PROVINCIAL MEDICAL JOURNAL

And Retrospect of the Medical Sciences.

No. 166.]

LONDON, SATURDAY, DECEMBER 2, 1843.

PRICE SIXPENCE.
[Stamped Edition Sevenpence.]

OBSERVATIONS

ON

PUERPERAL FEVER;

CONTAINING A SERIES OF EVIDENCE RESPECTING ITS ORIGIN, CAUSES, AND MODE OF PROPAGATION.

By ROBERT STORRS, Esq., Surgeon, Doncaster.

Introductory remarks—Four points proved—1, the contagiousness of puerperal fever; 2, its origin; 3, its power of producing other febrile diseases by infection; 4, the inefficiency of treatment—Evidence yet unpublished from Mr. Reedal, of Sheffield; Mr. Sleight, of Hull; Dr. Hardey, of Hull—Simultaneous origin of puerperal fever in the practice of three gentlemen who had attended a post-mortem examination—Evidence from Mr. James Allen, of York—Summary of the foregoing evidence—Evidence recently published by Dr. Holmes, in America; Dr. Paley, of Ripon; Mr. Hutchinson, of Nottingham; Dr. Robert Lee; Mr. Fisher, of Bungay—Summary of cases in the author's practice—Practical conclusion—Hopelessness of treatment—Necessity of prevention—Observations on the method of enforcing it.

The subject of the contagiousness of puerperal fever has been taken up by our medical brethren in America, in a paper by Dr. O. W. Holmes, published in the "New England Quarterly Journal of Medicine and Surgery" for April, 1843, and copied into the July number of the "American Journal of Medical Sciences," wherein he brings forward a strong array of evidence, which goes far in support of the opinions and in corroboration of the views I advanced in the Provincial Journal for April, 1842, when I gave a history of puerperal fever as it occurred in my practice in the early part of the previous year. I am induced, therefore, to send you a few more remarks on that subject, merely offering, as an apology, that it has absorbed a considerable share of my thoughts and attention since the occurrence of the unhappy cases in question, and that it will continue to excite a lively and painful interest in my mind as long as it retains its powers.

Dr. Holmes's paper proves, I think indisputably, the contagiousness of the disease; that it occurs generally only in the practice of one individual in a place; and that it is intimately connected with erysipelas: but it does not, I think, go far enough, in merely considering it to be propagated by medical men and nurses from one puerperal patient to another; whereas the disease, in my belief, is quite as frequently carried by the medical attendant to each fresh labor patient he is called upon to attend, from some original infectious case, whether of gangrenous erysipelas, of typhus fever, or of whatever animal poison besides, may hereafter be found to produce it. That I took it from a case of gangrenous erysipelas with subsequent abscess, to every case which occurred to me, I have

no doubt; the precautions I made use of being in reference to the contagion of the fever itself, rather than to the particular case, which I found too late to be the sole cause of it.

I shall now, from circumstances occurring to friends and neighbours, from cases already published which have come to my knowledge, and from my own personal experience, endeavour to prove, as concisely as the importance of the subject will admit of it, the four following propositions, viz. :—

1. The contagiousness of puerperal fever.
2. The origin of puerperal fever from an animal poison, chiefly erysipelas and its consequences, but sometimes typhus fever.
3. The power of puerperal fever of producing indiscriminately, in the persons of the attendants and nurses, and in the families of the affected parties, erysipelas, typhus, and a fever sometimes in the male, strongly resembling the puerperal.
4. That in general the most prompt, judicious, or careful treatment, is of no avail.

I shall begin this attempt first by an array of evidence yet unpublished, chiefly in the order in which I have received it from those friends who have favored me with the result of their unfortunate experience, and shall support it by what has been, in some form or other, already before the public.

To obtain all the information in my power from authentic sources, I addressed the following questions to Mr. Reedal, of Sheffield; Messrs. Hardey and Sleight, of Hull; and to Mr. James Allen, of York; all men of local eminence, who have themselves seen the disease in their own practice.

1. What is your opinion of the contagiousness of puerperal fever?
2. Do you consider it to arise from erysipelas, or from any other animal poison?
3. Do you consider it to have been propagated from one puerperal woman to another, or from a non-puerperal case which first produced it?
4. Had you any post-mortem examination? If so, what appearances were observed—especially was there pus in the uterine veins?
5. What treatment did you pursue, and what did you find of most avail?
6. Were any of the friends or attendants of the parties immediately afterwards seized with disease, and of what kind?
7. What other practitioners in your town had cases of a similar nature at the time?
8. Will you state the date of the commencement of the first and last cases of the disease, and how many cases of it occurred to you in that period?

As I consider myself indebted to Mr. Reedal, of Sheffield, for the most decided information as to the origin of the disease from erysipelas, I will begin with his communication; and as his letter is so full

of facts, and so concise, I shall make no apology for transcribing the whole of it. It is as follows:—

"DEAR SIR,—In reply to your note of the 19th of October, respecting those cases of puerperal fever which occurred in my practice, I beg leave to subjoin the following answers to your queries:—I may premise that at the time of my attendance on those females who were subsequently attacked, I had under my care a young man laboring under sloughing bubo, combined with erysipelatos inflammation of the scrotum and nates, of a malignant character, which required dressing daily, and which ultimately proved fatal. It may be somewhat corroborative of the supposed dependance of this form of puerperal fever on an animal poison generated by this sore, and propagated by contact, that the sister of the young man, who waited upon him, was seized with erysipelas of the head and face, of a very low, typhoid nature, which terminated fatally in a few days.

"1. In answer to your first question, it is my decided opinion that the cases occurring in my practice were from contagion.

"2. It would be unnecessary in me to repeat my implicit belief in the contagiousness of this disease, and its connection with this case of erysipelas; but if further confirmation were needed, I might adduce the circumstance, that immediately antecedent to my taking the charge of the above case of erysipelas, I had met with no cases of puerperal fever, and that upon discontinuing my attendance upon the young man (which I immediately did upon the belief that I was the medium of conveying infection from him to the puerperal cases), I had no recurrence of puerperal fever.

"3. In reply to this question I may give it as my opinion, that in all my cases the disease had one common origin, viz., the bubo, and was not communicated from case to case.

"4. I had a post-mortem examination of one of the cases, but am sorry that in consequence of not having the notes by me, I cannot answer this question so satisfactorily as I could have wished. The abdomen was tympanitic; the uterus flaccid, with considerable softening; its lining membrane injected. There was a large quantity of serum in the peritoneum, with flocculent matter floating in it. We made an examination to ascertain whether there was any pus in the veins, but we were unable to discover any.

"5. I have no ground for faith in any particular treatment, as all seemed alike unavailing. In the treatment of the above cases, assisted by Drs. Thompson and Favell, various forms were employed. In the two first cases we employed bleeding, both general and local, which we thought prejudicial, by depressing the powers of the patient. Mercurials were employed without any good effect. Turpentine was given by the mouth and rectum, and applied externally to some of the latter cases; this at the time I thought to be most beneficial.

"6. I have known of none of the attendants on these puerperal patients being attacked by any disorder which might be supposed to have arisen from these cases.

"7. No other medical practitioner had any case of a similar nature at that time.

"8. The first case commenced on the 27th of

October, 1838, and the last on the 3rd of November, and during that period five females were seized, and all died. During this week I attended two other females; one went on well without any unfavorable symptom; this patient I was called to about four hours after attending a lady who was the first fatal case; the other was attacked with inflammation of the mucous membrane of the bowels, but recovered in a few days. In the latter case, twelve or fourteen hours had intervened between my visit to the young man and my attendance upon this female; but in all those which proved fatal I went nearly direct from dressing the sore.

"I should also wish to state that at the time those cases occurred to me, Mr. Parker, then my pupil, but now resident in Sheffield, attended many midwifery cases, and all recovered well. He never visited the erysipelatos patient.

"The above cases were not confined to one locality, but were living in different parts of the town, showing that the disease did not arise from any local cause. As I have previously stated, I had very strong suspicion, after the first case or two, that I was conveying the infection, but could not discover how until the sister was seized. This was the most malignant case of erysipelas I ever witnessed. I then began to think whether I was not conveying the poison from this source. I am sorry that the above cases were not reported at the time they occurred. The reason why they were not arose from what I said concerning the notes in my former letter. You are quite at liberty to make whatever use of the above remarks you think proper.

"I am, dear Sir,

"Yours truly,

"Sheffield, Nov. 15, 1843.

"G. REEDAL.

"To Robert Storrs, Esq."

Mr. R. P. Sleight, of Hull, states that he had the misfortune to meet with three cases of puerperal peritonitis; the first case occurred on the 17th of May, 1838; the patient was attacked on the day after her delivery, and died on the 19th. Her nurse had been attending a lady who died a week or two before of the same disease. The next two cases occurred within a week or ten days of each other; "I was called to the first case whilst visiting a patient suffering from erysipelas; I immediately left him, and went to attend my female patient, who had a quick natural labor; she was attacked with puerperal peritonitis within twenty hours after her delivery, and died eighteen hours after the commencement of the attack. In the second case the patient was attacked the day following her delivery, and died within twenty-four hours."

Mr. Hardey, of Hull, states that the disease occurred in his practice in the spring of the year 1838.

"On the origin of this fatal malady (says he), in my own practice, I can offer no satisfactory solution, though I am impressed with the conviction it was in some way connected with my attendance on a case of large sloughing abscess of the groin, and also one of erysipelatos abscess of the mammae about the same period. The malignity of the disease was also, doubtless, favored by peculiar atmospheric constitution, inasmuch as large numbers of sheep, pigs, and cattle died at the same period of parturient disease in this

and the neighbouring counties. It would seem, however, from the order in which the cases occurred (to which I shall refer ere long), that a strong predisposition to disease must have been inherited by the parties affected, inasmuch as nearly two-thirds of the women attended by myself during the period contemplated, effectually resisted the contagion of which I was, I presume, the medium, and to which they were equally exposed with their less favored neighbours. I may further remark that the cases, whether fatal or otherwise, were spread pretty equally over the town and suburbs, and in no case could the fatal result be ascribed to unfavorable locality. The women affected, with but one exception, No. I., were of strictly regular habits of living, and all in comfortable circumstances. Of the seven fatal cases, five were in persons of good average health and constitution, the other two, Nos. II. and IV., were individuals of greatly impaired health; it is also worthy of note that, in all the fatal cases, the labors were natural, and of ordinary severity."

Mr. Hardey attended the seven fatal cases above mentioned between March 21 and April 20, besides thirteen others, all of whom did well; some of those who escaped the disease were attended by him within a few hours of those cases which proved fatal.

The treatment adopted was similar to that employed by Mr. Reedal and myself, but proved entirely unavailing. He is not aware that any diseases were originated by these attacks in the families of the affected females, and thinks that the further progress of the disease was arrested by a thorough new dress, frequent chlorine ablutions, &c.

The following history was mentioned to me by one of the parties concerned, and shows most clearly and positively the origin of the disease from gangrene. I have, however, no authority from any of the parties, and am not, therefore, justified in giving names.

Three surgeons, residing in the same town, attended the post-mortem examination of a patient who had died from gangrene after an operation for strangulated hernia, and were all of them employed in handling the diseased parts. One of them was called from the inspection to a case of labor, which terminated in fatal puerperal fever; he had others in rapid succession. The other two surgeons had also fatal cases of puerperal fever within a day or two after the same inspection.

On casually meeting, they mentioned their misfortunes to each other, and were thus convinced of the origin of the disease. They all abandoned practice for a short period, and had no more of it.

Mr. James Allen, of York, who some years ago had a long list of fatal cases of puerperal fever occurring in his practice (though he does not remind me in his communication either of the number of them, or of the length of the period of their occurrence), states that in his practice he believes that disease to have been contagious; he also thinks that he was a means of conveying it from case to case, but cannot understand how it was that in some instances the precautions he made use of were of no avail in preventing the disease, and that in others his patients escaped receiving it. He did not, however, leave home or abstain from practice, as at that time I believe he flattered himself that the disease was more epidemical than con-

tagious. The first case of his series was the only one in which he could trace any connexion with erysipelas.

For a period of two months or more the disease was suspended, when another woman was seized who was attended in labor by his assistant in a pea-jacket, which he had last used whilst remaining all night in attendance on a fatal case of puerperal fever in an advanced stage. "This first case of a second series," says Mr. Allen, "was immediately followed by an attack of the husband with peritoneal inflammation, with all the characteristics of puerperal fever, which proved fatal in three days." Mr. Allen is not aware that any other diseases than the one above-mentioned were produced in any of the families or friends of the parties. He also states that three or four other practitioners had cases of the disease at the time, though not altogether so many as he had.

With regard to treatment, he states that "the lancet, calomel and opium, turpentine, &c., were all tried, but seemed alike futile," though he had the advice and assistance of Dr. Simpson, and others of the most experienced practitioners in York.

I would here briefly draw the attention of the reader to the remarkable and striking fact of Mr. Reedal having five fatal cases of this horrid malady in labors which he attended so immediately after dressing a case of malignant erysipelatous disease, and on his leaving off attendance on this case having no more of it, and that neither his pupil even, nor any other medical gentleman in Sheffield, had any instances of it among their labor cases; also that Mr. Sleight had two cases whilst in attendance on a case of erysipelas; that Mr. Hardey's cases also arose while he was in attendance on a case of sloughing abscess and of erysipelas. And again, that three surgeons were simultaneously the means of spreading puerperal fever from one post-mortem examination of a case of gangrenous erysipelas—a combination of evidence I think sufficient to convince the most sceptical that this disease produces a subtle animal poison, which is instrumental in propagating, when puerperal women are subjected to its influence whose predisposition favors it, a disease in about thirty-six or forty-eight hours afterwards of the most inflammatory, prostrating, and violent character—a disease which stamps death on the features and in the symptoms immediately on its occurrence.

I will now briefly refer to those cases which have been lately published, which I have been able to meet with.

Dr. Holmes, in the article in the American Journal before alluded to, relates the following history in the practice of a physician, illustrative of contagion. He had six fatal cases of puerperal fever, besides others which recovered, from February 4 to March 28, 1830; he changed his clothes, attended no more labors until April 22, and had no more of the disease. The same physician had another disastrous period in 1835, having several cases of puerperal fever from July 1 to Aug. 13, only two of which died. At this time he changed his clothes as much as possible, and washed his hands in solution of chloride of lime after each visit, which accounts for the less severity of the contagion. He had no erysipelas under his care at the time, to his recollection. The following series of cases in the same journal, exhibit its origin from erysipelas. A

physician of Boston had five fatal cases from the 7th of May to the 17th of June, 1842, and two recoveries. He had been attending a case of severe erysipelas when the first case commenced. This physician states that a practitioner in a neighbouring state had eight deaths from puerperal fever in a few weeks, no other practitioner in the neighbourhood losing a single case during that time.

Another series of cases, fixing the origin of the disease on erysipelas, is recorded by a physician of Boston as occurring in that town during last spring. From March 20th to May 9th he had seven cases, the first five of which were fatal ones. They were the only cases attended by him during the period.

The first patient of this series was delivered March 20. "On the 19th, Dr. C., the physician in question, made the autopsy of a man who died suddenly; sick only forty-eight hours. Had œdema of the thigh, and gangrene extending from a little above the ankle into the cavity of the abdomen. Dr. C. wounded himself slightly in the right hand during the autopsy. The hand was quite painful the night following during his attendance on patient No. I. He did not see this patient after the 20th, being confined to the house and very sick from the wound just mentioned, from this time until the 3rd of April.

"Several cases of erysipelas occurred in the house when the autopsy mentioned above took place, soon after the examination. There were also many cases of erysipelas in the town at the time of the fatal puerperal cases which have been mentioned.

"The nurse who laid out the body of the patient No. III. was taken on the evening of the same day with sore throat and erysipelas, and died in ten days from the first attack. The nurse who laid out the body of the patient No. IV. was taken on the day following with symptoms like those of this patient, and died in a week without any external marks of erysipelas.

"No other cases of a similar character with those of Dr. C. occurred in the practice of any of the physicians in the town or vicinity at the time."

I have reversed the order of the various series of cases, as the last series here mentioned is so similar in origin to one which occurred in the practice of Dr. Paley, of Ripon; it was published in the "Medical Gazette" for Dec. 6, 1839, and was republished in the Provincial Journal of May 14, 1842, as illustrative of the origin of puerperal fever from gangrene, and in corroboration of the facts detailed in my paper published in the same Journal on the 23rd of April previous. Of this series I will now give a condensed statement. A surgeon in the neighbourhood of Halifax had six fatal cases of puerperal fever. On his calling in Dr. Paley to his second and third cases, he (Dr. P.) gave it as his opinion that they were true puerperal fever. Dr. P. states, "there is not the slightest doubt on my mind that the surgeon who was in attendance was the means of communicating something (call it what you please) from the patient laboring under disease of the scrotum to the lying-in women, which in them produced puerperal fever." A lady who repeatedly visited the first case, married, aged fifty-four, was seized with violent pain of the bowels, and died in twenty-six hours after the seizure.

I have endeavoured to be as brief as possible in the relation of the various histories and cases above men-

tioned, as they may all be consulted at length in the publications in which they have severally appeared.

In April, 1840, a communication from Dr. Hutchinson, of Nottingham, was presented by Sir James Clark to the Royal Medical and Chirurgical Society, in which three cases of puerperal fever, occurring in the practice of one accoucheur consecutively, are recorded, one of which was accompanied by erysipelas and sloughing of the labia, &c; the cases occurred at a time when erysipelas was prevailing in the neighbourhood. The same communication states that two practitioners residing ten miles apart met half way from the residence of each, in attendance upon a patient suffering from extensive erysipelas of the leg, with sloughing, which required incisions to be made, in which both were engaged in handling the parts affected. One of them the same evening attended a patient in labor, previously healthy, who died of puerperal peritonitis.

Dr. King, in the discussion on the paper, stated, in proof of the contagiousness of puerperal fever, that some years since a practitioner at Woolwich lost sixteen patients from this disease in the same year. The neighbouring surgeons had no cases of it in their practice.

Dr. Merriman at the same time stated that infantile erysipelas had frequently occurred after the death of the mother from puerperal fever in his practice. He also stated that on one occasion he was present at the examination of a woman who had died of puerperal fever; he did not touch the body, but the same evening was called to a labor where he had scarcely anything to do. The next morning the patient was seized with puerperal fever, and died. Her infant was seized with erysipelas, which proved fatal in a few days.

Mr. Gregory Smith on the same occasion stated that a woman who had died of puerperal fever was brought into the Windmill-street School. He passed his hand from the uterus into the vagina, and was seized with pain in it immediately, was very ill afterwards, and had his hand and arm covered with pustules.

Dr. Robert Lee relates the following list of cases, all of which support the doctrine of contagion, and some of them the origin of the disease from the specific poison of erysipelas.

In the last two weeks of September, 1827, five fatal cases of puerperal fever occurred in the practice of one midwife. No example of inflammatory disease of a serious nature occurred amongst the patients of the other midwives of the same institution at the time.

On the 16th of March, 1831, a practitioner near London opened the body of a person who died of peritoneal inflammation after delivery, and between that time and the 6th of April he attended three fatal puerperal cases which fell victims to this disease. And on the 30th of March a young woman whom he bled was afterwards seized with phlebitis accompanied with erysipelas, and died.

In 1839, Dr. Lee himself, after the post-mortem inspection of a case of uterine inflammation, immediately attended a young lady in labor, who was taken with uterine inflammation, but recovered.

In December, 1830, two fatal cases occurred to one

midwife of the British Lying-in Hospital on the same day, and another whom she examined, but who afterwards went home, fell into labor, and on the following day was taken ill and died.

In 1835, a surgeon at the West-end of London was attending a case of phlegmonous erysipelas of the leg with extensive sloughing; three cases of fatal uterine inflammation occurred to him at the same time. Dr. R. Lee assisted him at the autopsy of the last case, and had two fatal cases follow immediately, in spite of all the precautions he could take. One of the infants also died of erysipelas.

In August, 1836, another practitioner in the neighbourhood of London had three fatal cases of uterine inflammation; Dr. Lee was called in to assist at one of them, a case of turning; he afterwards assisted at the post-mortem of this case; on the same evening he attended a private case in London, which proved fatal. The assistant to the practitioner was seized with fever and foul ulceration of the throat, &c., but recovered. The cook in the same family had these symptoms in milder form, and the carpenter who placed the body in the coffin recovered with difficulty. These cases and details are extracted and condensed from the Lectures of Dr. R. Lee, published in the "Medical Gazette" for August, 1843.

By the kindness of Mr. N. B. Fisher, of Bungay, Suffolk, I have been favored with an account of five cases (since published in the *Prov. Journal*) which occurred to him between the 28th of July and the 14th of August of this year, all of which proved fatal. The history of the cases and his remarks upon them, strongly manifests the intense anxiety he felt to avoid the further propagation of the disease, and demands the strongest sympathy of his brother practitioners, more especially of those who have been fellow sufferers from a similar cause. His treatment of the cases was, I think, extremely judicious, though totally unsuccessful, and eminently proves the necessity of looking to prevention rather than cure. He ascribes the origin of the disease to typhus fever. I will extract his account of the circumstances attending the occurrence of the cases.

"Ever since August, 1842, continued fever has prevailed extensively in our town and neighbourhood; even now it continues in some localities. To form an accurate estimate of its prevalence, I may state that the population of Bungay is 4,000, and I think I shall not be extravagant in putting down the fever cases at 250. Its type has been generally mild, the cases extremely protracted, and happily the rate of mortality low, not averaging more than 1 in 15.

"On July 28 the patient No. I. was delivered, and the following day I attended another midwifery case, which did well. On the 3rd of August No. I. died, and on the 5th I delivered Nos. II. and III., within little more than an hour of each other. On the 7th I attended No. IV.; and Nos. II. and III. were seized while I was with her; indeed, one of them sent for me while I was detained in the house. No. V. I attended most reluctantly on the 5th instant, and not until I had put on my winter clothing, and washed my hands in a strong solution of chlorinated lime. It ought also to be observed, what I have before noted down, that No. V. was ill at the time of delivery with symptoms indicating the approach of fever,

which had been in the house for three months; so that it does not follow necessarily that I communicated the disease to her, as she was in a condition, to say the least, much predisposed to be affected by any epidemic tendency to puerperal fever; perhaps she had contracted the disease before delivery.

"As bearing upon the vexata questio of contagion, I must remark I delivered only one patient after No. I., and that was on the following day, before No. I. was attacked, and she did well, simply, as I apprehend, because I could not be the medium of communicating contagious effluvia I had not received. And what further countenances the very painful impression of my having transmitted the deadly poison is, that the women attacked were residing in detached, and in two cases remote, situations, where I could trace no connection whatever with a puerperal case beyond myself, and up to this period the disease had been unknown for many years in the town and neighbouring district, except a solitary case here and there, which attracted but little attention."

Mr. Fisher has extracted two strong instances of the disease from Dr. Collins' work, which are worthy transcribing. "A patient was admitted at a late hour of the night into one of the wards of the Dublin Lying-in-Hospital, laboring under a bad form of typhus fever, with petechiæ; she was removed next morning into a separate apartment, where she died. Two females, who occupied the adjoining beds to hers, were attacked with puerperal fever, and died. In October, 1827, a patient in typhus fever was admitted into one of the labor wards of the same hospital, where she remained some hours; the ward contained four beds; three women occupying the other beds were seized with puerperal fever, of which two died."

I have endeavoured, in bringing together the numerous melancholy histories above related, to adhere simply to facts, and, as much as possible, to avoid the introduction of any extraneous matter but what is necessary to give connection to the subject, and to render it intelligible. There can be no doubt but that the greater part of the series of cases have been treated with skill and judgment; all of them with carefulness and anxiety; but whatever kind of practice has been adopted, and I am inclined to think that in all of them the practice would be adopted to the peculiarity of each case, to its symptoms and condition, rather than to theories and authorities, yet in the hands of the most skillful physicians and surgeons in London, in York, in Hull, in Sheffield, and in America, scarcely any recoveries are recorded. How can we, therefore, flatter ourselves that any kind of treatment can be made available in arresting so malignant a disease—a disease in which the proportion of deaths to recoveries far exceeds that of the malignant cholera itself! But, fortunately, if it can be proved, as I think it clearly is, that the disease in this malignant form arises from an animal poison, and that that animal poison is the product of but few other diseases, how easily will the direful malady be averted by simply abstaining from visiting, without proper precautions, all obstetric cases, when in attendance on such diseases as gangrene, typhoid erysipelas, malignant typhus, and after making post-mortem examinations of any of these diseases.

In speaking of the fatality and malignity of true puerperal fever, such as occurs in a rapid succession of cases in the practice of one practitioner, it must not be confounded with a mere sthenic or sporadic case of puerperal peritonitis—a case which must have occurred to almost every practitioner who has had an extensive and continuous midwifery practice. But that it is often so confounded in the minds of some men there can be no doubt of. An eminent accoucheur, who has now retired from a large London practice, told me, not long ago, that he did not believe in the existence of any other disease of this description than simple puerperal peritonitis; he had never lost but one case of the kind. It is plain he had never seen *the disease*.

I will now briefly recur to the history of my own cases, as it bears upon all the important points of the four propositions I have advanced, and endeavoured to prove by the preceding array of evidence. These propositions are strongly supported by one or other of the cases respectively; by all of them on the subject of contagion; by the greater part on the subject of its origin from an animal poison, chiefly erysipelas, by many of them in the power of producing diseases in others of a malignant nature; and in all of the futility of treatment of any exclusive kind as a means of combating the mischief, consequently the necessity there is of looking to preventive measures alone.

No. I.—On the 8th of January, 1841, I attended Mrs. Downes, at Doncaster, in labor. I was at the time attending a Mrs. Richardson for gangrenous erysipelas; the nurse of one was also the attendant of the other. Mrs. Downes died of puerperal fever, and a sister of hers had typhus fever from attending her.

No. II. On January 13th, I attended Mrs. Boyd, of Cantley, four miles from Doncaster; she also died. Her mother-in-law had typhus fever a few days afterwards, and died. Mrs. Lockwood, of the same place, had typhus, and recovered. She was the attendant of both. Mrs. Lockwood's son had typhus fever also, and recovered with difficulty.

No. III.—Also on January 13th I attended Mrs. Briggs, of Doncaster, who died. Her husband was ill of typhoid erysipelas at the time, but recovered. Her friend and neighbour Mrs. Manby had erysipelas, plaritis, and abscess, but recovered. The nurse of Mrs. Manby had typhus fever, and died.

Nos. IV. and V. of the series recovered. No other diseases resulted from them.

No. VI.—Mrs. Bullas, at High Ellers, three miles from Doncaster, I attended Feb. 12, having opened an abscess on that day from Mrs. Richardson, the gangrenous erysipelas case. Mrs. Bullas died. Her sister had herpes, erysipelas (typhoid), followed by an immense abscess in the mamma.

No. VII.—Mrs. Pearson, Doncaster, was attended, Feb. 19, by my friend Mr. Loxley, was only seen by me; she laid out Mrs. Barrett's child, who had died of gangrene of the navel a few days before. I had attended Mrs. Barret between the first three fatal cases and this. Mrs. Pearson died, and her child died afterwards of erysipelas of the navel and genitals.

No. VIII.—I attended Mrs. Williams, of Doncaster, having opened an abscess for Mrs. Richardson on the morning previous. She died.

I now exiled myself for a fortnight, and underwent, as I supposed, a thorough purification.

No. IX.—I attended Mrs. Wilson, of Doncaster, March 21, at night; on the morning of the same day I had opened an abscess in the thigh of Mrs. Richardson, containing at least three quarts of pus. Mrs. Wilson died.

No. X.—Mrs. Bark was attended, March 22, the day following, and died also.

When the poison was somewhat exhausted some months afterwards, my assistant applied a bandage to Mrs. Richardson's leg, and on the following day attended a young woman in labor, who was seized with severe peritonitis, was twice bled, but recovered. The seizure was not so prostrating, but of a more sthenic character than the others.

I think, after a dispassionate examination of the cases and histories recorded above, it will be allowed that the propositions I have stated at the commencement of this paper have been fully made out. The contagiousness of the disease is chiefly proven by its adhering to one practitioner in a place alone. He will, for instance, have several cases of it in succession, and until he is fully made aware of being himself the vehicle of the poison which produces it, he cannot rid himself from it. When, however, he is fully convinced of its contagiousness, he ceases his attendance on obstetric practice for a time, uses complete and frequent ablutions, perhaps goes from home, has a complete change of clothes, and on his return, or on the resumption of his practice, has no more of it. Sometimes, though at an early period, fully aware of the contagion he is spreading, he repeatedly changes his clothes, and uses every precaution that extreme anxiety can suggest; still the disease clings to him, even after a journey, and abstaining from practice; until he becomes aware that the subtle poison arises from a non-puerperal case which, on declining to attend, he at once finds to have been the cause of all the mischief. Such was my case, and though I personally attended in all about twenty cases, which did well during the lengthened period of the continuance of the disease with me, I am convinced that they only escaped destruction in consequence of my anxious efforts to rid myself of the disease by the precautionary measures above mentioned, but which in some instances were unfortunately insufficient, because I was still attending the case from which the poison sprung. Whatever information, therefore, throws a light upon the origin of the disease must be valuable in teaching us how to prevent it, whether that origin be erysipelas, gangrene, or typhus.

How much inferior in importance must a knowledge of the treatment or post-mortem appearances of such a disease be, when its rapidity and severity allow of neither time nor means with which to combat it, and where the exceptions to the rule are the cured, not the deaths, and where recovery, where it does take place, appears to result from some fortunate circumstance, which has mitigated the intensity of the poison, or from some unusual degree of insusceptibility on the part of the patient, rather than from the skill and promptitude of the practitioner. In those instances in its history where the disease has been so frequently brought to a favorable termination, as in Dr. Armstrong's cases, I should attribute the

success to the less degree of intensity of the poison which had set it up, or (if the irruption was of long continuance) to its being partially worn out rather than entirely to the skill of the medical attendant; because, though the form of treatment adopted by that eminent man, by Mackintosh, and others, has been repeatedly followed up, it has very seldom been found available in the more destructive forms which have been recorded in this paper. The most eminent men of the present day who have witnessed it—as Drs. Locock, Ferguson, R. Lee, &c.—are not less hopeless of success than was Dr. William Hunter almost a century ago.

I have said little, therefore, on the subject of pus in the veins (at this time a favorite theory), as it appears to be sometimes present, though more frequently not so, my efforts in doing good being, I think with reason, directed to prevention alone.

As it is well to be always guarded against such a misfortune, I think it desirable for midwifery practitioners to avoid attending labors in the same dress in which they attend their ordinary patients, especially the coat, as this garment must be the one most likely to be the means of conveying fomites; and at any suspicious period, when typhus or erysipelas are prevailing, to carry out the same carefulness even in the after attendance on labor cases.

I should also, after a post-mortem of any kind, or after an operation upon any case of erysipelas, or of typhus, recommend the most careful ablutions of the hands, and for the surgeon to avoid attendance on a labor in any part of the dress in which such operations have been performed, not forgetting the gloves, as the hand and arm are the chief instruments of contact. Where, however, the disease has been unfortunately once set up in a practice, an absence from home for a fortnight or three weeks, a total change of raiment, the most careful ablutions, and a perfect avoidance of every case likely to have been the source of animal poison, should alike be adopted by the practitioner.

I shall now bring this perhaps tedious paper to a conclusion. It has extended itself much further than I at first intended it; but when once commenced, I found it impossible to condense all the facts which have come into my possession into a smaller compass, and even now I have omitted some of them which bear upon the subject, from my anxiety both to avoid prolixity and tautology. Having then completed this task, which I have not sought, but have undertaken entirely from the desire of fulfilling a promise, and of disseminating knowledge which cannot otherwise be purchased but at a sacrifice of human life and suffering, I shall bid the reader farewell; trusting it will please God to spare him the infliction of such dear bought experience.

ROBERT STORRS.

Doncaster, Nov. 22, 1843.

Removal of one ovary does not prevent the female becoming pregnant, for Dr. Chrysmar states that a patient, who was alive eight years after the operation, had in the interval given birth to a living child.—*Mr. Southam.*

CASE
OF
ŒDEMA GLOTTIDIS,
OCCURRING SUDDENLY FROM A COMMON COLD, AND
RELIEVED BY THE OPERATION OF LARYNGOTOMY.

By JAMES CARSON, M.D.

TO THE EDITORS OF THE PROVINCIAL MEDICAL
JOURNAL.

GENTLEMEN,—I have conceived that the following case of successful performance of the operation of laryngotomy for the relief of œdema glottidis, may not be uninteresting to the profession.

I received at four o'clock on the morning of Saturday, the 11th inst., a note from Mr. Parker, the house surgeon of the Northern Hospital, informing me that there was a patient in the hospital laboring under marked symptoms of œdema glottidis. As these symptoms had only supervened two hours previously upon a common cold, and as in that short time the appearances had become alarming, I went down to the hospital immediately, and found Mr. Parker with everything prepared for the performance of the operation. The extreme severity of the symptoms upon my arrival, and the short period of time in which they had come on, left no room for hesitation or delay. I directed Mr. Parker to proceed in his intention. The following notes were drawn up by Mr. Parker, who operated and carefully watched the progress of the case.

Robert Harvey, aged forty-five, a sailor, of temperate habits, admitted Nov. 10, at three, a.m., under Dr. Carson, states that yesterday morning he was attacked with sore throat and hoarseness, but experienced no difficulty on respiration until one o'clock this morning. At present he is able to speak only in a whisper. The respiration is somewhat impeded, and attended with a rough loud noise, which evidently arises from some obstruction about the glottis. Pressure upon the larynx is attended with pain, as is also protrusion of the tongue. Swallowing is difficult and painful.

On examining the fauces, some slight degree of redness is perceived, with little or no swelling.

On introducing the finger into the mouth, the epiglottis is found to be much swollen, and feels like a cherry.

He states that at times he feels strangulated. Pulse 104, soft; tongue furred and dry, from the mouth being kept open; but little febrile disturbance; some bronchial rle upon the right side.

He was bled from the arm to sixteen ounces, from a large orifice, without any relief to the symptoms; and some leeches were applied to the larynx, but the respiration becoming rapidly worse, and the spasmodic attacks more frequent, the leeches were removed, and the operation of laryngotomy performed in the usual manner. No difficulty was experienced, and the introduction of the tube gave rise to but slight irritation. As soon as the coughing had ceased, he breathed through the tube, and expressed himself as being much relieved. The countenance, which had previously been anxious and distressed, now assumed its natural expression. At five, a.m., two hours after admission, he was placed in bed, and took a quarter