

generated in the alimentary canal from which it is absorbed, vitiating the blood, and eventually depriving it of its vitality.

Dr. Winslow treats of the disease in reference to its connection with mental agency. This he does by discoursing on the known effects of terror on the bodily functions, and more especially on its remarkable influence upon the mucous membrane of the bowels.

“Considering the subject of cholera psychologically, I have, (he observes,) no hesitation in asserting that the disease has been much aggravated and extensively diffused by moral agents. * * * That in some instances the disease itself has been induced by great depression of mind, fear and anxiety is also capable of demonstration.”

If, by this passage, Dr. Winslow means that terror will render an individual more susceptible of the disease, when the elements of that disease are surrounding him, we fully agree with him; for fear, like any other depressing agent, will cause the system to be less able to resist its attack; but that fear will induce cholera solely in virtue of its known effects upon the intestinal canal, we cannot admit.

One part of Dr. Winslow's pamphlet has our cordial concurrence, namely, that no good can possibly arise, but on the contrary considerable mischief, from the custom of reporting the number of cholera cases in the daily papers. That such returns should be made is indispensable, but their publication should, we conceive, be restricted to medical periodicals, or they should eventually be brought together in a special volume. The daily parade of the number of victims to this fearful pestilence, cannot fail to have an injurious effect upon survivors, by depressing their vital powers through the influence of dread.

This pamphlet is well timed, and contains injunctions which are worthy the attention both of the public and the profession.

Proceedings of Societies.

REPORT OF THE MICROSCOPICAL SUB-COMMITTEE OF THE BRISTOL MEDICO-CHIRURGICAL SOCIETY.

At a meeting of the Microscopical Sub-Committee of the Medico-Chirurgical Society, held at Mr. Swayne's, Berkeley Square, October 10th, 1849.—Present, Drs. BERNARD and BUDD; Messrs. J. C. SWAYNE and J. G. SWAYNE, BRITTON, PRICHARD, and NEILD,—

After the reading of the following report, its adoption

was moved by Dr. Budd, seconded by Mr. Swayne, sen., and unanimously agreed to.

Report of the Sub-Committee appointed to investigate the Nature of Cholera, by means of Microscopic Observations.

On the 9th of July, 1849, Mr. Britton and Mr. J. G. Swayne examined separately specimens of rice-water evacuations, which Dr. Budd had obtained from two patients in the cholera hospital.

At the next meeting of the Sub-Committee they separately described and produced drawings of some peculiar bodies which they had noticed in the matters examined. The descriptions and delineations given by these gentlemen coincided perfectly, and they were submitted to the attention of the Medico-Chirurgical Society, on the 14th of July. The general impression at that time was that the bodies in question were *sui generis*, and had never before been observed in any part, or in any secretion, of the human body.

From this period must be dated the separate observations of Mr. Britton. He examined a series of cases, published in his table in the *Medical Gazette*, from No. 3 to No. 20 inclusive. The results of these observations were, that the peculiar corpuscles were constant in the intestinal discharges of cholera patients, and that they were to be found in the matters vomited, as well as in the dejections; that they are “small and clearly defined in the matters vomited; that they become larger and more compound in the dejections; and as the disease progresses favourably, they vanish with the disappearance of the symptoms.” “In very rapidly-fatal cases these bodies are sometimes to be met with only in very small quantity, or are altogether absent (probably from not being thrown off by the intestine.”) Mr. B. found them in the dead body, “adhering to the mucous membrane in shreds of white matter, and very abundant.”

He examined under the microscope specimens of healthy fecal matter, and of the fluid stools of typhus and other diseases, but he failed to detect anything corresponding with the peculiar corpuscles belonging to cholera dejections, though he discovered these bodies in “cases of severe choleraic diarrhoea.” From these observations he inferred that the bodies in question were peculiar to cholera, and bore “some essential relation to the disease.”

Mr. Britton next set himself to examine the atmosphere in places where cholera was prevailing, with a view of ascertaining whether it contained the same corpuscles as those found in the patients. In his researches he had the advantage of many valuable suggestions, and much active co-operation, from Dr. Bernard.

On the 19th of July he condensed one drachm of fluid from the atmosphere of “a house from which five

patients had been removed, the day previous, to the cholera hospital, and two of whom died," and in this fluid he discovered bodies identical in appearance with some of the smaller choleraic bodies. The same result ensued upon a like experiment in the Bridewell. Afterwards the atmosphere of districts free from cholera was examined, but it yielded no evidence of the presence of the bodies in question.

On the 2nd of August Mr. J. G. Swayne, who had been interrupted by domestic circumstances in his prosecution of the observations already mentioned, resumed his researches, and examined a series of cholera discharges, which afforded results more or less similar to those which he had previously described. A summary of them has been given in the tables comprised in Mr. Brittan's paper in the *Medical Gazette*, (Sept. 29,) and in Mr. Swayne's paper in the *Lancet*, (Oct. 6,) making altogether thirty-four cases. Mr. Brittan's own table contained twenty cases, extending from the 10th of July to the 24th. The first two were from the same specimens as the first two in Mr. Swayne's table.

About the last week in August or the first in September, Dr. W. Budd reported that he detected bodies identical with the choleraic corpuscles in drinking water, obtained from cholera districts. He says,* "Shortly afterwards, and being at the time aware of this discovery, I detected the same organisms in great numbers in almost every specimen of drinking water which I was enabled to obtain from cholera districts. First, in the drinking water from Wellington Court, Redcross Street, where cholera first broke out, (with any violence,) in Bristol; subsequently, in the water of the Float, and in the drinking water from King Street, in the same city; since then, again, in London, in water from Lovegrove Street, and from the Surrey Canal; and, lastly, in drinking water from the Workhouse at Stapleton, commonly known by the name of the French Prison, being all places where, at the time the water was obtained, cholera was making dreadful havoc. This led me to examine a great number of specimens of water from healthy quarters; and, although I often found in it a good deal of matter of various kinds, organic and other, in no single instance did I see anything resembling the peculiar bodies in question."

The first meeting of the Microscopic Sub-Committee was held at Dr. Budd's house on the 9th of July, when he furnished the specimens so often adverted to, to Messrs. Brittan and Swayne, while he reserved some of the rice-water fluid for chemical investigation.

Dr. Budd reported that he made very careful microscopic examination of seven different specimens of blood prior to their being subjected to other processes. In not one of these specimens was anything abnormal seen. The appearance of the blood-globules was always natu-

ral, both as to form and other essential characters; and they always assumed a vivid red colour when shaken up with the air. In no instance could he discover any object in the blood foreign to its normal constitution.

Having given this rapid summary of the important investigations which the gentlemen above named have prosecuted, your Sub-Committee have only to present a description of the peculiar choleraic bodies which they have extracted from Mr. Swayne's paper in the *Lancet*.

"These cells vary very much in size and apparent structure during the different stages of their development; the smallest are of the same size as, or even much less than, blood-globules, so that, to show them properly, an object-glass, of high magnifying power, such as one-eighth, one-twelfth, or one-sixteenth of an inch, is required. They are very transparent, and, like blood-discs, appear to be flattened cells, but the thickness of their walls causes them to resemble rings in appearance. Their interior is almost entirely destitute of granules. Their walls refract light powerfully; they sometimes present a dotted or even cellular appearance, and there is usually a transverse fissure or crack at some point of their circumference. In some of them I have observed very minute cells or buds, projecting at different points of their circumference. Fragments of them present the appearance of small segments of circles. Cells of such dimensions are most usually found in the first portions of the alimentary canal, especially in the matters ejected by vomiting. (*Cut II.—Fig. 4.*) I have, however, found them present in large numbers in the fæces, together with other cholera cells of much larger size. (*Cut I.—Fig. 1—e.*)

"These small cells precisely resemble, and are, in fact, identical in appearance with, those which (*Cut II.—Fig. 2.*) Mr. Brittan has discovered in the atmosphere.

"The medium and larger-sized cells (as usually found in cholera evacuations) distinctly resemble the small cells in appearance, but they are coarser, and more granular in structure. Between the three every gradation may be met with, both as to form and size. The medium cells appear like thick, but somewhat irregular rings; but on altering the focus of the microscope, they can be observed to be flattened cells, with granular contents, and in some cases containing distinct cells within them. Their walls appear thick, and cellular in structure, the arrangement of the cells sometimes giving them the appearance of transverse striæ. The walls have usually a great tendency to split at four or five points of their circumference; and when split by gentle pressure, the whole cell divides into four or five segments, and gives exit to its granular contents. (*Cut I.—Fig. 1—c d.*)

"The larger cells (as usually met with) are more irregular in shape, and cellular in structure; they are semi-opaque, of a dirty-yellow colour, and have lost much of their resemblance to rings. On bringing their surface into focus, three or four cracks can usually be seen upon it, which appear deep fissures when viewed in profile. The cell-wall is distinctly cellular in struc-

* See a pamphlet "Malignant Cholera," p. 4, by W. Budd, M.D., &c.

ture. The cell often contains within it other cells of a similar nature. When one of these large cells is crushed by pressure, it breaks into a great number of fragments of a round cellular form. (*Cut I.—Fig. 1—b.*) Sometimes, however, the fragments have an angular character.

“Such are the usual appearances of these cells in the evacuations of cholera, for in by far the greater number of cases they appear flattened, broken, and imperfect. They are collapsed, as if by exosmosis, and more or less disintegrated. It is very probable that this appearance is produced by their having undergone a kind of digestion whilst passing through the alimentary canal.

“A very short time ago I had an opportunity of examining the only perfect specimen of these cells which

I have seen. In one of my earlier examinations I met with a large well-developed cell, but this did not perfectly reveal the structure, and it is only lately that I have seen any which do this. These specimens were obtained from Case 34, and were very beautiful microscopic objects. (*Cut II.—Fig. 1.*) Their walls were thick, and studded externally with numerous cells or buds. These appeared to be arranged in concentric circles. The cells being somewhat globular, the centre is first brought into focus, when it is seen to be occupied by two or three of these buds with intervals between them. (*Cut II.—Fig. 1—c.*) On gradually bringing the rest of the cell into focus, wider and wider circles of these buds are successively displayed, until the outer margin

CUT I.

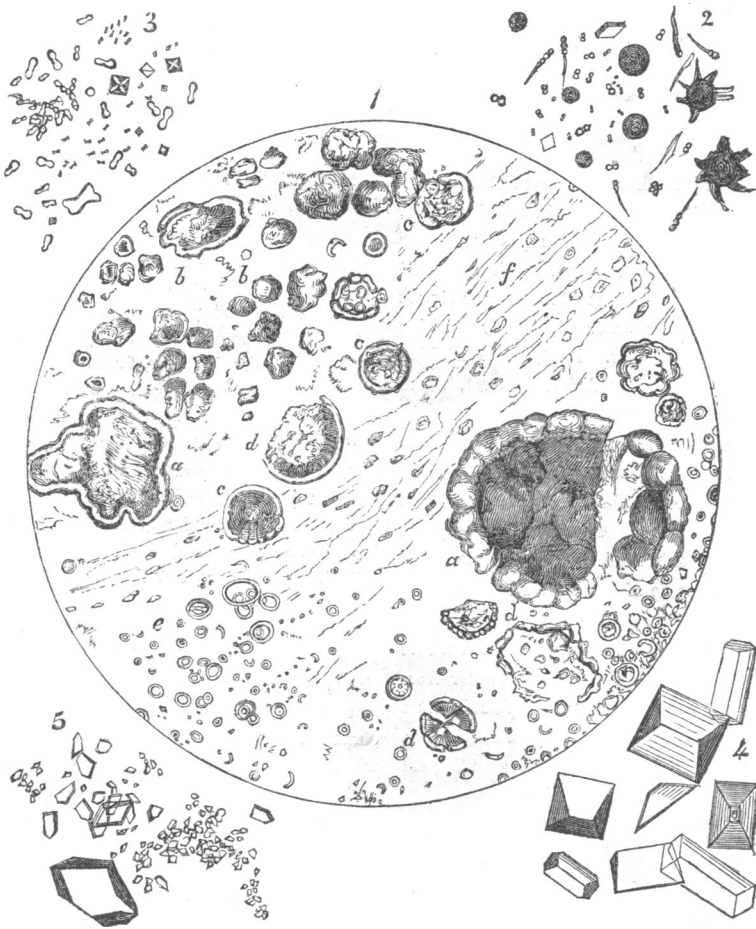


Fig. 1.—Large and small cells with mucous globules.

- a Large cells in the imperfect state in which they are usually found.
- b Large cells crushed by pressure.
- c Medium-sized cells.

- d Medium-sized cells crushed by pressure.
- e Small cells from same specimen.
- f Mucus, with hyaline basis.

Fig. 2.—Lithate of ammonia and lithic acid from cholera evacuations.

Fig. 4.—Phosphates from ditto.

Fig. 3.—Oxalate of lime from cholera evacuations.

Fig. 5.—Chloride of sodium from ditto.

or ring of buds is brought into focus. The cells forming these circles are connected by very distinct concentric lines.

“The parent cell is seen to contain within it a mass of granules, which in an imperfectly-developed cell does not quite fill its interior. On crushing one of the parent cells, it gives exit to its contents, consisting of granular matter, somewhat resembling the most minute cholera cells in appearance. (*Cut II.—Fig. 1—f.*) Well-developed large cells of this kind are usually tolerably transparent, and of a dirty yellow colour.”

As a supplement to this account, Mr. Swayne reports that he has observed buds projecting from the external

surface of the cells, and in some instances, completely detached. (*Cut II.—Fig. 1—b.*) This observation suggests that the mode of production may be that of gemmation, as well as endogenous.

JAMES F. BERNARD, Chairman.

J. C. SWAYNE.

FREDERICK BRITTON.

J. A. SWAYNE.

AUGUSTIN PRICHARD.

WM. BUDD.

J. H. SYMONDS, Extraordinary Member.

JOHN CASH NELL,

Secretary to the Microscopical Sub-Committee.

CUT II.

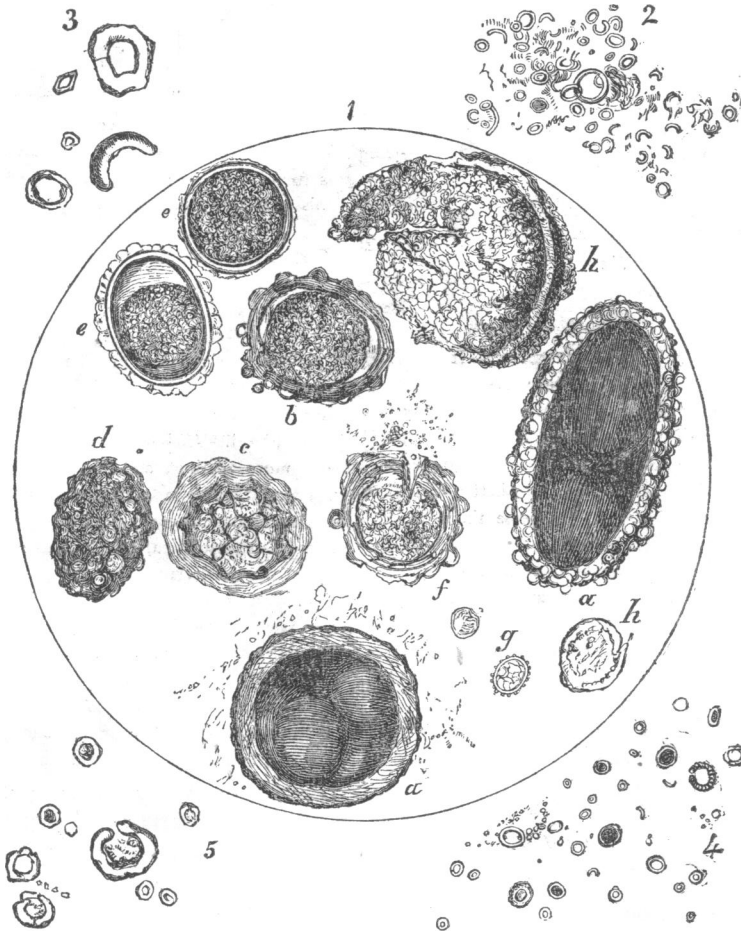


Fig. 1.—Large cells from cholera evacuations, (Cases 9 and 34.)

- a Large cells from Case 9.
- b Large cells from case 34.
- c Large cells, the centre only in focus.
- d Large cells, with rather more of the circumference in focus.
- e Large cells not fully developed.
- f Small cells, with development of buds externally.
- g Broken and imperfect cells from same specimen.

Fig. 2.—Cells from condensed atmosphere.

Fig. 3.—Cells from drinking water.

Fig. 4.—Cells from vomited matter.

Fig. 5.—Cells from drinking water.

RETROSPECTIVE ADDRESS,

DELIVERED AT THE EIGHTH ANNIVERSARY
OF THE

READING PATHOLOGICAL SOCIETY,

AUGUST 8TH, 1849.

BY WILLIAM B. YOUNG, Esq.

- I.—DISEASES OF THE NERVOUS SYSTEM.—*Sanguineous apoplexy; tumour of the cerebellum; cerebral softening; chronic hydrocephalus.*
- II.—DISEASES OF THE RESPIRATORY ORGANS.—*Tuberculosis; pulmonary apoplexy; calcareous concretions of the lung.*
- III.—DISEASES OF THE CIRCULATING SYSTEM.—*Aneurism of the abdominal aorta; enlarged heart.*
- IV.—DISEASES OF THE DIGESTIVE SYSTEM.—*Cholera; dilatation of the colon and rectum; abscess of the liver; intususception of the intestines; schirrus pylori.*
- V.—DISEASES OF THE REPRODUCTIVE SYSTEM.—*Diseased ovary; ovarian dropsy; fibrous tumour of the uterus.*
- VI.—DISEASES OF THE URINARY SYSTEM.—*Diseased bladder.*
- VII.—DISEASES OF THE SKIN.—*Horny excrescence.*
- VIII.—SURGICAL DISEASES.—*Fractured spine; gunshot wound; injury of the radial artery.*
- IX.—MIDWIFERY.—*Lingering labour, with hydrocephaloid head.*

MR. PRESIDENT AND GENTLEMEN,—It is with feelings of diffidence that I appear before you this evening, to fulfil the task which it has fallen to my lot to perform, viz., to deliver a Retrospective Address of your proceedings during the past year, inasmuch as there are many other members who are better qualified for such an undertaking. At the same time I must confess, that I have derived much pleasure and instruction from a closer perusal of the many interesting papers and cases which have been brought before you since our last anniversary.

We are met together this evening to celebrate the eighth anniversary of the Reading Pathological Society, and in taking a review of its proceedings during the past year, I think we may say, that although there have not been so many papers read as in former years, still, many interesting cases have been brought forward, and much useful information elicited by the discussions which have followed, and especially on the subject of cholera, which, from its importance, has occupied a great portion of our time.

The many advantages of societies of this kind have been so fully stated by those gentlemen who have preceded me, that I need not repeat them; but there is one which I would refer to more particularly at this time, viz., that it gives the members an opportunity of meeting together to discuss the subject of any severe epidemic which may be raging, and so to devise the best means of treating the same.

I have much pleasure in congratulating you on an

increase in our members, five new members having joined this society during the past year; but it is not unmingled with regret, as I have to record the loss of one whom it has pleased God in His Providence to remove from amongst us since our last meeting. I refer to Mr. Dunn, who kindly took charge of the museum since the formation of the Society, and had only lately resigned the office of house-surgeon to the Royal Berkshire Hospital, which he had held for ten years, with great credit to himself, and satisfaction to all connected with it, to enter upon the more anxious duties of private practice.

I shall now proceed to the more immediate object of the meeting, viz., to detail the cases, &c., which have been offered to the Society since our last anniversary, and in so doing, I shall follow the same arrangement as that adopted by my predecessors.

I.—DISEASES OF THE NERVOUS SYSTEM.

Sanguineous Apoplexy.—Mr. Walford related the case of a man who died in St. Lawrence's Workhouse. He had been suffering from a lichenous rash, on the disappearance of which he complained of a pain in the loins, with loss of appetite. On examination the liver was found enlarged; the urine became bloody, afterwards pale and albuminous, with a specific gravity of 1007.

On the 13th of July, the nurse hearing an unusual noise, went to him, and found him speechless. He died in a quarter of an hour.

On a *post-mortem* the following appearances presented themselves:—*Lungs* adherent from old effusions of lymph. *Heart* small and fatty, with slight thickening of the mitral valve. *Liver* twice its natural size, and hard. *Kidneys* large, the cortical substance being more distinct and harder than natural. On examining the brain a large quantity of blood was found effused and coagulated round the pons varolii and medulla oblongata, and extending into the spinal canal of the third ventricle.

Mr. Walford considered that the effusion on the brain might fairly be ascribed to the disease of the kidneys, and faulty secretion of urine. In the discussion which followed, Mr. May said, that when the specific gravity of the urine was below 1007 we might fairly assume that there is an absence of urea, and where this continues for any length of time it is invariably followed by apoplexy, either sanguineous or congestive. Dr. Cowan did not think there was any connection between the state of the urine and bloody effusion, which he considered accidental.

Tumour of the Cerebellum.—Dr. Cowan presented a tumour taken from the cerebellum of a girl, aged 18, who came into the Royal Berkshire Hospital, suffering from a severe pain at the back of the head, which came on in paroxysms. The head was drawn more or less towards the left shoulder. Her general aspect was anæmic. There was no affection of the sensorium, delirium, or paralysis. She derived temporary relief from the application of leeches to the nostrils and

behind the ears. In three or four days she relaxed and died suddenly.

On examination, the hemispheres of the cerebellum were found dry, but perfectly sound. On cutting into it a tumour was discovered in each lobe, about the size of a walnut, of the character of medullary sarcoma.

In his remarks upon this case, Dr. Cowan stated that this was the third case of the kind which had occurred to him. The other two had proceeded farther, and presented a greater complication of symptoms. He also remarked, that during the paroxysms of pain there was great unsteadiness of gait, which went off when that ceased, and that it was curious how much the symptoms produced by this permanent lesion were relieved by the remedies and slight depletion.

Cerebral Softening.—Dr. Wells read a case of cerebral disease, with softening of the fornix and septum lucidum, which appeared to follow a severe nervous fever, which occurred in 1845. This interesting case, and the valuable remarks of the writer, has appeared in the *Medical Gazette*, January 19th, 1849.

Chronic Hydrocephalus.—Mr. Harrinson related the case of a child, aged 9 years, who died of chronic hydrocephalus, with caries of the temporal bone, which appeared to follow an attack of measles. She suffered from severe pain behind the left ear, followed by a discharge, which continued for some time. A short time after a swelling formed behind the ear, which became very large, and was opened, from which a very offensive discharge continued to flow profusely. During this time the child was convulsed, very restless, feverish, and refused the breast; the bowels confined, urine scanty, and very offensive. On examination a large fungous ulcer was seen over the mastoid process, and on passing a probe the bone was found bare. Much restlessness and other symptoms of cerebral irritation succeeded, and ultimately convulsions, coma, and death.

On a *post-mortem* examination the bone around the meatus externus was found carious to some extent, but there was no appearance of disease of the petrous portion of the temporal bone, or trace of inflammation of the membranes or brain, or of caries internally. There was at least a pint and a half of fluid in the ventricles, and the surrounding brain was in a state of diffuence. A yellow gelatinous fluid lined the base of the brain. There were all the appearances of chronic hydrocephalus.

In commenting upon this case, Mr. Harrinson came to the conclusion that the hydrocephalus and caries were the effects of a general condition, induced by the immediately-preceding attack of measles.

II.—DISEASES OF THE RESPIRATORY ORGANS.

We next come to the diseases of the respiratory organs.

Tuberculosis.—Dr. Woodhouse read the case of a young lady, aged 22, who, up to the period of the sudden advent of the disease had always enjoyed good health. The disease was very obscure in its commencement,

resembling simple continued fever for a long period. The chest symptoms were at first very slight, then entirely ceasing, and exhibiting no physical signs whatever, till within a few days of her decease.

Autopsy thirty-six hours after death.—*Body* generally emaciated. *Head:* Scalp dry and bloodless; cranium thin; calvarium rather strongly adherent; dura mater slightly congested; the membranes at the base of the brain thick and opaque, and covered by a recent deposit of lymph, involving the origin of the nerves; a rather firm yellow granular deposit was found in the course of the large vessels in the fissura Sylvii, removable with the membranes, and leaving the substance of the brain untouched, which was softer than in other parts; the cerebellum presented throughout a series of small yellow points, resembling milary tubercles; on removing the thickened membranes from the base, the pyramidal and olivary bodies were found softened, and the medulla less consistent than normal; the pons appeared natural externally, but on cutting into it, three or four points of tubercular deposit were found; a single point was also found in the left olivary body and the right crus cerebelli; the hemispheres presented similar points of tubercular deposit equally distributed throughout their substance. *Chest and abdomen:* The chest presented externally the malformation called pigeon-breast; sternum prominent; and ribs flattened anteriorly. On raising the sternum the lungs did not collapse. Old adhesions were found on the posterior part of the right inferior lobe. The substance of the lungs densely studded with milary tubercles, especially in the upper lobes. Heart healthy. Liver gorged with blood, but otherwise healthy. Intestines natural.

The chief points of interest in this case were, its insidious approach, short duration, and the extent of recent tubercular deposit found in the brain and lungs, for in the former it was not merely confined to the meninges, but pervaded also the whole cortical and medullary portions, and this with so little disturbance of the intellect till within ten or twelve days of her death. The total duration of the disease was sixty-two days. No hereditary taint could be traced.

Pulmonary apoplexy.—Mr. Walford presented a morbid specimen taken from Edward Weller, aged 29, who died from pulmonary apoplexy, consequent upon an attack of pneumonia while suffering from an enlargement of the heart.

Post-mortem.—The heart was generally enlarged; valves of the aorta thickened, with effusion into the pericardium; there was also an extensive effusion of blood into the tissue of the right lung, so that when it was sliced a distinct line of demarcation existed between the portions of the tissue into which it was effused and the other parts; it presented a black appearance, and broke down easily under slight pressure. The adjoining portions indicated pneumonia. *Abdomen:* Liver large, hard, and presenting the appearance of a nutmeg when sliced. Extremities œdematous. Integuments subjaundiced.

This case is interesting, inasmuch as it shows the danger there is of a fatal termination when an individual with an enlarged heart becomes affected with pneumonia, from the increased liability to sanguineous effusion, or, in other words, pulmonary apoplexy.

Calcareous concretion of the lung.—Mr. Harrinson presented a small concretion which was expectorated by a girl who, when an infant, had inflammation of the lungs. One side of the chest was contracted. She is now a fine girl, and has coughed up five or six concretions at different times.

In his remarks, Mr. Harrinson stated that these concretions are classed by writers under two heads, viz., those produced by simple inflammation, which are either calcareous or osseous; and those by tubercular inflammation, which are amorphous or calcareous, and combined with animal matter. The mother died of phthisis, wherefore Mr. Harrinson was disposed to think it originated from the latter cause, and that she would ultimately become consumptive.

Dr. Cowan did not coincide with Mr. Harrinson, but thought they were formed in the mucous crypts of the tonsils or the bronchial glands, as depicted in Carswell's plates.

(To be continued.)

BIRMINGHAM PATHOLOGICAL SOCIETY.*

MAY 3RD, 1849.

MR. RUSSELL IN THE CHAIR.

The heart of a patient who died suddenly, after frequent paroxysms of angina pectoris for about ten days before his death.

Dr. Fletcher narrated the following particulars of the case:—

The heart was generally and equally dilated in all its cavities, without increase of thickness of its parietes, to about half above its normal size, with its walls thinned, so much that the heart would not exceed its normal weight, forming a case of dilatation of the heart without hypertrophy. Its valves were all perfectly healthy in their organization, but partook of the dilatation of the organ; and the chordæ tendinæ of the mitral and tricuspid valves were elongated. The muscular structure of the walls of the ventricles and of the columnæ carneæ was generally paler than natural. On the right side of the heart there was considerable fatty deposit; externally, and in the lower half of the left ventricle, there was considerable fatty degeneration, with softening and disorganization of the muscular structure; and the muscoli pectinati of this region were softened and destroyed. Portions taken from this part shewed none of the transverse striæ under the microscope which appear in the normal state, and which were sufficiently visible in portions taken from the base of the heart. The left coronary artery appeared healthy in its structure, about the normal size in the first part of its course, but

contracted afterwards. The right coronary was very large and wide, and patent at its origin, and dilated for about three inches of its course, where its coats became diseased, and afterwards its calibre was very much contracted. The veins of the heart were generally dilated, and more so into sinuses than usual at the base. The structure of the left ventricle was so extremely diseased at the lower portion, that it must have been incapable of much contraction; and here its internal surface was much softened and disorganized, and it contained a clot, firm and fibrinous, such as is found in an aneurismal sac, of about half an ounce in weight.

Dr. Fletcher was called to see Mr. A. B., (with Mr. Frederick Jakes) on the 15th of April, 1849. He was a thin, nervous man, aged 44, active in business. He had been ill since the day before, when Mr. Jakes first saw him, having frequent attacks of pains across the chest, which extended through to the back, and slightly into the arms, attended with palpitations and sensation of suffocation, and during the intermissions he was quite free from all inconvenience. He examined him very carefully, and could detect no physical signs of disease, either in the heart or arteries, or in the lungs, or in any other viscera; the only thing upon which he made any remark was, that the sounds of the heart were slightly sharper and clearer than natural, but this was not to such an extent as to have drawn his attention in a patient who did not complain of any symptoms of affection of the heart. The pulse was 73 or 74, and perfectly natural.

Mr. Jakes had known him twelve years, and had never seen him more out of health than occasionally suffering from colds, attended with a cough, which in some cases was rather obstinate. About twelve months ago Dr. Fletcher examined him with Mr. Jakes, when he was in some degree anxious about himself, but for no other cause than the obstinacy of his cough; and his father having been the subject of asthma, he thought he might become so, or consumptive. He then examined him very carefully, and detected nothing more than a slightly coated state of the tongue, which he supposed originated in indigestion, and prescribed some slightly aperient pills, and a mixture, containing infusion of gentian and alkalies, to which he has occasionally had recourse ever since. Dr. Fletcher was about to leave his room to talk over the case with Mr. Jakes, when he told us that one of his attacks was coming on, and immediately there was great anxiety of the countenance, and he appeared to suffer great pain and sense of suffocation, and the heart's action became frightfully irregular, it seemed to toss and tumble on every side, with the most irregular jerking contractions, both as to force, space of interval, and situation; you might fancy the heart assuming all sorts of positions, upside down, sideways, back again, without law or order, and contracting with the utmost irregularity, both as to force and interval, the pulse at the wrist during this time beating most irregularly, and not at all corresponding to any contractions of the heart. When this most inordinate action began to subside, the heart beat for some time as follows:—(The spaces between the numbers represent the spaces between the pulsations or sounds of the heart.)—1—2—3—4—1—2—3—4; and at this time the pulse at the wrist was only felt at the No. 1 sound of the heart, of which there were

* Continued from page 577.

about 60 per minute, but with this it was constant. The attack lasted about five minutes before it quite went off, and he was then perfectly regular, both in respiration and circulation.

April 17th.—Dr. Fletcher again visited the patient with Mr. Jakes. The character of the pains during the attacks had now altered, they were felt through the back and scapulæ, and through the forehead so intensely, that Mr. Jakes had thought it necessary to apply leeches to the temples. The heart's action was quicker, and more laborious; the lungs somewhat congested; and the surface of the body generally was so congested, that the hand or finger placed upon the surface of the body readily left its mark. About twelve ounces of blood were taken from the arm, to relieve the heart and the general congestion, and the treatment continued.

From this time Mr. Jakes reports that he continued in somewhat the same way, the attacks came on with about the same frequency, but were slighter, and on the 22nd he appeared much better, sat up, and enjoyed his dinner. About half-past five of the morning of the 23rd he died suddenly, whilst sitting up to take some tea.

Post-mortem examination fifty hours after death.—Body thin, not decomposed. *Head* not permitted to be examined. *Chest*: Lungs congested posteriorly, and very slightly emphysematous; in their anterior borders they overlapped the heart, so as to leave very little of it in approximation with the parietes of the chest. *Heart* as already described. No effusion in the pericardium or pleuræ. *Abdomen*: liver, spleen, and pancreas, and the vascular system of the intestines, congested; kidneys congested. All these organs otherwise healthy.

Remarks by Dr. Fletcher.—I have gone into details in this case more than perhaps may appear its due: but when we consider that these severe paroxysms came on, and a fatal disease existed in a part without permanent symptoms of its existence, so that in the early stage of his sufferings there were no physical signs of disease during the intermission between the paroxysms; and when we consider also that in this case a policy of insurance upon his life was actually effected after a careful medical examination within six weeks of his death, it must be evident that the case demands more care and more detail than even at present I have inflicted upon you.

Granular disease of both kidneys in a woman advanced in pregnancy, with constriction of the left auriculo-ventricular orifice, and sanguineous condensation of lungs.

Mr. Mackay gave the following history of the case:—

Mrs. Freeman, of dark complexion, moderate stoutness, and until within the last few months generally of good health, is in the ninth month of her second pregnancy, and admitted into the Lying-in Hospital on account of general anasarca, with much pulmonic and cardiac disturbance. Four months past had an alarming attack of hæmoptysis, said to have been caused by a severe beating, and about the same time anasarca

showed itself, first in the feet and legs, and subsequently in the trunk, upper extremities, and face. Has suffered much from dyspnoea and cough since the hæmoptysis; both continue, with violent cardiac impulse, some dulness over the region of the heart, and a strong bruit with the first sound. The urine of a dark colour, like the grounds of tea, with little black particles at the bottom of the vessel; specific gravity, 1030. The quantity, about five ounces, is converted, by boiling, into an opaque jelly. For the first few days she improved, but then relapsed, and for the first time experienced headache and vertigo, which were attended by an evident increase in the frequency and fulness of the pulse, and an aggravation of the pulmonic and cardiac symptoms. At this stage general bleeding was resorted to, with great relief, and subsequently topical bleedings, counter-irritation, aperients, and mild diuretics were employed, with decided effect. The sthenic condition of the system being reduced, opium, in the form of Dover's powders, was of great service in relieving irritation and procuring sleep. Three weeks from her admission labour came on, and after three hours' duration terminated in the birth of a mature male infant, which was still-born, but had evidently not long ceased to live. No change of importance occurred either in the general or local symptoms subsequently, excepting that the anasarca for some days abated, and the abdomen became distended with fluid; but in the last fortnight of her life the former returned, and before her death became extreme. The urine was very frequently examined, and was always highly albuminous. It occasionally varied in quantity and specific gravity, but generally was, in both respects, as on admission. Five weeks from the date of her delivery she sunk from exhaustion, having neither had convulsions nor coma.

Post-mortem thirty hours after death.—Head not examined. *Thorax*: Lungs not collapsed; filled their respective cavities; of normal colour; but in considerable portions of each there was great condensation of the parenchyma, as felt by the finger; and when incised, this induration was found to arise from effusion of blood, which in some parts was in patches, having a distinct outline. About eight ounces of bloody serum were contained in each pleural cavity. In the pericardium there were about six ounces of clear fluid, and on the anterior surface of the heart there were two small patches of soft lymph. On examining the cardiac structure some hypertrophy of the left ventricular walls was evident, and also great narrowing of the left auriculo-ventricular orifice, from contraction of the mitral valve. *Abdomen*: The liver was somewhat enlarged; a considerable quantity of an albuminous fluid in the peritoneal cavity. The kidneys exhibited the usual characteristics of granular degeneration in a marked, though not in an advanced, degree. They each exceeded the average size of the organ. Their capsules separated without difficulty. On making a section of them the difference in appearance between the cortical and tubular structure was very striking, the former being of a pale straw colour, and very smooth, the tubular part preserving its natural colour. The portions of cortical tissue between the tubes was much developed, and beginning to encroach on them.

Strumous tumour in the left lobe of the cerebellum.

Mr. Mackay gave the following particulars of the case :—

— Williams, aged 5 years; generally was pretty well, though never a strong child; has not had any illness or any nervous affection. She appeared in her usual health when she went to play with some neighbouring children. About six P.M. on the day of the attack, after amusing herself for some time in running round a circle with her companions, she suddenly fell down and became evidently convulsed. She was taken home directly, the usual remedies were employed, but without any effect upon her. The convulsion, which was universal, alternated with profound coma up to her death, which took place at three A.M. next morning.

Post-mortem thirty-six hours after death.—*Head:* Some congestion of the superficial vessels. The cerebral structure appeared healthy, excepting the left lobe of the cerebellum, which was the seat of a tumour, the size of a filbert. The tumour felt much firmer than the cerebral substance, and the portion of the latter contiguous with the tumour was very vascular, and evidently softer than usual. On cutting through the tumour it exhibited a cheesy appearance and consistence. All the other organs of the body were healthy.

Lungs enormously emphysematous; tricuspid orifice of the heart slightly dilated; from an old man who died of sloughing after the operation for strangulated hernia.

Dr. Heslop related the particulars of the case :—

The patient had been recently operated upon for oblique inguinal hernia, by Mr. Crompton, by whose permission Dr. Heslop was enabled to bring the specimens before the Society. The lungs exhibited a truly extraordinary amount of emphysema, immense bullæ being spread over every part of them, but over the inferior surface more especially. They were undoubtedly nearly three times their natural dimensions. The heart was not larger than usual, and presented nothing remarkable, but a slight enlargement of the tricuspid orifice. This man died of erysipelas a week or ten days after the operation. He was not afflicted with dropsy, nor with any marked thoracic symptoms. His age was 74; had been a drunkard for many years.

Dr. Heslop refrained from giving an account of the abdominal organs, because he believed that they were to be brought before the Society on a future occasion, in connection with the disease of which he died. But he must remark upon the enormously diseased state of the respiratory organs in this case—not portrayed during life by any marked effects—but which had begun to produce a retrograde (he believed *characteristic*) effect upon the right side of the heart. Supposing a slight bronchitis had occurred in this man, how rapidly must venous distention and anasarca have occurred, the veins already suffering from increased pressure on their walls from disorder of the central respiratory and circulatory organs.

Perforating ulcer of the bladder, communicating with the vagina; granular disease of the kidneys.

Mr. Hinds narrated the following case :—

Mary Jackson, aged 40, has had two children; has had ill health during two years; her illness commenced with a severe pain in the loins, which has continued more or less ever since.

In the early part of 1848 she applied to me on account of a vaginal discharge, then regarded as leucorrhœa. She assured me she had not had any venereal affection. I saw her six or eight times, when she became better.

In September, 1848, she again applied to me, and appeared to be labouring under granular disease of the kidney, such at least was inferred from the general symptoms; but the urine, several times examined, did not appear to contain any appreciable amount of albumen when examined by heat and nitric acid. She afterwards placed herself under the care of Mr. John Carter, at the dispensary.

On March 6th, 1849, she again came under my care, and, beside kidney affection, she was believed to be labouring under chronic disease of the bladder. Tenderness over the pelvic region, constant desire to pass urine, this desire troubling her every five minutes. Urine foetid and ammoniacal, and contained a mucopuriform matter, and a large amount of phosphates.

March 29th.—Her urine came away involuntarily. She died April 1st.

The *post-mortem* examination, made in the presence of Mr. John Carter, revealed extensive granular degeneration of both kidneys; and on the posterior surface of the bladder, a little below the fundus, a fistulous opening existed, about the size of a sixpence, communicating with the vagina; the margins were sloughy. The mucous membrane of the bladder was generally thickened, as well as corrugated, and the muscular coat very much hypertrophied. The capacity of the bladder much diminished.

Foreign Department.

Cholera in the Salpêtrière.

Our readers will remember that in the hospital of the Salpêtrière the cholera exerted a more fatal influence than in any other establishment in Paris. This was attributed greatly to the character of the patients attacked, for the most part feeble, together with aged females, who form the bulk of the establishment, and some lunatics. The history of the epidemic, as it appeared in this locality, has been copiously illustrated by M. Barth, in a communication to the *Archives Générales*, of which we give the following analysis :—

The first case of the disease occurred on the 14th of March; the last on the 29th of April. During this period of six weeks there were more than 800 cases, out of a population of 5,340. In the majority of cases at the first commencement of the disease, it occurred as a complication of some existing malady, as pneumonia, bronchial catarrh, measles, rheumatism, &c. It was