GENTLEMEN,

SHOULD the annexed observations on a branch of Midwifery merit a place in the Medical and Physical Journal, they are at liberty for insertion in your next Number. I am,

Gentlemen,

Blackburn, Lancasbire, New. 20, 1800. Your humble fervant, JAMES BARLOW.

On the Advantages and Disadvantages of inducing premature Labour, with a View of superseding Embryulcia, the Section of the Symphysis Pubis, and the Gesarean Operation.

Nec Deus intersit nisi dignus vindice nodus. HORACE.

THE practice of exciting premature labour, in cases where the pelvis is so much distorted as to render embryulcia necessary, has been recommended by various authors, though the exact limits prescribed for its necessity have not hitherto been pointed out with that degree of precision which the importance of the operation demands; how far I have been able to illustrate the subject I cannot pretend to say: if, however, I am so fortunate as to cast a single ray of light thereon, I shall not consider my time mispent.

To enter into a detail of all the various modes of delivery in cases of deformity of the pelvis, would far exceed the limits prescribed to the present undertaking; I will therefore only make a few animadversions on the subject in question, and wave entering into a laboured history of the operation, nor trouble my readers with atcertaining the exact epoch which gave rife thereto. The various gradations of deformity incident to the female pelvis, are frequently fuch as involve the accoucheur in some degree of perplexity respecting the best mode of delivery to be adopted for the fafety of both mother and child, and various are the refources which obstetric knowledge indicates for that purpose. The cruelty inflicted upon the foetus by the use of the crochet, and the danger attendant upon the mother, are reasons of sufficient weight for the humane accoucheur to exercise his utmost skill in endeavouring to point out a more eligible expedient, in cases of distorted pelvis, than that of the destruction of the fœtus; the deformity of the pelvis then, to a certain degree, is what has been confidered by authors as an indication for bringing on premature labour, with a view of faving the life of the child, and lessening the risque of that of the mother.

On a superficial view of the subject, it would appear to be pregnant with but sew difficulties; but, on a more minute enquiry into the attendant circumstances, we shall be compelled to acknowledge that many obstacles present themselves, some of which appear of considerable cogency; whether the removal of these lye within the sphere of obstetric art, or, otherwise, wait the interference of the legislature, time alone can only determine; it is nevertheless incumbent on every accoucheur (before he attempts the operation) to establish in his own mind the morality of the practice, and exert his utmost skill, by every possible means, to extricate the environed sectus from impending destruction.

This operation, however, can seldom be put in practice before it has been proved, by the event of a former labour, that
the pelvis was so much distorted that the life of the child must
have been inevitably destroyed before delivery could be accomplished; and as the human pelvis is liable by disease to become contracted into various shapes and degrees of distortion,
from that of a well-formed pelvis to one so much contracted
in its different apertures, that delivery per vias naturales becomes in some instances utterly impracticable. In these different shades of distortion, art has surnished us with means of accomplishing delivery in various ways, according to the exi-

gency of each individual deviation from the natural standard; but as authors, even in the present improved state of the art, differ in opinion on these important points of practice, it is to be hoped that every laudable endeavour to facilitate the difficulties attendant on parturition, will promote a free enquiry on the subject, and ultimately have a tendency to the general good of fociety. To become acquainted with the fundamental principles of midwifery, and to ascertain the exact dimensions of the pelvis, is a matter of the greatest moment to the accoucheur, before he determines on the operation; as want of this necessary knowledge made by the touch, may involve the practitioner in irretrievable injury to the fœtus. The distortions of the pelvis are generally induced by rachitis in the infantile state, or by malacostion and exostosis in the adult; it is these different causes and degrees of distortion which the accoucheur should keep in view when making the admeasurement per vaginam. When passing the finger up the vagina, and any part of the os facrum, or lumbar vertebræ, be perreived to project into the cavity of the pelvis, or if the rami of the ischia, or the symphysis of the os pubis, approach unusually near each other, we may conclude that some degree of original mal-conformation exists in the bones which compose that aperture; yet it not unfrequently happens that the superior aperture is considerably contracted, and the inferior cavity, or outlet, is even wider than natural: and to obtain a fufficient idea of the state of the apertures of the pelvis, in every direction, I have frequently found it necessary to have recourse to the passing of the whole hand into the cavity of the pelvis; the three first fingers of which are to be conducted to the brim, where the admeasurement may be generally ascertained to the space of a few lines, by placing them in different directions in the superior streight, and if, when kept close together, the fide of the fore finger touch the os pubis, and the third the projecting angle of the facrum, we may conclude that the space betwixt the two points is manifestly no more than two inches, an opening through which no living mature fœtus can possibly be extracted alive; and when only two fingers can be placed in the same manner, and betwixt the two angles above-mentioned, the accoucheur may rest satisfied that, except a greater space can be obtained on either of the sides where the admeasurement is made, that no other mode of delivery, per vias naturales, can, with fafety to the mother, be adopted than either the crotchet or Cæsarean section. This method of proceeding will generally furnish the accoucheur with an accurate knowledge of the dimensions of the pelvis, and direct him to the most eligible resources in cases of extreme deformity. In every instance where I have had occasion to terminate the delivery with the crochet, it has been my constant practice, to ascertain the exact dimensions in every possible direction, that I might be armed with every requisite auxiliary in each suc-

ceeding labour.

To those whose opportunities of practice have not furnished them with a sufficient share of discrimination by the touch per vaginam, to be enabled to ascertain to a tolerable degree of exactity the various shades of distortion which the semale pelvis is liable to, I would recommend the use of the calipers, as an instrument more easily applied, and possessing superior advantages of accuracy over any other. See plate the 6th of Heath's Baudelocque; and for an account of their mode of application and utility, I will transcribe the 130th page from Vol. I. of that author.

"To determine how much the superior strait is desective in the aforesaid diameters, and measure it by means of these compasses, we take the thickness of the woman, from the middle of the mons veneris to the centre of the depression of the base of the sacrum posteriorly, by applying one of the points of the instrument before, against the symphysis of the pubis; and the other behind, a little under the spine of the last lumbar vertebra; and deduct three inches from that thickness in women that are thin, for the base of the sacrum, and the anterior extremities of the ossa pubis; the thickness of these latter being at most but six lines, and that of the base of the sacrum two inches and a half; and so constantly so, that I have not sound a difference of a line in about sive and thirty pelves, distorted and contracted in all manner of ways, and in all possible degrees.

"This subtraction of three inches from the external thickness of the pelvis, in the faid directions, is also sufficient when the lustiness is moderate; and we may add one or two lines more, when it is excessive, because the fat which forms the mons veneris, eafily shrinks under the lenticular extremity of the leg of the compasses. The result of this procedure is so exact, that the pelvis measured with the common compasses after opening the body, was not above a line over or under my estimation in any one of my experiments. A greater precision if we could obtain it, would be uteless, fince the choice of the most proper methods for terminating the delivery in a given case, cannot depend on a line more or less in the diameter of the pelvis. According to these data, the knowledge of this diameter is eatily obtained. It is four inches when the external thickness of the pelvis measures seven; it is but three when the latter only measures fix; and but two when it does

not exceed five, &c. I suppose the woman to be thin, as most of those are who have been rickety."

In considering the mechanical descent of the sætal cranium through the pelvis, it will appear manifestly necessary that the dimensions of the one should bear some mathematical proportion to the other; to obviate certain difficulties, Nature has wisely ordained a peculiarity of structure to the sætal cranium, the mechanism of which is so formed, that the head of the sætus is less compact than that of the adult, and the bones more loose and numerous, consequently are better adapted for passing through the pelvis, than if they had been firmly joined

together.

The growth of the fœtus also varies very much during the different stages of gestation; the embryo increases more rapidly in fize during the first weeks after conception, (than after it takes on the fœtal state, till the end of nine months,) though this increase has various stages of irregularity, till the full period of utero gestation. The walls of the pelvis are so firmly connected together, and the change which the fœtal head is constantly undergoing as gestation advances, will ever remain an obstacle to this species of delivery, owing to the uncertain magnitude and degree of resistance opposed to the pelvis during its passage through that tube. Without multiplying the various positions which the fœtal head assumes during the approach of labour, it may be necessary to state, that the general and most natural presentation, is the vertex with the ears, nearly in a diagonal direction betwixt the pubis and facrum; the cause of this part of the head descending first into the pelvis, may be owing in some measure to the foramen magnum being fituated nearer the occiput than the face, consequently is more mechanically inclined to become first pushed into the superior aperture of the pelvis; sometimes, however, the anterior fontenelle may at the commencement of labour be perceived to present in the axis of the superior strait, but this small deviation is generally rectified by the repeated action of the uterus, which forces the vertex into the axis of the pelvis, whilst the chin is bent down upon the breast, and the face turned into the hollow of the facrum. If this process was not to take place, and the fontenelle was forced out of its proper direction, the labour would prove tedious, and probaby might fometimes terminate in a face presentation. forceps and lever are instruments well calculated for extracting the fœtus within certain bounds of difficulty, and claim a preference over every other invention, when used with a view of preferving the lives of both mother and fœtus; and when the small diameter of the superior strait of the pelvis offers a

space for the entrance of the head of the foetus, equal to three inches in diameter, we may not altogether reject every hope of extracting a living mature foetus through an aperture of the above specified dimensions, with either of these instruments; or if the child's head is finall, and not too firmly offified to elongate, and allow the bones to overlap by pressure, and the forcible action of the uterus, we may fometimes under these circumstances meet with a favourable termination, when the diameter of the pelvis is rather under three inches. the contrary, when the mother's pelvis is ascertained to meafure no more from pubis to facrum, or in any other of the apertures, than two inches, or two inches and a half, I am perfuaded that no mature fœtus can possibly be brought through a space of these dimensions, without destruction to the child; it is then in this intermediate degree of distortion, betwixt the possibility of delivery, (without injury to the mother or foetus,) with the forceps or lever, and that shade of deformity which requires the application of the crotchet, where premature delivery feems most likely to become admissible. A queftion then will naturally present itself to every accoucheur who deliberates on the subject, namely, to what degree of compreffibility is the mature foetal cranium capable of undergoing, without destruction to the child during its passage through the pelvis, and what analogy does it bear in computation with one of seven or eight months? The folidity of the foetal head, and the re-action of the bones of the pelvis upon that body, are so variable in different children, that no exact criterion can be formed before birth; however, I will venture to risk an opinion, that the diameter of the fœtal head, under certain fituations, will bear a reduction in fize by preffure, from a quarter to half an inch, without producing much injury to the fætus; but when the diameter of the head becomes much reduced beyond this, by either the forceps or lever, their application becomes dangerous to the child, and of course inadmisfible on that score. I consider the feetus a mere passive body during its passage through the pelvis; nevertheless, I am well aware that examples are not wanting, where the fœtal head has undergone a much greater reduction by compressure without proving fatal; however, I would have it understood, that what I have advanced, is what more generally takes place, and the deviations from the above rule are only exceptions there-Some difference may refult from the reduction of the volume of the cranium of a fœtus of eight, and one of nine months, as it will be generally allowed, that the bones which compose the cranium of the latter, will not admit of the same degree of reduction when compared to the former, yet, perhaps,

a less variation in the fize of the head will take place betwixe the two, during their passage through the pelvis, than what at first would appear probable, owing to the greater power of action of the uterus during labour upon the body of a foetus of nine months, than upon an immature one of seven or eight; and some difference of result may also arise to the foetus from the length of time which may elapse during the

passage of the head through the aperture of the pelvis.

The next question which occurs is, in what degree of distortion of the pelvis it becomes necessary to have recourse to this operation? This point will not be eafily ascertained, even if the accoucheur was allowed to make an examination per vaginam; and as this is a matter not altogether attainable during gettation, it becomes requifite to state the circumscribed dimensions of the pelvis, wherein this operation is more likely to meet with fuccess: I presume then that a pelvis, the small diameter of which measures from pubis to facrum about two inches or two inches and a half, appears to favour the success of this operation more than any other dimensions; for, on the one hand, it is fufficiently evident that a mature feetus cannot be born alive, when the dimensions are under two inches and a half; and on the other, when the short diameter does not exceed two inches, the crotchet becomes necessary; and should the superior aperture measure only one inch and a quarter in the widest part of its superior conjugate diameter, the only refource for the fafety of the mother and foetus is the Cæfarean operation.

If it is proved that this operation cannot be performed with any degree of certainty of fuccess to the fætus, except where there is a space to be gained in some part of the superior aperture, from two inches to two inches and a half, then it will follow that this mode of delivery must be very much limited, infomuch, that a confiderable degree of hazard will always attend it, owing to the want of accuracy in discriminating betwixt the relative fize of the foetal head and the dimensions of the pelvis. Having now pointed out the diameter of half an inch, as the most warrantable space alloted for the success of this species of operation, when performed at any time from the latter end of the seventh to that of the eighth month of utero gestation, before or after which periods, I think, no one justifiable who induces premature labour under these circumstances; nor can I altogether give credit to those accounts, from whatever fource they may have been gleaned, where it is afterted that premature delivery has been successfully adopted when performed early in the feventh month of pregnancy, and

where the diameter of the pelvis measured not more than two

inches in the widest part.

When this operation is had recourse to, and the dimensions of the pelvis are such as promise success, we ought to defer the attempt as near to that period fixed by Nature for the full evolution of the fœtus as circumstances will admit, that thereby the child may acquire every possible advantage to ensure a healthy state of existence after birth. The period of eight months, or thereabouts, is the most advantageous time for the performance of this operation, when we consider the precarious state of a fœtus at a much earlier period; for I will venture to predict, that not one in twenty can survive the birth so completely as to be reared, where labour is excited earlier than the feventh month of gestation: no doubt, a few exceptions may be opposed to this general conclusion; but if we consider the puny state of these short-lived individuals, and the misery which their premature birth subjects them to, we shall have no cause to envy their fituation; and few would prefer fuch an ephemeral fate to a mere nonentity.

It is to be wished, that authors who have had recourse to this operation, had been more explicit in their accounts respecting the exact period of gestation, and the premature sate of children, and how long they survived that event; for it is not a fufficient incitement to the operation, merely to bring a being into existence which must inevitably perish soon after birth. And this immature mode of delivery would confequently be a means of subjecting the mother oftener to a state of gestation than if the was allowed to complete the period of nine months. To obtain premature delivery, the membranes which envelope the foetus are generally artificially ruptured prior to that event; and the time which clapses before the uterus resumes its expulfive efforts, are very variable, infomuch that in some cases even feveral days have passed before that organ has completed its evolution. When the waters are thus evacuated, and the fœtus left in close contact with that viscus during its repeated contractions, I am disposed to consider the life of the child, during its exit through the pelvis, involved in some danger, and that proportionable to the degree of diffortion, and date of gestation. It is not fufficient that premature labour should be indiscriminately produced at a given period of gestation, merely with a view of superceding embryulcia, it is of more importance to look forward to the preservation of the child; for every attempt made as early as the fixth month of gestation, either with the intent of avoiding embryulcia, or preferving the life of the fœtus, will answer no other purpose than jugulare mortuos; for, as I have before observed, and what I wish further to inculcate is, that every delivery excited by art, or otherwise casually taking place at an earlier period of pregnancy than the seventh month, will generally prove destructive to the sectus, either during the time of delivery, or very soon after that event.

The sufficiency of augmentation of space gained by the section of the symphysis pubis in extreme deformity of the pelvis, and the manifest danger attending that operation, are circumstances sufficiently warrantable to preclude its use as a substitute for any of the above-mentioned modes of delivery. The Sigultian operation frequently involves the fœtus in imminent danger when the diffortion is confiderable; and in some instances where the fection has been made, the confolidation of the facrum and ilia have been so firmly united, that no adequate space could be gained by a division of the symphysis pubis for the extraction of the child, and delivery has afterwards been obliged to be terminated by the crotchet or Cæsarean operation; and it has been doubted, and with sufficient reason, whether the Signultian operation has ever been successful to either mother or child, in cases where the superior aperture, from pubis to facrum, measured less than two inches and a half; hence will appear the insufficiency of this operation, and the necessity of its being banished in future from the practice of midwifery.*

It is a matter of some consequence for the accoucheur to discriminate, in cases of distortion of the pelvis, between exostosis and malacostion, as in the latter the bones will sometimes give way considerably, either by the introduction of the hand,

or the impulse of extracting the child.

Two cases of this species of deformity have fallen under my care; in one of which, the projection of the lumbar vertebra and the connecting angle of the sacrum were so much bent into the cavity of the pelvis, that on the introduction of the finger up the vagina, a protuberance presented to the touch, very much resembling the head of the sætus, pretty far advanced into the pelvis; on carrying the singer a little higher up, past the projection, I could ascertain the head of the child; but on moving the singer round the projecting part,

^{*} Amongst the numerous evils attending the Sigantian operation, the laceration or separation of the facro iliac symphysis is one of the most dangerous, and to obviate which, and at the same time allow a sufficient separation of the symphysis pubis, appears no easy matter; yet, to accomplish which, I have however thought, that if a vice could be fixed externally upon the hips of the woman, with a screw so managed, that during the operation and subsequent treatment, no more space should be allowed to take place than what was sufficient for the extraction of the sœtus, by which means the injury in question would be in some measure obviated.

the distortion was so great, that the whole circumference, in any direction, did not exceed that of half-a-crown. This was on the 29th of April, 1792, at which time I delivered her with the crotchet, and the bones of the pelvis yielded confiderably to the impulse of the head of the fœtus, which acted like a wedge during the efforts of extraction; yet, notwithstanding the pliability of the bones of the pelvis, and the debilitated state of her constitution, she recovered speedily, and without interruption. On the 22d of February, 1794, I was in the neighbourhood where this poor woman refided, and hearing of her being still alive, I was led by curiofity to pay her a vifit, and if possible, to obtain permission to examine her per vaginam, which was readily granted. I found the rami of the offa ischia at their junction with the rami of the offa pubis overlapped each other, leaving a small opening under the symphysis pubis, sufficient to admit the finger to pass into the vagina by that pasfage, and another aperture below, but rather larger, and parallel with the tuberolities of the offa ischia. From what I have been fince able to learn, she survived this period near two years, at which time the was become fo crooked, that her breaft and knees were almost in contact with each other, and after her death it was with difficulty she could be put into the cosin. This woman bore nine children, and died in the 39th year of her age: I attended her in the preceding labour to that abovementioned, which case was lingering and tedious; however, I fucceeded by terminating the delivery with the lever, and preserved the life of the child. The other case of malacosteon occurred to me in this town, about three years ago; the woman was in a dying state before I was consulted. On examination I found the pelvis very much differted, and suspecting the deformity to arise from a state of malacosteon, I was induced, from the circumstances of the preceding case, to attempt delivery; and this more particularly, as the poor woman expressed an earnest desire to be released from her present burthen, rather than die undelivered. On enquiry, I learned that the had only just completed the seventh month of gestation; this stage of prematurity induced me to attempt to turn the fætus, and deliver by the feet, by which means I might give the child a greater chance of life; but with respect to the mother, there was not the least prospect of her surviving delivery long. The os uteri being dilated, I accordingly introduced my hand, but the apertures of the pelvis were so much diminished in their dimensions, that it was with considerable difficulty; however, I succeeded, and delivered the woman of living twins; the died in about twelve hours after, and the children did not furvive their births many days. Having obtained leave

to inspect the body afterwards, I found the dimensions and structure of the pelvis as follow: The conjugate, or anteroposterior diameter, from the symphysis pubis to the projecting angle of the facrum, measured two inches and a half; and the antero-posterior dimensions on each side of the facro illiac symphysis, between these two points, were, in some places, a few lines more than two inches and a half; from which it is obvious, that the form of the superior aperture of this pelvis had a The rami ischii approached so near triangular appearance. each other, that the space left betwixt them would scarcely admit one finger; and on the introduction of the hand, when proceeding to turn the fœtuses, these bones receded from each other very confiderably; and the same effects were observable in the superior strait. The spongy nature of the bones of this pelvis were also manifested, by having very little cretaceous matter in their substance, and their texture was so soft, that they were easily cut with a knife. Many advantages, I am confident, may refult from an accurate knowledge of the difeases and structure of the bones of the pelvis prior to delivery; it is, I am persuaded, from a want of this information, that the Cæsarean operation has so often proved fatal in this country, for there is reason to suppose, that most of the women on whom that operation has been performed in this kingdom,* have been afflicted with malacosteon, and consequently in an irrecoverable state, independent of any injury inflicted by the operation itfelf; and perhaps, if the nature of the disease had been more clearly understood, delivery per vias naturales might, in some instances, have been accomplished with safety to the child, without having recourse to any other mode of delivery; and in these cases, where malacosteon has made such dreadful ravages. in the female constitution, beyond which the art of medicine has hitherto fallen short of re-establishing, it would be a nugatory practice, when attempted only with the view of preferving the life of the mother, to have recourse to either the Signaltian operation or the Cæfarean fection, as the woman would inevitably die, even if exempt from a state of gestation. If we advert to the numerous cases of Cæsarean section performed on the continent, compared with those of this country, it will be obvious, that the comparative fatality has been owing to this disease pre-existing to the operation; for, in no instance where the Cæsarean operation has been performed in this country, has it proved successful to the woman, except the case of Jane Foster, on whom+ I performed the Cæsarean

[·] England, Ireland, and Scotland.

TVide Medical Records and Researches, p. 154.

eperation with success, at Blackrod, in this county, a few years since; in which case the operation became necessary, on account of a deformity of the pelvis, incurred by an accident prior to a state of gestation, and not from any constitutional disease. The failure of success attendant on the Cæsarean operation betwixt this and a neighbouring nation, is more ascribable to constitutional disease, which those women had laboured under in this country, who have undergone the operation, than to any difference of climate or mode of operating.

When premature delivery is attempted, with a view of fuperfeding the Cæfarean fection, it can only become neceffary when the dimensions of the polvis are such as preclude every other mode of delivery per vias naturales; upon this ground the practice will be confined to the embryon state, or at at least, soon after it has acquired to that of the scetal period. The folicitude of the accouchenr in this extreme degree of diftortion of the aperture of the pelvis, is wholly directed to the preservation of the life of the mother, as every endeavour within the limits of our art, when tending to preserve the foetus in these situations, will be abortive; and how far the morality of the practice may be justifiable, when performed with the view of preferving the life of the mother, and facrificing that of the fœtus, is not a matter easily determined; the wellknown aptitude inherent in a woman to conceive under these circumstances, and the number of fœtuses eventually destroyed with the intent of preserving the life of the parent, are incidents of the utmost importance to the community, and claim a proportionate share of consideration from every accoucheur concerned on these unfortunate occasions. In a situation so depending, is the accoucheur excufable who tacitly complies with the requests of the mother, and voluntarily sacrifices a number of immature feetules with a view to her own prefervation? As the Cæfarean operation in this fituation may be made a matter of choice, may it not be allowable for the mother to exercise her judgment on the occasion? In certain cases, where the diffortion of the pelvis is not very confiderable, it is a practice adopted by some practitioners, as soon as the hand is admissible into the uterus, to return the presenting head of the foetus, and deliver by the feet; how far this mode of practice may be justifiable, I cannot pretend to say, as I am at a loss to conceive how any material advantage can be obtained by reverfing the head, except it be where the uterine efforts are too feeble to accomplish the exit of the fœtus in a natural presentation, and where the advantage gained arises from the superior degree of power excited by the accoucheur over that of the uterus. In cases of this nature, and where the diameter of the superior aperture measures no more than three inches from pubis to facrum, the head of the fœtus will generally, by the repeated action of the uterus upon its body, be forced a certain distance into the brim of the pelvis; when this is accomplished, and the head is ascertained to have advanced one-third within the superior aperture, it will be advisable to attempt delivery with the lever; for I have, in a few instances, succeeded with perfect safety to both mother and child with this instrument, even in cases where the crotchet has been used in the preceding births; hence will appear the advantage of waiting till the head of the fœtus is become so far advanced in the pelvis, that the lever is admissible, rather than involving the life of the child in unnecessary danger, by the implicit act of turning and delivering by the feet; a practice, even in the most promising situations, always attended with danger to the foetus, and which has not hitherto been explicitly made clear by authors.

Another situation wherein premature delivery has been adopted, is in cases of habitual miscarriages at a certain period of gestation, beyond which the sœtus is supposed to die. The practice of inducing premature labour while there remains a prospect of the sœtus being alive, will involve the accoucheur in much ambiguity, particularly as the exact date of impregnation cannot clearly be ascertained, nor can we altogether obtain a certitude of the life of the sœtus in utero, or whether the woman might not go to her full reckoning, till the art of midwifery has arrived at that acme of persection, competent for the acquiring of the knowledge of these data. I think no one excusable who attempts this species of delivery, as instances are not wanting, where, after a number of periodical immature births, the woman has, at length, gone to the full period of nine months, and become mater familias.

Authors appear divided in opinion respecting the danger incurred upon the mother, by exciting premature labour; the parity of hazard which results from this species of birth, on the score of the woman, at the period of seven or eight months, will vary according to circumstances, when contrasted with the event which will follow the termination of a labour at full time, and where the pelvis is distorted to the degree which I have fixed upon as indicable for this operation.

Were we to form an opinion on the event of a miscarriage at the abovementioned period, we might be led to conclude, that little danger to the mother would follow this mode of delivery; but as the uterus is an organ in no respect governed by the will, and the efforts of that viscus are most regular when left uninterrupted, therefore no comparison will hold

good betwixt a premature delivery and one artificially produced, nor betwixt one at the full period of pregnancy where the pelvis is well formed.

An objection of much weight against this operation will naturally impress the mind of every humane accoucheur, namely, the difficulty of secrecy by which premature labour is effected; for I am firmly persuaded, if ever the method should be divulged amongst a certain class of individuals, it will soon become too generally known, and the abortive attempts will be innumerable; this will doubtless defeat the intention of the operation, and lead to a crime of a most cruel and inhuman nature.