In the fatal case seen by the author of this notice, serous fluid was found in the subarachnoid tissue and within the lateral ventricles of the brain, considerable portions of both lungs were in a state of circumscribed dark-red induration, or hemoptysical engorgement, numerous intus-susceptions were found in the course of the ileum, and opposite to each intus-susception were one or more of the Peyerian or aggregated patches of follicles enlarged, prominent, and tumefied.

In conclusion, the practitioner will find in this work a convenient and safe guide in enabling him to understand the nature, and conduct successfully the treatment of the various disorders incident to the age of infancy and childhood. The work, indeed, is not remarkable for novelty, as in most of the diseases considered what was obscure or uncertain, is not rendered more clear. With this, however, it would be unreasonable to find fault. The work is distinguished for much sound sense and correct judgment; and we think one of its leading recommendations is, that it will teach practitioners generally, and the junior in particular, the mode of observing infantile disorders, and recognizing their existence with much more promptitude and celerity than heretofore, and consequently, insure in curable cases a much more rational and efficient treatment.

ART. III.—*Medico-Chirurgical Transactions, published by the Royal Medical and Chirurgical Society of London.* Vol. xxi. London, 1838.

IT is not very long since we had occasion to bring before the notice of our readers, the 20th volume of the Medico-Chirurgical Transactions; and we have now much pleasure in directing their attention to the 21st, as a creditable continuation of the labours of the very respectable association from which it emanates. The volume consists of twenty-four articles, of which eight principally relate to subjects in medicine, eight to those connected with surgery, two to chemistry, one to physiology, and five to pathology. It is entitled the *third volume* of a *second series*, intended to begin with the 19th volume of the Society's Transactions, (which was the first that was published after the granting of the charter,) and to be continued in connection with the enumeration carried on from the commencement of the work. We have considerable doubts as to the expediency and propriety of such a change. It is likely to affect, in an important degree, facility and precision of reference, by introducing a double, or interchangeable designation into the Society's volumes; while it will lessen the prominence of that honourable position in the scientific world, which the Society

owes, in a certain degree, to the well-known and creditable extent of its publications. It likewise appears to us, that, if the present alteration is a proper one, introduced, as it has been, without the occurrence, on the part of the Society, of any change in its plan or system of management, similar alterations must take place, after certain arbitrary periods of time, or extents of publication. Viewing, therefore, the Medico-Chirurgiral Transactions as an important and permanent work of reference for this and other countries, we consider that the designation of its volumes which has hitherto been adopted, in continued numerical sequence, is simple, intelligible, and not liable to mislead. If this enumeration is to be kept up, the new one is unnecessary; and we would therefore, with every feeling of respect and regard, take the liberty of suggesting to the Council and to the Society, a reconsideration of the subject, while it is yet in time. We are aware that in the *trade*, hopes of promoting an increased sale, sometimes give rise to changes in the mode of getting up works, which would not otherwise be adopted. But supposing that such hopes were likely to be realized in the present instance, (which, from the ready diffusion, by means of the weekly, monthly, and quarterly press of the information communicated at the meetings of societies, we think but little likely to be the case,) we should still consider the justification as imperfect and unjustified, and the measure itself inconvenient and unnecessary.

We should venture to add a few words more on introductory matter. The very respectable printer of the Society's volumes, enamoured of his lately acquired dignity of printer to Her Majesty, has thought fit to place the Queen's arms over his name, in the reverse of the title-page; so that the modest, unassuming notice which the law requires printers to give of their share of a work, is now to contend with the title-page, for the attention of the reader. If such a decoration is admissible at all, we pray it to be at the conclusion of the volume, leaving to the authors and publishers undisturbed possession, as heretofore, of the title-page, both obverse and reverse. We believe it to be contrary to all usage for an engraving to appear on both sides of the same leaf.

In proceeding to the consideration of the contents of this volume, the first of the medical papers which presents itself to our notice, consists of a *Note on the Prevalence of Calculous Diseases, &c.;* by A. Copland Hutchinson, F. R. S. London and Edinburgh.

The former publications of the author on the comparative unfrequency of calculous diseases among sea-faring people are well known throughout the medical profession; and the object of the present communication is to offer some further evidence on the same subject, and to communicate some additional information in relation to calculous diseases generally. By a letter which is given from Sir William Burnett, it appears, that

since the period of the last communication made by the author to the Society in 1830, only one case of calculus, and that renal, had occurred in the various naval hospitals at home and abroad, though the average number of seamen and marines annually voted by Parliament from that time to the present has been 30,000, including 2000 boys.

The author quotes an interesting passage from Aretæus, in which it is stated, that diet, (meaning by δίαιτα, of course, the proper regulation of diet,) and anointing, *and* " *sailing, and passing one's life at sea,*—(καὶ πλοῦς, καὶ ἡ ἐν θαλάσσῃ βιοτή,) all these are remedial in diseases of the kidneys." From this passage the author infers, that the only difference between him and Aretæus is, that the latter recommends " a sea-faring life, or voyaging, as a *cure* for stone and disease of the kidneys, while the statements of the former have gone to prove that these diseases do not commence or originate in a seafaring person."

Aretæus, the author informs us, is singularly mentioned by Priestley, as having flourished 300 years before the Christian era, instead of in the first century subsequent to it.

In Mr Hutchison's second paper in the Medico-Chirurgical Transactions, he was disposed to regard the occurrence of calculous diseases in Scotland as much more frequent than had previously been considered to be the case; but from the opportunities which he has recently had, of much personal inquiry on the subject, he thinks that he has still much underrated the frequency of its occurrence in one part of the island.

With regard to the treatment of calculous diseases, the author is of opinion, that " pure air,—a lax state of the bowels,—iodine used internally in proper doses, and externally over the region of the kidnies,—the use of swings, either in a garden or elsewhere,—active bodily exercise,—warm clothing, such as flannel-dresses worn next the skin, and a very sparing use of vegetables," are " the remedial and preventive measures indicated in such cases;" and " that one or more, or all of these, according to circumstances, may be advantageous, when sea-voyaging and a sea-life are impracticable."

The second medical paper is *on a Peculiar Symptom occurring in some cases of Enlarged Liver;* by John G. Malcolmson, Esq. Surgeon in the Madras Establishment.—In a case of severe hepatic disease, which was actively treated by general and local bleeding and mercurials, a tumefaction soon presented itself in the right hypochondrium, extending towards the umbilicus, and into the left side. In a few weeks fluctuation and tenderness exhibited themselves in it; but though the tumour showed a tendency to point at its upper part, it made no progress, and the patient was in every respect under very unfavourable circumstances.

At length he was "suddenly seized with acute pain over a small space of the anterior part of the left side of the chest, between the sixth and seventh ribs. There is a very distinct, sharp vibration communicated to the hand applied to the spot, with an emphysematous feel between the ribs, but attended with a loud crepitous bleating, distinctly heard without the stethoscope. Some mucous rattle in the throat, and he expectorates a little thick adhesive mucus. The respiration is hurried; he is exceedingly anxious, and is forced to sit up in bed. Pulse very quick and weak. Apex of the heart seems to be thrust up a little higher than usual."—P. 95.

It was considered as improper to open the tumour; but an incision was made upon it, for the purpose of diminishing the thickness of the parts, and assisting the progress of the matter to the surface. The removal of the tension, by means of the operation, gave the patient some ease; but he shortly afterwards died suddenly.

On examining the body, a large abscess was discovered in the anterior and superior part of the right lobe of the liver, but without any adhesion to the parietes of the abdomen. The liver was much enlarged; was rather soft; had several abscesses in its substance; and strongly adhered to the diaphragm. There was much reddish serum in the right cavity of the pleura, with flakes of coagulable lymph floating in it, and recent adhesions between the two pleuræ; the lung, though compressed, being healthy, and the adhesions easily separable. In the left side of the chest, "there was a slight recent adhesion of the thin margin of the left lung to the sixth and seventh ribs, at the spot where the sound was heard during life: the lung was well traversed and healthy, with the exception of an enlargement of some of the cells where it adhered. It was seen that the edge of the lung had been pushed against the side by the diaphragm, forced upwards by the enlarged liver. The heart and great vessels were healthy."—P. 98.

From the result of this examination, the author had no doubt that the peculiar symptom "of a loud sound, partaking of the character of a bleating, and of an ordinary respiratory murmur, but audible at some distance by the byestander, and accompanied with a strong vibration of the part of the chest from which it proceeded, was caused by the thin edge of the lung being compressed against the costal pleura by the enlarged liver."

Mr Malcolmson states, that he has found this diagnostic symptom very useful in many cases which have come under his cognizance, and for which he could not have been able to account, till informed on the subject by the result of the present dissection. He considers the use of percussion and of the stethoscope as more valuable in detecting enlargement of the liver than exa-

mination below the margin of the ribs, inasmuch as they afford the means of discovering that encroachment on the cavity of the chest, to which such enlargement, when it takes place either from congestion or chronic inflammation of the right lobe, often gives rise.

We have next a communication entitled *Nervous affections peculiar to young women, causing contraction of the muscles of the extremities, accompanied by increase, diminution, or absence of Sensation or Motion;* by John Wilson, M. D. Physician to the Middlesex Hospital.—This communication is principally composed of cases, ten in number, taken without selection from the author's case-book. The phenomena are many, of them such as occur under some one or other of the forms of nervous diseases and hysteria; and in addition to the circumstances mentioned in the title of the paper, some of the cases were attended with pains in the region of the liver, and in the back, stretching down the lower limbs; with pain in the head, with convulsive affections variously modified, and with well-marked appearances of paralysis, generally assuming a hemiplegic form.

The treatment employed, generally, consisted in brisk purgatives; in local blood-letting; in the introduction of needles into the extremities, or the application of moxa; and the employment of carbonate of iron and douches of cold water.

The cause of the lameness which so often exhibited itself was frequently attributed to some accident, as a fall, knock, or sprain, occurring about the time of the lameness being first noticed; but the author is of opinion, that the patient is very apt to deceive herself on this point, and may become lame, without having received any external injury of the parts affected.

"In the cases related, the women were all young, generally in good health, and of strong constitutions: all of them were single, and many of them subject to violent hysterical fits. In the four most obstinate cases, the functions of the uterus were regular; in others, the bowels were confined, and in four of them obstinately.

"Again, at times, some were seized with sudden and apparently alarming symptoms, as repeated hæmoptysis, most violent convulsive fits; others, on the contrary, had perfect paralysis of both sensation and motion; another lay motionless and speechless for three days: yet these symptoms only suspended, and never altered the treatment."—P. 123.

A report of a Case of Secondary Measles, with observations; by Joseph Moore, M. D.—This was the case of a healthy female child of 22 months, who, in the latter part of May 1836, was attacked with measles, from which she had entirely recovered

by the 10th of June. All the other children of the family, (six in number) had the disease in succession, and on the 31st of July following, the child first attacked had an accession of fever, which was succeeded by a rubeolous eruption at the usual period. The symptoms were in an aggravated form; but by the 9th of the following month (August) the child was convalescent, though a dusky hue long rested on the parts which had been occupied by the eruption.

The author adverts to the doubts which had been long, and are still, to a certain degree entertained, relative to the second occurrence of measles; but he refers to the authority of Dr Baillie's paper in the 3d volume of the Transactions of a Society for Improving Medical and Chirurgical Knowledge, as one of the earliest confirmations of the fact, to which he adds the evidence of Home, Guersent, and Rayer, in conjunction with that of the present case.

Though there has been much difficulty experienced relative to the establishment of a definite diagnosis between measles and scarlatina, the author states, that he has never seen an example of measles, "in which congestion and redness of the conjunctivæ, especially of the lower eyelids, has not existed, and that too, occasionally, with very slight epiphora." He is also of opinion, that the less may be the lacrymal secretion which prevails, the more marked is the palpebral turgescence. "Cuticular elevation, or prominence on the parts occupied by the eruption," as contradistinguished from the "tumefaction of the cutaneous surface," prevalent in small-pox and scarlatina, is likewise to be seen in numerous instances of measles; while in the fauces and *velum pendulum*, the redness is more diffused than in scarlatina, is unaccompanied with swelling of the parts, and does not impede deglutition.

Dr Moore is of opinion, that many systematic authors have been much deceived in founding nosological distinctions upon slight shades of difference, and erecting a few anomalous cases into new varieties. The *Rubeola sine catarrho* of Willan; the *Rubeola incocta* of Good; the *Rubeola sine eruptione* of De Haen, Burserius, and others, are recorded by the author as very equivocal forms of disease.

The next article is *a report of twenty cases of Malignant Cholera that occurred in the Seamen's Hospital Ship, Dreadnought, between the 8th and 28th of October* 1837; by George Budd, M. B. F. R. S. Physician, and George Busk, Esq. Surgeon to the Dreadnought.—This communication contains a well arranged and interesting account of the various phenomena attendant on the attack of cholera which it describes; together with

the morbid appearances which existed in the cases which terminated fatally; and a summary of the phenomena which presented themselves, in a tabular form. This last we consider as very desirable where minute symptomatology is concerned.

Of the 20 cases which occurred, 12 proved fatal; but among them, eight deaths took place of the first 10 who were attacked with the disease; while of the second 10, four only died. This difference, however, the authors ascribe, not to any improvement of treatment, but to the circumstance of epidemics usually becoming milder, and therefore less fatal, towards the conclusion.

The general phenomena accorded very much with those which presented themselves in London in 1832. The disease occurred in conjunction with typhous fever, acute and chronic rheumatism, erysipelas, ague, dysentery, syphilis, and gonorrhœa. Not very dissimilar combinations of the disease occurred during former epidemics in the Dreadnought; and in one of the latter cases it was remarked, that when it attacked a person labouring under *diabetes mellitus*, the urine was as completely suppressed as in the others, and the inordinate secretion had not returned a fortnight after recovery. The character of the urine is, however, not mentioned after the return of the secretion, which it should have been.

The suspension, or rather the subsidence, of severe rheumatic affections, on the symptoms of cholera making their appearance, was remarkably evinced in two of the cases narrated, in one of which, no fluid was found in a knee-joint which had been, at the time of the attack, much swollen; and in the other, very slight traces only remained, of a long-continued previous rheumatic affection, after recovery.

Bleeding, together with large and repeated doses of calomel, were the curative means principally employed; but the authors candidly admit the unsatisfactory nature of the result.

Examinations, after death, took place in 11 of the 12 fatal cases. The state of vascularity in the œsophagus, stomach, and whole of the intestinal canal was carefully noted; but neither in these organs, nor in the head, was there any thing very unusual in its character or extent. In the duodenum, the solitary glands were very conspicuous, giving the membrane more or less of a granular aspect; and conspicuous follicles were in all the cases observed in the large intestines. In the ileum, the glands of Peyer and of Brunner were much developed, particularly in the cases which proved rapidly fatal. In none of the cases which proved fatal within thirty-six hours were the contents of the small intestines found tinged with bile; but they were more or less so, in all those which were protracted. But the gall-bladder was almost invariably distended with dark bile, which some particular cause

prevented passing into the intestine during the early and severer part of the disease.

The most important of the morbid appearances occurred in the chest.

"The condition of the lungs," it is stated, "varied as the patients died more or less remotely from the attack. They were found healthy, or simply congested, in four or five cases that proved fatal within thirty-six hours; while of six cases, in which the patients lived at least forty-five hours after the attack, four presented pneumonia. In one of these (8), fatal at the end of forty-five hours, the pneumonia was very partial, interlobular, and confined to the lower lobe of the right lung; in two, (4, 7), fatal at the end of 96 and 138 hours respectively, the lower lobes of *both* lungs were found in a state of red hepatisation. In all these cases, the pneumonia was latent; there were no symptoms indicating its presence, and, while the patients lived, we had no suspicion of its existence. We were not aware at the time these patients were treated, that the same observation had been made by Mr Jackson, in his Report of Cholera in Paris, in 1832. By him, pneumonia was found to exist in one-half of the cases that proved fatal after the reaction, and in all these, it was latent. This is unquestionably, as Mr Jackson remarks, the most important fact, with reference to practice, that dissection has as yet disclosed, and shows us the necessity of investigating by auscultation the condition of the lungs in all cases in which reaction has been established."—Pp. 165, 166.

The authors have examined carefully, all the circumstances which may be regarded as throwing any light on the origin of the complaint; but on this they can come to no satisfactory conclusion. The disease was insulated in the Dreadnought, and did not show itself in any of the neighbouring vessels, though the Iphigenia was moored at its stern. Its appearence, could, therefore, not be attributed solely to atmospheric influence. Neither had they any reason to imagine, that it was in consequence of infection from foreign parts; or that it was capable of exercising any contagious influence from one person to another, since none of the nurses, (all of whom lived entirely on board), or of the medical men, took the disease. The unknown influence on which it depended, seemed to act in a greater degree on the lower decks than the upper; but the hold was clean, and in no way differing from its usual state; while the ship was not more crowded than ordinary, and the scale of diet was nutritious and liberal. The shortness of the period which occurred between the appearance of the disease, in the different individuals affected by it, is considered by the authors as unfavourable to the idea of its admitting a long period of incubation. Previously to the occurrence of the cholera, typhous fever, they state, had been very prevalent; and, latterly, various acute affections of the intestines comprehending enteritis, simple fever with diarrhœa, and common diarrhœa.

Results of poisoning with Sulphuric Acid; by John Wilson, M. D., Physician to the Middlesex Hospital.—In the early part of 1834, a female swallowed some sulphuric acid, which is mentioned as being in the very indeterminate quantity of a *part of two penny worth.* After surviving the injury six months, during which time she ejected by a violent fit of coughing "a cylindrical tube about eight or nine inches in length," she left the hospital about the middle of July much recovered, but very susceptible of atmospheric influence. She had occasional expectoration to the amount of a quart of frothy mucus in twenty-four hours; much difficulty of swallowing; and occasional pain, extending from the pit of the stomach to the shoulders. In September she was readmitted, and soon began to improve; but on the 14th of November, she had a shivering fit, preceded by vomiting, and followed by continued but ineffective retchings. Dyspnœa, pain, and distress in the region of the stomach and right side; and universal and exquisite general suffering, succeeded, with swelling of the joints, and delirium. She died tranquilly on the 17th, having survived the swallowing of the acid forty-five weeks and three days.

On examination, the lower two-thirds of the œsophagus were found thickened and narrowed, with the interior vascular, irregular, and softened; "the upper third shining like an old cicatrix." In the stomach opposite to the spleen was an opening of the size of a half crown piece, with softened edges; the mucous membrane of the stomach being much softened, and the abdomen containing a quantity of dark-coloured fluid, which had escaped from the stomach; but exhibiting no appearances of peritonæal inflammation.

We have no description of the character, or opinion of the probable source of the cylindrical tube which had been coughed up. It was most likely from the trachea, as that organ was much affected; but the dissection was certainly deficient, in the circumstance of the trachea and lungs not having been examined. It is very remarkable, that peritonæal inflammation should not have come on after the effusion into the abdomen had taken place, supposing that it had occurred, according to the opinion of the authors, (which we very much doubt,) on the morning of the 14th, when the vomiting and rigors first appeared. We can hardly admit the correctness of Dr Wilson's opinion, that the state of debility which existed at the time when this incident was supposed to have occurred could account for the absence of peritonæal inflammation, on an effusion taking place into the cavity of the abdomen; besides that the patient was represented as having previously improved in looks, and increased in flesh. It would certainly have been desirable, therefore, to have ascertained with precision the state of the thoracic viscera and cavity.

Another case is given by Dr Wilson, in which a female, at about twelve at night, took two or three ounces of strong sulphuric acid, which remained in the stomach for a quarter of an hour. She was admitted into the Middlesex Hospital about ten hours afterwards, when she could only speak in a whisper; had great tenderness from the pharynx down to the epigastrium; extreme debility; frequent vomiting of a fluid of the consistence of treacle, and colour of carbonate of lime; cold extremities, and a pulse hardly to be felt. She had no convulsions; was without any evacuations; and died at twelve the same night.

On examination, fourteen hours after death, the lining membrane of the mouth, pharynx, and œsophagus was found to have a silvery gray, speckled appearance, like a snake's skin, pure particles of carbonized matter adhering to the deeper parts of the rugæ. The mucous coat of the stomach was nowhere visible, from its being covered with a black, pitch-like substance, which, when scraped off, showed the mucous coat "of a pink colour, much swollen, but entire." The commencement of the duodenum had a similar appearance, which gradually diminished, and nearly disappeared at the beginning of the jejunum.

The peritonæal coat of the small intestines, and particularly of the stomach, are stated to have been much inflamed; but it is not mentioned by what appearances such inflammation was characterized; although soon after its occurrence it hardly ever fails to be distinguished by effusion of coagulable lymph, and consequent adhesions more or less advanced.

On the use of Arsenic in some affections of the Uterus; by Henry Hunt, Esq. of Dartmouth.—The first of these cases was that of a female of 40, who was much benefited by doses of from four to ten drops, three times a day, of the mineral solution, in a cancer of the uterus, which was in a state of ulceration, and was accompanied with much fœtid discharge, and great suffering.

Recollecting the inflammation of the pudenda, which occasionally attended the employment of this agent, the author thought it not unlikely that arsenic might have some favourable operation in other diseases of those parts, and he has accordingly employed it with advantage in cases of profuse and frequently occurring menstruation; in pain or tenderness of the uterus; and in neuralgia coming on regularly at the menstrual period, and supposed to be occasioned, therefore, by some irritation in the uterus. The arsenic is given in the form of pill, in doses of about one-twentieth of a grain, three times a day; and the author found, that in cases of great susceptibility to its action, the exhibition of the pill immediately after meals has been favourable.

The last of the papers which bear more directly on the subject of practical medicine, is a *Case of Hydatid of the Liver, successfully tapped;* by William Travers Cox, M. D., of Yarmouth.—The subject of this case had, in the year 1832, twenty-one pints of fluid drawn from the abdomen, one ounce of which, when evaporated, "left half an ounce of coagulated fibrine and colouring matter, which latter was, for the most part, soluble in rectified spirit." The liver was found to be much enlarged; but under the use principally of iodine with nitrate of potash, and occasional small doses of elaterium, the patient got well, and resumed his employment of a coal-heaver.

About four years afterwards, he again came under Dr Cox's care, after having for two months had pain of the right side, with cough, dark expectoration, and fever. He was then expectorating "large dark coagula, occasionally offensive puriform matter, and large quantities of dark fluid blood." From the use of the stethoscope, the author inferred that there was "broken up structure towards the posterior part of the base of the right lung, the result of inflammation."

He went on for some months with appearances of improvement; but at length a severe return of hæmoptysis, to which he had been long occasionally subject, brought the disease to a fatal termination, in about three-fourths of a year from the commencement of the symptoms.

On examination, the upper lobes of both lungs, but especially the left, were found with small tubercles in different degrees of maturity; the base of the right lung was adherent to the diaphragm, and towards the posterior edge quite ligamentous. "On dividing this part of the lung, a small cavity was seen lined with firm, almost cartilaginous membrane, and containing clots of dark grumous blood puriform matter, and pieces of coagulated fibrine. This cavity, of almost the diameter of two fingers, was continuous with a dilated bronchial tube, whose lining membrane was thickened, and here and there ulcerated, One or two vessels opened into the cavity." —P. 335.

In the abdomen, a large cyst presented itself, which was found to be attached, "by a small portion of its surface, to the right of the gall-bladder, and the front of the transverse fissure." The cyst was about four times the size of the gall-bladder, was fully distended, elastic, and semitransparent when held to the light. On opening it, a transparent gelatinous mass was taken out, which presented exactly the shape and smooth surface of the cyst, and consisted of concentric layers, about two lines in thickness, which were very firm, transparent, and with little colour outwardly; but towards the centre were more opaque and softer; and within all had a quantity of concrete bile. Between the layers were small

pieces of a red substance, resembling what is used for injecting arteries; but though this was subjected by Dr Bostock to careful analysis, that able chemist could not satisfy himself as to its precise nature.

We next come to the surgical papers, the first of which is,

On Necrosis, being an Experimental Inquiry into the agency ascribed to the absorbents in the removal of the Sequestrum. With some observations concerning the adhesion of living to dead bone. By George Gulliver, Esq., Assistant Surgeon, Royal Horse Guards.—The author was induced to undertake the present inquiry, by the differences of opinion entertained by some of the most distinguished surgical writers, as to the process by which a sequestrum is removed. He made a great number of experiments as to the power possessed by ulcerating surfaces of dissolving bone; but he was never able to satisfy himself of the fact; and he is therefore of opinion, that, whatever may be the agency of the process of absorption, in the removal of living parts, it can no longer be regarded as the means by which the sequestrum disappears in cases of necrosis. The author reserves the consideration of the other means by which dead bone may be thrown off for a future occasion.

The second case connected with surgery is entitled *Description of a new instrument for closing vesico-vaginal, and recto-vaginal fistulæ and fissures in the soft palate.* By William Beaumont, Surgeon to the Islington Dispensary.—The description of this useful little instrument is illustrated by an engraving, without which it cannot be well understood.

Remarks on malignant diseases of the skin of the face. By Cæsar Hawkins, Surgeon to St George's Hospital.—The author limits the application of the term malignant to such diseases "as essentially possess a new structure," capable of exerting a poisonous influence either, 1*st*, upon the neighbouring textures, which are converted into a substance, either exactly similar, or at least analogous, to that of the new formation; 2*dly*, upon the *absorbent system*, so that the nearest glands become enlarged into a tumour like that originally deposited; or 3*dly*, upon the *whole constitution*, so that the poisonous secretions of the newly formed part gain access to the circulating fluids, and tubercles of various forms, but of the same or analogous character, become developed in some distant organs or textures, which have no direct communication, except through the blood, with the parts in which the new structure was formed."—Pp. 69, 70.

With this restriction, he excludes from participation in the af-

fections which he now describes, irritable and intractable ulcers of the face; the various forms of scrofulous phagedenic ulcers; the several varieties of tubercular sebaceous diseases; and the hypertrophy of the skin of the nose described by Mr Hay, Civadier, and other writers. These various affections are considered by the authors as developements of natural textures only, by means principally of the deposits of inflammation, and as being incapable of affecting other parts of the body.

Fungous malignant diseases, whether in their hæmatoid, medullary, or melanoid varieties, present no distinctive characters, when affecting the face; but scirrhous or cancerous complaints assume many peculiarities of form, and differ, in many respects, from what is usually called cancer, in other parts of the body. The author makes some observations on the common cancer of the face, and on the cancerous ulcer, or phagedenic ulcer of the face of old persons; and then goes on to the more particular object of his paper, the consideration of what he terms the *cancerous tumour*, or *fungous cancer of the face of old persons.*

The early stage of the disease, consists of a small, round, or oval tumour, generally in the cheek, molar bone, or *ala nasi*; white in its internal texture, and lardaceous in its substance; remaining long stationary, and very seldom having pain. It often reaches the size of a walnut, without exciting alarm. It then ulcerates spontaneously, or on some slight injury; throws out healthy granulations, and pus, without bleeding or sloughing; and increases in size at its basis, but without attachment to subjacent parts. The ulceration now becomes deeper, and the bones, and subjacent parts become rapidly assimilated to the new structure, which is, in some parts, gristly, like scirrhus, but in others, softer and more pulpy. "The ulceration differs from that of *fungus hæmatodes*, as much as it does from that of common cancer, in having none of that rapid sloughing and bleeding, characteristic of tumours of that description."

"In malignancy it is intermediate between the cancerous ulcer and the common cancer;—more rapidly and extensively contaminating the surrounding parts than the former, but not having the neighbouring scirrhous tubercles, and scirrhous bands of cellular texture, met with in the latter disease, and admitting, therefore, of removal by the knife, if sufficient care be taken to excise the whole, with more chance of the cicatrix remaining sound, than in ordinary cancer,—in fact, with almost a certainty of success, where it has not attained a great magnitude."—P. 88.

In the most malignant form of cancerous disease of the face, the simultaneous developement of the poison, in other organs or textures, is comparatively rare, and excision, therefore, when there is no glandular enlargement at the time of the removal, affords every promise of a successful result.

Removal of the clavicle, with a tumour situated on that bone; by Benjamin Travers, *F. R. S.*, Surgeon Extraordinary to the Queen, and Senior Surgeon to St Thomas's Hospital.—The subject of this creditable and successful operation was a young gentleman of 10 years of age, who, after a fall out of a wheelbarrow, complained of having hurt his shoulder. Ten days afterwards, a swelling of the size of a hazel-nut, firm, but not painful, was discovered on the centre of the left collar bone. After a lapse of about two months, when Mr Travers first saw him, the tumour had attained the size of a pigeon's egg; was firm and elastic, but was not painful, except on being pressed. The increase was slow, but regular; and in about twelve months, its base occupied full three-fourths of the bone, and about two-thirds of the circumference was supra-clavicular. The skin had acquired a purple hue; pressure became more painful; and a grooved needle introduced into the upper part of the tumour sometime previously, discovered a small cavity, an inch or more in depth from the surface, from which a few drops of black grumous blood were discharged.

On consultation it was determined to remove the clavicle, and tumour connected with it, which was done on the 6th of June 1837, about twelve months from the commencement of the disease. The operation was performed with skill, and was tedious; few vessels were tied, and the loss of blood did not exceed twelve ounces. The following is the description of it.

"The little patient being recumbent, with his shoulders raised and head slightly averted, a crucial incision was made through the integument and platysma myoides, one limb of which was nearly in the line of the clavicle, and the other at right angles; and the flaps and fascial coverings successively dissected down to the external basis of the tumour. The pectoralis and deltoid muscles were then carefully detached from their clavicular origin, avoiding the cephalic vein, and the fibres of the trapezius and cleido-mastoid muscles divided on a director. One considerable vessel, in the situation of the transversalis humeri, required a prompt ligature. The circumference of the tumour was now well defined, though it was found to be firmly imbedded, and adherent on its posterior aspect, Disarticulation of the scapular extremity of the bone was next effected without difficulty, and the mobility thus communicated to the mass facilitated the completion of the operation. A director was now worked beneath the bone, as near to the sternal articulation as was practicable, and with a pair of strong bone nippers thus introduced, it was completely and clearly divided. The subclavius muscle and a part of the rhomboid ligament were now detached from the tumour, and the mass being well raised by an assistant, while the edges of the wound were kept wide apart by metallic retractors, the cervical prolongations of the tumour were separated from their remain-

ing connections by a few touches of the scalpel, without injury to the subclavian vessels."—Pp. 137, 138.

The symptomatic fever was smart; but the convalescence proceeded without interruption, so that at the end of a month, the patient was able to be removed from London. He has since remained in perfect health; and has the same extent and variety of movement as in the other arm.

The section of the tumour, in its longest diameter, presented, for the most part, an arrangement of cells or chambers, "of pretty equal dimensions, filled with dark, solid coagula of blood, the edge of the scalpel grating, as it passed, upon particles of osseous matter. One larger compartment, deeply situated, was without a clot, having been filled with the dark fluid before mentioned. The investing membrane was evidently the condensed periosteum; the cells were the irregularly expanded cancelli; and the calcareous particles were the debris of the bony plates and walls."

With regard to the origin of the disease, the author has no doubt of its having had its rise in the cellular structure of the bone; but he does not feel himself justified in classing it with the osteo-aneurism, to which its structure affords the nearest analogy. He regards it "as a casualty attended by circumstances in which nature was unable effectually to relieve herself." Effused blood within the periosteum, acted, the author imagines, as a foreign body, and was not absorbed; while the continuous periosteum "did not secrete bone, but organizable lymph agglutinating it with surrounding membranes."

Four cases of removal of the clavicles, and four operations for osteo-sarcoma of the bone, are mentioned.

A Case of universal purulent deposition into the joints, with separation of the epiphyses, occurring as a sequel to small-pox. By Henry Ancell, Esq. Surgeon to the Western General Dispensary. The occurrence was in an infant of eleven months, and took place soon after the disappearance of the variolous eruption, which was numerous but distinct. Strabismus and other symptoms of cerebral affection, exhibited themselves towards the close of life.

Case of excision of the entire Lower-Jaw; with observations. By John G. Perry, Surgeon to the Foundling Hospital, and one of the Secretaries of the Society.—The subject of this case, when about 14 years of age, became affected with severe pain of the right side of the face, affecting all the teeth of that side, which was attributed to rheumatism, and soon extended to the other side also. At first, there was neither swelling nor redness; but in a few months, the lower part of the face increased in size, but the pain and inability to masticate diminished as the swelling advanced.

Several years afterwards, a considerable increase, both of swelling and pain took place; the parts becoming red, and acutely sensible, and having much throbbing. Matter was at length formed, and discharged itself by many apertures, to the partial relief of the patient's sufferings. She was then in her 20th year, and the case presented to the author the appearance of necrosis in the advanced stage; but on patiently waiting for the curative process of separation, it was found by examination, that the newly formed case of bone was dead, and had separated, in great measure, from the periosteum, which was in a diseased state. Under these circumstances, the author determined on removing the diseased bone, in three different portions. The first portion was that which reached a little in front of the masseter muscle on the right side, to the corresponding point on the left. This he took away by means of a saw and cutting forceps, after exposing the bone by a longitudinal incision along the basis of the jaw, in the direction mentioned. The following day, the second or remaining portion of the right side was removed without difficulty. It had somewhat descended, from the top of the support of the central part; and after an interval of three weeks, the third or corresponding portion on the left side was taken away. Little hemorrhage followed these operations; and great care was taken in each of them to avoid opening the mouth by cutting through the lining membrane; while the teeth, when practicable, were left in the gum. The wound healed without difficulty, and the patient was discharged, to follow her ordinary employment of a household servant, in a few weeks.

She is able to masticate solid food, by rubbing the morsel against the upper teeth with her tongue; for there has been no reproduction of bone in the lower jaw, to give firmness to such teeth as are left, while the new production which has taken place has not been able to resist the contraction which has risen from the healing of the wound; so that the circumference of the arch formed by the lower teeth does not correspond with that of the upper. The face is less deformed than might have been expected from so extensive a removal of a part of its solid structure.

Two other cases of necrosis in the jaw are mentioned, in one of which the coronoid process, and in the other, the alveoli of five teeth, with a part of the basis of the bone, readily separated, and were taken away through the mouth. In both instances, the cure was complete.

History of a Case of Popliteal Aneurism; with observations. By Samuel Hadwen, House Surgeon to the Lincoln Hospital.—A young man of 23, subject, by his business of a porter, to heavy exertions, was attacked with pain in his right leg, and round the knee, followed by swelling. Three months after this occurrence,

when he first came under professional treatment, the right calf was found to be much larger than the other; and in the ham was discovered a distinct aneurismal tumour as large as an orange.

On July 18th 1837, Mr Hewson, whose patient he was, placed a ligature "on the superficial femoral artery, at the marginof th e Sartorius muscle," which was followed by severe pain, for a few seconds, down the leg, and a slight irregularity of pulse. By the 27th, the pulsation was not perceptible in the femoral artery below the ligature, but was felt distinctly in the tumour at the ham, which was heard and resisting, but without exhibiting bruit on the application of the stethoscope. The incision had healed by the first intention, except the part through which the ligature projected. The limb was much swollen, and there were severe occasional paroxysms of pain. On the 29th, some pulsation was discovered in the middle of the thigh, and an arterial bruit extending upwards to the groin. On the 30th, there came on hemorrhage of florid blood from the nearly healed wound, to the amount of eight ounces. This occurred twice on the 31st, when it was determined to tie the femoral artery immediately below Poupart's ligament. This was done, and for two days the circumstances seemed to be improved by the operation; but on the 2d of August, considerable hemorrhage again occurred from the seat of the first ligature; and as the vessel could not be met with, for the purpose of securing it, amputation of the limb was determined upon, and immediately performed. The patient went on well till the 21st of the same month, when the wound at the groin was observed to bleed, and the bleeding recurred twice in the same day. On the 22d it took place to a large extent, and the patient then submitted to have the external iliac artery tied, which he had refused to do the day before. The operation was performed in the mode adopted by Sir Astley Cooper; and matters went on favourably till the 28th, when hemorrhage again occurred at the groin. Pressure restrained it, and a truss, in consequence, was so adjusted, as to make firm pressure on compresses of lint applied to the bleeding part. The truss was removed in two days, and very soon afterwards, the stump was nearly healed; the ligature coming away on the 29th day after its application. Convalescence went on steadily and permanently; the wound healed rapidly and securely cicatrized, and on the 101st day from the femoral artery being tied, he was fast recovering his flesh and strength.

Some observations follow, in which the author contrasts the operation of tying the common femoral artery, with that of tying the external iliac, very much to the advantage of the latter. When Mr Hodgson published his work on aneurism, he knew of 22 cases where the external iliac had been tied, without the occurrence of secondary hemorrhage in any of them; and since that

time, the same operation has been very often performed with an equally favourable result.

On a successful plan of arresting the destruction of the transparent Cornea from acute purulent inflammation of the conjunctiva. By Frederick Tyrrell, Surgeon to St Thomas's Hospital, and to the London Ophthalmic Hospital.—In this communication, the author premises some observations, on the organization of the cornea, in which he considers it as distinctly established, that the vascular organization of the cornea is principally derived from the conjunctival, and little, if at all, from the sclerotic vessels. The anterior surface of the cornea is covered with a mucous, but its concave surface, with a serous coat, the vessels of which are principally derived from the iris. The nerves of the conjunctiva have their origin from the fifth cerebral nerves.

In the progress of acute purulent inflammation of the conjunctiva, " the elevation of the selerotic part of the ocular conjunctiva, by subjacent deposit of serum or fibrin, or both, renders it tense, and creates so much stress and tension on that part which is firmly bound down, over the junction of the cornea and sclerotic, that the circulation through its vessels becomes impeded and ultimately arrested, so that the principal vascular supply of the cornea is cut off, and it dies or mortifies, in part, or *in toto.*" The progress to such state of things is exceedingly rapid; the author having known it to take place in eight hours, but he believes it may be in less.

From a consideration of the good effects of incisions in severe phlegmonous inflammation of the cellular tissue, Mr Tyrrell was induced to think, that a similar practice might be advantageously followed in the case of chemosis; and though he was aware that incisions had been practised in this disease, and without much success, he was induced to imagine, that the unfavourable result took place, from the incisions or excisions having been made in a direction corresponding with the margin of the cornea, and frequently extending completely over it, by which means, the vessels supplying the cornea must have been divided, and the supply of blood therefore cut off. He was hence induced to modify this plan, by making his incisions, after raising and securing the upper eyelid, as in the operation for extraction, " close to the margin of the cornea, where the tension and pressure could be greatest," and in such a way " that the direction of the wounds should correspond to the intervals between the insertions of the recti muscles; so that the principal vessels of the conjunctiva should not be injured."

The author gives several cases of the advantage derived from this plan of treatment, which he represents as having been successful beyond his expectation; and he states, that it is attended

with this additional recommendation, that it prevents the necessity of the severe general depletion, which often seriously reduced the powers of the system.

It is proper to mention, that the practice has been already employed and recommended as highly beneficial by Mr Mackenzie of Glasgow.

The first of the Chemical papers is entitled, *Observations on the constitution of the urine;* by John Bostock, M. D. F. R. S.

The difficulties which have occurred to prevent that extent of knowledge relative to the pathological conditions of the urine, which might have been anticipated, have depended, the author thinks, on the peculiar nature of the urine, and its being the medium through which "all the extraneous substances are discharged from the system, which have been from any cause, formed internally, or have been introduced *ab extra;* and secondly, from the great variety of causes, both external and internal, which affect the state of the urine through the intervention of the vital actions of the system."

For the purpose of prosecuting inquiries satisfactorily in relation to the urine, the author proposes that the attention should be directed to a few well-defined objects; and the experiments made precisely in the same mode, so as to admit of ready and direct comparison with each other, and with those made on persons in the state of health. Dr Bostock has therefore given an example, in a tabular form, of the mode in which such experiments should be conducted; and we trust that his valuable suggestions will receive the attention and co-operation which they merit.

The following are the circumstances which Dr Bostock has selected for experiments, namely, "external characters, including colour, odour, clearness, specific gravity, &c.; degree of acidity referred to a fixed standard; presence and amount of albumen; amount of residuum after evaporation; proportion of residuum soluble in alcohol; amount of saline contents; amount of calcareous salts; and spontaneous changes."

The healthy urine, taking a standard of comparison, combined the following particulars. During the night ten ounces passed; it was bright, clear, citron, and urinous, having a specific gravity of 1.014; six degrees of acidity; affording 5.05 per cent. of solid contents, of which 2.6 were soluble in alcohol; not affected by heat; rendered opaque by corrosive sublimate, and when heated afforded dense flakes, amounting to 2.1 grains per ounce; three grains of precipitate by oxalate of ammonia; exhibiting the following spontaneous changes. In two days it exhibited a light cloud; and in six days became less acid, and, at the same time, somewhat opaque and turbid.

On the proportions of Animal and Earthy Matter, in the different Bones of the Human Body; by G. O. Rees, M. D., F. G. S.—The attention of the author was directed to this subject in consequence of the discrepancy which exists, in the accounts of various analysts, between the proportions of earthy and animal matter in bones. He is of opinion, that these differences may arise from every bone having a proportion of earthy and animal matter peculiar to itself; from the bones examined being differently prepared, and containing more or less of fat, which is a mere infiltration into its structure; and thirdly, from the loss of different quantities of carbonic acid during decarbonization, owing to its conversion into carbonic oxide gas, which escapes at a low heat from carbonate of lime when carbonaceous matter is present.

The experiments brought forward were conducted on bones from the same adult individual, similarly prepared; freed from fat, periosteum, and cartilage, and decarbonized: but in order to supply the loss of carbonic acid gas, which decarbonization produced, the result was moistened with a solution of sesquicarbonate of ammonia, and the heat subsequently applied to low redness.

The results of the foregoing analysis are as follows:

"1*st.* The long bones of the extremities contain more earthy matter than those of the trunk.

"2*d.* The bones of the upper extremity contain somewhat more earthy matter than the corresponding bones of the lower extremity; thus the humerus more than the femur, and the radius and ulna more than the tibia and fibula: this difference is, however, small, being about one-half per cent.

"3*d.* The humerus contains more earthy matter than the radius and ulna; and the femur more than the tibia and fibula.

"4*th.* The tibia and fibula contain, as nearly as possible, the same proportions of animal and earthy matter, and the radius and ulna may also be considered alike in constitution.

"5*th.* The vertebra, rib, and clavicle are nearly identical as regards the proportion of earthy matter; the ilium containing somewhat more of earths, the scapula and sternum somewhat less; the sternum containing more earthy matter than the scapula.

"6*th.* The bones of the head contain considerably more earthy matter than the bones of the trunk, as observed by Dr J. Davy; but the humerus and other long bones are very nearly as rich in earths.

"7*th.* The metatarsal bones may probably be ranked with those of the trunk in proportional constitution."—Pp. 409, 410.

Cancellated structure the author found (at least in the ribs) to contain less earthy matter than the more solid parts of the bone.

Several of the conclusions relative to fœtal bones correspond with those now stated; but the bones in the upper extremity contain rather more bony matter than those of the lower; the hume-

rus contains more earthy matter than the radius and ulna; and the femur than the tibia or fibula; while the ileum possesses somewhat more, and the scapula somewhat less earthy matter than the clavicle or ribs.

Comparing the relative proportions of earthy matter in fœtal bones with those of adults, there is not much difference; except that in the former there is not that excess of earthy matter in the long bones and in the bones of the head, which is observed in those of the latter.

The only paper of a physiological character is, *the History of a female who has four mammæ and nipples.* By Robert Lee, M. D., F. R. S., Physician to the British Lying-in-Hospital, and Lecturer on Midwifery at St George's Hospital.—This singular malformation had been concealed by the subject of it till her first confinement; and she was very reluctant to expose it to the author, ten years afterwards, when the state of her health consequent to a premature delivery rendered this necessary. "After long entreaty," says the author, "I obtained leave to inspect the breasts, and was surprised to find that there were two on each side, as had been represented; the two of the same side being separated by a deep oblique depression. The inferior or pectoral mammæ, as they were afterwards termed by Sir Astley Cooper, were fully developed in the natural situation, and their nipples, areolæ and glands presented nothing unusual in their appearance. Near the anterior margin of the axilla, a little higher up on each side, was situated another mamma, about one-sixth the size of the others. The nipples of these were small and flat, but when gently pressed, a milky fluid, which had all the external characters of the milk secreted by the other breasts, flowed copiously and readily from several ducts which opened on their extremities. When milk was drawn from the lower breasts, a small quantity usually escaped from the nipples of the superior breasts, and when the draught came into the former, the latter invariably became hard and distended." —Pp. 266, 267.

The lady had borne several living children previously, but, from the flatness of the nipples, was unable to suckle them. The mammæ were considered by Sir Astley Cooper (who viewed the case as without a parallel in this country) as completely separate from each other. When she afterwards became pregnant, and was delivered of a living child, she was able to suckle it with the pectoral breasts.

Five similar cases are quoted by the author from foreign journals; and he states that in some women only one breast has been developed; others have had two nipples on one mamma, and a few have had three breasts, two in the natural situation, and a

third situated between the other two. Only one case, he adds, has been recorded of the occurrence of five mammæ in the human subject.

On subjects in Morbid Anatomy and Pathology there are five papers.

Facts and inferences relative to the condition of the vital organs and viscera in general, as to their nutrition in certain chronic diseases. By John Clendinning, M. D., Physician to the St Marylebone Infirmary, and one of the Secretaries of the Society.—In considering the bearings of the faculty of nutrition, which the author regards as the leading function of the animal body, he is disposed to refer the most serious diseases to such as involve some lesion in that function, while the remainder, (supposing that there were two groups in the whole,) would consist but of few leading acute maladies, and almost no dangerous chronic ones.

The author's object, in the present paper, is to offer some contributions to the history of diseases of the heart and lungs, many of the most important of which are greatly dependent either on excess or defect of nutrient action. Over-nutrition, or hypertrophy of the heart, he regards as one of the most common of fatal diseases; and inflammation and tuberculation of the lungs, as being the result, the former of active or excited, the latter of vitiated nutrition. Diseases of the heart are viewed by the author as more frequent in their occurrence, and more fatal in their issue, than pulmonary consumption itself; and as the "main cause of the great bulk, if not the whole of the sufferings and mortality ascribed by authors to numerous chronic diseases," comprising a great variety of affections of the chest and liver. He is also disposed to attribute to a similar origin, "no small part of the gravity and fatality of acute diseases of all the great viscera in adult subjects, but more especially of those of the lungs, as well as of typhous and other continued fevers." Dr Clendinning hardly expects such an extent of deduction to be readily admitted; but he hopes before long to be provided with sufficient data in proof of his positions. The facts brought forward in the present paper, principally consist of measurements by weight, of nearly all the principal viscera in most cases, and of the persons in many, of 249 subjects, of whose diseases and dissections, the author is in possession of satisfactory memoranda. He arranges the whole in tables, which he accompanies with appropriate explanations, and many general and interesting remarks.

The bearings of his deductions in respect to pulmonary consumption are first considered. In this disease, though there is a general wasting of the body; yet it is not general, but partial. It falls upon "the organs of locomotion, and external parts princi-

pally, if not exclusively;" and the viscera, which, from their importance, might be supposed to be among the parts most seriously affected, by no means suffer in an equal proportion. Even the lungs themselves are considered by the author as receiving and converting into their own substance, rather more than less the regular proportion of blood; and he is of opinion, that they do not suffer from "want of nutriment supplied, nor from any sluggishness in the business of assimilation, but from the preponderance of disintegrating processes peculiar to their structure." In most of the organs, the average weight was found to be as high, or even higher, in phthisical patients than healthy ones; and yet in two of his tables, where females only were concerned, though the average weight of the body was 82 lb. in those who did not die of consumption, it was only 66 lb. in the phthisical.

In the bodies of persons who have died of diseases of the heart, the same circumstances apply still more strongly; for here the average weight of the brain was found in males, as appears by the table, to be one twenty-fifth heavier than the standard; of the heart two-fifths heavier; the liver one-ninth; the kidneys one-fourth; while the spleen, pancreas, and stomach, were each of them also rather heavier, though in a small degree only, than the average of the same organs in persons who died of other diseases than phthisis, and those of the heart. Similar inferences are deducible from the tables of females.

As life advances, all the organs of the body lose substance, with the single exception of the heart, which, after the age of sixty, instead of diminishing with the person and the viscera, increases, so as to exceed the average by about a twelfth part. In this conclusion the author states his having been supported by the researches of Dr Bigot of Geneva.

On Aneurisms of the Heart, with Cases; by John Thurnam.—Partial dilatation, or aneurism of the heart, though long known, has been more particularly attended to since the publication, by M. Breschet, of ten cases of the disease, in 1827. Similar diversities of opinion have been entertained in relation to aneurism of the heart, which have taken place on the subject of those of arteries; but the author is of opinion, that while in some instances the disease may have the character of a *false* aneurism, produced by rupture or ulceration of one or more of its coats, in others it has the nature of a *true* one, and arises from dilatation alone. The seat of aneurisms of the heart is known by much the most frequently in its left ventricle, the right being, as far as is at present known, altogether exempt from it. But aneurisms may likewise occur in the left auricle; and as the valves themselves have been occasionally found to be the seat of dilatations, the author regards those in such cases as likewise affording examples of aneurism.

He gives the details of several interesting histories of these varieties of aneurism; and refers, in an appendix, to many of the principal examples of the disease.

From the materials thus collected, derived from 84 cases in the whole, and a diligent inspection of every preparation to which he could obtain access, the author has been able to communicate an interesting account of the history of the disease. The absence of aneurisms in the right ventricle of the heart has been attributed, by Breschet and Cruveilhier, to its apex being much stronger than that of the left ventricle, in respect to the thickness of its lateral parietes, and, therefore, better able to support an equal degree of distending force. But Mr Thurnam attributes this exemption, partly to differences in the functions of the tricuspid and mitral valves, the former admitting regurgitation, and therefore operating, as has been said, as a sort of safety-valve in the circulation, and partly to the right ventricle, as the circulator of black blood, being the centre of the nervous system, as the left is of the arterial, and possessing, therefore, much more of a venous than an arterial character. Of the 84 cases, which form the materials of the author's deductions, 58 were in the left ventricle; and these afford 35 examples of tumour exhibiting itself in the exterior of the organ. Aneurismal sacs vary much in magnitude, from the size of nuts to that of the whole heart itself; and they usually, when of some standing and magnitude, open into the ventricle by a narrow mouth. In 15 of the cases, the sacs were formed by muscular fibres and pericardium; in four, by endocardium and pericardium only; in 25, by the whole of the structures combined; while in the remainder, the component parts were incapable of being made out. In a small number of cases the tumour of the heart, by its attrition against the opposed surface of pericardium, produced limited inflammation, and consequent adhesions; while in about six, where there was not this extra support, a fatal extravasation of blood took place into the cavity of the pericardium.

With regard to the contents of the sacs, 23 of the cases had laminated coagula, 17 simple amorphous coagula, and 19 were empty. The most frequent position of the aneurism was near the apex. In 52 of the 58 cases, one aneurism only existed; in six cases there were two in each; in one, three; and in another, four incipient aneurisms.

Respecting the pathological changes which take place in the heart, when the seat of aneurism, they are mostly to be attributed to the effects of inflammation; and hence the author is of opinion, that it may fairly be inferred, that aneurism of the heart is not dependent on changes in one of its tissues only. Dilatation, or dilatation with hypertrophy, occurred in a small number of the cases. The proportion of cases presenting themselves in females

is much greater than in arterial aneurism; and with regard to age, the most frequent occurrence of the disease is between 20 and 30, and again in advanced life. The author is disposed to consider "by far the greater proportion of cases" as having the nature of "*true* aneurism," when there has been a dilatation of the parietes of the heart, in consequence of organic changes in the tissues composing it, and which appear to have been the result "of more or less active antecedent inflammation." On one or two occasions, the author observed what he regarded as the commencement of the changes which end in true aneurism, namely, enlargement of the natural interspaces, or depressions between the smaller fleshy columns. He is of opinion, however, that the occasional occurrence of false aneurism, by partial ruptures of the heart, is not to be doubted; but there never has been a case in which this form of disease has originated "from ulceration, and the discharge of the contents of abscesses and cysts into the cavity of the ventricle."

In the great majority of cases, the disease is of very insidious origin; the duration is exceedingly various, and the mode of death much diversified. Dyspnœa, venous congestion, passive hemorrhagies, and dropsy, arising from imperfect contraction of the heart, are usual symptoms, together with a variety of distressing sensations in the præcordia. In some instances, the pain was accompanied by a peculiar and distressing sense of weight. The diagnosis is difficult, but most likely to be successfully effected, the author thinks, by means of acoustic and manual examination. A letter from C. J. B. Williams on this subject will be read with interest.

With regard to aneurism of the auricles, it bore the character of true aneurism, as the cases, nine in number, were connected with, and dependent upon, an extreme contraction of the mitral orifice, producing a difficult transmission of blood from the left auricle. In three cases, the *right* auricle was the seat of a lesion analogous in many respects to aneurism of the left auricle.

Aneurism of valves of the heart, which is the last division of the subject, usually arises from dilatation, and have, therefore, the character of true aneurism; but when they are connected with destruction of one of the laminæ of the endocardium, they may be regarded as false ones. Under any circumstances, they are unfavourable to the formation of coagula. The diagnosis, the author is of opinion, will, for practical purposes, resolve itself into that of obstructive and regurgitant valvular disease, which has been well treated by Drs Hope and Williams.

On increased thickness of the Parietes of one of the ventricles of the Heart, with diminution of its cavity; by George Budd, M. B. F. R. S. Fellow of Caius's College, Cambridge, and

Physician to the Seamen's Hospital, Dreadnought.—M. Bertin, in 1811, designated as "Concentric Hypertrophy," unnatural thickness of the parietes of one of the ventricles of the heart; but M. Cruveilhier is of opinion, that this view of the subject is an erroneous one; and that the obliteration of the cavity of the ventricle and the proportionally increased thickness of the parietes, are only the result of the mode of death. All the hearts which he had an opportunity of examining, of persons who died by the hands of the executioner, presented this double phenomenon in the highest degree; and hence he infers, that the hearts described as concentrically hypertrophied were merely hearts more or less hypertrophied, which death surprised in all their energy of contraction.

Dr Budd considered it to be important to examine with attention these contending opinions; and from the result of many careful inspections, of which he gives the details, he is led to adopt M. Cruveilhier's view of the subject, and to conclude, that there was not really a contraction of the cavity during life, for the ventricle became relaxed to its ordinary capacity, after the heart had been a few days in maceration; and relaxation likewise took place by the forcible introduction of the fingers. There was likewise "no intermittence or irregularity of the pulse, no dilatation of the right cavities or dropsy; symptoms of obstacle to the circulation through the heart, which must have occurred had the cavity during life been so small as it appeared to be."—P. 316.

He likewise infers from the same cases, "that enormous hypertrophy, unaccompanied by dilatation, or by disease of the valves, does not produce any of the symptoms characteristic of an obstacle to the circulation through the heart.

With regard to the cases described by him, in which there was extensive valvular disease, the author is of opinion, that "the diminution of the cavity cannot be explained by the hypothesis of an obstacle behind it; and, in some of these cases, the existence of an obstacle before it renders it highly probable that this diminution was merely a passing condition of the ventricle: and as the appearances of concentric hypertrophy were not more marked in these cases than in those of the former category, and as the symptoms of obstacle to the circulation, observed in these cases, were such as would result from the diseased valves alone, we cannot admit the existence of concentric hypertrophy in the category we are now considering."—P. 317.

"Concentric hypertrophy of a ventricle," he adds, "in a high degree, with obstruction at its discharging orifice, and an extraordinary passage for the blood, occasionally exists as a congenital malformation, and, in most cases, the right is the ventricle so affected;" and that "hypertrophy of the heart, to whatever extent it exists, when it is exempt from dilatation of the cavities, and from disease

of the valves, does not produce any of the symptoms of an obstacle to the circulation through the heart."—P. 317.

On black expectoration and the deposition of black matter in the lungs, particularly as occurring in coal-miners and moulders in iron works; by William Thomson, M. D. Fellow of the Royal College of Physicians and Surgeons of Edinburgh. Part 2.—The first part of this paper was published in the 20th volume of the Society's Transactions, of which an account was given in our 49th volume, p. 256. Its object is to bring to notice a "number of instances of black discoloration of the sputa, observed during life, and of black infiltration of the lungs and bronchial glands, ascertained after death, in persons who, from their occupations, were particularly exposed to the inhalation of carbonaceous powders or gases, such as coal-miners and moulders in iron-works."

In the present communication Dr Thomson recapitulates the observations and opinions entertained by authors respecting black sputa and black deposition in the pulmonary organs. Concerning the sources of such black matter opinions have varied much; some having regarded it as a secretion from the bronchial glands, or from those of the mucous membrane of the trachea, while others have viewed it as originating either from the exhalents of the pulmonary air-cells, or as being entirely of extraneous origin. The statements brought forward have been collected with judgment and industry, and will be perused with interest.

From these statements, as well as from information which he has collected, and which he gives us in his paper, it appears, that black deposition is capable of occurring in individuals whose occupations did not render them peculiarly liable to accumulation of carbonaceous matter in the respiratory organs, and in whom, at the same time, there appeared to be no melanotic diathesis. The author has likewise found, from inquiries which he had made among many individuals of large experience among colliers, that they had not observed in that class of persons appearances such as were described by him in his former paper.

In a subsequent communication the author means to follow up the subject, by bringing forward some general conclusions, deducible from the evidence which he has brought forward in this and his previous paper.

Account of a case of enormous Ventral Aneurism; with the post mortem appearances; by Sir David J. H. Dickson, M. D. F. R. S. Ed., F. L. S. &c. Physician to the Royal Naval Hospital, Plymouth.—This was the case of a person of 36, who

had many symptoms of a paraplegic character, together with an ill-defined, pulsating tumour in the left side of the abdomen. This was considered to be either a tumour in contact with the abdominal aorta, or an aneurism of that great trunk, or of the common iliac artery; and it was supposed that its pressure on the vessels and nerves, and especially on the hypogastric plexus, occasioned the various paraplegic symptoms which exhibited themselves.

The tumour increased in size, though the general health improved; but on a little exertion of ascending stairs, "he was seized with excruciating pain in the right iliac region, followed by excessive faintness, and a death-like paleness of the countenance, indicating the rupture of the aneurism, and, after suffering much pain, he expired in about three hours."—P. 402.

On examination, an effusion of blood in vast quantity, was found to have taken place under the posterior reflexion of the peritoneum. It had escaped "by an ulcerated opening of the size of a shilling, in the side of an immense tumour near to the right kidney, which it had displaced forward and laterally; and which, on further examination, proved to be an enormous aneurism of the descending aorta. The aneurismal dilatation, upon further investigation, was found to commence from the posterior part of the artery, two inches above the cœliac axis, by a kind of neck, which extended to two inches and a half above its division into the iliac trunks; where, suddenly bulging out, it expanded over the whole of the abdomen. The tumour was so immense indeed, that with the exception of the cæcal region, from which it diverged to the left, it might be said to occupy the epigastric, both hypochondriac, the umbilical, and left iliac regions, and the pelvis."—P. 403.

The tumour was filled with coagulated blood, and its lining was of a vivid red colour, mottled with osseous scales, which prevented its collapse.

Art. IV.—1. *On the Statistics of English Lunatic Asylums, and the Reform of their public Management.* By William Farr. 8vo. London, 1838. Pp. 46.

2. *Observations on the Management of Mad-Houses, illustrated by occurrences in the West Riding and Middlesex Asylums.* By Caleb Crowther, M.D. Formerly Senior Physician to the West Riding Pauper Lunatic Asylum. 12mo. London, 1838. Pp. 145.

Of the two works now before us the first evinces great industry and judgment in collecting and digesting a number of facts not very easily obtained regarding the English asylums. The other, though written rather in a censorious vein, contains a num-