently without any further washing out of the bladder. It was very rare to find calculi which resisted crushing, but in the few cases that were found, or where the calculus had formed around a foreign body which could not be extracted through the urethra with the lithotrite, suprapubic cystotomy could readily be performed by cutting on the point of the lithotrite still holding the calculus or foreign body pressed against the anterior bladder wall.

Mr. FREYER, in reply to the PRESIDENT, said (1) that amongst several hundreds of operations for calculi performed by him during the last ten years, since he had become more or less expert with the lithotrite, he had only met one stone that was too hard to crush, though the calculi had ranged up to 6½ ozs. in weight. Strange to say this was a comparatively small urate stone of 2 czs., in a female, on which his largest

lithotrite (No. 18) could make no impression. He found, contrary to what was usually taught, that certain urate stones were more difficult to crush than oxalates; (2) that a practised hand, as a rule, found no difficulty in clearing the bladder of the last fragments with a properly constructed aspirator. Experiments on the cadaver were deceptive, as the bladder did not expand and contract as in the living subject. There was no selection of cases, these 100 being the only bladder stones that came under his care during the period over which they extended. His success was not unique, as several surgeons in India had recorded similar series of 100 litholapaxies without a death; and he might point to the excellent results from this operation in St. Peter's Hospital, where last year they had 51 litholapaxies with only 1 death. When stricture of the urethra was complicated with perineal fistulæ, he (Mr. Freyer) preferred, as a rule, external to internal urethrotomy, as more likely to cure the fistulæ, but he agreed with Mr. Swinford Edwards that internal urethrotomy might sometimes be preferable, particularly when there was only a single fistula; in fact, he had such a case at present under his care in private practice, where the fistula had rapidly closed after internal urethrotomy. He regretted to have to differ from his friend and colleague, Mr. Edwards, regarding suprapubic lithotomy, which should be had recourse to only in exceptional cases, such as very large and hard or encysted stone. It was true that the operation was simple, and the instruments required might be found in a pocket case, but in its very simplicity lay one of its chief dangers, as being tempting to the young and inexperienced surgeon not provided with litholapaxy instruments. He maintained, however, that an operation was to be judged of not by its simplicity, but by its results, and Mr. Barling, of Birmingham, had recently in the BRITISH MEDICAL JOURNAL published statistics collected from twelve large London and provincial hospitals, from which it appeared that suprapubic lithotomy in children had been attended by the appalling mortality of about 20 per cent., whereas lateral lithotomy and litholapaxy were attended by a mortality of less than 5 per cent.

OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.

CLINICAL EVENING.

H. H. SWANZY, F.R.C.S.L., President, in the Chair.

Thursday, May 5th, 1898.

CHIP OF STEEL IN THE EYE, WITH SKIAGRAPH.

MESSRS. ERNEST CLARKE and MACKENZIE DAVIDSON showed a case. The patient was struck by a chip of steel in the right eye in November, 1897. A scar could be seen in the cornea, and in the anterior and posterior portions of the lens capsule. The opacity in the lens had somewhat increased since, and vision was reduced from $\frac{1}{2}$, when first seen, to $\frac{1}{4}$. A skiagraph taken by Mr. Mackenzie Davidson showed that the piece of metal was lodged in the ciliary region at the lower part. On ophthalmoscopic examination a mass of exudation could be seen at this point. The skiagraphic exposure had now been reduced to 90 seconds, and in the case of a child to one minute.

OPHTHALMOPLÉGIA EXTERNA WITH IMPAIRMENT OF THE ORBICULARIS OCULI.

Dr. JAMES TAYLOR showed a case. Hughlings Jackson had first drawn attention to a case exhibiting weakness of the orbicularis in paralysis of the third nerve exemplifying Mendel's hypothesis that the ultimate nerve supply of the orbicularis was the third nerve. Mention was made of the similar association between paralysis of the orbicularis oris and the hypoglossal nerve.

Dr. BEEVOR said that he had shown a case at this Society a few years ago in which there was double ptosis and weakness of the orbicularis; it was probable that in most of the cases where the nucleus of the third nerve was involved the orbicularis was affected. Dr. Taylor's case was important, as other muscles which had a nerve supply originating in the bulb—those of the palate—were affected; he believed this to be rare.

Mr. FLEMMING said that anatomists were now agreed on

anatomical evidence that the orbicularis was supplied from the third nerve nucleus.

RUDIMENTARY DEVELOPMENT OF THE IRIS.

Mr. JOHN GRIFFITH showed two cases. The patients were brother and sister, in whom the iris was present only as a rudimentary band, which was absent in the lower outer part entirely; the choroid and ciliary body were normal. In one of the cases there were anterior polar cataracts, without sign of previous perforation of the cornea, and the lenses were slightly displaced upwards. In both patients there was defect of the enamel of the teeth, and there was a history of fits.

Mr. SYDNEY STEPHENSON had shown at the Society two brothers with aniridia, in whom there was deficiency of the enamel of the teeth, known to dentists as hypoplasia.

CONICAL CORNEA TREATED BY GALVANO-CAUTERY.

Mr. G. A. CRITCHETT showed a case. The improvement in vision had been in the right eye from $\frac{1}{60}$ to $\frac{1}{3}$, and in the left from $\frac{1}{60}$ to $\frac{1}{3}$. In the last series of cases, about 15 in number, he had tried not to perforate the cornea; he used the cautery wire at the lowest possible red heat, so that not much more than the epithelium was affected; the whole area intended to be affected was burnt with this, then at a slightly greater heat he burnt a smaller disc within this area; then at a higher temperature still he burnt the centre at a point only. During the first burning the aqueous disappeared, and the iris came into contact with the cornea. He used a flat, medium-sized point except for the central and last burning, when he used a small one.

Mr. HARTRIDGE asked the reason for using the different degrees of heat; he was in the habit of using one temperature only, and had never seen the aqueous disappear.

Mr. CRITCHETT said he thought a better cicatrix was obtained by this method.

Remarks were made by Messrs. DOYNE, GUNN, [and GRIFFITH.

CASE OF RETINITIS CIRCINATA.

Mr. FISCHER showed a case. The patient was a woman, aged 66, unconscious of anything wrong with her left eye. She was healthy, and had no ascertainable kidney disease. The right eye was quite normal; in the left there was well-marked retinitis circinata completely surrounding the yellow spot, which was degenerated.

Mr. LAWFORD thought this case was not typical inasmuch as there was little or no change at the yellow spot, and the band of exudation was distinctly raised.

Mr. GUNN thought this one of the manifestations of old-standing oedema of the retina, and that it was similar in nature to the asterisk seen in renal retinitis.

Mr. DOYNE thought that the exudation was decolorised blood.

Mr. HARTRIDGE had shown a case at the Society some years ago; the exudation had since entirely disappeared.

PECULIAR CONDITION OF LENS.

Mr. MARCUS GUNN showed a child who had a cataract in the right eye which had been diagnosed in early life, but nothing had been done for it. The right iris was much lighter in colour than the left; there was punctate deposit on the back of the cornea; the centre of the pupil was like an ordinary opaque membrane, with holes in it through which the o. d. could be seen with +10 D. The peripheral part of the lens appeared like a brown grey granular exudation raised above the level of the central capsule.

SPECIMENS, ETC.

Mr. ROCKLIFFE showed (1) Two specimens of Cystic Retina; some of the cysts were between the inner and outer nuclear layers, and the others were difficult to locate owing to degeneration of the retina; (2) specimens of Pseudo-Glioma. Remarks were made by Mr. DEVEREUX MARSHALL.—Surgeon-Captain HERBERT showed specimens of Epithelial Xerosis of Conjunctiva.—Mr. DEVEREUX MARSHALL and Mr. RIDLEY showed specimens of Persistent Hyaloid Artery with Atypical Development of the Vitreous.—Dr. G. H. Hogg showed a case of Polycoria.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY.

WM. V. SNOW, M.D., President, in the Chair.

Wednesday, April 27th, 1898.

ACTION OF DRUGS AND MINERAL WATERS ON THE BILE.

Dr. WM. BAIN (Harrogate) read a paper, entitled, The Action of certain Drugs and Mineral Waters on the Secretion and Composition of Human Bile; an Experimental Investigation. He experimented on a patient with a cutaneous biliary fistula. The patient was in moderately good health at the time, and the obstruction in the common bile duct was complete. He gave the patient 36 gr. of purified ox bile throughout the investigation, thus approximating the experimental to the normal conditions. He tried the effect of the old sulphur spring, the strong Montpelier, the Kissingen Spa, and the chloride of iron spas, Harrogate, also Carlsbad mineral water, euonymin, iridin, benzoate and salicylate of soda, podophylloresin and podophyllotoxin. He found the following to be cholagogues:—Old Sulphur Spring, Kissingen Spa, Carlsbad water, euonymin, benzoate and salicylate of soda, while podophylloresin markedly increased the total solids, and iridin had a similar effect in a less degree. Neither of them increased the quantity of bile. Strong Montpelier, Harrogate, and podophyllotoxin decreased both the total solids and the quantity of bile. Neither hot water nor soda water in large doses augmented the amount.

Dr. A. P. LUFF regarded sodium salicylate as a cholagogue in a limited sense. He had no doubt from his own experience that it increased the excretion of uric acid, but considered that it did so by uniting with glycocine in the liver to form sodium salicylurate, and so conveyed an increased amount of glycocine to the kidneys, where by the union of that body with urea an increased amount of uric acid was formed. He considered that the employment of sodium salicylate in the treatment of gout was open to objection.

Dr. SOLLY (Harrogate) and Dr. HOBHOUSE made remarks, and Dr. BAIN briefly replied.

GOUT AND RHEUMATISM IN RELATION TO THE SEASHORE AND SALT WATER BATHS.

Dr. EDMUND HOBHOUSE introduced a discussion on this subject. He considered that prolonged observation was required, and except in the acute forms it was difficult to determine the effect of any particular set of circumstances. Chronic rheumatic arthritis was a separate disease, which should be dealt with separately. It seemed doubtful whether sea air in itself had any direct effect apart from the question of soil and general meteorological conditions. It was also largely a question of season; the seaside was drier and freer from fogs than the country during the autumn and winter, but more windy in the spring. Individual cases varied greatly; hence the interrogation of a large number of patients and the tabulation of results was the best way to obtain evidence. Collective investigation on this point might yield valuable results. Only with regard to acute and subacute cases were statistics of any value to be obtained, and these mostly came into hospital. Statistics at Brighton showed somewhat less acute and subacute rheumatism than in London—7.2 per cent. of all medical cases, as compared with St. Bartholomew's, St. Thomas's, and the London Hospitals about 8.3 per cent. At Hastings it seemed to be a little more, but the statistics were for a short period only. At Plymouth there was a good deal less—4.51, but the chronic cases were much more numerous. These figures seemed to show the sea had little influence on the acute and subacute forms, but, generally speaking, marine climates were not indicated in the treatment of rheumatic affections, though patients weak and anæmic after acute attacks might be greatly benefited. Rheumatism in children was probably benefited by the sea—an important point on which investigation was desirable. As to chronic conditions, lumbago, sciatica, myalgias, etc., it was impossible to estimate their comparative prevalence by the sea, but it seemed to be agreed that they were very common in most resorts. Whether they were benefited or not depended on the place chosen, the time of year, etc. Gouty patients with any active symptoms were better away from the sea; they could live there, but had to be extremely careful as to

diet and alcohol. Sea air predisposed to what Murchison called "lithæmia;" this applied to all kinds of gouty patients. Rheumatoid arthritis was probably not commoner by the sea than elsewhere, but some rheumatoid patients felt more pain there. Salt water baths were unquestionably of great value, especially in subacute rheumatism, but the question was whether their value was due to the heat or the salt; probably it was chiefly to the latter.

Dr. ARCHIBALD GARROD thought that the factors at work at different seaside places rendered any generalisation on the point difficult, even if desirable. His impression was that cases of the classes mentioned in the paper were usually better away from the sea. Many patients with rheumatoid arthritis certainly found their pains worse by the sea. On the other hand, he had not observed that any specially large number of such patients were from among residents in seaside resorts. As a rule gouty patients were better away from the sea.

Dr. LUFF considered that cases of acute and subacute gout did not do well at the seaside. He attributed the effect of sea air in such cases, in part at least, to the large amount of aqueous vapour present in the air.

Mr. HAMILTON CUMMING (Torquay) found that in the higher parts of Torquay gout was not affected for good or ill, and that acute articular rheumatism was uncommon. Chronic rheumatism greatly varied according to the character of the seasons. He found hot sea-water baths with extract of fucus vesiculosus beneficial.

Dr. STREET (Westgate) had seen good results in cases of chronic rheumatism from the use of seaweed baths.

Dr. HYDE (Buxton) said that the different influences of climate in treatment were sometimes incomprehensible even between one inland resort and another, but especially between inland climates and seaside climates. The opinion of Dr. Hobhouse that a seaside climate as a rule was unsuitable for gouty patients with acute and subacute tendencies, accorded with the testimony he had frequently received from such patients. It had been pointed out by Professor Beneke that heat was lost more rapidly from the body at sea levels than at inland and elevated climates. As a result, the processes of metabolism were more active in a marine climate than an inland climate. He therefore thought that the explanation of why such cases were aggravated at the seaside would be found in this direction. Possibly increased products of waste, including uric acid, due to increased tissue change, were accumulated in excess of the powers of elimination, and that these set up those irritative processes about the joints and other parts of the body which were peculiar to the gouty state.

Dr. TYSON (Folkestone), Dr. SOLLY (Harrogate), Dr. WARD-HUMPHREYS (Cheltenham), and Dr. BOWEN DAVIES (Llandrindod) made remarks.

Dr. SYMES THOMPSON stated that information collected by the Royal Medical and Chirurgical Society showed that whilst rheumatic affections were prevalent in the soft humid atmosphere of the South and West of England, neuralgic disorders were common in the exposed parts of the North and East.

Dr. HOBHOUSE, in reply, said that he did not wish it to be supposed that because many so-called rheumatic affections were reported to be prevalent at the seaside, they were necessarily more prevalent there than inland. There were no figures to make any true comparison possible on this point, and those with reference to acute rheumatism gave no clue. All the actual statistics he had quoted were derived from hospital records, and there might be very wide discrepancies between such results and those of private practice. As regards gout his remarks only applied to it in an active form; hundreds of gouty people lived by the sea, and with care lived in comfort, but if they got an attack would not shake it off easily without change.

ROYAL ACADEMY OF MEDICINE IN IRELAND.

SECTION OF STATE MEDICINE.

H. C. TWEEDY, M.D., President, in the Chair.

Friday, April 29th, 1898.

SERUM DIAGNOSIS OF TYPHOID FEVER.

Dr. McWEENEY demonstrated a method which he had intro-

duced with a view to clear up the diagnosis in cases which did not give the agglutination phenomenon with sufficient distinctness. His plan was to cause the typhus bacillus to grow in a hanging drop of broth containing a small percentage (generally 1 per cent.) of the suspected serum. After four hours at 37° C. the preparation was examined, when, if the serum were from a typhoid case, the bacilli would be found to have grown out into beautiful chains, which at the end of twenty-four hours were exquisitely twisted and convoluted; motility was quite absent. If, on the other hand, the serum were non-typhoid, the bacilli were separate and freely motile. They were usually short, but occasionally grew out into filaments, especially if the temperature were low; but these filaments must be carefully distinguished from the chaining which took place with the homologous serum. He submitted microscopic preparations showing ordinary agglutination and chain formation both fresh and stained, and also demonstrated microphotography illustrating the two methods, by means of optical lanterns.

THE MORTALITY OF CHILDREN IN IRELAND.

Dr. LANGFORD SYMES contributed a paper on this subject. From his estimate of ten years ending December 31st, 1896, it appeared that in Dublin city out of every 1,000 children born there died in the 1st year 171.2; and in every 1,000 total deaths, 306.2 were children under 5 years of age. In Belfast the death-rate of children was enormous. In every 1,000 total deaths in that city no fewer than 519.8 were children under 5 years of age. The classes of disease, systems affected, and actual registered causes of death were shown in separate tables. The systems chiefly affected were found to be as follows in order of frequency, the most important only being mentioned:

Under One Year. Causes of Death.	Deaths Under One Year.	Under Five Years. Causes of Death.	Deaths Under Five Years.
1 Ill-defined and not specified causes ...	30,716	1 Respiratory diseases ...	34,557
2 Diseases of nervous system ...	21,998	2 Ill-defined and not specified causes ...	34,228
3 Diseases of respiratory system ...	18,976	3 Diseases of nervous system ...	28,828
4 Miasmatic diseases ...	8,423	4 Miasmatic diseases ...	26,790
5 Constitutional diseases ...	6,274	5 Constitutional diseases ...	16,690
6 Diarrhoeal diseases ...	6,201	6 Diarrhoeal diseases ...	8,990
7 Developmental diseases ...	4,715	7 Diseases of digestive system ...	8,288
8 Diseases of digestive system ...	4,690	8 Developmental diseases ...	4,758
9 Accident or negligence	1,325	9 Accident or negligence	3,773

Of the actual registered causes of death for all children in the whole of Ireland, the following were the eleven chief diseases found to produce this infantile mortality in their order of importance. They were identically the same diseases for both ages, but in varying proportions:—

Under One Year. Cause of Death.	Deaths Under One Year.	Under Five Years. Cause of Death.	Deaths Under Five Years.
1 Debility, atrophy, inanition ...	29,136	1 Debility, atrophy, inanition ...	32,062
2 Convulsions ...	20,764	2 Convulsions ...	25,261
3 Bronchitis ...	14,017	3 Bronchitis ...	24,773
4 Diarrhoea and dysentery ...	5,762	4 Whooping-cough ...	11,456
5 Whooping-cough ...	4,893	5 Diarrhoea and dysentery ...	8,383
6 Premature birth ...	3,827	6 Tabes mesenterica ...	7,564
7 Tabes mesenterica ...	3,512	7 Measles ...	7,557
8 Pneumonia ...	2,519	8 Pneumonia ...	5,868
9 Tuberculous meningitis ...	1,755	9 Croup ...	5,509
10 Measles ...	1,691	10 Tuberculous meningitis ...	5,069
11 Croup ...	1,589	11 Premature birth ...	3,827

Dr. Symes drew particular attention to the unsatisfactory terms—"debility, atrophy, inanition." Again, "convulsions" was not a true disease at all. "Croup" was equally misleading. With the correct diagnosis and proper application of the terms "diphtheria," "laryngitis," and "laryngismus

stridulus," the name "croup" should be dispensed with, for its identity as a distinct disease vanished. Again, "dentition" should not be so often registered. It actually appeared in Ireland to rank twelfth as a cause of death in sucklings. Another very striking fact revealed by this paper was that young children—in Ireland at least—died almost entirely from so-called "medical" diseases. Surgery had apparently little or no part in the production of infantile mortality.

Dr. GRIMSHAW (Registrar-General) said that in a great many of the deaths of children there was never any diagnosis made, there having been no medical attendant. Again, the medical man was only called in, in other cases, at the very last moment, and then for the purpose of giving a certificate for the insurance company. These two facts tended very much to damage the accuracy of such statistics. It was a question whether a medical certificate should be given in cases where the doctor was called in at the last moment and had no opportunity of making a diagnosis. He thought that the withholding of a certificate in a doubtful case had a most beneficial result, and should always be exercised by the medical attendant. Again, when a certificate was withheld the coroner should interfere. Medical men should be very particular as to what they put on death certificates; for instance, the primary cause might have been discovered in many of the cases recorded as "convulsions." He believed that if there was better accommodation for children in hospitals a great many of them would be better attended to. He thought that students were not sufficiently trained in the treatment of diseases of children.

Dr. DOYLE said he had never been able to arrive at primary causes of diseases. Secondary and tertiary causes were easily arrived at. He maintained that convulsions, tuberculosis, meningitis, chorea, diphtheria, croup, whooping-cough lay within the province of the surgeon and not the physician. Granular conditions in the nares and back of pharynx often accounted for such diseases as convulsions. Whooping-cough could be cured, but by the surgeon. The condition at back of fauces and nares should be attended to. Whooping-cough was caused by the continuous and repeated reinfection from the Eustachian tubes and back of pharynx. Similar remarks applied to tuberculosis. There was still room in Dublin for more children's hospitals.

Dr. FALKNER thought that the establishment of a new hospital with 50 beds would not have the smallest effect on the death-rate. His opinion was that medical relief was carried to the darkest parts of Dublin, and carried efficiently. The onus of neglected children was much more on the Government and the people of the country than on the doctors, who did the work as well as they could. When a child dying of neglect was brought to him it was his custom to write to the Inspector of Prevention of Cruelty to Children, who generally succeeded in having the child cared for.

Dr. TURNER thought that in Dublin there was a great necessity for having an institute for children, where students would have an opportunity to study and receive instruction which would enable them to be successful practitioners among infants.

The PRESIDENT said that it seemed to him that a large number of cases mentioned under the heading, "debility, atrophy, inanition," really came under the head of preventive medicine, and were largely due to insanitary conditions generally, and also to the ignorance of parents. The system of feeding children was often most barbarous, starchy foods being continually given to infants. What was the use of writing a prescription for a child when what it really wanted was warmth, cleanliness, food, etc.? The district nurse would be almost more useful in such cases than the doctor.

Dr. SYMES, in reply, agreed with the Registrar-General that the coroner should be communicated with in all cases where a medical certificate was not procurable. He was greatly relieved to hear that Dr. Doyle could cure consumption and whooping-cough by surgical methods. However, he thought that surgery had nothing to do with the deaths in the tables. He thought there were already enough hospitals in Dublin, and that an amalgamation of some of them would be beneficial.

BATH AND BRISTOL BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

E. MARKHAM SKERRITT, M.D., Retiring President, in the Chair.

Wednesday, April 27th, 1898.

THE NAUHEIM TREATMENT OF HEART DISEASE.

Dr. J. G. DOUGLAS KERR read a paper on the treatment of certain forms of heart disease by baths, exercises, etc. He said the bath season, being a winter one, offered decided advantages for the carrying out of the treatment. In England there was a tendency to trust too much to the baths, and to relegate the exercises to a subsidiary position or to dispense with them altogether, which was unsound. Much investigation had been undertaken into the effects of muscular contraction upon the circulation. At the instigation of the Scientific Grants Committee of the British Medical Association, Drs. Lauder Brunton and F. W. Tunnicliffe entered upon a series of experiments, which were fully reported in the BRITISH MEDICAL JOURNAL of October 16th, 1897. If it were granted that the treatment produced the results claimed for it, it only remained to arrive at conclusions as to the cases in which it should be employed. In his opinion the best results had been obtained in those cases in which the disease was functional rather than structural in origin. Was it necessary, Dr. Douglas Kerr asked, or was it consistent with the dignity and usual practice of the profession, to sensationalise this treatment, by supplying the patients with charts indicating the supposed shrinkage of the heart's size?

Dr. PRESTON KING read a paper on the limitations of the Nauheim treatment. The treatment had not received that calm and philosophic consideration which was due to a new therapeutic agent. It was one among the many means that existed which when properly applied might be of use in alleviating suffering, but at the same time it was one which too easily lent itself to the insidious suggestion and the unlawful practices of the charlatan and the quack. There was no peculiar virtue attaching to the use of a natural water, and the benefits derived from the treatment followed equally the use of baths artificially produced. As to the decrease in the size of the heart, which had often been observed as a result of a few immersions, he would suggest that this was in many cases *post hoc* and not *propter hoc*. Again, was the decrease in the frequency of the pulse a direct result of the treatment *quâ* treatment? Might it not be the effect of the warm bathing? The benefits of the treatment might be allowed without its necessarily following that it produced changes in the circulatory apparatus which both reason and experience tended to show were not peculiarly its own. He was willing to allow that it was of benefit in certain cases, but even in these he thought the Schott resistive movements were the most important factor.

Dr. LAUDER BRUNTON said he had sent a large number of cases to Nauheim, most of which were greatly benefited. He thought that in all probability the exercises were really more useful than the baths, but with baths their usefulness was increased.

Dr. BEZLY THORNE, after relating cases which had derived great benefit from the treatment, referred to the value of marking out the areas of dulness. In cases of Graves's disease he could not advise anyone to hold out the slightest promise of absolute cure, though the application of not less than four courses would be of value.

Dr. MYRTLE (Harrogate) did not think that the Nauheim treatment was required in purely functional cases. He had seen a number of cases treated with the greatest benefit. It was not possible to measure the relative value of baths and exercises.

The CHAIRMAN could not take the same favourable view of the treatment as had been expressed.

Dr. KERR replied on the discussion. He was inclined to think that if some of them were unduly enthusiastic on the results of treatment, it was a fault in the right direction.

TUMOUR OF BRAIN.

Dr. J. MICHELL CLARKE read notes of two cases of tumours of the præfrontal region of the brain, on which remarks were made by Drs. LAUDER BRUNTON and MYRTLE.

LARYNGOLOGICAL SOCIETY OF LONDON.—At an ordinary meeting held on April 13th, Mr. H. T. BUTLIN, President, in the chair, Mr. WYATT WINGRAVE showed: (1) A case of Cyst of the Epiglottis in a girl aged 13. A mass was seen attached to the left half of the laryngeal aspect of the epiglottis, resembling a small white-heart cherry in size and colour. The only symptom was occasional pain on swallowing, the singing and speaking voice being normal. (2) A case of Chronic Pharyngitis in a man aged 26 who had been under treatment for chronic suppurative middle ear disease for six years. The pharynx showed a symmetrical flesh-like thickening, which commenced behind the posterior pillars, and met in the middle line above the level of the soft palate, extending upwards into the naso-pharynx. This tissue proved tough on attempting to scrape with finger nail. Was the condition due to asymmetrical hypertrophy of the lymphoid tissue, or was it of inflammatory origin? Dr. SPENCER called attention to the adhesion in this case between the salpingo-pharyngeal fold and the pharyngeal wall, as had been observed in connection with Tornwaldt's disease. Dr. GRANT ascribed the condition to hyperplasia of the salpingo-pharyngeal folds, which had become adherent to each other at a lower level than the choanæ. Mr. SPENCER advised removal of the bands on account of deafness. Dr. HILL suggested that it was a case of adhesion of the lower portion of the hypertrophied salpingo-pharyngeal fold to the posterior pillar of the fauces. Dr. EDWARD LAW thought it resembled a gummatous condition of the lateral pharyngeal wall. Dr. STCLAIR THOMSON suggested that the condition might be a hypertrophy left by a syphilitic process. Mr. WINGRAVE, in reply, said there was a doubtful history of congenital syphilis which suggested a possible prenatal or postnatal inflammatory process.—Dr. DUNDAS GRANT showed: (1) A Modification of Baratoux's Electrical Laryngo-phantom. The instrument was tested by many of those present at the meeting, and was highly approved by them. (2) A case of Empyema of the Frontal Sinus cured by the Ogston-Luc operation.—Mr. WYATT WINGRAVE showed Microscopical Section of Tissue from Frontal Sinus (Dr. Dundas Grant's collection). This consisted of small cell or lymphoid tissue containing nodules similar to ordinary adenoid growth.—Mr. W. G. SPENCER showed a case of Oedematous Hypertrophy of Arytenoids. More than a year ago Dr. de Havilland Hall showed the patient, a man aged 47, to the Society. It was difficult to get a good view of the laryngeal condition, and the case was considered to be an unusual one of chronic laryngeal oedema. As dyspnoea was increasing an extra-laryngeal operation was performed. On retracting the alæ of the thyroid cartilages it was found that each arytenoid had become a tumour of the size of the thumb, with a perfectly smooth surface. Each tumour was seized with a volsella, and cut off with scissors, the line of division being through the apex of the cartilage. Healing occurred, and the patient had remained well for a year, except for an occasional catarrh. On examining the larynx now there was not much deviation from the normal, except that the arytenoids appeared flat-topped. Under the microscope the tumour was seen to be a soft oedematous fibroma, covered by normal stratified epithelium, and containing normal arteries, veins, and nerves, also groups of mucous glands embedded in it.—Mr. YEARSLEY showed a case of Papilloma of the Septum Nasi, which was easily removed under cocaine with a cold snare. The specimen shown under the microscope proved the growth to be a papilloma.—Dr. LAMBERT LACK showed a case of Laryngeal Stridor and Nasal Obstruction in a weakly child aged 5 months. The case seemed to be one of laryngeal spasm, probably due to adenoids. It was proposed to give an anæsthetic, to examine the throat thoroughly, and remove the adenoids or other cause of nasal obstruction.

WEST LONDON MEDICO-CHIRURGICAL SOCIETY.—At a meeting on May 6th, Dr. H. P. POTTER (President) in the chair, Mr. MCADAM ECCLES read a paper on Operation *versus* Taxis in Strangulated Hernia. By a strangulated hernia he understood a hernia which contained bowel, the lumen of which was obstructed by pressure from without, either partially or completely, while at the same time this pressure caused an interference with the circulation through the vessels of the intestinal wall. Two lines of treatment offered themselves in such

a condition: taxis, or operation, either being undertaken to procure the reduction of the gut with as little delay as possible. Against taxis it might be urged that it might bruise, lacerate, or even rupture the bowel; (2) that it did not permit of a view of the intestine before reduction; (3) that it involved the return of fluid from the sac as well as the bowel, which fluid might be septic; (4) that it allowed of no attempt to treat the hernia radically; (5) that it might bring about reduction *en masse*. Against operation, on the other hand, it might be urged (1) that it involved loss of time in preparing for it; (2) that it usually required a general anæsthetic; (3) that it might cause a risk of septic peritonitis; (4) that it might necessitate confinement to bed; (5) that it might cause the aperture to be enlarged; (6) that it might be greatly objected to by the patient. Mr. ECCLES gave it as his opinion that children with strangulated hernia should but rarely be subjected to operation, for the gut could nearly always be returned by gentle taxis, and was seldom very acutely strangulated. Old persons, the subjects of chronic lung trouble, should also be treated, if feasible, by taxis alone. Almost all other instances of strangulated hernia might be safely dealt with by operation, and he considered that the old adage "If in doubt operate," might be more widely extended. Dr. F. H. ALDERSON entirely agreed with Mr. ECCLES as to the rarity with which operation was required in the strangulated herniæ of infants. Mr. KEETLEY alluded to the difference of taxis under various conditions, but gave it as his opinion that operation was indicated in nearly every case of strangulation. Mr. MALLAM inquired whether it was common to find that the fluid reduced by taxis gave rise to peritonitis. Mr. G. E. TWYNAM thought it very doubtful that operation could be carried out with success in many cases where assistance was difficult to obtain. He thought that circumcision should always be performed in male infants who had strangulated herniæ with a view to the cure of the protrusion. Dr. R. D. BATTEN and the PRESIDENT having joined in the discussion, Mr. ECCLES replied.—Mr. A. H. TUBBY read a paper on the Surgical Treatment of Spastic and Infantile Paralysis. After describing types of cases of infantile spastic paralysis, he thought that the results of operation on these children showed that surgical interference was justified in appropriate cases. The method of treatment was to divide the tensor vaginæ femoris, sartorius, and adductor tendons at their pelvic attachments, as well as the hamstrings and the ilio-tibial bend at the knee, and to apply weight extension for a month, then to sever the tendo Achillis, and finally to maintain the rectification by means of a light apparatus. In severe cases of infantile paralysis he advocated tendon grafting and arthrodesis. The indications for and the limitation of tendon grafting were pointed out. Arthrodesis of the ankle was in his opinion a successful method of dealing with the flail-like joints resulting from infantile paralysis, and he described the mode in which the operation was performed. Mr. MCADAM ECCLES asked whether the length of the sartorius muscle in cases where it was implanted into the tendon of the extensor of the thigh was of much importance. Mr. KEETLEY thought that much benefit arose in cases of spastic paraplegia by the division of contracted tendons. He was doubtful of the utility of arthrodesis of the hip-joint, and he further questioned whether stiff knee-joints and ankle-joints were to be regarded as beneficial in many instances. Mr. TUBBY replied.

NORTH OF ENGLAND GYNÆCOLOGICAL AND OBSTETRICAL SOCIETY.—At a meeting held at Owens College, Manchester, on April 22nd, Dr. J. W. MARTIN (President) in the chair, Dr. RUMBOLL (Leeds) showed a large Fibroid Tumour of the Uterus, removed by abdominal hysterectomy. Treatment by electrolysis (Apostoli) had failed.—Dr. DONALD (Manchester) showed the Uterus and Appendages which he had removed from a patient aged 30, who had been suffering for eight months from acute pelvic inflammation. The patient was unfit for work, almost entirely confined to bed, and had been bleeding constantly for four months. After palliative treatment in hospital for four weeks without any change in her condition operation was decided upon, and the vaginal route chosen. Both tubes were useless from purulent inflammation, and the mischief having evidently commenced in the endo-

metrium, extirpation of the uterus was thought best. Dr. Donald remarked that the radical vaginal operation for bilateral, tubal, and ovarian suppuration had not so far met with much support in this country, although for some years it had been recognised on the Continent as the best means of dealing with cases which did not improve under rest and palliative treatment. After appendage removal the uterus was a useless organ, and the objection to its removal mainly sentimental. When the uterus was healthy, and the appendages not septic, there was no need to remove it.—Dr. DONALD read notes of a case of Rupture of the Vagina during Labour. The first case was that of a 9-para, aged 40, attended by a midwife. When admitted to hospital a loop of large intestine was hanging from the vagina, 2 feet in length, very distended and congested; the funis prolapsed, cold, and pulseless; there was a large rent in the posterior vaginal wall, the cervix about two-thirds dilated, the vertex presenting R.O.A. Cranioclasia was performed, and after extraction of foetus and expulsion of placenta it was found that the tear in the posterior vaginal wall began at a point one inch from the posterior commissure of the vulva, ran transversely for about 2 inches, and then almost vertically and a little to the left of the middle line, up to the highest point of the posterior vaginal fornix. The uterus was loosely packed with iodoform gauze, and the hole in the vaginal vault plugged with several thick strips of iodoform gauze, which was removed from the uterus fifty-six hours after delivery, but not from the abdominal cavity until the seventh day. The patient made an uninterrupted recovery.—Dr. WALLS (Manchester) described a case similar to Dr. Donald's, but of less severity, an 8-para, with conjugata vera of $3\frac{3}{4}$ inches, with history of large children and forceps labours. The breech was impacted. Chloroform was administered, and a leg brought down; the arms were delivered with difficulty, the head extraction being comparatively easy. A laceration was discovered in the neighbourhood of the right sacro-iliac synchondrosis, external to the cervix; the laceration admitted two fingers, which passed into the tissue of the broad ligament and then into the peritoneal cavity. The tear was plugged with iodoform gauze; the cervix uteri plugged separately and the vagina tightly packed with iodoform gauze beneath all. A good recovery was recorded.

WEST KENT MEDICO-CHIRURGICAL SOCIETY.—At a meeting on May 6th, Mr. W. ARBUTHNOT LANE, President, occupied the chair. Before the meeting Messrs. Maw, Son, and Thompson gave an exhibition of surgical instruments and apparatus.—Dr. Prior Purvis was unanimously elected an honorary member.—Mr. LANE delivered his Presidential address on the Principles that should guide us in Operations for Malignant Disease. He pointed out that the two chief indications were the complete removal of the growth at all costs, modified of course by the wishes of the patient, who must be made fully aware of the disadvantages associated with any particular procedure, and the ensuring to the patient a minimum of discomfort and pain in consequence of the operation. He illustrated his meaning by descriptions of operative measures for the removal of the larynx, tongue, breast, and rectum, which were based on the application of these two principles. He then read another paper on the Treatment of Ununited Fractures by Steel Screws, illustrating the cases by radiograph.—Mr. BIDWELL and Drs. DOCKRELL and TOOGOOD discussed the papers; and Mr. LANE replied.

ERRATUM.—The remarks on a Case of Graves's Disease with Bradycardia at the meeting of the Clinical Society (BRITISH MEDICAL JOURNAL, May 7th, p. 1,200) attributed to Dr. Leonard Guthrie were made by Dr. Arthur Davies.

CANADIAN TREATMENT OF INEBRIATES.—The Executive of the Toronto Prisoners' Aid Association recently appointed Dr. Rosebrugh to visit American inebriate hospitals, and otherwise inquire into the after-history of inebriates who had been under treatment. He has reported that of 10,000 cases treated at the Boston Washingtonian Home, 34 per cent. had remained abstainers for over ten years. After the same interval 34 per cent. of 600 cases treated at Fort Hamilton had also remained sober. In Minnesota only a half of 57 discharged criminal inebriates had relapsed at the expiry of a year and a-half. Among other recommendations for dealing with inebriate prisoners, he suggests for male inebriates an industrial reformatory on the farm colony plan.

REVIEWS.

THE TREATMENT OF SARCOMA AND CARCINOMA BY INJECTIONS OF MIXED TOXINS. By C. MANSELL MOULLIN, M.D. Oxon., F.R.C.S., Surgeon and Lecturer on Surgery at the London Hospital, etc. London: John Bale, Sons, and Danielsson. 1898. (Demy 8vo, pp. 66. 3s. 6d.)

The mixed toxins to which this little book refers are those of the streptococcus of erysipelas and the bacillus prodigiosus (Coley's fluid). The book has grown out of a paper which Mr. MOULLIN read before the Harveian Society of London, and an appendix is added containing brief particulars of all the instances which the author could find in which malignant growths have disappeared after attacks of erysipelas, whether occurring accidentally or communicated, and of some of the most important of those in which a like result has followed the injection of the mixed toxins.

While we are much indebted to Mr. Moullin for putting into such a convenient form so much of the material relating to this method of treatment, we cannot but own to a feeling of disappointment at the results with which it has been attended in the hands of surgeons in this country. Mr. Moullin seems, at first sight, to have been more fortunate than other English surgeons, for three of his five patients were vastly improved, if not cured, by the injections, but in not one of the three was the diagnosis of sarcoma confirmed by microscopical examination, and this is the more important because the clinical account of the cases leaves room for the gravest doubt whether the disease was sarcomatous in any one of them. The first of the three patients (H.K.) was suffering from a swelling in the groin, and some enlarged glands. The whole growth was of quite recent duration. The patient looked ill, and his temperature was very irregular (on two evenings 101°). No doubt those who examined the tumour thought it might be a sarcoma, but those who read the case must see that the diagnosis rested on very uncertain grounds.

The second patient (F.D.) suffered from a very large tumour within the abdomen, also of very short duration, which was first noticed after the patient had been seized with a sharp pain in the left flank, where the tumour was situated. There is nothing in the account of the case to prove that the tumour was a new growth. It is notorious that large intra-abdominal tumours which have been actually explored and pronounced to be malignant, do sometimes disappear without treatment. Such cases have been described by Thornton, Greig Smith, and others; and the late Mr. Greig Smith suggested, in a paper read before the Royal Medical and Chirurgical Society in January, 1894, that these reputed malignant tumours are probably inflammatory.

The third case (that of I.V.) is even more likely to have been a case of inflammation. The injections appear to have been only employed over about two weeks, and were suspended on account of the weak and prostrate condition of the patient. He is said to have had an abscess in the region of the hip where the tumour was two months after he left the hospital.

The study of these three cases, which were cured, as the author believes, by injection of the mixed toxins, leads us to the opinion that the tumour was, in all three of them, probably of inflammatory origin, and not malignant; and we are the more sorry to adopt this opinion because we are anxious to think favourably of the treatment by the toxin of erysipelas. It is founded on a sound basis—the occasional disappearance of malignant growths after an attack of erysipelas. It has been properly brought before the profession, and, in the first place, Professor Bruns, and, later, Dr. Coley of New York, deserve the highest praise for the work they have done in this connection. Unhappily the results, so far as this country is concerned, are very disappointing. They show that the treatment by injection is very distressing to the patient; that it is not free from danger to life; and that no really successful case is on record unless Mr. Moullin's three cases of doubtful tumour are to be regarded as cured cases of sarcoma. We wish we could believe they were.