

## SCIENTIFIC INTELLIGENCE.

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### PROCEEDINGS OF THE PATHOLOGICAL SOCIETY OF DUBLIN.

SESSION 1839—1840.

*Sixth Meeting, January 11, 1840.*

MR. ADAMS in the Chair.

1. *Morbus Coxæ*.—Mr. Ferrall presented a specimen of this disease; he observed that at the last meeting of the Society, he had exhibited a preparation illustrative of one form of shortening of the lower extremity, in cases of morbus coxæ, and which shewed that considerable displacement of the head of the bone upwards might take place, without destruction of the capsular ligament. The specimen which he now exhibited, was taken from the body of a female admitted into St. Vincent's Hospital with general anasarca and albuminous urine; shortly after her admission, it was discovered that she laboured under old disease of the hip joint, the limb was nearly two inches shorter than the sound one, it was fluxed, adducted, and rotated inwards; the trochanter appeared to form a projection on the dorsum ilii. The patient, having lingered for some time, ultimately sunk. Upon examination after death, the trochanter, which appeared to be placed so high upon the dorsum ilii, was found not to project beyond the brim of the acetabulum; the capsular ligament was deficient at the lower and inner part of the articulation, but in all other places perfect; the head of the bone and greater part of the cervix were destroyed by caries; what remained of the neck of the femur lay imbedded in a large perforation of the acetabulum, which communicated with the cavity of the pelvis, below the ileo-pectineal line; above this line a smaller perforation existed, in which lay a fragment of loose carious bone; the concavity of the ilium was bare, and here and there carious. There was, therefore, in this case, deepening of the acetabulum from caries, with destruction of the head and part of the neck of the bone, to account for the shortening of the limb: there was no luxation, nor

destruction of the capsular ligament, except the small fistulous opening at its lower part. The disease had existed for four years. (*Museum St. Vincent's Hospital.*)

2. *Pericarditis*.—Dr. Stokes exhibited a specimen of recent and singularly latent pericarditis, with the history of which he had been favoured by Dr. Grant. The subject of the case was a soldier, æt. 30, who, during a residence of eight or nine years in the West Indies, had suffered much from intermittent fever. Fourteen days before his death, he complained of cough, which was relieved by the use of tartar emetic solution: about a week previous to his decease, he was admitted into the military hospital, complaining much of pain in the right side and dyspnœa; he had great prostration of strength, and an almost imperceptible pulse, small, compressible, and beating 120 in the minute; he had tenderness on pressure over the right hypochondrium, to which situation alone he referred as the seat of his distress; upon the fourth day previous to his death, he for the first time complained of pain in the left side, he had constant cough and urgent dyspnœa, he died a week after his admission into the hospital. The preparation afforded a most extraordinary example of pericarditis, the lymph which covered the membrane being in some places an inch in thickness; there was no purulent effusion; the left ventricle was firm and contracted, and the heart increased in size. Dr. Stokes remarked, that the great interest of the case was the singular latency of the disease; the patient having all through referred his distress to the right side. The anatomical characters of bronchitis and of pleuritis, (particularly upon the left side,) were present. (*Museum, Richmond Hospital.*)

3. *Pulmonary Apoplexy*.—Dr. Greene presented a specimen of this disease. The history of the case was imperfect, but as far as he could collect, the patient appeared to have been subject to palpitations for twelve or fourteen years; this, however, had not prevented him from following his occupation as a sailor. He was a man of very robust frame, and had a remarkably large chest. About five months ago he was admitted into one of the hospitals at Quebec, complaining of distress in the præcordial region, and violent palpitations. After some time he got better, and resumed his usual occupation; but during his voyage home, became considerably worse, and on arriving in Dublin, was admitted into the Hardwicke Hospital. His symptoms were constant dyspnœa, harassing and incessant cough, hurried and wheezing respiration. His complexion was leaden-coloured, and he had dulness over the region of the heart, to the extent of about six square inches; the dulness also extended over the sternal region. The action of the heart was tumultuous and irregular; there was at first a very distinct impulse, and this was succeeded by five or six imperfect ones. Still the first and second sounds of the heart were not abnormal, and there was no *fremissement*. From the great extent of space over which the heart could be heard, Dr. Greene inferred that there was hypertrophy with dilatation, and from the circumstance of the pulse at the wrist participating in the irregularity of the heart's action, he thought at first

that there might be valvular disease. About ten days after admission he had hæmoptysis, to the amount of about eight ounces. The discharge of blood continued in a greater or less degree for six days: on the fourth day after it commenced, the rhythm of the heart was restored, both sounds resumed their natural character, and there was neither bruit de soufflét nor bruit de râpe. The same remark was applicable to the pulse, which became completely developed in the right arm, (in the left it could not be felt, owing to a high division of the brachial artery,) and quite in proportion to the ventricular contraction. From these circumstances Dr. Greene inferred, that there might be hæmorrhage into the substance of the lung, and that by the occurrence of this, and the hæmoptysis, the pressure on the heart being removed, and the weight of the column of blood being taken away, the heart had come back to its original rhythm. He examined the chest with care, and found that anteriorly and posteriorly on the right side there was dulness, at first modified, and afterwards complete. In addition to this, there was a large rale over the mammary region; at one spot the voice was resonant, and a fine crepitus was audible. Dr. Greene inferred, that there was pulmonary apoplexy, and that it was over distention of the heart; from the pressure of a large column of blood which produced the tumultuous action of the organ, as well as the absence of the normal sounds. At the approach of death the heart became again tumultuous in its action. On examination the heart was found to be more than one-third larger than the natural size; the right side appeared very much enlarged, and this would account for the dulness heard over the right side of the sternum. The right ventricle was greatly dilated, but was not hypertrophied like the left ventricle, the walls of which were of considerable thickness; there was no valvular disease of any kind. In this point of view Dr. Greene thought the case of great importance, for although the rhythm of the heart was disturbed and its action irregular, there was no bruit de soufflét or bruit de râpe. The state of the lung was that which is generally described as apoplectic engorgement. In the situation where the gargouillement was heard, the substance of the lung was broken up, and various parts of it were dotted with small round masses of coagulum, which, when turned out, left behind them a corresponding number of well defined cavities. Spots of engorgement were also discovered in the left lung, but there were no cavities. When the right lung was compressed between the fingers it had the feel of a lung in the second stage of pneumonia, but the fluid which exuded from it was pure blood. The mucous membrane of the bronchial tubes was of a vermilion colour, and deeply tinged with blood. Dr. Greene said in conclusion, that he had brought forward the preparation as the first example he had witnessed of that peculiar form of pulmonary apoplexy which depends on hypertrophy of the heart, unaccompanied by disease of the valves.

5. *Tubercular Phthisis*.—Dr. Graves exhibited the lungs of a woman who had died a few days previously at Sir Patrick Dun's

Hospital. She was admitted with symptoms of phthisis, accompanied by chronic laryngitis. Dr. Graves remarked, that it was well known, that where laryngeal disease with stridulous breathing exists, many of the phenomena of phthisis are recognized with difficulty. The character of the inspiration, of the voice, and of the cough, are not the same as when laryngitis is absent, and the sounds of the larynx mask those of the lung. The chief point to which he wished to refer in the case alluded to was this: both lungs were filled with tubercles, and in both there were tubercular cavities, a large one in the left, a much smaller one in the right lung. The right lung was every where closely adherent, in the left lung there were no adhesions; any one who examined the lungs would have expected, that during life they would have given evident indications of the nature of the disease, and that there would have been distinct dulness on percussion. Dr. Graves had percussed the chest, and it every where returned a clear sound, no dulness could be discovered in any part. He remarked, that in the investigation of diseases of the chest he had been frequently struck with the fact, that although percussion gives in some cases signs of great value, and which, when positive, appear to be infallible, in other cases the information derived from it is questionable. The truth of this he had frequently verified in cases of phthisis, in which tubercle might exist to a considerable amount, and without dulness.

5. *Corroding Ulcer of the Uterus. Cancer of the Uterus.*—Dr. Churchill exhibited two specimens of considerable interest, as tending to throw light on two affections of the uterus, differing in their nature, but very frequently confounded together. One of these was an example of corroding ulcer, the other of cancer, both of a malignant character, and attended with nearly the same fatal results, but differing very much in their pathological conditions. In corroding ulcer there is loss of substance without any new deposition or hypertrophy. In cancer there is also loss of substance, but the deposition of new matter is very considerable, and greatly exceeds the amount of loss, so that the uterus instead of being diminished in size is increased. This point Dr. Churchill considered interesting, as affording grounds for a correct diagnosis; the symptoms may be similar in both, both may be accompanied by severe lancinating pain, in both the discharge is acrid, and in both the patient may be run down by hectic; it is only in the pathological condition of the parts, that we have grounds for making a distinction between them. In corroding ulcer, where there is no deposition, when the finger is introduced, the pelvis is found to be less full than usual, the uterus is evidently diminished in size, and what remains of it is moveable. In cancer the finger cannot penetrate as usual, the bulk of the uterus fills up the cavity of the pelvis, and the parts are more or less fixed and immovable. Dr. Churchill said he had never met an instance in which these diagnostic signs had failed.

6. *Wound of the Thoracic Aorta.*—Mr. Smith exhibited a recent specimen of wound of the aorta, for which he was indebted to Mr. Swift

of Kingstown. The preparation was taken from the body of a youth aged 16, who had been stabbed with an iron nail rod in a scuffle with a smith, who worked in the same forge with him; the instrument had entered the left side, between the sixth and seventh ribs, passing through the lung close to its root, and entered the aorta about an inch above the opening in the diaphragm for the transmission of that vessel; about a pint and a half of coagulated blood was found in the cavity of the pleura. The boy died in three minutes and a half after the receipt of the injury. Mr. Smith said he exhibited the preparation as an example of an accident of very rare occurrence, and also as tending to shew the great difference between the middle and external coats of arteries, for any one who inspected the preparation would perceive that the cellular coat was only partially divided, while the middle coat and lining membrane were ruptured throughout their entire circumference. (*Museum, Richmond Hospital.*)

7. *Cerebral Apoplexy.*—Mr. Adams said he had a case of some interest to lay before the meeting. During the course of the last week, a man, aged 63, for some years an inmate of the House of Industry, and in the enjoyment of good health, went out to walk on leave, and shortly after his return retired to bed; during the course of the night he was heard to make one or two stertorous inspirations, and nothing more was observed until morning, when he was found quite dead. On opening the cavity of the chest, the heart was found to be of inordinately large size, and had a rounded apex, but did not present any marks of valvular disease. Mr. Adams then proceeded to open the brain, and discovered some effusion under the arachnoid. The most remarkable feature of the case, however, was an effusion of bloody serum into the cavity of the ventricles, very like that which is seen in hæmorrhagic pleuritis; all the blood in the vessels was of a dark colour, in the arteries as well as in the veins. The case was interesting when placed in juxta position with that just detailed by Dr. Greene. In Dr. Greene's case the heart was enlarged but the mischief consequent on this enlargement fell on the lungs; in Mr. Adams's case also the heart was enlarged, but the weakest vessels appeared to be those of the brain. There was this difference, however, none of the vessels had given way, and the only morbid phenomenon was the effusion of bloody serum.

8. *Hypertrophy of the Carneæ Columnæ.*—Mr. Adams said he wished to exhibit a specimen of hypertrophy of the fleshy columns of the mitral valves; the patient was subject to violent paroxysms of dyspnoea and palpitation, in one of which he expired. On making an incision into the cavities of the heart, the left ventricle was found to be almost completely filled by the enlarged fleshy columns, among which two of these columns were particularly hypertrophied. This case shewed that there might be hypertrophy, not only of the substance of the ventricles, but also of the fleshy columns and chordæ tendinææ. (*Museum, Richmond Hospital.*)

Seventh Meeting, January 18.

Professor GRAVES in the Chair.

1. *Subclavian Aneurism; fusiform Dilatations of the Artery.*—Mr. Smyly exhibited the parts in this case, taken from the body of a man aged 41, who was admitted into the Meath Hospital under the care of Sir P. Crampton. The injury from which the disease occurred was a fall from horseback while hunting; at the time of the accident the patient experienced most severe pains in the shoulder, but as soon as he recovered from the shock, he remounted, and rode with the hounds for the rest of the day. During the following week also, though suffering from pains of the shoulder, he hunted three times. In a month a pulsating tumour appeared under the right clavicle, and the patient came to hospital, where he died suddenly on the day after admission.

Dissection did not reveal the cause of death. The heart was large, but its parietes not thickened; there was no valvular disease. The blood in all the vessels, arterial as well as venous, was fluid, dark-coloured, and of a tarry consistence: immediately external to the scalenus muscle, the aneurismal enlargement commenced. The artery presented two dilatations, with a small intervening portion, about half an inch of the artery, apparently natural. The inner dilatation was the smallest. They were situated anteriorly and inferiorly with respect to the aneurismal sac, with which they freely communicated; the sac was the size of an orange, and bulged in between the first and second ribs, into the right side of the chest, its pressure had bared the surface of the first rib. The walls were thick, irregular, and fibrous.

The patient had enjoyed the best health up to the time of the accident; from that time till the period of his death he suffered violent pain in the shoulder, which seemed to be caused by pressure on the axillary nerves.

2. *Purpura Hæmorrhagica. Effusion of Blood into the arachnoid Sac, and under the Pericardium.*—Dr. Hutton laid the specimens in this case, together with a drawing of hæmorrhagic spots on the pericardium, on the table of the Society. The patient, a boy of eleven years of age, had frequently exhibited slight symptoms of the purpura simplex, without disturbance of his general health, until last June, when epistaxis, hæmorrhage from the gums, and from a sore on his foot, took place; the hæmorrhage was arrested in hospital, and he went out in apparently good health, but with the purple spots remaining. The hæmorrhages, however, returned in December, and in a few days, though the loss of blood was by no means considerable, he became pale, and his pulse was small and feeble; the epistaxis was very frequent, he became quite exhausted, and fell into a stupid, lethargic state; he rallied for a short time, but soon after sunk exhausted. The body presented an anemic appearance, with some traces of purple spots on the surface.

The substance of the brain was unusually free from red blood, but in the arachnoid sac, in the temporal regions, there existed some fluid blood. The heart was covered with purple spots, particularly over the right auricle, where the effusions below the serous membrane were more numerous, and of a darker colour than elsewhere. The blood was not unusually fluid. (*Museum, Richmond Hospital.*)

3. *Superficial Gangrene following the Eruption of Bullæ.*—Dr. Hutton brought forward a case of this description, which occurred in a child. The first appearance of bullæ was preceded by vomiting and purging. The bullæ, which came on consecutively, and were similar to pompholyx diutinus, were in each instance followed by a patch of superficial gangrene which formed beneath the vesicle, these sloughs exactly resembled those produced by boiling water. The child was not badly nourished, but had a pale unhealthy aspect; it died with convulsions in a few days after admission. The brain was healthy, somewhat firmer than usual; the lungs, heart, and digestive organs presented nothing remarkable. Two coagula existed in the digestive canal, one in the stomach, the other in the ileum.

4. *Pericarditis, with great liquid Effusion; pulmonary Apoplexy.*—Mr. Hamilton laid the specimens in this case on the table; they had been forwarded to him by Dr. Hudson of Navan. The patient, a lad aged 19, was admitted under Dr. Hudson's care on the fourth of December, and died on the sixth of January following; he had no symptoms of rheumatism, but for three weeks before admission, had suffered from weakness about the heart, and dyspnœa, not, however, sufficient to prevent his moving about. Four days before admission he was suddenly seized with pain in the cardiac region, so acute as to make him shriek out, to this succeeded fainting and extreme dyspnœa; at this time he was largely bled.

His symptoms on admission were as follows; great pallor of the whole surface, extreme dyspnœa, accompanied with attacks of spasmodic cough of the most distressing violence; his breathing and pulse very rapid, and the latter feeble and irregular, no two beats being alike in strength or frequency. The left side was evidently full, and presented dulness on percussion, extending from the lower margin of the ribs to the infra-clavicular region, and extending across the sternum to the upper part of the right side; the sounds of the heart were scarcely at all audible.

Repeated cupping, blistering, and the use of calomel, squill, and digitalis were employed; for the first few days, the attacks of syncope were most alarming, but on the gums becoming sore, a marked improvement took place: the face became less anxious; the convulsive cough and dyspnœa subsided, and he could lie in the horizontal position; the pulse became regular and fuller; and the sounds of the heart were accompanied by frottement. This improvement was but temporary. In three days the dulness increased over both sides, so that Dr. Hudson thought it unlikely that it solely depended on the pericardial effusion. Copious hæmoptysis took place. The orthopnœa returned, and he speedily sank.

On raising the sternum nothing was to be seen but an enormously distended pericardium compressing and displacing both lungs; the liquid was of a dark coffee colour, and on standing, threw down a sooty precipitate; its quantity exceeded three pints. The heart, particularly in its posterior and upper portions, was covered with lymph deeply imbedded. The valves were healthy, and the heart somewhat enlarged.

The right lung presented the appearances of circumscribed apoplectic effusions, particularly in its inferior portion.

5. *Polypus of the Uterus*.—Dr. Churchill exhibited the preparation and casts in this case. The woman was admitted into the Meath Hospital under the care of Mr. Smyly, she then presented great enlargement of the abdomen, with a tumour in the vagina; during her stay in hospital this tumour descended perpendicularly, till it projected beyond the external parts, to the extent of twelve inches; as it descended, the swelling of the abdomen diminished, and ultimately subsided. The tumour was removed by operation; but the patient sunk from inflammation of the pelvic organs. The tumour grew from the posterior wall of the uterus, and weighed between four and five pounds.

6. *Polypus of the Uterus, producing fatal Hæmorrhage after Delivery*.—Dr. Churchill exhibited the drawing of another case, in which a large polypus had existed during pregnancy. Natural labour took place, but the patient sank from flooding, which resisted all treatment; a polypus of the size of a large pear was found attached to the fundus of the uterus.

7. *Malignant Tumour in the anterior Mediastinum*.—Mr. Adams presented a series of preparations and drawings illustrative of encephaloid disease, a remarkable case of which had recently come under his observation: the particulars were as follows. On the 25th November, 1839, Mr. Cullen of Suffolk-street, was called to see a lady, æt. 40, of full habit, and two years married, but without children, she had œdema of the left hand, and of the face, and oppressed breathing, increased by any considerable exertion; she was, however, able to go out every day.

She complained chiefly of sudden and violent fits of coughing, of some minutes' duration, occurring occasionally in the day-time, but so frequently at night, as to prevent her from sleeping; in the intervals of these fits she had a short, dry cough; she sometimes expectorated a small quantity of frothy mucus, which on a few occasions was tinged with blood. These symptoms had existed for some time, but she could not accurately determine the date of their commencement. The veins of the neck and face, particularly on the left side, were greatly swollen, and her face was often livid from the violence of the cough. The chest was clear on percussion, and respiration audible and natural throughout both lungs. The sounds of the heart and large vessels were normal, but the pulse at the wrist was very small, and about 90. In the course of three or four weeks her symptoms became greatly aggravated. The left arm was enor-



mously distended with serum, the right considerably so; the mammae and the integuments of the thorax also became œdematous. The dyspnœa was excessive; she was constantly awake at night, and remained sitting up in bed, leaning forwards. Spots of ecchymosis now began to appear on the breast and arms, the left elbow and wrist on which she used to lean in bed were threatened with gangrene, and the buttocks commenced to slough. The neck immediately above the sternum was tense and swollen, with an oppressive sense of weight and fulness, and she complained of a continued feeling of suffocation. The lower limbs subsequently became œdematous, the left more so than the right. These distressing symptoms continued with little variation until the 15th, January, 1840, when she died. The stethoscopic evidences of a natural condition of the heart and lungs were unchanged throughout the entire progress of the case. On removing the sternum, an oval tumour, about three inches long and an inch and a half in breadth, was found in the anterior mediastinum, occupying pretty nearly the situation of the thymus gland. It lay somewhat obliquely, its larger end being above, and towards the left side; a portion of it was attached to the trachea, and to the arch of the aorta; when cut into, it was found to be of a carcinomatous structure, the great mass of it white, firm, and nearly cartilaginous, but near the circumference some portions were soft and brainlike, and there were scattered through it two or three melanotic spots. The trachea was red, the bronchi dry, the lungs emphysematous. The heart, aorta, and pulmonary artery were healthy. Mr. Adams said that the situation of the tumour inclining to the left side, and encroaching on the vessels of the shoulder and neck in that direction, accounted for the greater degree of œdema observed on the left side. The disease was a specimen of the cephaloid tumour, described by Bayle, and of which some cases have been described by Dr. Stokes in his work on Diseases of the Chest. Mr. Adams concluded by exhibiting several drawings of cases of this description which had come under his notice. (*Museum, Richmond Hospital.*)

8. *Softening of the Heart in Typhus.*—Dr. Stokes said he wished to exhibit two specimens, the hearts of two individuals, a father and son, who had both died of typhus. The fever was one of a peculiarly malignant character, and no less than four individuals of the family had died from it, two at home and two in Hospital. Dr. Stokes said, that with reference to his opinions on the state of the heart in typhus, some misconception had existed. It had been stated by some that he had asserted that there was always softening of the heart in cases of fatal typhus. This, however, was not his opinion; in some cases the heart was remarkably softened, in others not at all, and there was a great variety of shades between these states. The cases to which he alluded were admitted together, and presented nearly the same symptoms, at least both patients were alike covered with petechiæ, and the pulse was equally rapid in both. The son, however, had a peculiar train of nervous symptoms, he had subsultus of the face, eyes, and limbs, to a very remarkable degree,

sometimes resembling the effects of an electric shock, and producing momentary opisthotonos. The phenomena of the heart were the following: it appeared to act with great force, but when the cardiac region was examined, the impulse was found to proceed almost entirely from the contraction of the right ventricle; the left ventricle barely tilted against the ribs, and its sound and impulse were very feeble, while over the right cavity the sound was proportionably loud and the impulse strong. Wine was administered, but instead of bringing down the pulse, seemed to quicken it, for it rose from 100 to 130, and continued so until death. The same difference also in the state of the ventricles lasted throughout. The patient died on the eleventh day. On dissection the left ventricle was found to be of a dark red colour, and presented on its surface two large livid patches; the muscular substance was soft and friable, and broke down easily under the finger. The right ventricle was of the natural colour, firm and resisting. There were no symptoms of inflammation or putrescence. Dr. Stokes observed, that this went to confirm an opinion long entertained by him, namely, that the softening of the heart was neither the result of inflammation nor of putrescence, but one of those alterations which occur in fever, the nature of which at present is undetermined.

The second specimen was the heart of the father; he died on the thirteenth day, his death being caused by asphyxia produced by enormous secretion into the bronchial tubes. About twenty-four hours before death he improved greatly, and seemed as if about to recover; his countenance assumed a more favourable expression, his tongue became cleaner, and his pulse began to fall. But a fresh attack of effusion into the air tubes took place, and he sank from asphyxia. From the time of his admission, the impulse of the heart could scarcely be felt, and the only sound audible was that which accompanied the contraction of the right ventricle. It should be stated, however, that there were large bronchial rales present, and that these must have more or less obscured the sounds of the heart. On the day before his death, the impulse of the heart could be felt, and the sounds of both cavities were equally audible. On dissection both sides of the heart were found to be equally softened, and there was effusion of bloody serum into the cavity of the pericardium. This liability to effusion into the pericardium, in cases of typhus, Dr. Stokes considered to be a point worthy of attention. His opinion with respect to the specimen under consideration was, that it was softened, but not to the same extent as that of the son; and that at the time of the man's death, it was returning to a state of health. The chief pathological interest attached to the cases was, that in one instance the affection of the heart seemed to be more or less general, whereas in the other it was limited to one side. Dr. Stokes, in conclusion, stated his intention to lay before the Society every new fact connected with the history of the state of the heart in typhus.

*Eighth Meeting, January 25.*

Mr. CARMICHAEL in the Chair.

1. *Encephaloid Disease of the Bones, Liver, Lungs, and Lymphatic Glands of the Chest and Abdomen. Pneumonia.*—Mr. Smith said that on the 19th of January, 1838, he had an opportunity of shewing a series of preparations illustrative of scirrhus tubercles in the bones, amounting to twenty-four in number, and taken from the body of the same individual; all of these were illustrative of that form of degeneration which has been termed scirrhoma by Dr. Carswell. He would now beg leave to lay before the Society a number of specimens of cephaloma, occurring in several of the bones of the body, and coexisting with tumours of the same kind in the liver, lungs, and glandular apparatus. The preparations were taken from the body of a man, aged 77, remarkably large and muscular, and having all the appearance of general good health, with the exception of some symptoms which were supposed to arise from chronic disease of the heart. He was admitted into hospital on the 17th of January, with the ordinary symptoms of chronic bronchitis attended with emphysema. He remained without any peculiar alteration until a few days before death, when he was attacked with pneumonia of the lower lobe of the right lung, which terminated fatally on the 23rd. On dissection, the usual phenomena of bronchitis with emphysema were discovered, and in addition to these, the right cavity of the pleura contained a large quantity of a sero-sanguineous fluid. The lower lobe of the right lung presented an example of pneumonia in its third stage; the rest of the lung was free from inflammation. When an incision was made into the diseased portion, a large quantity of purulent matter escaped, and the surface of the lung was of a bright fawn colour, produced by a stratum of purulent matter lying immediately under the pleura. Throughout the remainder of the lungs, on the surface as well as in the substance, there was a number of small encephaloid tubercles of various sizes. The glands of the posterior mediastinum exhibited evidences of an analogous degeneration. They formed a considerable tumour in the posterior mediastinum, and had elevated the pleura from the right side of the spine and the aorta from the left. The aorta adhered so firmly to these glands, that it could not be separated without some difficulty, but it did not appear to have suffered any compression, nor did there seem to be any impediment to the flow of blood. On opening the abdomen, the liver displayed a fine specimen of the tubera diffusa of Farre; the tubercles existed both deep in the substance and on the surface of the liver, and in the latter situation presented the usual cup-shaped indentations. The gall bladder and the biliary ducts were healthy. Mr. Smith observed, that the process of softening generally commenced in the interior of these tubercles, so that when one of them in this state was examined, a cavity was found in the centre resembling the cavity of an abscess. The abdominal glands along the course of the aorta and vena cava were similarly diseased, and adhered to the neighbouring vessels.

The remaining organs of the abdomen were healthy, with the exception of the spleen, which presented the cartilaginous condition of its capsule, so commonly observed. During the dissection the body slipped off the table, and one of the vertebræ was fractured. This led Mr. Smith to suspect that the bones were diseased. He removed a portion of the spine corresponding to the diseased thoracic glands, and found in the centre of one of the bodies of the vertebræ a distinct, circumscribed tubercle, of a pale rose colour. He found similar depositions in the ribs, clavicle, and sternum. In some of the bones the matter was deposited in the form of tubercle, in others in the state of infiltration. The aorta, from its commencement to its bifurcation, was covered in various parts with atheromatous and earthy deposits, and in many situations the internal coat of the artery was destroyed. The patient had no symptoms except those of chronic bronchitis, and there was nothing in his aspect calculated to excite suspicion of the existence of extensive organic disease. (*Museum, Richmond Hospital.*)

2. *Encephaloid Disease of the lower End of the Femur.*—Mr. Adams exhibited a preparation of this disease occupying the lower extremity of the femur. The tumour had grown rapidly, and was attended with a remarkable pulsation, which seemed to be diastolic, and induced some to consider the case as one of popliteal aneurism.

During the performance of amputation, which was deemed unavoidable, the hæmorrhage was most copious, and restrained with great difficulty; the man bled profusely, and died soon afterwards. On dissection the disease proved to be cephaloma of the end of the femur, without any affection of the cartilages of the joint. The tumour was attached to the popliteal artery, which it had pushed out of its situation; the impulse of the artery was communicated to the tumour, and this accounted for the pulsation felt during life. (*Museum, Richmond School.*)

3. *Encephaloid Disease of the Wrist.*—Mr. Adams also exhibited another specimen of the same disease, situated in front of the wrist joint, and extending a short distance up the forearm; the tumour was as large as a small orange, and had the deceptive sense of fluctuation, so generally noticed on cephaloma. The patient was a young lad, a lunatic: amputation was performed, and the case terminated favourably, there having been no recurrence of the disease, though eight years have elapsed since the performance of operation. Mr. Adams remarked, that there was another interesting feature in this case, namely, that the boy recovered his reason perfectly after the operation. (*Museum, Richmond Hospital.*)

4. *Acephalous Fœtus.*—Dr. Churchill exhibited two specimens of acephalous fœtus; in both of which the quantity of brain was extremely small; in one the placenta had become adherent to the head and back of the neck at an early period of development: they were both born alone, and one of them which had a hair lip and cleft palate, lived eight or ten hours. (*Museum, Richmond School.*)

5. *Fibrous Tumours of the Uterus.*—Dr. Churchill also exhibited

several specimens of this disease; they presented the usual white fibrous appearance: Dr. Churchill remarked, that in the incipient stage, and when left to themselves, they scarcely give rise to any symptoms. Perhaps the only one is occasional variation and sometimes suppression of the catamenia. If let alone they are disposed to remain quiet, but if irritated they may take on inflammatory action, which may extend to the coverings of the uterus, and in this way the patient may be carried off by peritonitis.

Another specimen of the same disease was exhibited, which was attached to the appendages of the uterus: a point of interest connected with the history of fibrous tumours of the uterus, Dr. Churchill remarked, was the influence they might have on the function of generation. In some instances they did not interfere with the generative process at all, in others they gave rise to symptoms of an embarrassing and even of a formidable nature. A case is given by Dr. Montgomery, in which the impediment to delivery produced by one of these tumours was so serious, as to require the Cæsarean section. The operation was performed with care and rapidity, but on dividing the uterus, the fibrous development was found not only on the external surface, but also in the interior of the uterus, preventing the closure of the wound after the operation.

6. *Fibrinous Deposit in the Testicle; Hydrocele.*—Mr. Smith said he was about to submit a series of preparations confirmatory of some points mentioned by Mr. Cusack at a meeting of the Society, held on the 25th of May, 1839, illustrative of that species of chronic enlargement to which some had applied the name tuberculated testicle. In speaking of the disease, Mr. Cusack had expressed his opinion that it was not connected either with scrofula or venereal, but was the result of some inflammatory condition through which the organ had passed. The disease presented characters differing from those of the true scrofulous or tuberculated testicle, and generally commenced in the body of the organ in the form of a yellow, solid, firm mass. This Mr. Smith looked upon as nothing more than a deposition of fibrine in the structure of the testicle. He exhibited a series of drawings shewing the disease in different stages, and stated that in most of the cases it had been accompanied by hydrocele. Whether there was any thing venereal in it or not, he could not decide, but he was convinced it was not scrofulous. He had taken the trouble of examining with great care the body of the person from whom the specimen before him was taken, and could say that there was no trace of tubercular development in any of the viscera. The disease appeared to be the product of chronic inflammation, and was generally accompanied by obliteration of the tunica vaginalis, except at the upper part, where a cavity still remained, in which hydrocele was apt to form. Sir Astley Cooper has described the disease, and states that in the early stage of it a yellow, firm, adhesive substance is deposited in the tissue of the organ. This deposition may remain through life, without undergoing any further change, or it may run on to suppuration. When suppuration commences in the centre of

the organ, it comes very slowly to the surface, and a tumour is formed which he calls granular swelling of the testicle. Mr. Smith shewed several drawings illustrative of this condition of the organ, and observed that it was a disease, the nature of which had been frequently mistaken. It has been looked upon by some as malignant and incurable, and in treating it recourse was frequently had to extirpation. It was, however, neither a malignant nor an incurable disease, and generally speaking, yielded readily to mercury. Mr. Smith concluded by exhibiting a specimen of true scrofulous testicle, which he had brought forward for the purpose of contrasting it with the specimens under consideration. Any one who inspected them would readily perceive, that the diseases were quite different. (*Museum, Richmond Hospital.*)

7. *Hydrocele of the Tunica Vaginalis.*—Mr. Adams exhibited a series of preparations, illustrative of this affection. The first specimen, in addition to the usual enlargement of the tunica vaginalis, shewed several small cysts external to that membrane, and occupying the interval or angle between it and the spermatic cord, but unconnected with either. The tunica vaginalis of the opposite side was also distended with fluid. Mr. Adams next exhibited a cast and drawing of double hydrocele of enormous size, which had been successfully treated by injection. The other preparations which Mr. Adams brought forward, were principally illustrative of the great thickening and deposits of bone in the tunica vaginalis, occasionally met with in this disease. In one, the sac was covered by a red, vascular, and flocculent membrane, the product of inflammation. This hydrocele had been repeatedly tapped, and each time a coffee-coloured fluid was drawn off. (*Museum, Richmond Hospital.*)

8. *Hydatid Disease of the Testicle.*—Mr. Adams also laid upon the table a specimen of encysted or hydatid disease of the testicle, described by Sir A. Cooper, and which he has contrasted with fungus hæmatodes. The testicle in this disease is of the ordinary form, although considerably enlarged; the patient feels no pain but that caused by the size and weight of the tumour. In the case which Mr. Adams brought before the meeting the testicle had been removed with success, and he thought that the operation might always be performed with a favourable result. (*Museum, Richmond Hospital.*)

*Ninth Meeting, January 31.*

Mr. CUSACK in the Chair.

1. *Apparent Hermaphrodite.*—Mr. Bigger said, that during the past week, he had received from his friend, Dr. Kearns, of Westport, an account of an apparent hermaphrodite, with an illustrative drawing, both of which he would beg leave to submit to the meeting. The child was born in the natural way, and was pronounced to be a female by the nurse, but on more accurate examination, Dr. Kearns thought he could feel a small body in each of the labia which had the outline of the testicle, and that he could also distinguish the spermatic cord

passing up towards the ring. In place of the clitoris, he discovered a regularly formed penis, and below this in the natural situation of the vagina in the female, there was a small opening into which a probe could be passed. The child was in other respects healthy and well-formed, and was born of healthy, well-made parents. The mother had another child of the same kind, and two more who were well-formed. In this case the parts presented all the appearance of those of a female, but time would remove any doubt which might exist on the subject.

2. *Inoculation with the Matter of "Grease" in the Horse producing Symptoms of Vaccine in the Human Subject.*—Dr. Stokes presented two drawings of the appearances in a case which had recently occurred in Dublin, which was of importance, as tending to corroborate the opinions of Jenner with respect to the origin of cowpock. For the opportunity of witnessing this case, Dr. Stokes was indebted to Mr. Pakenham, under whose care the patient had been placed. After quoting some passages from the works of Jenner, Dr. Stokes observed, that some had misunderstood Jenner's opinions on this subject, and believed that he had held that the direct inoculation with the matter of grease was capable of producing a disease the same as vaccine in man. This was not Jenner's doctrine. He says that the fluid of grease seems capable of generating a disease like vaccine, *after it has passed through the system of the cow*. But in speaking of the form of disease produced in man by inoculation with the matter of grease, Dr. Jenner was not distinct or accurate in his description. He speaks of ulcerated sores on the hands, inflamed lymphatics, and abscesses of the axilla, and says that many medical friends of his were aware of the similarity between the eruption on the hands after infection with grease, and that which succeeds cowpock, but he does not give any precise description of the appearances which result from inoculation with equine matter in the human subject. He states, however, that persons who have had sores on the hands from inoculation with grease, do not appear to be susceptible of small-pox, and alludes to the great difficulty frequently experienced in producing disease with variolous matter in farriers and persons who have been much engaged about horses. Dr. Stokes proceeded to read some notes of a case of equine infection, which occurred in 1793, and is detailed in Dr. Jenner's work. Three men, on receiving the infection of grease, got sores on the hands, with pains in the axillary glands, shivering, and lassitude; and two of them, who had previously gone through the small-pox, said that their sensations were similar to those they had experienced on the invasion of that malady. The whole duration of the febrile symptoms in these cases was about twenty-four hours. Dr. Stokes next exhibited a drawing of the pustule produced in a child by inoculation with matter taken from one of the men infected with grease. He also exhibited a drawing of the true vaccine pustule, and contrasted it with the former. The only apparent difference between them was, that there was a greater degree of lividity about the equine than the vaccine pustule. As a

further proof of the close connexion between the two poisons, Dr. Jenner states that he has never been able to discover any instance of the prevalence of the vaccine pustule among cows, which could not be traced to cows originally infected, or which had been milked by persons labouring under equine infection. The opinions put forward by Dr. Jenner on this subject were controverted by some of his contemporaries, among whom the principal was Dr. Woodville, who stated that he had made several experiments to try whether cowpock could be produced by grease, but had always failed, and that his friend, Mr. Coleman, of the Veterinary College, had made several experiments of the same kind with a similar result.

The case which had occurred to Mr. Pakenham was this:—The servant of a gentleman residing near town, a man of good constitution and temperate habits, was in the daily habit of cleaning the hoofs of a horse labouring under grease. On one occasion the animal became restive, overturned the bucket in which the diseased limb was being washed, the edge of which cut the man over the upper lip. The groom immediately took up a sponge he had been using, and which was saturated with the matter of grease, and wiped his lip with it. He did the same the next day, and the day after, so that the matter was applied to the broken surface three, and perhaps four times. On the sixth day he became ill, complained of headach, lassitude, and loss of appetite. On the same evening a vesicle appeared on the upper lip, and next day another on the superior part of the cheek over the malar eminence; a third was placed more internally under the lower eyelid. Dr. Stokes saw him on the ninth day, and the appearances presented by the vesicles were such as were represented in the drawing he was about to exhibit. The drawing was taken on the tenth day. Dr. Stokes pointed out one of the pustules, and observed that on the ninth day it presented an appearance precisely similar to that of a vaccine vesicle, the areola being beautifully marked, and the vesicle so like that of cowpock, that no distinction could be perceived. Around this vesicle there were several smaller and less regular ones. The original wound presented the appearance of a superficial eschar, and the cheek was swollen, but the constitutional symptoms were so slight, that the man was up and walking about. The case was seen by several medical men familiar with the phenomena of cowpock, and all agreed that nothing could be more like it. Dr. Stokes exhibited also another drawing of the parts taken on the fifteenth day, and observed, that the appearance of the scab and of the retreating areola were very similar to those observed in the same stage of ordinary vaccinia. The chief interest of the case was, that it exhibited a form of disease originating in equine infection, and having certainly no connexion with glanders. He had hoped to be able to procure a drawing of the horse's heel, but had not been so fortunate as to obtain it. The case shewed that a disease remarkably similar to vaccinia, might be produced in the human subject by the matter of grease. The only points of apparent difference between them were, that in the latter the



matter contained in the vesicle seemed more purulent, and the surrounding areola somewhat more livid.

3. *Plastic Bronchitis; Formation of Casts of the Air Tubes.*—Dr. Corrigan said, that the case he was about to bring before the Society was an instance of a disease of rare occurrence. The disease had been termed bronchial polypus—a bad name, for polypi of the bronchial tubes were very different from polypi of the nose and other organs. Bronchial polypi are nothing but a secretion of lymph, which is moulded to the shape of the air tubes. The expulsion of portions of fibrine by expectoration, is a matter of common occurrence in the croup of infancy, and in connexion with the hæmoptysis which precedes or accompanies phthisis; but its occurrence in adults, without phthisis, and assuming an intermittent character, is extremely rare, and any knowledge of it is deserving of attention. The case which occurred in Dr. Corrigan's practice, was that of a gentleman, who was attacked in March, 1838, with symptoms of influenza, from which, after some time, he appeared to recover. About two months afterwards he came up from the country, and applied for advice to Dr. Corrigan. He was suffering at that time from what were supposed to be asthmatic paroxysms; during the fits his respiration was greatly hurried, his lips blue, his countenance anxious, and his whole appearance that of a man in the last stage of disease of the heart. The account which he gave of his symptoms was, that during the day he felt tolerably well, and his respiration was not much oppressed. At night, after sleeping for three or four hours, he awoke with a sense of suffocation, and remained in this state for several hours, when the fit at length terminated with difficult expectoration. He had consulted many practitioners, and had been treated chiefly for nervous asthma. On examining the chest, Dr. Corrigan found the respiration quite natural on one side, but on the other at a certain spot, an intense wheezing was audible, which diminished as the stethoscope was carried upwards or downwards. During the disturbance caused by the examination, a fit of coughing came on; it was of intense violence, and terminated in expectoration. Dr. Corrigan having observed the gentleman expectorate something into his handkerchief, requested to see it, and was surprised to find that it consisted of plastic lymph, moulded in the form of the bronchial tubes. Dr. Corrigan exhibited the specimen and also another of the same kind, sent to him by Dr. Cane of Kilkenny. The disease is of an intermittent character, and may be described as an affection of the bronchial tubes, in which they take upon themselves the secretion of lymph, instead of the ordinary mucus. During sleep, no expectoration taking place, the bronchial tubes became plugged, and the patient awakes in a paroxysm of suffocation, from which he is relieved only by violent fit of coughing with difficult expectoration. The treatment employed by Dr. Corrigan was such as is usually followed, where the secretion of lymph constitutes the chief feature of inflammatory action; the patient was put on the use of mercury, and the day he came under its influence the pulmonary symptoms disappeared, as if

it were by magic. Another case which was under the care of Dr. Cane was treated in the same way, and with a similar result. The points of interest in the case detailed by Dr. Corrigan, were, in the first place, that it went to prove the existence of a disease in the adult, in which the mucous membrane of the bronchial tubes takes on the secretion of lymph; in the next, that the disease may be intermittent and of a chronic character, bearing considerable resemblance to chronic asthma; thirdly, that in cases of disease of the chest every thing relating to the expectoration should be examined, for without a knowledge of its nature in this instance, all the other signs and symptoms would have been useless; lastly, it shewed that the remedy which proves most effectual is, that which is adapted to other forms of disease, in which the most prominent of the inflammation is secretion of lymph, viz. mercury. (*Museum, Digge's-street.*)

4. *Intussusception of the Ileon into the Cæcum; Polypus of the Ileon.*—Mr. Smith exhibited the recent parts in this case, the history of which was as follows;—A woman of spare habit, but apparently healthy constitution, applied for relief at one of the hospitals of the House of Industry, January 25, 1840. She stated that she had been attacked the day before with pain in the abdomen, vomiting, diarrhoea, and tenesmus. At the time of her admission into hospital, her bowels were constipated, but the vomiting and tenesmus continued until the 27th, when she died, her symptoms having strongly resembled those which have been observed to accompany internal strangulation of some portion of the intestinal tube. No tumour could be observed during life, either in the abdomen or in any of the situations where hernia is usually seen. Upon laying open the abdominal cavity, the intestines presented the anatomical characters of the first stage of peritonitis, but there was no effusion of serum, lymph, or purulent matter. The termination of the small and commencement of the large intestines formed a tumour of considerable size, extending from the left side downwards to the right iliac fossa; this tumour, upon examination, was found to be constituted by an invagination of the ileon, about twelve inches of which had passed through the ileo-cæcal valve, into the cæcum and colon: a pear-shaped, fleshy polypus, about an inch and a half in length, grew from the interior of the ileon, and seemed to have been the cause of the invagination. In his remarks upon this case, Mr. Smith alluded to three forms of intussusception, viz., first, that which takes place in the interior of the abdominal cavity, as in the case which he just detailed; secondly, that of which the ordinary form of prolapsus ani presents an example; and thirdly, that which is occasionally seen complicating an artificial anus. Drawings were exhibited illustrative of these three forms of the disease. With respect to the first variety, Mr. Smith observed, that it differed from the other in consisting of three cylinders, whereas in prolapsus of the rectum, and invagination through an artificial anus, there are only two cylinders, of which the internal is formed by that portion of the intestinal tube, which in the normal state was placed directly above the outer or investing cylinder. Mr. Smith exhibited several drawings

illustrative of the mode of production of intussusception, and entered minutely into its anatomical details, and concluded by referring to the recorded cases of recovery from this formidable affection, the invaginated portion of the intestines having, in these cases, sloughed away, the continuity of the intestinal tube being restored by adhesive inflammation agglutinating the serous surface of the internal cylinder, directly above the eliminated portion, to the serous membrane of the outer cylinder. (*Museum, Richmond Hospital.*)

*Tenth Meeting, February 8.*

Dr. LAW in the Chair.

1. *Two Aneurisms of the Arch of the Aorta; Cribriform Perforation of the Trachea; Death by Hæmorrhage.*—Mr. Ferrall, in presenting the specimen and drawings in this case, observed, that the diagnosis of aneurisms of the aorta had been much advanced by the labours of the Pathological Society. The history of the present case was as follows:—

A woman was admitted into St. Vincent's Hospital, labouring under extreme dyspnœa with aphonia; her countenance was extremely anxious, and she was expectorating blood in small quantities. She died during the course of the night, after having had a copious expectoration of blood. The heart was found to be dilated, but the thickness of its walls was not increased. Two large aneurisms were found springing from the arch of the aorta. One occurred close to the origin of the left subclavian, it was of an oval shape, and was attached to the trachea, into which it had opened. The sac was about two inches in diameter, and was partly filled with coagula. Between the trachea and the sac there existed four cribriform openings, situated in the interstices of the rings of the trachea, which latter were quite uninjured. Their orifices and the longest diameter of the largest was about two lines. The second aneurism existed lower down, and compressed the pulmonary artery. This aneurism was bilocular. Still lower down was a third but very small aneurism, in the incipient state, and also two small depressions, which, had the patient lived much longer, would have become aneurismal sacs. The valves of the heart were healthy.

Mr. Ferrall observed upon the integrity of the tracheal cartilages, and pointed out the analogy between this fact and that observed in the erosion of the spinal column by the pressure of an aneurism. He also drew the attention of the Society to the circumstance, that in this case there was the combination of stridulous breathing and loss of voice; a combination supposed to be diagnostic of laryngeal disease. Here, without any such affection, the combination existed. He suggested that the tumour had compressed the inferior laryngeal nerve. He had searched for the nerve with care, but from the matting together of the parts he had not been able to discover any traces of it.

If, on further investigation, it was discovered, that in cases of aneurism existing at the left side of the transverse portion of the arch of

the aorta, and where distinct traces of obliteration of the inferior laryngeal nerve were discovered, suppression of the voice was found to be a prominent symptom, it would furnish an interesting fact in the diagnosis of thoracic aneurisms. The case, however, as Mr. Ferrall observed, put on record one interesting fact, viz., that when a patient presents himself with stridulous breathing and loss of voice, it is not to be concluded that it is one of laryngeal disease and unconnected with aneurism. (*Museum, St. Vincent's Hospital.*)

2. *Spontaneous Gangrene of the right lower Extremity; Obliteration of the external Iliac, Femoral, and Tibial Arteries.*—Dr. Greene exhibited a portion of the femoral artery, taken from the limb of a person who had died of idiopathic gangrene of the leg. A female, aged 18, had been labouring under symptoms of fever in the country, in which state she was sent to the Hardwicke Fever Hospital. When seen by Dr. Greene, she did not exhibit much of the symptoms of fever, and what traces were present disappeared in the course of a few days, and she was pronounced to be convalescent. On the fifth day after admission she got up, and while about to take her breakfast was seized with stinging sensations and a benumbed feeling in the right leg, succeeded by pain and a sense of coldness. When the part was examined by Dr. Greene, he found the limb quite cold and pale from the toes to the knee; the young woman had also lost all power of the limb, and there was a total paralysis of sensation. The veins of the dorsum of the foot were turgid, but could be emptied slowly by pressure; when the pressure was removed the turgid state returned again by degrees. The femoral artery, when examined, was felt to roll under the finger like a piece of hard cord, and scarcely any pulsation could be distinguished in it. In the external iliac there was also very little pulsation, and none at all could be felt in the tarsal arteries. Two hours after the first seizure the temperature between the toes was 63 on the left, and 62 on the right side; in the left groin it was 80, under the tongue 96. The sounds and impulse of the heart were natural, and there was no throbbing of any part of the arterial system. These phenomena continued for the two following days, during which the temperature of the foot fell gradually to 56, but never went below this. M. Dupuytren states, that one of the characters of this disease is, that the temperature of the affected limb sinks below that of the medium in which it is placed, whether it be air or water. Dr. Greene examined the temperature of the limb in both media, and found this not to be the case. On the third day a livid patch, about six inches in length, formed on the foot, and on the fourth there was a sort of line of separation between the livid and living parts. The temperature of the leg continued as low as before, but the thigh still retained a considerable degree of heat. On the sixth day the centre of the livid patch presented two vesicles filled with a clear fluid, and their margins began to be surrounded with a yellow border. The pain of the limb still continued violent, and it was found necessary to administer opium. The patient died somewhat suddenly on the morning of the seventh day. Some time before

death she had bronchial râles, and a slight crepitus in the postero-inferior part of the right lung, and Dr. Greene looked upon it as pneumonia in the first degree. On examination, the affected portion of lung was found to be in the state surmised by Dr. Greene; the bronchial mucous membrane was highly vascular, and the bronchial tubes contained a quantity of reddish serum. In the stomach there were some traces of gastritis. With respect to the arteries of the diseased limb, they were almost universally filled with coagulum, and their cavities were obliterated. The clot was first found in the common iliac of the right side, immediately above its division into the external and internal iliac, and from this it could be traced down through the external iliac, femoral, profunda, and tibial arteries. The rapid formation of this clot would account for the sudden loss of sensibility, pain, and diminution of temperature which had almost instantaneously taken place. Dr. Greene observed, that during the whole case the thigh maintained its temperature, a fact for which he could not account, except by supposing that a kind of collateral circulation was kept up between its pervious vessels and those of the abdomen. With respect to the nature of these cases there are two opinions; Dupuytren thinks that in all instances they are the result of arteritis. Dr. Greene observed, that there was nothing in the history of the case he had brought forward to show that arteritis was present; there was no inflammatory fever, no throbbing of the affected vessels; none of the usual products of inflammatory action, such as fibrine, pus, or ulceration, could be discovered, and although the coats of the diseased vessels were of a deeper red than usual, the tinge might be owing to imbibition. The next opinion was that which had been put forward by Mr. Turner, in the third volume of the *Medico-Chirurgical Transactions of Edinburgh*. He attributes the gangrene to rupture of the internal coat of the artery, and gives some cases in illustration. The disease is also said to be produced by many other causes, as for instance, ossification of the arteries, the respiration of poisonous gases, and the use of ergot of rye. Dr. Greene had inquired carefully into the origin of his case, and could not attribute it to any of these causes. Observing that there was pain in the limb, and that perhaps it might be connected with inflammation of the vessels, Dr. Greene had caused a small quantity of blood to be drawn, and found that it did not manifest any appearance of inflammatory action. The crassamentum was dark-coloured, soft, without buffing or cupping. There was no appearance of pus in the artery, but Dr. Greene had discovered in the cavity of the left ventricle of the heart a mass of considerable size, somewhat like a polypus, in the centre of which there was a distinct cell, enclosing a fluid of a purulent appearance. Dr. Greene was inclined to attribute the disease of the limb to some cause producing stasis of the blood in the artery, and thought that if the patient had lived longer, the clot in the artery would have shown traces of pus. Perhaps this disease might be in part attributable to the sudden formation of polypi in the cavities of

heart, interfering with the functions of the *carneæ columnæ* and valves. In this case there was one of these *polypi* twined through the *carneæ columnæ* and *tricuspid valve*.

3. *Abnormal Elbow Joints*.—Mr. Adams presented six specimens of abnormal elbow joints which had come under his observation.

Two of these, which he laid before the Society, were old unreduced dislocations of the elbow joint; two were evidently the result of original or congenital malformation; and two were the consequence of the ordinary functions of the elbow joint having been for many years suspended.

1. *Luxation of both Bones of the Forearm, upwards and backwards, behind the lower Extremity of the Humerus, which last was consequently directed downwards and forwards*.—Owen Nowlan, æt. 40, had been in the Richmond Hospital on different occasions in the year 1836, under the care of Drs. Hutton and O'Beirne, and Mr. Adams; he sought relief for an *hydrosarcocele* and a stricture, and while in hospital it was discovered that he had an unreduced dislocation of both bones of the forearm backwards, behind the humerus. Mr. Adams carefully noted the appearances the joint presented, and had a cast taken of the arm and forearm, which is preserved in the museum of the hospital: the history Nowlan gave of the accident was, that while serving in the British army in Persia, about twelve years previously, he was thrown by a violent young horse he was endeavouring to train, that the left elbow joint was dislocated by the fall, and through the ignorance of the native surgeons he consulted, the nature of the accident was not recognized until too late to remedy the evil. On his return home, in a year after the accident, he left the army, but was enabled to earn his livelihood by grooming horses.

The ordinary characters of the dislocation of both bones backwards, were unusually well marked, because the bony prominences evidently had been enlarged since the accident by ossific growths. When the arm was extended as far as was practicable, it was noticed that the lines of direction of the long axis of the arm and forearm formed with each other an obtuse angle, salient externally, where they met at the elbow joint. When the forearm was semiflexed, the olecranon process was placed one inch and a half behind the inner condyle at the humerus, and the tendon of the triceps muscle carried back by the olecranon process, stood out as much in relief, as does the *tendo Achillis* from the malleoli. Viewing the joint on its external or radial aspect, three very conspicuous prominences were seen; the first was formed by the advanced and enlarged outer condyle of the humerus, covered by the supinator muscles, the olecranon process was the most posterior of the three, and the head of the radius, greatly enlarged, was, as to position, intermediate between the outer condyle and the olecranon. When the joint was viewed on the ulnar or inner side, the internal condyle was found to be less prominent than the outer, and nearer to the olecranon process, although this process was placed so much behind its ordinary position relatively to the inner condyle of the hume-

rus ; the notes entered in the hospital case book by the clinical clerk, Dr. Bradshaw, were :

“The olecranon process seems placed very far backwards with respect to the humerus, and seems to have some little inclination inwards ; some lateral motion can be communicated to the joint, still this motion is not directly outwards and inwards, but is somewhat oblique, as if the olecranon were the centre of it ; on flexing and extending the joint, there is a grating, and crackling, and rubbing sensation felt, as if smooth but hard bodies rubbed together. The external condyle has produced from it posteriorly some adventitious bony growths, which form a cap above and behind the head of the radius, which is itself very much enlarged ; the length of the limb is half an inch less than that of the opposite side, and the measure of the circumference of this arm, the left, is also less than that of the other. He can pronate and supinate perfectly, can flex the forearm to nearly a right angle ; with the arm can lift heavy weights, and can make any exertion with it which does not require him to raise his hand higher than his shoulder. He is employed as a groom, and can attend to horses as well as ever ; he cannot place his hand on the shoulder of the injured limb.”

It was concluded that this was a luxation of both bones of the forearm backwards, followed by chronic enlargement of the bones, the absorption of the cartilaginous surfaces, and substitution in their stead of a porcelaneous deposit. The man was in good general health, and left the hospital, having been relieved of the complaint for which he was admitted ; but in 1839 became affected with typhus fever, and was admitted into the Hardwicke Fever Hospital, where he died.

*Dissection of the Elbow joint.*—The elbow joint was examined by Mr. Adams and Mr. Smith. The muscles, as to structure, presented nothing unusual, the biceps and brachialis anticus were much stretched over the transverse eminence, which the lower extremity of the humerus presented.

When the muscles were thrown down, an irregular capsular membrane was exposed, and on opening this some synovial fluid escaped ; the cartilages were completely removed from the articular surfaces of the bones. The lower extremity of the humerus had lost all appearance of capitulum and trochlea, and presented a very unequal rough surface. This extremity of the humerus having abandoned the head of the radius and great sigmoid cavity of the ulna, lay exactly in front of the coronoid process of the ulna, and on the anterior part of the neck of the radius. The tendons of the brachialis anticus and biceps seemed to have prevented any further descent of the humerus on the forearm.

The head of the radius formed a perfect circle, and was much larger than usual ; it had a lip nearly half an inch deep, its cup was partly filled up, and its centre had given attachment to some short ligamentous fibres, which were attached to the irregular capsule which now existed. The head of the radius was found to rotate freely in the lesser sigmoid cavity of the ulna.

On the same transverse line with the anterior half of the circle of the head of the radius, was the coronoid process of the ulna, so changed as to resemble much in appearance and form the anterior half of the circumference of the head of the radius, for the naturally sharp edge of the coronoid process in the ulna was in this case enlarged, and converted into a thick articular lip, such as the anterior half of the circumference of the head of the radius presented.

It was this altered coronoid process of the ulna which lay behind the humerus, and corresponded to the fossa in the humerus, which ordinarily receives the olecranon. The great sigmoid cavity of the ulna was no longer smooth and excavated, but quite rough, and its extreme point, the olecranon, was placed where the forearm was semiflexed, one inch and a quarter behind the humerus.

The external and internal condyle of the humerus, which bounded laterally the degenerated articular portion, presented anteriorly nothing unusual in their appearance, but posteriorly, from the external condyle, a very large ossific growth was produced downwards and backwards; this had descended somewhat behind the head of the radius, (considering the forearm semiflexed,) and formed an imperfect socket for this bone. This bony growth had been felt in the examination made of the joint when the man was first in hospital. From the back part of the internal condyle there were also some bony depositions, so that when the humerus was detached from the bones of the forearm and viewed posteriorly, it presented a semilunar arch, the concavity of which formed the olecranon fossa. This fossa ever since the bones of the forearm were luxated, had been occupied by the coronoid process of the ulna. So this process was of an arched form, the highest part of which lay in the fossa, and it was bounded on both sides by the growths from the back part of the outer and inner condyles; so that thus was constructed a very secure and, as it appeared from the accurate history and previous observation made of the case, a very useful joint.

II. *Luxation of the Bones of the Forearm backwards upon the Humerus.*—Mr. Adams exhibited a specimen of luxation of the upper extremities of the radius and ulna backwards, of many years' duration; the bones of the forearm had passed upwards on the back part of the humerus as far as the tendons of the biceps and brachialis anticus would permit; the lower extremity of the humerus had acquired a quadrilateral form, and a very irregular surface; the luxated head of the radius was surrounded by an imperfectly formed capsule, from the inner surface of which a bundle of ligamentous fibres analogous to a round ligament passed to be inserted into the depression in the head of the radius. Of this newly formed round ligament Mr. Adams mentioned he had seen another example occurring in a case of unreduced luxation of the bones of the forearm backwards, and six specimens of this new formation in cases of chronic rheumatic arthritis of the bones of the elbow joint.—See Todd's *Cyclopædia*, Article, "Abnormal Elbow."

III. *Congenital Malformation of the three Bones of the Elbow*



*Joint.*—Mr. Adams had under his observation for some years a child which, the last time he took notes of her case, was 11 years of age. Mr. A.'s attention was directed to the elbow joints of this little girl by her mother, which she said had an unusual appearance. She stated, however, that the child suffered no pain in the joints, and had good use of them. Mr. A. found she could fully flex the elbow joints, but could not perfectly extend them; when in this last position, they presented an awkward bowed appearance, the convexity of the arch being external. When Mr. Adams, in making an examination of the elbow in this case, placed his thumb on the external condyle of the humerus, and head of the radius, and at the same time had the forearm supinated, he observed that the head of the radius could be felt to rotate in its proper place, and on its longitudinal axis, as in the perfect condition of this joint; but if now a forced movement of pronation were given to the head of the radius, the latter was observed to slip backwards towards the olecranon process. Every time the girl herself *fully* pronated the forearm, this species of sub-luxation above described occurred, and in supination the radius resumed its proper situation again. The radius seemed to pass forwards and backwards for the extent of an inch, when it was rotated either in pronation or supination. These movements did not consist in a simple rotation of the radius on its longitudinal axis, as already described, but in a real change of place of the upper extremity of the radius externally, half round the outer condyle of the humerus. There seemed to be a lax state of the ligaments of the radio-humeral and radio-cubital articulations, and no doubt a predisposition existed from these causes to luxation backwards of the head of the radius, but nothing of the kind occurred.

The child was attacked with malignant scarlatina, at that time epidemic, and died in a few hours' illness.

Few surgeons of experience have not been consulted about a lax condition of the radio-humeral joint in children, presenting many of the phenomena above described, but the anatomical characters of such a condition of the elbow joint not having been ascertained, Mr. Adams was very anxious to investigate this matter; with much difficulty he procured leave to make an anatomical examination of the elbow joints in this case.

Mr. Adams wishes, however, merely to record the fact; he would not be understood to imply that all cases of the sub-luxation of the elbow joint are of the same nature as the dissection proves this case to have been.

Mr. Adams, assisted by Messrs. Elliot and Donellan, examined both elbow joints, which were exactly alike, and removed one of them for more careful dissection. This joint he now begged leave to exhibit to the Society. The muscles were removed, and the capsular membrane opened; he observed that the head of the radius was large and unusually excavated in its upper part, the lesser sigmoid cavity on the ulna was also larger than usual, corresponding in size to the radius. The capitulum of the humerus was deficient externally, as if a seg-

ment or portion of the sphere had been here cut off; the head of the radius projected beyond it; the outer half then of the lower extremity of the humerus had somewhat the appearance of the condyle of the femur on a small scale.

The great sigmoid cavity of the ulna presented not only the usual excavation from above downwards, but was by one half narrower than usual; instead of being convex, it was on the contrary excavated from side to side, so as to present truly a scaphoid form, adapted to receive the inner articular half of the lower extremity of the humerus, which no longer presented the semblance of a trochlea or pulley; this was very narrow and convex from before backwards, as well as from side to side, and adapted to the sigmoid fossa of the ulna, already described. The coronoid process was deficient anteriorly; viewing the altered articulation exposed on the side of flexion, the obvious resemblance it bore to the knee joint in miniature was striking, viewed from the popliteal space; there were really crucial fibrous bands in the interior of the joint, which are still to be seen in the dried preparation, which Mr. A. then exhibited; all the ligamentous fibres around were yellow, though unusually strong.

As the humero-radial joint had enjoyed an unusual range of motion, as might have been anticipated, the ligaments were long and lax, indeed no regular coronary ligament existed, but a distinct capsular ligament surrounded the head of the radius, and connected it to the capitulum of the humerus. This nearly perfect capsule was longer, wider, and presented in this portion of the covering of the elbow joint more appearance of strength than it usually does.

The coronary ligament of the head of the radius formed a much wider portion of a circle than usual, but was much stronger, and its fibres were confounded with the lengthened external, lateral, and capsular fibres. It was in consequence of the length of the coronary fibres that the head of the radius was permitted to pass so far backwards in pronation. That this malformation was congenital, no one, Mr. Adams presumed, could doubt; the appearance, the history, the existence of the same deformity on both sides, all prove it.

*IV. Case of congenital Malformation of the Elbow Joint; the Head of the Radius dislocated laterally and upwards, above the outer Condyle of the Humerus.*—The lateral dislocation of the radius from accident, has been but twice noticed by medical writers, one of these cases was published by Sir A. Cooper, and the whole case is comprised in the following lines:—"Mr. Freeman, surgeon, of Spring-gardens, brought to my house a gentleman of the name of Whaley, aged 25 years, whose poney having run away with him, when he was 12 years of age, he had struck his elbow against a tree, whilst his arm was bent, and advanced before his head. The olecranon was broken, and the radius dislocated upwards and outwards, above the external condyle; and when the arm is bent, the head of the radius passes the os humeri. He has a useful motion of the arm, but neither flexion nor extension is complete."

Mr. Adams had himself published the second case of dislocation of

the head of the radius laterally and upwards.—See Todd's Cyclopædia, Article, "Abnormal Elbow."

Mr. Adams would wish now to lay before the Society a cast of the elbow joint of a man, named Horseman, æt. 27, who is now in the pauper department of the House of Industry, and who, besides other congenital malformations of the bones, has a very well marked displacement of the radius outwards and upwards, above the outer condyle of the humerus.

A healthy man, named Horseman, æt. 27, was under Mr. Adams's care, in the pauper department of the House of Industry, who had congenital deformities of many of his articulations, but the right elbow joint presented a very close resemblance to the two cases above described. Mr. Adams had a cast taken of the elbow, which he now exhibited. The arm could not be extended nor fully flexed, but was very muscular, and enjoyed completely the motion of pronation and supination; the left arm was perfect; the man could earn his livelihood as a tailor. When we view the joint on its external aspect, the outer condyle is large, and placed as low down nearly as the olecranon process; above it a very conspicuous, rounded, orbicular-shaped eminence is seen; into this eminence the line of the direction of the radius runs; when the thumb is placed on it, and a motion of rotation communicated to the forearm, this orbicular-shaped eminence moves freely with the radius; the inner condyle also descends very low down, and projects internally, the internal and external condyle of the humerus, and the lower portion of the olecranon process, (in the semiflexed position of the joint which it ordinarily remains in :) are on the same plane; we must infer that the lower extremity of the humerus is probably excavated to receive the great sigmoid cavity of the ulna, the most conspicuous eminence is observed on the outer side of the forearm, immediately above the external condyle, and is formed by the head of the radius, which is evidently of an orbicular form. The head of the radius is above and somewhat behind the external condyle of the humerus, so that the neck of the radius rotates on the ridge of the humerus, which descends to the outer condyle of this bone; its tubercle must play in front of this ridge and head of the radius behind. The state of the ligaments cannot be guessed at, but there can be no doubt that the tendon of the biceps is carried back with the tubercle of the radius, as the tendon can be followed to the situation the tubercle manifestly occupies, and the slender form of the arm immediately above the joint, which it does not elsewhere present, is thus easily accounted for.

This then appears to be a rare specimen, and worthy of being recorded; it is the third case of lateral luxation of the radius recorded, and the first of the congenital luxation of this kind as yet exhibited to the Profession. The man is at present in the House of Industry, and the cast is preserved in the Museum of the Richmond Hospital.

*V. Two Examples of the Effects on the articular Surfaces of the Bones of the Elbow Joints, which resulted from long Disuse. In*

*one Case the Elbow Joints having been permanently in a forced State of Flexion, in the other, the Elbow Joint remained extended; in both Cases Rotation of the Radius had not been performed for many Years.*—A female lunatic, apparently about 50 years of age, died last summer in the House of Industry; she had been in a state of complete dementia for many years, sitting wherever she was placed, without speaking a word, taking no notice whatever of passing objects; she never used either hands or feet, and would not eat except the food was placed in her mouth. In bed she lay on her side, her limbs drawn up; she was daily carried from her bed, and placed beside the fire during the winter, and in summer in the open air. Whether in bed or out of it, she always preserved her knee joints and elbows in the same flexed condition. The body was emaciated, and the limbs could not by any force be extended. The soft parts were removed from the articulations of the knee and elbow joints; the former presented nothing worth noticing.

In both elbow joints the following abnormal appearances were noticed:—

The trochlea on the lower extremity of the humerus, which is destined for articulation, with the great sigmoid cavity of the ulna, was normal; parallel to it, and on its outside, instead of the usual capitulum of a round hemispherical form for articulation, with the cup-like cavity of the radius, a second trochlea as it were existed, with a sharp lateral external margin between it and the outer condyle of the humerus.

Thus the portion of the lower extremity of the humerus, called the trochlea for articulation, with the great sigmoid cavity of the ulna, and the external part of the articular surface, usually called the capitulum for junction with the head of the radius, anteriorly presented the same breadth and form, and both had externally sharp lateral margins, with a central ridge between these two surfaces; in a word, possessing all the requisites, so far as the bones were concerned, for a perfect ginglymus joint, without any provision whatever for rotatory movements; indeed, from the very deep digital fossæ of a circular form, which existed above the degenerated capitulum for the head of the radius, and above the trochlea for the coronoid process of the ulna, it is manifest that for many years no motion whatever existed in the elbow joint, but that the forearm was permanently and forcibly flexed on the humerus, and the deep fossæ, already mentioned, prove the duration and amount of this pressure. The fossa, behind the humerus, for the reception of the olecranon process of the ulna, was, on the contrary, unusually shallow.

The bones of the forearm, where they entered into the formation of the elbow joint, were of their natural appearance, with the exception of the head of the radius, which instead of being excavated on its superior surface, was uniformly convex, and of a form which exactly fitted the round concave digital fossa, already noticed, in the humerus, situated above the altered capitulum.

The appearances are very remarkable, and on many accounts un-

necessary here to advert to, deserve attention. Both elbow joints present precisely the same remarkable characters. They now belong to the collection in the Museum of the Richmond Hospital.

At first sight, the very unusual appearances which the articulation presented might have been referred to some congenital malformation, but this idea was very soon abandoned, when this specimen was contrasted with the second one of this class of malformation then laid before the Society.

VI. This last specimen of degeneration of the form of the lower extremity of the humerus from want of use, was interesting in itself, and also as it seemed to illustrate the nature of the foregoing case clearly, and to prove that the degeneration of the form of the capitulum of the humerus was the result of the articulation never having been used for many years, except as a hinge joint.

A man died of fever in the Hardwicke Hospital, and was removed to the dead house of the House of Industry. He had suffered amputation in the forearm, near the elbow joint. The humerus, and elbow joint, and stump, were removed, that the changes the different structures had undergone after many years might be ascertained. The changes discovered in the bones were certainly unexpected. The lower extremities of the radius and ulna, where amputated about two inches and a half below the elbow joint, had formed an inverted arch, and were so completely united to each other in a loop, that they seemed indeed perfectly identified. It is manifest, in this case, no rotation of the forearm could have taken place, the head of the radius was larger than the capitulum for it in the lower extremity of the humerus. This capitulum presented a sharp edge externally, exactly as the former case did, or as a hinge joint always does; and, as in this case it is probable that the elbow joint was never flexed, there were no traces of digital fossæ above the degenerated capitulum or trochlea. (*Museum, Richmond Hospital.*)

4. *Organic Stricture of the Pylorus.*—Dr. Corrigan said, the specimen he was about to submit was exhibited for two reasons; firstly, with the view of showing the change the pylorus undergoes in certain affections of the stomach; and secondly, with a view towards greater accuracy in pathological description. Many of these specimens had been classed as cancerous or malignant, without having any claim to the designation; the case before him was one of the kind. The disease consists essentially in an affection of the pylorus, analogous to stricture of the œsophagus, viz., a deposition of lymph in the submucous tissue, accompanied by contraction of the calibre of the tube. The pylorus becomes gradually narrowed until it will scarcely admit the passage of a goose quill, the result of which is, that digestion is so much interfered with that the patient dies of inanition. Dr. Corrigan exhibited a cast showing the appearance of the parts *in situ*. The stomach was enormously enlarged from the undue detention of the ingesta; it appeared to be capable of containing near a gallon of fluid, and descended as low as the hypogastric region. The interior was sound, with the exception of the pylorus, which pre-

sented the thickening of the submucous tissue, and the diminution or calibre already noticed. There was a small ulcer in the vicinity, but by no means sufficient to account for the symptoms. The history of the case bore out the views put forward by Dr. Corrigan. The disease was of twelve months' standing, and the patient presented on admission the usual dyspeptic symptoms observed in such cases. In addition to these he had the usual vomiting after meals. About an hour and a half after taking food he threw it up, and it was observed that he vomited more fluid than he had swallowed. He emaciated rapidly, but he had no vomiting of dark-coloured matter, no peculiar hue of countenance, and on dissection there was no trace of malignant disease discovered in any other organ. (*Museum, Digges-street School.*)

3. *Hyperostosis of the Ribs in Chronic Empyema.*—Dr. Stokes exhibited the thorax of a female who died fourteen months from the first attack of pleuritis of the left side. On her admission, an extensive effusion existed, and the heart was found to pulsate at the right side of the sternum, and soon after pericarditis supervened, yet without pain or any symptom of increased irritability of the heart. The disease was only discovered by the existence of the friction sounds over the whole heart. This was the third case noticed by Dr. Stokes, in which a perfectly latent, dry pericarditis occurred while the heart was dislocated by an empyema. Dr. Stokes exhibited drawings illustrative of two cases of this description, in which there had been no pain, palpitation, nor irregularity of the heart preceding or accompanying the attack of pericarditis. The effusion in the case now before the Society was partially absorbed, and the heart was restored to its natural position, but the side continued extremely dull on percussion. After some time the patient began to expectorate large quantities of muco-purulent fluid, and soon after this a large and distinct gurgling could be heard in the supra-spinous and supra-clavicular region. Soon after this the patient complained of the occurrence of an unusual sound in the anterior portion of the left side whenever she coughed. A puffy tumour made its appearance in the second intercostal space, which could be easily obliterated by pressure, and conveyed a distinct sensation to the touch, as of air mixed with liquid. The tumour was reproduced in each fit of coughing, and its appearance was always accompanied with a sound audible to a great distance, and much resembling the barking of young puppies. For a considerable length of time this phenomenon used to recur at irregular intervals. The abdomen ultimately became enlarged, and the patient sank with diarrhœa.

The compressed lung was strongly adherent to the mediastinum and postero-superior portion of the chest. It was not more than three inches and a half in length, and one in depth. It presented scarcely a trace of its normal structure, and the large bronchial tubes and the branches of the pulmonary artery terminated in culs de sac. The left pulmonary artery, previous to its entering the lung, was not diminished in size. The eighth nerve was somewhat smaller than its opposite, and felt unusually hard. There was no evidence of tu-

bercle in the affected lung, nor in the right lung. A sinuous passage existed in the second intercostal space which seemed to communicate with the mammary abscess, which had so long existed; but dissection did not discover the source of the emphysematous tumour above mentioned.

The structure of all the true ribs in the affected side was remarkably altered. They were exceedingly dense and hard, and nearly three times as thick as those in the opposite side. They were so closely approximated as that in many places the intercostal spaces were wholly obliterated. Between a few of the ribs, however, the intercostal muscles could be seen forming a red elevated line, as if they had been doubled in themselves, and forced outwards between the ribs. There was no actual bony union of the ribs, but the chest on the affected side felt, when pressed upon, as if it were a continuous bony case, giving a dull sound on percussion, and resisting pressure remarkably. The ribs on the opposite side were thin and very elastic.

Dr. Stokes observed, that though from the analogies of disease we might be prepared to expect such a change of the ribs in very chronic empyema, he was not aware of its having been hitherto described. Dr. Stokes concluded by alluding to the observations of Andral on the ossification of the costal cartilages in phthisis, and the hypertrophy of the bones of the cranium in chronic hydrocephalus. (*Museum, Park-street.*)

*Eleventh Meeting, February 15.*

Mr. ADAMS in the Chair.

1. *Absence of one Lobe of the Cerebellum*.—Dr. Greene brought forward the case of a young man, æt. 20, in whom one lobe of the cerebellum was deficient; the individual was deaf and dumb from his birth. He died upon the twelfth day, of fever, in the Hardwicke Hospital; he was a well made, muscular young man, with perfect use of his limbs; the genital organs were well developed, and cicatrices of ulcers existed in each groin. The left lobe of the cerebellum was altogether deficient; the right lobe and corresponding crus cerebelli were healthy, but the left crus, consisted merely of a small tubercle connected with the pons. The crus cerebri of the left side was smaller than that of the right, and the annular protuberance, owing to the different development of its left side, was irregular in its form, and placed obliquely; its longest diameter being from behind forwards and to the right side. The origins of the nerves were normal; the right occipital fossa was remarkably shallow, and the foramen magnum was placed obliquely, its antero-posterior diameter being thrown towards the right side. Dr. Greene alluded to two cases recorded by Cruveilhier, of deficiency of both lobes of the cerebellum, in each of which there was loss of the power of motion in the lower limbs. (*Museum Richmond Hospital.*)

2 *Lumbrici in the Hepatic Ducts*.—Dr. J. Power exhibited the recent parts in this case; the ductus communis was distended with a large collection of lumbrici; its diameter exceeded half an inch,

the hepatic duct was still larger, being in some parts, more than an inch in diameter, and filled with lumbrici. The ducts in the substance of the liver contained numbers of this description of worm, as did likewise the stomach and intestines. It was not known whether there were any symptoms of hepatic derangement during life, the specimen having been found in a subject brought into the anatomical room of the Richmond School of Medicine. (*Museum, Richmond School.*)

3. *Mechanism of Perforation of the Substance of the Lung and Pleura, in Cases of Disease of the Substance of the Lung.*—Dr. W. Stokes said, the specimen he was about to present was interesting, as connected with a subject, which he had brought before the Society on a former occasion, namely, the mechanism of perforation of the substance of the lung and pleura, in cases of disease of the substance of the lung. The idea generally entertained, with respect to this kind of perforation, is, that it is the result of ulceration commencing in the substance of the lung, and proceeding outwards, or in other words, that the abscess of the lung, tubercular or otherwise, makes a passage for itself, on the one hand, into the bronchial tubes, and on the other, into the cavity of the pleura. Certain cases, however, have been recognized, in which the reverse of this takes place, as where the matter of an empyema perforates the costal pleura, and makes a passage for itself through the substance of the lung into the bronchial tubes. Andral and Louis have also referred to cases of localized inflammation of the pleura, followed by sloughing and an opening into the substance of the lung. But in those cases, where perforation of the pleura is combined with tubercular ulceration of the lung, the perforation has been supposed to commence in the lung, and make its way towards the surface, until at length it perforates the cavity of the pleura. Dr. Stokes said, that the interest of the case he was about to bring before the Society, consisted in the proof it afforded, that even in cases of tubercular phthisis, the perforative ulceration may proceed from without inwards. The history of the case presented nothing extraordinary. It was that of a lady aged 40, who was attacked with phthisis; there was nothing unusual in the symptoms or phenomena of the disease. The usual signs of the development, and softening of tubercles in the upper part of the right lung, were observed, with dulness under the clavicle, and over the scapula and right side of the spine, but without any sign of perforation of the pleura. During the course of the disease she was seized with a severe attack of diarrhœa, and sank rapidly. On making an examination shortly before death, the ribs and intercostal spaces seemed to be pushed outwards, as if by a quantity of serous fluid in the cavity of the pleura, but there was no evidence to prove that it contained air. The anterior portion of the right lung, when taken out, presented some very curious appearances: in the first place, in the substance of its upper portion there was a large anfractuous cavity, and the pulmonary tissue in its vicinity was infiltrated with tubercular matter,



looking at first sight like a portion of lung in the suppurating stage of pneumonia. On the anterior surface of the lung there were two cup-shaped depressions of about an inch in diameter, and on closer examination these were found to correspond with perforations of the lung into which a probe could be passed; lower down there was another depression of the same kind in the commencing stage. Dr. Stokes observed, that it was quite plain that the process by which these perforations were caused commenced externally, for the solution of continuity had evidently taken place in the pleura, in the first instance, a fact of which any gentleman might satisfy himself by inspecting the preparation. The superficial circular destruction of the serous membrane was best seen when the preparation was wetted. In two of these the perforation was complete, in the third it was imperfect. In those where actual perforation had occurred, as shown by the passage of air bubbles when the parts were compressed under water, the orifices were surrounded by opaque circular patches of an ash colour, and about three lines in diameter. The surface of these patches was somewhat flocculent; in the third depression the patch existed, it was exactly similar to those about it, but no perforation had occurred. Dr. Stokes said he considered the case as one of great interest, for though it was one of pulmonary consumption, the process of destruction had commenced in the serous membrane proceeding from without inwards. It was also interesting as showing that there might be complete perforation in the pleura and lung without pneumo-thorax; for no air had been discovered in the cavity of the pleura. The reason why no air had been effused was because the lung had been adherent to the pleura in the situation of the perforation.

4. *Depositions of calcareous Matter in the axillary Glands.*—Dr. Carlile said that the person from whom the specimen he was about to exhibit had been taken, had been subject for many years to swelling of the glands of the axilla, coming on in spring, and to a certain degree disappearing during the course of the summer. He also had abscesses occasionally in the same situation; but for many years back he suffered only from swelling of the axillary glands. Some time ago he was attacked with swelling of the glands of the right axilla, which for the space of fourteen days gave him more uneasiness than usual, and ultimately terminated in abscess. This in course of a short time burst, and, along with a quantity of purulent matter, discharged at various times upwards of one hundred small granular bodies, consisting chiefly of carbonate and phosphate of lime; after their discharge the individual completely recovered. (*Museum, Park-street School.*)

5. *Ossification of the Crystalline Lens and outer Layer of the Retina; Atrophy of the optic Nerves and Tractus Optici.*—Mr. Smith exhibited a series of specimens illustrative of these morbid alterations in the apparatus of vision; the bony matter was deposited beneath the choroid coat, and apparently in the outer layer of the retina, which was, in all the specimens produced, converted into an osseous

shell, enclosing the disorganized vitreous humour; the choroid coat was loosely connected to the external surface. In all the preparations the crystalline lens was likewise converted into bone, and the eyeball shrunk and atrophied, and the corresponding optic nerve wasted in a remarkable manner, the atrophy extending (in all the specimens but one) along the optic tract of the opposite side; in one, however, the atrophy extended along the tractus opticus of the side corresponding to the atrophied optic nerve. Mr. Smith referred to the cases published by Mr. Wardrop as examples of ossification of the choroid coat, and alluded to the different opinions held upon this subject, some thinking that the ossific matter is deposited in a false membrane formed as the result of inflammatory action upon the outer surface of the retina, while others believe that the retina itself is the seat of the alteration. Mr. Smith expressed his opinion that the choroid was very rarely indeed converted into bone, and that, in the great majority of cases, the outer layer of the retina, described by Dr. Jacob, was the seat of the ossific deposit: in all the cases which he had seen of what is usually termed ossification of the globe of the eye, the choroid could be readily detached from the subjacent bony shell. Mr. Smith said this preparation was also interesting, as bearing upon the question of the decussation of the optic nerves. One of the preparations, in which the atrophy of the nerve extended along the tract of the same side, would seem to support the account given by Cruveilhier, Mayo, and others as to the disposition of the nerves at the commissure, namely, that the outermost fibres of the optic tract go to form the outermost fibres of the optic nerve of the same side, that the next in order cross over to the optic nerve of the other side, and that the innermost fibres of the tractus of one side are continuous with the innermost fibres of the opposite; these are, properly speaking, the commissural fibres, and the only ones which exist in certain animals. Mr. Smith, in conclusion, alluded to the experiments of Magendie and Flourens, and also to the question of the origin of the optic nerves, and remarked that although proofs drawn from pathology were not the strongest that could be adduced upon this subject, yet they were calculated to furnish supplementary evidence of a most valuable description. (*Museum, Richmond Hospital.*)

*Twelfth Meeting, February 22.*

Sir H. MARSH, Bart., in the Chair.

I. *Abscess in the left Iliac Fossa.*—Dr. Law adverted to the notice that had been taken of ileo-cæcal abscess at former meetings of the Society. He begged leave to exhibit a specimen these matters had formed in the left iliac fossa, and under circumstances not hitherto observed. The circumstances under which it occurred were these: a man, aged 45 years, was admitted into Dun's Hospital, with dyspepsia and diarrhœa, under which he had laboured for a considerable time. On admission he complained of pain in the left side of the abdomen, a little above Poupart's ligament. In this situation, and about midway between the spine of the ilium and the pubes, there

was a distinct fulness, very painful when pressed. He stated that he had felt pain and uneasiness in this spot for the first time, about ten days before admission. He complained of distress in making water; leeches applied to the seat of the pain, and the hip bath gave him some relief; however, after a few days, Dr. Law, thinking that he could detect something like fluctuation in the tumour, directed an incision to be made into it; this was followed by no immediate result, but after poulticing it for two days, there came away a quantity of thin, greenish, purulent matter with a decidedly feculent smell. This, however, afforded no permanent relief, for the man sank in about four days, exhausted by diarrhoea and the irritative fever of the local inflammation. The post mortem examination exhibited the cellular membrane behind the peritoneum, just when this membrane is reflected from the anterior wall of the abdomen on the iliac fossa, in a sloughy state, infiltrated with fetid pus. The matter, and the cellular membrane in this disorganized state, extended from the iliac fossa down along the side of the great intestine, as far as where the rectum lies in contact with the bladder. On examining the large intestine, there were two small ulcerations in the mucous membrane of the colon in the transverse portion. The rest of the intestine was healthy, but at the termination of its descending portion, it was considerably dilated. The canal of the portion constituting the sigmoid flexure was so contracted, as scarcely to allow a goose-quill to pass. The intestine retained its normal diameter in the pelvis. On slitting open the intestine in its contracted portion, it required some force from the induration of its coats. The mucous membrane, thrown into irregular projections, nearly met from opposite sides, so as almost to obliterate the passage. External to this was a whitish, pearly cartilaginous line, whose resisting structure required some effort to divide. There the contraction ceased, and the intestine resumed its normal diameter; the mucous membrane was extensively ulcerated. The question was, to what was the abscess owing? Dr. Law considered it to be due to the irritation from the remora of the fæces in the portion of the intestine immediately above the stricture, just as the delay of the fæces in the cæcum produces the ileo-cæcal abscess. He wished to remark upon the nature of the stricture, that it was not true scirrhus, but a conversion of the sub-mucous cellular tissue into a fibro-cartilaginous structure, a result of inflammation propagated from the inflamed mucous membrane. Dr. Law thought it was wrong to consider these strictures always malignant in their nature, or that they were never so, but always the result of common chronic inflammation, converting the cellular membrane into a hard, unyielding structure; they were, in fact, sometimes of the one character, and sometimes of the other. He remarked upon the fetor of the discharge, a feature of collections of matter in the vicinity of an intestine, which had already been noticed, and which Dr. Law considered to be due to air escaping from the intestine, independent of any perforation, but as an effect of Dutrochet's principle of exosmose and entosmose, and mixing with the matter, and the imparting to it its peculiar fetor. This air some-

times gave to the cellular membrane in such cases an emphysematous feel, and when mixed with matter, communicated a sense of gargouillement. (*Museum, Sir P. Dun's Hospital.*)

2. *Occurrence of the Bothriocephalus Latus in several Members of a Family.*—Dr. Graves presented two specimens of tape worm. He said, the difficulty of determining the cause of the existence of the entozoa was acknowledged by all; any facts, therefore, connected with the subject had some claim to notice. The tape worm which he held in his hand was passed by a young lady, living in one of the best and most healthy localities of Dublin. The other was passed by a maid-servant of the same family. Similar worms had been passed by another servant, and by the master of the house. Now, tape worm is not a very common complaint in Dublin, and it would be hard to explain its occurrence in so many members of the same family, unless it were acknowledged that there was something in the food or drink used by those individuals, or what is still more unlikely, that the disease could be communicated from one person to another. There are two species of tape worm described, viz., the *T. Solium* and *Bothriocephalus Latus*. The Swiss and Russians are chiefly infested with the *bothriocephalus*, the English, Dutch, and Germans with the *tenia*. The specimen exhibited by Dr. Graves was referred by him to the species *bothriocephalus*, which is not common in this country. He said he would take the earliest opportunity of determining the species in the other individuals, and if they proved to be the same in all, it would go to establish the fact of a common origin.

3. *Severe Purpura Hæmorrhagica.*—Dr. Graves presented a drawing of the appearances in the case of a man in Sir P. Dun's Hospital. The case was one of *purpura hæmorrhagica* in an extreme degree. The patient was a labouring man, employed on the railroad, and there was nothing in his diet or mode of living to account for it. He came into hospital with rigors, quick pulse, and symptoms of febrile excitement. He was considerably exhausted by hæmorrhage from the nose, which lasted three days, and for which plugs were introduced into the nostrils with very little effect. He was subsequently attacked with hæmorrhage from the gums, palate, intestinal canal, and kidneys. He also had effusion of blood into the cavity of the tympanum, followed by deafness, detachment of the small bones of the ear, and ulceration of the tympanum. Dr. Graves said he wished to make one observation with respect to treatment. After some days the man was so exhausted by hæmorrhage, that no one expected anything like a recovery. All the usual means had been tried without effect; acetate of lead, acids of various kinds, and all sorts of astringents. Finding all to fail, Dr. Graves had recourse to turpentine and opium. At this period he was labouring under delirium, tossing about restlessly in bed, his pulse 130, and his extremities cold. While in this state he was ordered to take twenty drops of spirit of turpentine every second hour, a grain of opium every third hour, and to have twenty-four ounces of wine during the course of the day. Next day his intellect was observed to be much clearer,

he had slept during the night, his tongue was greatly improved, his pulse more regular; in fact he was better in every respect. By persevering in this plan of treatment for three or four days, he recovered completely. Dr. Graves observed, that in this case the blood seemed to be in a dissolved state, but he was not inclined by any means to found on that circumstance any hypothesis from which he would conclude that purpura was attributable to a dissolved state of the blood. Two of the most remarkable cases of this disease he had ever witnessed occurred in young and powerful men. Both had bleeding from the nose, gums, intestinal tube, and other parts. Blood was drawn from the system in both cases, and in both it was buffed and cupped as in rheumatism and other inflammatory affections. About the eighth or ninth day an eruption, like measles, appeared all over the body, and both sunk about the seventeenth day. Dr. Graves also exhibited a drawing, taken from a girl in the Meath Hospital, who had a combination of purpura with bullæ. He had brought it for exhibition, as the subject had been alluded to by Dr. Hutton at a recent meeting of the Society.

4. *Large Calculus of the Parotid Duct.*—A calculus removed by operation from the parotid duct was shewn by Sir Henry Marsh. The calculus was sent to him by the gentleman who performed the operation, Mr. Madden, of Portglenone Dispensary. The calculus is an unusually large one; at the time of its removal it weighed 127 grains. The man on whom the operation was performed, lived for many years afterwards, he had no return of the disease, nor did he manifest a tendency to the formation of calculi in any other part. An analysis was made of the calculus by Mr. Wm. Colles; it was composed of phosphate and carbonate of lime, with animal matter.

5. *Biliary Calculus.*—Sir H. Marsh shewed also a biliary calculus; it was angular, and somewhat larger in size than a nutmeg. This calculus was the cause of a long continued and dangerous obstruction in the bowels of the patient from whom it was expelled. The patient was a lady between 60 and 70 years of age, she had had previously frequent attacks of gall stones, but was not in any of these attacks jaundiced. On the passing of this gall stone, she was affected in the manner usual to her, she had pain in the epigastrium, vomiting, and great depression without acceleration of the pulse. On all former occasions, after the lapse of a few hours, the bowels yielded to medicine, acted largely, and the symptoms soon subsided. On the present occasion, the bowels for ten days resisted the action of medicine; during this period she suffered from continual nausea, and vomiting of greenish and yellowish fluids in large quantities, at intervals of six, eight, or ten hours. Temporary ease, and intervals of unquiet rest, were obtained after each discharge of fluid matter from the stomach. The lightest nutriment was loathed and soon rejected; the pulse frequent, feeble, and intermitting; the depression of the vital powers was extreme; the extremities cold, clammy, and livid; occasional distressing hiccup; extreme emaciation. Through the integuments of the abdomen on the right side, about three inches from the umbilicus, a

small solid tumour could distinctly be felt. In this region, the abdomen was tender and painful when pressed. On the eleventh day from the commencement of the attack, she was prevailed upon to take phosphate of soda dissolved in light broth; it remained on the stomach, a copious discharge from the bowels of fluid matter took place in the evening; she passed a somewhat less uneasy night, and next day full doses of scammony, finely pulverized with crystals of tartar, were retained on the stomach, and acted largely on the bowels.

In the midst of a large mass of solid and fluid fæces, the calculus now exhibited was discharged. Next day a great number of much smaller gall stones were passed, mixed with fæces. The transition from the most imminent danger to what might almost be called a state of health, was singularly rapid.

6. *Evacuation of Biliary Calculi through the abdominal Parietes.*—Another case of biliary calculi fell under Sir H. Marsh's observation, which he thought deserving of notice.

A lady of feeble constitution, about 70 years of age, had been suffering for years from various dyspeptic symptoms; she had never been jaundiced.

After her return from Cheltenham, whither for the benefit of her health she had been sent, Sir H. M. was requested to visit her. She complained of debility, languor, loss of appetite, and irregularity of the bowels, and mentioned incidentally, that she had had a boil over her stomach, which burst, and, notwithstanding various applications, had remained open. He urged the necessity of examining it; but this, on the plea of its being a mere trifle, was resisted. At his next visit having, with much difficulty, obtained permission to make an examination, he found about three inches to the right, and a little above the umbilicus, a fistulous opening about half an inch in diameter. On carefully examining it with a probe, a hard substance, easily displaced, was found to occupy the ulcerated space, which, by change of position, protruded somewhat. He then introduced a pair of forceps, and with no small difficulty gradually extricated an angular biliary calculus. Thin yellowish matter, such as is found in the upper parts of the small intestines, flowed out through the opening. Next day when he visited his patient, he extracted another calculus, similar in form, and nearly of the same size, which he found protruding through the orifice. Two days afterwards, a third; and after the lapse of another day, a fourth in like manner projected, and were removed.

For three weeks the fistulous opening gave exit to thin, inodorous, yellow, fluid matter. Strips of adhesive plaster were daily applied, it contracted gradually, and ultimately healed completely. This lady lived for several years in tolerable health, and died at the age of 82, dropsical, with signs of valvular disease of the heart.

Before concluding, Sir H. Marsh said he wished to mention one or two additional facts on the subject of biliary calculi. He had at home a dried preparation of the gall bladder and its ducts, with a large angular gall-stone, fixed firmly on the common duct, almost in

contact with the duodenum. The calculus was so placed, that some bile could pass between it and the walls of the enlarged duct; accordingly bile was found in the small intestines, and the patient exhibited but a very slightly jaundiced appearance. The cystic and common ducts were enormously enlarged. The patient, a gentleman, aged 62, had led for many years a sedentary life, had long been subject to various bilious and dyspeptic symptoms, and to frequently recurring attacks, characterized by the usual symptoms which announce the passage of a gall-stone. From one of these attacks he did not, as heretofore, recover; the pain subsided, but he remained in a state of great exhaustion; he loathed food, was unaccountably restless and uneasy, he could not sleep, the mouth and tongue were dry, the extremities became cold, dark, and clammy, the pulse feeble, rapid, and intermitting; there was occasional incoherence; the most powerful stimuli failed to sustain the vital actions. On the fourth day from the subsidence of the pain, he died, exhibiting no symptoms except those of irritation, and extreme depression of the vital powers. *After the most accurate investigation of all the viscera, nothing abnormal, except the gall-stone lodged in the common duct, was discovered.* From the continued irritation caused by this calculus, which had just reached the duodenum, but passed no further, the patient appeared to sink.

Sir H. Marsh brought forward the case of an indolent, full-living, plethoric lady, about 45, who, after years of suffering from painful attacks, at first conceived to be hysterical, but at a later period (from the uniformly recurring fits of jaundice) known to be from gall-stones, passed a biliary calculus, fully as large as a guinea-hen's egg, and similar in form. The attacks appeared to be constantly brought on by strong mental emotions. A biliary diarrhoea accompanied the passage of the gall-stones through the intestines. At the time of the escape of the calculus into the duodenum, there were evidences of intense inflammation, such as, great pain on pressure in the right hypochondrium, hot skin, thirst, headach, and rapid tense, pulse. After large bleedings, general and topical, and the adoption of other antiphlogistic treatment, the pain abated, the diarrhoea set in, and the large calculus described passed from the bowels. This lady soon and completely recovered, and now upwards of ten years have elapsed without any return of the symptoms of gall-stones. The large size of this calculus, and the symptoms accompanying its passage, render it probable that the transit was effected, not along the duct, but by the ulcerative process: large as it was it caused no intestinal obstruction. The calculus, which, in the first detailed case, so long and so dangerously obstructed the bowels, was very much less in size than that passed by this lady. It may be well, however, to remark, that the large one was round, smooth, and oblong, the other angular and square. It is not amiss to notice, that two of the patients affected with gall-stones (whose cases are alluded to) were never jaundiced, and the others had had many successive painful paroxysms, indicating the calcular irritation, before a jaundiced appearance was exhibited. The

explanation of this is not difficult, but the existence of gall-stones has often been denied, and an erroneous view of the disease formed, because the pain at the epigastrium, and the other symptoms were not accompanied with, or followed by icterus.

7. *Necrosis of the inferior Maxillary Bone, preceded and accompanied by Cancrum Oris.*—Mr. Smith said the communication he was about to make related to a formidable disease, termed gangrenous erosion of the cheek, or *cancrum oris*, a disease most frequently observed among the ill-fed and cachectic children of the poor. The case he was about to allude to occurred in the Richmond Hospital, where the patient was for some time under the care of Dr. M'Donnell. The child was about two years old, and had enjoyed good health until about four months before its death, when a quantity of a solution of acetate of lead was given to it by mistake. This was followed by obstinate diarrhœa, and considerable emaciation. At the end of nine weeks the diarrhœa was checked, and about the same period a livid red spot made its appearance on the mucous membrane of the gum of the lower jaw. This spread gradually to the cheek, and remained for some time without appearing externally. About the 14th of February, a circumscribed spot, of a dusky red colour, made its appearance on the cheek, close to the angle of the mouth, accompanied by tumefaction of the cheek, œdema of the eyelid, and remarkable fetor of the breath. On the following morning, in removing the poultice the greater part of the cheek came away, in a state of slough, leaving a large ragged opening into the cavity of the mouth. The child was admitted on the 17th of February, and died on the 19th. The phenomena of gangrenous erosion, and the perforation of the cheek were well shown in the specimen laid before the meeting. The sloughing process had extended to the superior maxillary bone, laying open the cavity of the antrum. The condition of the lower jaw was very remarkable. One half of it, with the teeth, was necrosed, separated from all its natural connexions, and enclosed in a new formed shell of bone. The rapidity with which the new bone had been formed was very striking. With respect to the state of the other parts, the stomach presented some dark ecchymosed spots, the mesenteric glands were diseased, and there were several patches of ulceration in the large intestine. Mr. Smith exhibited a cast of the whole body, shewing the emaciation of the trunk, swelling of the hands and feet, and destruction of the cheek. He observed that the disease frequently occurred during the prevalence of exanthematous affections. In one case, of which a drawing was exhibited, it had occurred during the progress of fever. About the period of convalescence a livid red spot made its appearance on the cheek, ran rapidly into gangrene, and in the course of thirty-six or forty hours, caused an enormous destruction of the side of the face. Mr. Smith alluded to the affection of the cheeks, occasionally produced by the use of mercury, and expressed his opinion that it differed from the true *cancrum oris*; he expressed doubts that mercury would produce *cancrum oris*, the constitution being sound, and not weakened by previous disease; but



admitted that it might favour the development of this peculiar form of gangrene, if at the time of the exhibition of the mercury, the constitution was debilitated, and the system weakened by previous disease; this debilitated condition, whether produced by disease, or the result of bad food, imperfect clothing, and living in an impure atmosphere, would appear to be necessary for the development of this formidable affection, recovery from which was not of very frequent occurrence. (*Museum, Richmond Hospital.*)

8. *Phlegmasia Dolens, terminating in Gangrene.*—Dr. E. Kennedy presented the recent parts in this case, which was one of phlegmasia dolens terminating in gangrene, an occasional termination of that disease. The patient was delivered of her second child after a natural labour on the 2nd of February. The placenta was retained, and it was found necessary to introduce the hand to effect its removal. She complained afterwards of some abdominal uneasiness; but there was nothing in the case to attract attention until the 12th, when her left leg began to swell. The swelling commenced in the calf of the leg extending gradually to the thigh, and accompanied by some tenderness in the iliac region. She went on in this way suffering acute pain for four or five days, and on the 17th a distinct redness was observed along the course of the saphena vein; this subsequently extended to the calf and upper part of the leg. On the 19th a large gangrenous spot made its appearance on the upper and outer part of the thigh, immediately behind the trochanter. On the 20th she was attacked with hiccup and symptoms of depression; during the course of the night small gangrenous spots made their appearance on various parts of the limb, and she died with symptoms of coma on the 21st. On examination eighteen hours after death, the cavity of the abdomen was found to be healthy, and the uterus of its natural size, but firmly attached to the pelvis on the left side by thickening and adhesion of its broad ligament. The thickening was of a very peculiar kind, it appeared almost cartilaginous, and the knife grated against it. On exposing the vena cava Dr. Kennedy exhibited some thickening of its coats, extending also into the femoral and saphena vein. The femoral vein was found to contain a tube of lymph, and, on pressing the vein between the fingers, a quantity of sanguineous fluid oozed out. The cellular tissue of the limb was extensively infiltrated with a clear serous fluid.

Dr. Kennedy also exhibited another preparation of a similar kind, but without any gangrene. Like the former case it had proved fatal. On examination the veins of the limb were found to be coated with lymph and obstructed throughout their whole course. In the case first brought before the society he said he had not examined the veins of the uterus, but would do so. On making an incision into them Dr. Kennedy found them filled with fluid blood, and in one or two he discovered some slight traces of the effusion of lymph. With respect to the first of these cases he thought the disease was to be attributed chiefly to venous inflammation. Others, however, might be inclined to adopt a different opinion, and would look upon the venous

inflammation as secondary. The character of the gangrene observed in that case was also worthy of notice. In the dry gangrene which arises from arterial obstruction, the swelling of the limb, and the enormous distention of the cellular tissue is never observed, at least in the commencement of the case. This exemplifies the difference which may arise from the nature of the obstruction; in the venous obstruction the swelling and infiltration of the limb is very remarkable, in the arterial there is scarcely any. (*Museum, Lying-in Hospital.*)

*Thirteenth Meeting, February 29th, 1840.*

Sir P. CRAMPTON, Bart., in the Chair.

1. *Injury of the Fœtal Head.*—Dr. Fitzpatrick exhibited a fœtus, born during the course of the morning. In this case pregnancy went on as usual, and every thing appeared favourable, until about ten days ago, when the mother, while sitting on the sofa, was kicked accidentally in the side of the abdomen by one of her own children, a very strong boy. From this period she found that the motions of the fœtus were no longer perceptible. Two days afterwards she had some hæmorrhage, but so slight, that she did not think it necessary to have advice. On the following day she had slight hæmorrhage again, but thought so little of it, that she went about as usual, and continued to do so until the morning of the 29th, when she was seized with labour pains, and delivered in six hours.

The fœtus was of the ordinary size of an eight months' child. The cuticle on different parts of the body was abraded, presenting in some degree the appearance of a syphilitic fœtus, for which supposition, however, not the slightest foundation existed.

The bones of the head were dislocated, and lay in a confused heap at the top of the spinal column; the brain was completely broken down and converted into a homogeneous fluid.

The scalp containing this fluid was the presenting part, and when protruding through the os uteri gave an exact representation of a tense bag of the membranes; on passing the finger up between it and the uterus, the broken down bones of the head were felt posteriorly, and decided the character of the presentation and the death of the fœtus. The quantity of liquor amnii was remarkably small.

The umbilical cord was of a pale blue colour, and softer than natural; the placenta, of the ordinary size, presented no other peculiarities than those produced by the arrest of the circulation.

Dr. Fitzpatrick said he was induced to exhibit the fœtus for examination, as it seldom happened that an opportunity offered of examining the phenomena of death from direct violence under such circumstances.

2. *Chronic Rheumatic Arthritis of the Knee Joint.*—Mr. Adams said he wished to make a few observations on a peculiar affection of the knee joint. It was the same disease he had exhibited specimens of in the hip, shoulder, elbow, and wrist joints. In the hip it

was generally termed *morbus coxæ senilis*; in the other joints it had got the name of rheumatic gout, of rheumatic arthritis, &c. It is almost invariably accompanied by enlargement of the bursa in the vicinity of the affected joint. When it affects the knee, the joint presents the form and appearance to which the name *hydrops articuli* was given by the ancients. The swelling is chiefly observed on each side of the tendon of the *crureus*, and of the patella. This bone is thrown forwards, and its ligament presents well-defined outlines; when pressed down, the patella is felt to strike against the condyles of the femur. There is also an enlargement of the joint in the popliteal region, which has been occasionally mistaken for popliteal aneurism, but when the joint is flexed, the presence of fluid in its cavity becomes so obvious as to remove all doubt. When the heel is struck with the palm of the hand, little or no pain is experienced, but when it is rotated, pain and crepitation are felt by the patient: the changes of the weather affect him. The patient from whom the specimen exhibited by Mr. Adams was taken, had the disease four years, and attributed it to cold caught while sleeping on a dray. This was followed by rheumatic fever, and chronic rheumatism of an obstinate character.

Mr. Adams said he wished to show also what he had seen of the disease in persons who had died of other complaints. On the articular surfaces there are depressions or grooves, which mark the commencement of the process of destruction in the cartilages of incrustation. After some time, portions of the cartilage are removed, and the surface of the bone is covered with an ivory deposit. At different points round the condyles, bony nodules and vegetations make their appearance, and are very remarkable in the advanced stage of the disease; it is to these the enlargement of the heads of the bones is in a great degree owing. With respect to the synovial membrane, it is in general very vascular, and presents several fimbriated processes hanging into the interior of the joint; in some cases there are foreign bodies in the cavity of the joint. In the advanced stage of the disease, the patella is thrown over the outer condyle, or dislocated. The enlargement observed at the posterior surface of the joint is chiefly owing to the increased size of the bursa which lies under the internal head of the *gastrocnemius*. Mr. Adams exhibited several specimens in illustration, and said that the attention of the Profession was now, for the first time, directed to the enlarged bursa as a sign of this disease. This enlarged bursa is normally situated, beneath the inner head of the *gastrocnemius*, and communicates with the joint by a species of valvular opening. He stated that he had traced this disease, chronic rheumatic arthritis, in almost every one of the larger joints. It is a very chronic affection, and never shortens the duration of life. It is incurable, but is sometimes benefited by rest, and the use of hydriodate of potash, with decoction of *sarsaparilla*. Cruveilhier calls this disease "*usure des cartilages*," and has well delineated it in his plates. He is wrong, however, in thinking it commences in the cartilages. The first link in the morbid chain is disease of the synovial membrane; this is followed by

destruction of the cartilages, and the formation of an ivory deposit on the articular surfaces of the bones. (*Museum, Richmond Hospital.*)

3. *Sloughing of the left Bronchial Tube from the Pressure of an Aneurismal Tumour; Emphysema of the sub-cutaneous Cellular Membrane.*—Dr. Greene said he was about to present a recent specimen of a disease of which several examples had been laid before the Society; he alluded to thoracic aneurism. The case was that of a man who was first attacked about fourteen months ago. The first symptom observed by him was slight superficial pain in the right side of the neck, a little above the clavicle; this was followed by pain extending to the right shoulder and down the side. This pain was neither violent nor constant, and continued for a long time before the patient became sensible of a pulsation within the chest. On observing this he became alarmed, and applied for advice at the Richmond Hospital. At this period there was no external tumour, but a slight pulsation could be felt over the spot where the aneurismal tumour afterwards appeared. On examining the chest Dr. Greene found dulness on percussion just below the clavicle, to the extent of about four square inches; the rest of the chest was clear on percussion. A double impulse could be felt over the tumour, but no *bruit de soufflet* could be heard. Shortly afterwards he began to complain of dysphagia; the difficulty of swallowing was not constant, being at one time worse than at another. There was a slight difference in the pulse at the wrists, that of the left side being somewhat weaker than the other. There was very little congestion of the veins, and no numbness, cramps, or œdema of the upper extremities. In this state the man continued, with very little variation, for three months. Both lungs were equally clear on percussion, but it was quite plain that the left bronchus was subjected to a certain degree of pressure, for the respiratory murmur was much weaker in the left lung than in the right. He was admitted into the Whitworth Hospital, where he remained for the last two or three months. During this time his respiration was laryngeal, but his voice was never affected until about ten days before his death. He suffered chiefly from pain, anxiety, and want of rest, and laboured under constant dyspnoea, but it was never violent nor in paroxysms. About ten days before his death an emphysematous swelling made its appearance on the front of the chest, and ran down both arms; this went on gradually increasing, and extended over the abdomen, back, and scrotum. He began to cough up a very foetid matter, his pulse became weak and low, and he sank, not suddenly, or from symptoms indicative of rupture, but from progressive exhaustion. On examining the parts after death, the cause of all the phenomena was explained. The left bronchial tube was greatly compressed by the tumour, and was in a state of slough, the sloughing process extending along the trachea, into the larynx. From this the air had escaped into the posterior mediastinum, from which it had made its way into the sub-cutaneous cellular tissue of the chest. The right bronchial tube, though in contact with the aneurismal tumour, was quite per-

vions. With respect to the dysphagia, it was explained by the situation of the œsophagus, which was pressed in front by the aneurismal tumour, and behind by the arch of the aorta. With respect to the state of the pulse, it appears that the aneurismal sac was placed pretty nearly in the centre between the two carotids, and that it must have exercised nearly an equal pressure on the arteries of the upper extremities, so that no indication as to its position could be drawn from the state of the pulse. As to the slight degree of pain experienced it might be accounted for also by the situation of the aneurismal tumour, which had little or no attachment to the spine, and sprang from the anterior surface of the aorta. When tumours of this kind proceed from the posterior part of the arch of the aorta, and lean backwards towards the spine, the roots of the nerves are apt to be compressed, and hence the pains, numbness, and cramps of the muscles of the upper extremities and chest. Another important feature in this case was that the patient died, not of rupture of the aneurismal tumour, but of gangrenous destruction of the windpipe and lung. To what could the gangrene of the lung be attributed? Dr. Carswell says that gangrene of the lung is sometimes caused by compression and obstruction of the nutrient arteries. Dr. Greene thought that in his case there had been compression of the bronchial arteries of the left side. This case, as well as another, of which a drawing was shown, served to bear out Dr. Carswell's opinion. In the case detailed the lower portion of the left lung was in a state of slough, and in the upper portion there were some small gangrenous cavities. The last observation which Dr. Greene wished to make had reference to the voice, which was natural throughout the whole course of the disease until about ten days before death, when the extension of inflammation to the larynx and rima glottidis gave rise to hoarseness. Some time back Mr. Ferrall stated at a meeting of the Society that he was very near overlooking a case of an aneurism of the aorta in consequence of the voice being raucous, and threw out the hypothesis that this might depend upon pressure on the recurrent nerve. Dr. Greene was inclined to differ with him upon this point. The situation of the aneurismal tumour and its connexions were such, that the recurrent nerve must have been subjected to pressure for a long time, and yet there was not the slightest affection of the voice until the larynx became inflamed. Dr. Greene had seen two cases of aneurism with hoarseness, from irritation propagated to the larynx, and followed by spasm; but in these instances the hoarseness was only occasional, and by no means constant. With these exceptions, Dr. Greene did not know any cause for raucous voice in cases of aortic aneurism. (*Museum, Richmond Hospital.*)

4. *Congenital Deficiency of a Portion of the right Cerebral Hemisphere; permanent and rigid Contraction of the left Arm.*—Mr. Smith said the preparations he was about to exhibit were taken from the body of a girl aged about eighteen, who had been for the greater part of her life a lunatic. She had been for some years an inmate of the House of Industry, had laboured under epilepsy, and died in a paroxysm of epileptic convulsions. On examining the body,

the first thing which struck Mr. Smith was a contracted condition of the hand, a state which he had found to be almost invariably connected with a deficiency of some portion of the opposite side of the brain. To this circumstance he had drawn the attention of the Society at a former meeting. This condition of the hand is not owing to any malformation, or deficiency in the bones, but is entirely the result of muscular contraction, and is to be distinguished from that state of the hand termed the club hand, of which an accurate delineation has been given by Cruveilhier. In this instance, on examining the external surface of the brain, only a small deficiency was observable in the left hemisphere (the right hand being the seat of the contraction), but on looking into the interior of the lateral ventricle, he found the deficiency to be very considerable, the wall of the ventricle, where the cerebral substance was absent, being completed by the arachnoid membrane. It is singular, that whether this deficiency be small or great, the result, with respect to the condition of the arm, is precisely the same. What is the immediate cause of this state of the hand? Some experiments and observations published by Dr. Marshall Hall, in the *Medico-Chirurgical Transactions*, seem to afford grounds for an explanation. Dr. M. Hall draws a line of distinction between cerebral and spinal paralysis. In the latter case, the irritability of the parts is destroyed, and hence the paralysis; in the former, the paralysis exists in consequence of the influence of volition being withdrawn. Dr. Hall also was led, from several experiments and observations, to conclude that where the influence of volition is withdrawn, the irritability of the parts is increased. This explanation, he thinks, bears upon the cases of idiots with a contracted state of the upper extremity, and cases of hemiplegia, where the arm is ultimately drawn into a permanently contracted state. He thinks the contraction is caused by the principle of tone constantly acting on muscles which are never relaxed by any act of volition, and observes, that a connexion may be traced between the defective or injured portion of the brain and the motor column of the spine. Mr. Smith thought that this hypothesis went far to explain the permanently contracted state of the hand, observed in cases of deficiency of a portion of the brain. Independently of this, the case brought before the Society was worthy of notice, as presenting an example of an almost universal deposit of scrofula. A portion of the intestinal canal, of the mesentery, and of the peritoneum covering the diaphragm, were exhibited as examples of scrofulous degeneration; the latter, in particular, was studded with small tubercles. He also shewed the axillary, cervical, mesenteric, and inguinal glands, all of which were enlarged and filled with scrofulous matter. Even the solitary gland which lies on the inside of the arm, a little above the internal condyle of the humerus, was diseased. It was remarkable, that the lungs were comparatively free from tubercles; but this was a circumstance which Mr. Smith had frequently observed in cases where there was extensive tubercular development in the abdominal cavity and glandular system. There were a few tubercles in the apex of the left lung, but the right was free from disease.

The liver was of a very light brown colour, and felt like a piece of dough or putty, it retained the impression of the finger. Mr. Smith said, he did not recollect having seen a similar condition of the liver. The gall bladder contained about an ounce of bile. (*Museum, Richmond Hospital.*)

5. *Aneurism of the Aorta complicated with Tubercle of the Lung.*—Dr. Stokes said that the Pathological Society was indebted to Sir Philip Crampton for drawing attention during the last session to the combination of aneurism of the aorta with tubercular degeneration of the lung. Of this combination, a very interesting specimen had been exhibited during the last session. The case to which Dr. Stokes would now direct the attention of the meeting, was that of a man about eight-and-thirty, who had served with the British Legion in Spain, and was exposed to much hardship and privation. At St. Sebastian a tree fell on him, striking him on the loins and back, and injuring him so much that he was obliged to remain two months in hospital. He recovered in course of time, and came back to Dublin, apparently in good health. On his admission into the Meath Hospital, about a year after his return, during which he had been employed as a printer, he complained of cough and palpitations, symptoms which he attributed to his accident at St. Sebastian. He had cough, attended with yellow viscid expectoration, streaked with blood, and frequent palpitations, but had neither pain nor night perspirations. The superior and anterior portion of the left lung sounded dull on percussion, and there was distinct dulness over the spine of the left scapula. In this situation there was evident cavernous respiration with gargouillement; under the left clavicle there were mucous, under the right, sonorous râles. His pulse was full, throbbing, and of a dicrotous character, and the pulsation of the vessels of the neck was very remarkable. A distinct double sound could be heard over the sternum, accompanied by a double bruit de soufflet. There was no evidence of enlargement of the heart, and the sound over the cardiac region was clear and natural. The question was, did he labour under aneurism? The fact of his having a tubercular cavity in the lung was against this supposition, but Dr. Stokes, bearing the case brought forward by Sir P. Crampton in mind, did not allow this circumstance to prevent him suspecting the existence of aneurism. There was no dysphagia, no distinct tracheal respiration, nor had he the usual distress of breathing observed in patients labouring under aortic aneurism. Dr. Stokes examined him with great care, to ascertain if he could distinguish any diastolic pulsation in the situation of the bruit de soufflet. On pressing the left hand against the sternum, and the right between the shoulders, a deep-seated diastolic throb could be felt; this phenomenon continued up to the period of the man's death. On dissection of the heart, it was found to be rather below the average size; the left ventricle was remarkably thick, as compared with the right, which was atrophied, soft, and small, similar to that of a person in phthisis. In this instance, the right ventricle represented the phthisical heart, the left, the aneurismal.

The ascending portion of the aorta was nearly six inches in width, its internal surface rough, and presenting numerous atheromatous and bony deposits; the dilatation commenced immediately above the aortic valves. Here was an explanation of two of the phenomena observed during life, namely, the bruit de soufflet, and the deep seated diastolic throb, which followed the impulse of the heart, and was felt over the sternal region.

The case was one of great interest with reference to the state of the left ventricle and the aortic valves, and tended to bear out the opinion of Dr. Corrigan, that in cases of aortic aneurism, a healthy state of the ventricle may be expected when the semilunar valves are not diseased.

The ordinary symptoms characteristic of aortic aneurism, which in this case were either feebly marked or altogether absent, were absence of great suffering, of pressure on the trachea or œsophagus, no change in the pulse at the wrist, and none of the violent throbbing which characterizes false aneurism. Dr. Stokes, said that with reference to diagnosis, Mr. Hamilton, who had examined the case on the 12th of February last, observed that the bruit de soufflet was audible above the situation of the heart, and from this sign was led to conclude, that there was either aneurism or dilatation of the aorta. His opinion of the nature of the disease was fully borne out by the post mortem examination. Dr. Stokes, in conclusion, observed, that nothing remained for him, but to exhibit the state of the lung. The substance of the lung would be found on inspection to contain a considerable quantity of tubercular accretions. In one of the lungs, there were a great many tubercular deposits, which, in consequence of their dark colour, were not evident at a distance, but as the preparation was too heavy to send round; gentlemen might examine it at leisure after the termination of the meeting. (*Museum, Richmond Hospital.*)