sort of cake. If the discharge seem to be coming out, a fresh quantity of the cotton may be applied, and thus the parts heal entirely under this cake, and no further treatment or dressing is required. I believe that in some instances in which this plan has been tried, it has been found to answer very well. The other plan of treatment which I have alluded to is, that of covering the parts over, copiously, with fine wheaten flour.* Taking an ordinary flour-dredger, as it is called, that is, a tin receptacle, the top of which is perforated with holes, you sprinkle the parts over until they are covered with a thick stratum of the flour; in fact, proceeding with it just in the way I have mentioned to you with respect to the cotton. This has been stated to be an effectual, a very effectual mode of treating burns, but I have not myself had any experience on the subject.

Effects of Acrid and Escharotic Substances.—There are various chemical substances which are stated to have the effect of immediately decomposing the textures of the body. The effect of *pure potash* is well known to medical men, who are in the continual habit of making use of it. *Ammonia, lime, strong acids, nitrate of silver, muriate of ammonia*, all these various substances are employed as *escharotics*, as they are called, that is, they make an eschar. They decompose, they burn or destroy, the part of the living body to which they are applied, converting it into a brown or dark-looking substance. They all deprive the part to which they are applied of life, although they do this each in its own peculiar way, that is, the appearance of the part after the application of the substances, varies in each particular instance. The action of lime is peculiar in some instances. Lime, when applied to the cornea of the eye, completely destroys its transparency, and reduces the animal substances with which it comes in contact, into a fine powder; it renders the cornea as completely opaque as a portion of marble. The peculiar effects of the nitrate of silver are well known; it produces a whitish film over the part. The truth is, that nitrate of silver is decomposed when it comes in contact with any animal discharge; for all the animal fluids contain muriatic acid, and the muriatic acid decomposes the nitrate of silver, so that a muriate of silver is formed, which is the whitish kind of substance that is seen after the nitrate of silver has been applied.

* This plan of treatment was first communicated to the profession through the pages of THE LANCET, in a letter from Dr. Ward of Manchester.

EDINBURGH UNIVERSITY.

CLINICAL LECTURES IN MEDICINE

BY

DRS. ALISON and GRAHAM.

ALTERNATING PECTORAL AND CEREBRAL AFFECTIONS.

Monday, Jan. 4th, 1830.

DR. ALISON.—J. Tyndall, ætat. 42. He was admitted on the 14th November, affected with two diseases of very opposite character and mutually obscuring each other; the leading and most urgent symptoms were attributable to inflammation within the head; there was much pyrexia, intense headach, intolerance of light, inquietude, and sleeplessness, but no delirium, comatose disposition, paralytic affection, or spasmodic contractions. That pectoral disease also existed to considerable extent (though at the time equivocal and obscure), was shown by the history of the case; for some winters the patient had been liable to troublesome cough, which of late had increased to an unusually violent degree, and had been accompanied by purulent expectoration; however, on the occurrence of the head affection, the thoracic symptoms abated, and became comparatively but of trifling inconvenience. Again, when the cerebral symptoms had subsided, the thoracic disease became evident, and in the course of a short time, he sunk into a state of weakness (free, however, from coma or paralysis), which soon terminated his existence. On dissection, the usual appearances of phthisical lungs were present to a great extent; and on the inferior surface of the cerebellum behind the medulla oblongata, was found a large tubercular tumour of round shape, of about the size of a musket ball, of a pale-yellowish colour, and homogeneous firm structure. The cerebellum, in its immediate vicinity, was red and softened, and the lateral ventricles contained six drachms of fluid. Dr. Alison observed, that with respect to this case, the first thing worthy of attention was, the fact of the pectoral disease having been *apparently* arrested in its progress by the supervention of the head affection, and its again becoming more evident when the head symptoms had abated; such an occurrence, although rare, had not escaped the observation of physicians. The late Dr. Gregory had seen one such instance, and Dr. Storer had published a paper on the subject, in the Medico-Chirurgical Transactions. It was unnecessary to suppose here, that the disease in the head had concealed the pectoral affection, as decided phthisis not only often remains latent for a considerable time, but

occasionally remits in its progress. As to the head affection, the symptoms at the commencement were nearly those of acute hydrocephalus; but the case terminated fatally without coma or convulsions, and appearances were found on dissection which, though they might have been satisfactory in hydrocephalus which had run its usual course, yet here were not reconcilable with the symptoms during life, especially as far as the tumour was concerned; in fact, this appeared to be one of a numerous set of cases, which concurred in casting doubt on the pathology of the nervous system; cases in which compression or disorganisation of the brain or cerebellum had taken place to a great extent, and neither delirium, spasm, nor coma, had supervened. The only answer to these objections was, that the parts essential to sensation and voluntary motion, namely, the origin of the nerves, had not been injured,—as it appears from the experiments of Fleusen, read before the Institute of France, and confirmed by Cuvier in his report on the subject, that the whole of the hemispheres of the brain or cerebellum, may be removed in some instances, without affecting the functions of sensation or voluntary motion, if the origins of the nerves be left uninjured.

SCABIOUS ERUPTION OF THE UPPER EXTREMITIES TREATED BY PUNCTURES.

Dr. ALISON then adverted to the case of James Downie, ætat. 29, who was admitted on the 13th December; he then laboured under two distinct diseases; the trunk, neck, and superior extremities, were covered with a thin eruption, pustular in some places, and desquamating in others, but, on the whole, decidedly scabious, and, like scabies, benefited by the subsequent use of the sulphur ointment. Besides this, the left leg was occupied by a diffuse, florid, and evidently erysipelatous efflorescence, which had originated in a slight wound inflicted on the tibia by the kick of a horse. Sometime previous, he had a venereal affection, which Dr. Alison thought entirely unconnected with his present disease. On admission, the erythema was of three days' duration; and had been ushered in, and was still accompanied, by well-marked pyrexia. He was immediately bled, and had purgative medicine, and the next day the febrile symptoms had all subsided, and the eruption on the leg had ceased to spread; but the swelling and redness continued as extensive as before.

In this case no danger was to be apprehended, either from the local affection or the general disturbance of the system; supuration, perhaps, might be apprehended in the leg, and such a termination was, probably, not to be averted by further general blood-letting. It might, however, be influ-

enced by local depletion, and for this purpose Dr. Alison considered numerous punctures were most suitable in such a case as *this*. Leeches he thought scarcely applicable, and incisions were, at the same time, excessively severe, and more suitable to an advanced period of the disease, where suppuration or sloughing of the cellular membrane had occurred. Punctures were accordingly made, and about six ounces of blood were obtained from the wounds; the practice proved eminently successful, i.e., by the next day, the erysipelas had nearly disappeared, and in less than a week he made no complaint but of slight irritation in the original wound on the tibia.

SUPPOSED INFLAMMATION OF THE DIAPHRAGMATIC PLEURA.

He next alluded to a case in which, as often happens, an inflammatory affection in some of the parts beneath the right hyochondrium, and corresponding to the lower ribs of the same side, rendered the diagnosis between pleuritis and hepatitis a matter of some perplexity. There were pain and tenderness along the margin of the ribs, not affecting the intercostal space, and, apparently, connected with an injury the patient had received some time previous in the same situation. From such pain, or from the state of respiration, no discriminating mark could be established between the two diseases; but by the evidence afforded by auscultation and percussion, and the catarrhal character of the accompanying cough, Dr. Alison was inclined to consider the symptoms as most probably resulting from inflammation of the pleura, where it is in contact with the diaphragm. After the application of leeches the pain quickly subsided, and, at the last visit, the stethoscopic phenomena tended strongly to corroborate the previous opinion of Dr. Alison as to the seat of the disease. The state of the respiration at present leads him to believe, that the lung below the seventh rib is impervious to air; perhaps from compression by fluid, or plastic lymph effused over the diaphragmatic pleura; if so, the part will very probably continue solidified during life, and, perhaps, become the predisposing cause of a repetition of similar attacks.

CURE OF OTALGIA.

Since the preceding report, a patient had been admitted, and again dismissed cured of rather severe otalgia, characterised by intense pain in one ear darting across the brain, accompanied by considerable intolerance and irritation. Such a case, Dr. Alison said, should invariably be treated with extreme attention; for though it would usually terminate without ill consequences, even when left entirely to itself, yet indur-

zation beginning in this way, was known by ample experience, to spread with great rapidity to the internal organs, involving the membranes of the brain, and often inducing cases of the petrous portion of the temporal bones. In every case, therefore, in which symptoms of pyrexia occur, and the pain is felt as if darting through the head, venesection, and other antiphlogistic remedies, should immediately be put in practice; for any ill that could result from a moderate detraction of blood, although absolutely unnecessary, would be amply compensated in really serious cases by the probable advantages. The patient was accordingly bled; since then, slight suppuration from the ear has taken place, and all the symptoms have rapidly disappeared.

DYSPEPSIA.

William Bruce, ætat. 43, was admitted 1st January, affected with severe dyspeptic symptoms, very similar to those described in the cases of stomach disease, related in a previous number. Besides the usual symptoms of indigestion, this man had severe pain and tenderness of the epigastrium, and decided evidence of, at least, increased irritability of the mucous membrane of the stomach, the pain being greatly aggravated by cold drink and vomiting occurring about two hours after taking food. The character of his pulse exactly coincided with that to which Dr. Alison had repeatedly called the attention of the class in these affections; it was slow while the pain was most urgent, and *vice versa*. He had (previous to admission) taken repeated doses of purgatives, without relief. He said his disease was but of three weeks' standing; if his account be not underrated, the case is peculiar, inasmuch as pain and tenderness but rarely supervene on dyspepsia at so early a period. Dr. Alison thought there was little doubt here of the existence of a state approaching to inflammation, which might, perhaps, lead to thickening and induration of the pyloric extremity. However, he should observe, that the single symptom of tenderness, was by no means sufficient to establish the fact of inflammation here, as such a sensation very generally accompanied distension, produced by any cause. Cases like this, Dr. Alison continued, he had known to yield rapidly to general or local blood-letting. In cases more obstinate he had seen mercury employed with great apparent advantage. The quantity of blood generally necessary to be drawn, is not great. he had known relief usually to follow the loss of 12 ℥, and Dr. Wilson Phillip gave the same. This patient, however, has been treated as yet with leeches, laxatives, an antacid mixt., and calomel and opium at night, and there is every reason to expect a favorable issue of the case.

PNEUMONIA AND PLEURITIS.

Thomas Rogers, æt. 27, admitted 2nd December, with tolerably well-marked pneumonia, and very possibly pleuritis; he had acute pain of right side of chest, greatly aggravated on the attempt at full inspiration, frequent cough, and mucous pneumonic spulum; pulse full and very frequent; nausea and vomiting, with pain and tenderness of the right hypochondrium. This group of abdominal symptoms, Dr. Alison said, might lead to the belief that the liver was the affected organ, but he had frequently seen them occur in indisputable cases of simple pneumonia, many circumstances too concurred here to point out the seat of the disease; he would particularise the pneumonic spulum, the dull sound on percussion, and indistinct character of the respiratory murmur, as far as the fifth rib, and the existence of sonorous rales in different places, all of which he considered as unequivocal proof of pectoral disease.

The crepitating rale had not satisfactorily been observed, but he did not consider it by any means an infallible guide, at all events it was transient in its existence, and liable to different sources of confusion. In a practical view, however, the seat of the inflammation was of little moment, as our measures should be directed, not against the *seat*, but against the *nature* of the disease; he had been bled to 46 ℥, which, perhaps, in a young patient might be the average quantity necessary to subdue pneumonia. He had also used calomel and opium, in preference to the antimonial solution, generally employed in this disease. Calomel and opium, the students were aware, were warmly recommended by Dr. Hamilton of Lynn Regis, and he, Dr. Alison, had often noticed the efficacy of this medicine; in most cases he was inclined to attribute its virtues to a strong sudorific action, which it usually excited; in this instance he was induced by two reasons to prefer it to tartar emetic; first, on account of the vomiting and nausea already present, and secondly, lest he should have been mistaken in his diagnosis, and the liver happens to be affected, in which case the mercury might prove of specific service. Under this treatment great improvement has taken place; and the irritability of stomach having been allayed, the calomel and opium were discontinued to-day, and the tart. emet. solution in very small doses was employed in its stead.

PYREXIA.

Dr. ALISON next observed that one of the patients in the short ward (M'Master) had suffered a relapse during convalescence from an attack of fever, which had been considerably retarded by an irritable state of the bowels. On the 27th Dec. he was suddenly seized with rigours, and severe stitch

in the left side, which yielded to the application of leeches. On the 29th fresh rigors occurred, and since then the pyrexia has increased without any concomitant local pain; there are considerable general irritation and restlessness, but he is free from delirium; the pulse is very frequent (130), extremely compressible. After an opiate he slept and diaphoresis ensued, but the pyrexia continued unabated, and under all the circumstances Dr. Graham feared his recovery was very doubtful. At present there is no diarrhoea, and the tongue does not present the florid appearance usually met with in diseases of the abdominal mucous membrane; nevertheless, in a young patient like this, an inflammatory tendency in this situation may be suspected, perhaps especially connected with the mucous glands of the lower intestines, which eventually might proceed to ulceration and sloughing. Such diseases often occur, it is true, in a concealed and insidious form, and under circumstances similar to the present, but the suspicion alone is not sufficient to justify any peculiar or active practice.

Tuesday, January 5.

DISEASE OF THE HEART.

DR. GRAHAM referred to the case of Isabella Whitehead, ætat. 55, admitted 22d of December, and which had since terminated fatally. She complained of great dyspnoea, cough, and palpitations, increased by lying on the left side; even moderate pressure on the abdomen, caused the sensation of threatening suffocation; her sleep was disturbed by starting, and she awoke in great anxiety; the lower extremities were œdematous, as was also the right side, perhaps from her constantly lying on it. The account she gave of the history of her illness was so vague and imperfect, that but little satisfactory information could be derived from it; she stated, however, that it was of six weeks' duration; dyspeptic symptoms also existed to a considerable extent. In this case there was unequivocal proof of diseased heart, though he should observe that many of the symptoms were only indicative of impeded transmission of blood in that organ, or in the lungs, which might arise from various other causes, as well as structural alteration of the heart or its great vessels; thus, though palpitations were readily excited by exertion, emotion, &c., this did not point out to us the actual seat of the affection; cough existed to a considerable degree, and hæmoptysis had occurred, yet these went no further in proving the actual cause of the present symptoms; in like manner, the dyspnoea and livor of countenance were no more decisive, as the same appearances are seen in

hydrothorax, hydrops pericardii, phthisis, &c.—in fine, even the œdema gave us no precise information, as it might have been produced by obstruction in various parts of the venous system. At first he was inclined to attribute the symptoms to hydrops pericardii, partly on account of his having mistaken the statement of the patient as to the side on which she lay with difficulty, and partly from the diffused palpitations which are apt to occur in that affection; but more lately he was induced to alter that idea, as he would presently explain; and to attribute the complaints to disease of the heart or large vessels, the chief characters of which, in this case, were the violent action of the heart, and monstrously rapid pulse; 192 beats could be counted in the minute, by applying the hand to the thorax; but, at the wrist, there was no perceptible pulsation. This remarkable circumstance might be referred to regurgitation of the blood into the left ventricle, and he was, therefore, induced to anticipate that a *post-mortem* examination would show enlargement of the arch of the aorta, and disease of the semilunar valves; the subclavian arteries, especially of the left side, pulsated evidently and violently, (on the right this symptom was obscured by an old fracture of the clavicle, but the effect was observable in the axillary artery,) which tended further to corroborate the opinion. On such a supposition, the various phenomena admitted of easy explanation, the reason of the increased action of the heart itself and the subclavian arteries, of the decreased action at the wrists, and of the several general appearances, was sufficiently manifest; but, said Dr. Graham, the patient is now dead, we have examined the heart, we know that most, if not all of these suppositions and anticipations are wrong; and whence are we to derive an explanation of the symptoms during life, and to reconcile them with the appearances found on dissection? On these points some information, but not by any means altogether satisfactory, could be obtained from the narrative of the examination, to which he would call the attention of the class as soon as he had briefly alluded to the practical bearings of the case.

In the treatment, then, there were two indications to be kept in mind, namely, to diminish general irritation, and to lessen the rapidity of the circulation: with the first intention, opiates and nitrous æther were used (the latter, at the same time, as a diuretic and antispasmodic), laxatives and enemata were also employed with the effect of inducing copious evacuations of solid fecal matter; at a later period the injections were given to relieve dysuria, which had become a source of much uneasiness. This part Dr. Graham said, merited some notice, as

pecially as it was connected with a subject of much delicacy in private female practice, namely, the introduction of the catheter, an operation, he said, generally submitted to with extreme reluctance, and which, in most cases, might be rendered superfluous by the use of laxative and emollient enemata. With the second view, or for the purpose of lessening the action of the heart, ten drops of the tinct. digitalis were given four times a day; for two days no effect was produced; on the third day the pulse had become perceptible at the wrist; on the fourth it was perfectly distinct, and the inordinate action of the heart considerably abated. This sudden relief, and the return of the pulse to the wrists, he confessed it was extremely difficult to explain, as it was by no means easy to understand why the extreme arteries should present pulsation in the inverse ratio of the heart's action; the pulse being absent when its contractions were violently accelerated, and again returning as they became more equable and composed. As by this time considerable depression had taken place, he discontinued the digitalis; under other circumstances, he would have next allowed a little wine, but he was willing to wait until it could be ascertained whether any permanent good was to be obtained from a continuance of this depression; however, after the visit on Saturday, she became rapidly weaker, and sunk in the course of the night.

On dissection, the adipose tissue was found very abundant throughout the body, especially in the neighbourhood of the heart and large thoracic vessels; 4 pounds of serum were effused in the cavity of the abdomen, old adhesions existed between the diaphragm and the left lobe of the liver, and between the pulmonary and costal pleuræ; fifteen ounces of serum were found at the left side of the chest, seven at the right, and two in the pericardium; the mitral valves were irregularly thickened and shortened; the insertion of the semilunar valves of the aorta were slightly hardened and prominent, but, in every respect, competent to their natural functions; there was a seemingly slight dilatation of the aorta at its commencement, but this was certainly very equivocal; on its inner surface there were a few specks of incipient ossification; the lungs were particularly hepaticized.

From the plethoric state of the patient, and the unusual collection of fat in the vicinity of the heart, some explanation of the symptoms might be deduced, particularly of the sensation of suffocation produced by the compression of the abdomen. In order to show better the shortened state of the mitral valves, he brought the heart of another subject to compare with that under consideration, and the contrast would more

clearly show the diseased condition of the latter (the specimens were handed round for inspection). The main cause of the symptoms was to be found here—at least as far as dissection gave an explanation of the case, that portion of the mitral valves being principally affected, which mainly prevents the return of the blood into the auricle; hence regurgitation took place, and in the disturbance of the heart's action which ensued, it was easy to trace the nature and causes of many of the symptoms.

It is unnecessary to follow Dr. Graham through the application which he made of this diseased condition to the explanation of the palpitations, pulsation of subclavians, dyspnœa, &c. He concluded, by observing that, on the whole, the extent of disease was less than the violence of the symptoms would have led us to anticipate, and that the absence and renewal of pulsations at the wrists, under opposite states of the heart's action, received from the dissection no elucidation whatever.

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Thursday, 7th January.

ACUTE RHEUMATISM, WITH PERICARDITIS.

DR. ALISON said, there were three cases admitted; the first was W. Caidey, æt. 21, taken in 4th January, on the third day of a febrile and inflammatory complaint, the seat and nature of which it was not easy to ascertain. He complained of pain in various parts,—in the head, back, and extremities, aggravated by every motion; the chest was also affected, there being considerable pain in the right side, increased by motion, inspiration, and coughing; he also suffered from a violent dry cough. Previous to the night of his admission he had been twice bled, and the symptoms were not so urgent as they became next day, when the pulse rose from 92 to 120, and assumed a sharp, vibrating, and thrilling character; the heart's action, at the same time, became violent,—so much so as to be readily seen from a distance, and the pulsations at the radials were also distinctly visible. All these, together with the previous rheumatic symptoms, gave reason to apprehend the existence of pericarditis. He was immediately bled to 18 ℥, and the pulse at once lost the jarring feel; 28 leeches were then applied to the chest, as the pain in the right side continued. At this time the sound on percussion over the heart was not unusually dull, nor could it be expected at so early a period of the disease. At night the pain was increased, and he was bled again to 18 ℥, with great relief; since then there has been no more inordinate action of the heart, but there remain some pain and tenderness of the abdomen, perhaps from rheumatism of the abdominal muscles; 12

leeches have also been applied to the temples on account of the headach, which caused considerable distress. To-day he is much better in every respect; the pulse has fallen to 80, and is free from the vibratory character.

The only name he could give this set of symptoms was acute rheumatism, with a tendency to pericarditis; at the same time it must be acknowledged, that cases of this nature are seldom so soon relieved. The only other practice pursued was the use of laxatives and antimonial solution, in quarter-grain doses, at sufficient intervals.

The next case was Edward Brookes, an old man, affected with intermittent fever, not very regular either in its interval or paroxysm; sweating seldom occurred, and in fact the nature of the disease might be questioned, but for the fact of his having been exposed to its most usual predisposing cause, namely, marsh miasmata, in the fens of Lincolnshire, and his having been twice before affected in the same manner. He also laboured under a chronic bowel complaint and catarrh. He has been ordered the sulphate of quinine, and, as far as the intermittent is concerned, will probably do well.

The case next to be mentioned, Dr. Alison said, was that of James O'Keil, one in which the danger was considerable. The patient was admitted into the ordinary physician's ward, on the 2nd inst., having been brought in comatose from the police office, where the stomach pump had been employed, as, when found by the police, he evidently laboured under the bad effects of excessive drinking; his pulse was then small and weak; the countenance pallid and extremely cold; in a short time he rallied, and complained of great headach and nausea, vomiting ensued, and the epigastrium became very tender to the touch. A blister was applied to the epigastrium, and a little wine allowed. Next day he was better, but appeared to be taking fever; the day after that, he complained of acute pain under left false ribs, with distressing hard cough; the pulse was 120, sharp and incompressible; he was bled to 20 $\frac{3}{4}$, and had the tart. emetic solution, which he soon vomited; he was also cupped over the side. On the following day the pain was quite gone, and the sonorous and sybilous rales (previously heard very extensively) had diminished, and he insisted on leaving the house.

After going home he was seized with rigours, and returned to the hospital next day with all his former complaints much aggravated; his respirations were five, and wheezing; his skin hot and dry; pulse 120, small and compressible; sound over the left side dull on percussion; the stethoscope, in several places, indicated the subcrepitating rale, and in others the true crepitus was

distinct. Here then, Dr. Alison proceeded, the symptoms both general and stethoscopic were decisive of inflammation of the bronchiæ and pulmonary texture, yet there were no characters indicative of strong reaction: in particular the patient had the dry tongue, which is so rarely present in active inflammation. Under the circumstances, however, it was plain nothing but venesection could save him; 16 $\frac{3}{4}$ of blood were taken before one o'clock (7th), but as there was no abatement in the symptoms he was bled again before three p.m. The antimonial solution was given, and the first doses produced vomiting and purging; at night he became delirious, which was well known to be a very bad symptom in pneumonia. To-day the case closely resembles one of bad fever, from the delirium, dry tongue, and comatose disposition; this depression, however, it is very likely, results from the excessive quantity of spirits taken before the commencement of his illness; however, in some respects he is better to-day, the breathing is but 36, still nearly double the natural number; it is also less noisy, and the anxiety of the countenance is diminished. Dr. Alison was of opinion, that further depletion was safe and necessary, especially by local means; leeches have, therefore, been applied to the sternum, and the antimonial solution has been resumed; he could not, however, advance with confidence the slightest hope of a favourable termination.

SKETCHES

OF THE

MEDICAL PROFESSION IN PARIS.

No. I.

M. AMUSSAT.

THE extended intercourse which has taken place between the British and French capitals, since the peace of Paris, has diffused a pretty general knowledge of the speculations and labours of continental medical practitioners amongst their brethren of this island. A few biographical memoirs from the Parisian school, may not, perhaps, be uninteresting to our readers; and it is our intention, therefore, to present them with occasional sketches of the most distinguished physicians and surgeons with whose works we are familiar. Amongst the most industrious contributors to science, within the last ten years, Dr. Amussat will be found prominent; his name is distinguished by the frequency, if not the brilliancy, of his publications. The ligature of the sper-