success. A generous diet was also enjoined, with two or three glasses daily of Burgundy or Carlowitz. This lady is now in the ninth month of utero-gestation, and is daily sensible of the vigour and activity of the foetus, whilst her own health is better than it has been for years.

These cases do not require any commentary. Of course, no positive conclusion can be drawn from any one of them; but their cumulative evidence is considerable, and certainly entitled to some weight in the question before us. Besides the foregoing, I have two other patients in the eighth and the ninth months of pregnancy respectively, one of whom has had three premature dead children and the other two. Both these ladies, like the one last mentioned, have now passed the period of pregnancy at which labour occurred before, and both enjoy unequivocal evidence of the vitality of the foetus. These two, with those previously related, represent all the cases in which I have employed the same treatment for the preservation of the foetus.

Let me now, in conclusion, very briefly sum up the heads of evidence in support of the possibility and reasonableness of foetal therapeutics.

1. It is a well known fact that many diseases, *e.g.*, syphilis, measles, small-pox, scarlatina, ague, etc., contracted by the mother subsequently to conception may be communicated to the foetus *in utero*.

2. Careful investigations have demonstrated that various medicines given to a pregnant woman may reach the foetus and be found in its blood or secretions.

3. Clinical observations establish the fact that therapeutical effects on the foetus *in utero* follow the administration of certain medicines, when given to the mother for a sufficient length of time before the accession of labour.

CASE OF DEATH SUBSEQUENT TO THE ADMINISTRATION OF ETHER.

By ROBERT SAUNDBY, M.D., Edin.,

Administrator of Anæsthetics, etc., to the General Hospital, Birmingham.

As the question of ether *vs.* chloroform is still *sub judice*, and as all that affects the safety of these means of narcosis ought to be known, I venture to publish the following notes.

M. C., aged 35, was admitted under Mr. Bartleet for contracted knees. On October 4th, at 12.45 P.M., I administered ether with Ormsby's apparatus; it appeared to me a very favourable case; very little of the anæsthetic was used; there were no alarming incidents; very little stertor or cyanosis; no vomiting; no obstruction to respiration, which was throughout regular and full. After Mr. Bartleet had straightened the limbs, some time was consumed in adjusting splints, during which time no more ether was given; and, as there appeared to be absolutely nothing to call for any notice at the time, I watched her with the utmost satisfaction, and allowed her to be carried out of the theatre without arousing her from the sleep into which she had fallen. She was removed on a stretcher, and was well wrapped up, but, to reach her ward, was carried about fifty yards across the open court, the day being fine. After being placed in bed, she roused and spoke to the nurse, who noticed nothing unusual about her. At 2.45, about one hour and a half after her return to the ward, she became suddenly alarmingly ill, and when seen by the house-physician (in the absence of the house-surgeon) she was cyanotic and pulseless, with *râles* all over the thorax. All attempts to rally her were fruitless, and she died at 4.15 the same afternoon.

The *post mortem* examination, made the following day, showed some œdema of the membranes of the brain; no thrombosis of the pulmonary artery; heart healthy, containing a little blood in the right auricle; ventricles contracted; lungs pale and œdematous; other organs healthy.

Remarks.—There seems to be no doubt that the deceased completely recovered from the ether-narcosis, but died from œdema of the lungs, which supervened one hour and a half after her removal from the theatre. As a rule, I completely arouse patients before permitting them to be taken out of my sight, as usually, in the hurry of the operation-theatre, they are removed pretty quickly after the operation is completed; this case, being the last, remained so long, and her state appeared so satisfactory, that I did not think it necessary to awaken her from the sleep into which she had fallen. It would be more satisfactory to me if I could say that I had seen her fully awake. It was an unusual occurrence, and contrary to the practice of the hospital, that the patient was taken out across the court; but operation cases are very rarely placed in the detached ward, and the house-surgeon being absent at the police-court, the assistant house-surgeon did not think of

making any special order. Whether this exposure was really the determining cause or not, I cannot decide. The ether used was of the specific gravity of 720.722, and I do not believe its quality can be impugned. The quantity used was very small, about an ounce being poured into the apparatus at first, and no more was required.

COMMENTS ON SELECTED CASES IN MEDICAL PRACTICE.

Being part of an Address delivered at the Meeting of the Yorkshire Branch.

By GEORGE SHANN, M.D., President.

Disease of the Spleen.—The subject of disease of the spleen is one which of late has attracted considerable attention and discussion; I will, therefore, venture to call the attention of the members to two cases of enlarged spleen (No. 5). One was that of an agricultural labourer, aged 60, who first came under my notice in 1872, anæmic and with an enlarged spleen, which could be traced into the hypogastric region; there were also enlarged inguinal glands. He came under treatment from time to time as an out-patient up to May 1876, when he was admitted an in-patient. The legs had then been swollen for two or three weeks; he had severe pain in the shin-bones, and there were reddish copper-coloured blotches on the thighs and excessive periosteal tenderness. The inguinal glands were enlarged, and he had some scalding and urethral discharge. There was some cough for a time, but not very troublesome, and the respiration was harsh over the right chest. Towards the end, the cough increased, and on one occasion there was slight hæmoptysis, and the bowels became rather relaxed. Without any serious alteration of symptoms, the strength began to fail rapidly, and he left the hospital and did not long survive.

The second case of enlarged spleen was in a female. The history was that, seventeen weeks before, after a severe premature confinement, sickness, vomiting, and pain in the hypogastric region, and also in the left breast, extending through to the back, symptoms which had existed in a less degree for a time previously, became greatly aggravated after the miscarriage. The symptoms were very severe when she was admitted, and the spleen was considerably enlarged and resting on the descending aorta, and receiving impulse from it. This patient had suffered scalding vaginal discharge and external soreness. There was a double *bruit* with the heart sounds. This patient was greatly relieved by the end of the week, and, continuing better, went out by her own desire, after being in the hospital thirteen days.

The question suggests itself: Was the existence of a specific poison in the system, in these two cases, in conjunction with enlarged spleen, simply an accidental coincidence?

Partial Paraplegia.—The next cases to which I would draw attention are two instances of partial paraplegia: one in a boy of nine and the other in a boy fifteen years of age. The younger, aged 9, had begun, four months previous to admission, to suffer from pain in the cervical vertebrae and difficulty of swallowing, followed by loss of the power of standing, though the legs could be drawn up in bed. The arms were not affected. When admitted, there was no pain in the spine, except on pressure, and the second and third cervical and first and fourth dorsal vertebrae were complained of when pressure was made on them. The appetite was wanting and the bowels were costive. I would call attention to the circumstance that there was marked improvement after commencing the use of faradisation to the limbs and spine. After ten days, the benefit was apparent, and he went out walking without assistance, having been under treatment about eleven weeks. The other case is that of a boy of fifteen, and has a much more complex history; but in this case the benefit derived from faradisation seemed equally apparent, though it is right to observe that, in both these cases, tincture of iron and liquor strychniæ, the latter in doses increased to ten or twelve minims three times a day, were given, at the same time that the galvanism was applied. This case has rather a curious history. It was as follows: That eleven months previous to admission, he began to complain of dizziness and had fainting fits; when these passed off, he suffered from severe pain in the upper part of the sacrum and in both legs, especially the left, and he gradually lost power more or less completely in both legs, at first more completely in the left. For the last seven months, he had so far regained power as to be able to walk with crutches. He began to improve after being a month under treatment, and then made steady progress towards recovery. The curious part of the history is that he was said to have been more or less œdematous, and the face puffy, from the age of two, when he had scarlet fever, followed by dropsy. He had not had rheumatism. There were

very extensive dulness in the region of the heart, extending up from the base, increased and extended impulse, a systolic *bruit* masking both sounds, heard extensively in the course of the ascending and descending vessels, heard also in the epigastrium and down the spine, on the left side, in the iliac and femoral arteries, loudest in the right femoral. There was no shortness of breath. What relation might probably exist between this state of the circulatory system and the paraplegia?

While on the subject of paralysis and the use of faradisation, I may mention, in passing, the case of an hysterical girl, aged 19, in which a single application dispelled an affection or delusion which had existed for a year and three quarters. She was said to have had epileptiform fits, and accompanied with loss of voice and sight and the power of opening her eyes. Her legs were supposed to be powerless, except that they could be drawn up in bed; and she had the catheter used constantly for six months, but not latterly. There was excessive costiveness. The catamenia were regular for six months, absent for ten previously. The eyes recovered their sight and the lids their motor power, and her speech returned at once, after a single application of galvanisation to the forehead. She went out well. Such cases need no comment.

Chorea.—I would next draw attention to five cases of chorea: four in females; one male. I am not aware what general proportion the females bear to males suffering from this affection. I allude to the cases with a view to the treatment. There appears to exist in the minds of some great doubt as to whether any treatment influences the course of this complaint, that is, any treatment by drugs. I find that in some London hospitals it is usual not to order medicine in chorea. It is to be observed that three out of the four females had a systolic heart *bruit*. In one, it was the second attack of the complaint. Two had been subject to it for five years. The boy had suffered more or less for three years; had not had rheumatism or any serious disease. He began to improve in a week, and went out fairly free. The others were severally five, eight, and ten weeks under treatment. It cannot, of course, be affirmed that the result would not have been the same had no medicine been given. I gave twelve minims of liquor arsenici chloridi, seven minims of liquor strychniæ, with perchloride of iron in water three times a day. In all the cases, arsenic was given in some form; and it appears to me to be more generally beneficial than any other remedy I have had recourse to. In some of the cases, the choreal movements were entirely absent during sleep; in others, they were sometimes present, at others absent.

In a case seen by me a year or two ago, the patient seemed to be almost sinking from want of sleep; and I may mention that in this case full doses of a drachm or more of the succus conii seemed to act most beneficially in quieting the movements so as to admit of sleep, and the case did well. No. 19, one of the cases which I have placed amongst those of chorea, was of a character quite different from any I had before witnessed, and I classed it as chorea, not knowing what else to call it. No. 18 was the case of a young apparently healthy girl of nineteen. The movements commenced with a convulsive twitch in the left loin, followed by a jerking action of the left side, hip, and the thigh, which were projected outwards. This jerk was at first immediately preceded by a stabbing sensation in the region of the left kidney. No spinal tenderness existed, and no indications of hysteria, or of any feigned disease. She had had a slight attack of scarlet fever some months previously, but quite recovered. A daughter of her mistress, a child, had also had scarlet fever, and I was told that the child was similarly affected with like convulsive movements. I should be glad to know if any of our members present ever witnessed anything of this kind associated or not with scarlet fever. There was a circumstance observed in connection with these choreal cases which may be worth mentioning, viz., that in one of them, that of a young woman (No. 19), rheumatic affections of the joints came on while she was under treatment; that the choreal movements ceased so long as the rheumatic affection of the joints continued; and that this occurred several times.

Heart-Disease.—I would beg to make a few observations in reference to heart-disease. Of these, there were nine cases in which the heart-disease appeared to be the primary affection to which all symptoms might be considered referable. Heart-disease was present in a variety of other cases, but in these it appeared rather as a complication than as the primary source of the morbid phenomena. Of these, there were nine cases; in three of which (one male and two females), the origin was distinctly rheumatic. In the six other cases not connected with rheumatism, the disease could be fairly attributed to the nature of the occupation of the patient, always implying powerful effort with the arms. Of these traceable to occupation, three had been hard drinkers. How far this would apply to the other three does not appear on the face of the report. In reference to treatment in these heart-affections, it is to be noted that in three, in which the pain and distress were great,

much and continued benefit was derived from the subcutaneous use of acetate of morphia, in doses of from one-sixth to one-fourth of a grain. In another case, attended with much severe pain in the region of the heart, speedy and invariable relief for weeks was obtained by nitrite of amyl, in two-minim doses. It was not found necessary to increase the dose, and one dose was generally sufficient. The event proved this to be a case of aneurism. With respect to the presence of albumen in the urine, it was observed that it was liable to be temporary; and in one case, in which it appeared for a time, yet two days before death it was barely traceable, though the kidneys proved to be contracted and granular.

Rheumatism.—Various forms of rheumatism—acute, subacute, and chronic—amounting to sixteen cases, about one-sixth of the whole, were met with. Though the salicylic acid was occasionally used, I cannot add from experience anything worthy of record to the very valuable information on this subject given to us, at our former meeting, by one of our members, in a very able and instructive paper. Two of the cases of subacute rheumatism—one, a male aged 62; the other, a young woman of 18—were complicated with bronchitis. The urine, on being poured upon nitric acid in a test-tube, at once threw down a mass of nitrate of urea. I do not suppose that this appearance, under these similar pathological circumstances, was anything more than a coincidence; but, when a somewhat unusual event occurs, it is well to note the conditions.

Facial Neuralgia.—Had time permitted, and had I not feared to weary your attention, I purposed to bring forward a number of cases in which the croton-chloral was most efficacious in relieving neuralgia of the face and head. A few also in which it appeared that belladonna was not altogether unduly credited with efficacy in controlling excessive perspiration. One, in which the form employed was atropine, one-sixtieth of a grain for this purpose, used with advantage subcutaneously. I also purposed quoting cases in which acute and subacute inflammations sprang up insidiously, complicating the course of chronic disease—a circumstance to be constantly borne in mind, especially in consultation practice; otherwise, an unjust suspicion of oversight in reference to a brother practitioner might be very unfairly entertained. I will only venture to refer to two more cases: one illustrating not in a chronic but in an acute disease, the insidious nature of these intercurrent affections; and the other possessing an interest in a medico-legal point of view.

Pneumonia supervening on Peritonitis.—The first of which I shall speak was a case of acute peritonitis, at the close of which, within a few hours of death, an attack of pneumonia was superadded. The patient was a gardener, twenty-nine years of age. The history he gave was that, five days before applying at the hospital, he was attacked with severe shivering and abdominal pains, attended with purging and vomiting. The purging had ceased, but the vomiting continued up to the time of admission. His breathing was so affected that he had to stop to take breath between each word. When he came to the hospital, the pulse was 100, but excessively feeble; the respirations were 38; temperature 100.7 deg. The bowels had not acted for some hours. There was not excessive abdominal tenderness, but a sense of weight rather than of severe pain. There were no stethoscopic indications of chest affection. Between 12 o'clock, when admitted, and 8 P.M., he had taken twenty ounces of milk and lime-water and some beef-tea and brandy, and had only been twice sick, and then brought up little. When seen by me at 8 P.M., the temperature had suddenly risen to 102.4 deg.; pulse 130; respirations 50. Dulness and fine crepitation were found at the base of the right lung. From that time, he sank rapidly, and died within an hour. The *post mortem* appearances were these: The peritoneum showed signs of acute inflammation throughout its entire extent. The blood-vessels of that portion covering the intestines were distended, and there was exudation of lymph, but not to any great extent. The intestines were enormously distended with gas. The bases of both lungs were congested. I was not present at the examination, or should have examined more minutely into the condition of the lungs, especially the right, which is briefly passed over in the report.

The last case with which I shall venture to tax your patience, I quote as possessing considerable interest in a medico-legal point of view. It is that of a boy aged 12, who died of atrophy and exhaustion. His antecedents have their importance as calculated to give a colouring to the case, had it been made the subject of a coroner's inquest, which might have happened had the death occurred in the work-house. The boy had been for two years and a half an inmate of the Whitby Union, and had been taken out by his father five or six weeks before he brought him to the hospital. The report given by the father was that the boy had parted with joints of tape-worm for six or seven years; that he was placed in the union, and had, while there, lost the

use of his limbs. When admitted to the hospital, the boy could walk, but lamely, and parted with joints of tape-worm, and, a few days after coming under treatment, a considerable length came away after a dose of the oil of male fern. After being a month in the hospital, the legs became more feeble and were painful, and were from time to time drawn up towards the chin. The bowels became relaxed a fortnight after admission, and continued to the end acting twice a day, but not largely. Three days before death, sickness and vomiting occurred from time to time, but only a little curdled milk was brought up. It was noted that, up to the time of the sickness commencing, the patient took sufficient milk. After the sickness set in, the patient fell into a dozing condition, and sank, apparently from exhaustion. The interest of the case arises from the *post mortem* appearances, medico-legally considered. The body was intensely emaciated; not a particle of fat to be met with; all the organs were drained of blood, though otherwise apparently healthy; not a particle of food was found in either stomach or intestines; only a few large joints of tape-worm. Supposing the like *post mortem* appearances to have been presented for the consideration of a coroner's jury, assembled in a workhouse for the purpose of investigating a charge of neglect and starvation, what, in all probability, would have been the inference from the facts laid before them? Would they not pretty certainly have come to the conclusion that neglect, and consequent starvation, best explained the phenomena? Yet, this natural conclusion would be a most unjust one.

I must now bring these very desultory observations to a conclusion, with thanks for your attention, and with an apology for having wearied you so long with matters of so very ordinary a character and entirely devoid of novelty.

POOR-LAW MEDICAL RELIEF IN CERTAIN OF THE NORTH-WESTERN AND MIDLAND COUNTIES, ITS ANOMALIES AND DEFICIENCIES.*

By JOSEPH ROGERS, M.D.

It occurred to me that as the British Medical Association would meet this year in this town, I would avail myself of the opportunity thus afforded of calling attention to the subject of Poor-law medical relief in the Midland Counties, with the view of showing what has been done in certain of the unions towards the establishment of an efficient system of medical relief, and what has been omitted to be done in adjacent unions, whereby the administration of such medical relief has been allowed to remain in an unsatisfactory state.

You are probably aware that in 1860, 1861, and 1862 a Select Committee of the House of Commons sat to consider the administration of poor relief. Three medical gentlemen gave evidence before that Committee—the late Richard Griffin, Dr. Robert Fowler, and myself. The first presented a voluminous mass of information relating to medical relief generally throughout the country. Dr. R. Fowler's evidence was mainly devoted to an exposition of the faulty condition at that time existing in the metropolis, since happily changed by the Metropolitan Poor Act of 1867. My own evidence was solely devoted to pointing out the advisability of securing that, instead of medical officers finding medicines from their stipends, the Boards of Guardians should supply all such medicines and appliances as were required in the treatment of the sick, and that the stipends of the medical officers should in future be wholly independent of such supply.

I regret to state that the truthful evidence of Mr. Griffin was combated by one of the Poor-law inspectors, Mr. Basil Cane, who, by a daring manipulation of statistics, contrived to show, and what was worse, to make that Committee believe, that the system of medical relief was so good that, to quote their own report, "there were no sufficient grounds for materially interfering with the present system of medical relief, which was made the subject of special and lengthened inquiries by Select Committees of this House in the years 1844 and 1854".

My friend Dr. R. Fowler's evidence was wholly ignored. The only practical gain obtained by us resulted from the evidence I gave; for the Committee "recommended that in future cod-liver oil, quinine, and other expensive medicines, should be provided at the expense of the Guardians, subject to the orders and regulations of the Poor-law Board". One would have thought that a Select Committee of the House, having brought up such a recommendation, the Poor-law Board would have hastened to communicate the same to the respective Boards of Guardians; but it was not so, the permanent officials of the

department, faithful to the traditions of the office, delayed the issue of the recommendation for thirteen months after the report had been presented to both Houses; and I have learned from Mr. Villiers, the then President, that it would not have been sent out even then, if he had not put pressure upon the permanent secretary, to make him issue it. I hold in my hands a copy of the letter which was eventually sent; and I think if you read it you will find it was studiously prepared, so as to destroy as much as possible the effect contemplated by the Select Committee. Some ten years ago, I asked the late Sir John Simeon to move for a copy of the letter and a return of what had been done by the respective Boards, so as to discover what had resulted therefrom; from that return I learnt that, out of a total of 626 provincial unions, "401 had acted wholly or partially on the recommendation contained in the said letter, and that in 225 unions they had not acted upon the recommendation in question". Nothing daunted by the apparent indifference of several of the Boards of Guardians, I have gone on, since that date, in urging the same view on the public, not only at meetings of this Association, but at the meetings of the Poor-law Medical Officers' Association, and of several Chambers of Agriculture I have been asked to address, with this result, that, by a return moved for in 1876 at my request by Dr. Lush, I learn that, instead of 225, there are now only 177 defaulting unions, or a diminution of 48, and that in many unions the Guardians have adopted in its entirety the principle of the supply of all medicines and the provision of independent dispensers. Among those that have done so, I may instance Southampton, Oxford, Birmingham, and Worcester.

It is, however, to the facts contained in Dr. Lush's return I more particularly desire to direct your attention, especially in so far as it relates to the several unions of the adjacent counties.

Commencing with *Lancaster*, 6 supply all medicines; 8 supply medicines for the indoor poor; 6 only cod-liver oil; 10 supply nothing.

Derby.—1, that of Derby, supplies all medicines; 5 supply cod-liver oil, quinine, etc.; 4 nothing.

Stafford.—3 unions, viz., Wolverhampton and West Bromwich, find all medicines for the indoor poor, and in Wolverhampton for certain outdoor districts; 6 unions supply cod-liver oil, etc.; 7 supply nothing.

Salop.—1, Clun, finds all medicines; 3 supply cod-liver oil, etc.; 6 partially, that is, only oil; 5 find nothing.

Leicester.—3 cod-liver oil, etc.; 1 oil only; 6 nothing.

Nottingham.—1, that of Nottingham, supplies all medicines; 2 cod-liver oil, etc.; 2 cod-liver oil only; 4 supply nothing.

Worcester.—2 unions supply all medicines; 3 cod-liver oil, etc.; 4 only oil; 5 nothing.

Cheshire.—1 (Birkenhead) supplies all medicines; 5 cod-liver oil and quinine; 1 cod-liver oil only; 3 nothing.

York, West Riding.—10 supply all medicines for indoor poor; 2 for out-door also; 26 supply oil and quinine; 6 supply nothing.

Now, one of the principal grounds on which I have gone in advocating the supply of all medicines by Guardians, or, as it may be better described, the adoption of the dispensary system of medical relief, is this: that, although apparently more costly, yet, in reality, wherever the system has been introduced and fairly worked, there has resulted, after a few years, a marked diminution in gross poor relief expenditure. Such has proved to be the case in Ireland and in those parts of England and Wales where it has been adopted, inclusive of the metropolis, where, as many of you are probably aware, no medical officer now either supplies or dispenses the medicines he feels it to be his duty to prescribe for the sick.

There is another reason why, in my judgment, an alteration of the system of provincial medical relief, notably in large towns, should be made. There is no doubt that there exists a profound distrust of Poor-law medical relief among the parties who are forced to apply for it; the poor are far more quick-witted than we give them credit for, and they have come to know that district Poor-law medical officers, who, as a body, are not the wealthiest members of the profession, do not behave so liberally as to find medicines in sufficient quantity or of sufficient quality from the merely nominal stipends they too frequently receive; and therefore in the towns the sick poor make application to the voluntary medical charities, only going to the district medical officers when they wish to get medical extras, which, by law, the Poor-law medical officer is alone empowered to recommend. (The curious in such matters are referred to a *brochure* by Dr. Heslop of Birmingham, *On the Realities of Medical Attendance on Sick Children in Large Towns*, Longman and Co., 1869.) These applications on the part of the sick poor to voluntary dispensaries and hospitals is one cause—I believe, the original and the most potent cause—why these charities are so much abused; for the classes above them, who ought to pay for medical attendance, join with the throng of indigent poor in applying for such

* Read in the Section of Public Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.