An attempt to prove, on rational principles, that the term of human pregnancy may be considerably extended beyond nine calendar months : comprising the substance of evidence given in the Gardner peerage cause, before the House of Lords, July 4, 1825 / by John Power, M.D.

with the progress of reason, this extravagant and absurd rule was overturned. It was therefore considered to be a fair subject of inquiry for a Jury to decide whether the husband had access or not; and this was held to be the law in modern decisions. In the case of the King against Love, though the husband resided with his wife four months previous to her delivery, yet, from circumstances which came before a Jury, they held the child to be illegitimate. This argument was used on that occasion, that if a man married a woman who was delivered of a child soon after her marriage, that child was held to be legitimate, but it was not held to apply to the case, because, when a man married under such circumstances, he did it knowingly, and the presumption was that he believed the child to be his. The Banbury Peerage had been alluded to, as a case of physical impossibility; but this he denied it to be. It was a case solely of probabilities. The husband was 80 years of age; and though so old, yet, howsver improbable, there was no evidence to show that it was physically impossible he could have issue. He lived with his wife at the period of conception, during her gestation, and up to the birth. These were strong circumstances in favour of the legitimacy of the child, but there were other circumstances to outweigh that probability. There was the concealment of the birth, the ignorance of the husband that such a child existed, no mention of it in his will, his being called another name, these circumstances, and not the physical impossibility, of which there was no proof, rendered it so improbable that the child was his as to amount to a moral conviction. In that case it was ably and eloquently argued, by Lord Erskine, that the offspring must be held to be legitimate, unless physical impossibility were established, but this principle was controverted by Lord Ellenborough. The case came before all the Judges, who delivered it as their grave and solemn opinion that a strong moral conviction, without proof of physical impossibility, was sufficient to form a ground of illegitimacy. Mr. Tennant had alluded to the case of Foster and Cook, which, he said, had been decided on the principle of physical impossibility, but in whatever manner the question was decided, it made for his argument, because that case was referred by the Court of Chancery to a Jury, who were to determine, from all the circumstances, whether the child was legitimate or not. This was the principle he now contended for—that it was quite competent for their Lordships, judging from all the evidence laid before them, whether Mr. Jadies was the legitimate son of Captain Gardener or not. He was desirous that their Lordships should form a correct judgment of the principle upon which they were to decide this case, because, till they were satisfied of that, the evidence must be nugatory, as it must be considered entirely in reference to that principle. The Learned Gentleman was then proceeding to comment upon the evidence, when their Lordships stopped him, it being then four o'clock.

The case was further postponed till the 6th of April.

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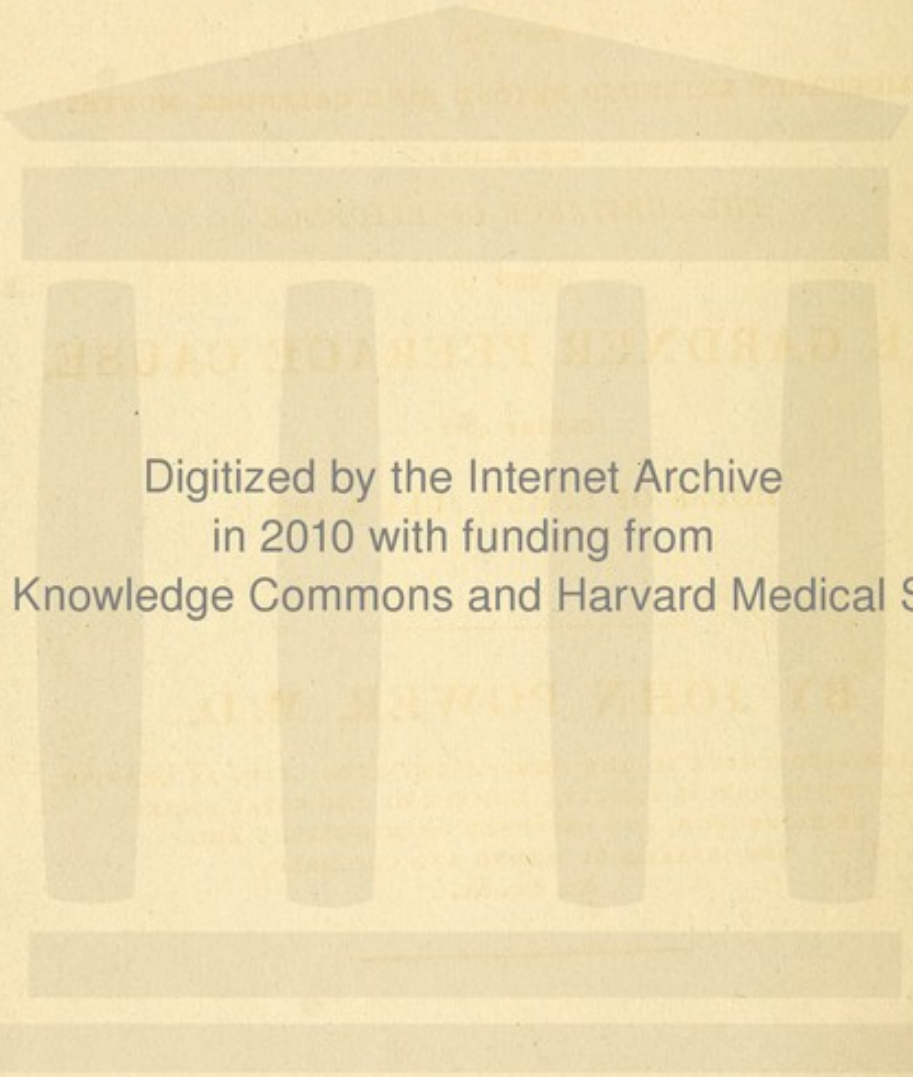

AN

ATTEMPT

TO PROVE, ON RATIONAL PRINCIPLES,

THAT THE

Term of Human Pregnancy

MAY BE

CONSIDERABLY EXTENDED BEYOND NINE CALENDAR MONTHS:

COMPRISING

THE SUBSTANCE OF EVIDENCE

GIVEN IN

THE GARDNER PEERAGE CAUSE,

BEFORE THE

HOUSE OF LORDS, JULY 4, 1825.

BY JOHN POWER, M. D.

PHYSICIAN-ACCOUCHEUR TO THE NEW WESTMINSTER LYING-IN CHARITY,
AND TO THE DORCAS SOCIETY; MEMBER OF THE ROYAL SOCIETY
OF EDINBURGH, AND LECTURER ON MIDWIFERY AND
THE DISEASES OF WOMEN AND CHILDREN,
&c. &c. &c.

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PREFACE.

THE Author, in giving evidence before the House of Lords, respecting the limits of human utero-gestation, was led to state that, in his opinion, its period admitted of an extension beyond what was generally regarded as the ordinary term; viz. nine calendar months: an opinion grounded, as he remarked, not only upon cases that had fallen under his observation, but also upon what appeared to him a rational theory, which he had long entertained with respect to the point in question. Their Lordships were pleased, in consequence, to direct him to explain the nature of that theory.

In complying with this requisition, the difficulties he had to contend with must be obvious, whether they be regarded as arising from the peculiar and obscure nature of the subject; the necessity of conveying his sentiments in a brief and intelligible manner, divested, as far as possible, of technicalities; or the want of preparation on his part, in being called

upon to make depositions of such a character before such an audience.

How far he succeeded in informing their Lordships, with respect to the theory in question, he is at a loss to determine; he is conscious, however, he could not have done that justice to the subject which its importance, in a physiological point of view, or as the basis of an interesting branch of medical jurisprudence, required; and, under this impression, he is induced to attempt, in the present pages, to define more accurately the doctrines he then advocated. This he deems not only a measure of justice due to himself, but to medical science at large; while at the same time it may lead their Lordships to a clearer comprehension of the interesting subject under their consideration; a subject which not only involves the rights of an individual, but with respect to which their decision is likely to establish a most important precedent in the laws of this country.

An admission of the theory in question would, without doubt, exert an important influence over the case before their Lordships, as enabling them to come to their decision upon satisfactory grounds—viz. rational principle; by which their Lordships, in this particular instance, will most probably be governed; the evidence of cases detailed by professional

men, as involving the hearsay information derived from their patients, and which is, consequently, regarded with so much doubt and suspicion, would then become points of secondary importance, or be considered only as fair illustrations, or corroborative facts.

Before concluding his prefatory matter, the Author begs to remark, that the present pages are, in great measure, extracted from a larger work, not long since published,* and which he has reason to believe is not wholly unknown to a considerable portion of the medical world.

* A Treatise on Midwifery, developing new Principles, which tend materially to lessen the Sufferings of the Patient, and shorten the duration of Labour, &c. &c. Second Edition. Simpkin and Marshall, 1823.

AN ATTEMPT,

&c. &c.

CHAP. I.

PRELIMINARY OBSERVATIONS.

ALTHOUGH the operations of nature admit, universally, of being referred to determinate laws, yet we are not warranted in inferring that the results of these laws are always the same. It is only so long as the circumstances under which their operation is elicited are similar that the effects will be uniform. Thus, if the ordinary food be taken into the stomach at an unusual time, the process of digestion is either suspended or imperfectly performed.

By such argument we may be brought to conceive that the growth of a child in the womb may be retarded, dentition protracted, the period of puberty delayed, and the natural causes of death anticipated or postponed. Is it unreasonable to presume that the natural time of labour may also be deferred?

Some, however, contend, that the time re-

quired for completing the generative process in many animals, evinces such an uniformity, as to prove it exempt from irregularity. This assuption, however, is founded upon error; since, on close investigation, it will be found that no animal necessarily observes a determinate period in perfecting its young. At the same time it may be remarked, that the habitudes and circumstances of those which evince the greatest regularity, are such as admit of little deviation.

In oviparous animals, for instance, as in birds, the necessary nutriment, and other principles of support, being previously enclosed within the egg, the only external circumstances by which the evolution of the young can be influenced, or which admit of variation, are air and warmth; if these be supplied in proper quantity, the evolution proceeds with precise regularity; if they are denied, it is more or less suspended; hence the process of incubation in these animals, which are generally thought to afford the strongest instances of regularity, admits of being protracted.

Another corroborative fact is, that if a hen is made to sit upon a number of eggs that have been laid in daily succession, the one last extruded will be the first hatched.

Those animals which are termed viviparous

or who mature their young in a womb, admit of considerable differences in the period of parturition; the reason of this is, that the supplies of nutriment, and the principle of detachment depend upon many circumstances connected with the vital powers of the mother, or which are external to the systems of herself or her young.

That parturition admits of being delayed with respect to the inferior viviparous animals, is well known to those who are conversant with them. Common observation has shown that the domestic ones, which come more particularly under man's superintendence, as the mare, the cow, and sheep, are very frequently the subjects of such irregularity; and with respect to the cow, it has been remarked, that the more calves she has had, the longer she exceeds the customary period; a fact readily explicable upon the theory which will presently be advanced, as depending upon the greater relaxation of the sides of the belly of the animal, produced by previous, or repeated, distention.

The difficulty of ascertaining the limits of human gestation is aggravated by a variety of circumstances; for instance, it is seldom possible to determine the exact time of conception, since we are acquainted with no unequivocal symp-

toms indicative of it;* again, it is well known to those who are conversant with the practice of midwifery, that labour, after it has actually commenced, may be suspended by slight causes, as agitation or depression of mind; nay, even when it has made considerable progress, it may from various sources of difficulty, be protracted two, three, or more days, and occasionally as many weeks; the birth of the child would hence be proportionately deferred.

It seem fair, therefore, to infer that human gestation admits of being postponed beyond the ordinary period of nine calendar months. It would, however, be an important corroboration, if a happy physiological explanation could be advanced relative to the nature and action of the causes which give rise to such protraction. The probability is, that this explanation would be found, in an investigation of the causes which excite labour at the natural period, since it is evident that any interference in the action, or application of such causes will necessarily tend to derange the functions to which they appertain; it is to the

*"Conceptio eorum qui post undecimum mensem editi sunt videtur latuisse. Illorum enim conceptus ignorant mulieres. Flatibus enim uteri sæpenumero occupati, postea coeundo gravidæ factæ, illud arbitrantur initium fuisse conceptionis, quod ex indiciis usitatis cognovissent."

Aristot. Hist. Anim. Lib. vii. c. 4.

investigation of these points that the remaining pages of the present essay will be directed, and with respect to them it may be remarked, that the theory which will be offered in explanation, is not grounded upon an imaginary principle, but upon facts observable in the generative economy, and therefore if the inferences from those facts are consistent, it may be regarded as a *rational theory;* and farther, if this be supported by fair analogy, and satisfactory cases, it must be admitted as a *demonstrated theory*, and accordant with strict physiological truth.

CHAP. II.

CERTAIN FACTS OBSERVABLE IN THE STRUCTURE OF THE UNIMPREGNATED AND IMPREGNATED WOMB.

THE womb, before impregnation, is situated in a cavity surrounded by a circle, or chain of bones, named the pelvis. It somewhat in form resembles a pear; but may, with more advantage to the intelligence of our argument, be compared to a wine flask, consisting like this vessel, of a body, an open mouth, and a neck, with a channel passing through the

latter, and leading from the mouth to a cavity situated within the body.

After impregnation, the womb progressively enlarges, so as to rise from out of the pelvis, and reach the pit of the stomach; at the same time it becomes more oval in its shape, now resembling an egg, the narrower end of which is turned downward, while the broader one lies in proximity with the stomach.

An important change also takes place in the *neck* of the womb; during the latter part of pregnancy it begins gradually to lessen, and at length entirely disappears, so that, just before labour comes on, the *body* and *mouth* alone remain, the latter being situated at the lower and narrower end of the oval.

The sides of the pregnant womb comprise a great number of fibres, which are capable of exerting all the properties of muscles, so as to fall occasionally into powerful muscular contraction. These fibres, however, are comparatively few, or wanting, near the mouth of the womb, the parts adjoining which are of a membranous, elastic, and dilatable structure—hence it would appear that the latter part of the womb, instead of contracting, is intended to dilate. Just before labour takes place, the size of the womb apparently *diminishes;* if its broader end has previously lain against the pit of the stomach, it now sinks down mid-

way between it and the navel. The body of the womb is found more compact; the motions of the child are restrained; and the woman knows from experience that labour is about to come on.

This diminution of bulk arises from the muscular fibres taking on a preparatory kind of contraction, and which being unconnected with pain, or any sensible feeling, may be named " the insensible contraction;" or, as being of a permanent nature, the " permanent contraction" of the womb; these terms will serve to distinguish it from the more powerful contractions, which afterwards come on by fits or paroxysms, accompanied by pain or considerable sensation, and constitute the *labour-pains.*

To explain this important phenomenon more fully it may be observed, that the gravid womb, however large it may become, is never full of its contents except when it is actually contracting under a labour-pain; on the contrary, until the insensible contraction comes on, its sides lie loosely around the contents like a bladder only three parts full of water. After the insensible contraction has taken place, this flaccidity more or less diminishes, so that the womb may now, not unaptly, be compared to a bladder nearly, but not quite full of water; hence arises the

lessening of its volume and greater compactness. Occasionally the insensible contraction is sufficiently forcible to open, to a degree, the mouth of the womb in the same way as the true labour-pains do, or to rupture the bag of membranes, by which the child is more immediately enveloped.

Another interesting fact remains to be detailed—the peculiar supply of nerves to the mouth of the womb.

The main trunk of the nerve *(hypogastric)* which chiefly supplies the womb, divides into two branches, one of which is expended upon the bladder and rectum; the other passes on to the womb, on approaching which, it spreads itself out like the expanded sticks of a fan, some of the branches of which pass obliquely upwards towards the upper or broad end of the body of the womb; the less oblique, or horizontal ones, pass directly to the lower parts of the body, and the *mouth* of the womb; while the remaining ones run obliquely downward towards the more external parts; the greatest crowd or number of branches, however, go to the *mouth of the womb.**

* See Dr. Hunter and Baillie's description of the Gravid Uterus.

CHAP. III.

ON LABOUR AND ITS CAUSES.

SECTION I. *On the nature of Labour.*

AT the end of *about* forty weeks from conception, when the child is sufficiently matured to be able to live independently of the mother's system, labour takes place.

The muscular fibres of the womb now fall into powerful contraction, and press the child, and its other contents, forcibly downward in the direction of the mouth of the womb, in consequence of which that part is opened, or dilated, and the child eventually expelled.

This dilating and expelling action comes on by fits or paroxysms, which repeat every few minutes until the child is born, and which, being universally accompanied by pain or excessive sensation, constitute the "labour-pains."

Section II. *On the exciting cause of Labour; comprising the Theory of Orificial Irritation.*

The contractions of the womb, which constitute labour, are excited in consequence of the mouth of the organ being irritated by its contents, and in much the same way as sneezing is occasioned by the irritation of snuff applied to the nose.

It has been shown (p. 13) that the mouth of the womb is supplied with a greater number of nerves than any other part of the organ, and it is an undeniable physiological inference, that it must possess a proportionate, high state of sensibility, or irritability. Now, as nature has done nothing in vain, it may fairly be concluded, that some intention is answered by this peculiar structure of the mouth of the womb. It is intended to prove that it becomes the means of exciting labour at its due and appointed season.

This view is remarkably confirmed by the great care which has been taken to prevent labour from coming on until the child is perfected, by the previous interposition of a barrier between the mouth of the womb and its contents, so as to prevent the latter from entering into contact with, and *irritating* the

former. This barrier is the *neck* of the womb, which it has been seen, (p. 11) continues unobliterated until just before labour takes place; unless this provision had been made, labour would come on prematurely, and the grand object of generation be defeated. The beautiful simplicity of the contrivance, and the gradual and undeviating manner in which it is done away with to admit of labour taking place, afford a most remarkable instance of the providence and wisdom of the Creator.

It appears, therefore, that at the end of gestation, the neck of the womb having disappeared, its contents come into contact with the sensible mouth and stimulate it; an action is in this way excited, that is then by symphathy communicated to the muscular fibres of the womb, which in consequence fall into powerful contraction and expel the child. In a similar manner, in the fore-mentioned analogy of sneezing, the irritation of snuff upon the sensible membrane of the nose, excites, by sympathy, violent contractions of the muscles concerned in respiration, with a view of removing, or expelling the irritating cause, which had primarily excited the sneeze.

Another circumstance must, however, be taken into account in this excitement of labour.

The mere apposition of the contents of the

womb against its mouth, is not alone sufficient to produce labour; they must be applied to, or pressed against the part, with more force than the power of gravitation, or accidental contact, alone can supply. This additional pressure is given by the insensible or permanent contraction before described, and which, according to its energy, will more or less increase the impulse upon the mouth of the womb. If this insensible contraction be wanting, or slight, notwithstanding the neck of the womb be fully obliterated, *labour will be delayed.*

Section III. *The Theory of Orificial Irritation strengthened by analogy.*

The principle of orificial irritation is applicable to a variety of other functions, besides parturition, so as to admit of a strong confirmation by analogy.

Every organ of the body is excited into its proper actions by the means of a stimulus—the eye by the irritation of light; the ear by the impulse of sound; the heart by the stimulus of blood; and the organs which remove excrementitious matters, as the bladder and rectum, by the irritation of their contents.

The manner in which the exciting stimulus produces the proper expulsive action of the

latter organs, will be found highly illustrative of the theory of orificial irritation, as applicable to labour.

The urinary and fæcal receptacles (the bladder and rectum) consist of muscular bags, the contents of which require to be retained for a time, and then expelled: the expelling structure, and the principle of action, of both these organs are precisely the same as have been described with respect to the womb. They are also, like the latter, furnished with barriers, named sphincters, to prevent them from discharging their contents prematurely, or until a proper accumulation has taken place: nor do these sphincters act as barriers only, they are also highly nervous and sensible; so as, like the mouth of the womb, to be admirably adapted to form the media, through which the expelling actions of the organs to which they appertain are called forth; and, what is remarkable, they are supplied with nerves from the very same common trunk as supplies the mouth of the womb itself.

Many facts concur to prove that these sphincters are actually the means of communicating excitement to the expelling muscles: in short, the expelling action may be produced by artificially stimulating them. As respects the organ of fæcal evacuation,

this fact is practically well known to medical men and nurses; and the phenomena accompanying calculus in the bladder, and diseases of the urethra, appear to prove that it is also applicable to the urinary organ.*

Section IV. *The Theory of Orificial Irritation confirmed by Facts and Practical Observations.*

It is a strong confirmation of the truth of this doctrine, that labour comes on soon after the contents of the womb, in consequence of the obliteration of the neck, are admitted into contact with the orifice: if the due pressure of insensible contraction be now superadded, labour immediately commences.

Another confirmation is, that labour may be excited at an earlier period than natural by an adventitious stimulation of the mouth of the womb. The possibility of influencing the actions of the womb in this way was known to the ancient as well as the more modern writers on midwifery, and used by them practically to promote labour.† That it admits

* The *medical* reader will find this subject more fully pursued in the Author's Treatise on Midwifery.

†" At constitit observatis, posse accelerari partum naturalem, dum digitis leniter, en sensim, diducitur osuteri—hoc methodo

of practical utility, is proved by the following case.

"Mrs. H—— was taken in labour with her first child in November, 1822: for many hours she made a very slow progress, the pains being slight and few. Having reason to consider the protraction an effect of deficient irritation of the mouth of the womb, in consequence of the latter being obliquely situated, (see chap. iv. sect. 4,) I determined to stimulate it with my finger, in hopes of thus exciting a more powerful irritation. This immediately occasioned an energetic expulsive action; so that within two hours from commencing the treatment, the child was born."

By combining the above treatment with other means for promoting more energetic insensible contraction, a most important, happy, and effectual controul may be acquired over the actions of labour: of this the following case is an instance.

"Mrs. H—— was taken with an excessive flooding, so that nearly two quarts of blood were stated to have been lost almost instantaneously. On the second day afterward she lost, at one gush, nearly a quart of blood. Before my arrival the flooding had ceased,

—*excitantur* dolores partûs, vel augentur, si jam adsint"—"prudenti *irritatione* oris uteri *incitatur* uterus ut contenta suo cavo expellat."—*Van Swieten, Com.* SS. 1308 et 1316.

and no symptom indicative of labour could be detected; the patient was, however, in the last stage of pregnancy. Considering the case as most critical, I determined to attempt to excite labour, and, with this view, commenced a vigorous friction on the abdomen with one hand, while with the index finger of the other I stimulated the mouth of the womb. In less than five minutes I perceived the womb contracting firmly; after this, by continuing the treatment, the labour proceeded in the most regular and satisfactory manner; so that *before the expiration of one hour* from my entering the room the child was *born!* The patient recovered in the most favourable manner."*

Another proof of the correctness of the theory is, that a deficiency of orificial irritation is followed by a deficiency or suspension of labour; so that this important function may either be weakened or deferred in consequence. This, however, which it is the chief object of the present essay to establish, must be the subject of an exclusive chapter.

* The present case is intentionally abbreviated, as the Author only wished to evidence those points which appeared to illustrate the doctrine of orificial irritation. The professional reader will, however, be fully sensible of its very interesting character in other respects, as well as of the important practical inferences which the success of the treatment adopted cannot fail to suggest, relative to floodings in the latter months of pregnancy.

CHAP. IV.

THE POSSIBILITY OF LABOUR BEING DEFERRED BEYOND THE ORDINARY TIME, ADVOCATED ON THE DOCTRINE OF ORIFICIAL IRRITATION.

SECTION I. *General Observations.*

ADMITTING that labour is excited at the natural period by the contents of the womb irritating its mouth, and that such excitement is influenced by the pressure arising from the insensible contraction, it must follow that whatever will prevent the former, or interfere with the due application of the latter, will necessarily occasion a deficiency in the action of the womb.

It will now be shewn that such causes will not only delay labour after it has actually commenced, but also *defer its commencement*, so as to prolong the time of utero-gestation considerably beyond the ordinary period of nine calendar months.

SECTION II. *Labour delayed beyond the natural time, by a deficiency of insensible contraction.*

The force with which the contents of the womb impress its orifice, must necessarily differ according to the degree of insensible contraction; if the latter be strongly exerted,

labour may commence long before the neck of the womb is fully obliterated. If, on the contrary, it is slight, labour will be deferred, or tardy in coming on, notwithstanding the changes at the neck and mouth of the womb have been properly completed.

A singular case of protraction, related by Chapman,* is apparently referrible to this cause. The labour had advanced so far, that the mouth of the womb was well opened; but the pains were short and imperfect, and eventually ceased altogether, so that the mouth of the womb *closed* again, and the patient went *three weeks longer* before labour returned. This delay was occasioned by the womb losing its insensible contraction, from some unaccountable modification of nervous influence: the consequence was, that the impression on the orifice became too weak to keep up labour.

SECTION III. *Labour delayed beyond the natural time by a want of sensibility of the mouth of the womb.*

The sensibilities of organs, or their susceptibility to receive impressions, will not only differ in different individuals; but in the same

* Treatise on the Improvement of Midwifery, by Edward Chapman, p. 80.

individual, under different circumstances, so that a greater stimulus than ordinary shall be required to excite them into action. To carry forward an analogy we are already familiar with, sneezing will, in one person, be excited by a small portion of the mildest snuff, whereas, in others, the largest quantities of the most acrid kind will with difficulty produce this effect.

The same principle may operate with respect to the mouth of the womb, so as to delay labour; it is difficult, however, to discriminate the present case, from the one treated of in the last section, since practically and theoretically, the effects of both are intimately blended together. When they concur, it it may readily be conceived, that the effect will be more decided, or, in other words, the labour longer delayed.

The modifications of these causes, whether taken separately or combined may be compared to the action of a gun-lock, where if the works are finely wrought, the slightest impression of the finger will discharge the piece; while on the contrary, if coarsely or imperfectly got up, a considerable force may be required to disengage the trigger.

The following case is illustrative:

"In the year 1821, I visited a poor woman in Westminster, who had gone a month beyond

her expected time, without any other indication of labour than occasional spurious pains. I found her suffering in this way, the pains neither accompanied by contraction of the womb, or pressure upon, or dilitation of its mouth; the child's head lay low down, and the neck of the womb was fully obliterated; the looseness of the fibres, however, as felt through the parietes of the abdomen gave evidence of deficient insensible contraction. Suspecting the labour was deferred by this cause, as well as by deficient sensibility of the mouth of the womb, I applied a bandage tightly around the abdomen, with a view of giving an increased impulse on the orifice. In the evening labour came on."

SECTION IV. *Labour delayed beyond the natural time in consequence of an oblique, or improper, situation of the mouth of the womb.*

The mouth of the womb, instead of being placed, as it ought to be, centrically at the lower part of the organ, is sometimes situated laterally as respects this part, more generally towards the lower part of the back, or sacrum; the consequence is, that the pressure or gravitation of its contents are not applied immediately

upon the orifice, but rather upon the anterior part of the sides of the womb; in this way the proper irritation, necessary to excite labour, is prevented, and the process deferred.

I have known many instances of labour being postponed by this cause, and in some the protraction has continued for a month or longer. The following is selected from many similar cases.

"Mrs. R——, previously the mother of four children, with none of whom she had been less than three days in labour, in her fifth pregnancy went *two months* beyond her expected time. After suffering for the last month considerable false and lingering pain, she was taken in labour on the 23d of May, 1824, at three o'clock in the morning, when the membranes ruptured; at nine o'clock the pains were strong and regular, coming on every five minutes. On my arrival, I found the child's head pressing down on the anterior part of the sides of the womb, but the orifice of the latter was situated so *far backward* as to be with difficulty detected; it was very slightly, if at all dilated; at length, I hooked my finger into it, and endeavoured to bring it more centrical, at the same time stimulating it, and attempting to assist its dilatation. A satisfactory progress was made, and soon after one o'clock the child was born."

Cases of protraction in labour, from this cause, are by no means uncommon, and generally yield in the most satisfactory manner to the above treatment. As this state of the mouth of the womb probably depends upon constitutional structure, women who suffer from it, may always expect to experience lingering labour.

Section V. *Labour delayed beyond the natural time in consequence of a pendulous state of the abdomen.*

It sometimes happens that the sides of the abdomen, which ought to support the womb in its proper position, are so much relaxed in consequence of the distension of repeated pregnancy, or from other causes, that the gravid womb hangs over the front of the pelvis, so as occasionally to reach nearly to the knees of the woman. This constitutes what is termed the pendulous abdomen, and when it happens, the contents of the womb are situated in the overhanging pouch; the effect of which is that no part of them can be applied to the orifice so as to irritate it. In this case the commencement of labour will generally be very long protracted.

The following cases are illustrations in point.

" A woman forty years of age, and the mother of many children, considered herself at the full period of utero-gestation, and experienced at that time a slight pain or two, after which she became free from any farther effort for nearly three months; her situation exciting alarm, several medical gentlemen saw her and declared, after examination, that she was not with child, as they could feel no weight on the mouth of the womb, nor variation of it from what is found in the unimpregnated state. I saw her, and in a common examination, as she lay on the bed, found matters apparently as had been represented. Observing however, the abdomen very large and pendulous, reaching down, when the patient was in an erect posture almost to the knees, a friend of hers, a physician of great eminence, was requested to stand above her on a chair, and elevate, as she stood, the pendulous abdomen with the assistance of a napkin; an examination was made under these circumstances, and I could now distinctly feel the head of the child. A bandage was contrived with straps to her stays, by which the child was removed from its situation over the os pubis; in four or five days labour came on, and she was delivered of an amazingly large but still-born child."*

* The above case was communicated by the author's father, Dr. Power of Lichfield.

July 8th, 1825, Mrs. W. communicated to me the following particulars with respect to her tenth pregnancy, and which she stated her readiness to attest upon oath.

She was seized with a severe illness on the 10th of July, so that her life was despaired of for the whole of the succeeding four months, during which period she positively declares that she was *ex necessitate* obliged to be absent *e lecto conjugali.* At the expiration of this time, symptoms of quickening were experienced, and she then immediately began to recover her health, her medical attendant, in consequence, attributing her entire illness to the effects of pregnancy. She was delivered of a remarkably large live child on the 31st of May following, being three hundred and twenty-five days, or nearly forty-seven weeks from the time of conception, provided the calculation be made from the 10th of July *only ;* it is most probable, however, that she had become pregnant before that time, in which case the period of gestation must be considered as still farther extended. On enquiry, she stated that the abdomen had been *very pendulous*, so as to have reached nearly to her knees, and to this cause there can be no doubt that the extraordinary extension of her pregnancy beyond the usual period is to be attributed.

"In the summer of 1821, my attendance was engaged by Mrs. D. the mother of many children, and who expected to be confined at the end of August, or in the beginning of September. On the 12th of October I was requested to visit her, and found her suffering much anxiety in consequence of the postponement of labour, as well as considerable distress from irregular and spurious pains—there was, however, not the slightest symptom indicative of true labour. I gave her an opiate to quiet the pain, and observing her abdomen very pendulous, tied a bandage tightly around it, next morning she was in high spirits, free from pain, and with an evidence of that insensible contraction taking place which is the usual precursor of labour. Unfortunately I was now compelled to leave town for a day or two, and on my return had the mortification to find that labour had come on immediately after my departure, and that I had by my absence irretrievably offended my patient."

A great many other cases of labour, evidently protracted from this cause, have come under my observation, and from their general tenor, I am fully convinced that, where a pendulous state of the abdomen exists, the period of gestation may be prolonged one, two,

or more months beyond the ordinary term, without our being justified in regarding it as inconsistent, or an unnatural occurrence.

Section VI. *Labour deferred beyond the ordinary time by various other causes, acting on the principle of Orificial Irritation.*

A variety of circumstances are constantly met with in midwifery, independently of the causes which have been above detailed, which prevent a due irritation being applied to the mouth of the womb, and consequently retard the parturient actions; as a premature or improper discharge of the fluid (liquor amnii) in which the child is perfected; an unfavourable position of the child, as where it lies across the womb; and a deformed or contracted state of the pelvis, which interferes with the descent of the child upon the orifice. The unpropitious effects of these causes, in delaying, or weakening the actions of the womb, are adverted to by all writers of midwifery, and I believe that they are not unfrequently the means of delaying, more or less, the commencement of labour.

THE END.

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Monthly Review, January, 1825.

NORMAN, Printer, 29, Maiden Lane, Covent Garden.

THE

MEDICAL EVIDENCE

RELATIVE TO THE

DURATION OF HUMAN PREGNANCY,

AS GIVEN IN

The Gardner Peerage Cause,

BEFORE

THE COMMITTEE FOR PRIVILEGES OF THE HOUSE OF LORDS

IN 1825-6.

WITH

INTRODUCTORY REMARKS AND NOTES

BY

ROBERT LYALL, M.D. F.L.S.

&c. &c. &c.

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INTRODUCTION.

As the Medical Evidence given before the Committee for Privileges of the House of Lords, in the Gardner Peerage Cause, involves most important considerations with respect to physiology, medical science, and legislation, as well as questions which are of great interest to the community, we have been induced to have it reprinted *verbatim* from the Minutes prepared for that august tribunal. We have taken the liberty to correct some trifling errors, as words which it was obvious were mistaken or mispelled, and have collected together the evidence of such of the witnesses as was scattered through different parts of these Minutes.

It is admitted by all, that it is extremely difficult, nay, in many cases impossible, especially in civilized society, to ascertain the *exact period* of conception, and consequently the *precise term* to which utero-gestation may be prolonged. Still, as from the commencement of the world procreation has gone forward, and favourable opportunities for accurate observation have occurred, we might be led to think, that all disputes regarding regular and irregular periods of pregnancy were already sufficiently determined. But, on the contrary, we are nearly in the same state, on these points, as were the most ancient fathers of medicine; indeed, in one respect it may be said, that the present investigation has added difficulty to the subject. Arts and sciences have made great advancement; and, with all the advantages of their progress, a number of the most distinguished physician-accoucheurs of London have been examined, and have given the most conflicting evidence, without confirming a single important doctrine, except one which required no confirmation—the general opinion of mankind, that the usual term of human utero-gestation is nine calendar months, or about from 270 to 280 days.

In forming an opinion respecting protracted gestation, we must cautiously examine the numerous cases recorded by the ancients, as well as by the moderns. Few of them, when properly sifted, lead to any positive conclusion*. The sources of fallacy and decep-

* A few of the witnesses would have done well to have perused and well digested some good works on Medical Jurisprudence†, before they appeared

† Any plea, that might, in former times, have been advanced as to the want of books of reference on Medical Jurisprudence, or Forensic Medicine, cannot be sustained in these days: besides some other works of less value, our countrymen have access to Male's Elements of Juridical Medicine —Smith's Principles of Forensic Medicine—Smith's Analysis of Medical Evidence—Paris and Fonblanque's Medical Jurisprudence—and Beck's Elements of Medical Jurisprudence: all, though not faultless, excellent publications.

tion, with respect to the duration of pregnancy, are so numerous, that even the most wary are liable to mistakes. In judging of this point, we must have a register of cases carefully kept by practitioners of veracity,—there must be no trusting to memory, or to second-hand details: facts must be ascertained from women themselves, and only from such women as have a good moral character, or credence cannot be given to their statements.

A series of observations properly conducted might be of great service, not only to medical practitioners, but also to the world in general. Insulated cases have their utility, but a mass of reports is still wanted, to enable us to arrive at *general conclusions:* and these reports should be kept with such fidelity that they will bear the most scrupulous examination; nay, even the cross-examination of counsel in a court of justice *.

Presuming that the reader will be curious to know the nature of the dispute which gave rise to the present investigation, we shall, before going farther, give an epitome of the subject. From the evidence of a number of witnesses, who were examined in the course of the proceedings, it appears, that the late Lord Alan Hyde Gardner † was married to Miss Maria Elizabeth Adderley, at Fort St. George, in the East Indies, in 1796:—that the said Maria Elizabeth Adderley bore a child on the 8th of December, 1802, which appeared to be the fruit of an illicit intercourse between her and Henry Jadis, Esq.:—that in the Court of King's Bench, in an action by Lord Alan Hyde Gardner against the said Henry Jadis, Esq., "*for trespass, assault, and criminal conversation with Maria Elizabeth Gardner, the wife of the said Alan Hyde Gardner,*" one thousand pounds damages, besides cost of suit, were awarded:—that, in the Consistory Court of the Bishop of London, a sentence

behind the bar of the House of Lords, and subjected themselves to the *sifting* examinations and cross-examinations of opposing counsel. The reader will not fail to discover, that some of the answers were by far too long, that many of them were deficient in precision, and that a few were contradictory. All ostentatious boasting—all attempts at a man's showing himself off—all unnecessary details—all uncalled-for disclosures—and all extraordinary or novel doctrines, unless well founded, should have been carefully avoided, as they only tend to make a man ridiculous. It might appear invidious to point out more particularly the individuals to whom we would read this lecture: we leave its application to the sagacious reader, assisted by our notes.

* It will be remarked, that few—very few indeed—of the cases of protracted gestation, adduced in evidence by the medical gentlemen, could bear that touchstone of fidelity—a cross-examination—and that many of them were cases of ordinary pregnancies. With respect to Dr. Granville's vaunted registers (vide pages 25, 34, 80, 86), they are not so highly valued by the profession as he imagines, though said to be *unique* of their kind: his cases by no means proved his assertions: and he seems to be altogether unaware of the fact, that some women who have received letters entitling them to attendance in their labour, have subsequently transferred them to others, in the same way as we have known travellers obtain the loan of passports.

† In the Minutes we find the name of his Lordship, the father of the successful claimant, occurring as Captain Gardner—The Honourable Captain Gardner—Lord Gardner—The Right Honourable Lord Gardner—Lord Admiral Gardner—and Viscount Gardner, according to the rank he held at different epochs. To avoid confusion we shall always call him simply Lord Alan Hyde Gardner.

of divorce was obtained by Lord Alan Hyde Gardner, against Maria Elizabeth Gardner his wife, which was dated the 29th of June, 1804, and received the Royal assent on the 10th of July, 1805:—that Henry Jadis, Esq. married Maria Elizabeth Adderley, formerly Mrs. Gardner, in the year 1805:—that the child already alluded to, as the fruit of previous criminal conversation, and the opponent of the claimant, was acknowledged from birth as their offspring by Mr. and Mrs. Jadis, whose name he took, *viz.* Henry Fenton Jadis, till the guardians of Alan Legge Gardner claimed the Barony of Gardner for their ward, a minor, when he assumed the name of Henry Fenton *Gardner*:—that the second marriage of Lord Alan Hyde Gardner, with the Honourable Charlotte Elizabeth Smith, one of the daughters of the Right Honourable Robert Lord Carrington, was celebrated on the 10th of April, 1809:—that Alan Legge Gardner, son of the above parties, and the successful claimant of the Barony, was born on the 29th of January, 1810:—and that Lord Alan Hyde Gardner died, and was buried in the parish of St. James's, Westminster, on the 5th of January, 1816.

In 1802, Lord Alan Hyde Gardner, who then was Captain of H. M. ship the *Resolution*, arrived off Portsmouth, and was joined by his first wife, Mrs. Gardner, who remained with him on board about three weeks, and then took her departure for London on the 30th of January;—hence the frequently repeated question, during the examination, respecting sexual intercourse anterior to, or on that day. It appears, however, that the *Resolution* did not sail till the 7th of February, and that some communications took place between the ship and the shore, by means of boats;—hence the second, and as often reiterated question, as to sexual intercourse anterior to, or on that day. Lord Alan Hyde Gardner sailed for the West Indies, and returned home on the 11th of July of the same year;—hence the reason of the third important question being put to many of the witnesses, relative to the capability of a child born about the 5th month being able to reach manhood.

To bring the grand points at issue, in so far as respects the duration of utero-gestation at once into view, we shall here cite the questions to which we have just made allusion.

1. Is it your opinion, that a child born on the 8th of December, could have been the result of sexual intercourse either on the 30th of January, or anterior to it, being 311 days?

2. Is it your opinion, that a child born on the 8th of December could have been the result of sexual intercourse on the 7th of February, or anterior to it, being 304 days?

3. Do you think that a child born on the 8th of December, that has lived to manhood, could be the result of sexual intercourse on or after the 11th of July: a period short, at least by two or three days, of five calendar months?

The two extremes of time alluded to in these questions are 311 (or at least 304 days) and 150 days: and, as is hereafter remarked, if it be admitted that Henry Fenton Jadis, alias Gardner, is the son of Lord Alan Hyde Gardner, he must either have been a five

months' or nearly a ten months' and a half child, or, to speak more definitely, a 153 days' child, or 304 or 311 days' child; that is, he must have been born either four calendar months before the *usitatum tempus pariendi,* or one calendar month and two or nine days beyond it.

The investigation of the succession to the Gardner Peerage therefore may be said to involve two important inquiries: 1st, as to the earliest age at which a premature fœtus or infant is capable of living to maturity or manhood: and 2dly, the longest period to which utero-gestation can be protracted.

As will appear more at length at the commencement of the minutes of the evidence, there were two claimants for the succession of Lord Alan Hyde Gardner: first, Henry Fenton Jadis—alias Gardner (twenty-three years of age), who was the son of the *first*, and afterwards divorced wife of Lord Alan Hyde Gardner, and who wished to prove himself to be the son of his Lordship; and secondly, Alan Legge Gardner, a minor (now sixteen years of age), the successful claimant, and the son of Lord Alan Hyde Gardner by his *second* wife.

Since the death of Lord Alan Hyde Gardner in 1816, the title has been in abeyance, and the property has been accumulating, and is now said to be worth considerably above 2,000*l.* a year. We have been told, that the relations and guardians of Alan Legge Gardner, afraid lest any of the material witnesses should die before he attained the age of majority, and expecting that the succession to the title and property of Lord Alan Hyde Gardner would be disputed by Henry Fenton Jadis, alias Gardner, were induced to urge the claims of their ward, by sending a petition in his favour to the House of Lords, which transferred it to the Committee for Privileges. Mr. Henry Fenton Jadis, alias Gardner, properly speaking, then, became the *counter-claimant;* for we believe he had hitherto made no open pretensions to the Gardner succession. Indeed, the longer his claim was postponed, it would appear, that there was a greater chance of the death of unfavourable witnesses, and that his prospect of success augmented with the degree of obscurity.

The grand aim of the guardians of Alan Legge Gardner was to prove, that Henry Fenton Jadis, alias Gardner, is not the son of Lord Alan Hyde Gardner; but the fruit of an adulterous intercourse between Mr. Henry Jadis and the first wife of Lord Alan Hyde Gardner; whilst the chief point of Mr. Henry Fenton Jadis, alias Gardner, was to verify that he is the *lawful son* of Lord Alan Hyde Garner, by his Lordship's *first* wife; and that he is not the legal son of Mr. Henry Jadis, as alleged by his opponents.

The Counsel for Alan Legge Gardner had two chief points which they wished to demonstrate: first, that an adulterous intercourse had taken place between the first Mrs. Gardner and Mr. Henry Jadis, at the supposed period of the conception of Henry Fenton Jadis, alias Gardner, as well as afterwards:—and secondly, that, according to the *laws* of utero-gestation, if we may so speak, it was impossible that Mr. Henry Fenton Jadis, alias Gardner, could be

the son of Lord Alan Hyde Gardner, on account of his Lordship's absence from this country, at the time the said Mr. Henry Fenton Jadis, alias Gardner, must have been begotten, whoever might be his father.

The evidence of the criminal intercourse was so clearly proved, and many circumstances so strongly indicated that Mr. Henry Fenton Jadis, alias Gardner, was the fruit of the intercourse between Mr. Henry Jadis and Lord Gardner's *first* wife, that it is thought by many, that the cause would have been decided in favour of Alan Legge Gardner, although there had not been a single medical witness examined. Indeed, it is the opinion of some "gentlemen of the long robe," that, had the decision of the case rested alone on the merits of the medical evidence, the Committee for Privileges of the House of Lords would have been obliged to request the College of Physicians to have taken up the subject, and to have made a report as to the longest protraction of utero-gestation, and as to its greatest abbreviation compatible with the life, and the prolongation of the life, of the child. Taken abstractly, the medical evidence was so discordant, that no general conclusion could, nor can, be drawn from it:—taken in connection with other circumstances of the present case, it goes to confirm the justice of the judgment of the House of Lords: a copy of which follows, for the sake of perspecuity*.

"The following is the resolution, afterwards sanctioned by the House of Lords, regarding the Gardner claim of Peerage, which resolution has been reported to his Majesty, and of which his Majesty has been graciously pleased to approve:—'That it is the opinion of this Committee (for Privileges), that *Alan Legge Gardner*, the infant, is the only son, and the heir male of the body of Alan Hyde Gardner his father, which last named Alan Hyde Gardner was the eldest son of Alan Gardner, of Uttoxeter, in the county of Stafford, who by letters patent, dated 27th November, 1806, was created Baron Gardner of Uttoxeter, in the county of Stafford, to him and the heirs male of his body; and that the said first-named Alan Legge Gardner is the heir male of the body of Alan Gardner, created Baron as aforesaid; and therefore, that the said infant hath made good his claim to the title, dignity, and honour of Baron Gardner, of Uttoxeter, in the county of Stafford, created by the said letters patent.'"

The principal accoucheurs of this metropolis, besides some whose names are little known, were called before the Committee for Privileges of the House of Lords to give their evidence, with the view, either of disproving or of supporting the possibility of the period of utero-gestation being extended to forty-four weeks and three days —*i. e.* to 311 days, or nearly ten and a half calendar months—from

* We doubt, however, whether this case will, as some expect, establish any future *norma* in the laws of this country, since it is by no means improbable that their Lordships were rather influenced by the moral, than by the physical view of the question, and thus waved the doubtful and conflicting medical evidence that was adduced.

the period of conception; and the possibility that a child born at the fifth calendar month might live to manhood.

Of the seventeen medical gentlemen examined, five supported the opinion, that the period of human utero-gestation was limited to about nine calendar months, from thirty-nine to forty weeks, or from 273 to 280 days; or, if we strictly take them at their words, from 270 to 280 days; one of the witnesses, indeed, said from 265 to 280 days *. These gentlemen of course gave their negative to the possibility, unless by miracle, that Henry Fenton Jadis, alias Gardner, could have been the product of a 311 days' gestation.

On the other side, of twelve medical gentlemen, who seemed to agree with respect to the above mentioned period as the natural time of gestation; most of them maintained the *possibility* that pregnancy might be protracted to nine and a half, ten, or eleven calendar months, *and of course to* 311 *days, the alleged term of gestation*, at which the counter-claimant was born; and thus admitted the possibility that Mr. Henry Fenton Jadis, alias Gardner, might be a ten and a half months' child: and they adduced a variety of cases, with a view of showing that their doctrine was founded on facts †.

The calculations of the *Duration of Pregnancy* ‡ have long been, and still are, chiefly founded upon—

1. Certain Peculiar Sensations experienced by some females at the time of conception, or within a few hours, or a day, or two or more days after the coitus, which was succeeded by impregnation.
2. The Cessation of the Catamenia.
3. The Period of Quickening.
4. A Single Coitus.

To these may be added—but, in our opinion, as secondary means of forming a judgment—the Size of the Abdomen, Examination per Vaginam, called the *Touch*, and by the French *Ballotment*—and the more lately proposed method, *Auscultation*, or the Stethoscope §.

* Vide notes, pages 2, 8, 16, 21, 26, 46, 60.

† The reader will remark, that the counter-claimant's counsel made less inquiry respecting the possibility of his being a five months' child than a ten and a half months' one; and very naturally, because it appears that Lord Gardner did not cohabit with his wife immediately after his return from the West Indies. Vide page 5 of this Introduction.

‡ To avert any mistake, the reader is requested to remark, that we are not speaking so much in reference to the *signs* of pregnancy, as to its *duration*.

§ In the perusal of the medical evidence it may be observed, that the opinions of the accoucheurs are different with respect to the best *datum* for the calculation of human pregnancy: some seem to prefer the peculiar sensations during or soon after coition—some the cessation of the catamenia—and others the period of quickening. All agree that a *single coitus* is the most sure; but as in the generality of cases, especially in married couples, the parties have frequent connection, it is but rarely that we have the advantage of this criterion, in conjunction with its other indications.

Generally speaking, however, neither medical men, nor even females themselves, judge of the existence of pregnancy, nor do they rest the verification

To these subjects we shall allude in the order in which they are enumerated.

1. *Certain Peculiar Sensations.* "It has been asserted, that women are conscious of a *peculiar sensation* at the moment of conception. Whether conception be the work of a moment or not, we shall not deny that there may be a sensible impulse conveyed by the excitement into which the uterine system appears to be thrown: at the same time women are very apt to imagine that they have conceived, after sexual intercourse, particularly if that consequence be either a very desirable object, or one to be dreaded*."

The evidence of a number of the medical witnesses seems to prove, that, *in some few cases*, the peculiar sensations alluded to afford a pretty sure criterion of the time of conception. But, comparatively speaking, there are only a few individuals who have the symptoms so well marked as to indicate early pregnancy: and as we have no means of ascertaining whether the assigned date be completely accurate, so we can only arrive at a presumptive conclusion by remarking, that labour comes on in from 270 to 280 days after the first time that these sensations were experienced. Some women pretend that these peculiar sensations almost immediately follow the impregnating coitus—others feel them two or three hours afterwards, and some not till after as many days.

It is impossible to prove that any excitement, into which the uterine system may be thrown at the time of coition, arises from impregnation, as we cannot readily discriminate between conception and the mere effect of the venereal orgasm, *citra impregnationem*. Women themselves very seldom calculate from this *datum*, and when they do, they are frequently mistaken. That they are sometimes right, only shows that the natural or the probable result of sexual intercourse has taken place. Were we hypothetically to look back to primary causes and effects, we would infer, that the first symptom occasioned by the male influence on the female ovum, in as far as respects the sensations of the mother, must depend upon the irritation excited in consequence, in the producing and enveloping organ, the ovarium. Whether the stimulus thus applied is sufficiently pungent, or is of such a nature as to occasion immediate effect, like the sting of a wasp, or like the bite of some other insects, only after an indefinite period has elapsed, we cannot pretend to say; but as most women do not experience the *peculiar sensations* only until after some hours or days have passed, we are inclined to think the latter occurrence the more probable; and if it really be so, any symptoms which may arise at the time of coition cannot be considered as a criterion of the point in question:

of its stage upon any individual symptom, but upon a combination of several signs—peculiar feelings, sickness, depraved appetite, suppression of the menses, swelling of the mammæ, dark coloured areola, &c.; to which may be added, in the more advanced periods, the abdominal tumour, quickening, &c. &c. But since there is not one single *invariable sign* of pregnancy—and as all of them, both separately and conjointly, have proved equivocal and even fallacious, it is needless to add that the greatest caution is required before decision.

* Smith's Forensic Medicine, p. 483.

indeed, it is certain, that it is only in rare cases that practitioners can trust to these peculiar sensations, as a sign of pregnancy. In a first pregnancy, a female could have little or no reliance upon them, from her ignorance of their nature.

The supervention of sickness and other secondary symptoms, sympathetic of uterine irritation, are certainly the earliest indications that can be depended upon, and these, we know, sometimes take place within a very short period after coition. In one woman sickness came on three hours afterwards; and in the case of another female, conception is always followed by an early attack of diarrhœa. It is only from a combination of the symptoms alluded to, and the history of the individual, that we are enabled to discern, with tolerable certainty, that impregnation has taken place: a point, which every practitioner is frequently called upon to decide, especially by unmarried females who have made a *faux pas*.

2. *The cessation of the catamenia.* The most usual way of calculating the time of pregnancy, both among practitioners, and by the females themselves, is from the time of the disappearance of the catamenia. As many individuals do not keep registers of these matters, it is not surprising that women should be continually deceived in the expected time of their accouchement; because, from the cessation of one menstrual period till the commencement of another, twenty-eight, twenty-seven, twenty-six, or fewer days intervene, on any one of which, providing they are living *in social habits* with a male, conception may have taken place. If the woman, therefore, should have become pregnant immediately after the cessation of one menstrual period, and should reckon her pregnancy from the date of the next expected menstruation, in an ordinary gestation, she would bring forth her child nearly four weeks before she had expected such an event: on the contrary, if she should not have become pregnant till the day before the next expected menstruation, and should take her reckoning from the termination of the last catamenia, it is equally clear, that her child would not be born till about four weeks after the predicted time. We knew an example of this kind very lately, where a nurse and a wet-nurse were hastily summoned to the house a considerable time before it was necessary. Unless medical men receive the most accurate information as to the date of the *peculiar sensations*, or of the *impregnating coitus*, the period of pregnancy cannot be ascertained*; and even such instances

* Pregnancy is generally computed from a single coitus, or from a fortnight subsequent to the last menstrual period: in some cases the computation has been made from the time of *quickening*; in either of the two first methods of calculation, *forty* weeks are allowed, in the last about twenty-two weeks.

"If we take into consideration the *fallacy of a woman's sensations as to the period of conception*—the very great prohability of her mistaking, in the first instance, to the extent of about *three weeks*, by reckoning conception from sexual intercourse immediately *after* the last appearance of the catamenia, while in reality it may not have taken place until just before they should have appeared again—and if we add to such a case (what often happens) the real commencement of a disposition to expel the contents of the gravid uterus some days before active labour takes place, we have a *ten* months pregnancy explained at once. But even greater mistakes in reckon-

require great caution and discernment. Taking the middle period between the last show of the catamenia and the next expected, it is clear that we cannot err above two weeks as to the time of labour, in the ordinary course of nature: we may either expect it two weeks before its actual commencement, or it may take place two weeks before our calculation. In consequence of the neglect of attending minutely to these circumstances, we are persuaded many cases of *protracted gestation* were, in reality, cases of nine months' pregnancy.

The reader will remark, that we are speaking of the general term of menstruation. It is well known, however, that some women, when in health, menstruate at periods different from the usual one, as at the second, third, fifth, or sixth week, and that these modifications are not incompatible with impregnation. They probably arise from the generative function being too active, or too passive; or, as Dr. Power would say, from the ovum being matured more or less quickly in one instance than in another *.

In a female, who only menstruated every fifth or sixth week, it is clear that there would be a wider range of indefinite time than a lunar month to calculate upon, in judging of the period of pregnancy by the catamenia: a range, in fact, of thirty-five or forty-two days; on either of which, conception might have followed coition†.

In the earliest stages of pregnancy, say the first, second, or third week after conception, we have no *unequivocal sign* of this event. From the cessation of the catamenia no opinion can be formed, unless the menstruation have been carefully noted: and *certain sensations*, while they may lead to a strong presumption of pregnancy in some women, in others may prove altogether deceptive. The missing of a *period*, however, when combined with the *peculiar sensations*, will lead to strong suspicions; and if to these can be added the fact of only a *single coitus*, we may next to certainty assure ourselves of the stage of pregnancy, even at a very early time. Though in general the first mark of the *existence* of pregnancy, upon which any reliance can be placed, is the disappearance of the catamenia at the usual period, yet *singly*, we must not take it for a conclusive proof, especially in the early weeks. The menses are often withheld by other causes; and their suppression will produce other disorders that resemble certain signs of pregnancy, as sickness at the stomach, irrita-

ing may be accounted for on the same principle. The menstrual flux may cease from other causes, and conception take place during their influence."—*Smith's Forensic Medicine*, p. 493.

* Essays on the Female Economy, p. 25. In the 10th page of the same work is a reference to a number of cases of pregnancy in women, who had never had the menses. Beck, p. 83, likewise refers to similar cases.

† We are aware that females, who had menstruated *irregularly*, or who had menstruated at *regular* though *unusual* intervals of two, three, five, and six weeks, have had the catamenia at the usual distance of a lunar month after the birth of one or more children, and on ceasing to suckle. But, on the contrary, we believe, that in other females, menstruation, under similar circumstances, has continued at the same intervals as before parturition.

bility of temper, depravation of appetite, enlargement of the mammæ, &c.

Denman, whose authority upon such a question must carry with it very considerable weight, says, "a suppression of the menses is one of the never-failing consequences of conception, at least I have not met with a single instance to the contrary." Professor Hamilton thus expressed himself: "It has been said that the menstrual discharge occurs in pregnant women, but such an occurrence I hold to be impossible. The discharges, which have been taken for the catamenia, have been nothing more than an effusion of blood from the mucous membrane of the vagina; for during pregnancy the cervix uteri is hermetically closed by a thick gelatinous substance." Burns says, he "has never known any instance where menstruation was perfect and regular during the whole period of pregnancy:" and maintains, "that the sanguineous discharges from the vessels of the vagina are neither regular as to the monthly period, nor of the same quality as that of the menses *."

* It is of great consequence, in dubious cases, to examine the fluid discharged by females. We recollect a very important case in Russia, where a noble lady, who reported herself pregnant, was seized with hæmorrhage. As she had peculiar reasons for wishing to be pregnant, and to make others think so, she desired to have medicines for a *discharge of blood*. Persuaded that she was wrong, but unable to convince her, we requested to see her clothes, and from the appearance of the fluid, and the other symptoms, we pronounced her not to be pregnant, and stated that the discharge was the catamenia; at our next visit, however, she presented a three months' fœtus, which she said had been thrown off. We maintained the impossibility of such an occurrence, and afterwards detected that the fœtus had been procured from a midwife. The case became known, and created much laughter.

The catamenial discharge greatly resembles venous blood in colour, but not in other properties. It never coagulates, and in this climate it is a bland and innocuous fluid; at times, however, it is acrid and irritating to the parts. Soon after its discharge it acquires the consistence of treacle, and indeed we have sometimes remarked a general resemblance to that substance. It is said to have a peculiar smell, so that any individual, who is familiar with it, by means of his olfactory nerves, is able to tell on entering the bed-room of a female, before her clothes have been removed, that she is menstruating.

"The menstruous secretion is a fluid of a red colour, possessing very little tenacity, which does not coagulate, poured out by the arteries of the uterus, once every lunar month in healthy women, if they are neither pregnant nor suckling.

"It is of consequence for practical purposes to observe, that menstruation is a secretion, and not an effusion of pure blood either from arteries or veins. All blood from the sanguiferous vessels (with very few morbid exceptions) coagulates; whilst the fluid of the catamenia does not, whether it comes away in a stillatitious manner, or is retained in large quantity, as in the case of imperforate vagina.

"From the definition above given of the menstruous fluid, it will be seen that it does not possess the coagulating part of the blood, and instances have occurred where the red colour has been wanting; but from the quantity of which a woman has been obliged once in a month to take the ordinary precautions of a menstruating woman."—*Clarke on Female Discharges*, Part I, p. 14.

"Dr. F. Lavagna, of Milan, the nephew of the celebrated discoverer of ammoniacal injections in amenorrhæa, has lately analysed the blood secreted

Notwithstanding these great authorities, there are eminent physiologists who maintain, that regular menstruation is not inconsistent with pregnancy. Haller, Heberden, Daventer, Capuron, and many others, seem to be of this opinion*. Some practitioners, who advocate the same doctrine, assert, that the os uteri is not always closed by a gelatinous plug; and that the fluid discharged has the precise characters of the catamenia. We should, however, strongly suspect, that the periodical discharges, to which they allude, have been singular coincidences of hemorrhage, either from the uterus or vagina, that in reality did not possess the qualities of the menstrual fluid. In a state of nature, we question whether any *periodical discharges* of blood ever occur during pregnancy. We have never met with any bloody discharges at all among the rude peasant females of Russia, which did not arise from accident, and were evidently hæmorrhages from the organs of generation. We also suspect, that in a state of barbarism, at least in a cold climate, women rarely become pregnant while suckling †.

during the menstrual discharge, and has ascertained that it differs from common blood, only in containing little or no fibrine."—*Anderson's Quarterly Journal of the Medical Sciences*, No. IV, p. 624.

* A notion has been entertained, that the state of pregnancy may go on, and the menstrual flux be continued. This has arisen from the observation of an occasional draining from the vagina during gestation. The catamenia decidedly flow from the cavity of the uterus; and besides the closure of the os uteri, already alluded to, its cavity is lined throughout with an impervious membrane."—*Smith's Forensic Medicine*, p. 484.

"As the mouth of the pregnant uterus is sealed up with gelatinous matter from the moment of conception, it is, under ordinary circumstances, incapable of allowing any passage for the catamenia, although exceptions to this law are frequently mentioned by men of science, which have probably arisen from the observation of an occasional sanguineous discharge from the vessels of the vagina."—*Paris and Fonblanque's Medical Jurisprudence*, p. 232.

"Suppression of the menses may take place from disease, without the presence of pregnancy; and again it is asserted, that the menses have continued in certain cases during pregnancy. Dr. Denman and others, however, conceive that this symptom is a never-failing consequence of conception; and the former, in particular, intimates, that a contrary opinion has its origin in credulity or vanity. It is certainly a strong argument, that an individual of the extensive practice of this accoucheur, never met with a case invalidating this rule; but it is no less true, that observers of equal eminence have occasionally witnessed deviations from it. Dr. Heberden knew a female, who never ceased to have regular returns of the menses during four pregnancies, quite to the time of delivery. Daventer mentions one who became pregnant before menstruating, and immediately after conception, this discharge returned periodically until her delivery, and this was the case during several successive pregnancies—inverting as it were the usual order of nature. Dr. Francis states, that Dr. Hosack had a patient, who during her last three pregnancies menstruated until within a few weeks of her delivery, and, notwithstanding, brought forth a healthy child at each labour. Dr. Francis also mentions a similar case in his own practice; and Capuron observes on this sign, "Quelquefois l'ecoulement periodique des menstrues dans le primier mois même pendant tout le temps de la grossesse" (p. 63). Belloc (p. 62) makes a similar remark. Those, who deny the presence of the menses, consider the discharge as a hæmorrhage from the vagina."—*Beck's Elements of Medical Jurisprudence*, p. 77.

† Professor Hamilton was accustomed to mention in his lectures, that

3. *Quickening.* The first motion of the fœtus, when felt by the mother, is called quickening. It is important to understand the sense attached to that word in former times, as well as at the present day. The ancient opinion, and that indeed on which the laws of some countries have been founded, was, that the fœtus became animated, or acquired a new mode of existence at the time of quickening: an opinion now altogether abandoned. The fœtus, if we speak physiologically, is certainly as much a living being immediately after conception, as at any other time before delivery; and its future progress is but the development and increase of those constituent principles which it then received. This doctrine is proved by a simple fact:—the fœtus, previous to quickening, must either be *dead* or *alive:* that it is not dead is evident, because it is not subject, like dead bodies, to putrefaction and decomposition, which would be the inevitable consequences of a want or an extinction of the vital principle. To say that the connection with the mother prevents such effects is wholly untenable; for fœtuses which die in the womb *before quickening* exhibit all the signs of death. It is but rational, therefore, to conclude, that the embryo resists the laws of chemical action in consequence of its *vitality.*

The *unconsciousness* — if we may use the expression — of the mother, relative to the motions of the child, is no proof that such motions do not take place: cases have occurred where they never have been felt during natural gestation, although the product was a full grown healthy child.

It is a well known fact, that in the earlier stages of pregnancy, the quantity of the *liquor amnii* is much greater in proportion to the size of the fœtus, than at subsequent periods. Is it not, therefore, rational to suppose, that the embryo may at first float in the waters without the mother being conscious of its movements; but that afterwards, when it has increased in bulk, and the waters have proportionally diminished in quantity, it may make perceptible impressions upon the uterus? Besides, it should not be forgotten, that fœtal life, for some time after conception, must be extremely feeble *.

We are, therefore, inclined to conclude, that conception confers life, and that life implies motion †; and consequently that the fœtus is in motion from the time of conception. Its motions, however, are seldom felt previously to the fourth or fifth month, partly because the powers of the child are too feeble to communicate sensible impressions, and partly because its vibrations are restrained by the thickness of the parieties of the uterus, and the unyielding

convicts, who had ceased to menstruate and to bear children in this climate, after reaching Botany Bay, recommenced their menstruation, and even became mothers.

* Vide Beck's Elements of Medical Jurisprudence, pp. 79. 138.

† We are aware of the assertion of some writers, "*that motion is not essential to life*;" but a distinguished author has also said, that "*Life without motion is an incomprehensible idea*:" and, indeed, it may be asked, what idea can we form of a *living body* unless it *has moved*, or *moves at the time?*

nature of the bones of the pelvis, within the cavity of which the impregnated womb is at this time contained.

The next explanation given of quickening is, that, from the increase of the fœtus, its motions, which hitherto had been feeble and imperfect, are now of sufficient strength to communicate a sensible impulse to the adjacent parts of the mother—an opinion which is yet to be found in many of our standard works. In this sense, then, quickening implies the first sensation which the mother has of the motion of the child. Though this theory has been in some degree set aside by that about to be mentioned, yet we are not persuaded that it is incorrect.

As is particularly mentioned hereafter*, some consider it more rational and correct to ascribe *quickening*, as they say it is improperly termed, to the *sudden* emergence of the womb from a state of confinement, in consequence of the pelvis being no longer sufficiently capacious to retain it; immediately after which the motions of the child become perceptible. Admitting this theory, quickening will take place sooner or later, according to the relative and comparative size of the uterus and pelvis.

The abettors of the above doctrine say it is confirmed by the fact, that (independently of the pulsatory motion of the fœtus) every other symptom of quickening may be produced whenever the uterus, in consequence of disease, becomes too large for the pelvis to contain it any longer; and they farther remark, that if the emergence be gradual, as is sometimes the case, the ordinary symptoms of *quickening* fail to be experienced.

Considerable variety occurs as to the *time* of quickening. Dr. Denman observes, that it happens from the tenth to the twelfth week, but most commonly about the sixteenth after conception. Again, Puzos, a celebrated Continental accoucheur, says, that it takes place at the end of two months, but most commonly at the expiration of eighteen weeks. Hydropic women, he adds, do not observe it until the sixth or seventh month. And in a late trial for abortion in this country, the medical witness deposed that it took place at eighteen weeks, sometimes in fourteen, and sometimes not till twenty weeks, but mostly at eighteen; that he never knew it so late as twenty-five, though it might happen, in some cases, at twenty-one or two. From the combined accounts of ancient and modern writers, and the evidence of a number of the witnesses who were examined in the Gardner Peerage Cause, it appears, first, that *quickening* takes place, *in different individuals*, from the tenth to the twenty-sixth week; and, secondly, that the *period of quickening* is pretty regular *in the same individual; i. e.* if a woman has quickened at the tenth, twelfth, fourteenth, or sixteenth week, with her first child, *cæteris paribus*, she will continue to quicken about the same advancement in all her subsequent pregnancies.

It ought, nevertheless, to be remarked, that, agreeably to authors, in a few cases, women never quicken, and that in some still more

* Vide Notes, p. 68, 69.

rare instances, they have failed to quicken only in one or two pregnancies, though they have always brought forth living children.

From the whole of these remarks it is clear, that if the mother of a numerous family were to discover, by careful observation, that she always *quickened at the same time,* we could found prety accurate calculations in any of her future pregnancies, provided we knew the day on which she quickened; and thus by a succession of such cases we might obtain some valuable *data* to assist in discovering whether gestation was *frequently* protracted, and to what extent it might be protracted.

The period of quickening, however, is of no precise use in a first pregnancy, as in our calculations we must assume, that the female quickened about the middle period between the two extremes—ten and twenty-six weeks—at which this sensation is generally experienced. Besides, the knowledge of the exact time of quickening, in any one case, is only applicable to that individual case, and cannot be applied to the quickening of any other female; because every female has her own peculiar time at which this event occurs. Besides, deceptions frequently take place. Flatus in the intestines, pulsations in the large vessels, nervous irritation, and the force of imagination, may readily impose on the woman herself: nor must we too easily credit the report of unqualified persons; for a man declared that his wife was pregnant, having himself distinctly felt the motion of the child, which turned out, however, to be the pulsation of the woman's heart*.

If the opinion, that quickening is owing to the escape of the uterus from the pelvis, be correct, we should even be inclined to place less reliance upon this indication than formerly: because many circumstances may occasion a greater enlargement of the womb at a given period in different pregnancies, and consequently anticipate or postpone the period of quickening; for instance, the liquor amnii may be more or less abundant; the uterus itself may, previous to impregnation, be of different size; it may contain twins; disease may exist, &c. &c.

In some cases of twins, the sensation, called *quickening*, is not felt till a late period; a fact, by the way, that militates against the sudden starting of the uterus from the pelvis, being the cause of that sensation. In other cases of twins nothing particular has been remarked; though there is generally great tension of the abdomen of the pregnant female: some think that the motions of twins are very troublesome, and some say there is no difference between those of them and a single child; but all these are casual occurrences, which may be influenced by many circumstances.

4. *Single Coitus.* We should be able to ascertain all the disputed points respecting the duration of pregnancy with accuracy, provided we had a sufficiency of cases founded upon indubitable authority, that a single coitus had only taken place. The details of such cases

* Smith's Principles of Forensic Medicine, p. 486, and private notes of Professor Hamilton's Lectures.

would be highly interesting, were all the concomitant symptoms or circumstances minutely detailed; as the period of the last menstruation; the first uneasy sensations or indications of pregnancy — the day of quickening — the exact nature of the feeling produced by quickening, &c.*

The reader will find considerable information respecting this sure test of the duration of pregnancy in the subsequent evidence, besides some remarks in the notes †: unfortunately it is but rarely, very rarely, that we have such a good criterion.

Expansion of the Abdomen. Though much be said respecting this sign in p. 67, we must here observe, that abdominal enlargements take place from various causes, and that mistakes as to pregnancy have been the frequent consequence. Even *ascites* has been confounded with the pregnant state. Avenzoar has left a con-

* We should be glad the following proposal, which was communicated by way of *jeu d'esprit*, when the Gardner Peerage Cause was exciting great attention, could be carried into execution. But religion, morality, and decency equally forbid it, supposing it were practicable.

"We see only one speedy and sure method of determining *satisfactorily* the knotty point in question, and we do not doubt that generations yet unborn will reverence our memory for our ingenuity in devising it. We recommend that a spacious building shall be immediately erected, in a healthy site, in the environs of this metropolis, which shall be surrounded by walls at least 100 feet in height, ; — that all aeronauts shall be forbidden from approaching the same edifice upon pain of death; — that no males, except *the privileged*, shall have admission; — that it shall be put under the care of a proper number of virtuous matrons selected from nunneries ; — and that the whole shall be governed by monastic regulations. This superb establishment shall be nominated, The Experimental Conception Hospital, in coincidence with its destination. Besides apartments for matrons, offices, &c., this institution shall contain separate rooms for fifty *virgins*, between the age of fourteen and forty-five, and for fifty *unmarried women*, who may have borne children, between the age of fifteen and forty-five. The directors of the hospital shall appoint ten of the most distinguished healthy physician-accoucheurs of London, between the age of twenty and fifty, each of whom shall be destined to administer physic and consolation to a certain number of these females, during a single nocturnal visit. The clerk of the hospital — one of the matrons of course — shall keep an exact register of all operations, and the results of the experiments shall be freely communicated to the world for the advantage of society, and especially for the purpose of affording our good British Parliament sure *data* upon which they shall be able to construct precise and just laws with regard to the legitimacy or illegitimacy of all children born in these realms, after the year 1830. Thus we allow time for the erection of the hospital, for the repetition of any of the experiments, and for the arrangement of the results. Lastly, we recommend, when the laws of legitimacy and succession shall be fixed, that the said parliament shall grant us a reward of 20,000*l.* sterling, as some compensation for the suggestion of this important plan."

We beg leave to recommend a moral and practicable experiment, in place of the above. Let all medical men, especially just after marriage, carefully note the results of their "*private practice*". (Vide p. 29 and notes); *i. e.* the cases of their own wives, and, in time, a mass of really useful knowledge will be accumulated, from which general conclusions might be drawn; we need not add, that it will be unnecessary to tell the *patients'* names. Vide Notes, pp. 40, 53, and 64.

† Vide p. 6 of the Evidence.

fession, that he was deceived about his own wife, whom he treated as dropsical, though she had passed the fourth month. In the case of Patience Ellis, after the woman, eight months gone with child, was dead, a medical practitioner (who is said to have *examined* the body) gave it as his opinion she had probably died of dropsy! It was a case of murder by strangling. Pregnancy and ascites may exist together; and in this state women have borne several children.

The ovaria are subject to enlargement, and, among other causes, from dropsy. Pregnant women have been killed by the mistaken application of the trocar. Along with dropsy of the ovarium, the functions of menstruating, and even child-bearing, may go on. A famous case of mistaken charge of pregnancy and child-murder is on record, where ovarian dropsy existed to an extreme degree*.

Sometimes the abdomen enlarges without any known cause, and where there is no question as to pregnancy. Women in easy circumstances are often disposed to obesity; and those who have had large families are liable to enlargements of the abdomen, and consequent mistakes. Tumours also form in the uterus itself; and these may arise, either from morbid action or from retention of the menstrual flux.

Besides these causes of deception, it should be remarked, that some women at the full time are so small, that we could scarcely suspect pregnancy, while others have been so large as nearly to justify the belief of a number of children being contained in the uterus; yet a single child has been the product. The size of pregnant women, of course, must also greatly depend upon the scarcity or the abundance of the liquor amnii.

For the various reasons assigned, then, no man would ever trust to the size of the abdomen in determining the period of pregnancy, except in conjunction with the other symptoms; at most, it can only be reckoned an auxiliary, and in dubious cases it will be of little or no advantage. The subsidence of the swelling, however, at the end of the ninth month, is an indication of the ordinary term of pregnancy being completed, and of the approach of labour.

Examination per Vaginam. Some practitioners seem to have placed great reliance upon an examination per vaginam, as a means of ascertaining the exact period of gestation; and this mode is in much greater repute and practice upon the Continent than it is—or than it is to be hoped it ever will be—in this country. An examination in the earliest months of pregnancy can give but little conclusive information; and after quickening, or after the fourth month, it may inform us that a female is some months pregnant: in the after months of gestation it may assist our judgment considerably, but in no case can it alone indicate the *precise period* of pregnancy. Even the most expert French accoucheurs, who are

* That of the Demoiselle Famin, published in a separate form at Berlin and Paris, by Valantin, Maitre en Chirurgie de Paris, 1768.—Vide *Smith's Principles of Forensic Medicine*, p. 486.

said to be *Great Touchers*, could not found any accurate calculations upon such an examination. This point deserves the more serious attention, because Dr. Collins, of Liverpool, has published what he calls "*A Case of an Eleven Months' Pregnancy*," in the 87th Number of the Edinburgh Medical and Surgical Journal, in which he seems to have chiefly trusted the decision of a very important point,—that of determining the eighth month of pregnancy—to such an examination. His patient was a woman about twenty-four years of age, stout, well made, a little above the ordinary height, and the mother of several children. She said she was in the eighth month of pregnancy, and that she dated its commencement from the close of the month subsequent to the last appearance of the menses. At this time the fundus of the uterus was as high as the epigastric region, and gave to the abdomen the form and appearance it assumes at the end of the eighth month of gestation. Knowing how fallacious the opinions are that rest exclusively on the evidence of external symptoms, or on the statement of the patient, and "being anxious to cultivate the knowledge which *touching gives of the stages of pregnancy*," he affected to perceive some urgent necessity of examining *per vaginam*, and succeeded in procuring her assent to the proposal.

"In examining," says Dr. Collins, "*per vaginam*, I found the neck, or cervix of the uterus, remarkably high, scarcely tangible, and with difficulty distinguished from the body of the uterus, as it presented little or no prolongation. Availing myself of my position, I placed the left hand on the abdomen, and giving a gentle jerk to the *os tincæ* with the index finger of the other, *the fœtus bounded from the touch, and fell again on the finger, exciting the sensation which the French call* BALLOTMENT, and that *degree of weight which a fœtus of eight months, it is supposed*, could alone produce. *Thus I ascertained the stage of the pregnancy; as the indications I have just detailed, according to the experience and observation of the most eminent in the profession, are sufficiently characteristic of it, and constitute the most conclusive means we possess to determine it with accuracy.* Hence I was enabled to appreciate the value that ought to be attached to the history of the symptoms which the mother gave of her pregnancy. She told me she experienced all the ordinary symptoms of this condition, in the same order and intensity in which they succeeded one another in her previous pregnancies. It is true, there was one exception in the phenomena of this case. *The period of quickening was later.* She usually felt it about the end of the *fifth month*, but the sixth was considerably advanced in this instance before she was sensible of the movement of the child *."

From a careful perusal of Dr. Collins's case, we are by no means convinced that it was, as asserted, one of eleven months' pregnancy. The circumstance of the delay of quickening, of itself, in our opinion, throws a degree of doubt over the justness of the conclusions. A medical friend, however, in whose judgment we have

* Vide Edinburgh Medical and Surgical Journal, No. 87.

great confidence, remarked, " that Collins's case was an eleven months pregnancy received a most powerful confirmation, from the circumstance of the belly subsiding, the glutinous plug passing off, and the cervix uteri being obliterated at the end of the supposed ninth month;" and he thinks, that as quickening has not taken place, in some women, till the twenty-sixth week, so, by an aberration from the time at which the patient in question usually quickened, we account for its delay in this case.

Alluding to an investigation by the *Touch*, Beck says, that the most distinguished accoucheurs have been deceived by it, as is testified by the works of Mauriceau and Baudelocque. He also alludes to a case related by Foderé, which " should make every physician distrust his skill." In a hospital, where the last named author attended, a female was detained on suspicion of being pregnant. Several medical persons visited and examined her. Some declared that she was in the eighth month of pregnancy, whilst others denied that she had ever conceived. She was kept in the hospital during a whole year, and was then dismissed as large as ever *.

" Notandum est magna hic prudentia opus esse medico ne facile graviditatem vel affirmet, vel neget; peritissimi enim decepti fuerunt toties ; nunquam magis periclitatur fama medici, quam ubi agitur de graviditate determinanda."

" History informs us," says Capuron, " and it is attested by Ambrose Paré, Mauriceau, Riolan, Devaux, and others, that pregnant women have been brought to the scaffold, after an examination by medical men and matrons, who have declared the absence of pregnancy †."

It is needless to add, then, that practitioners ought to take the greatest care, and examine with the minutest attention before pronouncing a decisive judgment, otherwise they may compromise their characters, and injure their interests.

Independently of the danger, especially with inexperienced hands, of causing abortion, we think, in a moral point of view, that wanton examinations *per vaginam* are highly censurable; they would tend to destroy the charming modesty for which the British fair are so eminently and so deservedly characterised.

Auscultation. Of the utility or uselessness of *Auscultation*, in discovering pregnancy, we have had no experience. It is said that the operation may be performed, either by applying the ear to different parts of the abdomen, or by using the stethoscope of Laennec. Reasoning *à priori*, we anticipate little advantage from such an examination ; and, at all events, we are persuaded, that in doubtful cases it can be of no utility as to the indication of the *period* of pregnancy.

* Vide Beck's Elements of Medical Jurisprudence, p. 80.

† Van Swieten Com. in Boer. tom. vi, p. 330.—La Medecine Légale, relative à l'Art des Accouchmens.—Paris and Fonblanque's Medical Jurisprudence, vol. i, p. 236.

The question as to the duration of pregnancy is of the greatest importance in its moral and legal relations; "for it may involve the honour and happiness of families, the legitimacy of offspring, and the succession of property*." It is a question which has been agitated for hundreds of years, and yet to this day it remains in an unsettled state. Yet, as we have already stated, it seems not incapable of solution in the course of time, provided due attention were bestowed upon it by all medical men†.

Some authors, among whom is Joubert, deny that any determinate period is assigned for the duration of human pregnancy. That fanciful author likewise supposes that the duration of gravidity may be influenced by sexual indulgence; imagining that excessive venery will accelerate, while abstinence may so far retard the time of delivery, that it shall not take place until after the expiration of eleven months:" a hypothesis which, *prima facie*, is so absurd as to require no comment. It is proper, however, that it should be known to young practitioners.

According to the common consent of mankind, the usual term of utero-gestation is nine calendar months, or about *forty weeks*, at the expiration of which labour usually commences. "Ingenious theorists have endeavoured to discover the principle of the expulsatory action of the uterus, and to assign the reason of its taking place at a stated period; but after all the subtle ingenuity which has been displayed upon this occasion, it is doubtful whether we are prepared with a better solution of the problem than that furnished by the physiologist in the time of *Avicenna*, who declared, *that labour came on at the appointed season by the command of God*‡".

But, "although the period of gestation is usually limited to nine calendar months, or about *forty weeks*, yet the term does not appear to be *so arbitrarily established, that nature may not occasionally transgress her usual law*; and, as we have just stated that many circumstances may seem to *anticipate* delivery, so are we bound to admit that *in some instances it may be retarded*; in several tolerably well attested cases the birth appears to have been protracted *several weeks* beyond the common time of delivery§."

Beck seems not altogether consistent in treating of the duration of pregnancy. "A calm and deliberate examination of these histories," says he, "must certainly, I think, *lead to a total disbelief of the doctrine of protracted gestation*. There are many that evi-

* Paris and Fonblanque's Medical Jurisprudence, vol. i, p. 246.

† Vide p. 17 of this Introduction.

‡ We do not think that a better reason is wanted: for what are the *laws of nature* but the *will or command of God*; though we talk of them, as we talk of the *laws* of the animal economy, or the *laws* of optics. From the combined testimony of ancients and moderns, confirmed by that of the seventeen medical witnesses who were examined in the Gardner Peerage Cause, it seems clearly established, that the ordinary term of human utero-gestation is about nine calendar months, or, to be more precise, from 270 to 280 days. The fact, that dead children and twins are born at the regular period, is certainly a strong proof that there is a fixed term of gestation—that it is, in truth, a law of Nature.

§ Paris and Fonblanque's Medical Jurisprudence, p. 245.

dently bear the impress of vice, while the most favourable are so liable to have arisen in error, that scepticism must appear unavoidable." And then he adds, "that a *limited variation may, from extraordinary circumstances, sometimes occur*, I shall allow so far, as to believe it proper that legislation should make allowances for it. The best and most accurate observers have sometimes met with cases, where the period *seemed to be somewhat prolonged;* but I will venture to add, that the more closely they are investigated the less will the number appear. Dr. Smellie mentions two instances, in which the females exceeded their reckoning *by eight weeks;* and Dr. Bartley confirms them by a similar case in his own practice. All these, however, were calculated from *the cessation of the menses;* and is it not possible that some peculiar circumstances might have caused this, particularly as it was the first pregnancy in two of them? Dr. Hunter, in answer to a question on this subject, observed, that he had *known* a woman bear a living child, in a perfectly natural way, fourteen days later than nine calendar months, and *believed* two women to have been delivered of children alive, in a natural way, above ten calendar months from the hour of conception *."

The same author also remarks, that cases of protracted gestation appear to have chiefly occurred in countries where the administration of justice was arbitrary, or at least fickle and unsteady; while he asserts they are rarely heard of in England and America.

Foderé, and the supporters of the same doctrines, assign various causes by which it is alleged the ordinary term of gestation may be varied: as, 1st, *Changes in the Constitution of the Atmosphere.* These, it is supposed, sometimes exert an important effect on the uterus. The authority of Hippocrates is cited, affirming that a warm winter, accompanied with rains and south winds, and succeeded by a cold and dry spring, causes abortions very readily in females who are to be delivered in the spring. Many physicians are said to have verified this observation in latter times; and Foderé himself observes, that at Martigues, in 1806, after a warm winter, an epidemic catarrh broke out, and all the pregnant women miscarried: 2dly, *The Constitution and Habits of Females*, it is believed, vary it. That part of the sex which reside in cities, and lead effeminate lives, are more liable to variations than others differently situated. The nervous system also may be so affected as to cause similar changes: 3dly, *The Womb may at one time be Irritable, and at other times Passive;* and, in this way, the ordinary term will not prove constant.

Beck remarks on these arguments, that experience has, and is constantly refuting them: that there is not a practitioner in midwifery who has not, within his own observation, met with a sufficient number of cases to contradict such opinions: and adds, "It frequently occurs that females of the most irritable habits and effeminate course of life proceed to the ordinary period — nay, it almost universally is so; and although some may be delivered at

* Vide Beck's Elements of Medical Jurisprudence, p. 201; and Note in this Pamphlet, p. 18.

the thirty-seventh or thirty-eighth week, yet if gestation be completed much sooner, the size of the child, or the dangers attendant on premature birth, are generally sufficient to prove the nature of the case. As to the effect of epidemic constitutions, it will be observed, that this cannot with fairness be used as a general argument; nor indeed does it prove any thing more, than that the state of the weather may be such as to predispose to abortion*."

Though we are of opinion that a great many of the cases described by authors, and reckoned by females, as deviations from the ordinary laws of gestation, would admit of an easy explanation, had they all been well sifted by a careful examination of the circumstances: yet we are compelled to admit, that occasional aberrations do now and then occur†.

The evidence adduced in the Gardner Peerage Cause, in our opinion, tended in the most forcible manner to impugn that injurious system-mongering principle of confining nature within the trammels of prejudice and preconceived opinions, a principle, which has throughout the annals of philosophy so frequently had the effect of excluding the light of reason and truth. In preparing lectures on different branches of science, we have experienced the extreme difficulty, nay, even the impossibility of defining objects by human language, and hence have been led to form an axiom, that "*Nature abhors a Definition:*"—thus telling us, that the stupendousness and the infinitude of her works are beyond the comprehension of the mind of man. The same difficulty will be found in every department of the arts and sciences, so that the more we scrutinize definitions, the more we shall detect their imperfections.

Following up similar ideas, we would remind the reader of the undeniable fact, that the product of human conception may be expelled at almost any period after impregnation, and that full grown children are occasionally born earlier than nine calendar months;—if Nature, therefore, thus brings children prematurely into the world, often we might fancy against the little *urchins' inclinations*, who may be loath to resign so snug a situation and so agreeable a climate, to become the denizens of this troublesome world and the most helpless of all creatures—why should she not be capable of retaining them *in situ* for a longer period—although it were only to indulge one of her whims or aberrations? The fact is, that Nature will not be limited by the opinions of man—she will not recognize human laws—she often delights in secrecy—she triumphs over the physiologist and the philosopher, by the incomprehensibility of her works, and by showing him his nothingness in the scale of her operations‡.

* Beck's Elements of Medical Jurisprudence, p. 196.

† Were all the cases of irregular pregnancies carefully investigated, we believe a great many of the witnesses would reply, like Mary Wells, vide p. 95, "*You interrogate me too closely.*"

‡ "In whatever manner," says Dr. Collins, "we view the phenomena of pregnancy in our own or other species, we must not reject facts that seem contrary to the ordinary laws, on the supposition that nature has prescribed fixed and determined limits to the period of gestation. For, on examining the laws and circumstances that regulate or influence the productions of

We agree, therefore, in opinion with those who say, justice requires that when pregnancy has exceeded the ordinary or legal term, we ought not to presume the illegitimacy of the issue, unless other circumstances warrant this conclusion; but we think it preposterous to maintain, in the present state of knowledge, that our legislation ought to accommodate itself to the deviations from the ordinary period of pregnancy, by allowing more time than it does, at least by precedent, to establish the claim of legitimacy, and consequently the right of succession in such cases. Before any important changes be made, legislators will naturally demand more positive information than any we yet possess: upon that being acquired, it is probable that some modification of the laws respecting legitimacy and succession might become necessary*. Admitting that aberrations

either the vegetable or animal world, we see extraordinary varieties and deviations from the general laws."—Dr. Collins also thinks, that "pregnancies continuing ten, eleven, or more months, are consistent with the laws and mechanism of labour; and that the gratuitous assertion of those, who deny them altogether, is contrary to the evidence of history and the principles of physiology or medicine."—*Vide Edinburgh Medical and Surgical Journal, No.* 87.

* The following extracts on legitimacy are highly interesting:—

"Although the decisions on the subject of legitimacy have occasionally been very extraordinary and loose, yet considerable uniformity exists in the laws of various countries.

The Roman law did not consider an infant *legitimate* which was born later than *ten months after the death of the father, or the dissolution of the marriage.* Such was also the French law prior to the revolution.

A case is said to have been decided by a majority of judges of the Supreme Court of Friesland, by which a child was admitted to the succession, though not born till *three hundred and thirty-three days from the day of the husband's death*, which period wants only three days of *twelve lunar months.* The reader will find the details of this case, in Latin, by consulting Paris and Fonblanque's Medical Jurisprudence, vol. iii, p. 219.

The Prussian civil code declares, that an infant *born three hundred and two days after the death of the husband*, shall be considered *legitimate*; and a case has occurred where one born three hundred and forty-three days after the death of the husband was adjudged a bastard by the *legislative commission* of that country.

The civil code now in force in France contains the following provisions. The child born in wedlock has the husband for its father. He may, however, disavow it if he can prove, that from the *three hundredth* to the *one hundred and eightieth day before its birth*, he was prevented, either by absence, or some physical impossibility, from cohabiting with his wife. An infant born before *one hundred and eighty days after marriage* cannot be disavowed by him in the following cases:—1. When he had a knowledge of his wife's pregnancy before marriage. 2. When he assisted at the act of birth, and signed a declaration of it. 3. When the infant is declared not capable of living. Lastly, the *legitimacy* of an infant born *three hundred days after the dissolution of marriage*, may be contested.

It will be observed, that, by the last section, the child born after three hundred days is not positively declared a bastard, but *its legitimacy may be contested.* And Capuron, in remarking on this, observes, that it would probably be deemed legitimate, if no legal investigation should take place. The language of this law is also so put, that, in a contested case, all the learning of former times, and the innumerable cases related by medical jurists, might be brought forth to prove, that *eleven and twelve months* are *possible*, and even *probable.* I confess that I prefer the Scotch law, because it prevents this. It

from the regular laws of utero-gestation do occur, they include cases of *protracted* pregnancy and cases of *abbreviated* pregnancy.

is concise and decisive. 'To fix bastardy on a child, the husband's absence must continue till within six lunar months of the birth. And a child born after the tenth lunar month, is accounted a bastard.'

The English law, on which our own (the American) is founded, does not prescribe a precise time. There are, however, some decisions which will show the ordinary course of adjudication." The reader will find the above quotations, and the details of some of the cases to which allusion has just been made, in Beck's Elements of Medical Jurisprudence, p. 202—205.

"*Pliny* tells us, that the Prætor, *L. Papirius*, was declared entitled to succeed an infant born after *thirteen months*; but he adds, this was *because* no time appeared by law "*quoniam nullum certum tempus pariendi statum videretur.*" We read in Aulus Gellius of an edict by the Emperor Adrian in favour of a woman, of irreproachable character, who was delivered *eleven months after the decease of her husband*: and the Parliament of Paris, in the case of a widow, decided in favour of the legitimacy of an infant born *in the fourteenth month of pregnancy*. *Bartholin* relates the case of a young woman at Leipsic who was delivered in the *sixteenth month*; and, if we may credit it, the account would appear to have been as *unexceptionable* as any case on record, for during her pregnancy she was in custody by order of the magistrates. The civil code of France has placed a limit to our credulity respecting retarded births, and decrees *three hundred days*, or ten months, to be the most distant period at which the legitimacy of a birth shall be allowed*."

"The Roman law was liberal in respect of the legitimacy of retarded gestations. The Decemvirs allowed children born in the tenth month to be legitimate; and the Emperor Adrian admitted the legitimacy of one born eleven months after the death of the husband, as the mother had a good and moral reputation.

The Parliament of Paris, in 1647, decided the legitimacy of a child born eleven months after the departure of the father to another country.

The University of Heidelberg allowed the legitimacy of a child born at the expiration of thirteen months. See Nebel's "Dissertation sur les Enfans nées à treize mois," published in the first part of the eighteenth century.

The celebrated Mauriceau, whose work on Midwifery appeared about the year 1688, and La Motte, whose book came out in the beginning of the eighteenth century, have recorded cases in their own practice in which pregnancy continued twelve or thirteen months. The former states, that there is no fixed limit, either for conception or uterine gestation; that they are influenced by many circumstances over which we have no control.

Perhaps the most celebrated question of this nature that was ever discussed in the medical world, was that which, in the close of the eighteenth century, called forth the splendid talents and ingenious theories of Petit, Louis, and Astruc. It was to ascertain whether the birth of a child, occurring ten months and seventeen days after the death of the husband, was legitimate, and consequently entitled to succeed to the father's property, who at his death was eighty years of age, and subject to much bodily infirmity. It is true, they did not believe or assert the legitimacy of this child, from the moral and physical considerations which the infirmities and age of the father and the immoral character of the mother suggest, but, from the principles of anatomy, physiology, and experience, they showed the possibility of such extraordinary pregnancies.

At Lyons, in 1782, Benoite Franquet was unexpectedly delivered of a child of seven months. Three weeks after, she experienced the sensations

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* By the law of Scotland, a child born *six* months after the marriage of the mother, or *ten* months after the death of the father, is considered legitimate.—*Vide Paris and Fonblanque's Medical Jurisprudence*, vol. i, p. 247.

The chief causes assigned for the Protraction of Pregnancy are,— 1. An Aberration from the Laws of Nature: 2. Hemorrhages: 3. Mental Emotions; and, 4. Mechanical Obstruction. It is obvious, that in speaking of these causes, especially the two last, we might rather employ the terms *protracted labour*, or the *retardment* of labour after it has commenced, but from whatever cause the fœtus may remain *in utero* beyond the natural period of nine calendar months, or rather about 280 days, whether owing to labour not having commenced at the natural period, or from its being delayed after it has commenced, is immaterial: both cases, strictly speaking, come under the meaning of protracted gestation.

Regarding the first of the four causes just mentioned of the protraction of gestation, we have said enough in this introduction, and perhaps the reader will hereafter find more than enough in the evidence and the notes. The other three causes are likewise adverted to in the notes *.

Contrary to the evidence of some eminent witnesses, some maintain that the passions of the mind have much influence over uterine actions. We have been informed by a respectable practitioner of a labour, that had nearly arrived at its apparent termination, suspended for more than two days in consequence of a gentleman having been sent to the patient against whom she took a prejudice; perhaps, such effects may be attributed to the depressing passions producing a deficient secretion of nervous power, and consequent diminution in the sensibility of the os uteri, although they, without doubt, also

that appeared to indicate the existence of another, and in five months and sixteen days after the birth of the first, she was delivered of a remarkably strong and healthy child. Now this infant could not have been conceived after the birth of the other.

We have another instance of preternatural pregnancy in the affair of Catherine Berard, the widow of Francis Chapelet. This took place in 1808, and on the evidence of the most respectable medical men, a child born ten months and eighteen days after the death of the father, was declared legitimate; but in an appeal to the court of Grenoble, this decision was set aside by a majority of one only." — *Vide Edinburgh Medical and Surgical Journal, No.* 87.

* Had our limits permitted, we should have entered into some details, touching the effects of mental emotions. We shall however, give two quotations, and refer the reader to a Note in page 48.— " Labour, after it has actually commenced, may be suspended by slight causes, as agitation or depression of mind; nay, even when it has made considerable progress, it may, from various sources of difficulty, be protracted two, three, or more days, *and occasionally as many weeks*; the birth of the child would hence be proportionately deferred," or, in other words, pregnancy would hence be proportionately protracted beyond the regular terminus."— Vide an Attempt to prove on Rational Principles, that the term of Human Pregnancy may be considerably extended beyond nine calendar months, by John Power, M.D. &c. &c.

Grief, and other depressing passions, have been said by the believers of protracted gestation to possess a delaying power; while others think that they are more apt to produce abortion.— *Beck's Elements of Medical Jurisprudence*, p. 201.

We recommend the reader to peruse Dr. Collins's ingenious illustrations of Mental Emotions, in the 87th Number of the Edinburgh Medical and Surgical Journal.

give rise to a diminished action of the muscular fibres of that viscus. Let us now speak of *Abbreviated Gestation*.

" It is an unquestionable fact, that there is in many females *a disposition to expel the child before the ordinary term*. This not only takes place at the thirty-seventh or thirty-eighth week, when we might suppose that the female made a mistake in her calculation, but occurs as soon as the seventh month. La Motte, in his Midwifery, makes mention of two females, who always brought forth at seven months. Van Swieten says he has observed similar cases; and Foderé relates of a female, in the Duchy of Aost, in the same situation. It will not, however, be contended, that these are to be considered as indicating a healthy and regular state of the uterine function, but rather as a consequence of disease.

If the question be confined in the manner already stated, we may derive aid from the appearance of the child and the condition of the mother. And although it may be deemed *barely* possible, that a child, born at seven months may *occasionally* be of such a size as to be considered mature, yet I apprehend, that the assertion is most frequently made by those whose character is in danger of being destroyed. If a mature child is born before seven full months after connection, it ought certainly to be considered illegitimate*."

" If the question, *how far the term of utero-gestation can be shortened, to be compatible with the life of the offspring*, could be decided by the number of recorded cases, we should be called upon to acknowledge *the possibility of the fœtus surviving at extremely early periods;* Capuron relates the case of *Fortunio Liceti*, who, it is said, was born at the end of *four months and a half*, and that he lived to complete his *twenty-fourth year!* In the case of *Marechal de Richelieu*, the Parliament of Paris decreed, that the *infant at five months possessed that capability of living, to the ordinary period of human existence* (viabilité), which the law of France required for establishing its title of inheritance. The Roman law, '*de suis et legitimis hæreditibus*,' establishes, upon the authority of Hippocrates, that an infant may be born *six months and two days* after the term of conception; while a second law, sanctioned also by the same high authority, requires an interval of *seven months* between the conception and delivery; this discrepancy receives explanation from the fact, that the ancients fell into many contradictions from indiscriminately using in their calculations *lunar* and *solar* months; thus, for instance, *Hippocrates* uses the former in his books, '*de Septimestri et Octimestri parte*,' while in those '*de Alimento, de Carnibus, de Epidemicis*,' the latter uniformerly constitute the basis of computation. Physiologists of the present day consider that a fœtus, born before the completion of the seventh month, has a very slender chance of surviving, although instances have occurred, where the life has been preserved after a birth still more premature†."

* Vide Beck's Elements of Medical Jurisprudence, p. 197.

† Paris and Fonblanque's Medical Jurisprudence, vol. i, p. 243.

Dr. Hunter's opinion was, that "A child may be born alive at any time from three months; but we see none born with powers of coming to manhood, or of being reared, before seven calendar months, or near that time. At six months it cannot be*."

"All accounts of children," said Professor Hamilton, in his lectures, "living to maturity, who were brought forth at the fifth or sixth month, are fabulous; at least I consider them so. I lately brought a child into the world a few days after the completion of the sixth month, which, to my surprise, was alive, and which lived nearly three days: this is the longest period ever I knew so early a fœtus live†. At the completion of, or a few days after the seventh month, a child may, and certainly often does, live to maturity. When I first began practice, I supposed that no child could live to maturity which weighed less than five pounds avoirdupoise, but experience has convinced me to the contrary; and now I am confident, that a child of four and a quarter pounds weight at birth may live to maturity. No child at the full period of pregnancy weighs less than five pounds avoirdupoise, and the common weight of children is seven pounds at the full period. Dr. Clarke had not seen a new-born child weigh more than ten pounds; now, I have seen a number which weighed twelve pounds, and I once saw one which weighed thirteen pounds twelve ounces avoirdupoise. Dr. Clarke had seen no case of twins weigh more than twelve pounds; now every year I see twins weigh fourteen pounds‡."

Before concluding, we would remark, that if the important point, as to the *abbreviation*, and more especially the *protraction* of human utero-gestation, were to be decided by the *analogy* of the irregularities or the deviations from the usual periods of gestation in the lower animals, the task would be easy. The sceptic on this head would only require to read the facts — the incontrovertible facts — contained in the various works referred to in the notes, to become a convert to the doctrine of the frequent protraction of human pregnancy beyond the natural period of nine calendar months. Indeed, the mass of facts respecting deviations in the period of gestation among the lower animals, is so satisfactory as to require no new experiments or observations§.

In the formation of laws, however, which might involve the character, the property, nay, the life of man, we admit that analogy,

*Vide Note, p. 18 of Evidence.

† "Irregularities, or apparent irregularities, in menstruation, will also explain some supposed *curtailments* of the term of pregnancy. I have already hinted that a discharge of blood may take place from the vagina, even after conception—nay, in cases of imperfect closure of the os uteri, it may even come from the uterus itself; which is, indeed, a well known cause of abortion. Care and other circumstances, however, may preserve the embryo; and, pregnancy going on, the female is surprised long before her reckoning is out."—*Smith's Principles of Forensic Medicine*, p. 493.

‡ Notes from Hamilton's Lectures.—Vide also Beck's Elements of Medical Jurisprudence, p. 116.

§ Every Newmarket jockey could adduce instances of mares which had exceeded the usual time of gestation.

though a powerful argument in the lectures of the physiologist or of the teacher of midwifery, is not a sufficient ground upon which legislation could be built.

One insuperable objection occurs to us against the inferences of analogy; *viz.* that no animal, woman excepted — we beg pardon of the fair sex, the most beautiful of all animals — is subject to menstruation *; and another circumstance has also its weight in their rejection; *viz.* that unlike many of the lower animals, who are in a state for procreation only at certain periods, women are almost always accessible to the male.

To conclude, when we compare both sides of the medical evidence, given in the Gardner Peerage cause, our inference is, that although the personal testimony of both parties may be nearly equal, it is, on one side, grounded chiefly on preconceived notions or partial reasonings; while the cases advanced in confirmation only show the nature of the *general law*, but not the impossibility of exceptions; this negative they have failed to prove: on the other hand, independently of the ingenious theory of Dr. Power, some instances have been brought forward to which we can scarcely deny credibility, and which tend to demonstrate, that exceptions to the general term of pregnancy are occasionally met with. But we are totally unable to come to any decisive conclusion with respect to the *latest period* to which gestation is protracted, or to the *frequency* of protraction. A wide and an important field remains open for future investigation.

* "Menstruation is to be regarded as exclusively confined to the human female, or, at farthest, to such females as in the structure of their uterine systems approximate more closely to that of mankind, and which have been said, when subjected to confinement, to evidence appearances of a similar periodical discharge."—*Essays on the Female Economy*, by J. Power, p. 2. The author refers to Buffon's and John Hunter's works for more information on the subject. But we must have more satisfactory evidence, than any yet in existence, before we become converts to the faith that monkeys, or any other class of the lower animals, have periodical bloody discharges, or a species of menstruation.

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MINUTES

OF

THE MEDICAL EVIDENCE

GIVEN IN THE

GARDNER PEERAGE CAUSE.

Die Jovis, 19 *Maii* 1825.

THE EARL OF SHAFTESBURY IN THE CHAIR*.

The order of reference was read.

The petition of Alan Legge Gardner, an infant, by George Hibbert, John Cornwall, and Alan Gardner Cornwall, Esquires, his guardians, to his Majesty, claiming the Barony of Gardner, with his Majesty's reference thereof to this House, and the report of his Majesty's attorney-general thereunto annexed, were read.

The counsel were called in:

And Mr. Solicitor General, Mr. Adam, and Mr. Le Marchant, appearing as counsel for the petitioner; Mr. Tindal appearing as counsel for Henry Fenton Gardner; and Mr. Attorney General appearing on behalf of the Crown;

Mr. Solicitor General was heard to open the allegations of the petition, in part, and a number of witnesses were heard in behalf of the claimant, when the Committee adjourned.

Die Lunæ, 30 *Maii* 1825.

CHARLES MANSFIELD CLARKE, Esquire, was called in, and, having been sworn, was examined as follows:

(*By Counsel.*) You are an Accoucheur?—I am.

* The medical evidence was taken before the Committee for Privileges, to whom the Petition of Alan Legge Gardner to his Majesty, claiming the Barony of Gardner, was referred. The Earl of Shaftesbury was always in the chair, and the Committee, including the venerable Lord Chancellor, gave the subject in question the utmost attention.

How long have you been in practice, as a medical man?—About twenty years.

Has your experience been very extensive, during that time?—My time has been fully employed during the greater part of that time.

According to your experience, acquired from so much practice, what is the *full period of a woman's gestation, under ordinary circumstances?—Forty weeks**.

In your judgment, is it possible, that a child born on the 8th of December, and which has lived, could have been the result of any sexual intercourse subsequent to the 11th of July?—Certainly not, in my opinion.

In your judgment, could a child, born on the 8th of December, and which lived, have been the result of sexual intercourse anterior to the 30th of January?—Certainly not, in my opinion.

The period mentioned comprehends three hundred and eleven days, or forty-four weeks and three days?—So I understand.

Could it have been the result of an intercourse anterior to the 7th of February, being forty-three weeks and four days?—Certainly not, in my opinion.

Supposing a woman's labour to be protracted, could that have made such a difference as to have enabled the child to be the result of an intercourse at the dates given?—I never knew a labour protracted to such a period.

How long could a labour be protracted without proving fatal to the mother, or the child, or both of them?—I cannot answer that question precisely.

As nearly as you can?—Your Lordships will understand, that it is a question which it is very difficult to answer; I hardly know how I can answer it. *I have no difficulty, excepting the difficulty of the subject.* If my answer may be taken as a matter of conjecture, and not as a matter of certainty, I should be very glad to give it. *I have known a labour last five, possibly six days; that I should say was the ultimum tempus;* but it is not to be considered as a precise answer, because a precise answer cannot be given, I believe, to such a question.

Was the child that was born after this labour you have referred to, a child born at its mature age?—I do not refer to any particular

* In giving their evidence, it is clear that some medical gentlemen have not remarked the difference between nine calendar months and forty weeks; and, indeed, in some works, we read of "*nine calendar months or forty weeks,*" as if these periods were the same. Now there is nearly a difference of a week: in nine calendar months may be reckoned from 273 to 275 days, according to the months of the year included; while forty weeks are equal to 280 days. The reader will do well to give this important point due consideration. Dr. Gooch clearly indicated the above difference in his evidence. It is likewise especially to be borne in mind, that while a number of the medical men who were examined fix the general term of gestation to forty weeks, or 280 days, others of great practice limit it to nine calendar months—a day or two days less or more, but generally less—*i. e.* from 271 to 277 days.

labour; but I am taking the recollection of past occurrences in a rough way. I am not referring to any precise case.

Supposing a child to be born whose nails are not perfectly formed, does that lead you to conclude whether the child has arrived at its full growth?—There is a vulgar error with respect to the nails of children, upon which no dependance is to be placed. The nails, in common with many other parts of the body, grow more quickly in certain cases than in other cases, and no dependance is to be placed upon that circumstance, to the best of my belief.

Does a child, having laboured under a difficulty in sucking, afford any rule for judging whether it had arrived at its proper growth before it was born?—I should say, that as weakness is in general in proportion to age, so a child sucking with considerable difficulty is more likely to have been a child prematurely born than one sucking naturally and easily*.

Cross-examined by Mr. Attorney General.

After sexual intercourse, what is the extreme point of time at which labour must of necessity begin?—*Forty weeks*, I should say, *is the extreme time*†.

Can that, by any suffering, by any hardships, which a woman has undergone, be protracted beyond the forty weeks, by any treatment she has undergone?—I know there is a case of that kind on the books; but I never knew a case of that kind. I can perfectly understand that privation, fatigue, and exhaustion *may accelerate*, but I cannot see how such circumstances *can retard*‡; neither in my knowledge have I ever known *any one instance* of a labour having been retarded beyond the period I have mentioned.

If labour must of necessity, according to your judgment, begin at the expiration of the forty weeks, what is the extremest point of time to which the continuance of that labour, before the child is born, may be protracted?—I have partly answered that question before; but your Lordships will understand I do not give a precise answer to that question, because my answer is founded on the recollection of the general result of a number of protracted labours; and, as far as such an opinion can be of any value at all, I should say, *that I have never known a labour protracted to a period of time equal to that of five or six days;* and I am not sure that I have known it protracted so long, the child being born living.

Do you conceive it possible that it could be protracted as far as a fortnight?—Possible to the Almighty, of course; but not possible in the common acceptation of that term.

You were referring to a case which is supposed to have occurred

* Would it not have been a more explicit answer to have said,—Rarely, or never, unless there be other concomitant indications?

† According to Mr. Clarke's evidence, forty weeks is both the *full* period of a woman's gestation under *ordinary* circumstances (vide former answer), and the *extreme* time!

‡ The reader will remark, that this evidence is contrary to that of some of the other medical witnesses.

at a former period; what was the name of the medical man that was concerned, that gave evidence upon that occasion?—That I do not know. If I recollect rightly, but I am not sure whether it was the case of Alsop v. Bowtram. I do not recollect the name of the medical man; the case I think is in Croke James.

Though you do not recollect his name, do you happen to recollect whether he was a man of eminence in his profession?—I have merely recorded the fact, having been a teacher of that part of the profession for a number of years. I have recorded the fact for the benefit of the students; I do not recollect any farther particulars of the case.

You are understood to say, that labour must begin at the expiration of forty weeks after the last sexual intercourse?—Certainly.

How can you ascertain that fact; how has your experience enabled you to state that as a fact? – I should say that *the immorality of the age* has enabled me, in a great number of instances, to ascertain that fact; that the fact of the last intercourse has been stated to me by the parties, who alone were acquainted with it, for their mutual advantage; and that I have combined that fact with the knowledge of the subsequent fact of the commencement of the labour; *and that I have never yet seen a single instance in which the laws of nature have been changed*, believing the law of nature to be, that parturition should take place *forty weeks* after conception*.

Instances of this kind may have occurred; but have you had experience of a great number of instances of this description?—I must answer that question as I did the former, that I have not minuted the number; but I should say several.

And you have in *no* instance known a deviation?—*I have not*†.

Have you, in the course of your medical studies and inquiries, ever heard of any deviation?—I have heard of a great number of things; but I have not believed them, because they have varied from my experience; and on sifting such cases, I have always found they had not been found d in fact.

The result of your judgment, as a man of science and experience, is, that forty weeks is the extreme time?—The result of my judgment, as a man possessing some experience, I should say is, that forty weeks was the time.

Cross-examined by Mr. Tindal.

I understand you to say that your judgment is formed, as to the first period, that is, as to the time from which the reckoning begins, from the information of the parties themselves?—Certainly; from their interested communication to myself.

From their communication to yourself?—I say interested, because,

* The precision of the *law of nature* seems to have been greater in Mr. Clarke's practice than in that of other medical practitioners. Even those who entertain nearly the same opinions as to the term of pregnancy, admit a day or two *less or more* than nine calendar months, or even than forty weeks.

† This is double negation; and, if grammarians be correct, two negatives make an affirmative.

where parties have an object to carry, it is not an object, of course, with them, to deceive the person whom they consult.

Have you not known, in many cases, that persons giving you this information, have themselves been deceived, and that the event has not happened as they stated it to you?—I should hardly think *that the man* could be deceived as to the time at which *he begot a certain child*.

Do you think that is more in the knowledge of the man than of the woman?—I would beg to observe, that when I answered that question, it referred to *cases of single connection*, and not to connections, one of which was stated; but that a single connection took place, *the result of which connection was a pregnancy*, the ultimate result of which pregnancy was a labour, where there was one single act of connection *.

Then the judgment you form depends upon the truth of that information, as to there having been or not been one single act of connection?—Certainly; but the result confirmed that statement.

Have you not known in many, I may say in most of the ordinary cases which occur of married persons, that females have been mistaken in the time that they have assigned for their gestation?—A great number; but married persons *do not calculate from the moment of conception*, but from other circumstances.

Of course the far greater number of cases that come before you are those of married persons?—Certainly: no doubt.

Therefore the result of your judgment must depend mainly on that which occurs in your daily practice, and not on single and particular cases?—The result of the particular cases I have stated to your Lordships; but perhaps that result may be confirmed by an additional fact, which is this, that supposing, and you will excuse me for employing medical language perhaps, supposing a woman to menstruate upon a certain day, and her menstruation to cease on a certain day, and that woman to fall with child, that woman must produce a child *at the end of forty weeks* (within forty weeks is meant, we presume) from the day preceding the next expected menstruation; proving, therefore, with the other cases, which form by far the greater majority of those which have fallen under my care, proving that forty weeks is, even in those cases, the *ultimum tempus pariendo mulieribus constitutum*.

Is not the judgment of a medical man made up, not only from his own experience, but from books of authority on the subject?—In matters of opinion, but not in matters of fact.

Is not the time during which the gestation of the woman is carried on, partly composed of matters of judgment, being derived from facts, and partly from books?—No; I conceive it to be entirely a matter of fact, provided you can give credit to the assertion of the

* In some cases, is it not fair to presume that Mr. Clarke might be deceived, to use his own phrase, by the "*immorality of the age?*" We had hoped the world was becoming *more moral*, and, at least, that the present age was not characterized by its *immorality*; but we leave this point to be settled by the witness and the divines. Vide note, p. 6.

parties; and in the instances from which my opinion has especially proceeded, the parties have been themselves interested in telling the truth*.

Have the goodness to state the number of instances you can say have occurred to you under those particular circumstances you have adverted to?—I really can hardly mention numbers, because I have kept no account of them—wishing at the same time to state the number, if I could—but I have known a great number.

Have you known as many as ten?—I should say more than ten, certainly; many more than ten—a great many more than ten.

That is the nearest approximation you can make to any actual number?—No, I do not know that. I can state the precise instances. I think I may venture to say I have known of twenty or thirty instances; twenty instances I will say to be within the truth, in which I can be enabled to state precisely the length of time.

Does not the judgment of the medical man in some measure found itself upon the works of authors of eminence, and of experience and ability?—It appears to me, not in matters of fact, where one's own observation constantly contradicts such assertions, provided they are at variance with that experience†.

Was Dr. Hunter a person of eminence in his profession?—Of great experience and great eminence, much greater than myself.

Therefore, if this should be laid down by Dr. Hunter in any of his works, that a child may be born perfect and in the natural way after ten months, is not that the *dictum* of a learned and eminent man, on which reliance can be placed?—It is the *dictum* of a learned and eminent man.

The Solicitor General submitted, that this examination was not regular; that the opinion of Dr. Hunter may be adduced in the way of observation, but not in the examination of a witness.

Mr. Tindal submitted, that he had a right, in respect of the judg-

* We can by no means assent to the opinion, that females, who profess to have had only *a single coitus*, have no motive for deceiving their medical attendant; we are assured, that few women, possessed of the least delicacy, would admit themselves guilty of repeated incontinence; and we all know that the particular instance, in which a culprit is first detected, is universally pleaded as the only deviation from rectitude: besides, it has, in more instances than one, occurred to ourselves to know, that women, when even in the pangs of labour, have denied that they had ever been subjected to sexual intercourse—so much for the veracity of the sex. Admitting, however, that only *a single coitus* had taken place, and that labour occurred precisely at the end of forty weeks, this only proves that in such instances it came on at the ordinary period, which nobody disputes, but is not conclusive against the possibility of deviation.

† Greatly as we respect the talents of Mr. Clarke, we must maintain, that, as far as facts go, the experience of one man is equally valuable with the experience of another, and therefore, independently of the respectable evidence brought before the House, we must pause before we entirely reject the testimony of such men as Dr. Hunter, Rœderer, Foderé, Chamberlayne, Mauriceau, Capuron, Hamilton, and others, who have, chiefly from cases they have met with, supported an opposite opinion. Vide subsequent notes.

ment of Dr. Hunter, who was deceased, to put questions by way of cross-examination.

The counsel were informed, that they might ask what were the opinions of eminent men.

(*Mr. Tindal.*) Do you not know it was the opinion of Dr. Hunter, that a woman may be brought to bed after the lapse of ten calendar months from the time of conception?—I believe Dr. Hunter *never taught that doctrine.*. He may have adverted to cases in which such circumstances were represented to him; but if I recollect rightly, Dr. Hunter never taught that doctrine.

Am I to understand you to say he did not state that?—*Not as his opinion, I believe I may say* *.

Are there not some names of authors which are well received, and upon whom reliance is placed in their profession, who have taught a contrary doctrine to that you are now stating, namely, that the time may be longer?—I may refer to Haller, who perhaps stood as high as a physician, in his time, as any other, perhaps higher; and who is considered a most respectable authority, as high an authority as can be had upon such a subject; and I believe Haller states *forty weeks* to be the period.

Have you not learnt from books of authority, that the time of gestation of a mother may be longer than the period you have represented?—Certainly; it is stated so in the Book of Moses; but when my own experience is opposed to such a statement, I would certainly give, for the advantage of persons, the result of my own experience, rather than I would offer the Mosaic opinion to guide them in their arrangements.

The question did not refer to so early an authority as Moses, but one more within the reach of our own times; cannot you refer to any practitioners of eminence, within the last two centuries, who have thought the same opinion?—Not that a woman goes *ten months*†.

Not that she may go ten months?—Not as his opinion; certainly not.

Does not a very ancient author, and one to whose name one always pays the greatest deference, Hippocrates, lay down that it may be a longer time than ten months?—Hippocrates mentions ten months; and I believe the expression to be, Γυνη φυει δεκα μηνος τουτο το μακροτατον.

Have the goodness to tell me the nature of the months he would reckon by?—I am not prepared to answer that question.

* Many parts of this evidence are printed in *Italics*, on purpose to point out their importance to the reader: sometimes they are extraordinary; sometimes contradictory; sometimes ridiculous; and at other times they are expressed in forcible language. Vide subsequent notes.

† We were a good deal surprised by this statement, but as the subject matter is sufficiently alluded to hereafter, we may here simply remark, that the opinion, that a woman may go more than ten calendar months, is mentioned by many distinguished men, and believed by many living practitioners of eminence. Vide subsequent notes.

You know the length of their months were different?—I believe so.

Is there an author of the name of Rœderer?—I know the name of the author, but am not acquainted with his works.

(*Mr. Attorney General.*) In the reign of James the First, do you know of a practitioner of the name of Chamberlayne?—He was a practitioner of considerable eminence in this town, and considerable experience.

Do you happen to know that he was the person who gave evidence in the cause which has been referred to?—No, I do not recollect that.

Re-examined by Mr. Adam.

Is Rœderer a person of much reputation in medical science?—In this country he is not much heard of.

Within the last two hundred years, has the stock of medical information upon this branch much increased?—I hardly know what answer to give to that question.

Since the death of Dr. William Hunter, has this branch of medical science been much matured and improved?—In some respects considerably, I should say.

(*By a Lord.*) You stated, that in a common *case you counted from the day when you supposed that a woman ought regularly to have menstruated?—Just so.*

How can you tell, or is it completely conjecture, from what period between the time she had menstruated, and the time she ought to have menstruated, how many days may have elapsed?—In the ordinary cases in which I might be applied to for information respecting the time at which labour would take place, subject to the difficulty your Lordship has stated, incapable as I should be of seeing whether the party had fallen with child immediately after the last menstruation, or immediately before the expected one, or in what part of the interval between those two dates, *I should take the safest mode of giving the average reckoning, by counting the half of twenty-eight days, fourteen from the last period, and of course fourteen from the next expected one;* and I should offer an opinion, that in all probability the effect might follow the cause at the end of *forty weeks* from that half of the interval; but I should know that it must take place *at the end of forty weeks* from the day upon which the last menstruation ceased, and before the day of expected menstruation*.

* We suppose the witness meant, within forty weeks of the day on which menstruation should have taken place, but for impregnation. Supposing a woman's menstruation to have ceased on the 2d January, that she became impregnated on the 3d, and that she bore a child on the 31st of October; the duration of pregnancy would include 28 days of January, besides nine months, containing 273 days: in all 301 days or 43 weeks:—if the same woman fell with child, or in other words, if conception took place on the 17th of January, the duration of pregnancy would still be 87 days, or 41 weeks. In the common calculation of women, by the cessation of the menses, we

(*Mr. Attorney General.*) Did you ever know an instance of a birth of a child being extended more than forty weeks beyond the day preceding that upon which the menstruation ought to have taken place?—I have gone so far,—and once in a case of considerable importance in this country, which is known to a Peer now in this House,—I have gone so far as to give an opinion, that a labour of an individual would take place between such and such a period; and the first period which I have mentioned has arrived, and the labour did not take place, and my opinion has been adverted to in the morning, and in the evening of that day the labour did take place.

Did you, in any case, ever know a labour to be protracted beyond forty weeks from the day when the next menstruation ought to have taken place?—*No, in no instance.*

(*By a Lord.*) You said, you should think you knew at least twenty cases in which the parties had told you the day on which connection had taken place, and that your experience is formed upon those twenty cases, and other cases, that it is limited to forty weeks; is there any case where the parties informed you of the day of connection, that you ever knew it exceed *forty weeks?*—*Never, to the best of my knowledge.*

The witness was directed to withdraw.

Then RALPH BLEGBOROUGH, M. D., was called in, and having been sworn, was examined as follows:

(*By Mr. Solicitor General.*) You are a medical man?—I am.

Have you had considerable practice in midwifery?—I have.

How long have you been in practice?—Four and thirty years in London.

Is your practice exclusively confined to that line?—No, it is not.

According to your experience, what is the period of gestation?—

Generally, it is the inclination of my opinion that *it is thirty-nine weeks, but forty weeks I consider the ultimatum* *.

Has your experience verified those dates?—Certainly.

Has the opinion you have given been the result of experience which has fallen within your knowledge and practice?—Yes.

Have you ever known a case in which gestation has been prolonged to the period of forty-three weeks and four days up to the

have 29, 28, 27, or fewer days to fluctuate upon, supposing a woman has regular intercourse with a man during that time.

* Thirty-nine weeks, or nine calendar months, are equal to 273 days; forty weeks to 280 days—therefore, Dr. Blegborough admits of seven days variety in the natural time of gestation. But after stating as above, that 39 weeks is the period of gestation, he afterwards allows that 40 weeks is the period, reckoning from the term of conception. Now, as the duration of pregnancy should be legally reckoned from the moment of conception—were it possible—the Doctor has given two fixed periods as the duration of gestation, viz. 39 weeks and 40 weeks. In the former calculation, however, he was probably judging by the cessation of the catamenia, in the latter, by the peculiar sensations which, in some women, *distinctly* indicate conception, if we can credit their reports.

period of delivery, and in which the child has lived?—According to my experience, I have no idea that such an event is possible.

You should not conceive it possible that such an event can happen? —Not according to the laws of the animal economy.

Have you found the laws of the animal economy general, or have you found them to vary with the constitution of the individual?—*I have no idea that difference of age, or difference of management, makes any alteration in the laws of gestation.*

You are to be understood, that adventitious circumstances do not vary the law of nature to protract gestation?—Mechanical obstructions may for a certain number of days, probably *five or six;* but in that case it is uniformly attended with hazard, and almost certain death, either to the mother or the child, or both.

You are understood to say, that five or six days constitute the range of departure from what you define to be the law of nature?—Certainly.

Are you to be understood, that this departure of five or six days is usually attended with the death of the infant, or the death of the parent.—Certainly; because the mother during that period is contending against mechanical opposition; in which case the womb generally bursts, and the patient is consequently destroyed *.

What you call mechanical opposition is some defect or obstruction in the uterus, or in the adjacent parts?—In the bones, from malconformation.

That you consider entirely a deviation from the law and order of nature?—Certainly; insomuch, that the effort of labour had commenced at a proper period, and was only delayed by mechanical obstruction.

Does it happen to you to have been consulted in cases where you can ascertain the day of sexual intercourse, on which your reasoning was founded?—I can answer that question *very satisfactorily* to your lordships: it is not unusual to be sent to by ladies *who have felt a peculiar sensation, have fainted, and have been extremely ill,* so as to induce their friends to send to a professional man; upon examining them minutely, and asking them those questions which are proper on the occasion, they will declare *certain sensations, by which we know that conception had taken place, and was the cause of those feelings which they represented to us.* Upon calculating from that time, I have, in such instances, invariably found I have been right in my surmises, and that labour has taken place certainly not later in every instance that I recollect of this sort, than *forty weeks* from that period †.

* We apprehend, that few practitioners will agree with Dr. Blegborough, with respect to this bursting of the uterus, at least, as a general rule; while many believe that physical causes are as capable, as mechanical ones, of protracting labour.

† Dr. Blegborough's inquiries with respect to *certain sensations,* which indicate the moment of conception, may have been more close than those of most practitioners. We profess to know no symptoms arising at the time of conception, which may not, at times, and in certain constitutions, be equally referred to the venereal orgasm, or which can be certainly and invariably relied upon in forming an opinion.

Could a child born on the 8th of December, and born alive, according to your opinion, have been begotten so late as the 11th of July in the same year?—No, certainly not.

Do you pronouce that to be impossible, according to the general laws of nature?—*I do.*

Cross-examined by Mr. Attorney General.

You are understood to say, that labour, at all events, *must begin at the expiration of forty weeks*, though the delivery may be protracted five or six days?—*Yes.*

Your attention has probably been directed to a case supposed to have taken place in the Reign of James the First; was Mr. Chamberlayne, who gave evidence on that occasion, a man of eminence at that time?—I believe he was a teacher.

Was he a practical man also?—I believe he was.

In that case the delivery is said to have been protracted to the expiration of nearly eleven months; do you remember the facts of the case?—No, I do not.

You have never consulted it?—No, I have not.

Cross-examined by Mr. Tindal.

You were understood to say, that the period of gestation, in your judgment, is *forty weeks*, reckoning from the time of conception?—Yes.

May there not be some distance of time intervene between the sexual intercourse and the conception?—I should not think it likely at all; I should have no idea of that.

Perhaps you have not formed a judgment decisively, either one way or the other?—Yes, I have; we imagine conception to arise from the ova seminalis, the influence of which will very soon be lost if not applied at the proper period.

When you say "we imagine," you mean that is your judgment?—Yes.

Are you not indebted for those opinions, not only to your own experience, but to the works of eminent authors?—I speak here, and I thought I was called here to speak, from my own opinions, the formation of my own judgment.

The question applies to the ground of your judgment?—I hear of ladies going to *a much later period;* but there are cases of extra-uterine conception, and the fœtus never passes *per vias naturales*, nor in such case is the fœtus ever born with life.

The question is, whether the judgment of a medical man does not depend as much, or at least in some degree, on works of authority in his own profession as on his own individual experience?—Not as to facts, certainly. I speak from my own recollection of facts; if I were to say all I have heard upon this subject I should get into a very wide field, and perhaps be very inconsistent with reason.

Are there any books in your profession which are reckoned works of authority at all?—Yes, there are.

Is it not to be concluded, that if they are works of authority, the

judgments and opinions of men in that profession bottom themselves in some degree on the authority of those works?—*There are very few men of very great eminence who have written books. Men who write books have seldom great practice; they are generally detailing the opinions of others, and not their own* *;* and I should be very sorry to be led astray by a great name, such as Baron Haller, who has been mentioned as an authority; who, perhaps, never was attendant on a case of midwifery in his life. I should be very dubious of the opinion of such a person. I wish very much to confine myself to my own observations and the result of my own experience.

Then you are not of the opinion of Mr. Clarke, that the gentleman you have mentioned, Baron Haller, was a man of great authority?—No, not upon that, certainly.

Doctors differ upon this subject?—Certainly: he was a general philosopher, writing upon all subjects, but not having particularly attended to this.

Are there in your profession books, which are reckoned books of authority, on which a practitioner may rely?—None, I believe, that relate such a circumstance.

The question refers to no circumstance?—None, certainly, which state the period of utero-gestation at a more distant period than *forty weeks*†.

You introduce a restriction and qualification in your answer, that did not exist in the question; are there no books of authority upon the practice and principles of midwifery, upon which practitioners may rely?—Certainly there are.

Was not Mr. Hunter a man of eminence and great skill in that, as well as other parts of the profession?—Yes, certainly he was.

Do you know the works of a certain author, of the name of Reoderer?—No, I do not.

When you were examined by the Solicitor General, you stated that the time from which your reckoning of the forty weeks commenced, depends upon the information given you by the patients, who call for you?—Yes.

Are you to be understood, that those were persons who described those symptoms which they felt at the time?—Yes.

Do those symptoms necessarily follow immediately upon the sexual intercourse?—Not always, certainly; but frequently.

* We must, in all charity, believe that these are not the precise ideas meant to be conveyed; otherwise we should say, that the above was a new conception not indicated by certain correct feelings: a premature birth. If the doctrine were true, not to speak of many of the ancients, we must put down the Hunters, Denman, Clarke, Hamilton, and a host of distinguished authors, as men of little eminence, and who had little practice. The doctor no doubt meant, that many eminent men, engaged in much practice, had no time to write books, and perhaps he reckoned himself one of that number.

† As will be seen in the sequel, this is Dr. Blegborough's estimation of books; but books, deemed worthy of authority, do exist, in which it is admitted that there are cases of gestation protracted beyond forty weeks.

Do they not vary frequently considerably, according to the nature and constitution of the patient?—Certainly.

Are there not many cases in which females may not feel those symptoms which you mention, until the period referred to has gone by for some weeks?—Undoubtedly. Certainly the sensations I have considered some ladies may or may not feel at the time of conception; but I am sure I did not mistake in having *attributed certain feelings I have described to conception*, and my subsequent observation has confirmed the opinion I have formed.

If the time at which those apparent symptoms take place may vary, with regard to the time of sexual intercourse, can you take upon you to affirm positively that the forty weeks you are reckoning commenced from the time of the intercourse?—I have not said that those sensations took place subsequent to conception; *I only say that I have had those sensations described to me immediately on contact, which has ended in pregnancy*, as I had predicted it would, and the result was labour at the time I expected.

Have you not known that in many instances, even taking the account from those symptoms, you have been disappointed and deceived in the time?—*No, I have not; it is not a very common occurrence; but I do recollect such occurrences* *.

You are understood distinctly to say, that in fixing the period which you assign of the *forty weeks gestation, you borrow the first terminus of that period from the symptoms which your patients describe to you?*—Yes.

Re-examined by Mr. Solicitor General.

You have been asked about several eminent midwives; did you ever hear of a gentleman of the name of Hargrave, among a series of accoucheurs, as particularly eminent in midwifery?—No, I have not.

The late lawyer Hargrave—you have never heard of Mr. Hargrave's medical skill?—No.

Probably you will not look into Coke upon Littleton for any opinion about a protracted labour?—Certainly not.

In the instances which you say have not often occurred, in which *those sensations or feelings* have been described to you, have your dates, in respect to the *forty weeks*, been verified in those instances?—*Yes.*

Were those feelings which were described to you, when stated by the parties who did state them, coupled with the period of sexual intercourse; when did they state the period of sexual intercourse?—*Immediately preceding their having sent to me.*

Those instances were instances where ladies stated the fact of sexual intercourse to have taken place, or rather led you to infer that fact?—Yes; both from the husband and the wife.

In those cases, where the fact of sexual intercourse was stated by

* What is the meaning of this answer? Is it not downright contradiction in the same line?

the husband or the wife, has the actual delivery corresponded with the period of gestation you have mentioned? — It has never in my experience *exceeded the forty weeks.*

It has never in your experience exceeded the forty weeks, where, from the statement, *you were informed of the period of conception?* — Never.

The witness was directed to withdraw.

Then ROBERT RAINY PENNINGTON, Esq. was called in; and having been sworn, was examined as follows:

(*By Counsel.*) You are an accoucheur? — I am.

Have you been many years in practice?—About seven-and-thirty.

According to your experience, what is the usual time of gestation of a woman?—*Forty Weeks.*

Have you known a delivery to be protracted beyond that time?—*Not beyond three or four days.*

During your experience, do you think it possible it could be protracted beyond that time without injury to the female or to the child?—Certainly not.

For what reason?—From the effort of the uterus the woman and child would both die during the delivery.

Do you conceive it possible that any *agitation of the mind* could protract delivery beyond the period you have just stated?—*Certainly not.*

Nor any particular disorder?—*No, nor any particular disorder.*

Nor any mode of treatment?—*Nor any mode of treatment.*

Do you think it possible that a child can be born on the 8th of December from sexual intercourse on the 30th of January?—Certainly not.

Or, that a child could be born on the 8th of December from sexual intercourse, which had taken place on the 11th of July?—Certainly not; not to be alive.

Nor from the 7th of February to the 9th of December?—No, certainly not.

Cross-examined by Mr. Attorney General.

What is the indication of a child being born without nails?—We have seen children born not exactly without nails at forty weeks, and we have seen them perfect at thirty-seven.

Cross-examined by Mr. Tindal.

You stated, that, according to your experience, *forty weeks* is the usual time; forty weeks from what time?—From the time of conception.

How can a medical gentleman, in practice in this town, know *exactly the time when the conception of a female takes place?*—From the circumstances stated to us; *we always get all circumstances related*, and we know that from that time in *forty weeks* a birth will take place.

Are you never deceived in the account you receive from your patients?—We may be deceived; they may tell us they feel; *but we judge from the circumstances, and know from the circumstances that conception has taken place*, and that *forty weeks terminates the whole.*

Do they not very frequently make mistakes in stating that as the time of their conception from which you begin to reckon?—Yes; but then we compare them in that way *that we are never hardly deceived.* Some [women bear children] come at nine-and-thirty weeks, and some will come in seven-and-thirty weeks; but they never go, according to my opinion, beyond forty.

That is assuming you are right in the period you assign for the *terminus* of the gestation?—Yes.

Are not females frequently mistaken three or four or five weeks in the period they assign themselves as the time of their delivery?—*No; I cannot conceive they are* *.

Have you not known they have been mistaken for some weeks in stating the time when they will be confined?—Yes, *that they will do;* but then I am quite sure, on inquiring into it, no such thing will take place.

Your are assuming that they have stated correctly the time at which the conception began; but may not they have made some mistake, from which a second mistake of the time of their delivery may originate?—*No; I do not suppose they do.*

The whole then of your judgment is founded on the faith you put on the first account given you by the female?—The first account, and the circumstances which go on after that confirm it; we find that they are not deceived †.

Mr. Hunter was a man of eminence and reputation?—Of very considerable.

The witness and the counsel were directed to withdraw, and the Committee adjourned.

Die Jovis, 2 Junii, 1825.

ROBERT GOOCH, M. D., was called in, and having been sworn, was examined by Mr. Le Marchant, as follows:—

Your are an accoucheur?—I am.

How long have you been in practice?—Between sixteen and twenty years.

Have you been in considerable practice?—For some years I was physician to two lying-in hospitals, and for a considerable number of

* We have been taught, and we always found by experience, that the mistakes of women on this point are numerous. Vide Clarke's evidence, p. 5.

† Mr. Pennington's judgment is founded on the faith reposed in the accounts received from the females, and which he considered as confirming the general law which limits the ordinary term of human pregnancy to thirty-nine or forty weeks: but he admits that "*children will come at thirty-seven weeks*;" full-grown we presume, or at least perfect in their development.

years to one; besides which, I have been for a considerable number of years lecturer on midwifery at Saint Bartholomew's hospital.

According to your experience, what is the usual time for gestation for a woman?—I should say, *nine calendar months*, where the thing can be calculated accurately; that is, if pregnancy was known exactly to take place on the 25th of March, for instance, I should expect the birth to take place on the 25th of December—that is *just nine calendar months.* It is generally stated in the books, I believe, to be *forty weeks, but I believe forty weeks to exceed the usual term of pregnancy.* The writers say, nine calendar months, or forty weeks; now the fact is, nine calendar months is scarcely more than thirty-nine weeks *.

You are understood to say, that it is generally less than nine calendar months?—*Rather less than nine calendar months.*

Does it often exceed nine calendar months?—*It is sometimes a day or two less, and sometimes a day or two more.*

Have you known it often to exceed nine calendar months?—A day or two.

Not more than a day or two?—When I say often, it is not very often one has an opportunity of calculating it accurately, because gentlemen ought to consider, that in the way married people commonly live together, having constant access and frequent intercourse with one another, *it is utterly impossible to know exactly the time when conception commenced, and consequently utterly impossible to known exactly the pregnancy;* but persons of large practice, and that practice continuing for a considerable length of time, are every now and then meeting *with instances where the time of conception is accurately known*, and therefore the length of pregnancy is actually known; and those are the cases on which we found our opinion; and those cases lead us to believe that it is exceedingly accurate, as nearly as possible nine calendar months, sometimes a day or two before, sometimes a day or two beyond.

Have you not met with many such instances, in the course of your practice?—Quite a sufficient number to enable one to form one's opinion upon the subject, as clearly as on any question of natural history.

Those instances confirm the opinion you have just given?—Those instances invariably prove it. It ought to be recollected, in our ordinary cases, I mean those cases where married people are living perpetually together, and where it is impossible to know exactly, although they are not strict and accurate experiments, yet it is strict and accurate enough to corroborate our notion, for we have known those cases falling in labour nine calendar months from some period or other, from which we must calculate.

You mean to say it is difficult to form an accurate calculation in common cases?—It is.

* Dr. Gooch's opinion differs from that of some of his colleagues. In fixing the invariable period of gestation to nine calendar months—a day, or two days, less or more—he limits the time from 271 to 277 days, while a number of the other medical witnesses fix it at forty weeks or 280 days.

How far does the possible inaccuracy extend?—It is not an inaccuracy.

An uncertainty, how many days?—I say even those cases always come at the nine calendar months, from one period or other of the first month.

Is it your opinion, that a child born on the 8th of December could have been the result of sexual intercourse either on the 30th of January or anterior to it, being 311 days?—No.

Do you think it could have been the result of sexual intercourse on the 7th of February, being 304 days?—No.

Do you think it impossible?— *I believe it to be impossible;* so impossible that it would influence my conduct.

Why do you think it is impossible that it should be so?—Because it deviates entirely from the *strict accuracy* with which I have found the length of pregnancy in those cases in which I could make the experiment strictly; *in those cases where by knowing the exact time of conception I could know the exact length of pregnancy*, it has come with singular accuracy a day or two before, or a day or two after, but very commonly a day or two before the nine calendar months.

Are you to be understood to say, that the period is certain, is uniform?—As certain as any point on natural history can be; I know few things about which I am so much satisfied.

Do you think any injury would result to the woman or the child, from a protracted labour, if it was possible to take place?—*I do not believe a possibility of it.*

Do you think a child born on the 8th of December could be the result of sexual intercourse on the 11th of July, or subsequently?—No, certainly not; a full grown child, certainly not.

Or a child that has lived to manhood; could a child born on the 8th of December be the result of sexual intercourse on or after the 11th of July?—That is short of five months; I have never seen any thing approaching to it; I believe they may be sometimes born alive, but I have never seen any thing approaching to it born capable of living; they have moved, and died in a few minutes.

Were you acquainted with Doctor William Hunter?—Doctor William Hunter died before I settled in London; but every body knew him by his writings.

You are well acquainted with his writings?—I am well acquainted with his writings.

Have you heard of his opinions upon the subject of protracted labour?—I have. The question was put to him; and the note in answer to that, I believe, is printed in Hargrave's notes on Coke on Littleton.

Have you read the note in Coke on Littleton, on which his opinion was given?—I have often examined the note carefully.

Have you examined the circumstances to which it relates?—It relates to the common circumstances of the case.

Is that case known in the profession?—What case?

Are there not two cases mentioned in that note to have been stated by Dr. Hunter to Mr. Hargrave?—If I recollect the note of

Dr. William Hunter rightly, the last clause of it is this,—that he has known one woman who went fourteen days beyond nine calendar months, and he believes that there were two who went beyond ten calendar months *.

Have you investigated those cases?—I have at home a manuscript copy of Dr. William Hunter's lectures.

Mr. Tindal submitted that this was not evidence; that the examination must be confined to the general opinion of the person referred to.

Mr. Adam submitted, that if Dr. William Hunter's opinion was to be received, founded as it was on two instances, those two instances ought to be inquired into.

The counsel were informed, that the note in Coke on Littleton was supposed to be a note of Dr. Hunter; but that could be known to the witness only by report; that the question ought to be put on the supposition of such being stated, whether he knew what was the fact.

(*Mr. Le Marchant.*) Within your experience, has any case happened of a woman going in gestation beyond ten calendar months? —I have never known *one go ten months;* and though I have looked over the reports upon the subject, *I have never read* [*of*] *one, the internal evidence of which was satisfactory proof;* I have never met one that approached it. The greater number of those on record are on the very face of them absurd; cases of three years pregnancy!

Did you ever hear of a case of nine months and a fortnight? — I never met with one. The only one on record, which I remember at this moment, is the one alluded to by Dr. William Hunter, in his note.

What case is that?—I know nothing more of it than what Dr. William Hunter mentions in the note.

(*By a Lord.*) Suppose a woman bore a living child fourteen days later than nine calendar months; how do you reconcile that with your statements?—I have never witnessed a thing of the kind; and in order to satisfy myself about it, I should like to know the grounds on which Dr. William Hunter stated that fact; for after all, he says, "I know of one, and believe there were two;" by what means he could know of this one I am at a loss to under-

* As this note is of importance, we think proper to insert it.—"We were curious to know the general sentiments of that eminent anatomist, Dr. Hunter, on three interesting questions. These were, What is the usual period for a woman's going with child?—what is the earliest time for a child's being born alive?—and what the latest? The answer, which he obligingly returned through a friend, we have liberty to publish; and it was expressed in the words following:—1. *The usual period is nine calendar months; but there is very commonly a difference of one, two, or three weeks.* 2. *A child may be born alive at any time from three months; but we see none born with powers of coming to manhood, or of being reared, before seven calendar months, or near that time. At six months it cannot be.* 3. *I have* known *a woman bear a living child, in a perfectly natural way, fourteen days later than nine calendar months, and* believe *two women to have been delivered of a child alive, in a natural way, above ten calendar months from the hour of conception.*"—Paris and Fonblanque's Medical Jurisprudence, vol. iii, p. 218; as taken from Hargrave's Jurisconsult Exercitations.

stand; he must still depend upon the testimony of the female individual.

Supposing such a thing were to fall within your knowledge, on what grounds could you account for it?—On no other ground but the circumstances deviating greatly *in some rare instances* from the ordinary course of nature; but I beg leave to add, that I have seen none similar to it in the course of my experience.

You do not conceive it possible?—I can only know the possibilities of nature by knowing all nature; and as I do not know all nature, it is impossible for me to be a judge of that. It is quite dissimilar to any thing I have experienced. In all the cases where I could calculate the length of pregnancy accurately, I have been struck by the regularity with which it ends *at nine calendar months, or a day before or after.*

Cross-examined by Mr. Tindal.

Dr. Hunter was reckoned a man of very considerable experience in the profession?—I think Dr. William Hunter was a man of more experience and more talent than perhaps any body who ever practised midwifery in London, except Harvey, the discoverer of the circulation, whom I look upon as the greatest man.

Was he not also a man of great credit?—Oh, yes! There is nothing in the shape of praise which one would not say of Dr. William Hunter.

Was he not a very skilful, pains-taking man, and not likely to lay down an opinion or to pledge his judgment rashly on any subject within his profession?—Yes; I think that is an accurate account of his general character.

You are understood to say, that the greater part of your profession lies in cases relating to married women?—I am extensively employed among pregnant and lying-in women, married women; but I was for many years physician to two lying-in hospitals. In one of those lying-in hospitals there are two wards kept for single women, so that cases frequently occurred in which I had an opportunity of calculating accurately the length of pregnancy; besides that, a man in a tolerably conspicuous situation as a practitioner of Midwifery in London will frequently, in private practice, be consulted about persons who are hospital patients, in which the thing can be calculated accurately, because in many instances there were no grounds for deception. When I say there were no grounds for deception, I mean, that young females in very respectable situations are very often seduced; *the intercourse is single, there is no motive whatever for misstating the fact;* it is just as unpleasant to come and confess one intercourse as to come and confess a hundred; there is no motive for fraud there*.

That would depend upon the temper and condition of the individual?—I am not aware of any circumstance in the temper and condition of the individual which could afford a motive for deception in a case of that kind.

Can you not suppose a person who has been seduced limiting it to

* Compare Note p. 6.

one single intercourse, not liking to confess more than one, on the ground of the frequency of it leading you to suppose there has been a habit of incontinence?—No, not in the cases I allude to. I think no man, in the cases I allude to, would suspect that.

You stated, that the only possible ground on which you can form an opinion rests on the credit due to the testimony of the woman?—Of course, I must depend for the accuracy of the facts on which I found my opinion, on the accuracy of the statement of the person communicating those facts.

You have already stated that Dr. William Hunter, when he gave his opinion, also depended upon the accuracy of statement?—Certainly.

Then, when he gives his opinion, and you give your opinion, you equally depend upon the accuracy of the statement made to you?—As a general observation, I should say yes.

In the case of married women, you have stated that the nine months must date from one period or other of the preceding month?—Yes; but what period of that preceding month I do not think it is possible to say. Our ordinary cases are not strict experiments; I mean by ordinary cases, the cases where husbands and wives are living in constant access and frequent intercourse.

Are there not in the medical profession many books that are looked up to as works of authority?—Yes; but I know very few that do not contain things which would now be looked upon as manifest errors.

Has there been a new light that has burst in upon the world since the old doctors went off?—In various branches of science there has been, and why should there not be in ours?

Would not the experience of past ages be more necessary in your profession than in any other?—I think there are cases have occurred, attested by very eminent individuals, about 100 or 150 years ago, which are on the face of them absurd. I can point to a case on record, attested by Winslow, one of the most eminent anatomists alive, of a pregnancy which lasted two years and eleven months. I think light has flown in upon us since that period, sufficient to contradict that.

Is he a person alive at this moment?—No; he lived about a century ago.

Your answer has been confined to a particular case, instead of a general answer, whether the profession of medicine do not rely considerably on works of authority that have come down to them?—The profession of medicine used to rely more upon authority than it does now. Men are much more than they were, even twenty or thirty years ago, in the habit of depending upon their own observations, cultivating the faculty of observation very much, on their own observation and their own meditation. Doctor William Hunter himself said, there were no class of men who were more in the habit of recording unfaithfully than men of science; he said, "They lie like the very Devil*."

* We cannot admire Dr. Gooch's taste or feeling in stating such a circumstance before so august a tribunal; and we fondly cherish the idea, not-

I hope he confined that expression to a particular profession?— The *certainties of medicine* never expect to equal *the certainties of the law.*

The witness was directed to withdraw.

DAVID DAVIS, M. D., was called in; and examined by Mr. Adams as follows:

You are a physician? — Yes.

How long have you practised as a physician? — Between four and five-and-twenty years.

Has your practice tended to midwifery? — During the last thirteen years.

Forming your judgment on the experience you have had yourself, what is the general period of the gestation of a woman? — I should say, as nearly as possible, *nine* months, *nine calendar months; and I should rather incline to a day shorter, or two days shorter than beyond that period*.*

In your opinion, if a child was born on the 8th of December, could it be the fruit of sexual intercourse which had taken place previous to the 30th of January, making 311 days? — Certainly not.

Could a child that was born on the 8th of December be the fruit of sexual intercourse that had taken place on the 7th of February, being a period of 304 days? — I believe not.

Could a child that was born on the 8th of December be the fruit of sexual intercourse that had taken place subsequent to the 11th of July, being a period of somewhat less than five months? — If it was born and lived, do you mean?

Yes; in each case the child is supposed to have been born alive and survived? — Certainly not, or approaching to it.

Have the goodness to state, as the result of your experience, within what period after sexual intercourse a woman must be brought to-bed? — Within nine calendar months, a day or two before, or a day or two after.

Is that opinion the result of your own medical experience? — *It is the result of my own medical experience.* I should wish to state, that it has happened, in the course of my experience, that I have

standing the great authority upon which it is said to be based, that it is really false. If Dr. Gooch thinks it correct, he will have a hard battle to prove it so; but we may believe that the immortal Dr. Hunter would never have wished his name to have been so injudiciously brought forward. To show the impropriety of Dr. Gooch's quotation, it might be asked, are we to apply this apothegm to the learned gentlemen generally who have given their evidence in the Gardner Peerage Cause, or only to those who support one side of the question?

* Dr. D. Davis's opinion would then lead to the belief that the general term of gestation is about 271 days; *i. e.* nine days less than that of some of his fellow witnesses. His evidence concludes that of the medical witnesses for the claimant, and the reader cannot but have remarked the conflicting sentiments of the five medical gentlemen already examined on various points.

met with a few cases, *several cases, where the parties have reckoned, as their expression is, from a particular coitus;* and that in all those cases, without a single exception, they (the children) came on the *thirty-ninth week, the conclusion of the thirty ninth week, I cannot say exactly on what day; and in all the other rather before that period, that is to say, within the thirty ninth week.*

How have you ascertained the period at which conception took place? — If your lordships will give me leave, I will mention a particular instance, and that will reflect some light on the other cases. A poor woman, a patient of the Northern Dispensary, to which institution I was at that time and am now attached as obstetric physician, requested the assistance of one of my pupils in her confinement, which she expected to take place in the course of three or four months from that period; she applied early in her gestation, on account of being subject to discharges of blood. On the whole, it was my impression at the time, that she was not pregnant at all, on account of the occurrence of those discharges of blood. I hinted my opinion to her; but she assured me that she was positive, and nothing that I could say could shake her opinion as to the fact. I saw her several times in the mean time, and for some weeks afterwards I still remained doubtful as to her pregnancy. "You may depend upon it, sir," said she, "I shall be confined on such and such a day; I have always been able to reckon very accurately." On that day the gentleman whom I appointed to attend this poor woman, on account of her particular case, at that time a senior pupil, sent a note to me, to say that she was in labour, and she was delivered on that day.

Within your experience, how many days have you known the labour of a woman to be protracted? — *I have not known a single instance.*

How long have you known a woman to continue in the pains of labour? — In my own practice I should not, as a general principle, allow a woman to remain in labour more than about thirty or forty hours, that is to say, if the labour be a decidedly active labour, and that is going beyond the period that would be generally safe.

After a labour had extended to the period you mention, you would apply the assistance of art? — Yes.

How long have you known the labour to continue? — I believe I did lately publish a case that went to *the fourth day.*

Is the fourth day the longest period to which you have known it extend? — Yes, I think it is, in my own private or consultation practice.

Taking those facts which have come to your knowledge in the practice of your profession? — Just so.

Do you mean it to be understood that those four days, or whatever period you may state the labour to be extended over, are to be added to the nine calendar months, or form part of them? — To be added; those cases of protraction depending upon some resistance, producing difficulty, by confining the space, or some other cause.

By some mechanical obstruction, if it may be so expressed?—Yes.

Cross-examined by Mr. Tindal.

Was the person whom you mentioned in that particular instance, the poor woman, a married woman? — She was.

Though in this particular case she foretold the time of her delivery so accurately, is it not the case that in by far the greater number of instances married women are deceived as to the time?—*I do not recollect a single instance where that mistake has taken place, when I had reason to believe that the party had reckoned from any particular intercourse.*

That is, if the party had reckoned rightly, there was then no mistake?—When I have believed that she was reckoning from that principle, then there was no mistake.

Then the answer goes no further than this, that when you found by the event she was right, she was right in her reckoning?—My answer goes further; that when she was reckoning from a particular principle, *that is, the recollection of the coitus, and having noted that fact in her recollection, she was right as to the time;* but when she was reckoning on general principles, as they are from menstruations, which is the general principle, *it sometimes happens that they are wrong.*

Does it not frequently happen, from whatever mode they reckon, that they are wrong in their calculations?—*Yes, now and then; not very frequently.*

Is it not a thing quite common, that the doctor has been sent for long before he was wanted?—Yes, because it frequently happens that women are attacked by what are called false pains; those pains not constituting the pains of true labour.

When the doctor arrives, and finds those pains on, does not the female herself state that she expects to be delivered?—They do sometimes expect before; but that proves nothing. The female expects from the pain she is in at that moment, from the pain she is suffering; that pain greatly similating the pains of real labour; but the practitioner, having the opportunity of ascertaining the fact for himself, can instantly say whether she is in labour or not, and thus, from the premises, conclude that she is not in labour.

The doctor thinks one thing and she thinks another?—Yes. The doctor knows when he has an opportunity of instituting an examination, that she is mistaken, because he finds that the uterus, the lower part of the womb, has not developed; that the business of gestation is not concluded*.

Does this amount to any thing more than that the lady expecting a particular time has been disappointed in her own calculation?—

* A friend, a practitioner and lecturer of some eminence, is positive that he has known repeated instances of spurious pain, in which the cervix uteri has not only been entirely obliterated, but the orifice sufficiently open to admit a couple of fingers, and yet labour has been deferred for nearly a month afterwards. Professor Hamilton used to mention cases in which though the *cervix uteri* was obliterated, yet real labour had not commenced.

That point frequently arises when she has been disappointed; she sends for her medical attendant very frequently for weeks before she expects to be confined. In most of those cases the pains turn out to be false.

Does she not on those occasions state that she expects to be confined at some future day?—She is pregnant, and arrived at a late period of pregnancy; of course she expects to be confined at some future day.

Does she not state to the medical man, that according to her own reckoning she expects to be confined at some future day?—Very seldom naming the day.

Does she ever condescend upon the week?—Yes; such a week in such a month is the usual mode of stating the circumstance.

The female herself cannot come nearer the calculation than such a week in such a month?—That is the ordinary mode.

How can you take upon you to calculate from a particular point, of which you must yourself be completely ignorant; namely, the coitus?—I do not calculate myself; I calculate from the report of the lady. It does sometimes happen that women, *from particular sensations, which they are capable of being impressed with, from certain circumstances of intercourse, are able to fix the date.* I speak from the fact; every body can account for it as I can; it is to the fact I adhere.

Are not the instances within your experience far more numerous in the case of married persons than of unmarried ones?—My experience generally concerns married women. I was for a number of years a physician to a hospital that did admit unmarried women; but my experience generally is amongst the class of females that are married.

Have not you found that amongst married women there must necessarily be a great degree of doubt as to the particular coitus which produced the child?—I have spoken to only a few cases of coitus; and those are the only cases I can speak to *with absolute certainty.*

That of course depends upon the credit which you give to the party?—*Just so.*

The witness was directed to withdraw.

So much for the statements and opinions of five distinguished accoucheurs on one side of the question; on the other side, we shall next give the minutes of the evidence of twelve medical gentlemen, some of whom appear to be men of not less experience, and stand equally high in professional reputation and public estimation.

Die Lunæ, 27 Junii 1825.

Doctor AUGUSTUS BOZZI GRANVILLE was then called in; and having been sworn, was examined by Mr. Tindal as follows:

You are a physician?—I am.

Are you a member of the Royal College of Physicians?—I am.

Where do you practise?—In London; in Grafton Street, Berkley Square.

How long have you been in practice?—As Physician, I have been since 1803; and as a practitioner in midwifery, conjointly with that of physic, about nine or ten years.

During that time have you turned your mind at all to studies of a physiological nature?—I have frequently, Subjects of a physiological nature have been favourite subjects with me; and I have had opportunities of cultivating them, of which I have endeavoured to avail myself.

Have you practised yourself in that department of physic which relates to midwifery at all?—I have for the last nine or ten years, and have directed my attention to that which may be called the scientific part of it, particularly to the physiology of generation, respecting which I have published, in the transactions of the Royal Society, two or three papers on questions of importance, within the last four or five years.

Have you arrived at any certain conclusion, by your studies or your experience, on the latest period at which a child can be born?—I should beg leave to state, in the first instance, that my opportunities for enabling me to answer this question have been very ample, owing to the appointment I hold at two of the most extensive Lying-in Institutions in London; and for the last period of nine years, I have not only merely studied the case of, but registered every particular of upwards of 9,000 pregnant women; it will be therefore upon those registers that I ground any answer I may give to questions which may be propounded to me upon this subject; and as it is not improbable that the documents themselves may be called for to be referred to, I thought it proper to bring those registers with me. I can I believe state, that the registers will be found authentic and important in many points of view; *that they are considered unique*, for I am not sure that similar ones are kept at any other Lying-in Charity. *They embrace a vast number of facts, all of them of practical importance.* They were examined in another place, if I may be allowed to refer to that, in a committee concerning population, and were thought of so much importance in a statistical point of view, that two very singular and novel doctrines have been established certainly by inspecting those very registers. I have moreover had a decent share of private practice, having attended, as all other medical men have, and studied midwifery under eminent practitioners, and attended for nearly two years at one of the largest lying-in hospitals in Europe, namely, that in Paris, besides my practice public and private. Those are the grounds on which I here hope to be able to give an answer to any questions which may be put to me. With respect to the latter part of the question, whether I have come to any conclusion in my own mind respecting *the usual or ordinary period* at which pregnant women go with child, I should state, that that period is comprised between the 265*th day subsequent to impregnation, and the* 280*th, or forty weeks**.

* Some of the medical witnesses examined, allowed a fluctuation of nine

You use the phrase impregnation; do you mean by that, to denote any different time from that of the actual access of the party?—I mean to denote the effect of that access, from which has resulted pregnancy, namely conception.

In your judgment may there be an interval of time, of days for instance, between, of two or three?—That is a question which is even now debated amongst physiologists, but which is not susceptible of demonstration.

Having stated what you conceive to be the ordinary period of gestation, to what extent in your judgment and experience may that period be carried, from the access of the husband to the time of labour commencing?—The question refers to protracted time, not premature. Your Lordships will allow me to make one observation, I trust not unbecoming on my part, on this question; that as I have throughout life endeavoured *to be precise in every thing which concerns my professional inquiries*, I feel great difficulty in assuming to answer questions that refer to numbers of days, to precise facts and to dates, without looking at the notes, where I have been enabled to make notes, on subjects of this description. The question is by far too important for me to trust to memory; it is too treacherous a record of facts of this kind; and I feel, that in giving my evidence before your Lordships, I am throwing a great weight of responsibility on my medical character. I trust therefore, if there be any document of which I am in possession, you will not insist upon my using the benefit of my memory, but the benefit of my notes.

The document you desire to refer to, is one you have made yourself?—Notes which I have made myself of various cases referable to my own experience personally. In the first place, if it will not take up too much of your Lordships' time—

Have the goodness to apply yourself to cases where gestation has been protracted beyond the ordinary period?—I wish merely to state the manner in which these cases are registered, in order that your Lordships may ascertain how far you may rely on their accuracy. Every woman that applies to me with a letter of recommendation from a subscriber to the lying-in charity, and which entitled her to have my advice and assistance in cases of difficult labour, or that of an experienced midwife, answers the following questions, and her history is thus briefly stated and recorded. The nature of that letter she presents is entered; her name; her age; her residence; the date she is admitted at; by whom she is recommended; the cause of her being admitted; the name of the midwife or practitioner who attends her; whether she is attended at her own house, or otherwise; how she is ultimately disposed of; whether single or married; how long married; the profession of her husband or herself, if she has any; when she expects to be confined, or what is the time of her own calculating the time of pregnancy; at what period of pregnancy she has quickened; whether she was suckling when she fell with child; the number of children, alive or still-born, she has had; how

or ten days; Dr. Granville, however, admits a variation of fifteen days in the *ordinary* period of gestation. This is worthy of remark.

long menstruation has stopped, or whether she is actually menstruating, and yet in the family way; how many of the children are now alive; and, in short, whether any have died, at what age, and from what cause; and whether the children she has had have had the Small Pox or the Cow Pox; the number of miscarriages she may have had since her marriage, including all the period, three, six, or nine months; how many of those miscarriages were in succession; whether she has had any children before or after, or between the miscarriages; of what nature the labours have been; whether long, tedious, protracted, quick, or difficult, or requiring assistance; and ultimately, whether she is generally liable to any particular complaint, arising from the state of pregnancy*. It is upon these documents that I shall have to ground, besides those which have fallen under my knowledge as a private practitioner, the answers that I hope to be able to give practically to questions.

Those examinations are made by yourself?—Those examinations, I may take upon myself to say, with very few exceptions, are all inserted in my own hand writing; where they have not been so, they have been inserted by one of my assistants and pupils, under my superintendance. I can swear to their hand-writing, with the exception of two or three short absences which I have taken from the Institution.

Were they inserted, at the time, in this book, in your own handwriting?—Each question is put to the woman before I give her an order for admission; and each answer is entered immediately, by myself, in this book.

That is the original entry?—Yes; that is the original entry of all those questions and the answers.

Adverting to your book, have the goodness to state whether there are any instances of protracted gestation beyond the ordinary period?

As it is impossible *to wade through a mass of* 9,000 *women registered*, I have brought notes; *for I admit I did not come unprepared.* I should beg leave to refer to notes, as I begged permission of your Lordships to do just now, taken out of those registers, that I may not have to turn to them again.

Have you copied the paper you are now referring to, from the book now at the bar of this House?—Having had but two or three days to prepare myself, independently of my own avocations, I have selected only two or three cases; for if I can bring forward *a case upon the most unimpeachable authority, besides the authority of facts, that case*

* It strikes us, that Dr. Granville was determined to give the Lords a long lecture—judging from his half-page answers to simple questions. A pompous display of a man's own "*sayings and doings*," is not wanted in a court of justice. We think he might read the following citation with much profit, before he again gets behind the bar of the House of Lords. "We recommend the witness," say Messrs. Paris and Fonblanque, "to steer a middle course, first, answering patiently, distinctly, and tersely, the questions put by the counsel on both sides, the court and the jury; and if none of these elicit the whole truth, and any material point remains to be disclosed, the presiding judge will always admit, and gratefully receive the additions or explanations which may be necessary to the ends of justice."

will go for so many thousands. I therefore beg to state, that *four*, if not *five*, are taken from those cases marked by slips of paper, and others taken from my note book of my own private practice, to which I must beg leave also to refer independent of this book.

Have you those notes now at the bar?—I have.

Have the goodness to refer to the case itself, using the paper in your hand as an Index?—I have not referred to any case yet.

Have the goodness to refer to any case of protracted delivery, referring to your original register?—Here is one case, Mary Ewers, 15, Saint Martin's Lane, attended by myself, was delivered on the 1st of August, of a girl. At the time of her being entered, which was the 2d of June, she expected that month: now taking it that we grant there is an incorrect calculation, and put it at the extreme end of June, we have four weeks beyond the extreme *Terminus* of her own calculation.

What reason have you to know, that the party, in the ordinary course of nature, would have been brought to-bed in the month of June?—The answer I give to this question, is the answer that every medical man must give, whether he calculates a gestation of forty or fifty weeks.

(*By a Lord.*) How old was the woman?—Thirty-three years of age.

Was it her first child?—The record of this case is not in this book, but I have the record at home with regard to whether it was a first child or not, I can most probably refer to it. This case is 29,216, whereas this particular register begins with the patient 32,923; the register referring to numbers before that is in papers at home.

(*Mr. Adam.*) Twenty-nine thousand is registered?—Yes, in this book, but not the particular as to whether she had had a child before that; I have papers on a file at home.

(*Mr. Tindal.*) Will you postpone that case, and go to some other, in which there is a continuation of the account?—For that I ought to have been allowed much more than two days, to answer such a mass of cases as this; but I can answer the question as to my private practice, and at a later period shall be prepared with other cases.

Have you your private note book here?—No, not my private note book; I cannot submit my own private note books to the inspection of any person, because I have entered into them facts which are entirely of a confidential nature; I merely wish to know whether I can refer to cases copied from my note book; if I find I cannot, I must refer to my note book.

Mr. Attorney General submitted, that it was not competent to the witness to refer to copies of entries made in his note books.

The counsel were informed the rule of examination was this, that where a gentleman was called to give his evidence, he might refer to his own notes with a view of assisting his memory; but having referred to his own notes with a view to assisting his memory, a memory

so assisted is that which is to enable him to swear to the fact one way or another.

Having referred to my note books, *having had a very few hours to prepare myself*, I have taken out the dates; not being permitted to refer to them, I will refer to my own memory; but the referring to memory is a great responsibility, which no medical man would wish to take upon himself. I will refer to a case *in my own private practice—a case of my own lady**. By private practice I mean, though I did not attend *the lady* myself, nor was to have attended her (there were practitioners who were to attend her whom I shall mention), I was in the house, and consequently witness to the time of parturition. *This lady* passed her menstruation on the 7th of April; on the 15th of August, that is four months and six or seven or eight days [afterwards] she quickened. In the early part of the first week of January her confinement was expected. Labour pains came on, a message was sent to Mr. Barrow, an extensive practitioner in midwifery in Davis Street, Grosvenor Square, to keep himself in readiness, he being engaged to attend. Labour pains went off, and every thing subsided; *the lady* went on until the 7th of February, when labour pains came on, and so quick, that thinking it would be impossible to get Mr. Barrow at such a distance, *the lady* then residing at Brompton, I sent for Mr. Thompson, a practitioner in Sloane Street; he arrived however too late — the child was born; he arrived just in time to remove what is called the after-birth. The child was stronger than usual, was large, and was considered by *the lady*, and by myself, and by Mr. Thompson, and by every one, *as a ten month child;* and, as I understand, when referred to medically speaking, as an instance of that kind. I will beg to make an observation which may throw some light upon it. I merely mention it thus, because that is the historical part of the case; but an explanation would be necessary in giving a full and comprehensive answer to the question put to me by the learned counsel. Supposing *the lady* who passed her expected menstruation on the 7th of April, 1815, had only conceived the day before, namely, the latest and most rigorous term one could give, thirty days after the last period of menstruation, or twenty-nine days, we have then a case *prima facie* of 306 days from the period of impregnation, or of conception, to the day of birth, 305 to the day previous to the birth. But every medical man will, I am sure, bear me out, *when I say that it is impossible to speak with precision as to the act of conception having taken place the very day pre-*

* The Doctor appears to have paid no respect to the following clause of the Hippocratic oath. "Whatever in the course of my practice I may see or hear (even when not invited), whatever I may happen to obtain knowledge of, if it be not proper to repeat it, I will keep sacred and secret, within my own breast." Dr. Granville was not necessitated to tell the name of his patient, unless under very peculiar circumstances. Dr. Conquest acted more prudently. (Vide his evidence.) We certainly cannot compliment Dr. Granville on the delicacy evinced in adducing the above instance from his "private practice;" but the laughter and jeers of his noble auditors must have been a sufficient punishment for his indiscretion, both at the time, and on every future occasion when this point of his evidence was adverted to.

vious to the period; it may have taken place the first day after the cessation of the other; or taking it as the most general way of calculating these cases, even where forty weeks is the period contended for, the middle period, fourteen or fifteen days after the last menstruation, we have had a case of 318 *days**.

That instance you have stated was of Mrs. Granville?—It was.

What date, beyond the ordinary time, do you say that extended to, in your judgment?—I have observed before, supposing conception to have taken place the day before the expected and missed period of menstruation, knowing as I do, that the child was born on the 7th of February 1816, the period, to say the least, is 306 days.

Have the goodness to state some other instance within your own knowledge, where the ordinary time has been exceeded?—The instances are taken from those registers. I have known a case of 285 days from the latest period of supposed impregnation, taking as the point of departure the last day of the month previous to the missed period, that is to say, twenty-eight or thirty days after the last menstruation. I have known a case [cases] of 290 *and* 300, *and* 315 *days*. In the latter instance, of 315, there was a doubt in my mind respecting the report made by the woman. She stated that she had terminated her menstruation previous to falling with child on a particular day; but on cross-questioning, she admitted that for five days afterwards she continued to have a discharge. I merely state, on comparison, the 315 days appear; but that, in my conception of the case, or admission of the case, *I should say it was only a case of* 310.

How long is it since that case occurred in your experience?—The case of 315? I believe it must have been in 1821; but as to dates, I really must speak merely from recollection, the liability to recollection failing.

Have you any other instances, in your own private practice, of protracted gestation, besides the one you gave a little time since?—None, in my own private practice.

You are understood to say, that the other instances you take from your practice at the hospital?—*Yes; and of course assuming the answers given by the women to my questions to be correct.*

Is there any other way of deciding the question at all, but by relying on the testimony of the women who consult you?—No other, *except in some few cases, where there is a possibility of ascertaining the very day on which conception took place from any* [*some*] *particular circumstances*, which I have no doubt have occurred to individuals; and I am myself acquainted with facts, though not peculiar to myself, in my own practice.

Are you to be understood, that the only ground on which the judgment of the medical man must of necessity be founded, is the account which is delivered to him by his patient?—*Chiefly.*

* The reader must carefully remark, that the calculation is made from the "*middle period*" between two menstruations, when Dr. Granville speaks of 318 days—and from the day before the *next expected menstruation*, when he alludes to 306 days.

Can he also make observations from symptoms which occur to that patient, so as to discover whether she is correct in that account or not?—Very frequently; and I can mention a case where I had reason to doubt that she was inaccurate as to the time, owing to one of the symptoms referred to, namely, a coloured discharge, having taken place during fifteen days.

Looking at the extent of your practice, and the observations you have made, in your judgment might a child be begotten on the 30th of January, and born on the 7th of December, that is, a period of 311 days; whether it is possible from the course of nature that a child should be begotten on the 30th of January, and born at an interval of 311 days, that is, upon the 7th or 8th of December?—*I am aware of no circumstance that can render it impossible;* indeed, after the relation of the cases that I have given, I cannot be expected to give any other than that answer to the question.

Mr. Adam stated, that as the witness was to be called again to produce his note of the case referred to by him, he would decline examining generally as to these facts, until he produced his books, but that there were some general points on which he would put some questions now.

Cross-examined by Mr. Adam.

How many years have you practised medicine?—I have practised medicine since 1803.

Are you a native of England?—I am a native of Milan in Italy.

Where did you receive your medical education?—At one of the first medical universities, so acknowledged and considered by all, Pavia: afterwards at a medical school for two-and-twenty months at Paris; and subsequently at the hospitals, and under some of the first teachers of medicine and midwifery in this country.

How long did you study at Pavia?—Four years.

Which were the hospitals in London you attended?—The Westminster Hospital.

Who had the charge of the hospital at that time?—Doctor Bradley, Doctor Paris, Sir Anthony Carlisle, and Mr. Lynn.

You say you have practised medicine since 1803; was any part of that period spent on board ship?—It was.

What portion of that time did you serve on board ship?—From 1807 to 1812; the latest period of 1812, when I came on half-pay of a surgeon in the navy; and I am at this moment in that capacity.

Where did you practise medicine before you went on board ship in 1807?—In various parts of the Continent.

Will you favour me with the place?—I travelled in capacity of physician to Mr. Hamilton, the late Under Secretary of State, through Greece and Turkey. I continued to practise there, after he left it, at Constantinople and various other parts, until 1805.

Do you include the time you travelled with Mr. Hamilton in the time you state you practised medicine?—Decidedly so; for, independently of taking care of his health, which required it much, I was consulted in most of the towns where we were travelling.

What portion of time you were with Mr. Hamilton did you continue in Greece?—From 1803, about seven, or eight, or nine months.

He was an unmarried man at that time?—He was.

There was no female accompanying him?—No.

How long have you been physician to the hospital you refer to?—To the Westminster General Lying-in Hospital I have been physician accoucheur since 1817, the 16th of December; to the Benevolent Lying-in Hospital I have belonged as physician accoucheur since March 1822.

How long have you practised as an accoucheur in private practice?—Since December 1817.

Cross-examined by Mr. Attorney General.

How old were you when you left Pavia?—I was a little more than twenty.

You began your studies at Pavia when you were sixteen?—Yes.

Where did you go to immediately from Pavia?—To Genoa, Venice, and afterwards embarked for Turkey, where I met Mr. Hamilton, to go to Greece.

How long was it after you left Pavia before you joined Mr. Hamilton?—I presume about a year or fifteen months, perhaps a year.

How long did you remain with Mr. Hamilton in the whole?—From six to seven months.

Practising in the different towns through which Mr. Hamilton passed?—Occasionally consulted.

Not to any great extent, probably, in the place where you were a chance resident?—If the learned counsel were acquainted with the eagerness with which a foreign physician is sought in those parts, particularly for consultation, upon his merely passing through, especially where he attended a person who had a sort of public character, as he was then attached to the embassy, he would admit that the opportunities could not have been few. I can take upon myself at random to state, that scarcely a day passed that I had not two or three patients to visit or to consult upon during the different periods that we resided in Greece and Turkey.

Do you confine that to Greece and Turkey?—Those were the only places where I travelled with Mr. Hamilton.

At the expiration of this time where did you go to?—I resided two years in Constantinople, and then travelled on my own account to Egypt and Asia in search of knowledge, and particularly directing my attention to natural history, and occasionally practising.

To what place did you go after the expiration of these travels?—I practised as a physician in 1805 at Malaga in Spain.

Was that the first place?—After arriving from the Levant.

How long did you remain at Malaga?—About thirteen months.

Had you much practice at Malaga?—Not much practice.

You left it, perhaps, in consequence of not having much practice?—I did not; I left it for a good reasou, in search after knowledge;

and wishing to travel through Spain, I went to Madrid, where I remained a few months without practising.

To what place did you go next?—I then went to Lisbon, where I embarked on board the Raven sloop of war: I embarked as surgeon. At the peace in 1815, I endeavoured, as many others did, to settle as a medical man, in Charles-street, Grosvenor-square.

How long did you continue there?—I remained there till 1816, immediately after the birth of the child to whose case I have alluded, when I removed, at the desire of Sir Walter Farquhar, and, at his suggestion and recommendation, to Paris, where I resided two-and-twenty months, studying more particularly midwifery, but attending to natural history and the lectures of all the medical men living there. In 1817 I returned, and have settled, and have now been before the public as a physician, and physician accoucheur, from that time to the present.

Re-examined by Mr. Tindal.

Is the school of midwifery at Paris one that is looked up to in the world?—I believe it is admitted on all hands, and I wish it rather came from others; my fortuitous birth abroad being alluded to, it may be supposed I answer partially, when I say that it is looked up to as the very first school of midwifery.

There you were settled two years?—Two-and-twenty months; not in the hospital, but attending the hospital.

Examined by the Lords.

Have you a degree in medicine?—I have.

Where did you take your degree?—At Pavia.

In what year?—In 1801.

What age were you at that time?—A little more than twenty.

Mr. Adam stated, that when the witness attended with the register referred to, he should wish to cross-examine him as to the particular instances.

Mr. Adam requested to know whether a day could be now fixed for the attendance of the witness.

The counsel were informed that the Committee would proceed on Wednesday morning.

The witness was directed to withdraw.

As Doctor Granville was examined on different days, in the original minutes his evidence is scattered: we have brought it together for the sake of perspicuity.

Die Mercurii, 29 Junii, 1825.

Doctor AUGUSTUS BOZZI GRANVILLE was again called in; and further examined by Mr. Tindal as follows:—

When you were last at the bar of this house, you referred to certain documents or registers which you had not at the time with

you; have you since brought them?—Those registers I had with me, I beg to observe, only I was not prepared to point out the precise cases which I submitted to the House I had known in my practice. I am now prepared to point out those very cases; and since the House and the counsel have been good enough to allow me sufficient time, which had not been the case before, I have moreover ascertained, and I trust in such a way as to convince the House of the reality of those cases, four more; making, therefore, altogether eight, in these registers of from eight to nine thousand pregnant persons; and one case, in looking over the notes of my private practice, besides the one which was improperly attributed to my *private practice*, namely, that which fell under my private notice, *that of my lady*.

Will you refer to those books, and point out the particular cases to which you allude?—The first case, the particulars of which I shall detail from the register, is that of Elizabeth Chapman.

Will you now take up the book, and read from that the questions put to her, and the answers which were given by her?—This case stands under number 33,916.

(*By a Lord.*) Is that a patient belonging to the lying-in hospital?—Belonging to the lying-in institution of which I am physician accoucheur.

Which is that?—The Westminster General Dispensary. "33,916, Elizabeth Chapman, aged 28, residing at No. 37, Charles Street, admitted on the 18th December, 1824, recommended by a governor of the institution, Mrs. Elizabeth Lumley." The cause for which she was admitted was pregnancy. She was attended by Mrs. Finlay, one of our midwives acting under my directions. "Attended personally;" that is, that she was herself in attendance upon me, whether at home or abroad; that is, whether she was attended at her own home, or came to the infirmary itself. "Was delivered of a girl, February the 2d." In the other book it appears that she was a married woman; "had been married nine years. The profession of her husband was that of a crier." She stated that she expected to be confined in about three weeks. Upon being questioned at what period she quickened, she answered, "I do not recollect, or the time is unknown to me." Upon being asked how long it was since she was last unwell, namely, had seen her menstrual period, she says, "nine months ago." In answer to the question, "Whether she was suckling at the time that she fell with child?—No." In answer to the question, "How many children had she had born alive at the time of birth?—Four. Any still-born?—None. How many of those children are alive now?—Two. Of what cause, and at what age the other two had died?—One from accident, when two years old; the other from fever in teething, when fourteen months old. Of those now alive, how many have had the small pox naturally, inoculated, or the cow pox?—One had had none of those diseases; the other had had the small pox naturally. Had she had any miscarriage since her marriage?—Yes; two at six months. Were they in succession?—Yes. To what did she attribute the cause of miscarriage?—To the carry-

ing of heavy loads. Had she had any children before and after miscarriages?—Yes. Were all her labours lingering, or quick?" The column stands "active labour, and passive labour." The active ones are those which are terminated without assistance, and they are subdivided into labours that last twelve hours, and labours that go beyond twelve hours, and yet terminate without assistance; she has had four of them. "Had any passive labours, or labours requiring assistance?—None. Is the patient subject to any habitual disease?"—The answer is, "I am well." Now I have made my calculations of this case, and your Lordships will find that it comes out that she carried her child, deducting a whole month subsequent to the last time she was unwell, *forty-one weeks and five days*.

From what day do you date the conception of this woman?—I date, as I have already observed, from the last day.

Mr. Attorney General objected to the evidence, the witness having no personal knowledge of the facts.

Mr. Adam was heard in support of the objection.

Mr. Tindal was heard in support of the evidence.

Mr. Attorney General was heard in reply.

(*By a Lord.*) Did you take down the answer of this woman?—I beg to answer, in a distinct manner, that, *with some exceptions, the whole of those answers* are in my own hand-writing, and where it is not in my own hand-writing it is written almost entirely under my inspection, the questions being put by myself, and the answers taken by a pupil; in the present case it is *my own hand-writing*.

In the present case do you recollect putting the question yourself to that woman?—Most positively.

(*Mr. Attorney General.*) Do you recollect the person of the female?—As to recollecting the person, if the learned counsel alludes to physiognomy, I should make the same observation I made the other day with respect to picking out particular cases out of 9,000; it is impossible for me to say I could recollect her, but I can boast of some means of recollecting individuals; I will not take upon myself to say, that if Elizabeth Chapman were presented to me, I should recognize her.

Then how can you state that Elizabeth Chapman gave you those answers?—Because I can state, on the oath I have taken, that every one of those cases in which the answers are written in my own hand-writing, the questions were put by me, and the answers taken down in my own hand-writing.

You do not recollect the particular case, but you swear to it merely because it conforms with your general habit?—I remember it merely because I have taken the best means of remembering it, that of making memorandums, and not trusting to memory.

(*By a Lord.*) Are there not many cases where your pupils took a note of the examination, and you subsequently entered the result in the book in your own hand-writing?—Not one.

(*By a Lord.*) When patients are admitted into a lying-in hospital, is not there a rule that they shall not be admitted till they

are within a certain time of their delivery?—The rule respecting the lying-in institution to which I belong does not apply to the hospitals; this is the Westminster General Dispensary and Lying-in Institution for delivering them at their own habitations, not for receiving them into a hospital, to deliver them by a midwife, or by myself.

Mr. Tindal expressed a hope, that in a case of so much importance the committee would not reject this evidence, but would receive it, as evidence was sometimes received in committees of Privilege *de bene esse*.

(*By a Lord.*) Have you any means of knowing whether this female is now alive?—From the date merely, I should presume she is alive; I should also add, that most of those women, a month after their delivery, are obliged to appear before me, to return thanks for having been attended at the expense of the charity, and it is very probable that Elizabeth Chapman did comply with that rule.

The counsel were informed, that in the opinion of the committee this was not evidence.

(*Mr. Tindal.*) Have the goodness to turn to some other instance?—Number 33,907.

(*By a Lord.*) Is that a patient applying to the same hospital?—A patient applying to the same institution, not a hospital, called the Westminster General Dispensary; the name is Margaret Sullivan.

How early did you first know the woman to whose case you are now about to speak?—On the 16th December.

Is that entry in your own hand-writing?—This is not in my own hand-writing.

(*Mr. Tindal.*) In whose hand-writing is that?—This is taken by an assistant of mine, whose name and hand-writing I can speak to.

Was it written down in your presence from the examination of the woman, you examining the woman?—No, it was not.

Then turn to another?—Number 32,938.

Is that your hand-writing?—The particulars in this register are all in my own hand-writing; the name is written in my presence, just before I put the question, by one of my pupils.

What is the name?—Those two registers being kept, I find it convenient that one of my pupils should write the particulars from the recommendatory letter, and I then ask the questions I have stated to your Lordships, and the answers to which are put down in my own hand-writing.

Was that written by yourself immediately after?—Yes.

(*Mr. Attorney General.*) Are all those entries in the hand-writing of your pupil?—Yes; in this page.

What is your pupil's name?—I have several.

Who wrote this particular entry?—It is Mr. Elston, who is now practising at Ormskirk in Lancashire.

You mean to say, that all the entries relative to this particular female, in this book, are in the hand-writing of that gentleman?—Yes.

Will you take upon yourself to swear that you saw and read the entry after it was made by him?—I will take upon myself to swear that I saw Mr. Elston copy those particulars out of the letter the patient brought, recommending her to our consideration.

Will you take upon yourself to swear that you compared the letter with the entry at the time?—No, that I will not; I take it for granted——

Never mind taking it for granted; the entries are made upon the faith of that letter which was produced to your pupil?—That was produced to me, and handed over to my pupil for the purpose of being copied.

You did not examine the entry here with the contents of the letter?—No, I did not.

Mr. Attorney General submitted, that this entry could not be received in evidence.

(*Mr. Tindal.*) Does it purport to be the day of the date on which she is received?—It does.

That is, the very day on which the very entry, as you describe it, is put into the book?—The very day.

Of course the entry of the time of her being brought to bed could not be made at that time?—No.

Who was it that wrote in this column, which states the date of her being delivered?—Either myself or one of my pupils.

Look to that particular entry, and to that particular instance?—In this particular case, it is in the hand-writing of one of my pupils.

What is his name?—I believe this to be the hand-writing of the same gentleman I mentioned before.

(*Mr. Adam.*) Are you not certain whose hand-writing that date of delivery is?—I believe it is Mr. Elston's.

How many pupils had you at that time?—I have several every year. They go away after they have learned their profession.

How many had you in the habit of writing for you?—Mr. Elston, Doctor Morgan, now practising in Westminster, and Mr. Langhorn, who is still practising with me; but I cannot exactly recollect whether it was one or the other.

Mr. Attorney General submitted, that the evidence in this case also could not be received.

(*Mr. Tindal.*) Will you go to another instance?—No. 33,146, Mary Keys.

In whose hand-writing is that?—This appears to be in the same hand-writing as the other.

Will you turn to another?—There is a case, No. 1,583, of another institution, namely, the Benevolent, for delivering married women at their own habitations.

(*Mr. Attorney General.*) In whose hand-writing is this entry?—*In my own.*

Every part of it?—*Yes.*

(*Mr. Tindal.*) Have the goodness to read it?—*The date of the birth is not in my own hand-writing*, I see; but I can produce the etter from the midwife who delivered her.

You say the date of the entry, the date of the birth, is not in your hand-writing?—*It is not**.

How far back is it?—1824.

Have you any recollection of the fact?—I have no recollection of that individual's case any more than the others.

Die Lunæ, 4 Julii 1825.

Doctor AUGUSTUS BOZZI GRANVILLE was again called in, and farther examined by Mr. Tindal as follows:

Will you turn to one of those instances to which the attention of the House was called the other day?—The first case to which I referred, and to which objection was taken, because I could not identify the hand-writing at that moment, was that of Elizabeth Chapman, No. 33,916.

In whose hand-writing is the first part of that entry?—Mr. Langhorn, one of my pupils.

Is he here?—He is.

Henry Langhorn was then called in, and, having been sworn, was examined by Mr. Tindal as follows:

Look at that entry under the head of Mrs. Chapman; is that your hand-writing?—It is.

How far does your hand-writing continue?—As far as there (*pointing it out*).

Were those the answers made by the woman at the time to the inquiries you made of her?—They were.

(*Mr. Attorney General.*) You took them down at the time in the book?—I did.

The time of the birth you did not enter?—No, I did not.

(*To Dr. Granville.*) In whose hand-writing is the time of delivery?—In the hand-writing of Mr. Barker, another of my pupils.

William Bligh Barker was then called in, and, having been sworn, was examined by Mr. Tindal as follows:

Look at the entry purporting to be an entry when Mrs. Chapman was delivered of a child; is that your hand-writing?—Yes.

(*Mr. Attorney General.*) From what did you enter that?—From the hand-writing of the midwife to the letter.

What was the midwife's name?—I am not aware of the name; Mrs. Finlay was the midwife appointed, I see.

Do you know the fact of the woman being delivered on that day?—Not at all, more than from the midwife having signed that she was.

(*By a Lord.*) Do you know the fact of who the midwife was, farther than from the book?—From the book.

* What attention should a medical man give to the subject matter of examination before he appears in a court! How mortified must he feel on discovering that he has contradicted himself!

(*Mr. Attorney General to Mr. Langhorn.*) You had entered the name of the midwife?—Yes.

From what did you enter that name?—From the person who applied. When they come with their letter, they apply for certain midwives that have attended them before; and she applied for Mrs. Finlay.

And you put down the name?—Yes.

Does it not sometimes happen that the person who is applied for does not attend, but some other is substituted?

(*To Mr. Barker.*) Who brought that letter to you from which you made this entry of the date?—I found that among other letters, and I took them and entered from the signature of the midwife.

Dr. Granville was farther examined by Mr. Tindal as follows:

Will you turn to another case?—There is the case of Mary Parker.

(*Mr. Attorney General.*) Is that in your hand-writing?—It is in the hand-writing of Mr. Barker.

(*Mr. Tindal to Mr. Barker.*) Did you take the different answers put down there from the examination of the female?—Yes; this is in my hand-writing; I took it down.

Where does your hand-writing end?—My hand-writing is the whole of this line.

(*Dr. Granville.*) The second register, with reference to the question asked of the pregnant women, is in the hand-writing of Mr. Langhorn.

(*To Mr. Langhorn.*) Is that entry in your hand-writing?—Yes.

Was it taken down at the time from the woman?—Yes, all those questions were asked; all of this was taken down in this book.

(*By a Lord.*) Did you ask the questions?—Yes, I asked the questions myself.

(*Dr. Granville.*) The person herself is now present, not yet delivered, and will answer for herself. The answers she has given to the questions were, that she expected in one month. On April the 7th, that she had not seen any thing for eight months. We are now on the 4th of July, and she carries her child yet.

(*By a Lord.*) Are you sure she is with child?—The woman is herself present, Mary Parker; and the questions may be asked of her.

Die Lunæ, 27 Junii 1825.

Doctor JOHN CONQUEST was then called in; and having been sworn, was examined by Mr. Tindal as follows:

You are a physician?—I am.

Where were you graduated?—In Edinburgh.

In what year?—About thirteen years since.

Have you been in practice from that time to the present?—I have.

Where have you carried on your profession?—Principally in London during the last eleven years.

Have you an extensive practice in this city?—Pretty extensive.

Have you applied your mind at all to subjects connected with the gestation and birth of children?—Principally.

Is the department of midwifery that in which your principal practice is carried on?—I principally practise as an accoucheur; I have been for some years a lecturer at one of the public hospitals of this city, St. Bartholomew's.

Are you able to state, from your own experience, any judgment you have formed on the ordinary time of the gestation of children? —*I presume the majority of cases are completed with the termination of the ninth calendar month; but unquestionably I have met with some cases which have far exceeded this date.*

Will you have the kindness to state the particular circumstances of any of those cases which have exceeded the ordinary date?— I presume I have met with not fewer than *twenty cases, where there has been very confident assertion on the part of the women, that they have exceeded the ninth month;* but I have taken great pains with *two or three cases*, sufficient to justify my speaking with *the greatest confidence.*

Will you confine what you are going to say to those two or three cases which you have had so completely under your own observation?—One woman was certainly pregnant *for at least ten months.*

Will you give *the name of the woman*, if you remember it? — I put the question, before I was called to this bar, to the attorney— Whether it was necessary for me *to give the names and residence of individuals*, because I am confining my remarks entirely to cases of private practice*.

Will you state when this first case happened?—The case to which I refer is that of a woman who has borne six children. She is a woman possessing an unusual share of good common sense; and

* The following quotations from Dr. Gordon Smith's Analysis of Medical Evidence, and Paris and Fonblanque's Medical Jurisprudence, may be useful:— "In consequence of our being sworn to disclose the whole truth, we may be called upon to reveal secrets confided to us in professional confidence. This involves a very delicate consideration, and one that I apprehend is but imperfectly understood."—"When the ends of justice absolutely require the disclosure, *there is no doubt* that the medical witness is not only bound, but compellable to give evidence, ever bearing in mind that the examination should not be carried further than may be relevant to the point in question: of this the court will judge, and protect the witness accordingly."—"Let it be distinctly understood, before I go further, that I am not alluding to the case of the priest and a culprit's conscience, but to matters, it may be, of the last importance to the character of individuals, and the peace of families, arising out of circumstances of a purely private nature, and in no way relating to affairs of state or municipal interest. It will at once strike the manly mind, that, in regard to females, we might be called upon to reveal that of which the promulgation would, to them, be worse than death itself."—"To an advocate no such revelations are to be conceded, let him demand them ever so urgently; and I should hold that barrister personally amenable who would presume to ask me to disclose a secret, as a matter of course, merely upon his requisition. A *gentleman* will certainly hesitate as much in requiring, as another would in affording such disclosures; and they are never to be made, but by express mandate from the Bench."

The reader, who may be called before a tribunal, should well digest what Haslam, Smith, Paris and Fonblanque, and Beck say on medical evidence.

she engaged me to attend her during her second confinement before the period of quickening; she also engaged her nurse. She felt so confident that she should be confined at the anticipated time, that she had her nurse in her house; and it was not till the expiration of nearly *five weeks* from the time at which she expected to be confined that she was delivered, and delivered of a child of an unusual size. *At that time I disbelieved all the cases which I had previously heard; I had been in the habit of laughing at them as a public lecturer; but so strong was the evidence, from the most minute investigation of this case, that I was compelled to admit the accuracy of this woman's statement, and my former convictions were very much shaken.* The same thing occurred to this woman at her subsequent confinement; she exceeded the time then, certainly *four weeks;* she has since borne three children at the expiration of the ninth month; the three last children have been considerably smaller than the two intermediate children.

When you received this account from the person to whom you refer, were there any symptoms or appearances from which you could judge, yourself, whether such account was correct or not?—I took no trouble to investigate the case until she had passed the ninth month.

That is one case you have mentioned; have the goodness to state the circumstances of any others?—The case I have mentioned refers to the cases of two children by one woman.

Have the goodness to state any other case that fell under your own immediate observation?—The other is the case of a lady who has borne nine children, and who, *on some account or another*, has been able five times to determine exactly the day on which she should be confined, and her predictions have been verified in those cases; but in one confinement she exceeded the time by a month and two days;* and this woman brought forth by far the largest child I had ever seen, after a very protracted labour; her labours in general being so slight, that in by far the majority of cases the children have been expelled before either nurse or medical attendant could be at hand.

To what cause do you attribute this protracted gestation; is it a cause that relates to the mother, or the fœtus, or to both?—Does the question apply to those particular cases, or to other cases of protraction?

Take it first as a general question?—I have not been able to make up my mind as to the correctness of the notion of the assigned causes of the protraction; but with one exception, I certainly have seen several cases similar to the last one to which I have referred, the one to which I am now adverting, in which there has been, from some accidental cause, an occasional loss of blood during pregnancy, and this has appeared to interfere with and to protract the gestative process.

Whatever may be the cause, are you or are you not satisfied, in

* Such ambiguous expressions ought to be most carefully avoided in the presence of a tribunal. We suppose Dr. Conquest alluded to the *certain peculiar feelings already mentioned in former evidence* (vide p. 10), and which some females *generally* experience about the time of conception.

your own mind, that there may be a *protracted gestation?—I have no doubt of it.*

What reason have you for answering that you have no doubt there may be such protraction?—I found the opinion on the *accumulated evidence* which may be adduced from *numerous ancient and modern writers, on my own personal experience, and on reasoning from analogy*, knowing that the same facts are constantly occurring in the brute creation; *on the evidence which I should consider satisfactory in the investigation of any other question in natural history.*

To what period beyond such ordinary gestation are you satisfied the protraction may by possibility extend?—Does that question refer to my personal experience, or a matter of investigation, or a matter of history?

The question refers first to the fact of your judgment?—If I am to credit the statements of such men as Livy and Pliny, Hippocrates, Haller, Hunter, Bourdileau, Mauriceau, La Motte, and many others whom I could mention, *I am bound to believe that eleven months has been exceeded.*

Suppose the father and the mother are together on the 30th of January, and a child is borne by the mother on the 7th or 8th of December, that is, after a period of 310 or 311 days, is it possible, or is it not possible, in your judgment, that such child could be the offspring of those two parents?—I am bound to *admit its possibility and its probability*, because I have stated a case in my own experience, where I believe that term was exceeded; *but I consider those cases to be a departure from the ordinary course of nature.*

Do you know the opinion which Dr. Hamilton publicly gives in his lectures upon the subject of the gestation of women?

The Attorney General objected to this question, Dr. Hamilton being living, and one of the witnesses proposed to be called*.

* From our notes of Dr. Hamilton's lectures in 1808-10, we are enabled to give the following extracts:—

"The ancients, both philosophers and poets, were of opinion, that it was necessary for the fœtus to remain ten *lunar months*, or about 300 days, *in utero*, before it could obtain its full growth, but yet they *did not suppose that pregnancy was confined to that exact period*; on the contrary, they allowed that it was *often exceeded*. By the laws of France, a child born at the tenth month is reckoned legitimate. Dr. Denman was of opinion, that the time of utero-gestation was from 39 to 40 weeks, or from 273 to 280 days; Drs. Clarke and Osborne were of the same opinion; and Dr. Lauder, who was a highly respectable teacher of midwifery in London, asserted to me, that although pregnancy had been protracted beyond ten menstrual periods, yet that after that time, '*the fœtus and the mother were no longer friends*;' meaning that labour had begun, although imperceptibly."

Hippocrates, Aristotle, Pliny, Galen, Avicenna, and many other ancient authors, have recorded cases of females having been pregnant eleven, twelve, and thirteen months.

Dr. Hamilton maintained, that there was not a case upon record where the time of human gestation was *exactly nine calendar months.* He expressed his conviction that this period was often exceeded by three weeks; and he stated his incapability of *fixing limits* to the degree that a woman might exceed her time, or nine calendar months. The Doctor founded his calculations, in most cases, by reckoning from the time of quickening. Reasoning from analogy, we find that the cow, *whose time of pregnancy* is usually about nine calendar months, often exceeds that period.

Mr. Tindal submitted that he might put that question, intending to follow it by another, Whether the witness agreed in that opinion.

and it is remarked, that the more calves a cow has had, the longer she is apt to exceed that time. In confirmation of this fact, Dr. Hamilton always stated, that it was well known to farmers and breeders of cattle; and he asserted that he himself had known a cow exceed nine calendar months by three weeks.

Dr. Hamilton, however, in speaking of the duration of pregnancy, thinks, that if the character of the woman be unexceptionable, a favourable report should be given for the mother, though the child should not be produced till *near ten calendar months after the absence or sudden death of her husband.* He used to say, in his lectures, that in his own practice he never knew a woman to exceed the eleventh menstrual period. He was accustomed to give the following tabular view of the arguments for and against the time of human utero-gestation being limited or not to nine calendar months*.

Arguments *pro.*	Arguments *con.*
1st. It is the common opinion of mankind, that pregnancy is limited to nine calendar months.	1st. It is very difficult for mankind to judge of this matter, because practitioners have great difficulty in ascertaining the time of impregnation or of conception.
2d. It is the opinion of some practioners of the greatest eminence, that pregnancy is limited to nine calendar months.	2d. The majority of the practitioners of midwifery are of a contrary opinion, many of whom are also men of distinguished abilities and eminence.
3d. If the time of pregnancy were much protracted beyond nine calendar months, the child would become so large as to be incapable of passing from the uterus.	3d. In regard to the child, facts are against this reasoning. A woman in the Grass Market (Edinburgh), who had a very difficult labour, affirmed, during its continuance, that she had gone ten months and a half with child, and *was sure* she could not be delivered, on account of the infant's great size. On delivery, the child weighed thirteen pounds and a half. But the lady before mentioned, who felt the quickening when at a card party†, bore a child which was a cu-

* "Each side is supported by an equally respectable list of partisans; and we perceive, that upon this occasion the two celebrated medico-jurisconsults of France are opposed to each other; *Mahon* having associated his name with those of *Bohn*, *Hebenstreit*, *Astruc*, *Mauriceau*, *De La Motte*, *Rœderer*, *and Baudelocque*, who reject the belief in *retarded delivery* as impossible, and contrary to the immutable law of nature; while the name of *Foderé* ranges with those who support the contrary opinion, as *Teichmeyer*, *Heister*, *Albert*, *Vallentini*, *Bartholin*, *Haller*, *Antoine Petit*, *Lieutaud*, *Vicq d'Azyr*, and *Capuron*, who may boast of the support of *Hippocrates*, *Aristotle*, and *Pliny*." — Paris and Fonblanque's Medical Jurisprudence, vol. i, p. 247.

† This refers to the case of a lady who had borne eleven children, and who supposed herself not to be pregnant, but about the change of life, in consequence of the suppression of the catamenia; but while seated at the card table, she felt the quickening of the infant, and was so affected by it, that the whole company remarked that something was the matter. The quickening was felt on the 25th August, and the lady was not delivered until the 4th of the following April, a term of 220 days; to which, if we add the time previous to quickening, taking the least known time, *viz.* ten weeks, we have 290 days, or forty-one weeks and three days.

The Counsel was informed that he might ask the witness what his own opinion was.

(*Mr. Tindal.*) You are a member of the college of physicians?—I am.

And of some other societies?—I am fellow of the Linnean Society, physician to the City Road Lying-in Hospital.

Cross-examined by Mr. Attorney General.

Was the first female a married woman; the female who had five children, two of which children were born after the expiration of nine months?—A married woman of very high respectability in the City.

Living with her husband?—Yes, living with her husband.

Is not menstruation very often suspended by cold and other causes?—It is frequently; but my opinion of her case was by no means founded upon the question of menstruation, but on the confirmatory evidence which several other points supplied to me.

Will you state what those facts are; were they facts communicated by the female herself?—They were communicated to me in consequence of questions which I put to her, and which I should not have thought myself justified in putting to any respectable woman, but on the ground of professional confidence, and extreme anxiety as a public lecturer, to make up my mind as to the correctness of the opinions which had been advanced by others. I may perhaps be permitted also to state, that after receiving the order from this House to be present, I took the liberty to re-examine this lady, and her impressions are very vivid, and her statements minute.

The question refers to the facts on which your judgment is founded, in the first place; was it in consequence of protracted menstruation; the interval which had occurred between the last menstruation and the birth of the child?—That was one fact.

That you had from her representation?—*From her statement.*

How long before the birth of the child was it that you were called in to give your opinion or advice?—I was not called in to give my opinion or advice at all. This lady applied to me to attend her in her confinement, stating, that she had not then quickened; that she had quickened with her former child at the termination of the six-

4th. In extra-uterine conceptions, the uterus is regularly thrown into action at the expiration of the ninth calendar month.

riosity for smallness, and which, in fact, was like a skinned rabbit.

4th. In all these cases, this statement has certainly been recorded, but in many of them their history contradicts the assertion. In Mr. Turnbull's case, it will be found, on carefully reading the account, that the action took place at the eighth month. This action must take place to throw off the decidua, but it happens at the sixth, seventh, eighth, or ninth month.

teenth week; and that woman has quickened with six children exactly at the same period.

Exactly at the same time, calculating from what?—Calculating from the time she supposed herself to become pregnant, the non-appearance of the periodical discharge, and also the time of her delivery.

The calculation, as far as she was concerned, as far as your opinion was formed, was founded upon the time of expected menstruation?—Not wholly so.

You have not stated any other circumstance yet; what are the other circumstances?—This woman is an excessively irritable woman, physically and mentally: and she affirms most confidently, that she invariably suffers *much constitutional disturbance within one week after impregnation, and that the acts of intercourse are so seldom with her husband, that she has in every case been able to date with correctness, with the exception of the two which I have mentioned*, and then she took the same data as the ground of her opinion.

What were the data she took then as the ground of her opinion at that time?—Certain symptoms of constitutional derangement, the non-appearance of the expected discharge, and the period of quickening.

What was the interval before those symptoms were communicated to you?—I stated before, that I was not induced to make any inquiries into this woman's case until she had passed the ninth month.

How many children had she altogether?—Six children.

In the whole there were only two which deviated from the same symptoms applying to the four?—And they only deviated as to the term of gestation; the data upon which she founded her opinion of pregnancy were the same in every instance.

The opinion you have formed was entirely upon this representation of facts made by her?—Entirely.

And some representation by her which had occurred at a very considerable period before the communication was made to you?—I have twice mentioned, that I did not institute any inquiries until she had passed the ninth month of gestation; and that when she became pregnant I still laughed at her, and thought there might be some ground of fallacy; but the same thing took place again.

How long is this ago?—It has all taken place within the last nine years.

Were you lecturing at that time?—I have lectured seven years.

You were not lecturing at that time?—I think I was lecturing at that time; I am almost sure I was.

You have read those various authors whose names you have been mentioning?—Unquestionably I have, as a student.

You stated, that before this communication with the female you quite laughed at the doctrine contained in these authors?—I did; and my inquiries into the fact, as a fact connected with natural history, certainly arose, in a great measure, out of this case.

Out of that single case, formed on a communication made by the

woman so long afterwards. Have you another case?—I do not mean to state that I was induced to change my opinion *by this solitary case;* this case shook the opinion I had formerly entertained, *and the occurrence of other cases since has induced me to admit it as a physiological principle.*

Was the other case you have referred to that of a married woman living with her husband?—Yes.

How soon after conception were you called in, in that case?—I must make the same reply as in the former case, that there was no ground to doubt the accuracy of her statement until she had passed the ninth month.

Then you began to examine her?—Then I began to investigate the grounds upon which she had formed her opinion.

Upon that representation of the woman as to menstruation, probably?—*There is no possibility of gaining evidence but by representations of the women themselves.*

Was menstruation the principal point upon which your belief rested, upon this second case?—*Menstruation and quickening.*

Does quickening take place at any certain interval after conception?—Quickening takes place from *the sixteenth to the twentieth* week; but when once a woman has quickened at a certain time, I believe, with scarcely an exception, *she invariably quickens at the same period afterwards.*

With how many children have you attended this woman?—I have attended this lady to whom I last refer either six or seven times.

What was the period from the quickening to the birth of the child in this second instance?—The woman quickened at the seventeenth week.

What was the interval between the quickening and the birth of the child?—My reply will come to the same thing. *I am, perhaps, not sufficiently collected to be able to make a calculation of the dates; it was the interval between seventeen and forty-five weeks* *.

Twenty-eight weeks?—Yes.

Which twenty-eight weeks, added to the shortest time in which a woman could quicken, cannot be more than nine months?—I should think *ten months.*

Ten *lunar* months?—Yes.

That would be the regular time?—*I never understood that women in general went longer than nine lunar months, forty weeks* †.

What was the interval in the other two instances between the quickening and the birth of the child?—I have stated that the woman has quickened with the six children at the termination of the sixteenth week; does the question refer to the first or the last case?

To the instances of the two children born of the same woman?—

* Such an answer shows the necessity of being sufficiently collected in a court of justice. The counsel put the proper answer into the witness's mouth.

† This answer well illustrates the Note in last page. Nine *lunar* months contain thirty-six weeks, or only 252 *days*—in forty weeks are 280 *days*. Dr. C. must have meant *ten* lunar months, or 280 days.

That woman invariably quickened at the termination of the sixteenth week, in this instance and four others.

You were not yourself present at the time of the quickening.—Certainly not.

You had that from her recollection of the fact?—Upon her recollection of the fact, and upon her having since, for my personal satisfaction, repeated it.

How many years ago?—She has borne those six children within nine years; she bears children rather *quickly* [frequently].

Cross-examined by Mr. Adam.

How long did you attend the medical school at Edinburgh?—The usual term of three years, before undergoing examinations.

You state that the instances you have cited took place in the course of the last nine years; how long ago did the first of them take place?—Perhaps between six and seven years.

How long, at that time, had you been in the practice of midwifery yourself?—About eight years.

You have said that the children upon these occasions were of unusual size?—In three cases to which I have referred of unusual size.

Supposing it possible a child should be born after a gestation of ten months, should you expect that child to be of unusual size, from your experience?—*I do not think it necessarily follows that the child should be so, for I have reason to suppose some circumstances may protract the duration of pregnancy, without there being any actual addition to the bulk of the child.*

You have stated but one cause, so far as your experience goes, which could protract the duration of pregnancy, *that is the loss of blood?*—I am aware there are other causes assigned.

That is the only cause you yourself assign?—I think there is another cause I have seen operate frequently to the protraction of labour several days.

What is that?—*Any powerful mental emotion; any physical cause bringing about the death of the child;* that of course does not apply to living children; except that, *powerful mental emotions will sometimes protract.*

Have you known any instances of that?—*I have known many instances.*

Have you known many instances of mental agitation protracting the period of labour?—My remark principally applies to the period of labour, those causes operating before the commencement, or immediately before the commencement.

Is that a common circumstance in your professional experience, to find that mental agitation or distress protracts the period of labour?—*By no means common.*

Is it very uncommon?—*It is not uncommon* for the process of labour to be interfered with and protracted *some hours*, cerainly not.

The question refers to that being produced by mental agitation?—I refer to mental agitation *.

In how many instances have you known that occur? — I really cannot say.

Are you speaking of the period of gestation, or the process of labour itself?—I am confining my remarks principally to the process of labour.

After labour has commenced, have you known the time for its perfection to be extended by mental agitation?—Yes.

That you state not to be uncommon?—I think not uncommon.

In how many instances have you known that occur?—I should think in fifty cases.

You have known fifty cases of protracted labour caused by mental agitation?—Of protracted labour.

Have you known any case of gestation protracted by mental agitation?—I have known several cases in which the mental affection has been so great as to destroy the vitality of the child.

Have you known any cases of gestation being protracted by mental agitation, and the child being born alive?—Yes, I have.

In how many instances?—Perhaps two or three; protraction has been but of two or three days.

You have not known a protracted labour to extend beyond two or three days?—With the exception of one case.

How long did that extend?—*A month.*

Do you mean to say the woman was in labour for a month?—I mean to say that the woman had all the symptoms of labour; that those symptoms left her, and she was not confined until a month afterwards.

The pains of labour came on and subsided; they went off, and she was not delivered until a month afterwards?—*Yes; of course the labour did not continue a month.*

You have stated as the only *cause for the protraction of gestation, loss of blood;* in how many instances have you known that to have been the fact; in more than one?—Certainly, more than one. *I have referred to one; I think in two other instances labour was protracted a few days, in one case a week* †.

* It is generally acknowledged, that affections of the mind have a very powerful influence on the functions of the animal economy; and that health and disease are often induced or removed by the nature and intensity of moral causes. It is equally admitted that the female sex, in consequence of their natural organization, their sensibility, and their domestic habits, are peculiarly subject to mental impressions, and, of course, to their consequences. Hence, reasoning from analogy, many practitioners believe, that the passions of the mind, as well as the health of the mother, modify the size and the constitution of the fœtus, as well as the period of birth; and they adduce cases to show that these passions not only protract *labour*, but also delay the usual progress of utero-gestation. That violent affections of the mind produce abortion, is beyond dispute: therefore, it might be asked, if mental emotions bring on premature expulsion of the fœtus, why may not the same causes retard its maturity or its birth? It is denied by some of the witnesses, however, that mental impressions can retard pregnancy.

† Compare this evidence with Mr. Clarke's on the same points, p. 3.

You were understood to say you have known gestation protracted?—I mean gestation.

You think in two instances you have known it protracted for a week?—In one case a month, I stated.

The case you originally stated is one of the two?—One of the three.

How long have you known it extended to the other?—One a week.

Those are the only instances in which you have known that effect produced by loss of blood?—Those are among the cases of the *doubtful protraction* I have had occasion to advert to.

(*Mr. Attorney General.*) You stated that the two children born of one mother after this protraction were large children; how was it with respect to the third child?—I stated that the third was the largest child I had ever seen.

They were all particularly large?—Yes.

Do you suppose the child would continue to grow in proportion during the whole period of gestation; a seven months' child is small?—*Generally, but I have known an eight months' child of the ordinary size of children at nine months.*

What is your answer as to protracted gestation; would the child continue to grow during the whole of the period?—I do not think it an established fact that a child that is born at a protracted period should necessarily be larger than children at nine months.

Does not the child itself grow from the moment it begins to be formed, continue to grow, that individual child?—Unquestionably.

Therefore the probability is, that a child at ten months will be larger than a child at nine months; *it would continue to grow in the interval between the ninth and tenth month?—I do not think we are justified in entertaining such an opinion; there are some children born in perfect health at the usual term of nine months, not larger than some children at seven or eight months*.*

Does not the individual child grow during the whole period that it is in the womb?—There is no doubt of that; but I should be disposed to bring before this House several other cases of protracted pregnancy, if I could satisfy my mind as to the general question, that a child must necessarily be larger which is not born at the ordinary time.

A child born of one mother may be larger at nine months than the child of another; but the question refers to an individual child, whether it would not continue to grow as long as it was in the mother's womb?—*I presume it would.*

Therefore it would be larger at ten months than it was at nine?—*Certainly.*

(*Mr. Adam.*) With reference to the case you stated of the protracted labour of a month, when the pains came, in the first instance,

* By comparing the previous questions and answers with those which follow, the reader will become sensible of the care he should take in preparing himself for a cross-examination.

had you any reason to know that the child was full-grown?—I could not possibly ascertain that; nothing short of actual inspection would justify a man in saying that.

Pains of labour may come on, supposing a child to be eight months grown?—I think that genuine labour pains may come on, certainly.

Then the coming on of genuine labour pains, and their cessation for a month, and the subsequent delivery of the lady at the expiration of a month, is no proof that she had gone for nine months at the time the pains came on?—Certainly not.

Re-examined by Mr. Tindal.

When you state that a child born at a protracted period would be larger than a child born at the proper time, do you mean larger than other children of the same mother, or larger absolutely?—I mean relatively larger, as compared with other children of the same mother.

In the process of gestation, is the quickening of the child an important time from which the birth is afterwards calculated?—*I confess that I should place much more reliance upon a calculation made from the time of quickening than from any other datum.*

Does your experience authorize you to say that?—Decidedly so.

Then in the course of your practice, do you inquire more diligently into the time of the first quickening, as it appears to the mother, or into the original appearances at the time of conception?—I am in the habit of depending much more upon the time of quickening. I have a case quite in point, if I may be allowed to state it. I had it in contemplation a few weeks back to leave town on account of ill health, and this very much depended upon a lady, who stated that she became pregnant at such a time; she dated altogether from the non-appearance of the periodical discharge; I dated from the term of quickening, and told her I was very apprehensive she would exceed the time by some weeks; and such has been the result; she is not yet delivered.

You who dated from the time of quickening were right, and the lady who dated from other symptoms was wrong?—*Yes.*

Does that agree with the general course of your experience?—*Yes.*

(*Mr. Attorney General.*) You were understood to say the time of quickening would vary four weeks?—*In different women, but it corresponds in the same woman;* and this woman has borne four children, and every time has quickened at the same period from the birth.

The time of quickening varies four weeks?—*Nearly so.*

The interval between the conception and quickening is much more uncertain than between the quickening and the delivery?—Certainly, as far as my experience goes.

(*Mr. Tindal.*) In the case you have stated, was the attention of the patient called by any circumstances to the time of quickening?—Certainly; it was the usual symptom which indicates the occur-

rence. I am aware that the circumstance of quickening is not always to be relied upon; many old women who are determined to have children, when they marry late in life, and many single young women, who wish not to have children, are very apt to be deceived; *but I am confining my remarks to married women of respectable character**.

Are there any instances relating to the quickening of women under those circumstances which can be relied upon?—They are generally of so decisive a character as not to admit of any doubt.

Is the period from quickening to the period of delivery an ascertained period, or is that one which varies?—*It must vary, because women do not quicken always at the same time.*

(*Mr. Attorney General.*) May menstruation be by cold or illness entirely suspended for an occasion?—The causes which will suspend the menstruous discharge are very numerous. If menstruation becomes suspended from any other cause than pregnancy, it is not likely that the uterine organs would be in a fit state to be impregnated during suspension.

May the menstrual discharge be suspended for a month; it is to commence on a particular day, it will naturally go on for five or six days, and then not occur again for a month; may one period of it be entirely suspended by illness, so as to go over to the next month?—I think it may.

Then can you take upon yourself to say, that in the interval between the time when that menstruation should have taken place and the next menstruation a woman may not conceive?—No; *I think the evidence connected with menstruation so uncertain, that, as I have before stated, I found my calculation more in the circumstance of quickening.* Women are constantly becoming pregnant whilst performing the duties of nursing, when they do not menstruate, and should not menstruate.

When was it you attended Doctor Hamilton's lectures?—It must have been about thirteen years since.

Before those particular instances you have referred to?—Yes.

(*By a Lord.*) With respect to those children who you say were particularly large, did you weigh them?—I did not.

You know the usual weight of a child?—Yes.

You did not weigh those?—No.

Had you any conversation with the husbands of those ladies on the subject?—No.

You never examined them with regard to any of the facts the lady stated to you?—I did not, because I should place no dependance at all upon the statements *of those men* as to sexual intercourse.

You talk of protracted gestation as originating from loss of blood; have you or not known a woman during her pregnancy menstruate?—I think a woman does not menstruate, in the common acceptation of the term. I know that a woman will lose blood

* This test will only apply to those women who have already been mothers, and noted the time of quickening. But it gives no certain datum for calculation in a first pregnancy.

periodically; but I believe that those are all cases in which the extremities of certain arteries terminate below the uterus in the upper part of the vagina; and I believe, that in by far the majority of cases of reported menstruation, if the discharge is examined by one or two tests, it will be found to be blood, and not the menstrual secretion, which differs materially from blood.

In those cases where there has been loss of blood, but where you do not allow there was regular menstruation, have you observed protracted gestation?—I believe I have once or twice stated that I consider all the evidence connected with menstruation of so uncertain a character, that I have not allowed myself to determine upon that.

In those cases where you have observed loss of blood that did not, in your opinion, amount to menstruation, have you witnessed protracted gestation?—The third case to which I referred I believe was a case in point: *a woman lost blood frequently, at irregular intervals; and I suppose that the gestative process became interrupted so far as she was concerned*, and in consequence of that irregular loss of blood enfeebling the organ.

Did she lose blood naturally, or was it taken from her?—Naturally.

Are not you in the practice of frequently recommending bleeding in cases of women in a state of gestation?—Not because they are pregnant; viewing it as a natural process, I do not know why we are to bleed spring and fall.

Are you not in the practice of recommending the loss of blood to ladies in that state?—I can suppose many cases requiring the loss of blood during pregnancy, and which must be treated by the loss of blood irrespective, or almost irrespective, of the state of the woman.

Does it enter into your mind, that you endanger a protracted gestation by taking blood from the woman?—Pregnant women are by far the most healthy women we meet with in society; consequently the cases are comparatively so few requiring the loss of blood, that I do not think my experience justifies me in giving an opinion upon that point with any degree of confidence.

In your opinion, may there be a period of some days between access and conception?—*Certainly not* *.

You think conception immediately follows access?—If I understand the question correctly, I should say, *certainly conception takes place at the time of coitus.* I believe, in some twin cases, where there are two ova, one may be developed much earlier than another; so that when those twins are born, one will frequently be of the common size of a child of nine months, and one considerably smaller.

(*Mr. Attorney General.*) What is the longest interval you have

* Vide Dr. Granville's answer to a similar question, p. 26, which is the proper reply. Upon what ground could Dr. Conquest use such an expression as this: "I should say, *certainly conception takes place at the time of coitus*!" relative to a point which he cannot demonstrate.

ever known between the birth of twins?—I have never allowed four hours to elapse between the birth of twins; I am aware that as many weeks have occurred.

By report?—By the report of living medical men.

The witness was directed to withdraw.

JOHN SABINE, Esquire, was then called in; and having been sworn, was examined by Mr. Tindal as follows:

You are a surgeon and accoucheur?—I am.

Where do you carry on your practice?—In Fenchurch Street.

How long have you been in business?—My first commencement of my medical studies was in Paris in the year 1815.

How long have you been in practice as a surgeon and midwife?—Between seven and eight years.

In this city?—In England.

How long have you been in the city of London?—I have been twice in the city of London; this last time about two years.

From the experience which you have had, what do you consider to be the *ordinary time of gestation* before a woman produces a child?—*About forty weeks, or nine calendar months* *.

Have you any case that has fallen under your immediate observation, in which that time has been exceeded?—*I have the case of my own wife* †.

Have the goodness to state the particulars of that case, and the length of time to which the protraction extended?—In the year 1817, the last period of her menstruation took place, I believe, about the 14th of September; on the 14th of October expected menstruation was looked for; it did not take place; immediately after this period all the symptoms of pregnancy followed; such as sickness, heartburn, pains in the breast, the ring round the nipple became dark, which I consider one of the *most principal* symptoms of pregnancy in the first child. Those symptoms went on until the second week in January, when she quickened; she was not delivered however till the 14th of August following. Her father, who has been a very eminent accoucheur in Norfolk and Suffolk for the last five-and-twenty years, was present with her during this period; it was his opinion as well as mine.

(*Mr. Attorney General.*) You will have the goodness to state your own opinion?—My opinion was that she was in the family way in October. This book is a memorandum book of the year 1817, where it will appear that she menstruated regularly from the commencement of the year.

* Vide notes, pages 2, 9, 16, 47.

† Some of the medical gentlemen seem, by the frankness of their disclosures, determined to make *their wives*, or as Dr. Granville would say, *their ladies*, notorious. They have adopted a new method of bringing them into notice: we should suppose not without offending their delicacy on a very tender point. *Ladies*, at least, will never forgive such uncalled for communications.—Vide notes, pages 40, 64.

Was that book kept by yourself?—Kept by her.

The entries are hers?—Yes.

(*Mr. Tindal.*) Were you by at the time that entry was made?—I was by at the time.

You saw the entries made?—I did. It appears by this book that she menstruated on the 14th of September; on the 14th of October, or about that time, menstruation was expected; consequently, on the 16th of October is marked "one week," and it goes on regularly "two, three."

(*Mr. Attorney General.*) Do you mean to say you looked at all those entries at the time?—Yes. It goes on throughout the whole year, until on the 25th of December is marked "eleven." She was not delivered till the 14th of August.

(*Mr. Tindal.*) From the 14th of October to the 14th of August *is ten calendar months?—Yes.*

From your judgment, and the observations you made, must the pregnancy or not have commenced before the 14th of October?—*It might have commenced only immediately before, on the* 13*th or* 14*th of October, just at the period when menstruation ought to have taken place; but it might have been a week or a fortnight previous to that time.*

What is the usual course which medical men take in reckoning the time, as to dating from a menstruation which has ceased?—They generally allow a fortnight either way.

Do they in general find that calculation correspond with the truth?—Yes.

Have you any other instance in which you can state a protracted gestation to have taken place?—Not with such confidence as the present one.

Have you any other in which you can state it with a sufficient degree of confidence to justify the statement of it here?—As I did not anticipate being examined before the House of Lords on a circumstance of this kind, I did not make notes of those circumstances.

Combining the experience you had in this particular instance with your general experience, in your judgment could a child, begotten on the 30th of January, be or not born on the 7th or 8th of December, that is 310 or 311 days?—*From this case and others, I am induced to believe it possible.*

Cross-examined by Mr. Attorney General.

Have you conversed on this case before?—It has been the subject of conversation with herself, and her father, and me, ever since it took place.

Not only with her father and herself, but with many other people, has it not?—Indeed I cannot say.

Have you never conversed with any body?—Since I have been summoned to this House I have.

You continued to live with Mrs. Sabine during this time?—I did.

Where were you living at that time?—At Yarmouth in Norfolk.

And you lived with her as usual?—As usual.

Did you put down in the book the date of the quickening?—I did not, because I felt the quickening myself.

When was it your attention was first drawn to consider the date of the quickening?—By my wife's desiring me to feel the motion of the child.

How do you know it was the 2d of January?—It was the second week in January.

What impressed upon your mind that it was the second week in January?—I recollect the circumstance particularly.

What combined the circumstance with the date; it is a long while since?—We considered the time she would be brought to bed *from the time of her ceasing to menstruate, and the time of her quickening.*

You would calculate naturally from the time of her ceasing to menstruate?—Not always.

What calculation would you make?—The usual period is sixteen weeks from conception; sometimes it takes place much earlier, and sometimes later.

How much earlier, and how much later?—Sometimes it is protracted *to the twenty-fifth week*, and instances are on record *of so early a period as the twelfth week;* I do not speak from my own observation of that, but from the records of other medical men.

From the knowledge you have as a medical man?—Yes.

Then a calculation from the time of quickening must be much more correct than from the time of conception?—Yes.

What, as far as your own observation and knowledge goes, has been the deviation as to quickening; what is the usual time?—Usually about the sixteenth week.

How far have you yourself known it go beyond the sixteenth week?—*As far as two or three weeks.*

How far have you known it to anticipate?—In this case I believe it took place very early.

How many children have you had?—Four.

Was this the eldest?—Yes.

It was the first child your wife had?—Yes.

It was born in 1817?—*In* 1818.

Of what size was the child when born?—A very large child indeed.

Does a child continue to grow during the whole time it is in the womb after it begins to live?—I cannot answer that question*.

You are a medical man?—I am.

What is your particular pursuit as a medical man?—As an accoucheur.

As a midwife?—Yes.

How long have you been in practice?—About eight years.

Where has your practice been?—At Yarmouth in Norfolk and in London.

* Vide evidence of Dr. Conquest, p. 49.

How long in Norfolk, and how long in London?—I have been in London about two years. A part of my practice was in Herefordshire, where I had the charge of a dispensary, where I had a great many midwifery patients; afterwards in Norfolk, and afterwards in London.

Where was your medical education?—It commenced in Paris.

How long were you in Paris?—Fourteen or fifteen months.

Where did you afterwards pursue your education?—In London.

You stated that you came from Yarmouth to London to practise? That was afterwards.

With whom were you in London?—I was a pupil of Sir Everard Home.

For what period?—I was for fifteen months in St. George's Hospital.

Are there cases of midwifery there?—No, none.

Sir Everard Home practises as a surgeon?—He is the surgeon of that hospital.

Where did you continue your practice or education as an accoucheur?—I have stated in Herefordshire, at Yarmouth, and in London.

Where was your education in midwifery in London; St. George's Hospital does not afford facilities for that information?—I pursued it in Paris, and in London I attended the lectures of Doctor Thynne.

For what time?—I attended three courses of lectures.

That was the whole of your education in London as to that department?—Yes, as to that department.

The instance of the birth of this child took place in the year 1817?—*Yes.*

Your medical education began in Paris in the year 1815?—Yes.

Cross-examined by Mr. Adam.

You have stated that you had no conversation with medical men on the subject of your wife's delivery until after you were summoned here?—Except with her father.

With no medical man at all?—With no others.

Did you ever have any conversation with Dr. Paris upon this subject?—Not till after I was summoned here.

The witness was directed to withdraw.

Doctor SAMUEL MERRIMAN was then called in; and having been sworn, was examined by Mr. Tindal as follows:

You are a physician, and also an accoucheur?—Yes.

Have you been long in the practice of that department of medicine?—About thirty years.

Has your practice been carried on in London?—Entirely.

Has it been carried on extensively?—Yes, I may say it has.

Where did you originally take your degree?—At Aberdeen; an honorary degree from Aberdeen.

How long ago is that?—Fifteen years, I think.

Were you before that practising midwifery as a surgeon?—Yes, I was.

During your experience, what do you consider to be the period of gestation of a female?—*The ordinary time certainly about forty weeks*, 280 *days*.

Have you had within your own experience cases in which that ordinary time has been exceeded?—I have had within my own experience *cases in which the time from which the female dated has exceeded* 280 *days*.

Assuming those dates to be correct, how long has it exceeded the term of 280 days?—*Some* 285; *some* 287; *two or three* 296; *one* 303; *one* 309 *days*.

Have you any reason to doubt that the information given to you was correct?—I have no reason to doubt with regard to several of the cases; as to some perhaps I have doubts.

Have the goodness to begin with that case in which you feel no reason to doubt; how long was the period exceeded in that case?—I will beg to refer to a memorandum.

Is that paper in your hand in your own hand-writing?—It is.

Is it a note made at the time?—It is a copy from a note made at the time.

A copy from a note in your own book?—Yes.

(*Mr. Adam.*) From what book?—A book which I constantly keep, and in which I put down occurrences that appear to me extraordinary.

Mr. Adam objected to the witness referring to this paper.

(*Mr. Tindal.*) Are you able to speak to the dates without looking to the paper before you?—I believe I can as far as correctness is concerned, but I do not know that I can state the day of the month, or the day of the year; with regard to one of them I can speak.

Bringing your recollection to that case, in which you feel no doubt upon the information which was given to you, how long did the period exceed the ordinary time?—The case was this: A lady had borne six or seven children; she always calculated her reckonings from the last day on which her monthly period ceased; on this occasion she was perfectly well on the 7th of March, and from some circumstances which I did not press to know, she said that she supposed herself to have conceived on the 8th of March. She engaged me about the month of November, or October, I am not certain which, to attend her, and said she should lie-in in the beginning of the month of December, and she said I am glad it will be so early in the month, because the children will not then be at home for the holidays. This lady was delivered on the 11th of January, making it, if I am not very incorrect in my calculation, 309 *days*.

Have you any other case in your recollection where there has been an excess of the time?—I have no case so strong in my recollection as that, where the period has been so long as 309 days;

but I have where the period was of a shorter duration, perhaps *forty-two weeks and one or two days.*

Have the goodness to state the circumstances of that case?—I was engaged to attend a lady, who stated that she expected to be confined in the month of July. I had occasion to go out of town in the month of July, and I called upon her to know how long I might venture to be absent before she was likely to want me. She said she certainly should not go more than another fortnight; she, however, was not put to-bed till more than a month after the time I saw her, making forty-two weeks and one, two, or three days, I do not exactly recollect which; the notes I have in my pocket would tell me the number of days, but it was about forty-two weeks and two days.

Do you know the date of the last?—I suppose it must have been probably about the year 1817.

Do you recollect any case where you have had the care of a patient for a longer period than the one you have mentioned last?—There is another case of a patient who was 303 days from the time at which she last had seen her monthly period.

When did that case occur?—In the year 1823, I think.

Were you called in at an early part of the case?—I saw the lady, I suppose, when she was about five months advanced.

Did you attend her from that time up to the time of the delivery?—I saw her occasionally, but not once a day, or perhaps once a week; I saw her perhaps every ten days or fortnight.

Did you see her as often as a medical adviser is usually called in?—Yes; there being nothing particular to call for his attention.

Were you able, by any symptoms, to form any idea whether she was correct in the period she fixed for conception?—I have no reason to think she was incorrect.

Then, assuming her to be correct, *an interval of* 303 *days* occurred before her delivery?—Yes.

Are there any other particular cases to which you would refer?—I think those three I have mentioned are equal in strength to any others that I can mention.

Upon the whole, judging by your experience, in your judgment could or could not a child, which was begotten the 30th of January, be protracted, as to its birth, until the 7th or 8th of December?—*I think such an occurrence is very possible.*

Cross-examined by Mr. Attorney General.

The 303 days you have stated are calculated from what period?—*From the time at which the last appearance of the menstruation ceased, from the termination of the monthly period.*

Was that the case of a married woman?—The case of a married woman.

It was 303 days from the cessation?—Yes.

Calculating from the next period, you would deduct twenty-eight days from that?—Certainly.

And the intercourse which produced conception might have been the day previous to the next period?—That is possible.

Or at any day during the interval?—That is possible, certainly.

And just as probable, perhaps?—I am not quite sure as to the probability, but possible, certainly*.

The one of forty-two weeks and two days, was that the case of a married woman also?—Yes.

In that case you were not called in till a short time before the woman expected to be delivered?—A few months, two or three months before.

The forty-two weeks and two days in that case are also calculated from the period when the menstruation ceased?—Yes.

So that, if the intercourse which produced the child had taken place precisely in the middle, between the two menstruations, it would have been a period of forty weeks?—*Exactly so.*

Which is all in the regular and natural course of things?—*Which is all in the regular and natural course of things.*

The first was also the instance of a married woman living with her husband?—Yes.

The calculation is made on the same principle there also?—*Precisely so.*

What was the number of days?—309 *days.*

Menstruation ceased on the 7th of March, and you calculated from the 8th of March your 309 days?—*I calculated from the 8th of March, because the lady said there were particular reasons which led her to believe that she fell with child on the 8th of March. She was a very virtuous, modest woman; and it did not become me to ask what her particular reason was.*

Though a very virtuous, modest woman, she was still living with her husband?—Yes.

And though a very virtuous and modest woman, she might have had intercourse with her husband subsequently?—Yes; and, therefore, she had no reason to conceal any fact from me.

How soon did you see her after the 8th of March?—I am not sure whether in October or November.

You saw her at a long interval after the supposed cause of conception?—Certainly.

If you were to take the twenty-eight days, the interval between the two menstruations, from the whole number of days, it would be all in the ordinary course of things?—It would then exceed, *by a few days*, forty weeks.

By only one or two days?—*One day.*

If the interconrse which produced the child had been upon the

* If twenty-eight days be subtracted, seventy-five days are left; so that if impregnation took place immediately afterwards, or soon afterwards, the duration of pregnancy would be reduced to the natural standard which Dr. Merriman assumed, of forty weeks, or 280 days. The counsellors did not fail to take advantage of this case.

day preceding the next menstruation, or the next period of menstruation, the child would have been born in due time?—*Certainly**.

That observation applies to all the three cases?—Unquestionably.

Cross-examined by Mr. Adam.

The only reason you had to think that conception did not take place the day before the expected menstruation was the statement by the lady, that she imagined she had conceived on the 8th?—*Not only on that, because I conceive that impregnation is by no means so common the day before the expected term of menstruation as it is the day after the menstruation has ceased.*

One day before the menstruation is not so likely as a longer period?—Certainly not.

But the lady did not state to you the grounds on which she formed the supposition of her having conceived on the 8th of March?—*No.*

Re-examined by Mr. Tindal.

Although it was so long after as October, did she at once fix upon the date you have stated to the House?—*Certainly.*

Are there any other circumstances besides that arising from menstruation, from which a medical man can form an opinion, as to the time of conception, adverting particularly to the quickening of the child?—*There are other symptoms by which he might be led to infer the impregnation; but all of those, I conceive, are secondary to the grand symptom of the cessation of the menstrual period*†.

Is there any other ground on which judgment can be formed as to the time at which impregnation takes place, that is, whether it is shortly after the preceding menstruation, or shortly previously to the expected subsequent one?—*I am generally in the habit of calculating from the time at which menstruation ceased; I reckon* 280 *days, from the time of the cessation of the monthly period; and reckoning* 280 *days, I find that I am generally correct in the calculation of the period at which the lady is to be delivered*‡.

Is there any general opinion to which belief is given amongst practitioners, as to the time at which impregnation takes place?—The general belief, I fancy, is, that it takes place soon after the menstrual period§.

(*Mr. Attorney General.*) Does the child continue to grow in

* Why were such cases—cases which prove nothing to the point—at all mentioned?

† This deserves to be contrasted with Dr. Conquest's idea, p. 50.

‡ The reader is requested to contrast this paragraph with the evidence of almost all the other medical witnesses. Were we to deduct any number of the twenty-eight days between two menstrual periods from 280 days, we should have a rauge from 252 to 280 days as the term of human pregnancy.

§ It is more probable that conception takes place a short time previous to the next expected menstruation; an opinion which we know many physiologists entertain.

the womb up to the very period of the delivery?—*I presume that it does.*

So that, if the delivery were protracted beyond the nine, and to the verge of ten months, supposing that possible, the child would be larger than if born at nine months?—I am not quite sure upon that point; it depends upon the period at which (admitting the fact that a woman may go more than forty weeks) there was a cessation of the growth of the child.

The question is, whether the child continues to grow till the labour takes place; is it not nourished till the labour takes place?—Yes; but the question is when the nourishment begins.

At whatever period it commences, as soon as the child is a living child, and begins to grow, does not the nourishment continue to supply it, and does not it continue to grow up to the period of delivery?—*Certainly.*

So that if the delivery is protracted to ten months it would still continue to grow, and would be in all probability a larger child than if born at nine months?—One must sometimes draw one's inferences from analogy. I have known more than one instance where a child has been inoculated for the small-pox; according to the ordinary course of things, where a child has been inoculated for the small-pox, the virus inserted in the arm of the child will in two or three days produce a vesicle, which ultimately enlarges, and the small-pox is generally diffused throughout the constitution, and the person has a very full eruption of pustules; but though it is the ordinary course of things, though it is, I may say, the law of small-pox inoculation, that the index should show itself at the end of two or three days, I have known seven, eight, nine, or ten days elapse before it shows itself. I think also that the ovum passing from the ovarium into the uterus may not immediately excite the action of the uterus; it may lie there in a more or less dormant state, and the action may not be set up in the uterus for four or five days, or a fortnight afterwards.

The question does not refer to possible and extreme cases; but would not, in all probability, the child be larger if born at the expiration of the tenth than the ninth month?—*Certainly.*

Re-examined by Mr. Tindal.

On the subject of protracted gestation, have there been experiments tried as to other animals, not the human species?—I cannot speak to such experiments from my own knowledge, only from what I have understood.

What were the experiments which you know of?—Doctor Leake, who formerly gave lectures on midwifery in this town, states, that in Egypt, where it is usual to hatch chickens by heat, the eggs being put at the same time ————

(*Mr. Attorney General.*) Are you speaking of experiments of which you were witness, or the result of which has been communicated to you?—I stated it was an experiment I had heard of.

The Attorney General objected to the evidence.

(*Mr. Tindal.*) Is Doctor Leake alive?—He is not.

(*Mr. Attorney General.*) In your judgment, can there be any interval between the connection which takes place between the sexes and the conception; does not impregnation take place immediately, and conception also?—*Unquestionably, if impregnation takes place, conception must take place.*

Does not impregnation take place either immediately, or not at all?—*Surely.*

So that conception must follow the act of impregnation immediately?—*Unquestionably, conception takes place in the ovarium, and the ovum descends into the uterus.*

You conceive there may be a difference in the descent of the ovum into the uterus?—Yes.

That is mere speculation?—It is known that the ovum does descend.

As to the interval of time, that is conjecture?—*That is partly conjecture, certainly.*

(*Mr. Tindal.*) Are there any books which have been written upon the subject of protracted gestation, which are received as books of authority by practitioners?—There have been a great number of works published upon that subject, and some, I apprehend, are no authority whatever.

(*Mr. Attorney General.*) Would you pin your faith on Livy upon such a subject?—Certainly not.

(*Mr. Tindal.*) Do you know the works of Monsieur Tessier?—*I have heard of them, but never read them.*

(*Mr. Attorney General.*) Would you pin your judgment on Mr. Haller's judgment, as expressed in his work upon this point?—Whatever Haller asserts upon his own knowledge I would believe; but there is a great deal in Haller which is not upon his own knowledge.

Mauriceau?—Mauriceau relates upon his own authority several cases of protracted gestation. I should be disposed to place some confidence in whatever Mauriceau states.

What was Mauriceau?—A practitioner of midwifery at Paris for many years.

A great variety of causes will suspend menstruation?—Yes.

May it be entirely suspended for that term, so as not to occur again till the next stated interval?—I have no doubt such a thing may be.

If that were the case, do you conceive the woman might conceive in the mean time?—I suppose it is possible, but I believe it is very rare.

What would be the difficulty in the way of that?—The uterus would be labouring under some disease, and would be therefore less likely to become impregnated.

The witness was directed to withdraw.

Doctor HENRY DAVIS was then called in, and having been sworn, was examined by Mr. Tindal as follows:

Are you a physician?—I am.

Where are you established in practice?—In London.

How long have you been in practice as a physician?—Ten years in London.

Were you in the profession before that?—I have been in the profession these twenty years and upwards.

Where were you educated for the profession?—Principally in London, in Paris and Edinburgh also.

Where did you take your degree?—I am a licentiate of the College of Physicians in London.

Have you been in extensive practice during any part of this time?—I have practised midwifery upwards of twenty years.

Have you been in an extensive business in midwifery?—Yes, I have for the last ten years.

Without inquiring into the ordinary time of gestation, of which we have heard so much, in your experience have you known any case of extraordinarily protracted gestation?—*In my experience I have not, except in one instance, and then I was led to believe it was owing to some mistake of the patient.*

Although not in your own experience, have you had any case of that sort under your observation?—One remarkable case.

Have the goodness to state the facts of that case?

(*Mr. Attorney General.*) Were you personally acquainted with all the facts?—I am perfectly acquainted with the persons who communicated it to me.

You were not yourself present during any part of the scene?—I did not attend the female as a patient.

(*Mr. Tindal.*) Were you from time to time attending upon her, so as to know the facts you are about to relate?—*No, I was not.*

What you were about to state is something which has been communicated to you by some female?—*Yes.*

You did not yourself attend her?—*I did not**.

The witness was directed to withdraw.

Doctor RICHARD BYAM DENISON was then called in; and having been sworn, was examined by Mr. Tindal as follows:

I believe you are a physician?—I am.

Where do you practise?—In London.

Has your practice been extensive in the line of midwifery?—Certainly.

What instances have occurred in your practice in which the natural time of gestation has been exceeded before the birth of the

* Why did the party bring forward Dr. H. Davis? Was it to show that he could do their cause no benefit?

child?—*I merely know one, and I cannot positively speak to the fact of that one.*

What do you call the natural time of gestation?—*Nine calendar months, or* 280 *days**.

That being in your judgment the ordinary time, will you state any instance in which that time has been exceeded?—In one particular case a lady went nearly three weeks over the usual time.

At what period of the gestation of that lady were you called in to attend her?—About a month before her expected accouchement.

Did you judge from any circumstances or symptoms that you observed yourself, that that was the period at which her delivery might be expected?—Certainly; it was her third pregnancy.

On what do you ground your calculation, that that pregnancy was beyond the usual time?—*More particularly from the narrative of the lady herself.*

You had no means of knowledge, of your own actual knowledge, prior to the time when you were called in?—Decidedly not; certainly not.

(*By a Lord.*) Have you any objection to state the name of the lady?—*I should beg to be excused; it is professional confidence*†.

Mr. Tindal.) On what do you ground your judgment that she exceeded the natural time of pregnancy?—From the account she gave me of the expected time of her labour.

What account did she give you?—That she expected about the middle of such a month.

Did you examine her in order to see whether the ground of her opinion was a just one?—*Not particularly; because I had no reason to doubt her accuracy any more than that of any other patient.*

Did you ask no question as to other circumstances which would have guided your own judgment?—It is not a common thing to do so; when a lady comes to me, I ask when she expects to be confined, and I make a memorandum of it.

(*Mr. Attorney General.*) Do you not find women very often mis-

* Vide notes, pages 2, 9, 16, 47, 53.

† A very proper answer. Vide notes, pages 40, 49.

" It has been supposed that medical practitioners may avail themselves of the privilege enjoyed by legal advisers, and that they are not bound to divulge the secrets of their patients, reposed in them in the course of professional confidence: undoubtedly this confidence ought not to be violated on any ordinary occasion; but when the ends of justice absolutely require the disclosure, there is no doubt that the medical witness is not only bound, but compellable to give evidence; ever bearing in mind, that the examination should not be carried farther than may be relevant to the point in question; of this the court will judge, and protect the witness accordingly."

" If a surgeon," said Lord Mansfield, " was voluntarily to reveal these secrets, to be sure he would be guilty of a breach of honour, and of great indiscretion; but, to give that information in a court of justice, which by the law of the land he is bound to do, will never be imputed to him as any indiscretion whatever."—*Vide Paris and Fonblanque's Medical Jurisprudence,* pages 160, 161.

taken?—*Decidedly, that they miscalculate frequently; a fortnight or three weeks is not unusual.*

(*Mr. Tindal.*) Suppose a period of 310 or 311 days elapsed between the last access of the father and the birth of the child, could that child be the product of that access?—An instance of that kind has never occurred to me at all.

Have you formed any judgment upon it?—*No, indeed I have not**.

The witness was directed to withdraw.

Doctor EDWARD JAMES HOPKINS was then called in, and having been sworn, was examined as follows:

(*By Counsel.*) You are the principal accoucheur to the Westminster Lying-in Institution?—I am.

How long have you been in that situation?—I have been in that situation five years.

In the course of that occupation have you had considerable experience?—The average number of patients has been about a thousand a year; but I consider the whole of the number that I attended to amount to that, for I attend the wives of most of the soldiers of the Foot Guards, in addition to that Institution.

Altogether your practice amounts on an average to about a thousand a year?—Yes.

What do you consider, in the course of your experience, the ordinary period of the gestation of a woman?—*The ordinary period is about* 280 *days.*

Have you known that time in any instance exceeded?—*I have known it in one most positive case.*

Have the goodness to state the circumstances of that case?—May I first state a case that occurred to my late father?

Were you living with your father at the time?—No; the case occurred about twenty-four years ago.

(*By a Lord.*) Is your father alive?—He is not; but the case was *most conclusive;* but that is not the case which I now refer to: that was what first grounded my conviction as to the possibility.

(*Mr. Attorney General*) It was reported to you by your father?—Yes.

(*Mr. Tindal.*) In the first instance refer to the case which you know yourself?—This was a lady, the wife of a merchant. I was called in ——

(*Mr. Adam.*) At what are you looking?—A note of the date.

(*Mr. Attorney General.*) From what is that taken?—From the lady whom I attended.

Was it taken at the time?—No, not at the time.

(*Mr. Tindal.*) *Put the note in your pocket, and state the fact as*

* Dr. Dennison's answers—we cannot say evidence—do not bear at all upon the point at issue; they convey *no information.* For what purpose was he examined?

you recollect it *.—I was engaged to attend this lady *in September* 1821 ; she then stated——

Mr. Adam submitted, that any thing the lady stated previous to the witness being called in was not evidence.

Mr. Tindal submitted, that the condition of the lady at the time she called in the doctor was one of those facts upon which he must be informed, in order to enable him to give medical advice to the female consulting him.

The Counsel were informed, that in the opinion of the Committee *this was merely hearsay, and not evidence.*

(*Mr. Tindal.*) Will you proceed with your recollection of the case?—*In referring to my note, I have made a mistake ; it was in December, not September* †.

Mr. Attorney General objected to the witness, who had been told to rely upon his recollection, having referred to the note *privately* after having been told that he was not to look at it.

(*Mr. Tindal.*) Do you recollect the time of the year?—I was applied to only a few days back, and cannot recollect every particular at the moment.

Was it in the winter time or the summer?—It was in the winter.

(*Mr. Attorney General.*) Was it in September or October?—From the note I have in my pocket——

According to your recollection it was in September?—I *believe* it was in December.

(*Mr. Tindal.*) Can you recollect whether it was in the one month or the other?—It *was* in December.

(*Mr. Attorney General.*) Do you recollect that from reference to your note, or do you recollect it without referring?—I now recollect it, because it has been brought to my mind.

You can recollect that it was in December without reference to the note?—*Now I can.*

(*Mr. Tindal.*) From the account given to you this woman was four months gone ; what did you observe?—*I observed the abdomen very much enlarged, and from every appearance it was a four months' gestation* ‡.

* "Notes, if taken upon the spot, or immediately after a transaction, may be used by the witness to refresh his memory ; and as to dates, numbers, and quantities, it is generally expedient to have them ; the notes should be original, not copies ; if there be any point in them which the witness does not recollect, except that he finds it there, such point is not evidence ; for the notes are only to assist recollection, not to convey information."—*Paris and Fonblanque's Medical Jurisprudence*, vol. i, p. 164.

† It is an unpleasant circumstance to make a mistake in giving such evidence ; in this case there was a considerable space of time between the months mentioned, *viz.* September and December. In the cross examination, the reader will remark how severely the witness was questioned, as if his veracity had been impeached.

‡ This was a new mode of judging almost *exclusively* of the duration of pregnancy. The witness's own answers to subsequent questions respecting the size of the abdomen, and his allusions to the cessation of the catamenia and the time of quickening, form the best critique on the above idea. We must

From your experience, did her appearance correspond with a four months' pregnancy?—*It did most decidedly.*

Were you in the course of regular attendance upon that lady from that time until her confinement?—I was, almost every week.

Did the subsequent symptoms that occurred agree with or contradict the opinion you had before formed as to the time of her pregnancy?—The gestation went on, *and the abdomen still increased in size*, and I have no reason to believe otherwise.

When, in point of fact, was that lady delivered?—She was delivered on the 4th of June in the following year.

Upon the mode of calculation which you have adopted, what length of gestation does that allow?—*That allows ten calendar months.*

Is that the only instance you have within your own knowledge?—That is the most decisive case I ever remember.

Have you had other experience, without going to particular cases, which has enabled you to form a judgment upon the possibility of exceeding the ordinary time?—Patients very frequently go beyond the time that they calculated at. With respect to this case, she menstruated on the 3d of June, that I recollect most positively, on the 3d of June 1821; making in the whole, from the time of menstruation until she was confined, *eleven months and a day.*

Cross-examined by Mr. Attorney General.

How do you know that she menstruated on the 3d of June 1821? Because I made an inquiry.

You had that from her representation, and her representation only?—*From her representation only, but there were other symptoms to corroborate.*

suppose that he laboured under some trepidation before the august assembly, and that his senses were not "well collected" at the time he made some of his vague and contradictory responses. Let the junior members of the profession take a lesson from the present case, study medical jurisprudence, and prepare themselves, by a proper education, before venturing to give medical evidence. Beck, in speaking of the *Expansion of the Abdomen*, after alluding to deception by dress, or in consequence of corpulency, says, "Waiving these, however, we observe, that this sign is generally observed at the end of the fourth month. It then remains to inquire, whether the enlargement is the result of disease or of pregnancy. If the former, it may originate from suppression of the menses, tympanites, dropsy, or schirrosity of the liver or spleen. In tympanites, however, the abdomen is hard and elastic, and sounds like a drum when pressed; and there are irregular elevations, which appear to roll under the finger. Dropsy, also, when not encysted, is characterized by its peculiar symptoms; and schirrosity, by its indurated and unequal swelling. All these diseases, if the observer exercises patience and judgment, may be distinguished from pregnancy. Encysted dropsy will be understood with more difficulty, as no fluctuation will be observed; and the best advice probably is, to mark the symptoms, as they daily become more aggravated in this disease, while the slighter affections of pregnancy generally wear off. Even if we have settled that there is a tumour of the uterus present, it is not certain that it is caused by a fœtus; it may arise from a mole, from hydatids in the uterus, or from a schirrous state of that organ. These remarks sufficiently prove, that enlargement of the abdomen is *a sign of little importance* in determining the question of pregnancy. It should always be noticed, but never relied on."—*Elements of Medical Jurisprudence*, p. 75.

That was five months before you were called in?—Yes.

The extension of the abdomen varies with different women in the same stage of pregnancy?—*It does; but it was of that size that I could have been almost certain she was that far gone; it was of a most enormous size.*

Does not it vary very much in different women?—*It varies in different women, for it depends in some measure on the size of the child, and the fluid in which the child is contained; some women have more than others.*

Does not it vary very much in different women?—*Yes, it does.*

In some women the abdomen would not be more extended at *five months than in others at four?—Or at seven.*

Some will not be more extended *at seven* than others at *five?*—*Yes.*

From the extension of the abdomen your impression was, that she was four months gone with child?—*Yes, combined with her representation*, and the answers she gave to some questions I put to her; one question I put to her was, *when she quickened.* It appeared that this lady quickened *the fourteenth week after conception;* she had prior to this borne five children.

All this is from her representation?—*We have no other way of judging but from the representation of our patients*.*

What was the date in which she had quickened in this case?—*That I do not recollect.*

Do you recollect how long it was before you were called in?—*If I was called in in four months afterwards, it must have been a very short time.*

The interval between the period of conception and the period of quickening varies very much with different women?—Most decidedly it does in different women; but the same woman will generally quicken with each child at the same period throughout.

You do not mean to say that it is universally true, though it is generally so?—Generally so, it is, with a very few exceptions; *but that depends upon the size of the bony cavity which the child has to pass through, and also on the size of the child†; but where the*

* The witness appears to refer here only to *quickening*: he has before stated, that he formed his opinion chiefly from the size of the abdomen; and toward the conclusion of the cross-examination he says that he had "very little reliance upon the opinion" of his patient.

† We suppose the above remark alludes to the most recent theory of *quickening*, which we shall explain by quotations.

"A far more *rational and undoubtedly more correct* opinion is, that which considers *quickening* to be produced by the *impregnated uterus starting suddenly out of the pelvis* into the abdominal cavity. This explains several peculiarities attendant on the phenomenon in question—the variety in the period of its occurrence—the faintness which usually accompanies it, owing to the pressure being removed from the iliac vessels, and the blood suddenly rushing to them; and the distinctness of its character, *differing*, as all mothers assert, *from any subsequent motion of the fœtus.* Its occasional absence in some females is also readily accounted for, from the ascent being gradual and unobserved."—*Beck's Elements of Medical Jurisprudence*, p. 79.

"Mr. Royston appears to have been the first that satisfactorily developed

children are of the same size they always quicken at the same time.

Had you ever attended this lady before?—*I never had.*

Then her period of quickening you had merely from her representation?—*From her representation; we have no other way of ascertaining.*

Was she a married woman?—She was.

Was she, at the time, living with her husband?—She was.

Menstruation is very often suspended by disorder?—*Yes.*

By cold?—By a variety of causes.

Cross-examined by Mr. Adam.

Does your memory serve you as to the time in December when you were called in?—I do not recollect the date in December, but I remember its being *in the winter, and about December, as I have before stated, in December.*

Do you recollect whether it was the 1st of December, or the 31st?—*No, I cannot state that fact.*

this opinion to the public, although he gives the credit to Dr. H. S. Jackson, of originally advancing the idea. See his paper, copied from the London Medical and Physical Journal, in the Eclectic Repertory, vol. iii, p. 25. Writers on midwifery are embracing this opinion. See Conquest, p. 38; and also Hogben, in London Medical Repository, vol. i, p. 146."—*Ibid.* p. 79.

In another place, however, the same intelligent writer says, "There is a difference of opinion as to the *real nature of quickening*. It has been lately suggested by a writer, that it is altogether independent of any motion of the child, and that it is to be attributed to the sudden rising of the uterus out of the pelvic cavity into the abdomen.—(*London Medical and Physical Journal*, vol. 27, p. 441.)—*If this opinion be true*, it would afford another incontrovertible argument in favour of the position I have advocated, that '*motion is not essential to life.*'"—*Beck's Elements of Medical Jurisprudence*, note, p. 139.

Paris speaks with a more decisive tone, although all practitioners do not concede the point.

"About the *sixteenth* or *eighteenth* week after conception, the uterus suddenly ascends from the pelvis into the abdomen, a change which is attended with a very peculiar sensation to the woman, and is erroneously called *quickening*, from its having been supposed to arise from the first motions of the fœtus in utero, which was imagined at this period to receive the essence of vitality. The law of England still sanctions this hypothesis as a principle by which the degree of criminality, in cases of *abortus procuratus*, is determined, and according to which the plea of pregnancy, in bar of punishment, is either admitted or rejected."—*Paris and Fonblanque's Medical Jurisprudence*, vol. i, p. 239.

Admitting that *quickening*, in some cases, may be referred to the sudden ascent of the uterus—though we are sceptical with respect to this theory *in toto*—it may be presumed that in others a different cause must be assigned. We know cases where no sudden jerk ever took place: the first motion, or *quickening*, was described as "*a stirring in the under part of the belly*," followed, as it were, by "*the rolling and overthrow of some bulky body.*" In one case, the patient said, that on quickening she thought "*the child had thrown a somerset*;" which caused her to desist from directing the cook's operations, and to throw herself upon the bed, when she fainted. In other cases, not only the first motion of the infant, but even all its subsequent motions, during pregnancy, have been extremely feeble, and no sudden movement "*like the impregnated uterus starting out of the pelvis into the abdominal cavity*," has ever been felt. The subject deserves further investigation.

It might have been the 31st of December?—*No, I do not know that it was.*

Does your memory serve you?—*No, I do not recollect at what time in December.*

How long had you been in practice at this time?—I had been in practice then about three years.

Your father was a midwife in his life-time?—*Of great celebrity.*

You stated that you had conceived an opinion as to the period of time of gestation from some conversations with your father?—*From some conversations with my father.*

You had, in fact, formed no opinion upon that subject before then yourself; you had formed none on your own experience?—*I had not decided merely upon the case my father mentioned; I had an impression that women could go beyond nine calendar months.*

And that not from your own experience, but something you had heard from somebody else?—*From the experience of my father*, and the nature of that case.*

(*Mr. Tindal.*) When was the conversation with your father, to which my learned friend has referred, and what was the nature of it?

Mr. Attorney General objected to the evidence of this conversation.

Mr. Tindal submitted, that the conversation having been referred to by Mr. Adam, and the grounds of the witness's opinion, as connected with that conversation, being asked, he had a right to ask to the conversation.

The counsel were informed, that in the opinion of the Committee *the conversation was not admissible.*

(*Mr. Tindal.*) You have stated that you had not attended the lady before that confinement?—I did not.

Have you attended her since?—Yes.

How many children has she had since?—One. The child, in this instance, was considerably larger than any she had hitherto borne; *the labour was so tremendous*, and had impaired her general health so much, that in this instance I have been *obliged to bring on labour at the seventh month*†; the child was so much larger than it would be in the ordinary course of things.

* "The witness must relate only that which he himself has seen or observed; that which he has heard from others is not evidence as coming from him; except, indeed, where some expressions or declarations of the parties concerned have become part of the *res gesta*: but the declarations of a dying man are evidence when related by a third person on oath, though the party making them was not sworn, for the law presumes that the solemnity of the occasion may dispense with form, and that a man, trembling on the brink of eternity, will never risk salvation by falsehood. To give this weight to a declaration, it is necessary that the party should believe himself to be dying."—*Paris and Fonblanque's Medical Jurisprudence*, vol. i, p. 164.

† From the evidence it appears, that premature labour was induced *at the seventh month*, because the patient had previously had a *remarkably large child at the tenth month.* Would it not have been advisable, then, to have taken the chance of natural labour at the ordinary period? Was not the great size of the ten month child ascribed to protracted gestation?

Was the child born alive at seven months?—It was born alive. Her general health required it; *I am confident she never would have survived if I had not.*

(*Mr. Attorney General.*) The child you supposed to have been born at the expiration of ten months, you described as a remarkably large child?—*Yes.*

Supposing it possible that a child should go beyond the usual time, the probability is, that the child, the nourishment being continued, would be a particularly large child?—*Yes, beyond nine calendar months.*

Assuming it to be possible that a woman could go ten months instead of nine, the child would continue to be nourished during that month?—*It probably might not get very much larger;* but it was in this instance larger.

Is not the probability that it would be a large child?—*I should imagine so*.*

If you were to find a child particularly small, that would be an argument in your mind against that?—No, it would not; because there are exceptions to be made.

Would it not be an argument, though there are exceptions; would it not be a circumstance from which you would naturally infer that the woman had not gone beyond the usual time?—If I were to see the child, I should perhaps form a judgment upon that.

(*Mr. Adam.*) You have stated, that in this particular instance the labour was very severe?—Very severe.

How long did it last?—It lasted eighteen hours.

(*Mr. Tindal.*) When you say that you imagine that the child would be remarkably large, do you mean that it would be remarkably large, absolutely speaking, or relatively to the other children of the same parents?—To the other children; that is what I wish to speak to.

(*Mr. Attorney General.*) When a child is born at seven months, it is very often born without nails, is it not?—I should place very little credit upon the growth of the nails.

How is it when a child is born at nine months?—At times the nails are very perfect, in others not; it is a thing I place very little reliance upon, *for sometimes we have children born with teeth.*

(*Mr. Adam.*) Does the fact of a child not being able to suck with facility give you reason to suppose it was born prematurely?—No, it may be from debility.

Supposing you were to hear or to see that a child sucked with difficulty, should you presume it was born sooner than its usual time?—It might be probably from debility, but there might have been a disease going on.

The question is not whether you cannot account for it in another

* The celebrated Mauriceau, La Motte, and Orfila, have long since observed, that children who remain in the womb longer than the usual time, are much stronger and stouter than those that come forth at the usual period; a remark that some of the modern adherents of protracted gestation think has been confirmed by their own experience."—Vide *Beck's Elements of Medical Jurisprudence*, p. 81, note; and *Ed. Med. and Surg. Review*, No. 87, p. 249.

way, but should you not infer that the child was born prematurely?—No, I would not.

(*Mr. Attorney General.*) Would it not be a circumstance?—It would be a circumstance; but I generally look at the parents, and if I find them of a muscular and powerful habit, I judge from that that the children will be large in proportion.

Recollecting that the usual time of gestation is nine months, if you were to see a child born of vigorous parents, but under the size, a difficulty of sucking, and without nails, would not all those circumstances lead you to infer, not conclusively, but fairly to infer that the child had not gone beyond the natural time?—*Probably it might; it might have some influence in my decision.*

(*Mr. Tindal.*) By what would you be most governed in your decision under those circumstauces; by the investigation of the parents, or the appearance of the child?—The investigation of the parents, most undoubtedly; there is such a difference in the appearance of children, that cannot be relied upon.

(*Mr. Attorney General.*) With respect to the instance you have yourself spoken to, had you any communication with the father?—Yes, I had. It was his opinion that she had gone ten months; *but still I had very little reliance upon the opinion of my patient; I thought for myself, by making inquiries.*

He was living with her at the time?—He was.

And had daily and nightly intercourse with her?—I suppose so.

(*By a Lord.*) What was the health of the child when it was born?—Very healthy.

Did it differ in its appearance at all from that of a child at the natural period?—It was much larger than any of the other children, but it had the same appearance.

Did you weigh the child?—*I did not.*

The witness was directed to withdraw *.

HENRY SINGER CHINNOCKS, Esq., was called in; and having been sworn, was examined by Mr. Tindal as follows:

You are a surgeon and accoucheur?—I am.

Have you the care of any lying-in hospitals entrusted to you?—

* We have just remarked the following advertisement:—

"Dr. Hopkins, Physician Accoucheur to the Wives of Soldiers of the three Regiments of Foot Guards; to the Westminster Lying-in Institution; to the Southwark Lying-in Establishment, and Consulting Physician Accoucheur to the Islington Lying-in Institution, will commence his next Course of Lectures on the Principles and Practice of Midwifery, and the Diseases of Women and Children, at the Medical and Obstetric Theatre, 1, Dean Street, Borough, on Monday, April 17, at a Quarter past Ten in the Forenoon.

"The great advantage to be derived from this course will be, the extensive field of practical instruction which Dr. Hopkins has in his power to lay open to his students, and the very frequent opportunities each of them will have, even during one course, of putting his precepts into actual practice under his own superintendance, aud that of numerous consulting surgeon accoucheurs attached to the institution under his direction.

"For particulars apply to Dr. Hopkins, at his house, 3, Queen Square, St. James's Park, Westminster, or at the Theatre."

A few lectures on *Obstetric Juridical Evidence* might be a useful *addendum* to the course.

I am accoucheur to the Brompton and Chelsea district of the Westminster Lying-in Institution for delivering women at their own habitations.

Is that the same institution which Doctor Granville is connected with?—The same establishment that Doctor Granville is connected with; there are four districts, the Chelsea and Brompton district is one, and I am the accoucheur to that.

In the course of your employment in that situation, have you many cases of pregnant women that are brought before you?—A great many.

How many do you think in the course of the year, on an average?—The Chelsea and Brompton district is but very lately formed, on the average I should hardly suppose more than forty; it has been formed only two years.

Have you other practice besides that you have referred to?—I am a general practitioner at Brompton.

In the course of your practice at Brompton, have you or not an ordinary quantity of private business, or what is the quantity of that business?—I have as much as I can reasonably expect, considering the time I have been there.

With all those means of information, what do you state to be the ordinary period for a woman carrying a child?—Perhaps I should wish to be excused giving any theoretical opinion, from being such a junior member of the profession; I cannot well give opinions.

You are not urged into the depth of theory, when you are asked what, in the ordinary course of women bearing children, is your opinion of the time when a child ought to be born?—Nine calendar months.

Have you in your own practice known any instance on which you can depend of that time being exceeded?—*I have.*

Do you know one, or more than one instance?—*One.*

You need not state the name of the patient, but the time, and any other circumstances relating to it?—This patient called upon me about four months previous to her confinement; she was confined on February the 20th, in the year 1824, the last year; *that was her first child.*

(*By a Lord.*) Was she a married woman?—Yes. It was her first child; she was consequently inexperienced when she called upon me, and I think I asked her about what time she expected to be confined, and she told me about the middle or latter end of January; I called upon her about that time, as is usual, and paid her very frequent visits. I was rather surprized to find labour was not coming on; I questioned her more particularly in what manner she reckoned, and she stated that there could be no doubt whatever.

(*Mr. Attorney General.*) Does this refer to menstruation?—*No; the time the husband left her.*

Mr. Attorney General objected to this evidence.

(*Mr. Tindal.*) Did you know the husband?—I did not.

You do not know the fact of his quitting her yourself?—*No, only from her account.*

(*By a Lord.*) Was this a poor patient, or a person in a superior station of life?—Her husband held some situation in a trader going to America.

(*Mr. Tindal.*) Were there any other appearances at the time you visited the party, from which you could form a judgment of the truth of her account?—There were no other symptoms than the usual symptoms which accompany pregnancy. I was called in four months previous to her confinement: and the appearance of the abdomen was decidedly large, but not so much so as would warrant me to come to the opinion that she must be confined at that particular time.

How much did she exceed that time?—*Eighteen days.*

You have no means of knowing the truth of any account she gave you of the time of conception, except that she gave it you?—*I have not.*

Cross-examined by Mr. Solicitor General.

How long have you been in practice?—Two years.

(*Mr. Tindal.*) Where had you studied before?—In London.

Have you attended any hospitals?—St. George's, and the Westminster Lying-in Institution. I was a pupil there twelve months previous; I attended there constantly for that period; on an average, I visited every other day.

(*Mr. Attorney General.*) St. George's is not a lying-in hospital?—No.

(*Mr. Solicitor General.*) Your pupilage in this branch was a year before you began to practise?—Yes.

And your practice has been that of two years?—Yes.

The witness was directed to withdraw *.

THOMAS CORY HAWKES, Esq., was then called in; and examined by Mr. Tindal, as follows:

You are an accoucheur?—I was.

Have you discontinued practice?—Yes.

How long were you in the profession, as an accoucheur?—Fourteen years.

Was it in London you carried it on?—In the country.

What part of the country?—In Devonshire, at Oakhampton.

Were you in considerable practice there, or not?—There was only another medical man besides my father and myself.

Was the population of the country such as to afford considerable practice?—Yes, on one side it was.

Looking to the side where population might be expected, and con-

* We can assign no reason why Mr. Chinnocks was brought before the House for examination. He had no important facts to disclose, and to do him justice, he made no pretensions.

sequently gestation sometimes, had you considerable practice, or not?—Yes, I had a great deal; some thousands in the course of my practice.

Perhaps you have formed an opinion of the ordinary period of a woman's gestation?—Yes.

What is it?—*About forty weeks.*

Have you ever known an instance in which that period has been exceeded?—*I have, by what a woman informed me, on the death of her husband.* I was called in to attend a woman, and she had a very fine boy in a day or two. Upon going round afterwards, I said to her ———

Where did this woman live?—She lived at Oakhampton.

In what year was it this happened?—It must be nearly nineteen or twenty years ago.

Do you know whether the woman is alive now?—I do not know. A conversation took place with my father about it.

You have no means of knowing of her prolonged gestation except from what she told you?—*No; I said it appears to me you went forty-one weeks.* I asked her whether she had had any connection with any other man.

Did you know her husband?—*Yes, I did.*

Do you know the date of his death?—No, I do not; I cannot state that from the time. There was another case, when I attended a woman with twins. There she mentioned to me to attend her at a certain time, and I was sent for to her, and she appeared to have every indication of labour. She went a fortnight afterwards, and then she had two boys. *And I think, from my general observation of animals as well as women, that they go longer with males than with females*.*

That is your judgment and opinion?—Yes; so much so, that I had two mares that went to the horse one day, and one foaled a fortnight sooner than the other; the female colt came first.

Cross-examined by Mr. Solicitor General.

Male gestation is in your opinion longer than female gestation?—*Yes.*

That is your theory?—*Yes.*

(*Mr. Attorney General.*) When you speak of 280 days as the ordinary time for gestation, is that the male or the female gestation?—*The female.*

(*Mr. Solicitor General.*) What is the ordinary scale of nature; what is the difference?—*A week or ten days.*

(*Mr. Attorney General.*) Do you mean to state that *the ordinary*

* "Many a flower is born to blush unseen." We therefore rejoice when an occasion like the present brings talents into view. The greatest accoucheurs may receive *ancient* information, *new modelled*, from the communications of the witness now behind the bar. We are quite concerned that Mr. Solicitor General treated so serious a subject in such an ironical style: had he been more cautious, the world might have learned all the mysteries of generation, and perhaps the *true method* of procuring a male or a female child at pleasure.

time for male gestation is 290 *days?*—In some cases; I will not state the number of days. I merely state the case of those two mares; one went a fortnight longer than the other.

The question refers to the gestation of human beings. Do you state that the ordinary time of gestation when the child is a male, *is* 290 *days?—It is more than* 280, *that I am convinced of in my own mind.*

How many more?—I cannot say exactly; *it may vary from* 280 *to* 290. The reason I state that is, *that most of the women I have attended have never come regularly to their time.*

(*Mr. Solicitor General.*) The people at Oakhampton do not come regularly?—*It is owing to the cold weather.*

You seem to have particular customs at Oakhampton; *do they depend upon the dissolution of parliament at all?*—We always find a great number *more nine or ten months after that time.*

You say there is one season for male gestation, and another for female; suppose the child is an hermaphrodite, what should you take as the time?—*That I should take between the two.*

(*By a Lord.*) You first said that the ordinary period of gestation is 280 days?—*Yes.*

Then you said that the ordinary period of gestation of males was 290 days?—*No; that it extended to that time.*

But above 280?—*Yes.*

Do you think the number of males that is born is greater than that of females?—*No; there are more females than males*.*

(*Mr. Attorney General.*) Has your observation been so accurate as to know whether the same mother has gone longer for males than females?—*Yes.*

In what instances?—When she has mentioned the time to me to attend her she has in general gone some days over what she first mentioned to me.

Is that peculiar to the case of males?—I have generally remarked it has been a male child born after that.

That whenever a woman has been mistaken in the time of her calculation, it is a male child that is born?—*Yes; I think it has generally been a boy†.*

The witness was directed to withdraw.

Doctor JOHN ELLIOTSON was called in; and having been sworn, was examined as follows:

(*By Counsel.*) Are you a physician?—I am.

Where did you take your degree?—At Cambridge.

Are you also a lecturer on any subject in any of the institutions in London?—I am physician to St. Thomas's Hospital; and I gave

* We believe this assertion is contrary to the statistical accounts and the general calculations respecting population.

† According to Hippocrates, the male fœtus became animated thirty days after conception, while the female required forty-two.

The reader must at least have received much amusement by the perusal of the above evidence. *thinking*, however, is not evidence.

a course of lectures on Forensic Medicine in the neighbourhood of the hospitals, I think, three years ago.

(*Mr. Attorney General.*) What we call medical jurisprudence?—Yes.

(*Mr. Tindal.*) Have you had any experience upon the subject of the gestation of women?—*I have had no experience whatever;* but I found it necessary to make myself as fully acquainted as possible with the information that existed upon the subject.

You derived your knowledge from studying the works of eminent persons?—*Yes, entirely.*

What judgment did you form from those sources you have mentioned, as to the period of gestation?—*Certainly, that women have frequently gone on more than ten calendar months.*

You have found, from that course of study, and judgment, that women have gone more than ten calendar months?—*Yes.*

Have you any reason to doubt the truth of that fact *in the experience you have had?—Certainly not**.

You have not yourself practised in midwifery?—*No, I have not.*

Cross-examined by Mr. Attorney General.

You have had no practice in midwifery?—No, I have not.

You speak merely from reading modern and ancient authors?—*Yes.*

The witness was directed to withdraw.

Die Lunæ, 4 Julii 1825.

Doctor JAMES BLUNDELL was called in; and having been sworn, was examined by Mr. Tindal as follows:

Are you a physician?—I am.

When did you obtain your diploma?—About twelve or thirteen years ago.

Have you been in practice from that time to the present?—I have.

Where?—In London.

Is your practice confined to the diseases of women, or have you practised generally as a physician?—Not wholly to the diseases of women, but in a great measure.

Have you had considerable practice in matters relating to the delivery of children?—In cases of difficult parturition I have had considerable practice.

Have you known any cases in which the period of gestation has been carried over the ordinary time?—*Personally, I have.*

Have the goodness to state one of those cases, and to what period

* Dr. Elliotson had just said, "I have had no experience whatever." A number of the dusty folios of the ancient authors might as well have been brought into court as the learned Doctor; therefore he was not long detained by counsel.

it extended?—I have personally known *but one case in which pregnancy was protracted beyond the nine calendar months. That was a case in which a lady became pregnant upon the night of the 9th of November, and she was delivered upon the night of the 23d of August**. The proofs that she became pregnant at the time mentioned were these, I saw her a few days after the impregnation took place, the catamenia had failed to make their appearance, although, to use the female expression, she had been perfectly regular previously.

Mr. Attorney General submitted, that the witness could not speak to this statement made to him.

Was this at the time when you were first called in?—*It was the day subsequent to this intercourse; there was a good deal of irritation.*

Mr. Attorney General submitted that this could not be evidence, being only on the representation of the woman.

Mr. Tindal was heard in support of the evidence.

The counsel were informed that the witness might prove the symptoms described to him by the lady when he was called in.

(*Mr. Tindal*) Go on to describe the symptoms?—I cannot describe them more distinctly than to say, that they were *symptoms of irritation about the bladder and the parts adjacent.*

In your judgment as a medical man, were those symptoms that she described connected with a state of impregnation at the time?—*I should state that such symptoms might have arisen from other causes.*

Did you attribute them to other causes at that time?—I did not.

To what did you attribute them at the time?—*I have no doubt they arose from the impregnation.*

(*Mr. Attorney General.*) You had no doubt, in consequence of what she had told you?—In consequence of my inquiring into all symptoms and circumstances, as it was my duty as physician to do, and thence drawing my inference.

One of those circumstances was the circumstance of the information she had given you as to the intercourse which had taken place?—That was one.

A most material one?—In conjunction with the failure of the catamenia.

(*Mr. Tindal.*) Was that you have first mentioned one on which you relied also?—Undoubtedly.

Did you continue to attend this lady from that time to the time of her confinement?—It was within a fortnight of the reputed impregnation that I saw her; the symptoms were so slight I saw her *but once or twice.*

Mr. Attorney General submitted this statement ought to be struck out of the evidence.

* Admitting this statement to be quite correct, this case would not have gone far towards the argument of *legitimatizing* a child born on the 311th day. From the 9th of November to the 23d August (including the 23d itself) are only 287 days: but there is no positive evidence to show that the lady even exceeded the natural period by seven days; indeed the case is good for nothing.

Mr. Tindal was heard in support of the evidence.

The counsel were informed, that it might stand for the present, with a query against it.

Is the lady alive?—She is not.

Did you continue to attend this lady up to the time of her delivery?—She required but little attendance; what attendance she did require I gave.

The child you say was born on the night of the 23d of August?—Yes, under my own care.

Do you recollect the precise day on which you first attended her?—I do not.

Have you no note from which you could discover it?—I have a note, but not one that would lead me to that.

State any other instance that has occurred in the course of your own practice?—There is but one instance within my personal knowledge.

Have you any other mode by which you have formed a judgment, that the period ordinarily assigned to gestation may be extended?—*I have.*

Upon what grounds is that opinion formed?...My physiological opinions, and my opinion upon this point among the rest, where I specifically examine and think for myself, *are drawn from facts, from observations* [of others] *on the human subject, and experiments* [of others] *upon brutes* resembling, especially in their organization, and the laws that regulate their actions, the human structure.

Have there been any actual experiments tried on brutes, which lead to that result?...In this country but few experiments have been instituted; but in France Tessier has bestowed, I believe, from thirty to forty years of his life in collecting facts from different observations made on different genera of the mammalia or womb animals, in order to show that in them prolongations of pregnancy do occur*.

* The subsequent remarks would firmly establish the certainty of protracted gestation in the human female, if we were to judge from analogy:—

"Pass in review," says Dr. Collins, "the animal kingom, and you will find the exceptions to the ordinary laws of pregnancy as extraordinary, and more frequent than perhaps you suppose. Bitches pup usually in ten (two) months, others in a much shorter or longer period. Sheep generally produce their lambs in five months, yet some exceed or fall short of that period. Cows, horses, and other animals, present in the same circumstances similar irregularities, as the experiments and observations of Mr. Tessier, which were communicated in 1817 to the Academy of Sciences in Paris, so irrefragably attest. To illustrate the subject of this memoir, I will briefly state their result.

"In 575 cows, 21 calved between the 240th and 270th days, average 259; 544 between the 270th and 299th days, average 282; and 10 between the 299th and 321st days, average 306; average of the whole 282 days; so that, from the shortest to the longest period, there is a difference of 81 days, that is more than one-fourth of the average time.

"In 277 mares with foal for the first time, 23 foaled between the 287th and 329th days, average 322 days; 226 between the 329th and 360th days, average 346; and 28 between the 360th and 419th days, average 372;

Have you yourself ever known any facts that led to the same result?—I have none on which I should place reliance, *for I have not experimented professedly upon that point.*

Have you any other ground on which that judgment you have arrived at is formed?—My observation upon the human female, facts ascertained by the observations *of others* on whom I could rely, or that single fact, decisive in my own mind, ascertained by myself.

What are the observations to which you refer upon the structure of the frame of the female which have led to that conclusion?—I have stated distinctly, as I humbly conceive, the grounds on which I have rested my conclusion. They are facts taken from the observations of others upon animals, and particularly of Monsieur Tessier, and *observations taken from the human female herself.*

(*Mr. Attorney General.*) By yourself?—One made by myself.

That one you have mentioned?—And others made by persons on whom I can rely.

The witness was directed to withdraw*.

Doctor JOHN POWER was then called in; and having been sworn, was examined by Mr. Tindal as follows:

Are you a physician-accoucheur?—I am.

In the City of London?—In the City of London, or Westminster.

How long have you been in that department of physic?—I have been a physician-accoucheur about six years, but I have been in the practice of midwifery about eighteen years.

Have you during that time had considerable experience?—I probably may have personally attended from fifteen hundred to two thousand cases in that time, and I have superintended many more.

average of the whole 347 days: difference between the extremes 132 days.

"In 170 mares which had foaled before, 28 foaled between the 290th and 329th days, average 321; 128 between the 329th and 360th days, average 341; and 14 between the 360th and 377th days, average 370; average of the whole, 341 days; so that, between the shortest and the longest period, there was a difference of 97 days, more than one-fourth of the mean term.

"In 912 sheep, the mean time of gestation was about 151 days, and the extreme difference only 11 days.

"In 25 swine, the extremes were from 109 to 133 days.

"In 161 rabbits, the extreme terms of gestation were from 27 to 35 days."
—*Vide Edinburgh Medical and Surgical Review*, No. 87, *p.* 257, and *Beck's Elements of Medical Jurisprudence*, p. 195.

* As we had always understood that Dr. Blundell was a gentleman of superior talents, and considerable experience, we assuredly expected that he would have made a more interesting figure at the bar of the House of Lords. We were totally disappointed; because he had no fact worthy of relation, and should have preferred total silence.

We fear that some of the medical men have volunteered their evidence, with the view of bringing themselves into notice; but they should have borne in mind, that it is disadvantageous to become *notorious* in a manner which does them no honour.

Have you formed any judgment as to the protraction of the period of gestation in the female sex?—I have.

What is the judgment you have formed?—*That the period of gestation may be extended beyond nine calendar months.*

How far does your judgment lead you to conclude it may be so extended?—I know not how to place a limit exactly to that; I should say certainly, *drawing my inferences from observations, and likewise from rational theory*, grounded upon circumstances observed in the generative actions, and the generative process, that it may be extended *to eleven calendar months, if not longer.*

Can you state more precisely the grounds on which that opinion is formed, separate from any observations which have fallen under your own immediate inspection, from any other source on which that opinion is founded?—I have met *with cases*, which apparently, as far as I could form an estimate upon the facts communicated to me, would warrant me to suppose that the period has been extended *to eleven calendar months;* and then, when I connect those circumstances with the inferences I have drawn from *physiological reasoning*, I cannot in my own mind *doubt the possibility of the fact.*

Do you advert to any particular case, or cases, that were under your own observation?—I advert to the cases which have come under my own observation; to more than one case.

(*By a Lord.*) To how many?—I could bring before your Lordships several; but unfortunately I have not been so correct in making my notes, in keeping my register, as it might have been, and should have been could I have foreseen that my evidence would be required upon the subject; if I had, I am disposed to think I could have advanced a much greater number, according to my own feeling on the subject; I should say not less than *from thirty to fifty cases.*

(*Mr. Tindal.*) Do you mean not less than from thirty to fifty cases where the period has been protracted beyond the ordinary time, or beyond eleven months?—Where the period has been protracted *beyond the ordinary time;* some where it has been *evidently protracted to the eleventh month, if not longer.*

Then, looking at both grounds of your opinion, is that the result of your judgment, or not?—My judgment is, that the period of gestation may be *extended beyond the ordinary time of nine calendar months.*

Cross-examined by Mr. Attorney General.

As far as your own experience and observation go with respect to this point, it is founded on facts communicated to you?—Of course; those points which can only be gained from the information of the females themselves who communicated; for instance, *the period of menstruation, and the time of quickening, could be derived only from information;* I cannot conceive any other source.

Or the time of sexual intercourse?—I would not advert to that

point: I have no fact to bring forward as to the time of sexual intercourse.

Then, as far as your own observation goes, it is built entirely on the communication made to you by the females, as to the time of menstruation, or the time of quickening?—Not entirely so.

From what other facts?—From facts connected with the generative functions.

In those particular cases?—In those particular cases, and in all cases generally, in application to the exciting causes of labour.

Do you know any instance of gestation having been protracted materially beyond the ordinary period?—As far as I can draw an inference from facts communicated, I have known cases.

When you say, or when you said before, you had known instances of gestation being protracted beyond the ordinary period, you calculated the period from some fact communicated to you by the woman; was that so?—*Certainly; I cannot calculate it from any other circumstance.*

That fact is from the menstruation, or the period of quickening?—I think I may say another ground.

As communicated by the woman?—As communicated from the woman; only from those points, of course. I think I have seen a case in which labour has *apparently came on, if not commenced, at what the woman has believed to be her proper time, and it has been postponed nearly a month after that time.*

The communication from the woman must have been as to the time when she expected it?—*The woman believed herself at her full period; and sometimes the labour came on, the membranes ruptured, and the labour was deferred for nearly a month* *.

Is it not common for women to be mistaken as to the time they expect?—I believe it is not uncommon.

Is it not common?—*It is not uncommon.*

You say that the information, or the conclusion that you draw from those particular cases, which have fallen within your own observation in the manner you have described, have been confirmed by observations you have made upon physiological reasoning?—I have very deeply considered the subject physiologically, and I have published those facts, *I mean my opinion*, in a treatise which came out some time back. I have convinced my own mind that I have given an explanation of the exciting causes of labour, which bears the evidence of being, perhaps, physiologically correct.

Will you communicate a little of this information?—I will do that, if your Lordships will allow me.

Is it founded on facts within your own observation, or facts communicated by others?—I must inform your Lordships what those facts are, and I may use a little technical language, but I will endeavour to divest my observations of that as much as possible. There is a canal leading externally to the uterus, or the womb;

* Such cases must be very rare: if we be not mistaken, some practitioners and lecturers think such an occurrence impossible.

the uterus is situate at the further extremity of that canal. The uterus may be resembled to a bottle, a wine bottle, when in an impregnated state. It consists of a body, a neck, and a mouth to it. There is a peculiar supply of nerves to the mouth of the womb; it is more largely supplied with nerves than any other part of the uterine organs, and I infer there is a peculiar sensibility attached to this part of the uterus. As utero-gestation goes forward, particularly at the latter part of it, the neck of the womb gradually obliterates, so that at the end of utero-gestation, when the woman has gone her full time, the neck being obliterated, the uterus consists of a mere body with a mouth to it. The theoretical part is this—what I have before advanced are facts—the theoretical part is this, that labour is excited in consequence of the contents of the womb being brought into immediate contact with the mouth; that the neck has been intended to keep off labour until it has been obliterated, until the child is perfected. At the end of utero-gestation labour takes place, in consequence of this stimulus applied to the mouth of the womb. Now there is another cause which excites labour; which is, that just before it takes place there is a subsidence of the uterine tumour; the womb previously has been as it were only three-fourths full of its contents, but now it becomes comparatively as seven-eighths full of its contents; the consequence of which is, that the action, which is thus produced by a kind of insensible contraction of the womb, tends to bear the contents upon the orifice, so as to apply the necessary stimulus to it. It may be replied to [inferred according to?] this theory, that any cause that could prevent the contents of the womb being pressed upon the orifice would postpone the commencement of labour. I shall endeavour to name some causes which may and do illustrate this by cases in point. If there is an insensibility of the mouth of the womb, it would necessarily have a tendency to postpone labour; a certain impression is necessary to excite it; if the insensible contraction I have alluded to before were deficient, it would fail to excite at that time. In illustration of this point I should name a case in Westminster some time back, in which a woman had gone her full time, as she imagined; when I say her full time, she had gone a month beyond her full time, as she imagined. Viewing the case as arising from this want of due stimulus, I applied a bandage round the belly, with a view of producing a pressure downwards, and in the course of the day labour came on. She had sent to me, not in consequence of having symptoms of labour, but from having uncomfortable, what we call spurious, pains. Again, my Lords, if we were to suppose the mouth of the womb situate at the side of the womb, instead of being exactly in the centre, it would be evident then, that the gravitation of the child down would not be directly upon the mouth, but upon the sides of the uterus, upon the anterior parts of the sides; this would defer the commencement of labour. In illustration of this I think I can give a case in point*.

* Dr. Power, in order to illustrate his opinions, has judged proper to publish a pamphlet on the subject, the title of which will be found in the note

(*Mr. Attorney General.*) From what is that taken?—It is taken from my case book in my own hand-writing.

(*Mr. Tindal.*) Is that before you your case book?—It is.

Did you copy it out from your note book for the purpose of saving trouble?—Yes, I did. "Mrs. Reyner, Horseferry Road. This woman had four children before"—I will give it in the words in which I wrote it down—"and was never less than three days in labour."

below*; and from it we shall endeavour to give an accurate condensed view.

Dr. Power hinges his explanation of the possibility of protracted gestation on *certain peculiar doctrines* relative to the excitement of labour, which he attributes partly to the development of the *cervix uteri*, and partly to that subsidence or semi-contraction of the womb which takes place previous to labour, the combined effects of which give rise to *an irritation at the mouth of the womb*, which determines the uterine muscles into expulsive contraction, in the same way as the irritation of snuff on the nose produces contractions of the respiratory organs in the act of sneezing. We must admit, that the arguments and illustrations, by which this theory is supported, have impressed us with something like a conviction of its truth; and when we contemplate the important manner in which, if true, it will, independently of bearing on the present question, necessarily affect the practice of midwifery,—affording advantages which, if we may credit Dr. Power, are not merely problematical—we cannot but direct the attention of professional gentlemen to the subject.

Dr. Power assumes that any cause, capable of interfering with the *proper irritation* at the mouth of the womb, will either prevent the labour from coming on at the natural period, or protract it when it has come on; and he contends, that such results are not unfrequently occasioned by a deficiency in the preparatory semi-contraction of the womb, and a want of due sensibility of the mouth of the organ, either of which separately, or both combined, may render the *orificial irritation* inefficient; by an obliquity in the position of the mouth of the womb, as compared with the centre of gravitation of the child's head, and which prevents the proper application of the necessary stimulus; by the consequences of a pendulous belly, where the child, instead of gravitating within the pelvis, lies as it were in a pouch in front of the pubis, and also by a variety of other causes acting upon similar principles. These positions are illustrated by cases, with a view to prove the correctness of the doctrine. Further observations are wanted to confirm or to refute this theory, which seems plausible and physiological.

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* "An Attempt to prove, on Rational Principles, that the term of Human Pregnancy may be considerably extended beyond nine calendar months, comprising the substance of evidence given in the Gardner Peerage Cause, before the House of Lords, July 4th, 1825, by John Power, M.D., &c. &c."

We are aware that Dr. Power has maintained the same principles in his "TREATISE ON MIDWIFERY;" but we rather think that some of his opinions have been anticipated. This gentleman has also a number of *peculiar notions* respecting various other points in midwifery, which, at least, deserve examination. Respecting one of them, we would ask, If labour be owing to orificial irritation, why does it not always come on gradually, as the stimulant is not applied suddenly, but progressively; while labour frequently commences at a moment's warning, and severe pains are continued until the expulsion of the contents of the uterus. We incline to the old opinion, "*that labour takes place by a law of nature,*" which we cannot explain.

(*Mr. Attorney General.*) Had you attended her before?—Never. That was from her own information. "She had in her own opinion gone two months."

(*Mr. Tindal.*) Was this a description of any symptoms, or the account she gave you when she called you in?—She gave me an account that she had gone beyond her calculation two months, and that for the last month she had experienced a great deal of spurious pain.

(*Mr. Attorney General.*) Did she say that she experienced a great deal of spurious pain?—Yes.

Did she use those words?—No; that she had experienced a great deal of pain, that I considered to be spurious. I have given the words that I wrote down.

You have read the words that you wrote down?—Yes.

Those are the words you had written down?—Yes.

Then the note is not correct?—Of course, in making out a case with [without] any view to evidence, I give it in the medical language. "The membranes ruptured at three in the morning, at which time labour commenced."

(*Mr. Adam.*) Was that a fact within your own knowledge?—I think not. "At nine o'clock she was having regular and strong paroxysms"—I conclude I got to her at that time—"coming on every five minutes. On examination, the head presented fully upon the anterior parts of the womb." That was a fact within my knowledge. "The os uteri," the mouth of the womb, "being so far back towards the sacrum, that I could not find it without the greatest difficulty. I at length however hooked my finger into it, it being just large enough to admit it freely; attempting to bring it more centrical, and at the same time to stimulate it and dilate it; a satisfactory progress was made, and soon after one the child was born." *I adduce this case to prove, that obliquity of the os uteri may postpone labour for two months, even;* that was the inference in my own mind.

(*Mr. Attorney General.*) Was that *postponed labour* or delivery?—The labour was postponed, in my opinion *.

(*Mr. Tindal.*) You were about to state some other case, that led you to the same result?—The belly of a woman being relaxed, so as to produce what we term a *pendulous belly*, I believe upon this principle *will protract labour*, protract the commencement of it, in consequence of the child being allowed to gravitate over the front of the pubis in the pendulous belly. May I be allowed to read a case from a treatise I published, not of my own, but my father's?

The witness was informed he could not read that case.

I will give you one of my own.

(*Mr. Attorney General.*) The case you have [before] referred to was not one of your own?—It was from my own practice.

* Granting the fact, then, that the patient had exceeded her regular time by two months—and we are very sceptical on this head—this was a case of *postponed labour*, and of course of *protracted gestation*.—Vide Introduction.

How long were you present?—From nine o'clock to one.

Had you ever seen her before?—I had registered her on an institution book, which I superintended at the time; and I have the evidence there that she gave me; it appeared that she should fall into labour two months before the time she did.

Then the theory you have stated is not formed on facts within your own knowledge?—*No facts can be within my own knowledge.*

According to your theory, the birth might be anticipated or protracted almost indefinitely; according to your expression, almost without limit?—*When I stated almost without limit, I meant that I could not define the limit to it.*

From the obliquity of the position of the child, it might remain there permanently?—I believe it is the permanent structure of the female, and that it always tends to produce difficult or embarrassing labour, or protracted; I have had several reasons to think that I am correct in that opinion.

Would not your theory apply to anticipated labour as well as protracted labour?—Undoubtedly; and by stimulating the os uteri anticipated labour may be procured, and I believe that is a frequent source of abortion.

The witness was directed to withdraw.

MARY PARKER was then called in; and having been sworn, was examined by Mr. Tindal, as follows* :

Are you at present in a state of pregnancy?—Yes.

How long have you been in that state?—I think nearly, by my account, eleven months.

What ground have you for forming that opinion?—No further than what other women generally count from.

Have you ever had a child before?—Yes, one before.

Have the same appearances and feelings taken place on this occasion that did in the former?—As nearly as possible.

Have you formed your calculation of time from the same appearances now, which you did with respect to the former child?—Yes, as nearly as possible.

Then so forming the conclusion, are you of an opinion you have been the period of time you have mentioned?—Yes, I think so; as nearly as possible eleven months.

How long were you with child with the former child?—Nine months and a week, as nearly as I could count.

Cross-examined by Mr. Attorney General.

Are you a married woman?—Yes.

Do you live with your husband?—Yes.

Have you lived with him during the last eleven months?—Yes.

* We thought of omitting the evidence of a number of women—by the way, almost all named *Mary*—but on mature consideration, it seemed better to have a complete account of the whole proceedings, especially as interesting comments were made by counsel upon their statements.

As before?—Yes.

You calculated from certain appearances that took place?—Yes.

Have you made any memorandum in any book as to that?—No; no further than the time I suckled my first little girl. The little girl was very ill; *the doctor told me he thought it was full time for me to take the breast from her*, for that he thought I was two months then gone.

Did you put down the date of that?—No.

Were you suckling?—Yes, when I fell pregnant.

When did you leave off suckling?—My little girl was fourteen months old, and now she is a twelvemonth and eleven months.

Then it is nine months since you left off suckling?—Yes.

From this time?—Yes.

You know Dr. Granville?—Yes.

Have you seen him lately?—Yes, I saw him on Friday.

Where did you see him on Friday?—I saw him at his house.

Did he send for you?—No, he did not send for me.

How came you to go there?—It was Mrs. Tungate, the midwife who is to put me to bed, sent for me.

She desired you to call on Dr. Granville?—Yes.

Had you any conversation with him?—No; I only just saw him in the room.

Had you no conversation with him?—He only told me I was to appear here if I thought proper.

Did not he tell you what [why] he sent for you for?—No; he told me no further than that, that I was to appear here on Friday.

What is your husband?—A bookbinder.

Does he keep a shop?—No; he works with Mr. Grellet.

Do you and your husband live in one room?—Yes.

And one bed, of course?—Yes.

Cross-examined by Mr. Adam.

Had you any conversation with the midwife who sent for you, Mrs. Tungate?—No.

What did she say to you?—She only told me that Dr. Granville wished to see me.

You had no conversation with her about the state you were in?—No; I never had any conversation with her from the time I engaged her.

Did she not ask you how long you had been with child?—Yes.

When was that; on Friday?—Yes.

Did you tell her?—Yes.

What else did she tell you?—She only said that if I thought proper to take a walk to Doctor Granville, he wished to see me; she did not tell me for what purpose, nor I did not know till I came here.

(*Mr. Attorney General.*) When was it you had indications of the child quickening?—It is five months and a fortnight, going on for six months.

It is five months and a fortnight since you first felt the child move?—Yes.

Did you make any memorandum of that?—No further than that I was very ill at the time I felt it.

You have no entry in any book?—No.

That depends upon your reckoning?—Yes; I counted from that time, and from that time I engaged the midwife.

(*Mr. Adam.*) What do you mean by five months and a fortnight; do you remember the month in the year when it was?—No, I cannot say exactly; but what I counted from was, that we moved about four months and a fortnight ago, and it was between three weeks and a month before that.

What makes you think it was three weeks or a month before you changed your lodgings; what makes you fix that, rather than between three months and four months?—That is all I have to reckon from.

You have no particular reason for fixing that date?—No.

(*Mr. Attorney General.*) Do you take your lodgings by the weeks?—Yes.

Then when you say four months or five months, you mean four times or five times four weeks?—No; I count by the regular month.

What do you call a month; four weeks?—Sometimes it is two days over the four weeks.

You do not go by four weeks; you mean five calendar months?—Yes, five calendar months.

(*By a Lord.*) Why did you give over suckling your little girl?—Because the doctor that attended my little girl said I was two months gone then; that was Doctor Cox.

Your opinion of your being gone eleven months with child proceeds upon Doctor Cox's having told you you were *two months gone then?—Yes.*

(*Mr. Tindal.*) Have you any other reason for knowing you were then with child?—*No further than what other women count from.*

Had those appearances taken place so as to induce you to think you were with child?—Yes.

Those appearances had ceased to take place?—Yes; once since that appearance took place was this time twelvemonth.

Are you able to state when it was that that last appearance took place?—Yes; it took place the latter end of this month twelvemonth.

The latter end of July in last year?—Yes.

(*By a Lord.*) Did that appearance take place during all the time you were suckling?—No; only that once; that was all.

You continued suckling afterwards?—Yes.

And it did not take place again?—No.

(*Mr. Attorney General.*) During the time you were suckling, were you ever as women usually are?—Only that once.

When was that?—The latter end of July last year.

After that you continued suckling?—Yes; till this doctor who attended this little girl said it was the milk that made the little girl very ill.

And then you left off?—Yes.

The milk made your little girl very ill, *just nine months ago?*—*Yes.*

And then you left off?—Yes.

Did you yourself feel *at all different just about that time?—Yes;* and so my mother thought the same, *from my appearance.*

How did you feel?—*I felt just the same as I did with my first child*.*

The witness was directed to withdraw.

MARY SUMMERS was then called in; and having been sworn, was examined by Mr. Tindal as follows:

Have you had any children?—Yes.

What number?—Twelve.

What is the longest period during which you have been pregnant before the birth of the child?—The longest was, as nearly as possible, about eleven years ago.

What period of time was it during which your pregnancy continued?—I had my Letter to be put to bed on the 1st of May, and I was not put to bed till the 4th of August.

Your letter from some hospital?—From Dr. Merriman.

To admit you on the 1st of May?—Yes.

Do you mean, that you supposed you would be confined on the 1st of May?—Yes.

But you were not in fact delivered till the 4th of August?—No.

What reason had you to expect you would be delivered on the 1st of May?—I was going home with a basket of linen, and was taken in a fit, as I thought, *and that was on quickening.*

When was that?—*About the Christmas week.*

You were going home with a basket of linen, and were taken with a fit, as you thought, and the child quickened?—Yes. *From that I thought* I should be put to bed on the 1st of May; but I was not until the 4th of August.

Was there any other reason besides the quickening of the child that induced you to think you were in the family way?—*No further;* for I always went from that before, and since; for I have had many children since.

In the experience you have had with a number of children, what has been the general length of time from the quickening to the birth of the child?—I have gone *a month*, and I have gone *three weeks*, and I have gone *a fortnight*. I have sometimes had frights in those cases, *that has put me out of my reckoning;* but I believe that time has been the longest.

* This boasted case really proves nothing more than that Mary Parker became pregnant, and brought forth a child about the expiration of nine months after conception.—Vide page 39.

What time do you reckon from the quickening to the birth of the child?—The number of months was the calculation for me to be put to bed on the 1st of May, and I was not put to bed till the 4th of August.

That was making your calculation as you had been accustomed to do before?—I have never yet to say gone properly to my time; I have never been so exact, for I have had other troubles and trials, *and I have never put down the times.*

Cross-examined by Mr. Attorney General.

Are you a married woman?—Yes, I am.

What is your husband?—My husband is dead, and has been dead nearly two years.

You were living with your husband at this time?—I never lived from him.

At what time generally have you been delivered after you had first perceived that the child had quickened?—I never was much out of my reckoning, but very little.

Generally, what period did you calculate from the quickening to the birth of the child of your other children?—I went generally to my time.

What time?—It is so many years ago, I never could have thought of these kind of things, that I should have been brought to such a place as this; having so many children, I have had other things to think about.

You cannot tell what is the usual interval, as far as you are concerned, between your perceiving the quickening of the child and the birth of the child?—*In general, whether it was four months or five, I cannot say.*

You cannot tell whether it was four months or five months?—*No, I cannot.*

According to your calculation, has it deviated considerably in different cases; has it been sometimes more and sometimes less?—That is the utmost I can recollect.

Were the other cases exactly alike, or did they differ?—They differed; most of my lyings-in differed.

How much?—*Generally, I believe, four or five weeks.*

They have differed generally four or five weeks?—Yes; and I have had a great change in girls and boys.

In this case your calculation was from the time you supposed the child to quicken?—*Yes; and that was the only thing I went by.*

Did you make any memorandum of the date?—It was some time in Christmas, but the particular day I cannot remember; *it was in the month of Christmas;* that is a very remarkable month.

Was it not the month of January?—*I cannot swear to it.*

What do you mean by the month of Christmas?—*It was in Christmas week.*

Did you perceive the child quicken in Christmas week?—I did; I felt that which I always did before.

When did you feel the child move?—About three days after that.

From that, *and that only*, you expected that the child would be born in the month of May?—I did; and I was not put to bed until the 4th of August.

Cross-examined by Mr. Adam.

How do you recollect that it was three days after Christmas you felt the child?—I know, because the place where I worked at, the public house, the Windmill, I was to have been there as a cook, to cook the beef.

How does that make you think you quickened three days after Christmas?—I felt the child.

What circumstance makes you think that feeling came on three days after Christmas day?—No; it was three days before Christmas day that I felt so.

How do you know it was three days before Christmas day that you felt so?—Because I was to have gone to this place to cook the victuals.

Did that prevent your going to cook the victuals?—Yes it did, for I was very bad.

You were not bad from the child quickening?—Yes; I always had very bad times.

How do you mean very bad times?—Always in a very bad state of health, from the time the child quickened.

You say that the periods have differed very much between your quickening and being brought to bed?—*Yes, they have.*

Sometimes as much as a month?—*Yes.*

Re-examined by Mr. Tindal.

Were you in the habit every year of going to the Windmill Inn to cook the beef?—No; I generally went there.

Was there any particular entertainment going on?—Yes.

You say you were to have been there to cook this beef at Christmas?—Yes, I was to have been there to help.

That imprints it upon your memory?—Yes; that is the only thing I have to bring it to my memory.

(*Mr. Attorney General.*) This child born eleven years ago that quickened about Christmas—had you some time afterwards any feeling about that child of the same kind?—I had.

When? how soon after?—For a week after.

Had you after that?—No, I cannot say that I had.

Did you take notice of the child moving afterwards?—I did see a fluttering, as I always did.

You feel a child move by putting your hand upon the person; can you take upon you to say you felt the child move so soon after that?—*I cannot.*

How soon after Christmas did you feel the child move?—To the best of my knowledge, I would not wish to say nearer than *about six weeks*, that I felt it most strongly.

You do not mean to say you ever felt the child move before that,

though you felt this fluttering?—I cannot say that I did, any more than a fluttering.

What were you doing when you felt that fluttering?—I was in the habit of going out washing, and I rather thought I felt a pain in my side.

It was hard work?—Yes.

Had you been washing several days?—Yes; I used to work very hard.

Were you carrying home any load?—Yes; I had a basket of linen, and going across the road I fainted away.

You had been working hard, and were carrying home a basket of linen, and you fainted, and were carried into a house?—Yes; and I supposed at that time that I had quickened.

And six weeks after that you first felt the child to move within you?—Strongly.

Will you swear you ever felt the child move before that?—*No farther than a little fluttering.*

Did you put your hand upon your person, and feel the child move?—*No, I cannot say that I did.*

(*Mr. Tindal.*) This fluttering you speak of, was that the same appearance, or feeling rather, from which you had before reckoned?—The same, or I should not have reckoned upon that.

Have you felt the same fluttering upon other occasions?—Yes. Dr. Merriman was fetched to me six weeks before I was put to bed.

(*Mr. Attorney General.*) Have you in your pregnancy felt that *kind of fluttering* more than once during the same pregnancy?—*Yes, I have.*

Sometimes at different intervals?—Yes, with the same child.

Have you ever felt it before you felt the child move?—*Yes, I have.*

The witness was directed to withdraw*.

MARY WILLS was then called in, and having been sworn, was examined by Mr. Tindal as follows:

Have you had any children?—Yes.

What number?—I have had thirteen children.

Have any of those children been born at a longer period of pregnancy than ten months?—Not than ten months; yes, from December to the 17th of November, *I had one born.*

Are you able to state any particular part of the month of December?—From the 24th of December.

What reason had you for calculating from the 24th of December?—The *same as other people in general have* for that calculation.

Has it happened to you that the term of ten months has been ex-

* No conclusion can be drawn from Mary Summers' case: her own statements prevent the possibility of drawing any inference as to the protraction of gestation.

ceeded in any other instance?—No, only in that one; I quickened the 25th of March.

Cross-examined by Mr. Attorney General.

Do you mean to say, that on the 25th of March you felt the child move?—Yes, I did.

And it was born on the 17th of November following?—Yes.

Are you a married woman?—I am a widow; I was a married woman at that time.

You were at that time a married woman?—Yes, I was.

Living with your husband?—Yes.

Did you make any minute of the date?—Yes; I have got at home a minute of it; it was so far beyond my regular way.

Did you make a minute of your not being in the regular way?—Yes.

Where is it?—I have not got it; I did not expect to be asked for it.

Is it in existence?—Yes, it is.

You say you made a minute at the time of your not being regular?—Yes.

And you have that minute now?—Yes I have, at home.

You are a midwife?—Yes,

Does Dr. Granville recommend you?—Yes; I belong to the Dispensary to which he belongs.

Perhaps you have no objection to produce that note?—I dare say I can, of the birth of the child.

The question refers to the minute of your not being in the regular way?—I have it at home, I have no doubt.

Do you always make that kind of minute?—Yes, mostly I did.

Did you make it on any other occasion?—I do not exactly know, but I can ascertain it.

You do not know whether you did on any other occasion?—No.

How came you to remember that you did it upon this occasion?—Because going so long over my time.

The nine months were not expired when you were so irregular; what was the particular reason you had for making that minute then?—I did not make it till I was put to bed.

You did not make the minute until the birth of the child?—Not till the regular time had elapsed; not till after the nine months.

You made that minute of the circumstance which had occurred as you supposed nine months before?—Yes.

And it is by reference to that minute that you know the time when you were not as you ought to have been in the regular way?—Yes.

Cross-examined by Mr. Adam.

It was nine months after what you call the regular time that you put this down in writing?—Yes.

How came you to know the time to put down?—I could give no other reason than every body else does.

Nine months after the 24th of December would be in the month of September?—No; I expected to go to bed at the latter end of September, or the beginning of October.

In the beginning of October you made a memorandum, that you had ceased to have the ordinary occurrence on the 24th of December?—Yes.

How did you know, at that time, that it was the 24th of December that you ceased?—Very well.

From what circumstance?—From the circumstance that I was well.

Was there any particular fact that fixed it in your remembrance?—When I found not my regular return, of course I began to consider what was the matter.

But you did not make a memorandum until nine months afterwards?—No.

What induced you, in October, to put down the date as the 24th of October?—Because I considered that shortly after that it must take place.

Had any particular fact occurred to bring that to your memory at the particular time?—No.

How many years ago was this?—It was in the year 1774. I was married in the year 1780.

Then it must have been in 1784?—Yes.

That is forty-one years ago?—Yes.

What has become of that memorandum?—I cannot say.

Have you ever seen it?—I have seen it since.

Where is it?—In a book of the birth of my other children.

Have you a register of births of your other children?—It is in a book.

Is it in a Bible?—I believe it is in a Bible; but it is in a book, in which I have the registers of all their births.

Is it in a Bible—No, it is not so large as a Bible.

What sort of book is it?—I am sure I cannot tell till I look at it.

How came you to fix upon that book?—It was a German prayer book: and I have got the leaves with the registers of my children.

Has the German prayer book been destroyed?—Yes, but I have kept the leaves for the purpose of my own information.

Where have you kept them?—In different places. I have been in different situations of life.

Have they been locked up?—They have been locked up; I know where to find them.

You have not locked them up?—No; I know where to find them.

Are they written or printed leaves, or blank leaves?—On blank leaves.

How shall it be seen they were written on a German prayer book?—That I cannot say; it was a good while since I looked at them.

When did you last look at them; how many years ago?—Among other family papers, five or six years ago, perhaps.

Does your memory serve you to have seen them within thirty years?—I have seen them often within thirty years; there have been so many things I have had occasion to look to them for.

When was the last time you saw them?—I cannot say; it may be four or five or six years ago.

(*Mr. Attorney General.*) Have you seen Doctor Granville within the last day or two?—No; I had not seen him within the last six months, till I saw him here.

Have you had any letter from him?—No.

Re-examined by Mr. Tindal.

Though you did not put down the minute till the end of nine months, was your attention called to the fact at the end of the first month?—Yes, from indisposition.

At the end of the month after the 24th of December, was your attention called to the fact you have been stating?—It was.

From that time till the end of the nine months, you did not make a memorandum?—No.

(*Mr. Attorney General.*) How many children had you altogether?—Thirteen, not all alive born; and I have got the register of every child.

On this paper?—I cannot say indeed. *You interrogate me too closely.* My children are all registered in Mary-le-Bone church.

You say this was entered in the leaves of a book, which you described as a German prayer book?—Yes.

Together with the births of your other children?—Yes.

All your children?—Yes, all that were alive born.

This will be found among the entries?—Yes.

You saw the paper four or five years ago?—Yes; I have got it by me, and can produce it.

Is it in your own hand-writing?—Yes; a very indifferent one.

Did you suckle your own children?—Yes.

How long before the birth of this child was your previous child born?—I cannot tell, unless I look at the date, for my children came very quick.

How long did you suckle?—A very short time.

Were you suckling or not in the month of December?—No, I was not.

That you swear?—Yes.

What sized book was this?—I cannot say indeed as to the size of it; I think it was about there (*an octavo*).

How many leaves might there be?—About three or four.

All blank leaves?—Yes.

You recollect very well that you made this memorandum?—Certainly.

Who was it requested you to come here as a witness?—*I do not know. My own daughter;* she is one of the midwives too.

You knew what you were coming about?—I did not, till Friday.

You did on Friday?—Yes, when I came here to be sworn.

Of course you had the curiosity to look at this memorandum, to refresh your memory?—No, I did not give it a thought.

Is not that rather singular; it was made thirty years ago?—No, I cannot consider it so; I did not know what questions I might be asked.

You knew you were going to be interrogated as to a fact that took place thirty years ago, of which you have a memorandum in your possession?—Yes.

How came you not to look at the memorandum?—Because I did not feel it to be necessary.

Is your daughter a midwife under Doctor Granville's institution?—Yes.

Cross-examined by Mr. Adam.

Who desired you to come here?—My daughter called on me on Friday, and told me that something of this kind was in hand, and Doctor Granville had asked her, did she ever know a case of the kind, of any person going over their time, and she said, "I do not know, Sir, but I think I have heard my mother mention her own case."

In consequence of that you came here?—Yes.

What hospital does your daughter attend as a midwife?—A good many institutions; Middlesex Hospital, Westminster Hospital, the Queen's Hospital, and Gerrard Street.

The witness was directed to withdraw.

Die Martis, 5 Julii 1825.

MARY WILLS was again called in, and cross-examined by Mr. Attorney General, as follows:

Can you produce the book which you spoke of yesterday?—No, it is not in my power at present.

You said the papers were in your possession?—Yes, I do not say it may be impossible yet.

Do you despair of finding them?—I cannot say indeed about that; I have been unavoidably embarrassed lately, and shifted about.

Have you looked for them?—Yes, I have.

You said yesterday you had no doubt about finding them?—I have no doubt about finding them now.

The next time their Lordships meet you will have the goodness to produce them?—Yes, I hope so.

I always entertained a doubt whether we should see them?—I never had any doubt; I do not know why you should doubt on the subject, I am sure.

The witness was directed to withdraw*.

* From want of proper documents and accuracy of reply, the account of Mary Wills is good for nothing.

MARY ANN FARRELL was then called in, and having been sworn, was examined by Mr. Tindal as follows:

You are a midwife?—Yes.

Have you had any children yourself?—Yes.

What number?—Seven.

Is there any instance of any of your own children *exceeding the period of ten months* previous to the time of their birth?—*Yes; the last.*

Do you mean that there is one instance, or more than one?—Only one.

When did that happen?—There was one I believe on the 13th of June last; I was put to bed on the 17th of April.

What period do you assign *for the conception* of that child?—*The 13th of June last year.*

What reason have you for fixing upon the 13th of June as the period from which you date?—What I have always gone by with my other children.

Have you been right in the calculations you have formed with respect to your other children?—*Yes.*

Did you proceed to make the calculation in the same way here?—Yes.

Cross-examined by Mr. Attorney General.

Are you a married woman?—Yes.

Living with your husband?—Yes.

Did you suckle your former child?—Yes.

Up to what time?—I suckled her till she was a twelvemonth old, when she died.

In what month did you leave off?—In September, she died the 21st of September.

September in the last year?—No; September the year before.

September 1823, you mean?—Yes.

Did you make any memorandum of this?—Yes, I did.

In a book?—No; my own self.

Did you make any memorandum in writing?—No, not in writing; but I know that is the time.

That is the time when you were not as you expected to be?—*Yes.*

You calculated from that?—*Yes.*

Living with your husband all the time?—*Yes.*

Re-examined by Mr. Tindal.

Are you able to state, from recollection, when that child quickened?—Yes.

When was it?—The *latter end of September, or the beginning of October;* I cannot remember which exactly.

(*Mr. Attorney General.*) Did you make any memorandum of it?—I went to be bled that very evening.

Did you feel the child move by putting your hand on your person?—Yes, I *fainted away, which I always do.*

You made no memorandum as to the time?—No, I did not.

That is the best recollection you have upon it?—Yes.

You did not expect to be questioned upon it?—No.

When was it you were first asked about this; on Friday?—Yes.

Never before?—*No, never before I came here.*

You must have been asked before?—*I was asked by Mrs. Fraser.*

What is there particularly to impress upon your recollection that the time when you felt the child move was on such a day of the month?—Because I always took a great deal of notice of it.

What was the day?—The latter end of September, or the beginning of October.

What is there to impress the day, and enable you to recollect the fact that it occurred on a particular day?—I had a labour in hand; that I went to be bled, to get my arm well, that I might go to the labour.

How can you take upon yourself to swear that it was that time?—I am sure that was the time.

(*Mr. Tindal.*) Do those circumstances make an impression on the minds of persons; do women in general think upon them before the birth of the child?—Yes.

Did they upon your mind make that impression that you are able to state your recollection?—Yes.

Where do you live?—No. 70, Monmouth Street.

The witness was directed to withdraw.

Die Martis, 5 Julii 1825.

Mrs. MARY GANDELL was called in; and having been sworn, was examined by Mr. Tindal as follows:

You are the wife of a merchant in the City?—I am.

Have you had several children?—Yes.

Has the time of bearing those children in any instance exceeded ten months?—*With the last but one.*

Are you able to state, how long the period was before the birth of that child?—I conceive that I was pregnant a month gone the beginning of August.

In what year?—1821.

When was that child born?—On the 4th of June 1822.

Did a similar case occur with respect to any other of your children?—No.

You have had seven?—Yes, I have.

Cross-examined by Mr. Adam.

Where does your husband live?—Upper North Place, in Guildford Street.

You have stated, that you conceive you were a month gone with child in the beginning of August 1821?—Yes.

Will you state your reason for supposing that?—*The reason which every other female has.*

Have you any other reason, except that which every other female has?—*No.*

Were you living with your husband at that time?—*Yes.*

In the same way as you have been ever since your marriage?—*Yes.*

Re-examined by Mr. Tindal.

You were attended by Dr. Hopkins, were you not?—I was.

The witness was directed to withdraw.

Mrs. FRANCES ANN JACKSON was then called in, and, having been sworn, was examined by Mr. Tindal as follows:

You are the wife of a gentleman who is clerk in a merchant's counting-house?—I am.

You have had several children?—I have had four born alive.

Have any of those children been born after the period of your being ten months with child?—I consider that I have been *ten months and a fortnight nearly from the time I was regular.*

Has that happened on one occasion only?—On two occasions.

The witness was directed to withdraw.

On the same Day the Witness was again called in, and farther examined by Mr. Tindal, as follows:

Did you make a note of the different times which you had mentioned to the Committee?—Yes.

Have the goodness to state the different notes you have made; are the notes in your own hand-writing?—No, in my husband's; I told him what to write.

Did you see him write the notes?—Yes I did.

Looking at the notes, have the goodness to state the first note you have made?—The 24th September 1823.

Have the goodness to state the meaning of that?—*The time when I was last regular.*

When was the date of the birth?—The 22d of July.

Is there any note made of the time when the child quickened, as it is termed?—*No.*

(*Mr. Attorney General.*) Did you perceive when the child quickened?—I cannot tell, but between four and five months.

From the date you have marked there, in September?—Yes; I quickened between the fourth and fifth month.

It is no unusual thing for women to be mistaken, and considerably mistaken, as to the time of their expected delivery?—I was not mistaken.

The question applies to women in general?—I cannot say indeed.

The witness was directed to withdraw.

ISABELLA LEIGHTON was then called in, and, having been sworn, was examined by Mr. Tindal as follows:

You are the mother of one of the witnesses, Mrs. Parker, who was examined yesterday, are you not?—Yes.

How many children have you had?—Eleven.

Amongst those children, have any of them been born at a longer period than when you were *ten months* with child?—*Yes.*

Do you mean one, or more than one?—With only one; but I cannot recollect how long; it was not the last. I have gone a month, or near six weeks, I think.

With which?—The last but one.

With your last child but one you went how long?—A month or six weeks nearly.

Beyond what?—Beyond what I thought.

What did you think; at what time did you expect your child would be born?—The last of April or the beginning of May.

Why did you expect your child to be born the last of April or the beginning of May?—Because I thought by my reckoning.

When did you begin to reckon; from how long before that last of April or beginning of May; how many months before that?—Nine months.

Reckoning that way, how long was the child born after the last of April or the beginning of May?—It was born on the 15th of June.

Did that happen on any other occasion, or only on the one you were mentioning?—That was the only one I have thought of in so long.

Cross-examined by Mr. Adam.

Are you a married woman?—Yes.

Were you living with your husband at that time?—Yes; I always live with him.

Were you living with him then?—Yes.

You cannot recollect, you say, whether you went a month or six weeks beyond the time you speak of; how long was it since this child was born?—Twelve or thirteen years ago.

Does not your memory enable you to say whether you were a month or six weeks longer than you expected?—*I think it was between a month and six weeks.*

You are not sure whether it was a month or six weeks, or some period between the two?—No, I looked upon the latter end of April or the beginning of May as my time.

From what period did you begin to count, so as to make you suppose you should be brought to bed at the end of April or the beginning of May; what did you count from?—No more than I thought I should go till the latter end of April or the beginning of May.

Why did you think so; from what circumstance did you begin your counting?—From no more than what other women do.

Was that your only reason?—*Yes.*

Can you state when it was that that circumstance happened,

which you say happens to other women; what was the date of it?—*I cannot recollect the date.*

What you did count from was that which was common to all women, but when that happened your memory does not enable you to state?—No, I cannot state at such a long time.

Do you count from the time when that event did happen, or when you think it ought to have happened?—It ought to have happened sooner, *that is all I can say about it.*

What ought to have happened sooner?—That I ought to have been brought to bed sooner.

From what event do you begin your counting; from that which is common to women having happened, or from its not having happened?—From what is common to other women.

From the time it did happen?—Yes, but I cannot recollect the time.

You cannot recollect the particular period when it did happen, but it is from that you begin your calculation?—Yes.

And not from the omission of it?—Yes.

Cross-examined by Mr. Attorney General.

Did you take any notice when the child quickened?—I went longer after quickening than was usual; that is all I can say.

Did you take any notice as to the time when the child quickened?—I cannot recollect that so well.

How long was it after you were as women are to the time when the child was born?—It is such a time, I cannot recollect; I did not keep account of it when the child was born.

How long was it from the time when you were as women usually are to the birth of the child; how many months?—I know I went that time; I went beyond my time.

You cannot answer the question now put to you; is that so?—*Not so particular as that;* I cannot keep that on my memory. When my child was born I know.

In what month was that child born?—The 15th of June.

At what time before that were you as women usually are?—*I cannot recollect to a month.*

You cannot state how long it was from the time you were last ill to the time when the child was born; is that so?—*I cannot say correctly to that.*

Re-examined by Mr. Tindal.

Do you recollect when the child quickened; how long before the birth of the child it was that the quickening of the child took place?—I went about five or six months; but I cannot be certain.

But you say that the time exceeded what you had expected?—Yes.

What is the reason you think it exceeded the time you expected?—I cannot account for it; but I asked the person who was to lay me, and she said there was many a one that used to go as long.

Have you any reason for fixing upon this child having exceeded

the time of nine months?—Yes, I was bad for a month, that was one thing; I was bad for a month before I had the child, ill at times.

What do you mean by ill?—I had to send for my midwife two or three times.

You expected the child to be born at different times?—Yes; it was off and on.

Did you make any note at the time of any circumstance connected with your child-bearing?—No farther than I did when the child was born.

That is the only note you made on the subject?—Yes, and I always recollect it, before my daughter was brought in, and have mentioned it to several people.

Are you able to give any reason for fixing on the time when the child was conceived?—No, I cannot recollect that at all.

The witness was directed to withdraw.

MARY TUNGATE was then called in; and, having been sworn, was examined by Mr. Tindal as follows:

You are a midwife?—I am a midwife to several lying-in institutions, and the Middlesex Hospital.

How long have you been in the situation of midwife to those institutions?—I have been in practice for myself the last ten years.

In the course of that experience, have you had many cases of delivery under you?—A great many; from 150 to 200 in a year. Sometimes I have exceeded that; calculating from the money I have received at the end of the quarter.

From the experience you have had, have there been any cases under your own observation in which you can state that the period of the child-bearing has exceeded ten months?—In one case particularly I recollect, which was a woman of the name of Fitzgerald, of No. 6, Falconberg Court, an Irish woman. I made inquiry respecting her, and she is gone to Ireland. She was a poor woman. She had her letter signed the 27th day of November, in the year 1823. She came to me, saying, that she expected to be confined in a month.

Was she confined in that month?—No; she was not confined till the 8th day of February. She sent for me twice during that time.

Did she state any ground or reason for such her expectation?—The first time she sent for me, she said she was extremely ill, which I found her; the second time she sent for me, on inquiry, I told her it would be her labour, and I stayed within full twelve hours, and never left her; but she was never confined for three weeks after that.

Did she state any ground or reason for expecting her confinement?—I was rather curious in the matter. She said she was sure she had gone beyond her time. I asked her, how do you know that? and she said—

Mr. Attorney General objected to the evidence.

The witness was directed to withdraw.

Mr. Adam was heard in objection to the evidence.

Mr. Tindal was heard in support of the evidence.

Mr. Attorney General was heard in reply.

The Counsel were informed, that the evidence proposed could not be received.

The witness was again called in, and further examined as follows:

(*By Counsel.*) Have you formed any judgment or opinion, that a child may be born after a period of gestation of ten months?—I should think it was possible.

Have you formed any decisive opinion upon that, one way or another?—Yes, I have; by what women have repeatedly told me, when I have put their children into bed to them, that they have been more than ten months.

Have you, from the course of your experience, formed a judgment or opinion upon the subject?—Yes; I do believe that it is as likely for a woman to go over nine months, as it is for a woman to come under it. I have had a large family myself; *I never went nine months with any of mine.*

You were about to state some case; do you know the whole of the circumstances of that case yourself?—I have attended the person with three children. She lives in Long Acre. She applied to me to attend her in March; she sent for me in February, the 19th of February, saying, that she was very ill, but had a month to go. She got her letter on the 22d of February, and she was not confined until the 13th day of May,—last May.

You had not seen her before that time?—Yes; I met her in July, and she told me she was in the family way, and should be put to bed in March.

In the month of July, when you saw her, what was her appearance as to the state of pregnancy?—She complained, as is usual for women to do, of being in the family way, and that she should want me about March.

Did you observe at all, being an experienced person, what her state was as to pregnancy?—I conceived by the look of her that she was in the family way; but in that early stage of pregnancy they do not show it till after quickening; there is nobody quickens before twelve weeks; from twelve to twenty weeks; I never knew any one exceed twenty weeks.

Nor fall short of twelve?—No, there is no one shorter than twelve; nor I never knew any one to exceed twenty.

Cross-examined by Mr. Attorney General.

You say it is as likely, in your opinion, that a woman shall exceed the period of nine months as fall short of it?—*Yes.*

Is that opinion founded on what women have told you that have been under your care, as to their judgment when they first fell ill?—Yes, it is; because many women tell me they were in such a way at such a time; then they go over that time, and it is impressed upon their minds, if they do not come at the period of nine months, that they go beyond it.

Your opinion is founded on the statement made to you by particular women, as to the time when they were in a particular way?—Yes.

Cross-examined by Mr. Adam.

In your own instance you have always gone a shorter period than nine months?—I have come as much as six or seven days within the nine months, but I have never exceeded it; and I have had twelve live born.

Re-examined by Mr. Tindal.

You have stated the ground of your opinion; is it from what you have heard from other women, or what you have heard generally?—What I have heard generally; I have heard more than a dozen women say they have gone ten months.

(*Mr. Attorney General.*) How many have you heard state this?—I cannot say. I heard a woman say she had gone ten months, and she hopes to be put to bed to-morrow.

Have you ever heard a woman say she had gone eleven?—I have heard of such cases, but they never came within my own knowledge. There is a woman now lies in, who has been confined a fortnight to-morrow, and she says she has gone ten months.

Do you attend one or more hospitals?—I attend the Middlesex Lying-in Hospital out patients.

At what period are women allowed to come in?—They do not come into the Middlesex hospital.

Of any other?—In the Westmister Lying-in Hospital they do not give us their letter till they say they are within the last month.

Was the woman you were mentioning in that hospital?—No.

Where is she?—At her own house in St. Andrew's Street.

When they lie in at home, may they get their letter at any time?—No? they only get their letters about the seventh month, as it is so common for women to come at that period.

From the seventh to the ninth month, are they assisted by the hospital?—No, they have no money; it is only for the attendance of a Midwife, and a Doctor if necessary, and to supply them with medicines.

The witness was directed to withdraw *.

* Had time been granted by the Committee, it was proposed to have procured the attendance of Dr. Hamilton of Edinburgh, and other witnesses, in behalf of the counter-claimant, Mr. Henry Fenton Gardner.—Vide note, p. 42.

THE END.

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