

SCIENTIFIC INTELLIGENCE.

PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF DUBLIN.

SESSION 1840.

Nineteenth Meeting, April 11, 1840.

Mr. COLLES in the Chair.

1. *Morbus Coxæ*.—Mr. Ferrall said he wished to present a specimen of disease of the hip joint, which exhibited some characters not uninteresting. The patient, a boy about eight years of age, was admitted into St. Vincent's Hospital, the disease being at that period of twelve months' standing. At that time the most prominent features of the case were the presence of a large swelling involving nearly the whole limb, particularly the upper portion, accompanied by a distinct sense of fluctuation, which was freely communicated from one part of the thigh to the other; there was also a tumour of considerable size on the dorsum of the ilium. At first it was supposed that the tumour might by possibility be connected with disease of the spine, but this idea was abandoned on more accurate examination. The position of the patient while standing was this: the pelvis on the diseased side drooped, and the foot was pointed, the toes resting on the ground, and the heel elevated. The boy was of a bad constitution, and laboured under other diseases. He had enlargement of the liver, chronic diarrhœa, and ulceration of the bowels, under which he ultimately sunk. Mr. Ferrall said he should observe, that the shortening of the limb was very trifling, being not more than half an inch, and that it enjoyed a greater degree of mobility than he had ever observed in the advanced stage of morbus coxæ; it could be freely moved in every direction, and with very little pain to the patient. On dissection, the following state of parts was observed. The head of the bone was destroyed, and the caries had also engaged the acetabulum; the amount of destruction in the head being about as much as would account for the shortening. It lay in the acetabulum, which was not remarkably deep, but was carious throughout its whole extent. The capsular ligament was perfect, except at its

inferior part, where there was an opening by which it communicated with the immense abscess at the upper part of the limb. The head of the bone had separated from the shaft, and the slightest degree of extension was sufficient to detach them. In fact the femur presented the appearance which had been so well described by Mr. Carlile during the last session, except that the separation was not so complete, for in his case the head of the bone had been not only detached, but also thrown off through an opening in the integuments. In Mr. Ferrall's case the head of the bone, although separated from the shaft, was still kept in connexion with it by slips of synovial membrane, which passed from one portion to the other. Mr. Ferrall observed that the case was interesting; first, as presenting some difference compared with the usual position of the limb in *morbus coxæ*. Sir P. Brodie has observed that in some few cases the patient rests on the toe and not on the heel; in the majority of cases it has been remarked that the pelvis is higher on the diseased than on the sound side. In Mr. Ferrall's case an opposite state prevailed; the pelvis being lower on the diseased side. The next point was the remarkable separation of the head of the bone and the preparations for throwing it off, if recovery had been possible from other conditions of the system. (*Museum, St. Vincent's Hospital.*)

2. *Pericarditis with Pleuritis and Pneumonia*.—Dr. Greene presented a specimen of pericarditis taken from the body of a young person about eleven years of age. About fourteen days previously to his death he was attacked with nausea, vomiting, and palpitations, but had no pain in the heart. On admission into hospital the action of the heart was found to be violent, and extending over a very considerable space, the pulse jerking, hard, and incompressible; but he did not complain of any pain, until closely questioned, when he referred it to the cartilages of the fifth and sixth ribs at their junction with the sternum on the right side. On examination a double fremitus was discovered over the base of the heart; it was accompanied by a double soufflet. In Dr. Greene's case there was a double frottement, distinct, but not very loud, which might be accounted for by the length of time the disease had been going on, and the amount of adhesion between the heart and pericardium. With respect to frottement, Dr. Greene said he looked upon it as a very valuable sign. Dr. Stokes says, that it can be heard at a considerable distance, where there is hypertrophy; this however was not the case in the instance alluded to by Dr. Greene, but he thought that solidification of the lung contributed to render the sound more distinct. With respect to the double soufflet, it continued long after the frottement had ceased, and could be heard even at a distance from the heart. This led Dr. Greene to conclude, that there was some internal affection of the heart, most probably some disease of the valves. On examination, he found this to be the case. There was disease of the auriculo-ventricular valves on the right side, and also of the aortic valves. Dr. Greene observed in conclusion, that he thought it

would be extremely important to determine whether bruit de soufflet existed in simple inflammation of the pericardial layer, or whether it is not partly attributable to some simultaneous affection of the internal membrane lining the cavity of the heart and its valves. Whether the presence of an effusion of lymph on the external surface of the heart could produce bruit de soufflet, Dr. Greene could not exactly say; but he thought that an affection of the lining membrane of the heart would produce it. There was another point in the investigation of which he had been engaged, but without having arrived at any satisfactory conclusion, viz., to ascertain whether the sound of friction depends on deposition of lymph on the pericardium, or on the corresponding surface of the pleura. Reasoning from analogy, he would be inclined to think, that where the to-and-fro sound depended on pleuritis, it would be double, like that of respiration, and he had verified this in a case which had been recently under treatment at the Richmond Hospital. Hitherto, however, he had not succeeded in meeting with a case of simple pericarditis; but he knew that there were such, and gentlemen who had the opportunity would be able to determine the exact character of the to-and-fro sound in pure pericarditis as compared with pericarditis complicated with pleuritis. With respect to the case he had brought before the meeting, it was one of pericarditis with pleuritis, pneumonia, and solidification of the lung. The patient had not been subject to rheumatism.

3. *Cancer of the Lung with Empyema*.—Dr. Stokes begged to bring before the notice of the Society, a case of cancerous degeneration of the lung, combined with empyema. So little was known of the ordinary symptoms of the cancer of the lung, that he hoped the society would excuse him for detaining them, while he read an account of the case transmitted to him by an exceedingly scientific and accomplished physician, residing in one of the principal provincial towns in Ireland. The subject was a man, aged forty; his illness commenced in June, 1839, when he was supposed to labour under symptoms of hepatic disease. On the 9th of July, he was attacked with dyspnœa, which was relieved by bleeding, but was not otherwise ill. On the 7th of August, he expectorated some bloody mucus, and had lancinating pains in the right side of the chest, between the fourth and sixth ribs. At this time his pulse was 70, and regular; his respiration 26 in a minute; his tongue clean and moist; his skin cool; bowels free; and appetite good. The chief inconvenience he felt was, that he could not make a full inspiration, in consequence of the pain it produced. Both sides of the chest were symmetrical, but the right was dull on percussion over the lower half, both anteriorly and posteriorly; the left was quite natural. The respiratory murmur was feeble in the right, and puerile in the left lung. Here was a person with violent pain, difficult breathing, and dulness over a large portion of the right side, but without any fever, acceleration of pulse, or

derangement of digestion. The stethoscopic phenomena were clearness of respiration both before and behind, over the upper part of the right lung; below, respiration was feeble, and accompanied with wheezing. The sputa were very opaque and the matter expectorated frequently presented the appearance of black currant jelly; but had none of the viscosity of pneumonic sputa. Decubitus in general on the back; he was blooded again, leeches, and cupped, and put on tartar emetic. On the 29th of August, dulness and absence of the respiratory murmur were spreading upwards, his dyspnoea increasing, so that he was unable to keep the horizontal position, and was obliged to have himself propped up in bed by pillows. His physician at this time had come to the conclusion, that he either had a tumour in the lung, or empyema, as the result of pleuritis; the latter opinion he subsequently adopted. On the 4th of September, there was little alteration, except the occurrence of an attack of neuralgic pain, to which he was subject, and which continued for several weeks. On the 2nd of October, the chest was measured, when the right side was found to be two inches larger than the left. The superficial veins of the chest and abdomen, which had been observed to be slightly enlarged about the latter end of August, were now considerably swollen and prominent, and there was œdema of the face. Over the right side of the chest, from the fourth rib downwards, there was dulness with absence of the respiratory murmur; pressure on the epigastrium produced most distressing sensations. On the 6th of November, the chest, which on the 2nd of October had measured two inches more on the right, than on the left side, was found to be again symmetrical; there was œdema of the face and right side, and the cough and expectoration continued. At this time he was seen in consultation by Dr. Stokes, who was struck with the remarkable size of the intercostal and epigastric veins, which were greatly enlarged, and anastomosed freely; some of them were nearly as thick as the little finger, and remarkably tortuous. He came to the conclusion that the patient was labouring under cancer of the lung, combined with empyema. From the previous history of the case, he was satisfied that there had been effusion into the pleura which had been partially absorbed; but it was clear that it had been followed by some alteration of the lung itself. It was found that although the side had returned to its usual dimensions, yet the upper portion of the lung had not regained its sonority. On examination, Dr. Stokes found that the condition of the lung was one of *perfect solidification*; there were none of the râles or other phenomena characteristic of imperfect permeability present, the signs were those of total obliteration of the air cells and complete solidification. This was a circumstance which was strongly opposed to the idea that the patient was labouring under phthisis. Cases of complete solidification of this kind are extremely rare. The next remarkable feature of the case was the appearance of the veins, which were extremely large and tortuous. This symp-

tom was first noticed by Dr. Graves as connected with the existence of tumours or malignant disease of the thoracic viscera. It might be said that this condition was owing to some compression exercised by the empyema on the deeper seated veins. This, however, could not be the case, for although the empyema had diminished, the veins had been increasing in size. These two circumstances, the complete solidification of the lung, and the varicose enlargement of the veins, becoming more marked notwithstanding the diminution of the empyema, led Dr. Stokes to the conclusion, that cancer of the lung existed. The circumstances of this gentleman's death were very painful. There was no change in his symptoms, except that the liver became gradually displaced, and pushed down into the abdomen. During the months of January and February, there was a rapid decline in his strength. For the last fortnight, he complained greatly of pain in the epigastrium and sense of weight in the stomach. His legs became cedematous, and he could breathe only in a particular posture; he sat on a chair with a pillow on his knees, on which he rested with his hands. His eyeballs became considerably enlarged, and the sclerotic presented a peculiar blue pearly appearance. His body became extremely emaciated, and he died quite worn out with suffering. On opening the right side of the chest, a quantity of puriform matter was found in the cavity of the pleura, which was lined with a smooth membrane. The lung was diminished, and strongly adherent in many parts. The substance of the lung was converted into a solid, white mass, intermixed with encephaloid and melanotic spots. The white substance was traversed by fibres in various directions. There were very few traces of vascularity in any part of the lung. The left pleura contained about a pint of serous fluid. The heart was sound, but the pericardium contained about eight ounces of serum.

Dr. Stokes then submitted a portion of the lung for inspection; it agreed exactly with the description given. He said the case was interesting in a practical point of view, as, during the prevalence of the disease, the question had been raised as to the expediency of paracentesis of the chest. There were two more symptoms in the case which were deserving of notice. One was the occurrence of a peculiar kind of expectoration resembling currant jelly; the other was, that this expectoration had for several weeks an intensely acid odour. (*Museum, Park-street School.*)

4. *Pott's Gangrene; Arteritis.*—Professor Harrison presented an example of Pott's gangrene. The patient was a woman, aged 76, and had always enjoyed good health. The disease was of very short duration. One of the most distressing features of the case, was the violent pain she suffered, from which she experienced no relief night or day. The disease commenced on the third toe, extending to the second and great toes, and from them up along the foot and leg. Nothing afforded the slightest relief, and she sank very rapidly. On dissection, nothing peculiar was observed

in the smaller vessels; they contained a quantity of serum, but no coagulum. The anterior and posterior tibial arteries were hard and studded with ossific particles; these, as well as the other arteries of the limb, were filled with dark coagulum. A portion of the femoral artery near Poupart's ligament was shewn by Professor Harrison; when opened, scarcely any appearance of a canal could be seen, and it contained a firm clot which adhered to the sides of the vessel, so that it could not be squeezed out without considerable difficulty. There was no apparent derangement of the nerves of the limb, except that they appeared somewhat more vascular than usual. Professor Harrison seemed to think, that the disease had originated in inflammatory action in the arteries, most of which presented patches of ossification. The heart was small, the coronary arteries were also ossified, and there were a few specks of bone in the valves. (*Museum, Trinity College.*)

5. *Fracture of the Neck of the Femur through both Trochanters.*—Professor Harrison presented also a specimen of fracture of the femur through both trochanters. The patient was an old man, who had been thrown off the flag way, and died a few days afterwards. The limb was shortened and everted, but no crepitus could be felt. On examination, a double fracture was discovered, passing through both trochanters, and uniting in an angle above. The lesser trochanter was nearly separated, being retained merely by a small portion of the periosteum; this fragment had made a small opening into the capsule, but there was no inflammation round it, nor was it much displaced. The neck of the bone was firmly impacted between the two trochanters. (*Museum, Trinity College.*)

6. *Dropsy of the Spinal Cord with Congestion.*—Mr. Adams wished to bring before the Society, the case of a man who had been brought into the Richmond Hospital about a month before with retention of urine, loss of power of the lower extremities, imperfect paralysis of sensation, and sloughing of the nates. All these symptoms had appeared in a very short space of time. The patient was a man about twenty-three years of age, had had venereal two or three times, and had used mercury to a considerable amount. Shortly after a mercurial course, and while still under the influence of the medicine, he had gone into the water: he was brought out weak and shivering, and next morning found that he had lost the power of his lower extremities. The symptoms under which he laboured were paralysis with rigidity of the muscles, a tympanitic state of the abdomen, retention and afterwards stillicidium urinæ. He was placed on a water bed, and the urine regularly drawn off, but he sunk rapidly, and died at the expiration of a month. On opening the spine, the chief phenomena observed were a large collection of water in the sheath of the cord and great congestion of its veins. Mr. Smith, who conducted the post mortem inspection, examined the whole of the spinal cord, and found it to be quite healthy. The fluid was entirely lodged in the lumbar region,

and was contained in the arachnoid sac. The fluid described by Magendie lies between the arachnoid and the pia mater. The bladder was found to be more or less inflamed, as is always the case in such instances. (*Museum, Richmond Hospital.*)

Twentieth Meeting, April 18, 1840.

DR. GREENE in the Chair.

1. *Permanent Patency of the Aortic Opening. Calcareous Depositions in the Sinuses of the Valves.*—Professor Graves exhibited a specimen, showing a deposition of bony matter filling the sinuses of the aortic valves, and producing permanent patency of the aortic opening; the opening was contracted to a very small size. The patient was a gentleman *æt.* fifty-four, of active habits; he had never felt any inconvenience, nor any deviation from a state of health, until about six months before his death, when in walking up a hill, he was seized with severe dyspnœa; he afterwards found that even walking rapidly upon level ground induced a paroxysm of difficulty of breathing. After each attack, however, he seemed to be quite well. About one month before his death, he was attacked with influenza, but he was not confined to bed, or even to his bedroom; after it had continued for about a fortnight, he consulted Dr. Graves, who found, upon examining his chest, that the heart beat violently and irregularly; there was also an irregular state of the radial pulse, a loud *bruit de soufflet*, accompanying the first sound of the heart was audible over the whole of the cardiac region; it extended as high as the top of the sternum; he had also bronchitis and cough, with paroxysms resembling those of asthma. His symptoms progressed with great rapidity, his breathing became more and more hurried, he had complete orthopnœa, became in the course of a few days dropsical, and died rather suddenly. (*Museum, Richmond Hospital.*)

2. *Permanent Patency of the Aortic Opening, with Bony Deposits in the Valves.*—Dr. Stokes exhibited the heart of a middle aged man, of exceedingly active habits, and who had always enjoyed excellent health. A short time before his death, he was attacked with shivering, symptoms of fever, and a certain degree of bronchial irritation. He was seen in the course of two or three days by his medical attendant, who found him labouring under symptoms of fever, with bronchial irritation and extraordinary excitement of the heart. The pulsations were exceedingly violent and tumultuous, and diffused over a very large space of the chest accompanied by *bruit de soufflet*, which was synchronous with the first sound of the heart. He went on tolerably well for three or four days, when he expired suddenly; his friends had only left the room for a few minutes, and on returning found him dead. *Post mortem* examination detected nothing in the head to account for death; there was neither effusion of blood or serum, and the substance of the brain was quite healthy. On opening the chest, the

heart has found to exhibit some unusual appearances. The left ventricle was distended to the greatest degree with fluid blood, and one of the most singular obstructions of the aortic valves on record, was discovered. In the case just detailed by Dr. Graves, the opening would admit the passage of full sized goose quill, but in this specimen, a small sized probe would not pass without the employment of some force; yet this individual had enjoyed uninterrupted good health, until his last attack. Dr. Stokes observed, that the narrowing was the most complete he had ever witnessed. No opening for the passage of blood could be perceived until the artery was examined on its ventricular aspect, when a very small slit was seen, through which it was just possible to pass the small end of a fine probe; it was about a line in width, and about four lines in length. The specimen was extremely interesting in itself, and tended to confirm an observation of Dr. Graves, that in cases of organic disease, the sufferings of organs depended more upon their vital, than on their mechanical conditions. Here there was no evidence of suffering, until the fever of influenza set in, by which the heart's action was so much disturbed, that it became unable to carry on its functions. In order to illustrate, still further, the absence of suffering in cases of ossification of the valvular apparatus of the heart, Dr. Stokes said, he would beg leave to show the aortic valves of the heart of a gentleman, who had laboured under the disease for five years, and had never suffered any inconvenience, except what he felt from constantly hearing an intense bruit de rape in his chest. (*Museum, Park-street School.*)

3. *Encephaloid Disease of the Stomach.*—Professor Graves exhibited the recent parts in this case. The subject, a car driver of intemperate habits, was admitted into the Meath Hospital, about a month since; he stated, that after exposure to wet and cold, he was attacked about three months previously, with a sense of weight and distension of the stomach, but without pain and tenderness. He had constant nausea and vomiting, followed by anasarca of the lower extremities; he then became jaundiced, and the bile disappeared completely from the alvine evacuations. At the period of his admission, it was evident, that he had a very large solid tumour of the abdomen, of an irregular nodulated shape, and his aspect was that of a person labouring under malignant disease. The patient died soon after his admission. Upon examination the disease was found to engage the stomach, and the folds of the omentum, which looked like so many masses of yellow fatty matter. On cutting into the stomach, a large quantity of dark-coloured fluid like coffee grounds, escaped, and the patient had vomited matter of similar character during life. The right half of the stomach, from the œsophagus to the pylorus, was converted into a mass of encephaloid disease. It was infiltrated with a white creamy fluid, differing somewhat in its aspect from the brain, like matter of cephaloma. The disease had also engaged the folds of the gastro-hepatic omentum, forming an enormous mass, which

by pressing upon the liver, and biliary ducts, had given rise to jaundice. The glands of the mesentery were also affected. The case was remarkable, both in consequence of the rapid growth of the tumour, and of the appearance of the disease in one so young, the patient being not more than twenty-five years of age. There was no disease of the pylorus. (*Museum, Richmond Hospital.*)

4. *Plastic Lymph voided from the left Bronchus.*—Mr. Smythe exhibited a portion of plastic lymph which had been voided from the left bronchus; its lower extremity was divided into two branches, and there were depressions formed on its surface by the cartilaginous rings of the bronchus. It was tubular, and admitted readily the passage of a probe. Previous to its expulsion, the patient suffered greatly from cough and distress of breathing. While the patient was in the act of leaning forward, a violent fit of coughing came on, and the lymph was expelled. A great number of smaller portions were brought up in the same way. The patient was labouring under phthisis. (*Museum, Richmond School.*)

5. *Fibrous Tumour of the Uterus.*—Dr. Kennedy exhibited a specimen of a large fibrous tumour growing from the side of the uterus; the remainder of the organ and its appendages were healthy. Dr. Kennedy also exhibited a number of drawings and preparations, illustrative of the various forms and situations of fibrous tumours of the uterus, and expressed his opinion, that these tumours were not unfrequently confounded with uterine polypi.

6. *Puerperal Arthritis Genu.*—Dr. Kennedy also exhibited the recent parts in this case: the knee joint was filled with purulent matter, but the bone and cartilages were sound. The case was one of puerperal peritonitis, followed by inflammation and suppuration of the knee joint. The woman died on the fifth day after delivery; the knee joint was attacked only two days before her death. (*Museum, Lying-in Hospital.*)

7. *Lenticular Cataract.*—Dr. Bigger exhibited a lens which was the seat of cataract, caused by a thorn having penetrated the eye; the accident was followed by severe inflammation and swelling, the thorn had remained in the eye for thirteen weeks; the lens was white and glistening. The operation for extraction of the cataract was performed, and the lens and thorn removed.

Twenty-first Meeting, April 25, 1840.

SIR H. MARSH in the Chair.

1. *Foreign Body in the Vermiform Appendix; Perforation of the Tube.*—Dr. Law said the specimen to which he was about to call the attention of the meeting, was taken from the body of a young woman, who had died in Sir P. Dun's Hospital, after a very short illness. The account she gave of herself was, that she had been in good health up to the previous Saturday, when she was seized with vomiting and pain in the abdomen, for which nothing was done until the following day. She was admitted into Sir P. Dun's Hospital on Monday, with well marked symptoms

of peritoneal inflammation, and also complained of pain running down along the right thigh, and died at ten o'clock on the same evening. An examination of the body was made about fourteen hours after death, when the following phenomena were observed. On opening the abdomen, about a pint and a half of greenish sero-purulent matter was found in its cavity, mixed with a few flakes of lymph. The peritoneal covering of the intestines was inflamed and vascular, and parts of it were covered with a coating of lymph; the vermiform appendix was found to contain a hard compact substance of a cinnamon brown colour, which was moulded exactly to the cavity of the appendix. There was no sign of inflammation about the open end of the appendix where it communicates with the cæcum, but towards the other extremity it was of a dark colour, and contained a quantity of lymph and pus. On passing a probe through the appendix in this direction, Dr. Law found that it passed into the cavity of the peritoneum. Where the peritoneum is reflected from the anterior wall of the iliac fossa, the cæcum was adherent to the walls of the abdomen, but there was no trace of inflammation or of ulceration of any part of the mucous membrane of the intestinal tube. The disease appeared to be confined to the vermiform appendix, from which it had extended to the peritoneum. Dr. Law said, that about three weeks ago he had submitted another case of a similar kind to the notice of the Society, in which the vermiform appendix opened into the cavity of the peritoneum, and in this way gave rise to inflammation. In that case, however, he had not discovered any foreign body in its cavity. There was one remarkable circumstance to which he begged leave to direct attention, namely, an emphysematous condition of the submucous tissue of the small intestines, a condition which was present not only in the present specimen, but also in that which he had last shewn. The appearance to which he alluded was still visible, and could be seen satisfactorily in the preparation. (*Museum, Sir P. Dun's Hospital.*)

2. *Foreign Body in the Vermiform Appendix.*—Sir Henry Marsh said, the case brought forward by Dr. Law was extremely interesting, and it was a singular circumstance, that two cases of a similar description had lately come under his observation. One of these was that of a medical student, whom he had very lately seen in consultation with Drs. Benson and Houston. The particulars of the case he would not detail, because he was quite sure, that all the facts connected with it would be made known to the Profession, by the gentlemen who had an opportunity of closely observing the whole progress of the case. All he should say was, that in the case he had alluded to, a foreign body had been discovered in the cavity of the vermiform appendix, that this had produced inflammation, and the formation of an abscess, which ultimately burst, and was followed by fatal peritonitis. The case which he wished to bring before the Society was one of a remarkable character, and in which the presence of a foreign body in the vermiform appendix had given rise to the

disease, by which a very valuable life was lost. The substance he held in his hand, was a concretion which was lodged in the Vermiform Appendix; it was reduced in size by evaporation, but it still retained its original shape, which is that of a kidney bean.

There were also two other concretions of the same character and form, smaller than the one now exhibited. There was no inflammatory affection of the internal coat of the intestinal tube; the only part of the mucous membrane which exhibited signs of inflammatory action, was that which lined the vermiform appendix. One of the concretions had been submitted to chemical analysis by Mr. William Colles, the Lecturer on Chemistry in Park-street; and it was found to consist of indurated feculent matter combined with animal matter. The Vermiform Appendix itself was greatly altered, it was thickened, of a deep chocolate colour, and its whole internal surface covered with a dense layer of coagulable lymph. From this point the inflammation extended over the peritoneum to the adjoining parts, namely, the caecum coli, the ascending colon, the concave surface of the liver, the right kidney, a considerable portion of the small intestines, and down to the edge of the psoas muscle. All these parts were covered and glued together by a coating, fully half an inch thick, of pultaceous lymph, and on separating portions of this, a few ounces of purulent matter escaped. The whole of the intestinal tube presented, on its external surface, evident marks of inflammation, having been universally injected, and of a deep chocolate colour, but there were no adhesions except on the right side of the abdomen.

Sir H. Marsh said the case was one of peculiar interest, particularly when viewed in connexion with those detailed by Dr. Law, and the other which he had mentioned himself. He might observe, that in the case under consideration, the progress of the symptoms corresponded with the morbid appearances. For the space of fifteen or sixteen hours, the patient had complained of pain under the false ribs of the right side, and in the right lumbar region, but had not applied for advice.

At the end of this period, when first seen by Sir H. Marsh, he had no fever, his pulse was natural; his abdomen soft; and he complained only of pain in the right hypochondrium, extending to the loins, and increased by a full inspiration. Immediate and decisive measures were taken to check the inflammation, and the result was a complete subsidence of the pain. After the lapse of some hours, the pain returned, but still there were no constitutional symptoms; active means were again resorted to for its removal, and were followed, as before, by a marked abatement of the symptoms. Towards night the pain returned with greatly increased severity; the patient had a severe and prolonged rigor; high fever set in; and the belly for the first time became tympanitic, and universally painful on pressure. The symptoms now scarcely yielded to treatment, and in a few hours it was evident that the disease had so rapidly extended, as to be altogether beyond control. There was soon a total depression of the

vital powers, and the patient sank rapidly from the effects of widely diffused peritoneal inflammation. It was certainly remarkable in this case, that the only part of the mucous membrane which exhibited marks of inflammation, was the internal surface of the vermiform appendix. It is also worthy of remark, that many hours—from the time when pain was first complained of—elapsed, before the constitution generally appeared to be in the least degree engaged, and even then the local symptoms appeared for a time to have been controlled by treatment. Sir H. Marsh had omitted to mention, that during the last few hours of the patient's life, he had complained very much of pain along the right thigh with retraction of the testis, and painful and frequent micturition.

3. *Plastic Lymph expectorated.*—Sir H. Marsh said, he would trespass a few moments longer on the attention of the Society, for the purpose of shewing a beautiful and very accurate drawing of concrete lymph moulded into the form of the bronchial tubes. The drawing represents one of many of the expectorated portions of these solidified bronchial exudations, or, as they are often termed, bronchial polypi.

There is the large trunk of the numerous and gradually diminishing ramifications. The arborescent form is accurately preserved. The globules of air retained and entangled in the middle of the tubes are well expressed in the drawing. These concretions or polypi are most firm and solid on the surface in contact with the mucous membrane from which they were exuded.

In receding from the points of contact towards the central parts, the matter became less and less firm, till in the middle it was semi-fluid, and presented the characters of soft mucus with numerous globules of air entangled in it. In this accurately resembling the adventitious membrane in true croup, which in like manner (if the case be not one of too short duration) is firm and coriaceous along the surface of contact, and becomes softer and more fluid toward the middle of the tube. In the minute tubes it generally happens that the solidified character of the lymph gradually disappears, and the matter exuded presents a soft and puriform aspect.

[Sir H. Marsh here exhibited a drawing of the adventitious membrane in croup in a child who died of that disease.]

These adventitious membranes lining the air tubes, if not by a natural effort detached, would no doubt assume a still more solid condition, adhere to the surface, become organized, and put on all the characters, as in other parts, of an organized false membrane. Of precisely the same nature are these larger and longer tubular masses, which are occasionally expelled from the mucous surface of the intestines; the concrete lymph moulded into the form, and exhibiting even a cast of the intestinal tube; of this I have seen a few very remarkable instances.

In most of the recorded cases of bronchial polypi, it is stated that the expulsion of this substance is the result of violent, distressing, and suffocative cough. This is exactly what we should anticipate, and

yet, strange to say in this case, they were expectorated with the greatest ease: so much so, that the patient herself, in describing the process, said, (to use her own words,) that they "walked up into her mouth;" and so little did she regard this curious occurrence, that she never alluded to it in describing her symptoms and sensations; and it was by the merest chance it was discovered that such substances had been coughed up. At one time, during her illness, the patient expectorated so large a number of these polypi, that if collected and expanded, they would, as she herself averred, have covered a large table beside which she was seated. The nurse collected a great number of them, and sent them about amongst her acquaintances as curiosities. In this case the breathing was laboured and the chest oppressed, previously to the expectoration of these masses. After they had been coughed up she felt herself much relieved, and the respiration, she said, was considerably less embarrassed. Of this peculiar affection, she had (during the progress of her long illness) two distinct attacks. Between these attacks there was an interval of nearly three months: during this interval not one of these polypi was ascertained to have been expectorated. During each attack she continued for several successive days almost incessantly to cough them up. The quantity of them expelled without trouble or exertion during each of these attacks was almost incredible.

The patient by whom these substances were expectorated was affected in a peculiar manner. The disease under which she laboured merits a distinct notice. Sir H. Marsh has not any where met with a description of this disease. Its characteristics are—inordinate action of the heart; habitually quick pulse; enlargement of the thyroid gland; and in every case Sir H. Marsh has witnessed, a remarkable prominence and protrusion of the eye-balls, giving to the eyes a peculiar stare. He has seen several cases in which every one of these symptoms, in a greater or lesser degree, co-existed and stamped upon the case a peculiar and distinctive character. All those seen by Sir H. Marsh, affected with this disease, were females; all presented unequivocal marks of the strumous diathesis; all were naturally thin, and as the disease advanced much emaciated. In these cases the pulse is habitually and permanently quick, and in some instances singularly rapid. Palpitations, often violent, and dyspnoea, are caused by the least unusual muscular exertion, and by every stronger mental emotion. The heart's impulse gives to the integuments a considerably increased perceptible motion. The sounds sharp, loud, and short, like those which characterize nervous palpitations. They are heard loudly throughout the chest on both sides; but unmixed with any bellows or other abnormal sound. When the cardiac action is much agitated the venous system is gorged; the veins of the neck prominent and distended. The thyroid gland permanently enlarged, palpably swells and subsides, as the heart's action increases and diminishes. The protrusion of the eyes likewise keeps pace with the degrees of the heart's action. Of the patients thus affected the countenances were pallid, and as the disease advanced the lips and cheeks presented, in various degrees, a purple shade.

In two cases amongst six observed by Sir H. Marsh, there was slight spinal tenderness; in the other four no trace of this symptom existed, nor was there any pain on pressure. The symptoms were always greatly aggravated by every catarrhal affection, or by any material disturbance of the digestive functions. In these cases generally, at the early stage, the catamenia were regular. This disease, if not far advanced, Sir H. Marsh has found perfectly amenable to treatment. That which he has found effectual, in four cases, is, firstly, very small bleedings, repeated at intervals of three or four days, either by leeches or cupping over the region of the heart: the latter, as being less debilitating, he has preferred. Secondly, a combination of tonic and sedative treatment. The inordinate action of the heart has been in these cases obviously restrained by small doses of Belladonna, also by Prussic acid; and less remarkably, but still to a certain degree, by Digitalis. The milder preparations of iron were given in conjunction with these remedies. This medicine was markedly useful: it did not increase the heart's action; it altered the state of the blood, inasmuch as every case was characterized by a deficiency in the red globules. Thirdly, a diet sufficiently nourishing, but not stimulating: tranquillity of mind and body were strictly enjoined. Nothing in treatment appeared so effectual as prolonged quiet journeying; changing air and place for a long continued period of time. All those affected with this disease were benefited by this treatment; three apparently were perfectly cured. When the disease, either from neglect of proper treatment, or from other causes, increases, all the essential symptoms are materially aggravated. The heart beats more violently and rapidly; the breathing becomes more hurried and distressing; the veins more swollen; lividity more marked; the thyroid gland increases in size; the eyes assume a more staring and prominent aspect; emaciation advances; and lastly, the patient becomes universally anasarca.

Sir H. Marsh saw, not long since, a young female affected with this disease, in whom the anasarca yielded twice to treatment, and who was twice restored to what her friends deemed perfect health, by travelling, and frequent change of air and place: the anasarca having been previously removed by diuretics. Of the cases of this disease, seen by Sir H. Marsh, three had, from an early period of life, lateral curvatures (not however of any very considerable extent) of the spine. In one case, (that of the lady who expectorated the polypi,) the disease advanced slowly to a fatal issue. For many weeks before death she was affected with symptoms of organic disease of the heart; violent, irregular palpitations; dyspnoea; orthopnoea; lividity of the countenance; coldness of the extremities; dozing and starting suddenly in a fright; delirium; anasarca; and ultimately effusion into all the cavities. Her sufferings before death were prolonged and most painful to witness.

From the time when the earliest signs of the disease manifested themselves to her death, a period of at least seven years elapsed. Often during that time, she appeared comparatively reinstated in health;

but on each occasion, severe catarrhal affections, caused by exposure to cold, sometimes anxiety of mind, or excessive fatigue or exertion, from which she would not be restrained, reproduced, in an aggravated form, all the most urgent symptoms of the disease.

From a consideration of all the cases, it would appear, that at the first, the cardiac disturbance is purely functional, and that long continued altered function produces ultimately organic disease. No opportunity has been afforded of examination after death.

4. *Deposition of Tubercular Matter in the Prostate Gland; Vesiculæ Seminales, Vasa Deferentia, and Testicles; in the Lungs, Liver, bronchial, mesenteric, and inguinal Glands, with scrofulous Caries of the Hip and Knee Joints, Spine, and Tarsus.*—Mr. Smith exhibited a series of preparations, shewing the effects of scrofula upon numerous organs and textures of the body. They were taken from the body of a man, æt. 30, who was admitted into hospital, November 1st, 1839, and died April 24, 1840. During the intervening period, he merely complained of symptoms referrible to the chest; he never attracted attention to the condition of the joints, or genital organs: he died hectic. During life, the man had a large tumour projecting under the clavicle, which had been found to be a scrofulous abscess, and which had been diminished very considerably a short time before his death. It had most probably commenced in a lymphatic gland, but during its progress it had passed inwards, and producing caries of the second rib had perforated the anterior mediastinum. The sac of the abscess had become adherent to the lung, but no matter had escaped into the pulmonary tissue. The diminution in the size of the external tumour had taken place when the matter had passed into the anterior mediastinum. The bronchial glands were very much enlarged, and one of them pressed on the trachea, forming a protrusion of a portion of its wall internally; when cut open it presented a mixture of scrofulous, with the black matter which is generally found in these glands. The lungs were comparatively free from tubercular deposition. The tubercles were few in number and confined to the lower lobe of one lung. These, with traces of chronic pleuritis, were the principal morbid phenomena observed in the chest. The substance of the liver was tolerably healthy, but there was a large number of miliary tubercles deposited under its peritoneal covering. The mesenteric glands were enlarged, and filled with scrofulous matter. The glands both above and below Poupart's ligament were similarly diseased. The left hip joint presented an example of scrofulous degeneration. Externally there was a tumour of considerable size, which had passed upwards on the dorsum of the ilium, and was formed by an immense abscess, filled with scrofulous matter. The head of the bone was softened and carious, and the cartilage of incrustation raised and detached from its surface. There was another large abscess in front of the lumbar vertebræ, the body of one of which was carious opposite the situation of the abscess. In fact, a chain

of diseased glands extended from the thigh under Poupart's ligament, along the side of the pelvis and spinal column. There was another scrofulous abscess in front of the lower dorsal vertebræ; and tumours of a similar nature projected into the spinal canal, implicating the spinal nerves near the exit. Scrofulous inflammation had also attacked the right knee joint; but there was no matter in the articulation. The bones of the foot also presented marks of scrofulous caries. The urinary and genital organs were also affected. There was enlargement and deposition of scrofulous pus in the vas deferens, vesiculæ seminales, and prostate gland. The prostate was considerably increased in size, and filled with matter which could be squeezed out of into the urethra. One testicle was enlarged, and filled with scrofulous matter.—(*Mus. Richmond Hos.*)

Sub-Cutaneous Section of forty-two Muscles and Tendons, to remedy general Deformity, by Jules Guérin.—Jules Guérin laid before the Academy of Sciences, August 31st, 1840, an account of a case in which he practised the sub-cutaneous division of forty-two muscles, tendons, and ligaments, in order to remedy a general deformity of the articulations. We report the case in the words of this celebrated surgeon and orthopœdist. "I have the honour to report to the Academy the history of an operation which, in respect to its generality and its immediate results, appears to me to establish definitively the value of a principle which I endeavoured to establish in my memoir on sub-cutaneous wounds, viz. that these wounds, if sheltered from the contact of the air, are not liable to be attacked with suppurative inflammation. Upon the 25th of the present month, at 5 o'clock in the evening, I divided, in a young man, æt. 22, forty-two muscles, tendons, or ligaments, in order to remedy a series of deformities in the body and limbs, produced by the contraction of the muscles and the ligaments. This series of operations required twenty-eight openings in the skin. The muscles, tendons, and ligaments divided were as follows:—

The pectoralis major, . . .	1	<i>Forward</i>	23
The biceps, in each arm, . .	2	The semimembranosis, . . .	2
The pronator teres do., . .	2	The semitendinosus, . . .	2
The extensor carpi radialis .	2	The rectis femoris, . . .	2
The flexor sublimis, do. . .	2	The fascia lata,	1
The palmaris brevis, do. . .	2	The external lateral liga-	
The tendon of the extensor		ments of the knee, . . .	2
carpi ulnaris,	2	The tendo Achillis, . . .	2
The tendon of the palmaris		The tibialis anticus, . . .	2
longus and brevis, do. . .	4	The extensor communis, . .	2
The tendon of the abductor		The extensor pollicis, . .	2
pollicis, do.	2	The peronæus longus and	
The sartorius,	2	brevis,	2
The biceps cruris,	2		

The patient experienced but little pain or fatigue: in an hour

after the operation he fell into a deep sleep. Upon the third day the twenty-eight wounds were perfectly healed, without the supervention of inflammatory action. The operations were performed at La Muette, in the presence of many French and foreign physicians, among whom were MM. Arendt, Surgeon to the Emperor of Russia, Valentine Mott of New York, Donbowitsky of St. Petersburg, Begurn, Chervin, Delherbe, Donné, Fiévé, Forelle, Jacob, Nuhn, Levy, R. Parise, Rayer, Ribes, and Valenciennes, of Paris; and Bataille, Boucher, Navart, Noble, Penard, and Vitry, of Versailles. I shall not at present allude to the circumstances connected with this remarkable case which bear upon my opinions with respect to the common origin of particular deformities. I wish merely now to allude to the circumstance of the division of forty-two muscles, tendons, and ligaments, with twenty-eight wounds in the skin, being performed without being followed by any inflammatory action. That the operation may not be subjected to the imputation of rashness, I may add, that since I have ascertained, by numerous experiments upon animals, the perfect freedom from danger of sub-cutaneous wounds, I have, as regards man, established the same principle by a gradually increasing series of operations, from the division of a single muscle to the section of a great number."—*Gazette Medicale*, September 5th, 1840.

On the Presence of Iodate of Potassium in Commercial Iodide of Potassium, and the Mode of detecting it, by Maurice Scanlan, Esq., Wolverhampton.—Mr. William Bailey, of this town, who, amongst other chemical products, has lately become a maker of iodide of potassium on the great scale, has, within a few days directed my attention to an examination of a specimen of this salt made by a house of deservedly high repute, as manufacturing chemists, near London; and whose name is generally looked upon, in the trade, as giving the stamp of purity to any chemical to which it may be prefixed.

It appears that hydriodic acid is sometimes exhibited as a therapeutic agent, and the method resorted to for its extemporaneous preparation is that recommended by Dr. Andrew Buchanan, of Glasgow. It consists in mixing together, in proper proportion, iodide of potassium and tartaric acid, both in solution.

Now, the quantity of free iodine liberated from this salt, which I have under examination, when treated with tartaric acid, in the way just mentioned, has led some dispensing chemists to suppose, that it contains more iodine than other specimens of iodide of potassium, which, when treated in a similar way, afford a solution that is colourless, or, at most, of a very pale yellow colour; and hence, as I am informed, some actually look upon tartaric acid as a test of the value of commercial iodide of potassium, assuming the salt of which we are now speaking as a standard of comparison. How far it may be depended upon as a test, will appear from what follows.

If tartaric acid in solution be added to a solution of pure iodide of potassium, the commixed solutions are at first colourless, but

quickly become slightly yellow, owing to the action of atmospheric oxygen on the hydriodic acid which is thus generated.

On making this experiment with the salt in question, I found, to my great astonishment, that free iodine, in quantity, was instantly developed. I was at first at a loss to account for so great a difference in the behaviour of this salt to that which I had prepared myself, and knew to be pure iodide of potassium; but from the appearance of the crystals of this salt, and from the circumstance of its not being soluble in water to the extent that it should be, I suspected the existence of iodate of potash in it, and I have since convinced myself of the fact of its presence.

I find, if we add tartaric acid solution to a solution of iodate of potash, no change of colour takes place, but that bitartrate of potash is deposited in abundance, and, as a matter of course, iodic acid set at liberty, this solution instantly decomposes iodide of potassium in solution, giving rise to free iodine in great abundance; or, if we add a drop of solution of tartaric acid to a solution of pure iodide of potassium, to which even a minute quantity of iodate of potash has been added, free iodine is instantly developed.

Tartaric acid appears, then, from the experiments I have made, to be a very delicate test of the presence of iodate of potash in iodide of potassium, and will be found a very ready and useful one for this purpose in the hands of the dispensing chemist, showing him that any specimen of this salt in which free iodine is thus developed, is actually of less value than one in which no trace of iodine appears on the instant of its application; inasmuch as iodide of potassium, in a given weight, includes more iodine than iodate of potash does; as is seen at once by the atomic composition of these two salts.

It is well known to every chemist, that one of the methods very commonly resorted to for the production of iodide of potassium is that of acting upon iodine with potash water. In this way we form iodate of potash at the same time; six atoms of potash and six atoms iodine giving birth to five atoms of iodide of potassium, and one atom of iodate of potash; which latter, if suffered to remain mixed with the iodide, would increase the produce of the manufactured salt nearly five per cent., at the expense of its purity and crystalline beauty.—*Lancet*, August, 1840.