Puerperal Fever as a Private Pestilence. By OLIVER WENDELL HOLMES, M.D., Parkman Professor of Anatomy and Physiology in Harvard Uni-

versity. Pp. 60. Ticknor & Fields.

The admirable Essay entitled "The Contagiousness of Puerperal Fever," read before the Boston Society for Medical Improvement, in 1843, and printed in April of that year, in the N. E. Journal of Medicine and Surgery, has just been most opportunely re-published, with an "Introduction" emphatically demanded. Its accomplished author tells us that "the Essay can hardly be said," previously, "to have been fully brought before the Profession." If this be so, it is time that it was re-printed, so that every medical man in the land may hold a copy. When doctrines plainly repugnant to reason, and even to the commonest perception, are promulgated from professorial chairs, we may congratulate both ourselves and the public that there is boldness and truth enough yet left to denounce such terrible teachings.

Notwithstanding its author's assertion above referred to, the Essay has been long enough known and thoroughly enough appreciated, to call forth the sincerest approbation and gratitude, and its re-appearance, at this time,

awakens a new and peculiar satisfaction.

The Essay appears without any change, of phraseology even, and we are quite willing, in the words of its writer, to "leave it to take care of itself." If we do not mistake, it will "take care" of a deal of error implanted in the minds of learners, and prove an effectual antidote to a bane so widely spread.

It is especially with reference to the added "Introduction" that we in-

•tend to say a few words.

light of such demonstration.

And first, we do not believe that any "practitioner," or any "more mature student," who meets with this pamphlet will think it a "trouble to follow" Dr. Holmes through it; we are sure, rather, that it will not be laid down until every word is read.

While the deductions are so clear and logical and the evidence so strong that the youngest student can understand the whole at the first reading, there is a noble, manly language used, and a beautiful tenderness of feeling manifested toward woman in her sacred relation of mother, which will win for these pages more than one perusal. The medical student must be a bold man, indeed, who, remembering these warning sentences, can carry out, in his future practice, the death-bearing tactics they so faithfully expose. The "Waterloo" illustration, quoted from Dr. Watson (mide Introduction, p. 14), is peculiarly apposite. Were it not too awful a subject for jest, this slighting of the influence of contagion would be ludicrous in the

The first feeling experienced on hearing of the deliberate visiting of parturient or puerperal patients by a practitioner "in whose hands scarcely a female for weeks past has escaped an attack" of puerperal fever, is astonishment at what must be either his ignorance or his recklessness. Whichever it be, horror at the results, so unlimited as they may prove, at once overwhelms us, and disgust at the man puts its seal upon the whole

transaction.

Dr. Holmes well shows what is the physician's duty, so long as there is "any reasonable suspicion of his being the medium of transfer" of the disease: he has in fact but one course, viz., to resign his obstetric practice

for a sufficient time to insure safety to such patients.

Let the medical student learn his duty first; aye, long before he explores the minutize of science! The man who forgets his relations to humanity can never be fitly entrusted with its dearest interests! Better that he fail, forever, to attain professional success (if it be estimated by the number of his patients alone), than that he open the grave to even one, who is, or is to be, a mother, and who "trusts her life, doubly precious at that eventful period," to his care.

There are sentiments in this Introduction, and in the Essay itself, which do the heart good, and honor the writer more even than does his unwearied research, his close discrimination, or his far-reaching scholarship. In his own strong language of appeal, we would "entreat those who hold the keys of life and death to listen this once" to a voice which carries with it a conviction that neither rhetorical flourishes nor coarse and disrespectful insinuations can stifle.

"Persons," indeed, "are nothing in this matter"—the incompatibility of doctrines, however, so "deadly," is a subject for the solemn reflection of every physician. Who, that is a man, would wish—how can he dare—to allow even the shadow of a risk of deadly agency on his part to cross the

threshold with him on an errand professedly of aid and mercy.

It is indeed a work of supererogation in us, even were it quite fitting, to eulogize what Copland and Ramsbotham and Farr, abroad, and a host of other distinguished men at home, have praised in such choice terms; we have merely desired to express our own feelings in regard to a production, the first prompting from which is to make us wish to give the author our earnest and respectful thanks; and the next, that every one who values the

honor of the profession and the happiness of the community may read and ponder what is done so well.

One remark has arrested our attention, which may claim a word of notice. On p. 20th, M. Paul Dubois is mentioned as being "cited by Dr. Meigs as a sceptic." It was our good fortune, during the winter of 1846, to see much of Professor Dubois, at one of the lying-in hospitals in Paris, to which he is attached (L'Hopital des Cliniques); and we well remember, at a morning visit, when a case of puerperal fever was declared in one of the wards, the promptitude with which he ordered the room to be cleared, not only of its patients, but of its furniture; and the unfortunate subject of the disease to be placed by herself, while no more patients were to be admitted to the Hospital until a sufficient time had elapsed to give reasonable assurance that it would be safe for them to be received. It seems to us that this had but little the appearance of scepticism as to the contagious nature of the disease, and that if M. Dubois be doubtful upon the "point at is-

sue," he at least was wise enough to be exceedingly safe in his management. In conclusion, we are inclined to attribute the "mental disorganization," referred to upon page 23d of Dr. Holmes's "Introduction," to the "negative" rather than to the "affirmative" side of the argument. "Quem

Deus vult perdere, prius dementat !"

There are no better words with which to terminate our remarks upon this subject, than those of the author himself:—"Indifference will not do here; our journalists and committees have no right to take up their pages with minute anatomy and tediously-detailed cases, while it is a question whether or not the 'black-death' of child-bed is to be scattered broadcast by the agency of the mother's friend and adviser. Let the men who mould opinions look to it; if there is any voluntary blindness, any interested oversight, any culpable negligence, even, in such a matter, and the fact shall reach the public ear; the pestilence-carrier of the lying-in chamber must look to God for pardon, for man will never forgive him."

"PUERPERAL FEVER AS A PRIVATE PESTILENCE." -- A REVIEW.

[Communicated for the Boston Medical and Surgical Journal.]

Tens able and eloquent production is a re-print, with additions, of a pamphlet published in 1843, to prove that puerperal fever is a contagious disease. To our own mind it has proved this point conclusively. Highly favorable opinions were long ago expressed of its ability and of the force of its argument. We quote a few from foreign sources. Copland, in his Dictionary, affirms it to be a "very sensible and able memoir," and quoting it freely, adopts the language of Dr. Holmes, in saying that "the fact of the contagious nature of this malady is completely set at rest by the evidence." Robert Storrs, an English writer upon this subject, whose paper is endorsed in being quoted in the annual report of the English Registrar-General (1843), says, "Dr. Holmes's paper proves, I think indisputably, the contagiousness of this disease." Ramsbotham, in his Midwifery, says of it-" The best paper in any language, with which I am acquainted, written to prove the highly contagious nature of puerperal peritonitis, is by Dr. Oliver Holmes.*** It is a masterly performance, and well worth perusal by any sceptics on the subject."

Among the believers in the contagiousness of this disease are the following, cited by Dr. Holmes:—"Gordon, John Clarke, Denman, Burns, Young, Haighton, Good, Waller, Blundell, Gooch, Ramsbotham, Douglas, Lee, Ingleby, Locock, Abercrombie, Alison, Travers, Rigby and Watson." The point of discussion we presume to be this: Is puerperal fever sometimes contagious, and remarkably so? Nobody believes that exposure is always followed

^{*} Puerperal Fever as a Private Pestilence. By Oliver Wendell Holmes, Parkman Professor of Anatomy and Physiology in Harvard University.

by contagion. On the contrary, a puerperal patient is no more likely to contract this disease from an affected patient or from the physician who has attended her, than she is to contract smallpox, if unvaccinated, from similar exposure to that disease. Instances of such escape and exemption are within the knowledge of every physician. Yet a chance of contagion exists; sometimes to an alarming extent. The opinions to which Dr. Holmes has been conducted by the evidence, give rise to such expressions as the following, from his pamphlet:—

"I cannot doubt that most readers will be satisfied and convinced, to loathing, long before they have finished the dark obituary calendar laid before them."

"The number of consecutive cases, in many-instances frightful."

"It does appear a singular coincidence, that one man or woman should have ten, twenty, thirty, or seventy cases of this rare disease, following their footsteps with the keenness of a beagle, through the streets and lanes of a crowded city, while the scores that cross the same paths on the same errands know it only by name. It is a series of similar coincidences that has led us to consider the dagger, the musket, and certain innocent-looking white powders, as having some lit-

tle claim to be regarded as dangerous."

"I have no wish to express any harsh feeling with regard to the painful subject that has come before us. If there are any so far excited by the story of these dreadful events, that they ask for some word of indignant remonstrance, to show that science does not turn the hearts of its followers into ice or more, let me remind them that such words have been uttered by those who speak with an authority I could not claim.* It is as a lesson rather than as a reproach that I call up the memory of these irreparable errors and wrongs. No tongue can tell the heart-breaking calamity they have caused; they have closed the eyes just opened upon a new world of love and happiness; they have bowed the strength of manhood into the dust; they have cast the helplessness of infancy into the stranger's arms, or bequeathed it, with less cruelty, the death of its dying parent. There is no tone deep enough for regret, and no voice loud enough for warning. The woman about to become a mother, or with her new-born infant upon her bosom, should be the object of trembling care and sympathy wherever she bears her tender burden, or stretches her aching limbs. The very outcast of the streets has pity upon her sister in degradation, when the seal of promised maternity is impressed upon her. The remorseless vengeance of the law, brought down upon its victim by a machinery as sure as destiny, is arrested in its fall at a word which reveals her transient claim for mercy. The solemn prayer of the liturgy singles out her sorrows from the multiplied trials of life, to plead for her in the hour of peril. God forbid that any member of the profession to which she trusts her life, doubly precious at that eventful period, should hazard it negligently, unadvisedly, or selfishly!"

After this forcible expression of opinion, fully authorized, as we think, by the evidence which constitutes the body of the pamphlet, and to which we shall presently allude, it will be asked whether any contrary opinion is entertained upon this subject. In reply, it may be stated that in a recent work, Prof. Meigs, of the Jefferson School of Pennsylvania, has zealously maintained the noncontagious character of the disease; while Prof. Hodge, of the University of Pennsylvania, has supported the same view in an introductory address to that school of medicine.

"The teachings," says Dr. Holmes, "of the two Professors in the great schools of Philadelphia are sure to be listened to, not only by their immediate pupils, but

^{*} Dr. Blundell and Dr. Righy in the works already cited.

by the profession at large. * * * * I ask no personal favor; but I beg to be heard, in behalf of the women whose lives are at stake, until some stronger

voice shall plead for them."

"Let the men who mould opinions look to it; if there is any voluntary blindness, any interested oversight, any culpable negligence, even, in such a matter, and the facts shall reach the public ear; the pestilence-carrier of the lying-in chamber must look to God for pardon, for man will never forgive him."

This public teaching of the doctrine of non-contagion is one apparent motive for the present publication. But we think that Dr. Holmes exaggerates the effect of any public announcement of opinion whatever, provided it can be met with such evidence and authority as that presented in this instance upon the other side. It is true that Prof. Meigs says—

"I have, in numerous instances, gone from the bedside of women dying with childbed fever, whether sporadic, or to the most malignant degree epidemic, without making my patients sick. I have also endeavored to assist my brethren, when they had such cases and I had none."

And in another place—"I have long ago decided for myself to go on" doing so. But a part, at least, of the public seem to distrust these opinions of Prof. Meigs; as we infer when he says—

"I have been unceremoniously set aside, after having been for months engaged, even for some who owed me impayable gratitude for the services I had for years rendered them. And this treatment I got, not because I merited it, for I did not merit to be regarded as a private pestilence, nor was I found to be so, in fact, by those who had more good sense, or who could appreciate the feelings with which a physician finds himself to be looked upon as a peripatetic pestilence, or poisoner of women for love of gain, or what is worse, stupidity."

Prof. Meigs, as a representative of the theory of non-contagion, appears to overestimate the value of his negative evidence, especially in the face of the extraordinary array of positive testimony offered in the present case. It is quite possible that, as he affirms, he has never transmitted the disease from one patient to another; but it does not follow that others have been as fortunate. If puerperal fever has followed in the track of any practitioner through a dozen successive labor cases, when it occurred no-where else in that vicinity, the reasoning faculty will associate these cases with their medical attendant. When this occurs again and again, such an inference is inevitable. But Prof. Meigs has little charity for those who differ from him in opinion. The late Dr. Gooch, "an admirable writer, and most learned man, a most firm believer in the contagion of puerperal fever," is a "gobemouche" of material to feed his prejudices upon this subject; and the efforts of certain younger, or, as Prof. Meigs designates them, "sophomore writers," are "dreamings, jejune and fizenless"; an expletive we have not found in any human dictionary. Yet Prof. Meigs can speak with force upon the other side. In the following startling picture, the consequences of his theory seem to rise before the imagination of the non-contagionist almost like a nightmare.

"Is contagion a truth? Then, for heaven's sweet sake, I implore you not to lay your impoisoned hands upon her who is committed to your science and skill and

charitable goodness, only for her safety and comfort, and not that you should, after collecting fees, soon return her to her friends a putrid corpse. horrid idea!"

Horrid, indeed! Let us hope that the most callous obstetrician would recoil from so hideous a way of getting his fees. But the exclamation is more suggestive of the emotions of some tender miss, who furtively musing on the contingencies which may result from the love she hopes to bear her future lord, accidentally peruses Prof. Meigs's statement, and is petrified by his circumstantial revelation of professional practices.

A few cases will give an idea of the general character of the evi-

dence adduced by Dr. Holmes.

"In a letter to be found in the Lond. Med. Gaz. for Jan., 1840, Mr. Roberton, of Manchester, makes the statement which I here give in a somewhat condensed form.

"A midwife delivered a woman on the 4th of December, 1830, who died soon after with the symptoms of puerperal fever. In one mouth from this date the same midwife delivered thirty women, residing in different parts of an extensive suburb, of which number sixteen caught the disease and all died. were the only cases which had occurred for a considerable time in Manchester. The other midwives connected with the same charitable institution as the woman already mentioned, are twenty-five in number, and deliver, on an average, ninety women a week, or about three hundred and eighty a month. None of these women had a case of puerperal fever. 'Yet all this time this woman was crossing the other midwives in every direction, scores of the patients of the charity being delivered by them in the very same quarters where her cases of fever were

happening.'
"Mr. Roberton remarks, that little more than half the women she delivered days all escaped, on others only during this month took the fever; that on some days all escaped, on others only one or more out of three or four; a circumstance similar to what is seen in other

infectious maladies."

And again—

"Dr. Condie called the attention of the College of Physicians of Philadelphia, in 1842, to the prevalence, at that time, of puerperal fever of a peculiarly insidious and malignant character. 'In the practice of one gentleman extensively engaged as an obstetrician, nearly every female he has attended in confinement, during several weeks past, within the above limits' (the southern sections and neighboring districts), 'had been attacked by the fever.'

"An important query presents itself, the doctor observed, in reference to the particular form of fever now prevalent. Is it, namely, capable of being propegated by contagion, and is a physician who has been in attendance upon a case of the disease, warranted in continuing, without interruption, his practice as an Dr. C., although not a believer in the contagious character of many of those affections generally supposed to be propagated in this manner, has nevertheless become convinced by the facts that have fallen under his notice, that the puerperal fever now prevailing is capable of being communicated by contagion. How otherwise can be explained the very curious circumstance of the disease in one district being exclusively confined to the practice of a single physician, a Fellow of this College, extensively engaged in obstetrical practice—while no instance of the disease has occurred in the patients under the care of any other acconcheur practising within the same district; scarcely a female that has been delivered for weeks past has escaped an attack?

"Dr. Rutter, the practitioner referred to. 'observed that after the occurrence of a number of cases of the disease in his practice, he had left the city and remained absent for a week, but on returning, no article of clothing he then wore having been used by him before, one of the very first cases of parturition he attended was followed by an attack of the fever, and terminated fatally; he cannot readily, therefore, believe in the transmission of the disease from female to female,

in the person or clothes of the physician.'

"The meeting at which these remarks were made was held on the 3d of May, 1842. In a letter dated December 20, 1842, addressed to Dr. Meigs, and to be found in the Medical Examiner,* he speaks of 'those horrible cases of puerperal fever, some of which you did me the favor to see with me during the past summer,' and talks of his experience in the disease, 'now numbering nearly seventy cases, all of which have occurred within less than a twelvemonth past.'"

"A young practitioner, contrary to advice, examined the body of a patient who had died from puerperal fever; there was no epidemic at the time; the case appeared to be purely sporadic. He delivered three other women shortly afterwards; they all died with puerperal fever, the symptoms of which broke out very soon after labor. The patients of his colleague did well, except one, where he assisted to remove some coagula from the uterus; she was attacked in the same manner as those whom he had attended, and died also.' The writer in the British and Foreign Medical Review, from whom I quote this statement—and who is no other than Dr. Rigby—adds, 'We trust that this fact alone will forever silence such doubts, and stamp the well-merited epithet of "criminal," as above quoted,

upon such attempts.'

"From the cases given by Mr. Ingleby, I select the following. Two gentlemen, after having been engaged in conducting the post-mortem examination of a case of puerperal fever, went in the same dress, each respectively, to a case of midwifery. 'The one patient was seized with the rigor about thirty hours afterwards. The other patient was seized with a rigor the third morning after delivery. One recovered, one died. One of these same gentlemen attended another woman in the same clothes two days after the autopsy referred to. 'The rigor did not take place until the evening of the fifth day from the first visit. Result fatal.' These cases belonged to a series of seven, the first of which was thought to have originated in a case of erysipelas. 'Several cases of a mild character followed the foregoing seven, and their nature being now most unequivocal, my friend declined visiting all midwifery cases for a time, and there was no recurrence of the disease.' These cases occurred in 1833. Five of them proved fatal. Mr. Ingleby gives another series of seven cases which occurred to a practitioner in 1836, the first of which was also attributed to his having opened several erysipelatous abscesses a short time previously.'

"At a meeting of the Medical and Chirurgical Society before referred to, Dr. Merriman related an instance occurring in his own practice, which excites a reasonable suspicion that two lives were sacrificed to a still less dangerous experiment. He was at the examination of a case of puerperal fever at 2 o'clock in the afternoon. He took care not to touch the body. At 9 o'clock the same evening he attended a woman in labor; she was so nearly delivered that he had scarcely anything to do. The next morning she had severe rigors, and in forty-eight hours

she was a corpse. Her infant had erysipelas and died in two days."

The alliance of puerperal fever and erysipelas has been long more than suspected.

"I will only say," says Dr. Holmes, "that the evidence appears to me altogether satisfactory that some most fatal series of puerperal fever have been produced by an infection originating in the matter or effluvia of erysipelas."

A long array of such evidence is offered, much of it in detail, some quoted, some here for the first time given to the public. In the words of Dr. Holmes,

"More than thirty strings of cases, more than two hundred and fifty sufferers from puerperal fever, more than one hundred and thirty deaths, appear as the results of a sparing estimate of such among the facts I have gleaned as could be numerically valued. These facts constitute, we may take it for granted, but a small fraction of those that have actually occurred. The number of them might be greater, but 'tis enough, 't will serve,' in Mercutio's modest phrase, so far as

^{*} For January 21, 1843.

frequency is concerned. For a just estimate of the importance of the singular circumstance, it might be proper to consult the languid survivors, the widowed husbands, and the motherless children, as well as 'the unfortunate accoucheur.'"

"I only ask the student to read the facts stated by Dr. Condie, as given in my Essay, and say whether or not a man should allow his wife to be attended by a practitioner, in whose hands 'scarcely a female that has been delivered for weeks past has escaped an attack,' while no instance of the disease has occurred in the patients of any accoucheur practising in the same district. If I understand Dr. Meigs and Dr. Hodge, they would not warn the physician or spare the patient under such circumstances. They would 'go on,' if I understand them, not to seven, or seventy, only, but to seventy times seven, if they could find patients. If this is not what they mean, may we respectfully ask them to state what they do mean, to their next classes, in the name of humanity, if not of science.'

When it is remembered that all this evidence is arrayed to support the position, not that puerperal fever is always contagious, but that it is often so, and that it is sometimes contagious in a virulent and alarming degree, and that it calls for great precaution on the part of the practitioner; the question must be considered as settled, definitively. It surely will not excite surprise that new truth should meet with opposition. Such is its frequent experience. We need only recur to the yet recent history of anæsthesia, which neither opposed the daily interests of family practitioners, nor did it conflict with preconceived opinion; and yet, even at this day, with the acclamation of the world in its behalf, it has, if we are well informed, some few opponents, who have continued so consistent from the first as still to maintain a firm and undeviating opposition to its use. We desire to express the full strength of our conviction of the futility of opposition to preponderating evidence. To give it utterance, we could almost avail ourselves of the gratuitous expletive bestowed upon the unfortunate "jejune and sophomore writers" before mentioned. But we entertain only the highest consideration for the distinguished professor of the Philadelphia school, and hesitate to meddle with a rhetorical engine whose latent forces we are wholly unacquainted with.

The following are Dr. Holmes's conclusions. We commend the pamphlet to every physician, as a convincing argument, and a pro-

duction of distinguished literary ability.

"If any should care to know my own conclusions, they are the following; and in taking the liberty to state them very freely and broadly, I would ask the inquirer to examine them as freely in the light of the evidence which has been laid before him:—

"1. A physician holding himself in readiness to attend cases of midwifery, should never take any active part in the post-mortem examination of cases of pu-

erperal fever.

"2. If a physician is present at such autopsies, he should use thorough ablution, change every article of dress, and allow twenty-four hours or more to elapse before attending to any case of midwifery. It may be well to extend the same caution to cases of simple peritonitis.

"Similar precautions should be taken after the autopsy or surgical treatment of cases of erysipelas, if the physician is obliged to unite such offices with his

obstetrical duties, which is in the highest degree inexpedient.

"4. On the occurrence of a single case of puerperal fever in his practice, the physician is bound to consider the next female he attends in labor, unless some

weeks, at least, have elapsed, as in danger of being infected by him, and it is his duty to take every precaution to diminish her risk of disease and death.

"5. If within a short period two cases of puerperal fever happen close to each other, in the practice of the same physician, the disease not existing or prevailing in the neighborhood, he would do wisely to relinquish his obstetrical practice for at least one month, and endeavor to free himself by every available means from any noxious influence he may carry about with him.

"6. The occurrence of three or more closely-connected cases, in the practice of one individual, no others existing in the neighborhood, and no other sufficient cause being alleged for the coincidence, is prima facie evidence that he is the ve-

hicle of contagion.

- "7. It is the duty of the physician to take every precaution that the disease shall not be introduced by nurses or other assistants, by making proper inquiries concerning them, and giving timely warning of every suspected source of danger.
- "8. Whatever indulgence may be granted to those who have heretofore been the ignorant causes of so much misery, the time has come when the existence of a private pestilence in the sphere of a single physician should be looked upon not as a misiortune but a crime; and in the knowledge of such occurrences, the duties of the practitioner to his profession, should give way to his paramount obligations to society."