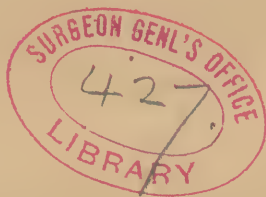
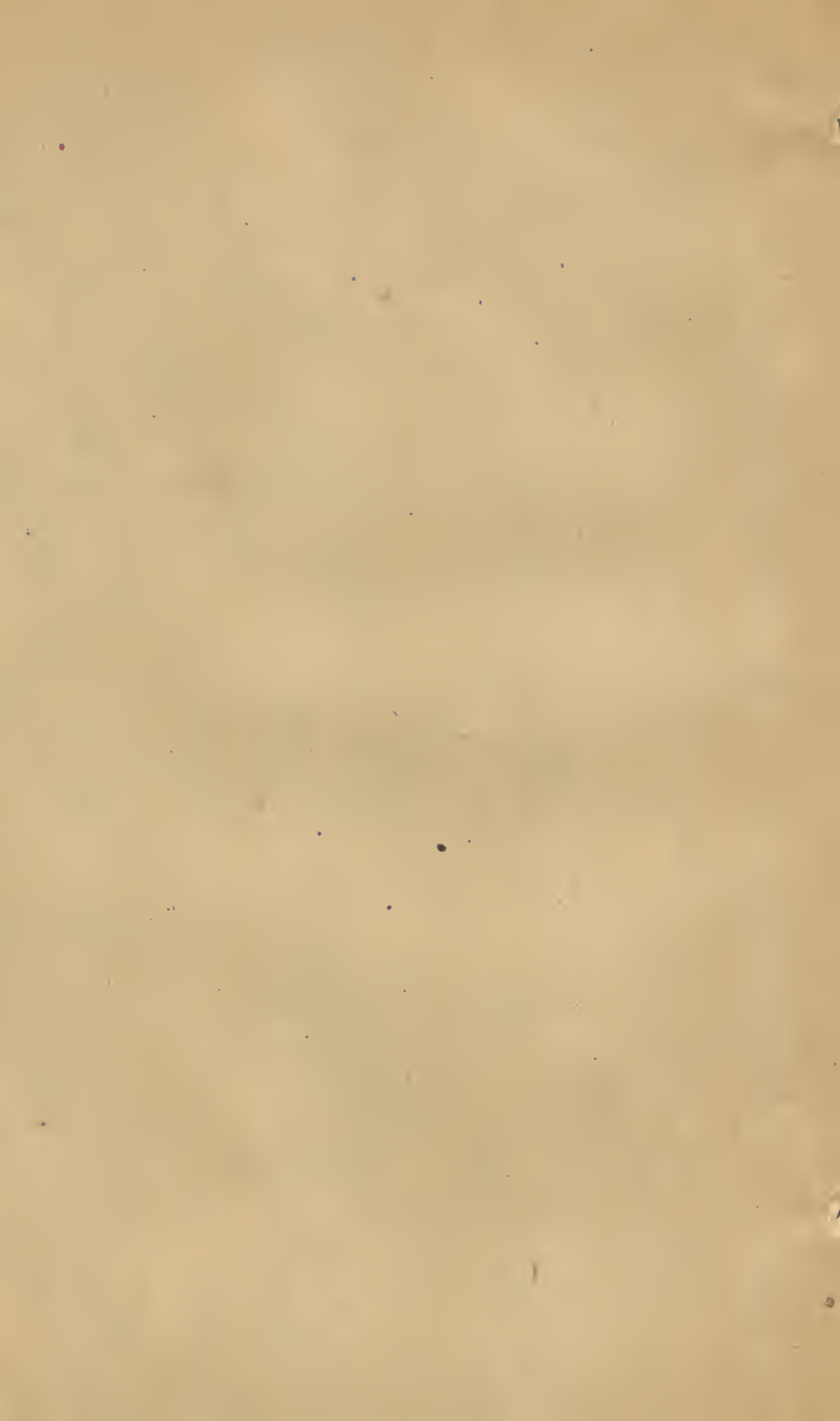


STORER (H.R.)

Studies of abortion.





STUDIES OF ABORTION.

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I.



STUDIES OF ABORTION.

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IN a series of papers published in 1858-60,* the writer had occasion to discuss abortion in one only of its several aspects, that relating to medical jurisprudence. The general interest then evinced in his labors by the profession both at home and abroad, the approbation and encouragement he received, even from gentlemen who took decided issue with some of his views, and above all, the practical result of the whole matter (which has proved precisely that aimed at in the outset), namely, the awakening of the public conscience, the enlightenment of the public mind as to the value of foetal life and the vindication of the character of the profession on this point alike in its own sight, that of the law and of the community, by the unanimous voice of the medical press,† are all convincing evidence of the importance and legitimacy of the investigation. This, however, though handled with all the ability I was then master of, was not exhausted, and it may perhaps be resumed at some future period.

In the present papers I wish to enter the field of abortion from an entirely different direction, that pertaining to obstetrics alone; and I think that it will be made to appear that here also there is

* Proceedings of the American Academy of Arts and Sciences, Dec., 1858, vol. iv., p. 109. North American Medical-Chirurgical Review, January to November, 1859.

On Criminal Abortion in America. Lippincott & Co., Philadelphia. 1860. Pp. 107.

† In verification of this statement, I refer to the current files of every medical journal, to the published Transactions of the National and minor Medical Associations, to many medical addresses, as that by Dr. Miller of Louisville at New Haven in 1860, and to nearly every general obstetric work of any importance issued in this country since that date—Bedford's Principles and Practice of Obstetrics, for instance.

much of interest that has not been generally appreciated, many practical questions to be stripped of uncertainties and to be solved. While, therefore, I have above referred to the criminal aspects of abortion in a way I would gladly have made less personal, it is that I may the more forcibly present beforehand the importance of the research now undertaken, and ask for it immunity from any bias that former opposition might occasion.

In no department of medicine has such immense progress been made of late years as in obstetrics. Not merely have its theoretical and more strictly scientific boundaries been widened, but as an art, in practical every-day results, it has accomplished more in saving human life than any other branch of the profession. In the treatment of all the stages of labor at the full time this is now an acknowledged fact, and is proved both by the results of individual practice and of mortuary statistics, as compared with former years; and whether I instance the suppression of puerperal fever by recognizing its contagious character and the necessity of attending to an obvious sanitary law; the greater abstinence from meddling midwifery; the judicious use of anæsthetics in shortening labor and suppressing or preventing puerperal convulsions; the separation of the placenta in presentation of that organ; the substitution of turning and the long forceps for craniotomy; or the induction of premature labor when required, the accoucheur may feel a great and reasonable pride. What I have here stated as the result of closer and more thorough study of the processes of labor at the full time, I now claim may be also accomplished in the case of abortions; which, as a general rule, while always when completed necessarily implying one death, that of the child, are also generally more fatal to the subsequent health of the mother, and I think I may even say as fatal, on the large scale, to her life, as labors at the full period.

The causes of an immediately or secondarily fatal result of labor at the full period are few; in abortion nearly every one of these is present, with the addition of others peculiar to the sudden and untimely interruption of a natural process and the death of the product of conception. There is the same or greater physical shock, the same or greater liability to hæmorrhage, the same and much greater liability to subsequent uterine or ovarian disease. To these elements we must add another and by no means unimportant one;

a degree of mental disturbance, often profound, from disappointment or fear, that to the same extent may be said rarely to exist in labors at the full period.

Physicians as yet are hardly agreed as to the essential nature or natures of the accident, it would seem to occur from so many and varying causes, and yet it is extremely important at the very beginning of this inquiry that our ideas upon this point should be settled and correct; and then again it is of the utmost value to distinguish between proximate and predisposing causes. How different, for instance, the nature of abortions arising from mechanical violence, external or internal; from a general virus pervading the maternal or foetal system; from disease of the uterine walls, or of the placental tissue, or the accidental extravasation of blood between them; and how different the treatment should be, though so generally the same.

In the diagnosis, also, of abortion there is the same latitude to be observed, and the error that may be made is one involving not merely the reputation of the attendant as a skilled obstetrician, but the life of the patient, often also her moral character. To these chances must be added also the possibilities of preventing the completion of the morbid process, and thus of frequently saving the life of the child. In cases of secondarily transmissible diseases, as syphilis for instance, it will be seen that these inquiries receive remarkable importance as affecting the reputation and moral standing of persons who would have otherwise seemed the least liable to suspicion.

There is scarcely a phase of uterine or ovarian disease that may not simulate, or be simulated by, some form of abortion, common or extreme; and there is scarcely one that may not induce or be induced by the same disturbance of gestation. How often has abortion been mistaken for dysmenorrhœa or menorrhagia, and again how many virtuous women laboring under these irregularities of function have been charged with a breach of moral discipline. In like manner has the partially detached ovum been mistaken for polypus, the expulsive contractions of the uterus for intestinal flatulence, the cachexia from retention of a dead and putrid foetus or membranes for malignant or other incurable disease.

If, as I have said, extreme importance attaches to the correct differential and causative diagnosis of abortion, this is essentially the

case also with its treatment. And here I affirm that the duty of the physician is in most cases not, as is generally attempted, to complete the abnormal process as soon as possible, but to arrest it; for I am satisfied, from my own experience in very many cases where there no other reason, that this can often be done even in cases apparently desperate as far as the foetus is concerned, and yet its life be saved. Should, however, the expulsion of the ovum be already effected or be beyond prevention, it becomes of the utmost importance that the accident should be thoroughly completed; the interesting cases bearing upon this point that have been reported in this city will be referred to hereafter, as they constitute, with those published during the present month by Dr. Matthews Duncan, of Edinburgh,* a most important contribution to our knowledge of the subject.

But the abortion completed, there is an immense field for exploration still open. The frequent or constant repetition of the occurrence in the same patient, whether from menstrual periodicity, original or acquired disease of mother or foetus, suggest questions alike of scientific and the most strictly practical interest, and it is just here that professional reputations are to be made. I firmly believe that most if not all of these periodical cases, whatever their intrinsic nature or exciting cause, are yet to be cured and their character to become thoroughly understood. Several of the problems alluded to have already been explained; oxygenated salts prevent abortion when depending on certain forms of placental disease—a specific constitutional treatment, it may even be of the husband, enables in other cases a subsequent pregnancy to progress without hindrance. These facts merely open the subject, while proving, however, what grounds we have for expecting ultimate and general success.

Before proceeding further, one erroneous supposition, arising from easily explainable misstatements, is to be met and dealt with. It has been assumed by some, and on the authority of writers of repute, that abortions from other than a criminal cause are really very rare. I will instance Churchill, who probably holds at present, and very deservedly, the foremost rank as obstetrical authority in this country. He states, striking an average from statistics afforded by Collins, Beatty, Deubel, La Chapelle and himself, that there are

* On the Results of Imperfect Deliverance. *Edinburgh Medical Journal*, January, 1863, page 589.

over seventy-eight labors at the full time to every abortion.* The same result is also given, from precisely the same data, by Dr. Clay, of Manchester, England, of recognized weight as an obstetrical writer.†

This statement I shall now proceed to refute, by the very evidence these gentlemen have produced for its verification. For this purpose I have thrown their statistics into the following tabular form:—

	Total Cases.	Abortions or premature labors.	Proportion of do.
La Chapelle	21,960	116	1 to 189
Beatty	1,200	21	1 to 62
Collins	16,414	293	1 to 56
Churchill	1,705	65	1 to 26
Deubel	420	35	1 to 12

By the above it is perceived that while one observer placed the frequency of abortions as low as once to every 189 labors, another, who was probably just as unbiassed, supposed it to be once to 12, a difference of over seventeen fold; while Churchill himself, though broadly stating the proportion to be once to over 78 labors, in reality had found it by his own experience to be at least once to every 26 labors, or in other words precisely three times as frequent as he would have us to believe.

Again: in striking the average from a large number of cases collected by different observers in different countries, allowance must be made, as in all other researches of the kind, for what in astronomical language would be termed the personal equation of the observers; that is to say, for their general accuracy, their weight as authority, and the purpose, more especially, for which the observations were made. The differences between the several observers in this instance, as evidenced by their results, is so very marked as to render it impossible for us to sum these together.

Moreover, to render an average, computed from more than three elements, of probable approximation to the truth, it is necessary that the proportion should regularly progress, positively or negatively, towards either extreme; that is, that there should be present some evident ratio or law of increase or decrease. But, on referring to the

* Theory and Practice of Midwifery, 4th London Edition, p. 167.

† Obstetric Cyclopaedia, p. 21.

table presented, it will be found that while Madame La Chapelle, Collins, Churchill, Beatty and Deubel, as regards their total number of cases presented, stand to each other as the numbers 1 : 2 : 3 : 4 : 5, their respective rate of proportion of special cases to their sums total is as 5 : 3 : 2 : 4 : 1. Viewed in this light the unreliability of the average becomes the more evident.

This is not all, however. The writers referred to, as indeed most others, have not taken care to eliminate those cases of advanced pregnancy which should more properly be classed as premature births, as distinguished from the earlier cases, or abortions properly so called. The importance of taking this element into consideration will be seen both from its own intrinsic value and from another fact pertaining to the same collection of statistics; namely, that being mostly compiled from the records of lying-in hospitals, these cases would very naturally and almost of necessity be miscarriages at an advanced period of gestation, and therefore can furnish no reliable data on which to base an estimate of the comparative frequency of abortions.*

The fallaciousness of medical statistics in the settlement of questions of importance is seldom more marked than in this instance. Compiled for an entirely different purpose, their impartiality on this account cannot be appealed to, inasmuch as they do not contain the only element on which an opinion can be grounded as to the frequency of the occurrence, even in hospital practice alone—to wit, the number of abortions properly so called, and distinguished from premature births; and yet the conclusion drawn from such erroneous premises has been, till now, suffered to remain unchallenged.

Lastly: the infrequency of abortions as compared with labors at the full period is disproved by the experience of every physician in special or large general practice who will faithfully investigate the subject. The truth of this statement has been fully verified in the instance of abortion criminally induced, by many of my professional friends who were at first inclined to doubt the accuracy of my inferences on that point; with reference to abortions more naturally occurring, the evidence is of course more easily arrived at and is in

* In this connection, I would refer to an interesting paper by Mr. Whitehead in the Medical Times and Gazette for the past month, and to a most comprehensive article upon "The Bar Sinister" in the British and Foreign Medico-Chirurgical Review for the present month.

consequence proportionately more striking. In many cases of sterility it will be found that the number of abortions in a single patient have been almost innumerable; and, it may be added, in a large proportion of the cases of uterine disease occurring in the married, inquiry as to their past history will reveal abortions, unsuspected perhaps even by the family physician, as the cause. It is not so much the general practitioner, the hospital attendant, or the accoucheur as such, who can testify as to the true frequency of abortion; for many cases, even of the most deplorably fatal results, do not seek for medical assistance at the time of the accident. The real balance sheet of these cases is to be made out by the hands which are more especially called to the treatment of chronic uterine disease.

Hotel Pelham, 25th January, 1863.



