# FEMALE PHYSICIAN,

Containing all the

DISEASES incident to that SEX,

Virgins, Wives, and Widows;

TOGETHER

With their Causes and Symptoms, their Degrees of DANGER, and respective Methods of PREVENTION and CURE:

# To which is added, The Whole ART of

# New improv'd MIDWIFERY;

#### COMPREHENDING

The neceffary Qualifications of a MIDWIFF, and particular Directions for Laying Women, in all Cajes of Difficult and Preternitural BIRTHS; together with the Diet and Regimen of both the MOTHER and CHILD.

By JOHN MAUBRAY, M. D.

Dicor, \_\_\_\_\_ Opiferq; per Orbem Ovid. Met.

LONDON:

Printed for JAMES HOLLAND, at the Bible and Ball, in St. Paul's-Church-Tard. 1724.

# The Project Gutenberg EBook of The Female Physician, by John Maubray

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Title: The Female Physician

Containing all the diseases incident to that sex, in virgins, wives, and widows; together with their causes and symptoms, their degrees of danger, and respective methods of prevention and cure: to which is added, the whole art of new improv'd midwifery; comprehending the necessary qualifications of a midwife, and particular directions for laying women, in all cases of difficult and preternatural births; together with the diet and regimen of both the mother and child.

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# FEMALE PHYSICIAN,

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# To all Learned and Judicious Professors of Рнузіск, as well as Ingenuous and Experienced Practisers of Midwifery.

#### Most Excellent Societies,

I Have generally observ'd, that *Men* address their *WORKS* to improper Hands; *some* aim at *Personages* too great, to regard them; *others* stoop to *Men* too unlearned, to defend them: *Some* again make their *Court* and apply to Persons in Vogue or in Place, and *others* cringe and creep after *Purse-proud Patrons*: But as I pursue not the common Designs of *DEDICATORS*, so I have studied no subterfuges of *Flattery*, nor Flourishes of *Panegyrick* in this DEDICATION. I know, that, whatever my *Performance* may prove, a *substantial WORK* will stand securely upon its own Bottom, and make its way into the World, without any *secondary Helps*; whereas a slight *Defective Piece* will fall and be quash'd, tho' it should even *strut* with *MAJESTY* itself in its glaring *Front*.

Had I then presum'd upon any particular *VOUCHER* for the *FEMALE PHYSICIAN*, it would have look'd like acknowledging *Guilt* and seeking for *Defence*; Because *You*, and none else, are the *competent Judges* in Affairs of this Nature: *GOD* having entrusted *you* only with the *Lives* of Men; and *you* (under *HIM*) being the Sole *Preservers* of *LIFE* and the great *Distributers* of *HEALTH*, I have thought it my *Duty* to make this solemn Application to *your August Societies* in general; and in this manner to render you some small *Account* of the *TALENT*, which some of your selves have entrusted me with for *Improvement*.

In fine, your *famous Fraternities* being universally celebrated for encouraging of *Learning* and promoting *Ingenuity*, You are still the more highly entitled to my *Endeavours* in both respects; and I my self in all points of *Humanity* the more secure of your candid *Interpretation*. The *undertaking* then being yours by *Birth*, it has a Natural Claim to your *Care*; And it being the *Duty* of Men to provide for their *Off-Spring*, it has a peculiar Right to your *Patronage*. Wherefore, with all due *Deference* and becoming *Submission* to your *wiser Judgments*, I lay the *DEDICATION* as well as the *WORK* it self entirely at your Feet, in Hopes of your courteous *Reception* and benign *Tutelage* both at Home and Abroad: Upon which (in short) I beg Leave to Subscribe my self, with profound *Veneration*,

Your Eminent Societies, Most Faithful, and Most Obedient, Servant

John Maubray.

#### THE PREFACE TO THE READER.

As the Study of *Physick* has differ'd in every Age, according to the prevailing Opinions and Ambiguous Determinations of *Philosophers*, so the Practice of *Midwifery* has also varied, according to the Judicious Experiments and successful Operations of *Professors*; until of late Years, by the many happy Discoveries and strict Inquiries made into the Secrets of Nature, and Natural Causes, these Healing and obstetricious *Arts* are so much improv'd and advanc'd, that, they now seem to be arriv'd at their very Height of *Perfection*: Insomuch that both the *one* and the *other* stand this Day upon as sure a Foundation, and as certain Principles, as most other *Sciences* do, which notwithstanding are not exempted from the Fate of *Casualties*.

*THE* Case then being so, it becomes all Men of Ingenuity and Integrity, to be also *Communicative* of such Things, as may tend to the Welfare of their Neighbours and to the Common Good of Mankind; since according to the Excellent *Poet*,

Scire tuum nihil est, nisi te scire hoc, sciat alter.

*THIS* was the Principle of the *Ancients*, who, as they discover'd the Natural Debility of the *Female Sex*, and that Women were not only Subject to all Diseases in common with Men, but also obnoxious to a vast many Distempers peculiarly singular to themselves, were first mov'd to write particular *Books*, and respective *Treatises*, upon these Heads: The most wise and divine *Hippocrates*, first breaking the Ice, after him *Diocles*, next *Aetius*, and at last many *others*; For the more

Learned and Ingenious that any one found himself in his respective Age, the more readily he exercis'd himself in these difficult Points.

*BUT* now a-days *Women* may well complain, and cry out with Soranus, "O malè Occupatum virorum Genus, occidimur nos, non Morimur: Et ab illis, qui inter vos peritissimi existimantur, perperam curatæ, vos vero de qualibet vel levissima vestrarum Affectionum, Libros ex Libris facientes, Bibliothecas voluminibus oneratas, de Nostris inter ea diris ac difficillimis Cruciatibus, nulla vel exigua, & ea quidem satis oscitanter mentione factâ": That Men, in short, study their own Good, and take more Care of Themselves than of the Women.

*BECAUSE* then there are so many Faults and Defects in this part of *Physick*; in that the *Antients*, by reason of their precise Gravity, rendred their *Works* either obscure, or at least difficult to be understood: As *some* of the more *modern Authors* have, treated them but Partially and Defectively in most respects; *others* but transiently and indifferently, or as if they were otherways employ'd: *Some* again darkly and briefly; *others* so confusedly and prolixly, that we may justly say to them, as the *Lacedemonians* did to the *Samian Legats* of old; "*Prioris orationis vestræ partis sumus obliti, postremam ob primæ oblivionem non intelleximus*": We have forgot the Beginning of your Discourse, and for that reason, cannot understand the latter Part.

THESE being the Reasons of this Undertaking, I shall trouble you with no farther Apologies in its behalf, save only that I thought it my Duty, notwithstanding the Considerable *Charge* and immense *Labour*, not only so far to endeavour to imitate my *Predecessors*, but also to deserve well of Humane Kind, and particularly of *English Women: FIRST* by collecting these things, which I have found clearly written by the most approved *Authors*, together with what I have conceiv'd to be true and Rational by my own painful Study, frequent Speculation, and assiduous Practice; and SECONDLY by publishing this *Praxis* and *Analysis* of Women's Distempers, as they are accurately, tho' succinctly comprehended in this small *Volume*: Yet not so briefly neither, but that most Things are consider'd and explain'd for removing *Obscurity*; nor so prolixly, that any Head is swell'd with Trifles or empty Words: And that not only in our vernacular *Tongue*, but also in a certain middle *Style*, adapted to the

Capacity of the meanest *Reader*; so that if it be possible, where the *Flowers* are thinnest Sown, there the *Fruit* may appear the thickest; Because I have all along consider'd this to be no Work of *Eloquence*, but of *Midwifery*, or *Physick*, or *both* together, if you please, in which I have studied the common Good, but no vain Glory.

*IN* composing the *WORK*, I have follow'd such Methods as seem'd to me the most conducive towards its Use and Design, and insisted only upon such *Topicks*, as can be most serviceable to the World, and absolutely necessary in the Practice of either of these *Arts*; without touching upon any of the pompous Superfluities, with which *Physick*, as well as other *Professions*, is now a-days over-run and embarrass'd: The *one* I apprehended to concern my Integrity, and the *other* only an empty Applause. But that you may be at no Loss in conceiving the Regularity of my Method, because of the variety of Subjects to be met with, I shall here delineate or draw out the *Lines* of the *WORK*, and give you some distant *Idea* of it, if possible, by a general Hint upon every *Part* or *Section* of the *BOOK*, *Viz*.

*IN* the *first Part*, I have explain'd the History of the *Formation* and *Animation* of Man, together with the *Maturation*, *Nutrition*, and *Position* of the Infant in the Womb; to which I have subjoin'd the *Anatomical* Account of the *Membranes* and *Waters*, as well as of the *After-Birth* and *Navel-String*. I have likewise in this place previously set forth the Dignity and Excellency of *Man*, together with the Faculties of our *Souls*, and the Qualities of our *Bodies*; And, having initiated the whole with the Natural Proofs of a *GOD*, and a short Dissertation upon *Nature*, I hope none will take that amiss, because my Belief in the *one*, and the small Knowledge I have acquir'd of the *other*, are to be my *Guide* throughout the Course of my Life, as well as my *Directory* in the present Performance.

*IN* the *Second Part*, I have not only explain'd the Natural *Philosophy* of the *Maiden-State*, and set forth the Passions, as well as the Diseases familiar to *Virgins*; but also defin'd the Power of *Imagination*, and added the Natural Reasons for the various *Likenesses* of Children.

*IN* the *Third*, I have expounded the Mystery of *Conception*, together with its Diagnostick Signs: I have directed the *Regimen* of the Pregnant Woman, and particularly set forth the various *Symptoms* of the Months of Gestation, together with the *Acute* 

*Diseases* incident to her in that Time. I have in the same place insisted at Large upon *Miscarriage*, and explain'd at length the *Mystical Theory* of Birth in general.

*IN* the *Fourth Section*, I have defin'd the *Art of Midwifery*, and the Contemplation of its *Theoretical*, as well as its *Practical* Knowledge: And, that *Women* practising this *Art*, may not mistake me in what is said or recommended to them, I have also addressed my self to *Men* professing the same *Science*; and, with all imaginable Impartiality, told them both their *Faults* and their *Duties*, however without any intended particular *Reflection*. To which I have subjoin'd a compleat *Anatomical Description* of the Parts of *Generation* proper to Women; together with the Natural History of the *Matrix* and its amazing Faculties.

*IN* the *Fifth*, I have ingenuously laid open the whole Mystery of *Midwifery*, as to all Sorts of BIRTHS, whether *Natural* or *Preternatural*, and faithfully laid down the Fundamental Principles and most certain Rules of this *Profession*; and that not only according to the best *Notions* of my own Application and Study, or the real *Dictates* of my proper Practice and Experience; but also according to the most ingenious Precepts and infallible *Maxims* of the ablest and most polite *Professors* of this excellent *Art*, and that also according to its newest and latest *Improvements*: And in these *Cases*, I have neither fear'd the Invectives of the Æmulous *Zoilus*, nor regarded the Snarlings of the reprehensive *Momus*: For Wise Men are not any longer to be entertained with *Ænigmas*, since *GoD* hath said, *Fiat Lux*.

*IN* the *Sixth Part*, I have not only prescrib'd the due *Regimen*, and provided for the Safety and happy *Recovery* of the *Child-Bed-Woman*, but also taken a suitable and corresponding Care of her *Babe*; As I have farther instilled particularly upon the various Disasters incident to both *Mother* and *Child*, in their respective tender Conditions of *Child-Bed* and *Infancy*.

*IN* the *Seventh*, I have dilucidated the *Philosophical History* of all the different Sorts of *Preternatural Conceptions* as well as *BIRTHS*; and insisted at large upon the Theme of Women's *Sterility* or *Barrenness*.

*IN* the *Eighth* and last *Section*, I have not only defin'd the *Widow-State*, as far as it concern'd my Purpose, but also diligently pursued

the *Subject-Matter*, and traced down the Particulars of their common *Grievances*.

THESE, I say, are the general Heads of the WORK, which are all again sub-divided into their proper respective Particulars; and consequently every general *Head* or *Section* assign'd its own relative *Chapters*, for the singular Benefit and more easy Comprehension of the *Reader*. And these *Chapters* consisting of 130 in Number, I have, with respect to every singular *Distemper* mentioned in them, *FIRST*, defin'd the Nature of the *Disease*; SECONDLY, accounted for its *Causes*; THIRDLY, I have given the *Diagnostick Signs* or *Symptoms*; FOURTHLY, the *Prognosticks* or Degrees of Danger; to which I have FIFTHLY and lastly added the Method of *Prevention* in many Cases, and That of CURE in All: So that there is almost not one *Disease* which can affect the Woman from her *Birth* to her *Death*, in *Child*, *Maiden*, *Wife*, or *Widow-hood*, whose *Essence*, *Species*, *Differences*, *Causes*, *Signs*, and *Prognosticks*, we have not sufficiently clear'd up.

ALL these Things I have endeavour'd to be most particular in, to the end that any Woman, who reads, so as to be conversant with this BOOK, may know before She sends for her Physician, not only her Distemper, but also the Danger, with which she is threatned upon every Sickly occasion. And in these Things I flatter my self that this WORK will prove Acceptable, where such a Number of Diseases and Symptoms are set forth in so clear a Light, that any Person, making use of their Eyes and Reason only, without being any ways vers'd in the Practice of Physick, or Midwifery, may evidently see, perceive, and by Experience find, every individual Case to answer these Ends, and the whole to correspond exactly with its Title and Contents.

BUT upon the whole, if here and there a brief Philosophical way of Reasoning has crept in, I would have you consider, that it could not be avoided; because the Proofs relating to Natural Things are sometimes taken from very minute Instruments; And that the Design of such an Interspersion, is only to assist your Understanding, and conduct your Thoughts through the WORK. However in such Cases the Reader may go on, or pass by what does not suit with his Taste, as he pleases. Again if here and there, I have retain'd a Term of Art, which the common Reader may call a hard Word, I declare it is out of no Design to amuse any one, but out of mere Necessity, since otherways I should have been ridiculously singular, and far less understood: In the mean time I have taken what Care I could to explain the most, or at least the most requisite of *These*, insomuch that whatever *Words* or *Sentences* of this Kind are not fully interpreted, you may slip over, without losing any thing Material of the Purport of the Matter, such Things concerning the *Practitioner* more than the common *Reader*.

*HOWEVER* yet, if the Measures I have pursued in handling this uncultivated *Subject*, should not appear so exactly Methodical as some of you may expect, I shall only say for *Excuse*, that, as it belongs to hard Labour to cut out new Paths and Ways thro' *Woods* and *Desarts*, and where *Guides* are wanting, to find out the shortest *Cut*; so it is only by frequent *Travelling*, that such *Roads* can become smooth and easy, however exactly plan'd. Again farther, I would have you also to consider the Difficulty of the *Task*, to contract Much in a Little; to omit Nothing which ought to be animadverted; to join Perspicuity with Brevity; and after all, finally to reduce the whole to the certain *Precepts* of *ART*.

I have incessantly perus'd the vast *Volumes* of others, *Ancients* as well as *Moderns*; and whatever may be found there variously dispers'd, over-strain'd, or collected profusely, without either Order, or Coherence, you'll find here manifestly disposed, and neatly contracted in this small *WORK*. I have sever'd the *Grain* from the *CHAFF*, winnowed the *Seeds* from the *HUSKS*, and purged the *Gold* from the *ORE*, to the end that I might again successfully *Sow* what I have thus laboriously *reaped*; and digest all Things into such an easy and clear *Method*, that you'll be at no Loss here for what you want, but may turn to it at once, whatever the *Case* may be; you'll read nothing twice, nor will you fall into any *Trifles*, which might either confuse, or detain you.

BUT that I may not be misconstrued or misrepresented here, give me Leave to affirm that the Design of this *WORK*, is not to reprehend or find Fault, with any former *Writer's Performance*; but only to render these Things, which *others* have either treated negligently, or indifferently, confusedly, or obscurely, the more Clear and Evident.

*THIS*, candid *Reader*, being the Design as well as the Reason of my *Undertaking*, according to the *Fruit* you receive by it, Pray, repress the Minds of the Invidious; and according to the Judgment you make of its Worth, let it stand or fall in your Esteem. Not that I am so vain

in the *interim* to imagine, that the Work can stand upon the Foot of its own *Merit*; and far less can I expect that it will escape the ordinary Fate of *Censure*: No, I shall take it well, considering its *Imperfections*, if it undergoes no worse Fate, than what is common to *BOOKS*; especially considering that it is no ways set off with a great *Figure*, under the splendid appearance and modish Trappings of flourishing *Hypotheses*, so common among our *Modern Writers*.

THERE are many Things altogether New in our *Midwifery*, which I would have none rashly to stumble at, tho' I know that New Opinions are always suspected and generally opposed, merely because they are not already *Common*: But as I am not in any respect to press my Notion of Things upon the Belief of others, so I desire not to establish any Maxims of mine in other Peoples Opinions, farther than they think fit. I know the Relish of the Understanding, is often as different as that of the *Palate*; Hence it is that some Men condemn, what others approve; and some despise what others admire: Yea such is the Uncertainty of Men's Judgments, concerning the Excellency of Things, that no Nut of Learning was ever yet open'd, whose Contents were allowed by all to be pure Kernel: And no more has any Truth been yet discover'd, either in Physick or Midwifery, which has not been question'd, and the Detector exclaim'd against as a pedantick *Innovator*: But all that I shall say to these Things is, that, as Antiquity will never protect an Error in Judgment, so Novelty shall never prejudice me against TRUTH, whether of my own or other People's Invention.

UPON the whole, I would in fine recommend my self to the candid *Reader*'s Benevolent and Charitable Opinion, and if in any particular Point or Respect (because we are but *MEN*) I may not have had the Happiness to please, or to give Satisfaction, Pray impute it not to *Sloth* or *Idleness*, but to *Peregrination* and *Travelling*; in which it may be well suppos'd that *Studies* are too often interrupted. Remember also *that* of *Pliny*, *"haud ullo in genere veniam Justiorem esse, si modò mirum non est, Hominem Genitum non omnia Humana novisse.*" For as none of us can do all Things, nor is sufficient for All; so it is Natural for *Man* to fall, to err, and to be deceiv'd: And as we see some *Blemishes* in the most beautiful *Bodies*, so there is nothing altogether *Perfect*, among the Works of Men.

#### Farewell.

*From my House, in* New-Bondstreet, *over against* Benn's-Coffee-House, *near* Hannover-Square. 1724.

J. M.

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With a conclusive Application of the whole Work.

# THE

# FEMALE PHYSICIAN.

### SECT. I.

# CHAP. I. Of GOD.

*REASON*, and the mere Contemplation of *Nature* (abstracted from the Light and Assistance of *Revelation* or *Faith*) afford us sufficient convincing Arguments, for the *Existence* of this great and incomprehensible *BEING*; as *Heathens* themselves do testify.

ACCORDING to Plato (that most excellent Heathenish Divine) Philosophical Demonstrations are the only Catharticks (i. e. Purgers) of the Soul; being the most proper means to cleanse it from Error, and give us an exact Relish of Sacred Truths. Wherefore I shall strictly confine myself to These, in proving the BEING of this Existence, from the Maxims of all the four principal Sects of Heathen Philosophers; which I shall discuss in the briefest Terms, by only touching upon a few of their respective Proofs; viz.

*THE Naturalist* insists chiefly upon three Heads; That of *Motion*, the *Final*, and the *Efficient Cause*.

UPON the Axiom of Motion, that Sect could not exceed, or go beyond the Primum Mobile among created Beings; and therefore

allows, that there is something *above* it, which moves *itself* and is not moved by *Another*.

UPON that of the *Final Cause*, they could find no *created Being* capable of directing that *Nature*, which directs and appoints all *Creatures* to aim at some peculiar *END*; and thence conclude, that this *Nature* is directed by something *superior* to itself.

*UPON* that of the *Efficient Cause*, they confess, from the many Vicissitudes of *created Beings*, that they've all had a *Beginning*: and (because no *Beginning* can be without an *Efficient*) acknowledge, that *something* more excellent than all *created Beings*, hath created them.

*THE Metaphysician* useth a vast Variety of sublime *Arguments*; whereof I shall only give a few Instances: *viz*.

I. *THAT* every *finite Being* must needs proceed from *something* else, limiting it in that *Finiteness*, in which its *Nature* conflicts.

II. *THAT* all *Multitude* must proceed from *Unity*, as the *Motions* of the *lower Orbs* proceed from that of the *one highest*; or as the many particular distinct *Actions* and different *Motions* of the Man, proceed from (their *Superior*) the *SOUL*.

III. *THAT* the *Subordination* of the *Creatures*, one serving another, and all concurring to the *Common Good*, must needs proceed from the *Disposal* of some most wise *GOVERNOUR*.

IV. *THAT* the wonderful and incomparable *ART*, observable in the *Make* and *Form* of every the minutest Part of the least and most despicable *Creature*, must necessarily proceed from some very great and omnipotent *ARTIFICER*.

V. *THIS Sect* acknowledges also the *Immortality* of the *SOUL*, as *Cicero* witnesses; because it is an *immaterial Substance*, and independent of the *Body*: And consequently they allow it to proceed from an *immortal Author*, and to return to the *same*, after a *Dissolution* from the Body.

*AS* to the *Moralist*, his way of *Reasoning* is plainer to our common Capacities.

I. *HE* proves this *Argument* from the *natural Disposition* and *Propensity* of the worst of Men, even *Atheists* themselves, upon the Approach of Death or any heavy *Calamity*, to acknowledge some superior divine Power; as *Seneca* witnesseth of *Caligula*, &c.

II. *FROM* the *ultimate End* and chief *Good* of Man; which (according to *Plato*) is nothing *Terrestrial*: Our *Souls* being *insatiable* in this Life, have a constant *Tendency* to that particular *END*, for which we are *created*; which (in his Words) consists only in being *inseparably* united to *GOD*.

III. FROM Virtue and Vice, the Rewards and Punishments due to these from Nature and Reason; which agree with Equity and Justice, that they, who live well, should be rewarded with this their ultimate End and final Felicity: And those who live otherwise, should be punished by the Loss thereof forever. Thence they (of consequence) acknowledge, that there must be a just and powerful JUDGE, above all created Beings, to inflict this impartial SENTENCE.

*THE Mathematician* acknowledges *That* to be some *Being superior* to all others; whose *Center* he finds every where, and whose *Circumference* he can limit or discover no where. But because this *Sect* borrows the better Part of their *Proofs* from the other *three* mentioned, I shall go no farther; designing nothing but *Brevity* thro'out this Work, especially upon a *THESIS* so manifest as *This*: Which indeed I should not so much as have touched upon, considering how elegantly and copiously many very *learned Divines*, and other eminent *Writers*, have treated that *Subject*; were it not that some subsequent *Hypotheses* depend immediately upon it. Wherefore I proceed to

# CHAP. II. Of NATURE.

HOWEVER extensive this Word NATURE may be, and whatever secundary Definitions it may admit of; it is (in effect) nothing else than the Denouncer of the Divine Will and Pleasure, the Efficient CAUSE of natural Works, and the Conservant of real Existences: Or, the Order and Series of Sacred Works, obeying the Divine Will, Power, and Commands. At least I think all other Definitions of this Word, taken in whatsoever Sense, may be reduced to These following; viz.

*NATURE* is the implanted and *innate Quality* of Things.

NATURE is the Faculty and Propensity of every Mind.

NATURE is the Mixture and Temperature of the four Elements.

NATURE is the Philosopher's Axiom of Motion and Rest.

*NATURE* is *that* which giveth *Form*, by a specifick Difference, to every thing.

WHICH Power (in either Definition) can only be ascribed to that Great GOD, whose *infinite Existence* I've been hinting upon: Who is the Author of Nature and Framer of the Universe; who by his own Breath and Word, without any material Help, and at his own Will and Pleasure, created all Things. In whom all Things live, move, and have their Being. By whom a vivacious Faculty is infused through all Things; so as that (by and through HIM) all Things subsist of their own peculiar Natures and natural Qualities; and by these implanted Qualities increase, maintain, and defend themselves: And that so, that in such an immense University, and such a vast Variety of Things, nothing is indeed idle, useless, or unprofitable. Nothing is made rashly, fortuitously, or in vain; but every Thing appears appointed to some certain Use and Purpose, and determined to some settled *Course* and *Sphere* of *ACTION*: Every *Being* answering the *END* of its *Design*, and the *Design* of its *CREATION*.

AS Man was set on the *Theatre* of this World, to the *End* that he might admire, delight, and confide in *GoD* his great *Creator*; so was the *Humane Body* made for the *Divine Soul*, and the *respective Members* for the *Body*: which all voluntarily concur in the Discharge of their *peculiar Functions*, for the Benefit and Use of the *WHOLE*.

*AND* so was every *Stem* endued with its own *Faculty*, and every *Creature* with its own *Nature*; which made *Aristotle*<sup>[1]</sup> most pertinently say, "*That there's nothing so minute in the Nature of Things, nothing so abject or despicable, but may reasonably afford Men something of Admiration.*"

*NOW*, I think, we may be soon brought to this *Admiration*, when we only *view* those Things which are so evidently exposed to our Eyes: such as the *Elements*, the *Heavens*, the *Rising* and *Setting* of the *Sun*, *Moon*, and *Stars*, the *Diurnal* and *Nocturnal Vicissitudes*, the *four Seasons* of the Year, comprehending the two *Æquinoctials* of Spring and Fall, and the two *Solstices* of Summer and Winter; by whose *Decourse* or Descent *Grass* fades, and *Herbs* decay; and again, by their Ascent or *Influence*, spring up and revive.

AND again, when we consider the Animals, the Faculties and Propension of their respective Natures, how they are endued with peculiar Sense, because denied particular Reason; and how wisely they are all dispos'd, some inhabiting the Waters, some enjoying the free Air, and others possessing the Desarts; some reptile and creeping, some gradient and walking, some solivagant and wandering, some wild and fierce, and others innocent and tame: I say the marvellous and inimitable Artifice of Nature in these, and all other natural Works, is not only to be admir'd; but also the Majesty, Glory, Fullness, and Magnificence of the Great CREATOR and Institutor of this Nature is to be most highly ador'd; in whom all things originally center, as their common Source and Divine Fountain, and to whom all things are finally reduced, as the Primigenious Essence and Archetype of NATURE.

### CHAP. III. Of MAN.

MAN, to whom all sublunary Beings were subjected, is most excellently qualified, far above all other *Creatures* of this World: In him is not only the vegetative Life of *Plants*, and the sensitive Life of Animals, but also the Angelical Reason, the Divine Understanding, the true *Conjunction* and glorious *Possession* of all Things: He is not only endued with *Reason* and the *Gift of Speaking*, but also with a Mind and a SOUL, which participates of a Celestial Nature and *Divinity* itself; which can relate to the Nature of nothing else, and be compared to none but GOD himself: In and thro' whom he has a Similitude with all things, an Operation with all, and Conversation with all: He symbolizeth with all Matters in proper Subjects; with the *Elements* in a fourfold Body; with *Plants* in a vegetative Virtue; with Animals in a sensitive Faculty; with the Heavens in an Etherial Spirit; with Angels in Wisdom and Understanding, and with GOD himself (as it were) in containing and comprehending all things, except the Divine Being. Hence nothing can so expresly represent GOD as the Soul of Man, by which he is dignified and railed to the very *Image* and *Similitude* of himself. And in *MAN* the mirificent Wisdom shines the more conspicuously; in that the whole World, and the *Fabrick* of all its Contents, however concise and artificial, can in no respect compare with the noble Structure of this *Microcosm*, *MAN*. It is so marvellously concise, and so wonderfully artificial, that it seems no otherways, than as if the MAKER (designing this for his Master-piece) would have his chief Glory, Esteem, and Reputation to depend upon it, and derive itself from *Hence*; or, as if the *Maker* (designing this for one signal Instance of his *Divinity* to Men) would have us brought, merely by the Understanding and Knowledge of ourselves, to the true *Knowledge* and due *Reverence* of HIMSELF, our great ARTIFICER.

THAT we may be the more duly and sensibly affected towards him, and the more admire and reverence the Wisdom of his Nature, as he bountifully produced all things for the Use and Utility of MAN; so he most appositely disposed the Herbs of the Field, some to our Nourishment, some to our Remedies, and some to both Necessities: assimilating and assigning them to our singular Members, so that their Powers and Virtues are physically convey'd to such Parts of our Bodies, as they are adapted to by Nature.

AND in the same manner he imbued the *Roots* of the Ground with such *natural Qualities*, that they by their respective innate *Faculties*, succour and relieve those *Members*, to which they are *specifically* destinated; and such *Members* sensibly attract and imbibe from them, not only wholesome *Nutriment*, but also healthful *Remedies* peculiarly appropriated to themselves by *Nature*.

*BUT* the immortal *SOUL*, which is only peculiar to *MAN*, whereby he so perfectly assimilates and resembles *GOD*; and its *Gifts* and *Graces*, whereby he excels and out-shines all other sublunary *Creatures*; is more properly the *SUBJECT* of the *Divine*, than the *Physician*; wherefore I shall but touch it transiently.

# CHAP. IV. Of the SOUL.

*THE SOUL* is a certain *divine Light*, created after the Image of *GOD*; figured by a *Seal*, whose Character is the *eternal Word*.

*THE SOUL* is a certain *divine Substance*, individual, and entirely present in *every Part* of the Body, depending only upon the Power of *Him*, who is the ultimate *END*, and efficient *Cause* of all things; whose *Body* (according to *Plato*) is *Truth*, whose *Shadow* is *Light*, and whose *Name* is *GOD*.

AND this divine Substance of *Light*, the *SOUL*, immediately proceeding from that divine Fountain of all Things, *GOD*, (according to the Opinion of the *Platonists*) is join'd, by competent *Means*, to the grosser Matter of the *Body*. Which *Means* these *Heathens* account for in manner following: *viz*.

THE SOUL, in its Descent, is involved in an *etherial Body*, which they call the *celestial Vehicle*, or *Chariot* of the *SouL*; thro' which *Medium*, by the Command of *GoD*, (who is the *Center* of the World) it is first *infus'd* into the middle *Punct* of the *Heart*, which is the *Center* of the *Body*; whence it is *diffus'd* thro' all the Parts and Members of the *Body*, joining itself to the *natural Heat*. As a *Spirit*, generated by *Heat* from the *Heart*, it plungeth itself into the *Humours*; and thus inhering in all the respective *Parts*, it becomes equal in degree of *Proximity* to all the *Members*.

THUS the immortal SOUL is, by an immortal Engine, convey'd to, and included in the mortal Body: But when by Diseases, or otherways, these Mediums (the Heat and Humours) begin to dissolve, the Soul recollects itself, and flies back betimes to its first Receptacle, the Heart: When the Spirit of the Heart also fails, the Heat extinguishes, and the Spirit leaves the Man; He dies, and the SOUL flies away in its original Vehicle: When the Body returns to Earth, whence it came, and the Spirit to GOD, who gave it a sacred *Nature* and *divine Offspring*: which *Spirit* judging the *SOUL*, if it has liv'd ill, subjects it to some general and some particular *Torments of Hell*, abandoning it also to the Pleasure of the *Devil*: Whereas, if it has *done well*, it mounts its *celestial Chariot*, rejoicing together with the *Spirit*, and passes freely to the Choirs of *Heaven*; where it enjoys all its pure *Senses* and *Faculties*, the perfect *Knowledge* of all things, a perpetual blessed *Felicity*; and at last, the divine *Vision*, the *Possession* of the eternal Kingdom, &c.

*THUS* far I have prosecuted the *Platonick Doctrine* of the *SOUL*; so that even by *This*, the gross Opinion of such as deny the *Existence* of so *divine* a SPARK in Man, may be confuted.

AND this being sufficient for that purpose, I need not introduce any *Christian Arguments* to second it; which, however important, are commonly deem'd light by an obstinate *Sett* of Men. Wherefore I shall only add, that from the Disparity of *Manners*, *Affections*, *Dispositions*, *Capacities*, *Judgments*, *Opinions*, and *Passions* of Men, it appears most probable and evident, that every *one of us* is individually indued with a SOUL, and that with a proper SOUL, peculiar to our respective *Bodies*, according to the wise *Proverb; So many Men, so many Minds*: as well as *Horace*'s<sup>[2]</sup> Saying,

"Millia, Quot Capitum vivunt, totidem Studiorum.

——And *Persius*<sup>[3]</sup> says,

*"Mille hominum Species, & rerum discolor Usus;" "Velle suum cuique est, nec voto vivitur uno.* 

TO which Assertion the great Prophet David assents, in that GOD fashioned and made the Hearts and Minds of Men one by one, enduing them with peculiar Dispositions, and assigning every SOUL its proper natural Conditions. Hence Solomon<sup>[4]</sup> says, I was a witty Child, and had a good Spirit; yea, rather being good, I came into a Body undefiled: That is, adapted to the Disposition of his SOUL. As we see some Torches or Candles burn brighter, and some Fuel cast more Heat and Light than others; so the Splendour of every SOUL shines in a different way, and produces different Distinctions of Minds: as is evident in Youths, who (however accurately taught, and painfully instructed) are not equally capable of learning Arts, Discipline, or any sort of Erudition.

*BUT* notwithstanding that some curious *Physicians* (who have strictly scrutiniz'd the Works of Nature) would have the *SOUL* to center in the BRAIN, whence all its *Senses*, *Faculties*, and *Actions* proceed; yet some *Philosophers* have justly assign'd the *Center* of the *HEART* to its Residence: which Doctrine is also approved by the wise Solomon<sup>[5]</sup>, saying; Keep thy Heart with all Diligence, for out of it are the Issues of Life.

HOWEVER yet, if any should still obstinately persist in denying the BEING of the SOUL, I advise such to go no farther, but look into themselves, and call their own Minds to Counsel; for even there they will have a full View, not only of its BEING, but also of its supernatural Excellency; If they but seriously weigh the eximious Gifts, and unlimited Faculties of Nature, together with the egregious Ornaments of Reason, Understanding, Judgment, Memory, and many other Accomplishments, with which every Mind is abundantly endued; they will clearly perceive something of a superexcellent Nature, and Supernatural Quality in themselves; which is nothing else but what I call the SOUL, and which is also of a more noble and excelling Substance, than any corporeal Matter liable to Corruption can be.

*THIS Being*, only and alone, vivifies, rules, and governs the *Body*; furnishing it with innumerable Actions, and exercising it with as many curious Offices. Hence, from its manifold Effects, and different Operations, it has various Appellations, according to St. Augustine's Saying: "Cùm Corpus animat, Vitâq; imbuit, Anima dicitur: Dum vult, Animus: dum Scientiâ ornata est, ac Judicandi peritiam exercet, Mens: dum recolit ac reminiscitur, Memoria: dum ratiocinatur, ac singula discernit, Ratio: dum Contemplationi insistit, Spiritus: dum Sentiendi vim obtinet, Sensus." Which are all the principal *Functions* of the SOUL, whereby it demonstrates its *Power*, and performs its relative *Offices*. In the Execution whereof, St. Cyprian asserts, that the SOUL makes use of the Body, as the Workman does of the Mallet, Hatchet, or Anvil: tho' (I think) the Simile may be drawn much nearer, the SOUL being inclosed and dwelling in the *Body*, as the *Fish* or the *Snail* in the *Shell*; without which *Receptacle*, or *Rampart* of Defence, it cannot subsist: Which is evident in that, as soon as the *Body* labours under any *Grief*, the SOUL is also affected; not with a primary Affection (as some would have it) but by a *Law* of the most strict *Alliance*, and nearest *Affinity*; and hence it is, that the *Vices* and *Virtues* of the *one* are transfus'd, and flow into the *other*.

THIS is the only reason why, when the corporeal Organs or Instruments are vitiated or impeded, the SOUL cannot explicate its own Faculties, according to the Words of Solomon<sup>[6]</sup>; The corruptible Body presseth down the Soul, and the earthly Tabernacle weigheth down the Mind. Which Truth may serve to obviate two Objections; viz. That of Childrens being destitute of the SOUL, and that of the SOUL's growing up with Youth, and declining with Age, or Sickness: Since, tho' it less displays itself in Infancy, Sickness, and Dotage, yet it still is, and continues furnished with its proper Faculties, and that from the Beginning of Life, until its End; neither does the SOUL in its Substance ever suffer the least Diminution, but only by the Ineptitude of the Instrument or Organ, it may be hindered in the Discharge of its Functions, and Execution of its Offices.

AND tho this divine Substance can contract nothing of Vice, Spot, or Contagion from the Concretion of the corruptible Body: yet as a thick Cloud obscures the Sun-Beams, and overcasts its Light; or, as by holding a versicolour Glass to our Eyes, Matters appear different from what they really are: So the Intemperature of the Body obscures the Light of Reason, and overshadows the Intellects of the Mind, which of course obstructs the Functions of the Soul. Hence it is, that a delirious or drunken Man thinks he sees double, or two things, tho' one be the only Object of his Eyes: And as, for this reason, melancholick Persons imagine Absurdities, and feign Dreams to themselves; so cholerick Persons grow insensibly hot, and are suddenly incensed by the Fumes of noxious Humours oppressing the Brain.

*BUT* there is another *Sett* of Miscreants, who don't so much deny the *Existence*, as the *Immortality* of the SOUL. This I esteem a Piece of the grossest *Impiety*, to think *that* spiritual Substance *Mortal* and *Frail*, which is inspir'd in *Man* by the Divine *Will* and *Command*, proceeding immediately from the very Substance of *GOD* himself: Since if Man be made after the *Image* of *GOD*, to express his *Similitude*, he must needs participate of his *Nature*, and consequently be a *Fellow-Sharer* of Eternity: And if the *human* SOUL be Partaker of the divine *Essence* or *Substance*, as *GOD* is *eternal* and incapable of *Decay*, so it must needs be *eternal*, and free from all *Corruption*.

*MOREOVER*, *GOD* form'd and made all other *Things* for the sake of *Man*, but *Him* he made for his *own sake*, and therefore like unto HIMSELF; for which reason, he was pleas'd to agglutinate *Immortality* to *Mortality*, and *Divinity* to *Humanity*: By which Means, the *divine* NATURE incorporates, as it were, with the *human*, and the *human* is united to the *divine*.

*HENCE* we may clearly see how marvellously GOD has been affected towards us from the *Beginning*; how much he delighted in us, and desired the entire *Fruition* and full Enjoyment of our perpetual *Familiarity*, and eternal *Fellowship*; which *Truth Christ*<sup>[7]</sup> (the Wisdom of the *Father*) confirms by his own *Testimony*.

AND such is still the great Love and Propension of *GOD* towards *Man*, that all Things (thro' his *Grace*) are communicated to *him* by his only *SON*;<sup>[8]</sup> and that more especially because we are conditional *Sharers*, equal *Inheritors*, and *Joint-Heirs* with him, agreeable to the<sup>[9]</sup> *Apostles Phrase*; and whatever is express'd in *CHRIST*, may also be in *Man*: Since as *he* is *eternal*, and lives for ever, so *Man* (by his *Grace* and *Merits*) does the same; for *he* having sufficiently bruised *Satan*'s Head, led *Captivity* Captive, and conquer'd *Death*, rose again, and became the *Prince* and *Captain* of so glorious a *VICTORY*, that all *Men*, by virtue of that *Triumph*, might be raised up again at the Last Day, and *that* to participate of an *IMMORTALITY* of *Welfare* or *Woe*.

# CHAP. V. Of the FACULTIES of the SOUL.

*Plato, Alcinous,* and many other learned Men, do agree, that the *heavenly Spirit's Composition*, mixing *Fire, Air, Earth,* and *Water,* made of them all, put together, *one* BODY; which they subjected to the Service of the *SOUL*, assigning the several *Provinces* of the *one,* to the sundry *Faculties* of the *other*: To the *meaner* of them, mean and low *Places*; as to *Anger,* the *Midriff*; to *Lust,* the *Womb,* &c: but to the more *noble Senses,* the *HEAD,* as the *Tower* of the whole *Body.* 

AS they divide these SENSES into *external* and *internal*; so they subdivide the *external Senses* into *five*: To which are allotted as many proper *Organs* or *Subjects*, being so order'd, that they which are placed in the more eminent *Parts* of the *Body*, have the greater Degree of *Purity*.

FOR the Eyes, placed in the uppermost part, are the most *pure*, and have an Affinity with the Nature of *Fire* and *Light*. The *Ears* have the second Order of *Place* and *Purity*, and are compar'd to the *Air*. The *Nostrils* take the third Order, and have a middle Nature betwixt *Air* and *Water*. Then the *Organ* of *Tasting*, which is *grosser*, and most like to the Nature of *Water*. And, lastly, *Touching* being diffus'd through the whole *Body*, is compar'd to the *Grossness* of *Earth*.

AND of these, the more *pure SENSES*, are those which perceive their *Objects* farthest off; as first *Seeing*, then *Hearing*, then *Smelling*, which are all more pure than *Taste*, which doth not perceive but what is *nigh*: whereas the *Touch* perceives *both Ways*; it perceives *Bodies nigh*: And as *Sight* discerns by the *Medium* of the *Air*; so the *Touch* perceives, by the *Medium* of a *Pole*, Bodies *hard*, *soft*, *dry*, *moist*, &c. *NOW* this Sense of *Touching*, is common indeed to all *Animals*: However, 'tis certain that *Man*, in this, as well as in the Sense of *Tasting*, excels all others: whereas, in the other *three*, he is exceeded by some *Brutes*, as by a *Dog*, which *hears*, *sees*, and *smells* much more acutely than *MAN*. Besides, the *Lynx*, and *Eagle*, see more acutely than *Man*, or any other *Creature* in the World.

AS to the *interiour SENSES*, they are (according to Averroes) divided into Four; whereof the *first* is called the Common Sense, because it collects and perfects such Representations as are drawn-in by the external SENSES. The second is the Imaginative Faculty, which retains those receiv'd Representations, and presents them to the third Faculty of internal SENSE; which is call'd the Cogitative Faculty, Phantasy, or Power of Judging: Because it perceives and judges by the Representations received, what Nature or Kind of Thing that is, of which the Representations are made; and commits those Things thus discerned and adjudged, to the fourth Faculty of Inward SENSE, the Memory, to be kept there, and retain'd by it.

AND these Four SENSES have their respective Organs in the Head: Common Sense and Imagination possess the two former Cells of the BRAIN, as the Cogitative Faculty doth the highest, and middle Part of the Head; the Memory taking up the hindmost Part thereof.

THE Organs of SPEECH and VOICE are as many as the inward *Muscles* of the *THORAX*, betwixt the *Ribs*, *Breasts*, *Lungs*, *Arteries*, *Wind-pipe*, the Bending of the *Tongue*, and all Parts and *Muscles*, serving for Respiration, or Breathing: But the proper and immediate *Organ* of *SPEECH*, is the *Mouth*, in which are fram'd *Words* and *Sentences*, by the *Tongue*, *Teeth*, *Palate*, *Lips*, &c. above the *sensitive* SOUL, which expresseth its *Powers* by the *Organs* of the Body. The *incorporeal Mind* possesseth the highest Place, and hath a *double Nature*; the *one* called the *Contemplative*, the *other* the *Active Intellect*, because of their respective *Faculties*.

ACCORDING to the three-fold Order of its Faculties there are three APPETITES in the SOUL. The first is natural, which is an Inclination of Nature unto its End. The second is Animal, which is divided into irascible and concupiscible, relating to Anger and Desire. The third is intellective, and is call'd the WILL; which (from its own deprav'd Quality) is affected with four PASSIONS, as the Body sometimes also is. The first is called Oblectation; the second, *Effusion*; the *third*, *Ostentation*; the *fourth*, and last, is what we commonly call *ENVY*. And

THESE four PASSIONS arising from a deprav'd APPETITE of *Pleasure*; its *Grief* or *Perplexity* doth occasion as many contrary *PASSIONS*: viz. *Horror*, *Sadness*, *Fear*, and *Sorrow* at another's *Good*, without its own *Hurt*; which is call'd *ENVY*, being a *Sadness* at another's *Prosperity*, as *Pity* is a certain kind of *Sadness* at another's *Misery* or *Adversity*.

*BUT* not to insist on these *Topicks*, I shall only add a few Words upon the *PASSIONS of the Mind*; which are nothing else than certain *Motions* or *Inclinations*, proceeding from the *Apprehension* of any Thing, as of *Good* or *Evil*, &c.

THESE APPREHENSIONS are of three different Sorts, *viz. Sensual*, *Rational*, and *Intellectual*. And according to *them*, there are *three* Sorts of PASSIONS in the *Soul*; the *first*, following the *sensual* APPREHENSION, respects a temporal *Good* or *Evil*, under the Notion of *Profit* or *Loss*, *Defence* or *Offence*, &c: and they are called *Natural* or *Animal Passions*.

THE second following the Rational APPREHENSION, respects Good or Bad, under the Notion of Virtue or Vice, Praise or Disgrace, &c: and they are called Rational or Voluntary Passions.

THE third, following the Intellectual APPREHENSION, respects Good or Evil, under the Notion of Truth or Falsehood, Justice or Injustice, &c: and this Sort is call'd Intellectual Passions.

*BUT* these *three* different Sorts proceed all from the *Energy* of the SOUL; which is divided into *Concupiscible* and *Irascible*, both respecting *Good* and *Evil*, tho' under different Notions: which Division affords us *eleven* PASSIONS of the Mind, *viz. Love*, *Hatred*, *Desire*, *Horror*, *Joy*, *Grief*, *Hope*, *Despair*, *Boldness*, *Fear*, and *Anger*; all which might be particularly defin'd: But as *that* is more the *Philosopher*'s than the *Physician*'s Business, I shall proceed to that which is more strictly my *Province*.

# CHAP. VI. Of the HUMANE BODY.

BESIDES what has been said in the preceding Chapters, touching the SOUL, its Powers and Faculties; when we duly consider the beautiful *Form* and amiable *Figure* of the *BODY*, so nicely adapted to the sublime Qualities of the SOUL, with its curious Structure, and majestick *Stature*, erected to *Heaven*, whither its natural Tendency proportionable leads: besides the Symmetry and exact *Commensuration* of all its *Parts*: Surely we cannot, I hope, without the greatest Amazement, contemplate and admire the incomparable Art, and incomprehensible Skill, of the great ARTIFICER: And with magnificent *David*<sup>[10]</sup>, break out in *Eulogies* of Praise, and ardent *Exclamations* of Love and Admiration.

BUT more especially: first, when we distinctly view the slender Filaments, the minute Vessels, the elaborate Contextures, and various Configurations of the different ORGANS of this BODY. Secondly, When we duly consider the Power of its natural Faculties, the Situation of the *Entrails*, the Rise of the *Nerves* from the *Brain*. the Ducts or Conduits of the Arteries from the Heart, and the Original of the Veins from the Liver. Thirdly, When we call to remembrance, and ponder what I have been hinting upon, to wit, the *Power* of the natural *Faculties* of the SOUL, by which they execute their relative Functions; besides, the Ætherial Spirit (the Seat and Vehicle of our natural Heat) dividing it self into a three-fold *Diversity*, and appropriating to itself as many *Residences*, viz. the Animal in the Brain, the Vital in the Heart, and the Natural Spirit in the *Liver*: And then again, how these *three*, by a Fomentation of native Heat, and nutritious Humours, cherish and refresh the whole BODY supplying every *Part* with requisite Strength and Vigour. contemplate Fourthlu. When at last we that Piece of incomprehensible Artifice, which gives a respective Species and *Form* to every particular *Part*, and implants a peculiar *Faculty* in every distinct *Member*, inducing such an Excellency into the whole BODY; that is, the *Formation* and *Delineation* of the *FOETUS* in the *Womb*.

*THIS* is such a great and curious *Master-piece*, that all *Others*, as well as the *Physician*, will find it not only their *Duty*, but also their great Satisfaction and Pleasure, to know and examine into this inimitable *MACHINE* of the divine *Architect*.

THE great Galen was converted at a Dissection, and durst not but acknowledge a Supreme Being, upon that Survey of his admirable Handy-work; saying,<sup>[11]</sup> "How much is it our special Duty therefore to admire the Wisdom and Providence of the Workman? Since, tho' it is far more easy to set forth in Words the Beginning of Things, than to form the Work; yet our Expressions and Words fall so much short of the Wisdom of him that made us, that we are not able to explain, what gave him so little trouble to make."

AND as this was a Man who had not been too *devout*, so if the most *Profligate* would seriously weigh and consider the elegant *Constitution* of such a vast Variety of different *Textures*, the Nicety of these *Organical Works*, the Curiosity of these *Embroideries*, and the Exactitude of these *Figures*, which appear and seem rather to be fitted for Admiration than Use; they would readily conclude with that great *Naturalist*, that these Things are the evident *Characteristicks* of some divine and omnipotent *Power*, in that they are no ways to be accounted for by such *natural Causes*, as may be thought sufficient to explain the *Phænomena* of ignobler Beings.

THIS BODY, therefore, being the Vessel and Receptacle of the SOUL, the Engine and Instrument, in and through which it operates; I judge it to be our incumbent *Duty*, to take special Care, and nice Observation of both *SOUL* and *BODY*: Since (in this Life) the *one* cannot consist without the *other*, or discharge its respective *Offices*; the *one* always requiring the *Ministry* and *Assistance* of the *other*, which the *omniscient ARTIFICER* has so wisely ordered and ordained from all Eternity.

*HOWEVER* yet, I cannot agree with St. *Cyprian*, that the animated and sensible Body is only used by the SOUL, as mechanical *Instruments* are by the *Workman*; since I think a more proper *Simile* may be drawn from the *Sun* and *Moon*: For tho' the *Moon* borrows LIGHT of the Sun, she is not altogether devoid of such a Power or Influence as is proper to herself, being guided and sustained by a peculiar Motion, whilst she absolves her own Circle; taking LIGHT from the Sun, no otherways than as a Looking-Glass, polish'd Brass, or Copper, takes Splendor or Refulgency from an opposite Fire or Light: For notwithstanding she exhibits no Light, unless illuminated by the Sun; however yet, she is not idle or desidious in accomplishing her monthly Course, and measuring her own Space of the Heavens, and that without any Assistance of the Sun. So the SOUL invigorates and affords Strength to the BODY, which however is not altogether without its own implanted Faculties and natural Powers; the four Qualities of Humours, with which ev'ry BODY abounds, capacitating and adapting it to all Things within its own Sphere.

FARTHER, as the Sun suffers ECLIPSES, and is obscured by the Intervention of the *Moon*; and the *Moon* again (in like manner) is eclipsed and obscured by the Objection or Interposition of the *Earth*, the Sun always running thro' the Ecliptick Line in the same Degree, and the Moon in opposite Degrees: So BODY and SOUL are subject to their own Impediments and Eclipses; sometimes defending, and sometimes offending one another; both sympathizing mutually, and participating equally of one another's Portion. As it is evident from the very Words of our *dying SAVIOUR*, who, by reason of his Human Weakness, broke out into these<sup>[12]</sup>Words, My Soul is exceeding sorrowful, even unto Death: Which Death, in the next Verse, he, in a manner, deprecates of the FATHER. For though he was not yet insulted, or laid hands upon, yet his whole *Mind* and *Thoughts* running upon his approaching *Danger*, he was seiz'd with such Horror and Trepidity, as express'd a *bloody Sweat*, which streamed from his whole Body: so that the Acerbity of his Grief must (of consequence) have been communicated to both Parts; and beginning in the SOUL, did thence redound into the BODY.

*HENCE* arises a rational and natural *Argument*, that as SOUL and BODY do not only *act* in and thro' one another, but also *suffer* mutually, always *sympathizing* with each other, and bearing equal *Share* in the *Troubles*, *Misfortunes*, and *Inquietudes* of this Life; and that as they *both* inseparably constitute the *MAN*: So, by reason of that natural *Sympathy*, and proximous *Affinity*, as the SOUL enjoys *Immortality*, the renew'd BODY (by the Mystery of the *RESURRECTION*) will be a future *Partaker* of the *same Reward*; and consequently the *whole Man* must enjoy *one* and the *same State* of *Beatitude*; or *otherways*, as he shall have promerited. Whence I proceed to

# CHAP. VII. Of the Formation of the EMBRYO.

THE spirituous Substance of both SEEDS, by its own generative and active Qualities, in a well disposed WOMB, produceth a small Consistence within the Space of Seven Days, call'd the GENITURA; which contains three<sup>[13]</sup> Bullæ (so term'd by Physicians) superlatively MINUTE, design'd for the three Spermatick Members: The one containing the purer Part of the Seed, full of Vital Spirit, for the Heart; the other, the more thick and pinguid Part, full of Natural Spirit, for the Liver; and the third, the more cold and crude Part, full of Animal Spirit, for the Brain.

ACCORDING to<sup>[14]</sup> Hippocrates's Definition of the GENITURA, it appears the *likest* of any Thing to a raw immature EGG, inclosing a certain red Liquor, with some pale-colour'd Fibres, of the finest *Contexture*, not unlike the Filaments of a small Spider's Web, wrap'd up with the said red thick BLOOD in the Pellicule.

BUT in this place I must farther observe, that the abovesaid spirituous Substance, in which the effective Virtue of CONCEPTION resides, is endued with four distinct Faculties, which perfect as many different Operations, all subordinately effected in the Constitution of the CONCEPTION, viz.

I. *THE animative* or *vivificating* Faculty of the *MENSTRUUM*, called by some the first *Constitutive Faculty* of *Conception*, operating, as above, in *Seven Days*; which is otherwise term'd the Time of *Spumification*, *Lactation*, or *Coagulation*.

II. *THE separative* or *severing Faculty* of the Parts of the grosser *Materials* of the *Conception*, destinated for the respective *Constitution* of the different *Organical Members*; which, being the Work of the next *Eight* or *Ten Days*, is perfected about the 15th or 17th *Day* from *Conception*; and this is called the Time of *Lineation* or *Ramification*, when the *GENITURA* receives the Name of *EMBRYO*.

III. *THE collocative* or *ordinating Faculty* of all the severed material Parts of the different *Members*, disposing and placing them according to the *Law of Nature*, in due Order, Figure, and Situation; which, happening the following<sup>[15]</sup> *Twelve* or *Fifteen Days*, about the 27th or 32d Day from *Conception*, is called the Time of *Carnification*; when the Embryo receives the Name of *Foetus*.

NOW according to the Maxims of Astrology, as all inferiour Bodies are govern'd and influenced by Superiours, so the Seven Planets have Dominion over the Man, not only from the Day of Birth, but also from the Moment of Conception; yet not All at one and the same Time, but every one in their Order, reigning each its peculiar Month. According to which Principles, SATURN reigns the first Month, suppeditating the humid and liquid Substance of the GENITURA and EMBRYO, through his frigid and siccid Quality's due Coagulation for generating the Man; by virtue of whose Siccity the uterine Retentions also happen.

IV. *THE formative* and *figurating Faculty* of all the *Members* of the Body, imparting their respective *Shape*, *Figure*, and natural *Form*, to every particular *one*; which being the Work of the next *Eight* to *Eighteen Days*, is perfected about the 35th, to the 50th Day from *Conception*, and is called the Time of *coarticulate Formation*, when the *FOETUS*, or *CYEMA*, is stil'd *Infant*.

AND in this, the second Month, JUPITER is supposed to exert his Power in the Seed, by his calid and humid Qualities; and thereby to vivify the Spirits, strengthen the Members, and give Augmentation and Growth to the whole FOETUS: So that the interior Members are not<sup>[16]</sup> only conspicuous, but also Legs and Arms appear perfectly delineated, and are (at this time) distinctly visible; when also the Head takes its Distance from the Shoulders, the Arms from the Sides, and the Legs are plainly parted.

BUT, however, the above-mention'd Four remarkable Times may be also thus distinguished; viz. The first perfects the Work of Spumification and Coagulation; the second the Vegetative; the third the Sensitive; and the fourth begins the Rational Operation: Altho' this cannot yet be discern'd, because of the Redundancy of HUMOURS.

FROM the beginning of this Chapter, 'tis evident that the more noble, or three chief Parts take the first beginning to FORMATION,

tho' perhaps last *perfected*, which forthwith distribute their respective *Branches* to the whole *Body*; as the *HEART* sends forth the *Arteries*, the *LIVER* the *Veins*, and the *BRAIN* the *Spinal Marrow*, with all their other *Dependencies*: And according to *Aristotle*, (who says, *there must be a different MATTER to every different FORM*); So indeed every distinct *Part* of the Body is *form'd* of a different Substance, according to the different *Nature* and singular *Disposition* of every particular *Part*.

HOWEVER, I shall not here pretend to go much farther in describing the FORMATION, it being more the Philosopher's than the Physician's Business: But whatever farther Progress others may attempt, I judge it a most difficult and ambiguous Matter; for who can be so well vers'd in those Indiscoverables? Or, who can pretend to know sufficiently what is done in those Obscurities? The Series of Nature being profounder than our Understandings, is consequently above our nicest and exactest Scrutinies: Which Consideration makes me astonished at the Logical Dissertations that some Men offer on these Principles, even on the most minute Particles, and smallest Proportions, rashly and inconsiderately assigning every respective one of these, a precise definite Time for their FORMATION.

I HAVE often been inclin'd to think, that such SCIOLISTS have not read, or at least not consider'd the Words of the<sup>[17]</sup> Preacher; As thou knowest not what is the Way of the SPIRIT, nor how the Bones do grow in the Womb of her that is with Child; even so thou knowest not the Works of GOD that maketh all. Neither do I find that the wise<sup>[18]</sup> Hebrean ever enter'd upon such Syllogisms, who (to the contrary) testifies that the Counsel of GOD is not to be known; that our Thoughts are miserable, and our Devices uncertain. Upon which Authority, I say, in this Case, as *that Labour* is commendable which can be compar'd to *Possibilities*, so to dive into those *Things*, which exceed our *Judgments*, and admit of no possible *Comparison*, is nothing better than *Folly*. Wherefore All that is further requisite, or possible for us, is to contemplate and admire the Greatness and Elegancy, the Sublimity and Profundity of this wonderful and amazing Work of *FORMATION*; which *Subject* (we find) hath been the frequent Contemplation of the Royal Prophet<sup>[19]</sup>, particularly expressing himself, in the most eloquent and sublime Terms, according to the *divine Light* of his illuminated Understanding:

Saying, Thou hast possessed my Reins: Thou hast ordered me in my Mother's Womb. I will praise thee, for I am fearfully and wonderfully made, marvellous are thy Works, and that my Soul knoweth right well. My Substance was not hid from thee, tho' I was made in secret, and curiously fashioned in the lowest Parts of the Earth. Thine Eyes did see my Bones, yet being imperfect; and in thy Book were all my Members written; which Day by Day were formed, when as yet there was none of them. Whence I proceed in order, to

# CHAP. VIII. Of the Animation of the FOETUS.

*THE human Fœtus* being duly form'd and organiz'd about the 50th Day at the latest, as we observed in the preceeding *Chapter*, it remains to be *animated*, and that with a three-fold *SOUL*, *viz*. a *vegetative*, a *sensitive*, and a *rational Soul*.

THE First of which, according to the most learned Fortunius<sup>[20]</sup> *Licetus*, &c. may be ascribed to the *MOTHER*, as chiefly proceeding from the Power of her Menstruum. The Second may (by the same Authority) be ascribed to the *Power* and *Spirit* of the *Paternal Seed*; but it is the more generally received Opinion, that the *vegetative* Soul is generated from the *Commixture* of both Seeds with the *Menstruum*, and therefore as much to be ascribed to the *one*, as to the other, PARENT: And that also the sensitive SOUL proceeds from the proper natural Faculty of the organiz'd Fætus, as the rational SOUL doth from the immediate Infusion of the great CREATOR. Touching which Infusion, I desire not to meddle with the Controversy that has so long subsisted betwixt Philosophers and *Divines*: Only as I have noted in *Chap*. iv. the Opinion of the greatest Masters of Nature; so if, in this, we could, from the Dictates of Faith and *Religion*, as well as from the Maxims of *natural Philosophy*, set the Matter in a clearer *Light*, I humbly presume it would not be *disagreeable*: Since the *Principles* of *EITHER*, taken separately, are in themselves *mysterious*, and can never be fully comprehended by some; whereas, both taken jointly, I mean, the Arguments of the one, to reinforce the Positions of the *other*, may be satisfactory to *all*.

*IN* order to which, I *first* observe; That the *Influx* of celestial Bodies exerts its Power very efficaciously in all *Sublunaries* and *Inferiours*. Hence, touching the *four Humours* of our Bodies, *MARS* is thought to excite the *yellow Bile*, as *SATURN* exasperates

*Melancholy*; and *LUNA* to encrease *Phlegm*, as *SOL* and JUPITER govern the *Blood*.

SECONDLY, I observe, That the Power and Influence of the *PLANETS* lies effectually in *Metals, Stones, Gems, Herbs, Roots, and all Subterranean Bodies*; as *Gold, Silver, Copper, Iron, Tin, Lead, and whatever is contained in the Bowels of the Earth, whether it tend to Use or Necessity, Profit or Pleasure; the Virtues and Increase of them all proceeding from their peculiar STARS.* 

THIS we may easily conceive, by considering that GOD, who made all things for his singular, great, and good Ends, would never have exhibited to us such a fair and spacious *Heaven*, such a *Course*, *Order*, *Continuation*, and *Series* of *STARS* to delight and feed our *Eyes*, like an empty *Shadow*, or an idle *Picture*: But, to the contrary, the *Trees*, the *Roots*, the *Branches*, the *Seas*, the *Rivers*, the *Streams*, and whatever runs thro' the Veins of the *Earth*, or graces the Surface of *Sea* or *Land*; yea, whatever is, or may be distinguished by the Variety of *Things* or *Names*, together with our *Bodies*, and their implanted *Humours*, *HE* subjected to the *Heavens*, that they might perceive some superiour *Impulse*, *Motion*, and *Agitation* from the *STARs*, and experience the Utility of their *Effects*.

HENCE the learned Arabians ascribed the Bodies, Actions, and Dispositions of Men to STARS and SIGNS: As Proclus teacheth, that Superiours and Inferiours are manifestly one in the other. But these Inferiours are defin'd, some to be SOLAR, others LUNAR; on which the SUN and MOON make strong Impressions, like those of the STARS and SIGNS they are under. In reference to which, they distribute the human Body among the Planets and Signs of the ZODIACK; and most ingeniously demonstrate, that as the Triplicities of those Signs answer one another, and agree in Celestials, so they also concur in the Members of the BODY; which Observation, daily Experience also confirms. As for example: By a Coldness of the FEET, the Belly and Breast are affected; and these Members answering to the same Triplicity, any proper Medicine apply'd to the one, helps the other; as by warming the Feet, the Pain of the Belly ceaseth.

WHEREFORE, if we consider the many occult Qualities, and secret Influences of celestial Bodies, besides these three which are manifest to us, namely, *Heat*, *Light*, and *Motion*, we shall readily and rationally agree with *Astrologers*, as well as *Philosophers*, in this Point; that the *celestial Bodies* concur with other *natural Causes*, in the regular *Procession* of all the different Steps of the *Conformation* and *Constitution* of human *Conception*.

*MOREOVER*, in the Work of *Animation*, they concur not only *physically*, but *efficiently*; not as formal, final, or material *Causes*, but meerly by *Action*; upon which Great *Efficient*, all other *Causes* depend. And yet they concur *efficiently* not as the only particular, immediate, and proximous *Agents*, but as the common remote, physical *Agents*, moving *physically*. Now this *Aristotle* also plainly teacheth, saying; that, "As this *inferiour World* hath Existence from *superiour Beings*, so all worldly Existences must necessarily be ordered and directed by *those*, as the common *efficient Cause* of all *Sub-celestials*."

*BUT* I would farther observe, that the only *ACTION* of *those Bodies* in this Work, is to dispose and govern all proper, special, and singular *Causes* pertaining to *Nature*, preserving them *physically*; that is, by their *Motion*, *Light*, and *Heat*.

THE reason I call those Bodies the remote, not the proximous Agents in the Work, is, because they do not in Substance, Motion, or Light, immediately reach or touch the FOETUS; but only, by their secret Qualities and Influences, extended to these inferiour ORBS, penetrate through, and affect the WOMB, tho' never so closely shut up: By which means, the Spirit and Power of the SEEDS, the Faculties of the Womb, and all concurring Causes are fomented, govern'd, promoted, preserv'd, and determin'd.

*HOWEVER*, in this *Constitution*, (whatever *natural Causes* may be advanc'd) the great *GOD* is indisputably and undeniably the prime and principal *Efficient*: for all other *Causes*, whether proximous or remote, without his *Concurrence*, would be but vain and insufficient, for the following Reasons.

I. *HE* is the only primary *AGENT*, not *physical*, because not acting *physically*; not operating by *Motion*, because *immoveable*: but without *Motion*, and all other *physical Helps*, he powerfully and clearly displays *HIMSELF*, most eminently officiating by his own *All-sufficiency*, and Appointment of *Nature*.

II. *HE* likewise, as the prime, common, remote, and physical *CAUSE*, governs and directs all *other secundary Causes* 

supereminently, which are subjected to, and dependent upon *HIMSELF*; in constituting, organizing, and fomenting the *CONCEPTION*.

III. *HE* finally, as the proper, proximous, and immediate CAUSE, or AGENT, directing *none else*, nor using any *other Assistance* in the Work, neither being *directed* nor *assisted* by any *other*, gives to the organiz'd human *FOETUS* its greatest Completion; and the *ultimate finishing Stroke* of consummate *Perfection*, by infusing and communicating to it a *Mind* in a rational *SOUL*, by which the *FOETUS* becomes *MAN*.

AND this Infusion comes immediately from, and of HIMSELF, who is (in Aristotle's Words): "The Form and Former of the UNIVERSE, the ultimate End, the final and efficient Cause of all celestial Bodies, and created Beings."

BUT now, as to the Time of this great Work of ANIMATION, Naturalists agree, that it requires double the Space that FORMATION had from Conception: which seems so far probable, because at that time, and no sooner, the Infant may be sensibly perceiv'd to move; and that by the Influence of calid and siccid MARS, who (according to Astrologers) now takes charge of it in the third Month. For by virtue of his hot Quality, he perfecteth the three principal Members, separating the Legs, Arms, and Head (in due proportion) from the rest: Wherefore this auspicious Planet is called the AUTHOR of the Infant's Motion. So that, in fine, conformable to what is laid down in the preceeding Chapter, the Work of ANIMATION is perfected, at soonest, about the 70th, and at latest, about the 100th Day from CONCEPTION. Which being done, I proceed to the next principal Work in constituting the MAN.

# CHAP. IX Of the MATURATION of the INFANT.

*NATURALISTS* allow the *Infant*, for its ripening in the *Womb*, and to the legitimate *Time of Birth*, treble the *Space* that *ANIMATION* had; as *Physicians* agree in allowing *this* treble the Time that the *first Motion* had from *Conception*: and from hence the 4th, 5th, 6th, 7th, &c. are called *ripening Months*.

*IN* the *fourth Month, Astrologers* will have the *Planet SoL* to reign over the *INFANT*; whose *calid Quality* gives it entire *LIFE*, fully perfecting the *Members*, excavating the *Bones*, and amplifying the *Pores* and *Passages* of the Body.

AS, in the Fifth, VENUS presides over the INFANT; who, by her *Frigidity* and *Humidity*, mitigates the *Heat* and *Siccity* impressed on it by the *superiour Planets*, absolutely perfecting the *Lineaments* of the *external Members*. According to which Principles, she, in a word, forms the *Privities* of both *Sexes*; and adds Beauty and Ornament to the *Nose*, *Mouth*, *Hands*, *Fingers*, and all the rest of the *visible Parts*.

AS also, in the *sixth Month*, MERCURY takes his Turn to assist the *INFANT*, which puts the last finishing Hand to the *Work*; perfecting the *Organs* of the *Voice*, enlarging the *Eyes*, *Eye-lids*, *Brows*, and *Nails*; promoting and confirming the *Instruments* of *Motion*; and at last, absolving and compleating whatever the *others* have commenced.

I shall only farther *hypothetically* observe, that, if the INFANT was perfectly *form'd* about the 35th *Day*, it was *animated* about the 70th, and consequently will be *born* about the 210th *Day*, the last of the 7th *Month*.

*IF* the *Formation* was perfected about the 40th *Day*, the *Animation* happen'd about the 80th, and the *BIRTH* will (unluckily)

happen towards the close of the 8th Month.

*IF Formation* happen'd the 45th, *Animation* follow'd the 90th *Day*, and the *BIRTH* will succeed about the close of 9 *Months*.

*IF Formation* was compleated the 50th, *Animation* follow'd the 100th Day, and consequently the *BIRTH*<sup>[21]</sup> will appear about the last of 10 *Months*; and so of any other certain *Time*, definite *Day*, or stated *Hour*.

*IT* is, in all the above-mentioned *Cases*, to be farther animadverted, that the *MALE*, as he proceeds from the more *calid*, *siccid*, and *spirituous Seed*, arrives sooner to Perfection in *Formation* and *Animation*; and is consequently *sooner born* than the FEMALE, whose *Nature* is more *cold*, *flaccid*, and *weak*, even in the *WOMB*: Hence an Allowance of a few Days more or less<sup>[22]</sup>, may be justly made, according to the *Sex*.

# CHAP. X. Of the NUTRITION and POSTURE of the INFANT.

*THIS* is manifest, that the *FOETUS* is nourished in the *first Months*, by the *Umbilical Vessels* only: But the several following *Reasons* engage me to think; that, in the *latter Months*, it is alimented by the *Mouth* also, and *That* by a glutinous *limpid Liquor*: Which, being (probably) secreted from the *AMNION* for that Purpose, is found to surround it.

I. *BECAUSE* this *Liquor*, which seems very proper for that *Use*, is found not only in the *Mouth*, but also in the *OEsophagus* and *Stomach* of the *INFANT*.

II. *IT* is found *changed* in the smaller *Intestines*<sup>[23]</sup>; and being *chylify'd* in the *Ventricle*, it turns to *Excrements*, call'd MECONIUM, in the RECTUM, or *strait Gut*.

III. *WE* find a *large* Quantity of this *Liquor*, surrounding the *FŒTUS* in the *first Months*, and but *little* in the *last*; which cannot probably be consum'd any *other* way, than by the *INFANT*.

IV. *BECAUSE*<sup>[24]</sup> that the *Oesophagus*, *Intestines*, *lacteal Vessels*, and *thoracick Duct*, may continue open, and be gradually accustomed to their respective *Functions*.

THE Infant's Situation, in the first and middle Months, is various; but, in the latter, it is commonly observ'd to be of an oval Figure: Sitting, with the Head hanging down, and the Chin upon the Breast; the Neck bending forwards, the Back is round; embracing the Knees, which are drawn up towards the Cheeks with its Arms; the Hands commonly hanging down, seem to embrace the Feet; the Heels cling close to the Buttocks; and while the Head is uppermost, the Face is towards the Mother's Belly. BUT about the Time of Birth; the HEAD, which was always before Lighter, becomes considerably Heavier than any other Part. And its ponderous Bulk bearing much smaller Proportion to its Substance than it did before, must needs (consequently) tumble Heels over Head, in the Waters of the MEMBRANES; and the Head falling downwards, the Feet get uppermost, and the Face is turn'd towards the Mother's Back.

*BUT* because this is a painful and irksome *Posture*, however favourable for its *EXIT*; the *Motions* it makes for its Relief, occasion frequent *Pains* to the MOTHER, which cause a Contraction of the *WOMB*, for the Expulsion of the *Infant*.

*AND*, in short, this being the *natural Posture* of the *Infant* in the *WOMB*, its *preternatural Positions* may from thence be easily conceived.

# CHAP. XI. Of the MEMBRANES and WATERS.

*THE MEMBRANES* of the *Infant*, are *Two* in number, the one *exteriour*, call'd *CHORION*; the other *interiour*, *AMNION*: which are so contiguously joined *one* to the *other*, that they appear like one and the same *MEMBRANE*; and, because they are only separable by *Art*, as a *Silk-Lining* from a *Cloth*, are sometimes call'd the *double MEMBRANE*.

*THE Chorion* is rough and unequal on the *Outside*, but smoother *within*; where it closely unites itself to the thinner and transparent *Amnion*.

*THIS Amnion* covers the *Placenta*, and is fixed to the *Inside* of the *Womb*, by its *Circumference* on all Sides.

THESE MEMBRANES contain the WATERS, in which the Infant swims; which WATERS encrease along with the Infant, generating by degrees, and proceeding from the moist Humours, exhal'd (by way of Transpiration) from the tender Infant's porous Body.

THESE WATERS are of infinite Service to the Infant, during the time of Maturation: As they are to both Mother and Child in the time of BIRTH; which hereafter will more amply appear. And as in Conception, these MEMBRANES are form'd before the EMBRYO; being, as they are commonly call'd, the Coats of the Egg: So, in time of Labour, they always present themselves, with their peculiar WATERS, to the ORIFICE, before the Infant approaches.

*IN* Case of *TWINS* or more *Children*; each has its proper *MEMBRANES* and *WATERS* apart, in which they are separately wrap'd up.

# CHAP. XII. Of the SECUNDINE, or AFTER-BIRTH.

THE SECUNDINE is a thick carnous Mass, of a soft vasculous Substance, compos'd of the maternal Menstrua; which waxes upon the outside of the Chorion in proportion with the Growth of the FOETUS; encreasing (as the Waters do) together with the Infant. It is also called the Womb-Cake, or Placenta Uterina; but most commonly the Woman's AFTER-BIRTH.

*IT* is call'd *Placenta*, because of its flat circular *Figure*, resembling a pretty thick round Cake; being about eight Inches *Diameter*, and one *Thick*; a little thicker in the *Middle*, where the *Umbilical Vessels* are fixed, than at the *Edges*.

*ITS thickest spongious Part* (properly call'd the *Placenta*) adheres to the Bottom of the *Womb* by innumerable *Vessels*, and the Interposition of a very thin *Membrane*, which is a Continuation of the *Chorion*.

*ITS Concave Part* towards the *Infant*, is join'd to the *Navel-String*, and encompass'd with a smooth *Membrane*, which it derives from the *Chorion* and *Amnion*.

*THE Vessels* terminating in the *Navel-String*, are inserted at *one End*, almost in the Center of the *Placenta*; as the *other End* adheres to the *Navel* of the INFANT.

*THE SECUNDINE* is rough and unequal on the *Outside*, and smooth and soft on the *Inside*; and cannot be extracted, without breaking the mentioned *Vessels*: From hence an Effusion of *Humours* and Fluxion of *Blood* always follows it; which (according to the *Woman's State of Health*) is of a *fairer*, or *darker*, red *Colour*.

THE Use of the SECUNDINE, is to receive and absorb the Nutritious Juice from the WOMB; (as the Intestines imbibe the

*Chyle*) which it afterwards transmits to the *Infant*, by the *Umbilical Vein*.

*IN* Case of TWINS, or more *Children*, if conceived at *one Time*, they have but *one common SECUNDINE*, (notwithstanding the contrary Opinion of *others*) which adheres to the *Fund* of the WOMB, by the *Placenta*, as above: Wherefore I must needs reject the *Testimony* of such MIDWIVES, who give out that they have found the *SECUNDINE*, *fix'd* to any *other Part* of the WOMB; tho' I experimentally know, that it is sometimes found in the *Hinder Part* near the LOINS, sometimes in the *Forepart*, sometimes near the *Diaphragma*, sometimes in the *Right*, and sometimes in the *Left Side*.

BUT however, we should be grossly mistaken, if from hence, we did conclude, that the SECUNDINE adher'd to any other Part, than the Bottom of the WOMB: Since such erroneous Apprehensions are merely occasion'd by the various Motion, or oblique Position of the WOMB; as hereafter will appear more at large.

### CHAP. XIII. Of the UMBILICAL VESSELS, or NAVEL-STRING.

THE three Umbilical Vessels consist of one Vein and Two Arteries; which compose the NAVEL-STRING, and are wrap'd up in one strong Membrane, proceeding from the CHORION and AMNION, between the Navel and Placenta.

THE Vein arises in the Placenta, from innumerable minute Vessels; proceeding thence with Spiral Contortions between the Arteries, thro' the NAVEL-STRING, and Navel, to the Liver of the Infant; terminating in the Sinus of the Vena Porta, into which it pours the Blood and nutritious Juice received in the Placenta; which immediately proceeds to the Vena Cava, and Heart, thro' a Cylindrical Canal (call'd VENOSUS) opposite to the Umbilical Vein.

THE Arteries, which are scarce half so large as the Vein, arise from the ILIACS of the Infant, or from the AORTA. They pass both Sides of the Bladder to the Navel, and thence through the NAVEL-STRING, by the like Spiral Windings, to the Placenta: where, after distributing some Branches to the AMNION and CHORION; they are divided into a very great Number of Sprigs, transferring the Blood from the Fœtus to the SECUNDINE.

THESE Two Arteries, with the above-mentioned one Vein, make up a certain Part, twisted like a Rope, about one Inch thick, and near a Yard long, call'd the NAVEL-STRING; which is so ordained of this Length, that the Infant, by its Motion, may not pull the Placenta from the WOMB; and that, by its Means, the SECUNDINE may be commodiously extracted after the Birth.

IN Case of TWINS, or more *Children*, every one has its proper *NAVEL-STRING*; the chief Use of which is, to convey the *Maternal Blood* and *nutritious Juices* by the *Veins* to the FOETUS, for its

*Aliment*: The *Arteries* carrying back that which is unfit for this *Use*, to the *Placenta*; whilst the *Fœtus* is still supply'd with more by the *Vein*: So that there's a *continual Circulation*, or Communication, between the MOTHER and her INFANT.

#### SECT. II.

#### CHAP. I. Of the SYMPTOMS peculiar to the State of MAIDEN-HOOD.

SUCH Distempers as are incident to this SEX in Childhood, are generally common to the Other; wherefore I shall take another Opportunity to treat of them more particularly, and conduct the Child, whether MALE or FEMALE, thro' all the Indispositions, to which its tender Age, or flexile Nature, may subject it, from the Moment of Birth, until the Time of Puberty: At which Age, the more delicate Constitution of FEMALES, takes a quite different Turn from That of the other Sex.

*AT* this *Crisis*, or Juncture of Time, the *Imbecility* of their *natural Dispositions* begins to display itself, by various and different *SYMPTOMS*; to which, some are more, and some less, expos'd from Henceforward; very few being altogether exempted from what is so peculiar to their *State*: Wherefore (in the first place) I shall undertake to lay down the *Causes*, the *Symptoms*, the *Degrees* of Danger, and the respective *Methods of Curing* such *Diseases* as are incident to *VIRGINS*: Which leads me previously to define the *VIRGIN-STATE*, in

## CHAP. II. Of VIRGINITY.

*VIRGINITY* is an entire *State of Nature* in this Point; and nothing else, than the *Integrity* of the *Muliebrian Parts* from the Violence of *Virile Congress*.

TOUCHING the real Signs of VIRGINITY, many learned Controversies have risen; particularly as to the Membrane, call'd HYMEN: Some great Anatomists and Physicians<sup>[25]</sup> strenuously denying its Existence, and representing it as some preternatural Production; and Others<sup>[26]</sup> as vigorously maintaining the contrary Opinion. Upon which Contention, if I may humbly offer my Sentiment; the later Authorities are so commonly receiv'd, that (I think) this Dispute sufficiently decided.

WE find the Reality of it has been abundantly confirm'd by the Greeks, as it was discover'd by the Arabians of old: And the Gentiles, for that very Reason, call'd their Nuptial God, HYMENEUS. But, moreover, being since so positively asserted, by so many famous and learned Men, who openly vouch and aver that they have found and seen it; I do not see why we should longer doubt of this Membrane's being to be found in Most, if not in All, VIRGINS, to distinguish them from the rest of their Sex: Especially since 'tis certain, that something extraordinary happens in the first COITION, which made Terentius call it, Coitio Acerrima. Upon which Notion, Catullus's Verses are very elegant and à propos: viz.

"Ut flos in Septis secretus nascitur hortis, "Ignotus pecori, nullo contusus Aratro; "Quem mulcent Auræ, firmat Sol, educat Imber, "Multi illum Pueri, multæ optavêre Puellæ: "Idem cùm tenui carptus defloruit ungui, "Nulli illum Pueri, nullæ optavêre Puellæ. "Sic Virgo dum intacta manet, tum chara suis; sed *"Cùm Castum amisit polluto Corpore florem, "Nec Pueris jucunda manet, nec grata Puellis."* 

This I take to be a notable *Emblem* both of the *HYMEN* and of *VIRGINITY* itself.

*OTHERS* again affirm, that the *Effusion of Blood*, in the first ACT, is common to all *VIRGINS*; founded upon the *Authority* of the 22d Chap. of *Deut*. &c: By which 'tis plain, that *this Criterion* or *Mark*, has been of the nicest *Consequence* among the JEWS; as also in several other *Nations*: according to *Claudianus* in the *Epithalamium* of *Honorius*, viz.—

*"Et vestes Tyrio Sanguine fulgidas "Alter Virgineus nobilitet Cruor: "Tum Victor madido prosiliat Thoro, "Nocturni referens vulnera prælii.* 

In short, many *Philosophers*, as well as *Poets*, hold *This* for an infallible Symptom.

HOWEVER, tho' I must confess *This* to be a certain *Sign* of *VIRGINITY*, when it does appear; yet, if it don't, the *VIRGIN* is not therefore to be *suspected*: especially if she be more *adult*, in which Case the *Parts* grow both larger and firmer, by the long *Flux* of the *Menstrua*; and consequently this *Effusion* cannot well be expected; neither can it be supposed in case of any violent *Procatarctick* or *Primary Cause* (and from *That* she can be no more *secure*, than another Person) which may break the HYMEN, and dilate the *Parts* before COITION. But besides,

*NEITHER* can the *Mosaical Law*, nor the *Customs* of other Countries, imply any thing *farther*; than, that *This* is the indubitable *Mark* of *VIRGINITY* when it appears, without drawing any *suspicious Consequences* from its accidental *Non-appearance*: especially considering, that their *VIRGINS* married always very *young*, and commonly about the 12th or 13th Year of their *Age*; when they could scarce possibly be without some evident *Effusion*.

OTHERS will have the Astriction of the VAGINA, to be a certain Sign of VIRGINITY; which, (tho' I confess, is more astrict in VIRGINS, than in such as have copulated) I deny, to be any certain Sign: Since all know, That Part to differ (in this Point) according to *Age, Habit,* and other *Circumstances* of Body and Health: But besides, some *astringent Medicines* would also easily answer this *End.* 

OTHERS again have disputed the Possibility of a VIRGIN's generating Milk; affirming Milk in the Breasts, to be a certain Sign of lost VIRGINITY: And (I think) there is some Reason for this Opinion; for my part, I would inform myself better, before I should credit Her, who would give herself out for a VIRGIN, having this Symptom; notwithstanding the contrary Opinion of others, founded upon the Authority of Hippocrates<sup>[27]</sup>: Since, according to the Judgment of the most learned Mauritius Cordæus<sup>[28]</sup>, it very seldom happens. But if after All, a VIRGIN chances to have Milk in her Breasts, it differs in Quantity as well as Quality, from That of a Woman who has conceiv'd: For which Reason, he distinguishes and describes Two Sorts of MILK: viz.

THE One, which belongs to *this Case*, he says, is generated of *Blood* flowing to the *Breasts*, when deny'd an *Exit* by the WOMB; and is nothing but the *superfluous Aliment* of the *Breasts*, by their *peculiar Faculty*, turn'd into MILK: Which may happen to *VIRGINS* irregular in their *Menstrua*; and according to this Interpretation, *Hippocrates* is to be rightly understood. The *other* MILK, he calls *Puerperial*; which does not generate without a *Big-Belly*, and *That* pretty far *Gone*: Which MILK is communicated from the WOMB directly to the *Breasts*.

*HE* teaches us also, that this *Difference* of *MILK*, proceeds from the Diversity of *Blood*, of which *both Sorts* are generated; and likewise from the Variety of the *Veins* and *Passages*, by which they are convey'd and carry'd to the *Breasts*.

WHICH Veins are Two-fold; namely, Common and Proper. The Common are called External, and these are such as only carry the Blood from the Vena Cava, for the Nutrition of the BREASTS; which, if superfluous, or more than is sufficient for that Use, is converted (by the Glands of the BREASTS) into a kind of MILK: Which, altho' white, is of a thinner Substance, not so sweet, nor so plentiful, as true MILK. Whereas the proper Mammary Veins carry that very Blood, of which MILK is generated for the Nourishment of the Infant, from the WOMB directly<sup>[29]</sup>; which happens, by what the Greeks call

an *Anastomosis*, or Conjunction of the *Mammary* and *Epigastrick Veins*.

*FROM* hence we have the Difference of these *two sorts* of BLOOD and MILK: Wherefore it is to be concluded, that altho' the *One* be found in the *Breasts* of *VIRGINS*, they are not therefore to be rashly suspected of *Pollution*; since, according to *Aristotle*<sup>[30]</sup>, the *same* may happen sometimes also to MEN.

*BUT*, besides what is mention'd, there are many different external *Methods* propos'd by *Authors*<sup>[31]</sup>, to distinguish a *Real*, from a *Supposititious VIRGIN*: Which however I shall not enter upon, lest what I have intended for the *Benefit* of All in *general*, might tend to the *Detriment* of some in *particular*. And thus having briefly described the *MAIDEN* and *MAIDEN-HEAD*, I come now to treat of such *Indispositions*, as are either *Peculiar*, or more *Familiar* to her *STATE*. And, *First*, in order

#### CHAP. III.

# Of the Virgin-Disease, commonly called the GREEN-SICKNESS.

*THIS Malady* is an *Indisposition* visibly discolorating the Complexion, and nothing else, but a *Complication* of divers *Diseases* and *Symptoms*: Wherefore it is variously represented and taken, sometimes for a *Disease*, and sometimes for a *Symptom*.

*BE* that as it will; it is so Familiar, or rather Peculiar to *Mature VIRGINS*, that most *Physicians* call it the *Virgin-Disease*, or *Virgin-Fever*; as *others* call it *Febris Alba*, or pale Fever: Not that it is always join'd with a *Fever*; but because the *affected Party* represents (in most Respects) a *Feverish Person*, by the Celerity and Frequency of Her PULSE, &c.

IT is also call'd Febris Amatoria; I suppose, (partly) because of the Colour, according to the POET; Palleat omnis Amans, Color hic eft aptus Amanti: And (partly) because of the Age, which may be the fittest Time for LOVE; which made Diogenes say, at sight of a certain Patient, That she was dead in her OWN, but alive in ANOTHER Body: As it is otherwise denominated Icterus Albus; because, as in an Icterus or JAUNDICE, the whole Body is tinctur'd yellow: So in this Disorder, it is changed Pale and Wan; and from hence it is commonly call'd the GREEN-SICKNESS, because of the Colour and Aspect inclining a little that way. As it is likewise also term'd, Fœdus seu pallidus Virginum Color, or the ugly pale Colour of languishing VIRGINS.

HOWEVER yet I have known many Women, in France, and Germany, who have been so far from thinking it an ugly Colour, that they have esteem'd it most Beautiful; and have used very pernicious Things to gain and appropriate this Colour to Themselves:

Esteeming *Fresh-looking-Women*, of a fine sanguine *Complexion*, mere *RUSTICKS*.

THIS disagreeable Affection of the Body, however it is titled, most certainly implies a Complication of several different Maladies; annoying all the Actions of the Natural, and Motions of the Animal Faculty: Or, in short, perverting the whole OECONOMY of the Body. And because it is always join'd with Most, if not with All the following SYMPTOMS, I think it may be regularly thus defin'd.

THE VIRGIN-DISEASE, is a Change of the natural Colour of the Face into a pallid greenish Tincture; with a Dejection of Strength, Gravity of all the Members and Parts of the Body, Fastidy of Victuals, Malacia or Pica, Heaviness and Palpitation of Heart, Difficulty of Breathing, a slow Fever, Pains of the Head, Melancholy, Inflations, and Oedematous Tumours of the Feet, Legs, Eye-lids, and the whole Face; with a frigid Intemperature, and Cachexy of the whole Body; proceeding from a deprav'd Nutrition, and the abundance of crude Humours, ingender'd from a perverse Disposition of the LIVER, SPLEEN, or VENTRICLE.

*HENCE* proceed the *OBSTRUCTIONS* of the *Uterine Vessels*, and neighbouring *Parts*, of the *Veins* of the *LIVER*, and *SPLEEN*; but especially, of the *MESENTERY*: So that the *natural Calidity* of the whole *Body* being thus suffocated, and oppressed, by those *crude Humours*, an Irregularity, or Suppression of the *MENSTRUA*, must needs ensue.

*BY* this *Definition*, the *DISEASE* may easily be known; tho' in some *Circumstances*, it may differ, according to the different *Quality* of the predominant *Humour*: Especially considering, that if all the foremention'd *Signs*, or *Symptoms*, do not concur in all *PATIENTS*; yet *Most* of them commonly do happen in most *Persons*, and ALL in *Some*. Whence I come *methodically* to denote more particularly its CAUSES.

*IN* order to which, I may justly premise, that the *Proximous Cause* is a *Collection* of deprav'd *crude Humours* in the Body: As the *Remote Cause*, is a *Suppression*, or *Irregularity* in the Course of the *Menstruous Blood*.

NOW this Blood flowing to the WOMB, as soon as the VIRGIN is Mature; if the Passages are not capacious or patent enough, it

regorges to the Major Veins, and thence to the very BOWELS; extinguishing the Heat, and obstructing the Vessels of the LIVER, SPLEEN, and MESENTERY: From whence proceeds a vicious Concoction and Sanguification; and consequently a Collection of crude Humours, which excite various Symptoms thro' all Parts of the Body. And it commonly happens, that an irregular or improper Way of Living, especially about the Time of Puberty, or in the Time of the natural Course, engenders a pituitous and viscid Blood; which, together with the aforesaid Humours, totally obstructs the Uterine Vessels.

*THIS Distemper* is very dangerous, if not timely *cur'd*; because if the *Heart* be very much affected, and the *Vital Faculty* quite oppressed with it, the *Patient* often dies suddenly: Or, otherways, it commonly turns to a *Dropsy*; and, when the *Humours* fly into the HEAD, it causes a *Frenzy*.

*NOW* as I come gradually to set forth the CURE of this *Distemper*, I shall *First* observe; that, as various *Diseases* and *Symptoms* do concur towards its *Complication*, all *These* are to be discreetly remov'd by proper *Means* and *Methods*. But that I may be better understood, *SOME* are more prudently (perhaps) to be remov'd *singly*; and *OTHERS*, *jointly*: As for Instance, if any one *Symptom* be more troublesome and dangerous than the *Rest*, it ought to be chiefly regarded above All *others*; and, if not *remov'd*, at least *mitigated* in the First Place.

*SECONDLY*, That a proper *Regulation* of DIET and *Regimen* of BODY, is to be judiciously directed, as another initial necessary *Step* towards the CURE; which we have hereafter more fully treated of.

THIRDLY, That this Distemper is more easily and sooner cur'd, in Spring or Summer-Time, than in Autumn or Winter; because when the proper Constitution of WEATHER and AIR concurs with the medicinal Means, more may be done towards effecting its CURE in a Week, than otherways can be expected in a Month. Wherefore These being premised, the CURE will most rationally depend upon the four following methodical STEPS; viz.

I. *THAT* the vitious *Humours* lodged in the *Body*, especially in the *Bowels*, be duly *prepar'd* for Expurgation, and then effectually *evacuated*.

II. *THAT* the *Intemperature* and *Obstructions* of the *VENTRICLE*, *LIVER*, *SPLEEN*, and *WOMB*, be All carefully and regularly removed.

III. *THAT* the *Menstrua* be duly rectify'd, and physically reduc'd to a *Natural Course*, by the best *Conduct* of Art and Judgment.

IV. *THAT* the Rest of the morbifick *Humours*, whether *Crude*, *Aqueous*, or *Serous*, lurking behind in the *Body*, be in due manner discharg'd.

*BUT* more particularly; The CURE may be begun with a gentle *Evacuation of the Belly*, and, if Strength and other Circumstances shall permit, with repeated *VENÆSECTIONS*<sup>[32]</sup>, or *Blood-letting* in the *Foot*, not only for removing the *Plenitude*, but also for resolving the *Obstructions* of the *MENSTRUA*.

AND because the HUMOURS are *Thick* and *Frigid*, proper *warming* and *attenuating*, or preparing and purging *Medicines* are to be used in their Turns; or *rarefying* and *inciding Matters* may be mixed with the *Purgatives*. As also in Case the HUMOURS lodge about the *Ventricle* and *Mesentery*, a gentle VOMIT may be convenient.

BUT because divers Parts suffer OBSTRUCTIONS in this sickly Affection, proper Aperitives are to be made use of; and Those chiefly, which have a natural Affinity with every respective affected Part: As for Example; Hepaticks, for the LIVER; Spleneticks, for the SPLEEN; Uterines, for the WOMB, &c. Wherefore the Physician ought to weigh and consider well, whether the Veins about the VENTRICLE and MESENTERY, or LIVER and SPLEEN, be most obstructed; since the most special Regard must be had to the Part most affected.

*IN* the *Beginning*, such *Medicines* as serve best to open the *Obstructions* of the *MESENTERY*, *SPLEEN*, and *LIVER*, sparingly mix'd with such as provoke the *MENSTRUA* or *MONTHS*, are to be discreetly used: But afterwards, in *Progress* of the CURE, the *Uterines* may (by Degrees) be prudentially *augmented*.

*HOWEVER*, at last it often happens, that tho' the *grosser HUMOURS* are evacuated: yet some *watry*, *serous Humours* remain in the Circuit of the Body, too much refrigerating and infesting it still; which are most conveniently remov'd by *Sudorificks*.

*BUT* because the compleat *CURE* of this *Disease* requires some Length of Time, I would advise proper *Preparatives, Purgatives*, and *Corroboratives*, to be exhibited by Turns; as also the very *Form* and *Composition* of the *MEDICINES* to be varied in their Courses, for the preventing of *Nauseousness*.

THE Patient's REGIMEN, must likewise be well prescrib'd, and curiously regulated; especially her DIET. She ought to live upon Victuals of the best Nutrition, and easiest Concoction, carefully avoiding all others that are not so agreeable: Especially such as are of a frigid or humid Quality; such as Pot-herbs, Garden-Fruits, Milk Fish, &c. She may drink generous Wine, or good Ale cautiously abstaining from all small Drinks, and other such like noxious Liquids, as much as possible.

*MOREOVER*, *Motion* and *Exercise* are very convenient, not only in the *Beginning*, but also in the *Declension* of this *DISEASE*; especially by strongly *Chafing* and *Rubbing*, with warm *Flannels*, every Morning in *Bed*.

*BUT Sleep* is not to be too much indulged, especially not in the *Mornings*; altho' *she* be *Then* more propense to it, by reason of the abundance of *VAPOURS* ascending to the *Brain*.

*LASTLY*, to perfect and confirm this *CURE*, I would recommend<sup>[33]</sup> *Hippocrates*'s sound Advice to the *Patient*; which is to the following *Purpose*, of *marrying* betimes for the sake of *Health*, and to prevent all the future ill Consequences of this growing *Malady*.

"EGO, inquit, Autor sum, ut Virgines hoc malo affectæ quàm celerrimè viris conjungantur; iisq; cohabitent: Si enim conceperint, convalescent. Si verò in pubertate hoc malo non corripiantur, tum paulo post eas invadit."

*UPON* which excellent *Sentence*, the two following *Observations* may, (I hope) appositely here follow and take place, *viz*.

I. Quod etiam Ratione & Experientiâ confirmatur<sup>[34]</sup>: Venere etenim Uterus & partes circa Uterum incalescunt, viæq; aperiuntur

& laxantur, ut sanguis Menstruus postea faciliùs ad Uterum confluere & per eundem effluere possit.

II. Rectissimè etiam dictum, convalescent, si concipiant; quia Sanguis, qui præter Naturam antea retinebatur, jam in Fœtûs Formationem absumitur; & si quid vitiosorum humorum in Utero cumulatum sit, id post partum evacuatur.

I have thought it proper to insist the *more* upon this HEAD; because I know *none* else among all the *Indispositions* of Life, which can properly be accounted *peculiar* to VIRGINS.

SOME however may think perhaps, that I had a fair Opportunity in this *Place*, to introduce the various *Diseases* and *Symptoms* of the *WOMB*, *VAGINA*, and *PUDENDUM*; the divers *Symptoms* of the MENSTRUOUS FLUX, together with *Those* which are incident to all *Women* after PUBERTY.

WHICH Objection I humbly beg leave briefly to answer, that a *twofold Reason* dissuaded me from undertaking to treat of *Those Heads* in this Place.

I. BECAUSE They are common to all WOMEN in general, and incident to the *Wife*, or *Widow*, as well as to the *Virgin*; wherefore, I hope, another *Place* in this *BOOK* may be assigned to *Them*, more proper and convenient than *This*, without any *Digression*.

II. *BY* reason the several *Branches* of these HEADS are so very many and different, that to discuss 'em all *Here*, as I ought to do, would too much swell the *Bulk* of the *Volume*, and enhance the *Price* of this *BOOK*; which I design for the Good of the *poorer* Sort of *Women*, as well as the Benefit of the *Rich*. However, what is most *Essential* and necessarily *Requisite*, shall not be omitted (at least *coincidently*) in its *proper Place*. Wherefore I shall leave the VIRGIN, after a digressive Hint in the following *Section*, upon her darling *Passion*, [*LOVE*]: and supposing her to have *alter'd* her *Condition*, I shall thenceforward treat her as a WIFE.

# CHAP. IV. Of LOVE.

*LOVE* is the *first Impression* that affects the APPETITE; proceeding from the *Pleasure* conceiv'd in a *Real* or *Imaginary GOOD*.

*IT* is the *CEMENT* of *Affections*, and the *Effect* of a certain *Congruity of Minds*; sympathetically arising from the *DIASTOLE* and *SYSTOLE* of *affected Hearts*.

*IT* is (as a certain *Author* defines it) a sacred *Frenzy* of the *Soul*, and a *Divine Madness*, elevating *Men* to the Pitch of *Saints*, and rendring them the Care of Benigner DÆMONS: so far that they are every where *safe*, being under the Protection of *GODS* and *Men*; as the *Poet* familiarly expresses it, *Quisquis Amore tenetur*, *eat tutúsq*; *sacèrq*;——

*IT* is a kind of a wonderful satisfactory *Death*, and a voluntary *Separation* of SOUL and BODY. The LOVER'S *Mind* is in *one Place*; his *Body*, in *Another*; and *He* himself is *No Where*, if he be not with the *Object* of his *LOVE*: So that (in a manner) it transforms the *LOVER* into the *Object beloved*; and all this without any *evident Trouble*, or if there be any *Trouble*, still the *Trouble* is *lov'd*, with apparent Satisfaction and Delight. As it is ingeniously said, *Ubi Amatur, non laboratur; & si laboratur, labor Amatur.* 

LOVE always springs and blooms with fresh *Desires*, with young and vigorous *Inclinations*. It is so riveted in our *Natures*, that our *Blood* must first grow cold and be congeal'd by *Death*, before this *FLAME* can be extinguish'd: Nay, sometimes it is more *fervent*, tho' of shorter Duration, in our *latest Hours*, than in our *Prime*. For like as the *OIL* which feeds a *Lamp*, when almost spent, the *startled Flame* begins to rouze itself, and *burn afresh*, as if it would fain subsist a *little longer*; tho' on the very DREGS of its accustomed Fuel, it crackles and flashes with greater *Noise* and *Lustre* than before, but presently *expires*: So does the *Amorous Fire*, when we are nearest our *Dissolution*, begin to trouble us most, and makes our SOUL to blaze with greater FEVERS of *Desire* and *Grief*, knowing its *Period* to be near at hand.

LOVE is like the *Palm-Tree*, the more oppressed with *Weights*, the *Higher* it grows. It always desires to encrease, dilate, and stretch itself farther still, leading to an *Harmonious Union* of HEARTS. *Riches* cannot purchase *Love*. Neither *Threats* nor *Violence* can either force or restrain it; which being free by *Nature*, as proceeding from the *Freedom of the Will*, disdains all COMPULSION; *subduing* all, and *unsubdued* by any Opposition. In short, it is so generous, that whereas all other *Affections* and *Actions* aim at different *Rewards*; *LOVE* only is contented with *Love*, holding nothing else as a *sufficient Recompence*.

*LOVE* made *Ulysses*, rather than forsake his dear *Penelope*, refuse *IMMORTALITY* itself at *Calipso*'s hands.

*LOVE* is the oldest of our *Passions*, in that it came into the World with us; and from thence it becomes *habitual* to a *good NATURE*, and a *brave SOUL*.

*LOVE* is the most noble and generous of our *Passions*, it soon removes all puny Obstacles in its way. It is ready, prompt, and dexterous to find *Excuses* or *Forgiveness* for the greatest *FAULTS*, and much more to palliate the *Peccadillo*'s of the BELOVED. It does by a peculiar Force and Virtue extirpate all *Revenge*, and blot out the *MEMOIRS* of *past Unkindnesses*.

LOVE triumphantly overcomes all Things. All things yield to its Power; and the more we oppose it, the stronger *Resistance* it makes. It conquers the greatest *Hearts*, and victoriously subdues the most magnanimous *Souls*. *Alexander* the Great, was not exempted from this insuperable *Passion*, at the sight of *Darius*'s fair *Daughters*. No, *LOVE* made *Hercules*, the Son of *JUPITER* himself, stoop and truckle to the *Female Conqueror*; according to the following known *Distich*,

*"Lenam non potuit, potuit superare Leænant, "Quem Fera non potuit vincere, vicit Hera."* 

*IN* fine, I think it is also ingeniously well defin'd in this ensuing *Hexastick*, by Mr. *Howel*<sup>[35]</sup>,

"Fax grata est, gratum est vulnus, mihi grata Catena est, "Me quibus astringit, lædit & urit Amor;
"Sed Flammam extingui, sanari Vulnera, sulvi "Vinc'la, etiam ut possem non ego posse velim:
"Mirum equidem Genus hoc Morbi est, Incendia & Ictus "Vinc'lag; vinctus adhuc, læsus & ustus Amo.

Grateful's to me the *Fire*, the *Wound*, the *Chain*, By which LOVE *burns*, LOVE *binds*, and giveth *Pain*: But for to quench this *Fire*, these *Bonds* to loose, These *Wounds* to heal, I would not, could I, choose: Strange *Sickness*, where the *Wounds*, the *Bonds*, the *Fire* That *burns*, that *bind*, that *hurt*, I must desire.

THE Omniscient CREATOR, at the Beginning, implanted in the Nature of Both Sexes this Faculty of LOVE, accompanied with a fervent Desire of Procreation; furnishing them (for this Purpose) with proper adapted ORGANS, and other suitable MEANS of Generation: which, in themselves, are no less wise and wonderful, than the great DESIGN of propagating the World by successive Generations, is profound and miraculous; as will more manifestly appear, by explaining their Order, Propriety, and Disposition, in Sect. 4. Chap. 5, 6, &c.

AND to compensate many subsequent *Griefs* thereupon, NATURE added to *Man* and *Woman* an ardent Desire of mutual *Embraces*, concomitated with certain alluring *Enticements* to *Multiplication*; to the end that in *Congression* they might be so delightfully charme'd, as to forget, or at least vilipend and slight all other trifling *Annoyances*.

*THUS*, in short, *Nature* hath cared and provided for *Propagation* and *Posterity*; not only in the *Human Race*, but also in all other *Species* of Creatures, according to the excellent *Poet*<sup>[36]</sup>;

"Omne adeo genus in terris hominúmq; Ferarúmq; "Et genus Æquoreum, pecudes, pictæq; Volucres, "In furias ignemq; ruunt: Амок omnibus idem.—— "Quid Juvenis, &c.——

Thus ev'ry *Creature*, and of ev'ry *Kind*, The secret Joys of sweet COITION find: Not only *Man*'s imperial Race; but they That wing the liquid *Air*, or swim the *Sea*, Or haunt the *Desart*, rush into the *Flame*: For LOVE is Lord of all; and is in all the *same*.

'Tis with this Rage, the *Mother-Lion* stung, Scours o'er the Plain; regardless of her Young: Demanding *Rites of Love*, she sternly stalks; And hunts her LOVER, in his lonely Walks.

'Tis then the shapeless *Bear* his Den forsakes; In Woods and Fields a vast Destruction makes. *Boars* whet their Tusks, to battle *Tygers* move, Enrag'd with Hunger, more enrag'd with LOVE.

*BUT* all ludicrous Diversions apart! I proceed hence to a necessary *Consequence* of this Noble Natural *PASSION*; *viz*.

## CHAP. V. Of COPULATION.

*THIS Conjunction* of both SEXES, is the *Consummation* of *Love*, and the *Pinnacle* of the *Lover*'s natural Felicity. It is the Sum and superlative Degree of their *terrene Happiness*; above which the *Lovers* cannot aspire, naturally speaking, in *Human Society*.

*THIS* is also the utmost *Height* of their eager Desires, and the greatest *Extent* of their languishing Wishes. It is the *Abatement*, as well as the *Completion* of their unbounded *Passions*, and the *Tranquillity* of their restless *Minds*. However yet—

THIS ACT is *Two-fold*; *Fæcund* and successful, or *Sterile* and unsuccessful in the Event.

I. AS to the First, some most famous AUTHORS have written their Minds freely and copiously upon it, and have given certain pertinent Instructions, touching the Time, and Manner, as well as Conduct of the Parties concern'd, both before and after the ACT: Particularly Avicenna<sup>[37]</sup> (no Proletarian Writer, but a most Illustrious and most Learned Prince) has insisted at large upon every Case belonging to this Head, together with the Way and Manner, as well as the proper Time of begetting either SEX; "Ubi, inquit, menses defluxerint, sitq; abstersus Uterus, quod quinto ferè die usu venit, aut septimo; Si Vir Mulieri congrediatur, à primo quàm est purgata die ad quintum, MAREM produci: à quinto verò ad octavum, FÆMELLAM: rursus ab octavo ad duodecimum denuo, MASCULUM, &c."

WHICH excellent Opinion is fully proved by Levinus Lemnius (another great Master of NATURE): According to whose authentick Judgment also, there are likewise many things<sup>[38]</sup> of an occult specifick Quality, and secret Effect, for answering the same ENDS, as well as Fecundity itself: which both common Reason and daily Experience confirm for TRUTH.

*BUT* because I lie under the Disadvantage (at present) of writing in our *vernacular Tongue*, it may be proper to pass by, what (otherways) might be plentifully said on this *Head*: However I shall observe, that the *Generality* of *RULES* are most commonly calculated for *Persons* of a discording Constitution of natural *Temperaments* and *Faculties*; which *Difference of Constitution* brings often false and ungrounded *Reproaches* upon the Reputation of fruitful *WOMEN*. From whence it is justly to be remarked, that, tho' few or no *Children* are got meerly by ART; yet if a little *Dexterity* or ingenious *Subtilty* was used with some *WOMEN*, there would not (perhaps) *One* in *Three* of those, who are rashly accounted so, be found *BARREN*.

II. AS to the unsuccessful ACT of Coition, I shall refer what may be offer'd on that Point, until I come to treat of Sterility, in SECTION viii: And therefore I shall only farther observe Here, that the Parties ought not to encounter with full Stomachs, Bellies, or Bladders; much less when BOTH, or EITHER, are weary, fatigu'd, depriv'd of Sleep, angry, troubled in Mind, or in any other real respect out of Order. For in these Cases, it is very detrimental to the Health<sup>[39]</sup> of such imprudent Parents; and (if Conception follows) it infallibly intails some respective EVIL upon the Innocent Production: Because all the Affections or Disturbances of their MINDS, virtually devolve upon the EMBRYO. And besides, as (by such perverse Means) the Conception becomes irregular; so also does the Maturation, Nutrition, and Birth carry the same Impression: For from the least Perturbation of SPIRIT, the Infant may contract various Blemishes of BODY, as well as Errors of MIND.

WHEREFORE, in fine, as this Affair is to be undertaken with a serene and contented *Mind*, a chearful and undisturbed *Heart*, so it ought to be perform'd with *Moderation* and *Decency*: Not in any *brutal Manner* or *Posture*; but according to the rational *Law* and proper *Instinct* of *Nature*.

## CHAP. VI. Remarks upon COPULATION.

Supposing now this amicable *Engagement* of NATURE to be over, I may be modestly allow'd (I hope) to add a few Words upon its necessary *Consequences*; and *First*, of what has happen'd in the *ACT*, *Retention*, and *Conception* following.

FIRST then, If the WOMAN has contributed most Seminal Matter, it may reasonably be concluded, that the CHILD will favour the MOTHER most: If the MAN predominantly, the FATHER: If Both equally, it will resemble Both, or in part the FATHER, and partly the MOTHER.

AND according to Anaxagoras, if the SEED has flown into the *Right Side* of the WOMB, from the Right *Rein* of the Man, a *Male* will be conceiv'd; if into the *Left*, from the Left *Rein*, a *Female*; by reason of the *Frigidity* and *Humidity* of that Place. Which *Notion* may seem *probable*; considering, that tho' the *WOMB* has but one *Cavity*, yet it has two *Sinuses*<sup>[40]</sup> for conceiving the *Two different Sexes*: As *Nature* has in other Respects accordingly given the WOMAN two *Breasts*.

LACTANTIUS also observes<sup>[41]</sup>, That, if peradventure a *Male* should be conceiv'd of the SEED fallen to the *left Side*, the Place destinated for the *Female*, he will make but a SEMIVIRILE MAN; distinguishable by some *Womanish Qualities*, such as a *weak* or *tender Heart, small Voice*, a *smooth*, or *unbearded Face*, &c: And so, on the contrary, if a *Female* should be conceiv'd of the SEED fallen to the *right Side*, she will have some distinguishable *Marks* of VIRILITY; such as a *large Stature, robust Members, dusky Colour, rough hairy Face, coarse Voice*, &c: And that because the *Conception* happen'd in that Place, which *Nature* had appropriated to the *Male*.

THIS likewise seems to be the best Reason which may be given why some Women, like Hector's WIFE, mentioned in Homer's Iliads, are naturally inclin'd to intermeddle with MEN'S Affairs; for having thus (as it were) *originally* invaded his RIGHT *ex traduce*, they are always for maintaining their *wrong Conquests*, and defending their *unjust Possessions* in future Progress of Time.

BUT I should rather in this Topick agree with Velthuysius<sup>[42]</sup>, that Both SEEDs are each of them naturally endued with the Faculty of generating its Like: I mean, the MAN's, to produce a Male; and the WOMAN's, a Female: And that therefore by a natural Predominancy, where the Masculine Faculty has prevail'd, a MAN-CHILD is begot; and a GIRL, where the Feminine Virtue has exceeded it.

THIS, in short, is the best and only Reason I know, why Children like to either *Parent* in SEX, may yet differ in *Physiognomy*, Manners, &c: the SEED of the one perhaps prevailing in making the SEX, and That of the *other*, in *determining* the rest of the Parts. Hence it is, in all Probability, that a CHILD like his *Father* in SEX, may be like his *Mother* in natural *Disposition* and Tenderness of *Constitution*. Although by the way (without doubt) the *Place* or *Sinus* of the WOMB, Matter, Heat, and Imagination of the WOMAN, contribute very much to the *Difference* of the SEX; as will hereafter more plainly appear at large. AND, in fine, This is the only Cause of the Conception of HERMAPHRODITES, that the emitted Substance of BOTH PARENTS containing the full respective Faculty of EACH, is sufficiently prolifick and prevalent to constitute and distinguish each proper SEX, in one and the same *personal Production*. But before I proceed farther on the *Similitude of Children*, I beg leave previously to describe the *Force* of *IMAGINATION*.

#### CHAP. VII. Of the Power of the IMAGINATIVE FACULTY.

*THE Imagination* is the strongest and most efficacious of all the SENSES; for the *Vivacity* of all the *others* (mention'd in Sect. I. Chap. 5.) in some measure, depend upon it.

*IT* works upon, and affects, *others* as well as *ourselves*, and operates in the very *Soul*, as well as *Body* of Man; moving the Powers of all the *Passions* of the Mind.

AS it happens frequently by reason of the Similitude of things; that by seeing or imagining ONE to eat some sharp or sour Matter, or hearing it only mention'd, ANOTHER'S Teeth may be set on edge, and his Tongue wax tart; so by seeing One gape, Another often falls a yawning. In like manner, as the sight of any filthy Thing causeth Nauseousness; so the sight of Man's Blood, makes many Persons fall a-swooning.

*GUILLAUME de Paris* writes, that he saw a Man, who at the *SIGHT* of a *Medicine*, went to *Stool* as oft as he pleas'd, tho' it neither in *Substance*, *Odour*, or *Taste*, did affect him; but only by an *Apprehension* of a kind of *Resemblance*. Which is much the same Case of one in a *Dream*, who thinks he *burns* and is in a *Fire*, or as much tormented, as if he did *really burn*, tho' far enough from any Substance of *Fire*; only because of a *Resemblance* apprehended by the Strength of *IMAGINATION*.

AND besides, this *IMAGINATION* hath not only such Power over the *Body*, but also over the very *Soul* of Man; which Power of the *Soul*, hath its respective *Influence* upon the *Body*: As *Avicen* remarkably describes a certain *Man*, who (when he pleas'd) could affect his *Body* with the PALSY.

*IT* is wonderfully related of *Gallus Vibius*, that he became *Mad*, not casually, but on purpose; for whilst he imitated Mad-Men, he so

assimilated their *Madness* to himself by the *Counterfeit*, that he fell at last into *real* MADNESS.

*St. AUSTIN* mentions *some Men*, who could move their *Ears*; and *others* who could move the *Crown* of their Heads to their *Foreheads*, and *replace* them at Pleasure. He writes of *Another* also, who could sweat whenever he had a mind.

I have likewise known some *Persons* myself, who could weep and shed abundance of *Tears* at Will and Pleasure; *others*, who could bring up what they had *swallow'd* of any kind, as *Gold*, *Silver*, &c; and *others* again, who could so naturally *imitate* and express the VOICES of *Birds*, *Cattle*, *Dogs*, &c; that they could not easily be distinguished.

YEA, and farther yet, many Learned Authors<sup>[43]</sup> testify by divers Examples (of Cajetava, Æmilia, &c.) that Women have been turn'd into Men: Which some would persuade us to believe, to be an Effect of the Force of a vehement IMAGINATION, acting upon the Soul, with which it is of a near Affinity, beyond all the Power of SENSE.

*AS* to this Point, I am no ways to question the *Veracity* of what so many excellent Men have confirmed; but (granting it to be so) I think we may find more probable *Reasons* for it, than all the *Powers* of *IMAGINATION*, how great soever and marvellous they may be: Whereof I shall mention *That*, which seems to be the most *rational Cause*; viz. An extinguish'd or latent *forming Faculty*<sup>[44]</sup>, which (however) sometimes has *exerted* itself again, like the BLAZING of a raked or resuscitated *Fire*.

FOR as our Teeth take their Beginning in the WOMB, but are perfected without, as Bartholomæus Eustachius teacheth; and as the Teeth, call'd Dentes sapientiæ, are generated, and break out, even after the 30th Year of our Age: So it may be, that the virile Genitals have been imperfectly begun in the WOMB, and that this forming Faculty has only perfected them by little and little; so that at last they have sprung forth and appear'd, after shaking off the Pudendum. And consequently such WOMEN as Those (upon Dancing-Bouts, or the like, when the Blood and natural Heat had been strongly exagitated) have turned into MEN.

*HOWEVER That* be, I very well know that when the *Soul* is elevated and inflam'd with a fervent *IMAGINATION*, it may not only

affect its own proper Body, but also That of ANOTHER.

FOR the Longing of a Woman that has conceiv'd, acts apparently upon Another's Body, when it marks the Infant in her WOMB with the Figure or MARK of the Thing long'd for: Besides, who knows not that one Body may be easily affected with the Vapours of another diseased Body? As is plain in Cases of Plague, Leprosy, and several other Distempers. Thus also in the Effluvia's or Vapours of the EYES, there is so great a Power, that they can bewitch and infect the Beholders about them; as the monstrous Catoblepas, and Cockatrice or Basilisk, kill People with their very Looks<sup>[45]</sup>. So in like manner Witches by their intent Desire to hurt, have been thought to bewitch Persons most perniciously by their steady malicious Looks only, directed and inforc'd by IMAGINATION.

NOW this Force of *IMAGINATION* affecting other *Bodies*, holds good even among *Brute-Creatures*; as One bit by a *Mad Dog*, presently falls a-raging, and the *LIKENESS* of *Dogs* is clearly impressed upon his *Urine*. Moreover, by *IMAGINATION* in time of *copulating*, PEACOCKS and other *Birds*, impress a particular *Colour* upon the *Wings*, &c. of their Brood; and from hence it is, that the Curious may have store of *white young-ones*, by hanging the *Places* where they *couple* with white *Linnen-Cloths*, *Papers*, &c: As in *Snowy* Mountainous Countries we find always *white Peacocks*, *Quails*, *Wolves*, *Hares*, and other *Creatures*.

AND This holy JACOB<sup>[46]</sup> was not ignorant of, when he used that ingenious subtile *Stratagem* of placing *white-streaked Rods* before LABAN'S *Flocks*; which also answer'd effectually, in the *Cattle*'s producing their *speckled and white spotted Young*. In like manner by the same *Experiment*, the curious Admirers may be supply'd with Variety of *spotted Birds*, *speckled Horses*, *Dogs*, &c.

THE Mind also being inflam'd with a vehement *IMAGINATION*, may affect both the *Soul* and *Body* of ANOTHER: Which we need not wonder at, considering how much more powerful, fervent, and prevalent the *MIND* is in its *Motion*, than any exhaling *VAPOURS*; and that it does not want its proper and peculiar *Mediums* by which it may operate.

*THIS* (I think) is also evidently shewn from the many *MIRACLES*, which we find have been done by *Prophets*, *Apostles*, and other *Holy Men*; (not to mention those *Wonders* of *Pythagoras*, *Apollonius*,

*Empedocles*, &c. which cannot come in Competition with the *Others*, being ascrib'd to *Natural Causes*): Whose *Minds* being firmly fix'd upon *GOD*, with full Intent for *Good*, affected both the SOULS and BODIES of *others*, as well as *Themselves*, with what *Divine Gifts*, or other *Blessings*, they wanted.

*HENCE* it is that *Philosophers* advise, to shun the *Society* of wicked and impious Men; because their *Souls*, being full (as it were) of pernicious *Rays*, infect them who are *near*, with a *resembling Contagion*: As they enjoin likewise on the other hand, to keep and frequent the *Fellowship* of good and fortunate Men; because (by such a *Proximity*) they are diffusive of their own *Good*, and infuse it into *Those* about them. For as BAD of something *bad*, so GOOD of something *good*, always descends and adheres to the *nighest*; which virtually (like the *Smell of Musk*, or *Assa-Fœtida*) continues a long time its lasting *Impression*.

*HERE* might be indeed a great deal said upon the EFFICACY of the *Constancy of the Mind*; but because I've already been too prolix on this Head, I shall only observe, that in all our Business and Applications, a strong IMAGINATION, zealous Affection, firm Hope, and stedfast *Belief*, are great Advantages, and necessary Helps. As some most excellent *Physicians* have experimentally verified this Notion, that a strong *Belief*, and constant *Hope*, together with the *Love* and *Confidence* of the PATIENT towards the *Physician*, conduce very much to the Recovery of *Health*, and sometimes perhaps more than the *Medicine* itself: Because the firm *IMAGINATION* of the honest *Physician* concurring (in effect) with the *Medicine*, and strongly hoping it will do him *Good*, he thereby influentially changes the Symptoms, and virtually alters the Qualities in the Body of the Sick; especially if the PATIENT reposes an *entire Confidence* in him, by which means he becomes mutually disposed to receive the VIRTUE of the *Physician*, as well as *That* of the PHYSICK.

*THE*<sup>[47]</sup>*Arabian Philosophers* join'd in this Opinion, establishing it for a *Fundamental Maxim* among them; that *whatever the constant Mind* affected *with a fervent Desire, would be* effected: As in the Case of the MIND of *Him*, who is vehemently in *Love*, whatever it *affects*, has an *Efficacy* to cause LOVE; and so in other such like Cases.

BUT however, to come closer to the IMAGINATION of the Pregnant Woman, who knows not that it affects the INFANT in the Womb? Whence is it then that we have so many deform'd Persons, crooked Bodies, ugly Aspects, distorted Mouths, wry Noses, and the like, in all Countries; but from the IMAGINATION of the Mother; while she either conceives such shapeless Phantasms in her Mind, or while she frequently and intently fixes her Eyes upon such deform'd Persons or disagreeable OBJECTS? Wherefore it is very wrong, and highly imprudent in Women that have conceived, to please themselves so much in playing with Dogs, Squirrels, Apes, &c. carrying them in their Laps or Bosoms, and feeding, kissing, or hugging them, as I have both often heard, and seen with my own Eyes.

AND besides, the same is the Case, when the Natural Faculties are all at work in *forming*, or ripening the *FŒTUS*; for if the *Woman* be surpriz'd at any sudden Evil, or frighted at any unseemly Sight, the Humours and Spirits presently retire downwards, and (as it were) abscond themselves in the Recess of the WOMB: From whence immediately a strong *IMAGINATION* of the disagreeable *Thing* (whether seen or heard only) seizes her Mind; and the Forming *Faculty* (going on in the *Interim*) quickly impresses the *Imaginary* Idea of That thing heard off, or the Shape and Form of That thing seen, upon the FŒTUS. The same is the *Reason*, that if a *Mouse*, *Rat*, Weazel, Cat, or the like, leaps suddenly upon a Woman that has conceived, or if an Apple, Pear, Plum, Cherry, &c. fall upon any part of her *Body*; the *MARK* of the thing (be what it will) is instantly *imprinted*, and will manifestly appear on the same *Part*, or *Member* of the CHILD: unless the Woman (in that very Moment) wipe That Part or Member, and move her Hand to some more remote, private, or convenient *Place* of the *Body*: which done, the *MARK* is actually averted, or at least stamped upon the *other Part* touch'd, where the deep *Impression* of the *Mind*, directs, and fixes the *IMAGINATION*; and whither the *Forming Faculty* (not so much by any *Virtue* of the simple TOUCH, as by *Force* of the strong *IMAGINATION*) infallibly converts it.

*IN* fine, having thus briefly defin'd, and variously described the *Powers* of *IMAGINATION*, I come in the next Place, more particularly, to treat of the Reasons of SIMILITUDE in *Children*.

# CHAP. VIII. Of the SIMILITUDE of Children.

WHATEVER may be advanced on this *Head*, the most probable and solid Reason for the *Child*'s *Likeness* or *Resemblance*, is the *IMAGINATION* of the *Mother* in the ACT of *Copulation*; together with the *Liberty* she gives herself in her *Thoughts* and *Actions*, during the Time of *Formation*, commonly call'd the Time of *Breeding*.

HENCE it is, that whatever she intentively fixes her *Eyes* upon, or *conceives* and *impresses* in her Mind, the INFANT represents the same in its *extimous Parts*: And particularly whatever OBJECT she directs her *Eyes* or *Thoughts* upon, in the Interval between the *Embrace* and the *Charm*, its *Effigies* is afterwards manifest in the CHILD. As St. *Jerom* thus relates of a certain *Woman*, who conceiv'd and brought forth a *Black-Child*, tho' both *She* and her *Husband* (the real Father) were *white*; meerly by eying a *PICTURE* in the Bed-Chamber at that *critical Juncture*.

UPON this Chapter<sup>[48]</sup>Pliny has most elegantly express'd the Artifice of NATURE, together with all the Reasons and Causes of SIMILITUDE, to this Purpose; viz. "The Cogitations of the Mind make much for the SIMILITUDES and RESEMBLANCES of Children: As many other accidental Occurrences are thought to be very efficacious in the same, and that whether they come by Sight, Hearing, or calling to Remembrance; or by Imaginations conceiv'd, and deeply apprehended in the very Act of Generation, or the very Instant of Conception: The inconstant Mind, and wandering Thought, of either Parent, is justly suppos'd to be one Cause."

*HENCE* it is, that some *Children* favour and resemble their *Fathers*, some their *Mothers*, some their *Grandfathers*, or *Mothers*, and some their *Kinsmen*: And hence also it is, that there is more Difference and Diversity in the *Rational Kind*, than in all *other* 

*Creatures*; because the Velocity of their *Thoughts*, the Celerity of their *Minds*, and the Variety of their *Dispositions*, impress a far greater *Diversity* of various peculiar *MARKS*: While the rest of *irrational Creatures* have their *Minds* continually fixed (in a manner) immoveable, steady, and alike: every *One* of them in its own peculiar Kind, and specifick Nature.

*INSOMUCH* that the *Woman's IMAGINATION* frequently induces a strange *Likeness* to her INFANT; that is, in no Part, and in no Respect, favouring the FATHER. From whence it often happens, that a *Woman* abusing her HUSBAND's Bed, and fearing perhaps to be surpriz'd by him in the *ACT*, brings forth (in due time) her *CHILD*, no ways *resembling* the *real* FATHER, (namely the GALLANT); but altogether *LIKE* to the *injur'd* HUSBAND.

*UPON* which Case the following facetious *Epigram* was occasionally written by the famous and celebrated Sir *Thomas More*.

"Quos ante Conjux quatuor "Natos, SABINE, protulit, "Multùm ecce dissimiles tui, "Tuos nec ipse deputas. "Sed quem tibi puellulum "Enixa jam nuperrimè est, "Solum tibi simillimum, "Pro quatuor complecteris. *"Adulterinos quatuor* "Vocas, repellis, abdicas. "Atqui graves tradunt Sophi, "Quodcunque matres interim "Imaginantur fortiter, "Dum liberis datur opera, "Ejus latenter & notas "Certas, & indelebiles "Modóque inexplicabili "In semen ipsum congeri. "Quibus receptis intimè, "Simúlaue concrescentibus. "A mente Matris insitam "Natus refert imaginem. "Quum tot abesses millibus, "Dum gignit Uxor guatuor, "Quòd esset admodum tui "Secura, dissimiles parit.

"Sed unus omnium hic Puer "Tui refert imaginem, "Quòd mater hunc dum concipit, "Sollicita de te plurimùm, "Te tota cogitaverat, "Dum pertimescit anxia, "Ne tu, SABINE, incommodus, "Velútque lupus in fabulâ "Supervenires interim.

HOWEVER, as to what relates to the Tempers, Dispositions, Miens, Manners, Qualities, and Propensions of the MIND, daily Examples convince us, that Children, after all, generally much resemble Those of their Progenitors; which proceeds merely from the Efficacy of the SEED, containing the Power of the natural Faculties of their Minds and vital Spirits, which are thence infus'd into their Posterity.

BUT I take this Matter to depend much upon the Passion, Indolence, or Indifferency of the Mind, with which the ACT of Copulation is perform'd. For as the Ardour and Fervency of the Parents, and their plentiful prolifick Contribution, tend much to the CHILD's affecting the same Behaviour, Gestures, Actions, Tempers, and Motions of BODY and MIND; even sometimes to their representing the very Nature, and treading the very Foot-Steps of their PARENTS, to so nice a degree, of an exact Resemblance, that I've more than once observed a MOLE-MARK of a Father plainly impress'd on his Child. Which, I think, is also conformable to<sup>[49]</sup>

*"Fortes creantur fortibus & bonis: "Est in Juvencis, est in equis patrum "Virtus: nec imbellem feroces "Progenerant Aquilæ Columbam.* 

To valiant *Fathers*, valiant *Sons* succeed; Thus *Bulls* from *Bulls* descend, and *martial Horses* breed.

AND because the Institution of Nature, perfects its own Gifts, which, by the Help of Education, corrects Errors, and abolishes Blemishes; the Poet very pertinently adds,

"Doctrina sed vim promovet insitam,

#### "Rectíq; Mores pectora roborant.

Yet the best *Blood* by *Learning* is refin'd, And *Virtue* arms the *solid Mind*; Whilst *Vice* will stain the *noblest Race*, And the *paternal Stamp* efface.

*BUT*, however yet, there are many *Parents* still less salacious and less fervid; who rather vilify, than covet, and rather abstain from, than delight themselves in this *Encounter*. In short, there are some of both Sexes, who, in patiently gratifying their active *Consorts*, esteem it rather a sort of *Hardship* and *TASK* for *Family-Quiet*, than any incumbent *DUTY* of *Nuptial Benevolence*; Which<sup>[50]</sup>St. *Paul* seems to allude to, by calling it the *defrauding of one the other*.

FROM hence it is, that *Children* often degenerate from the *Nature* and *Qualities* of their PARENTS; from hence also it is, that *brisk Men* sometimes have *stupid*, and *wise Men* frequently beget *foolish Children*. This happens only because of the *Indifferency*, *Indolence*, or *Coldness*, either of Mind or Constitution, in their *Conjugal Pleasures*: The dull heavy *Faculty* of their *Inclinations* to the ACT, being diffus'd and transmitted through the SEED into the *Infant*, according to *Catullus*;

#### "Naturæ sequitur semina quisque suæ.

*BUT* farther still, the SEED flowing from the *principal Parts* of the Body, comprehends in itself the *Vigour* and *Quality* of their respective Members: Whence it follows, that *Diseases*, *Imperfections*, *Blemishes*, or any other *Deformity*, inherent in any *Part* of the PARENTS, becomes commonly *hereditary* to their CHILDREN.

THIS is the Case of the whole Dutchy of upper Styria, where all the Natives have a huge Excrescence of FLESH, which grows up with the Body (however visibly increasing and decreasing with the MOON) generally lying upon the Left side from the Jaw-bone, and hanging downwards: So that the Women giving SUCK of that Breast, commonly cast this carnous Excrescence (which they call CRAPE) over their Shoulders. This is so Natural to them, and remarkable, that in a Journey once from Venice to Vienna, passing thro' the chief Town of that Country, call'd Judenburg, I had the Curiosity to go off the *Post-Waggon*, into the *Church*, with five other Gentlemen, Fellow-Passengers, to be better satisfy'd of the Truth of it. The *People* were at MASS, but the sight of us soon confounded, or at least disturb'd their *Devotion*; for in a Moment, the Eyes of the whole *Congregation* were staring upon us, wondering to see so many *deform'd Men* (as they call'd us) in that Place at one Time.

AND the same is the only Reason, that most *Children* in *Spain* and *Portugal*, are born with some SYMPTOMS of the *Venereal Disease*; which, however, is without any infectious *Malignity*, and so *Natural* to them, that they seldom apply to the *Doctor* for CURE, until the Case becomes more dangerous or desperate by the *Party's* own Means: which generally happens to them in a very few Years, being exceedingly *Salacious* from their INFANCY, because of the stimulating *Acrimony* of the *putrid Humours* of the Body, which they only strive to mitigate, or allay, by *continual* WHORING.

*FROM* what's already said, we see that the *Efficacy* of the *Father's* SEED is very considerable; insomuch, that indeed many calamitous *Misfortunes* may derive from it, to his *Posterity*: But it is, however, to be strictly observ'd, that what *Disorder* soever of a vitious Nature derives itself this way from the *Mother*, hath yet the greater *Malignity*, and more powerful *Effect* upon her *CHILDREN*<sup>[51]</sup>; the *Habits* of her Body, Good or Bad, her *Virtues* or *Vices*, taking still a deeper *Root*, or firmer *Footing* in the Constitution of the FOETUS. Which *Distinction*, in short, must needs be a most plain *Case*, considering that the *Maternal Blood* is its chief ALIMENT, and the very *secundary ORIGIN* of its *Procreation*.

AND this, in fine, is the only *natural Reason* to be given, why many *Things*, no ways commendable in either SEX, are the less excusable in the WOMAN.

#### SECT. III.

#### CHAP. I. Of CONCEPTION.

*CONCEPTION*, in a word, is *Two-fold*; True and *Natural*, or False and *Præternatural*. It is call'd *True*, in opposition to a *False Conception*; and *Natural*, because it answers to the *Institution of Nature*. Wherefore I shall begin with *This*, and conduct the *Woman*, who has truly and naturally *conceiv'd*, thro' the different *Stages* of Life she is to pass; describing plainly, and laying before her the many various *Scenes* of every respective *Stage*, which can any ways affect her Person.

*IN* this nice Affair, like a faithful *PILOT*, in a *narrow Channel*, I shall not only point out the *Barrs* and *Rocks*, on which she may be *Shipwreck'd*; but also direct and prescribe her *Course*, by which she may *sail* safe into her wish'd-for PORT: Where when I have duly secur'd *Herself* and her *Cargo* to the Best of my Capacity, I shall thereafter proceed in their Order, to treat of the different *Preternatural Conceptions*; as I shall in this place now discourse only of the *Natural*.

THIS Natural Conception then, is the first principal Action, and peculiar Function of the WOMB, in duly commixing and fomenting the retain'd SEEDS of Man and Woman: Since as the SEED of Plants requires the Matrix of the Earth, to nourish it well, and safely defend it; so doth That SEMINAL Virtue of Men, the WOMB, in this Act of CONCEPTION.

*BUT* as to the *Time* of *CONCEPTION*, I cannot but differ from *Those*, who protract and put it off till the *seventh Day* from the first *Seminal Retention*, for I am clearly of Opinion with *Lud*. *Mercatus*<sup>[52]</sup>, that if the SEED be retain'd *seven Hours*, the *Woman* hath CONCEIV'D: Neither can I find sufficient Reason to think *Nature* one Moment *Idle*, much less *seven Days*. Therefore *CONCEPTION* ought to be reckoned, from the very *Day*<sup>[53]</sup> of the *First Retention*.

HOWEVER yet, it is certain that, if the *Debility* of the SEED, or WOMB, or *Both*, happen to hinder or impugn the Work, *Nature* ejects the GENITURA, or *Thing conceiv'd*, on the *seventh* Day; which Time is the common *Crisis* of all *Diseases*, and *Morbifick Accidents*: Whereas if no such *Effluxion* happens about that Time, *CONCEPTION*<sup>[54]</sup> is certain, and *Formation* goes on.

THIS True CONCEPTION is likewise known by many various Signs; whereof I shall mention a *Few*, not out of any vain Curiosity, but meer Necessity: Because, supposing a *Woman* to labour under any dangerous *acute Disease*, it is of the greatest *Importance*, to be certain, whether she hath conceiv'd, or not; by reason that the Means of her *future Relief* must (of Necessity) be adapted to her *present Condition*.

# CHAP. II. Of the Signs of CONCEPTION.

THE Signs of CONCEPTION are many and various, and accordingly some more, some less *certain*, as hereafter set forth; whereof I shall only mention such as are most common and familiar to the *Generality* of WOMEN: *viz*.

I. *THE Retention* or *Suppression* of the MENSTRUA; when not occasion'd by some other *Indisposition*.

II. *SUDDEN Weakness*, *Feebleness*, and *Imbecility* of the Body and Limbs.

III. *LAZINESS*, *Weariness*, and *Sleepiness*, with a *Heaviness* of the whole Body; but especially of the *Reins* and the *Thighs*.

IV. A sort of little SPOTS, or hard WARTS, arising in the *Face* and *Forehead*.

V. A small *Pain* about the NAVEL, and *Commotions* in the *lower* BELLY.

VI. *COLD* Shivering, and trembling *Fits*; wandring *Pains*, and *Head-Aches*.

VII. *LOSS* of wonted *Colour*, sunk *Eyes*, discolour'd *Eye-Balls*: A sparkling *Dimness*, and *Glimmering* of the Eyes; the *Ball* growing less, and the *White* larger.

VIII. A *Protuberancy* or Swelling of the VEINS, and BREASTS; their growing *Hard*, and giving *Pain*: As the NIPPLES become firm, large, and dark-colour'd, with a *livid Circle* around them.

THESE and many other Signs often occur upon CONCEPTION; but except a *Plurality* of them meet in *one Person*, they are not absolutely to be rely'd on: It being a *Vulgar Error* among *Women*, to calculate precisely from the Time of *missing* their MONTHS; for as *These* are often suppress'd, without any such manifest *Cause*; so I have known some *Plethorick* Persons, who have had them several repeated times after Conception.

YEA, I was once given to understand by a *LADY* of Distinction, in the City of *Berlin*, that she never had *Them*, till she first *conceiv'd* in the 19th Year of her Age; and then they came in *regular Course*, without any *Detriment*, during the whole *FOETURA*, or time of *Gestation*: After which, she had *Them* no more, till she *conceiv'd* again, when *They* return'd, and continued as formerly; and thus it constantly happen'd to her, till she had done *Child-bearing*.

THERE are other more certain Signs of CONCEPTION; touching which, let it suffice, that the *Physician* knows them, from the *Relation* of the PATIENT: And to these may be added the Symptoms of the MONTHS.

*BUT* notwithstanding all the positive *Diagnosticks*, which most Men have been, hitherto, guided by; I have met with so many *Fallibilities* in this Point, that I shou'd readily have come into the Opinion of<sup>[55]</sup> *Paulus Sacchias*, and deny'd the *Certainty* of *PREGNANCY*, even at an *advanc'd Time*, had I not been better instructed by Those most excellent *Physicians* and MEN-MIDWIVES, Sig. *Garofanzzo* of *Padua*, and *Pfizerus* of *Wittenberg*; who agree in certain *infallible Signs*, which put an end to all my *Doubts*, as well as to the grand *Controversy*, touching *CONCEPTION*.

AS to those common Signs, which discover the CONCEPTION of a Boy from a Girl, or Vice Versa; finding them tend only to Curiosity, and to no real Advantage, I cannot think it worth while to allow them any Place Here.

### CHAP. III. Of the DIET and REGIMEN of the Pregnant Woman.

I Come now, agreeable to my Promise, in the *First Chapter* of this SECTION, to direct and prescribe to the *Woman conceiv'd* her due COURSE: Whom I would have to consider, *First*, that she is in a very narrow and dangerous SEA; and, *Secondly*, that, as the PILOT cannot be always upon the *Watch*; so the Safety of SHIP and *CARGO* depends entirely upon the *Care*, *Conduct*, and *Steady Hand* of the skilful STEERSMAN.

WHEREFORE the Woman being now satisfy'd of her CONCEPTION, she is to observe a quite different Oeconomy in her Way of Living, from what she formerly practis'd: Since a double Mischief may be the Result of one single Fault in this Case; the INFANT always participating of what affects the MOTHER. And therefore she is now not only to take Care of Herself, but also of her Embryo, or the Fruit of her WOMB; especially in the First Months, when it may be justly compared to the tender BLOSSOMS of Trees, which are easily blasted, or shaken-off by the least Accident of Wind or Rain.

THIS Regimen, which I am about to speak of, is *Two-fold*; the One for such Women as find themselves in a good State of Health, by way of Prevention: The Other for those of the tenderer Sort of Constitutions, who begin to suffer immediately under the common Symptoms: Upon which Affair I shall give a few necessary Precautions adapted to Both, with all possible Discretion and Judgment.

I. *THE Conceiv'd Woman* then is to observe a good, wholesome, and regular *DIET*; since *Errors* committed that way, with respect either to *Quantity* or *Quality*, may be of *double Damage*; I mean,

both to the MOTHER and the INFANT. She should therefore eat rather *Often*, than *Much* at a *Meal*; especially at *Nights*, without fasting too long at any Time.

II. *SHE* is discreetly to avoid all unwholesome, or intemperate *Air*, and not expose herself to any *Excess* of *Heat* or *Cold*.

III. *SHE* must not desire rashly to walk much abroad in *Moon-Shine*, nor to *wash* her Head in *Sun-Shine*.

IV. *SHE* ought not to frequent *Gardens*; and that for the following *Two-fold Reason*: *FIRST*, lest perchance she happen to sit or tread upon some *Herb* of a pernicious *Quality*; as divers are, in provoking *Abortion*: *SECONDLY*, lest she covet some *Fruit* or *Herbs*, which may be of Damage or Inconveniency if *allow'd*, and the same if *deny'd* Her.

V. *SHE* is prudently to avoid all *Odoriferous* or *Perfum*'d, as well as *Stinking Nauseous* SMELLS.

VI. *SHE* must carefully shun *sitting* or *lying hard*, and also *lifting* any heavy *Weight*, or her *Arms* above her *Head*.

VII. *SHE* ought purposely to forbear all *hard Labour*, and *violent Emotions* of Body.

VIII. *SHE* is prudently to avoid all Apprehensions of *Fears* and *Frights*, and not to be *surpriz'd* at any thing she hears or sees.

IX. *SHE* is cautiously to decline *Watchings*, and sitting up late at *Nights*; but must indulge *moderate Sleep*.

X. *SHE* must not *lace* herself (as *before*) with *Whalebone-Stays*, nor use *Busks*; which may not only spoil her *Breasts* and *Belly*, but also *mis-shape* the INFANT, if *Abortion* does not immediately follow.

XI. *SHE* ought discreetly to suppress all *Anger*, *Passion*, and other *Perturbations* of Mind, and avoid entertaining too *serious* or *melancholick Thoughts*; since all *such* tend to impress a *Depravity* of Nature upon the INFANT'S *Mind*, and *Deformity* on its *Body*.

XII. *SHE* is not to be too *Busy*, or *Attentive*, fixing her *Eyes* too much upon any one OBJECT; especially on deformed *ugly Persons*, or any such accidental *disagreeable Sight*.

XIII. *AS* to her *Appetite*, she ought to set the *Delphick Oracle* before her (*Nil nimium cupito*) and *desire* nothing but what *she can have* to her Satisfaction.

XIV. *SHE* must carefully avoid all strong *purging Medicines*,<sup>[56]</sup> especially before the *fourth*, and after the *sixth Month*: And even *Then* also, unless a Necessity of turgid *Matter*, or unfix'd *Humours*, oblige her to it, or require *Evacuation*. She is also likewise to abstain from all *PhLEBOTOMY*<sup>[57]</sup>, especially in the *latter Months*.

XV. *AS* to her *Exercise*, of what kind soever, the following general *Rule* may suffice; *viz*. the *first Month* she ought not to *exercise* herself at all: The *second*, but seldom and slowly: The *third*, oftner and briskly: The *fourth*, *fifth*, and *sixth*, moderately and boldly: The *seventh*, *eighth*, and to the middle of the *ninth*, she should study by degrees to reduce Herself discreetly, and abstain from all her wonted *Exercise*, and act very circumspectly in all Regards; especially<sup>[58]</sup> the *eighth Month*, which is the most dangerous and troublesome of all the Time of *Pregnancy*.

XVI. *LASTLY*, Let her *State of Health* be never so good, she ought to take proper *Medicines* to strengthen the WOMB, as well as the *FŒTUS*, in order to prevent *Accidents*, which may happen to the *strongest Woman*.

BUT as to Women of more tender Constitutions, they are not only subject to the common Symptoms, but often liable also to acute Diseases; such as Fevers, Pleurisies, Squincies, Inflammations, Epilepsies, Apoplexies, Convulsions, Contractions of the Limbs, Joints, &c. In which Cases, I may reasonably recommend the PATIENT to the ablest Physician; since none but the most Judicious ought to undertake them in such critical Conjunctures. Because it is no ways SAFE to use the same Means and Medicines with the Pregnant Woman (which those incident Diseases would otherways regularly require;) without a due Distinction and a nice Regard had to her other HABITS of Body.

THESE tender Women are also sometimes seiz'd with Chronical Distempers; such as intermitting Fevers, lingring Coughs, &c: But, in those Cases, PRESCRIPTIONS are not so Proper or Convenient, unless the Distemper be very severe and extremely prejudicial to the FOETUS, because they commonly wear off before the DELIVERY.

*HOWEVER*, be the *Constitution*, or Condition, of the *Woman* as it will, I mean, *Strong* or *Weak*, *Healthy* or *Sickly*, all prudent PARENTS, who desire to be bless'd with comely, tractable, and hopeful *Children*, ought not only to perform their *Nuptial Duties* with great

Serenity of Mind, but also to take mutual *Care* to prevent and suppress all *Family-Tumults* or *Domestick Storms*: For there never ought so much as a *Cloud* to appear in their *Conjugal Society*; since all such unhappy *Accidents* strongly affect the growing INFANT, and intail the same *Qualities* of DISPOSITION almost indelibly imprinted upon it.

## CHAP. IV. Of the SYMPTOMS of the first three Months.

THE Prolifick Seed being duly coagulated by a gentle *Ebullition* of its own *vegetative Faculty*, by the Power of the *Plastick Virtue* of the vital *Spirits*, and by the peculiar innate *Quality* of the *MATRIX*; this inlivened Substance produceth an *Organical Body*, of a perfectly form'd, and delineated *FOETUS*: Which *FOETUS*, according to the various *Steps* of its Progression in *Formation*, *Animation*, and *Maturation*, occasions as many various and different *Effects* upon the *BEARING WOMAN*; as necessary *Consequences* of the said three principal *ACTS* of the *Infant's* Constitution.

*NOW* these consequential *Effects* may be properly divided into *Three* CLASSES; which are accordingly call'd *SYMPTOMS* of the *First*, *Second*, or *Middle*; and of the last *Three Months*.

BUT it is to be observ'd by the Way, that all Women are not alike subjected to them; SOME being more troubled with Those of the First; OTHERS also with Those of the Second; and OTHERS again with the SYMPTOMS of the last Three Months. But there are some Women, in fine, that continue to be troubled, in the Middle Months, with the SYMPTOMS of the First; and in the Latter, with some of Those of the Second: All which happens according to their various Regimens, Dispositions and Habits of Body.

*HOWEVER*, to proceed methodically, with all Submission, according to what competent *Knowledge* and *Experience* I have of the *CONCEIV'D WOMAN*; the *SYMPTOMS* most common to *Her*, in the *First Three Months*, may be briefly reduced to the following principal *Eight* in Number; namely, (1.) *Vomiting or Nauseating*. (2.) *Fastidy* or *Loathing*. (3.) *Pica* or *Longing*. (4.) *Painful Cholicks* or *Gripes*. (5.) *Diarrhea* or *Looseness*. (6.) *Tooth-Aches*. (7.) *Head-Aches*. And, (8.) *Swimmings of the Head*. Of all which, I shall now separately treat in their Order.

## CHAP. V. Of VOMITING, or NAUSEATING.

*VOMITING* is a strong and sudden *Contraction* of the whole *Stomach*, occasion'd by the *Animal Spirit's* being preternaturally *expanded* in its *orbicular* as well as *oblong Fibres*, and the too quick and violent *Exertion* of their *Elastick Power*: Or otherwise, it is a *Convulsive Motion* of the *Stomach*, whereby, when the *Fibres*, which compose its middle or *muscular Tunick*, are all at once strongly contracted, it endeavours to eject through the *Oesophagus* and *Mouth* the Contents of its *Cavity*; to which the *Gullet* itself (being of a piece with the *Stomach*) and the *Muscles* of the *Belly* contribute not a little.

WHICH Definition comprehends the *immediate Cause* of all *Vomitings*; and tho' there be many external and internal *mediate Causes*, yet, I think, in the present Case of the *pregnant Woman*, the Cause of this SYMPTOM proceeds chiefly from the *Vapours* of the exhaled HUMOURS, and the worse Part of the BLOOD; infesting the *Tunicks* of the *Orifice* of the VENTRICLE, and flying into the *Cavity* of the STOMACH.

WHICH, if slightly affected, occasions only a nauseous Spitting, or gentle Vomiting; but if more severely, it excites a far worse Vomiting, with a certain grievous Pain and Torment of the Person afflicted. Now if those Vapours be of a calid Quality, they commonly occasion a stinking and burning kind of Belching; but if frigid, perhaps, on the contrary, a troublesome sour, acid, breaking of Wind: Both of which promote frequent Vomiting, that carries off the vicious Juices; so that the SYMPTOM commonly ceases (of itself) in the second or third Month. Wherefore this ill Habit need not be industriously restrain'd, unless very Troublesome; as in the abovemention'd Case, when attended with extreme Severity of Pain: For

*then* it is not without *Danger*, and therefore requires immediate *Remedy* or CURE.

WHICH Cure, I humbly conceive, maybe judiciously effected by expelling the *Cause*, and strengthening the *Ventricle*; so that it may be capable to repel those *Vapours*, or *Humours*, ascending from the WOMB; and may either entirely subvert or repress *Those* previously receiv'd.

# CHAP. VI. Of FASTIDY, or LOATHING.

THE Cause of this SYMPTOM proceeds from the worse Sort and more ignoble Part of the BLOOD; which, in concert with the Humours, perverts the Temperature of the STOMACH, by flowing towards its Orifice: And This, upon emitting Vapours to the same, strongly impresseth such vicious Qualities upon it, as doth occasion sometimes a LOATHING of All Meats, and sometimes only an Aversion to some certain particular Dishes of Meat.

WHICH last Case happens most commonly, and especially at the Time of New and Full-Moon. Now this LOATHING may be thus distinguished: To wit; if it rises from bilous or cholerick Humours, the WOMAN feels a gnawing or biting of the Ventricle, and is afflicted with a frequent great Thirst: If from putrid Humours, she is (at several Times) feverishly inclined: And if from moderate gross Humours, the only SIGN is a frequent Spitting.

THIS Symptom ceases (of itself) in due Progress of Time: For as the FOETUS (which as yet is only sustain'd by the better and nobler Part of the BLOOD) grows bigger, it requires the larger Quantity, and at last the WHOLE of the Menstruous BLOOD for its Sustenance; at which Time also the accumulated Humours likewise are lodg'd in their proper Place: Both which Causes being thus remov'd, the Effect ceases of course by degrees. However it is prudent, to prevent this Evil, from the beginning of Conception, by proper Medicines; but otherways (whenever it happens) unless the FOETUS be endanger'd for want of sufficient Aliment, Time and Patience are the fitted Remedies.

## CHAP. VII. Of the PICA or LONGING.

WOMEN subject to this SYMPTOM, are indeed desirous of *Meat* and *Drink*; yet commonly of *such*, as is not only *disagreeable*, but also *offensive* and *prejudicial* to NATURE.

*THE* violent *Excess* of this *vicious* or *degenerate Appetite* is wonderful; as frequently appears by many *unnatural Instances*, which I shall forbear mentioning in this Place, for fear of ill Consequences; so that I can only recommend the *Curious* to the<sup>[59]</sup>*Authorities* of the MARGIN.

THE Cause of this SYMPTOM proceeds from the various Humours of deprav'd Qualities, inherent in the Tunicks of the STOMACH, vitiating the Ferment of the VENTRICLE; and so affecting the Orifice, that it becomes the very Seat and Source of this Evil: from whence arises the Variety of the Humours, exciting a strange and uncommon Variety of APPETITE.

THE Nature and Quality of these HUMOURS, have occasion'd many learned Disputes, which yet remain undecided. But tho' *Platerus* takes upon himself to call them *Malignant* and *Poisonous*, yet it is the *Opinion* of many *learned Men*, and as excellent *Authors*, that *They* are not to be justly accounted for, any farther than that they are of an occult perverse Quality, generated in the *STOMACH*, from irregular *Diet*, improper *Food*, and bad *Concoction*, attended with an *erroneous Regimen* in other Cases.

*THIS Symptom* begins commonly about the 40th *Day* from *Conception*, and continues to the 4th *Month*: Against which time, part of the *vitious Humours* are excreted or thrown up by *Vomiting*, and the Remainder (by degrees) imbib'd by the *growing Infant*; which *Humours* being so consum'd, the *Distemper* ceases of Course.

*THIS Effect* is more extreme and disorderly in bearing a GIRL than a Boy; the *pituitous Humours* having less *Concoction*, because of the want of requisite *Heat*: Which for the same Reason also occasions disagreeable *Flatulencies*, *Belchings*, and *Fluctuations*.

I have, in the Course of my Experience, observ'd this *Evil* to be most common in *Holland*; partly because of the *thick* condensed *Air* of the Country, and partly because the *Commonalty* of the *Women* live but on gross and cold Food, Fruit, Acids, &c. and are consequently of a cold humid *Temperature*, very subject to this Evil.

THE Diagnostick Signs of this SYMPTOM, are Weakness of Body, Dissolution of Limbs, Gnawing of Stomach, Loathing of wholesome Food, (and even That very often which the Party lov'd before) Anxiety, Pensiveness, frequent Spittings, and (at several times) Vomitings.

*IF* the *Ventricle* or *Stomach* is only slightly affected with some sort of *viscous* and *frigid Humours*, the *Party* generally *longs* for *sharp* and *tart Meats*; if with *calid* and *hot* ones, she craves for those which are *bitter* and *biting*: But if more severely affected, with *Humours* of some perverse *occult Quality*, she longs for *strange unaccountable Matters*; and hence it is that all *monstrous APPETITES* proceed.

BUT if such Humours become Connatural to the Woman, by the deep Impression of Diuturnity, she longs for things resembling the very same Nature of the Humours: As for Example, if they be of a burning or parching Nature, she covets to eat COALS, CINDERS, &c. if of a gross and thick Quality, CHALK, LIME, &c. if of a Saltish Kind, SALT itself: if of a Melancholick Temper, EARTH, CLAY, DUST, &c. For because, as the Thing containing changes the Contents, so the Contents (in process of time, by Force of constant Impression) change the Thing containing. In like manner as deprav'd Wine imparts a vitious Taste or Savour to the CASK, so those Humours convert the Temperature of the STOMACH into their own Natural Qualities.

*THE* Similitude and Dissimilitude of *Humours* and *Temperature*, may be thus known and distinguished, *viz*. The APPETITE, longing for things of a *like* or *resembling Nature* (as above), remains still *unsatisfy'd*, tho' plentifully indulg'd with the Thing desir'd: Whereas the APPETITE of *different* or<sup>[60]</sup>*discording* Things, having obtain'd the Thing *long'd* for, is easily *satiated*, and immediately ceaseth. THIS Malicious or Lusting SYMPTOM, is most dangerous; degenerating commonly into a Cacochymy, Dropsy, Phthisick, or some other heavy Disease.

*BUT* the greatest Hardship or Misfortune, after All, is *This*; that, if the *Woman* doth not indulge her corrupt *APPETITE*, she *languishes* and *pines* to such a degree, that her<sup>[61]</sup>Life is often endanger'd, together with the FOETUS, by the Disappointment: and if she does so gratify herself, *This* often proves of the worst of Consequences, even sometimes to a mortal Fatality.

HOWEVER, in short, this SYMPTOM is like many Others, more easily prevented, than cur'd: Wherefore all Women, as soon as they conceive, ought (at repeated Times) to use proper Anti-kittean Medicines (that is, against PICA or Longing) and be very careful of their Regimen and Diet: But when, perhaps, by neglect of those Means, the Distemper appears inordinate, the Method of CURE consists in evacuating the Humours, and in absterging, alterating, and corroborating the STOMACH.

# CHAP. VIII. Of CHOLICKS and GRIPES.

THO' the Cholick derives its Name from the Gut Colon, I mean by it not precisely that Pain which affects This only, but that also which usually invades other Guts, whether thin or thick; because one Gut seems not to be more subject than another to this Pain; the Contexture of all of them being the same every where. So that the Cholick is nothing else than a sorrowful Sensation of a very sharp Pain, infesting the Guts, or the Nervous Plexus, or Membranes in their Neighbourhood, proceeding from wandering Winds and Flatulencies in the ABDOMEN, or lower Belly; arising from the Humours aggregated about the WOMB: which, dissipating themselves, distend the Intestines, and excite most severe Pains about the NAVEL.

THESE Effects may also proceed from indurated *Excrements* in the RECTUM; or from any *other Matter*, which either compresses, obstructs, or erodes the *Intestines*: Hence *Physicians* commonly take notice of *Three* different Sorts of *Cholicks*; namely, the *Flatulent*, the *Bilous*, and the *Pituitous*.

*NOW These* are All thus distinguished: The *Wind-Cholick* traverses the Belly, and gives an excruciating wandring *Pain* in the VISCERA, or *Bowels*, &c. The *Bilous* induces a certain Pain, with a very sensible *Mordacity*; and is generally attended with *Thirst* and a *Bitterness* in the MOUTH: The *Pituitous* gives a most sharp penetrating fixed *Pain*, resembling (as it were) a driven *Stake*, or perforating *Instrument*; attended with a *Nausea*, *Vomiting*, and *Retention* of Excrements, &c. This last Sort *Galen* calls the most cruel CHOLICK.

*HOWEVER* I take it to be the *First* of these, which most commonly afflicts the *Conceiv'd Woman*; generated of improper *Diet*, or proceeding from an irregular *Regimen*: And *This* is also sometimes

so excessive, that I've seen the *PATIENT* fall by its Extremity into a *Lipothymia*, or *Swooning-Fit*, which generally presages *ABORTION*, if not seasonably prevented by proper *Discutients*, and convenient *Diet*, &c.

# CHAP. IX. Of a DIARRHEA, or LOOSENESS.

A *Looseness*, in my Sense, is an immoderate, frequent and sudden going to STOOL: in which the *liquid* and *diluted*, as well as *sharp* and *peccant*, *Excrements* are voided, which is commonly preceded by the *Belly-ach* and *Gripes*.

*IT* differs from a LIENTERIA, in that the *Excrements* are not indigested, unaltered, or *Chylous*, nor the STOOLS so quick after Meals: As it also differs from the *bloody Hepatick*, and *Hemorrhoidal Flux*, in that no *Blood*, *Matter*, or *Liquor* like that, in which Meat may have been wash'd, is voided with the *Excrements*.

*SOME Loosenesses* are call'd *Bilous*, when so much of the sharp *Gall* is expell'd as tinges the *Excrements Yellow*, however mix'd with other *serous Matter*: *Others* are call'd *serous* and *pituitous*, in which viscous watery *Humours*, less impregnated with GALL, are frequently and copiously voided.

THIS Symptom may proceed from a great Variety of Causes: For an Error committed accidentally in eating or drinking, or any Irregularity in the way of Living may occasion it. <sup>[62]</sup> HIPPOCRATES and many others, justly observe this Case to be dangerous; because it not only relaxes and debilitates the Body of the WOMAN, and Ligaments of the INFANT; but also necessarily impairs its requisite Nourishment, and provokes Nature to an untimely Expulsion of the tender Fruit. Which unhappy Consequence ought (by all means) to be prevented, if possible, and the grievous Affection to be cured without any Loss of Time: Now I presume That may be done first, by gentle Abstergents and Corroborants; and Then afterwards by proper Restringents and Strengthners.

## CHAP. X. Of the TOOTH-ACH.

THE Cause of this SYMPTOM, proceeds from the sharper part of the *Humours*; which, ascending to the *Head*, vitiates the BLOOD, and thence occasions a *effluxion* of *Rheum* upon the TEETH: So that *This* vitious *Rheum* fixing itself at some of their *Roots*, affects the *Membranous Parts* so sensibly, that instead of a small *Ach*, it proves a great *Pain*, and almost intolerable *Torment* to the SUFFERER.

THIS ill Affection may also proceed from some Frigid or Calid, Serous or Salt-Humour, falling down upon the Membrane of the JAWS, or Nerves of the TEETH: Where, if it corrupts and lies putrefying, it commonly engenders WORMS.

*IN* all which *Cases*, I humbly conceive, it may be *cur'd* by Variety of respective *Means*, according to the different Quality of the CAUSE, whether *Frigid*, *Calid*, *Serous*, *Saltish*, or *Acrimonious*: Otherways it ceases (of itself) in process of Time, by good Conduct and keeping warm, &c.

## CHAP. XI. Of the HEAD-ACH.

*OF* all the *Parts* of the Body, the HEAD is most expos'd to *Pains*; that is, to a troublesome and grievous *Sensation* of the *Membranous Parts*; proceeding from *Vapours* of the noxious *Humours*; which ascending to the HEAD, distend and rend, in a manner, the *Membranes* of the BRAIN.

THE Parts most commonly affected, are the Hairy Scalp, the *Pericranium*, and the *Diploe*; That is, the medullous *Duplicature* of the CRANIUM, otherways call'd the *Meditullium*: For these *Parts*, by a continual *Solution*, when it happens so, are always most severely pain'd. But besides, in a *Woman* that has conceiv'd, the *Pains* commonly shift and move from one Place, to another, of the HEAD; and take certain *Intervals*, longer or shorter, betwixt their *Access* and *Recess*.

*BUT* as the *Infant* grows, and exhausts a greater Quantity, or at last the *whole* of the BLOOD; and as the *Humours* fix in their proper Place: So this SYMPTOM gradually goes off, and quite ceases.

*HOWEVER*, in case the *Accesses* be long and violent, they may be discreetly *cur'd* by repelling and mitigating *Applications*, or by peculiar *Corroboratives* and *Discutients*, or proper *Alteratives*, according to the *Nature* and *Quality* of the CAUSE. I refer what may be farther added on this Head, to *Sect.* IX. *Chap.* 3.

## CHAP. XII. Of the MEGRIM, or VERTIGO.

THIS Symptom begins with a Swimming, Giddiness, or Dizziness of the HEAD, and proceeds (in the conceiv'd Woman) from Vapours of the Humours; which, ascending partly thro' the Veins and Arteries tending to the BRAIN, and partly thro' the OESOPHAGUS or Gullet, disturb the Animal Spirits.

*NOW* This *Distemper* is *Two-fold*, and distinguished by the Words VERTIGO and TENEBRICOSA; which last the *Arabian Physicians* have call'd *Scotomia*, I suppose from the *Greek* Word Σκοτος, *Tenebræ*, Darkness; and is now generally receiv'd by that Name.

*BUT* because this sad *Affection* is too common to both *Sexes*, young and old, I shall proceed to a farther Dilucidation of it, for the universal Good and Benefit of All.

*FIRST* then, the<sup>[63]</sup>*VERTIGO* is a deprav'd *Imagination*, attended with the vitiated SENSES of *Hearing* and *Seeing*; proceeding from the violent Commotion of the *Animal Spirits*. *Secondly*, The *SCOTOMIA* is also a deprav'd *Imagination*, accompany'd with loss of *Sight*, and sometimes of the *Motion* of the *Animals* affected with it, because of some *Interruption* in their circular Passage. In the *first Case*, the *PATIENT* imagines his Head only to be turn'd round, or winded about: In the *other*, he thinks that *circular Motion* to consist in the *external Objects*.

NOW the VERTIGO is attended with the vitiated SENSE of *Hearing*, as well as *Seeing*: Because, as something like a *Cloud*, *Smoak*, or *Web*, seems to appear before the PATIENT'S *Eyes*; so there is a certain *Whistling*, *Hissing*, or Tinkling always in his *Ears*. The SCOTOMIA, in like manner, is attended with Loss of *Sight*, and *Motion*; because of some *Disorder* of the *Ventricles* of the BRAIN obstructing or impeding the *Transition* of the SPIRITS.

*IN* the VERTIGO, an *Agitation* happens in the *Membranes* of the VEINS and ARTERIES, as also in the *Membranes* of the BRAIN; by which violent *Motion*, the very *Continent Parts* are vehemently shaken and concuss'd, and at length so disquieted, that the PATIENT thinks his HEAD wheels round about.

IN the SCOTOMIA, the Animal Spirits having in themselves the Species of all Sensibles, and those Species being presented to the Imagination: As such Images of external Objects are moved in it, so the Party thinks the same real Objects to be moved. For, according to Avicen, it is the same thing, whether that which is seen, or that by which we see, is moved: As seeing Land from on board a Ship, in a smooth Sea, being insensible of the Ship's Way, we imagine (and sometimes very strongly too) that the LAND is in Motion.

*THAT* by which we *see*, is the *visible Species* reserved in the *Spirit*: Hence when this *Species* is moved, the *external Object* seems also to be *moved*.

BUT in explaining the Circular Motion of the Animal Spirits, we must consider it to be twofold; namely, Natural and Preternatural: The Natural Motion is that which begins in the Carotide Arteries, thence tending to the Plexus Choroideus, or the anteriour Ventricles of the BRAIN; from These to the middle; from the middle to the Posteriours; and from the posteriour Ventricles of the BRAIN, the Spirits are imparted to the NERVES. The Preternatural Motion is just the Reverse of this Case.

*THE Causes* of both these Cases and Conditions are either *immediate* or *mediate*. The *immediate Causes* may be reduced to *Three Classes*; to wit, *Causes* of an *inordinate Motion* of the Animal Spirits, *Causes* of the *Circular Motions*, and *Causes* of lost *Sense*, *Sight*, and *Motion*.

THE Causes of the Spirits<sup>[64]</sup> moving inordinately, are either *External* or *Internal*. The *Externals* are the *Sun*, *Hot Baths*, *Frictions*, and *Concussions of the* HEAD; or a *Fall*, *Blow*, *Contusion*, and all inordinate and immoderate *Motions* of the whole Body: such as *Running*, *Leaping*, *Riding*, *Dancing*, too much *Venery*, or hard *Drinking*; as also the Use of *Acids*, or acrimonious Things, and all Things replenishing or stuffing the HEAD; such as *Garlick*, *Mustard*, *Anise*, *Parsley*, *Leeks*, *Onions*, *Radish*, strong *Snuffs*, *Drinks*, &c.

*THE internal immediate Causes* are the *Imagination* of the *PATIENT*, *Vapours* of the whole Body, frigid *Flatulencies*, and<sup>[65]</sup>a sudden *Fluxion* of the *vital Spirits* into the HEAD.

THE mediate Causes are Material; and this Matter<sup>[66]</sup> (almost all *Physicians* agree) is *frigid*. From hence it is certain, that the *Distemper* proceeds from *Crudities*, and *Victuals* of a crude Juice; such as *Pulses*, *Cheese*, *Tarts*, *Fish*, and all *other Sorts* of the like frigid and humid *Qualities*: But *these* are only to be reckon'd *concurring*, not *efficient Causes*.

*THE* most common *material Cause* is, according to *Galen*<sup>[67]</sup>, the BILE; which, seeking for Vent at the *Mouth of the Stomach*, is the *Cause* of these *Symptoms*, and is<sup>[68]</sup>properly to be educed or evacuated by a due *Vomit*.

BUT in Case of VAPOURS, Heat is always the efficient Cause, elevating them from the peccant Matter; since a Cold, or a refrigerated Body, can never engender VAPOURS or Wind from any Material Cause.

I shall not now enter upon the particular *Diagnosticks* of this *Distemper*, because they are as *Various*, as the *Causes*, and affected *Places* are different. Let me observe only, that the *simple* VERTIGO is easily known by the *Imagination* of the *Circular Motion* of the *Patient's* HEAD, or That of *external Objects*, or by vitiated *Seeing* and *Hearing*.

BUT the SCOTOMIA differs from the VERTIGO, in that besides the *Imagination* of the *circular Motion*, the PATIENT often loses his *Sight*, staggers, tumbles, or falls to the Ground. And yet the *same* is distinguished from the *Epilepsy*, in that the PATIENT retains his principal *Functions*, and neither *Foams* at Mouth, nor is *Convulsive*.

HOWEVER, as to the Distinction of Causes, if the internal Cause proceeds from Calidity, it is known by the hot Temperament of the whole Body, as well as by a Swelling and Pulsation of the ARTERIES about the Throat: Besides that this VERTIGO easily accedes and recedes, it is always attended with Calidity and Redness of Face and Eyes; with Watchings, Deliriums, &c: And it commonly follows Fevers, Watchings, Anger, the Use of Calids, hot Things, &c. In which Cases, it is always to be helped by the Use of Frigids, or Coolers. *IF* it arises from *frigid Flatulencies*, the *Paroxysms* or Fits are preceded by a *Hissing* or *Tingling* in the EARS; the PATIENT turns *pale* and *wan*, and is taken with an odd extensive *Pain* of the HEAD: And if these *Flatulencies* generate in the HEAD, the *Party* feels it *ponderous*, *lumpish*, and *heavy*; and is consequently much inclin'd to *Sleep*, *Stupidity*, *Dullness*, and *Inactivity*.

*IF* the *Distemper* is derived from a *flatulent Stomach*, the *PATIENT* is troubled with *Rifting* and *Rumbling* of the Belly; with *Sobbing* and *Sighing*, with *Hickups*, *Yawnings*, *Extensions*, *Inflations*, and frequent *Spittings*.

*IF* it comes from a *Mordacity* of the *Mouth of the Stomach*, the *Party* is infested with a *Nausea*, *Loathing* and *Fastidy*; with a Dejection of *Appetite*, a lasting or frequent *Thirst*, and a *Bitterness* of the Mouth. But this *Affection* also very often proceeds from the WOMB, and that either because of the suppress'd *Menstrua*, or longretain'd *Seed*; as will hereafter more fully appear in *Sect.* ix. *Chap. 8*.

AS to the Prognosticks of this Distemper, it does not always seem Dangerous, much less Lethal, at first; but its Consequences are (however) very Fatal<sup>[69]</sup>, if not timely prevented: For it often turns to Inflammations<sup>[70]</sup> of the HEAD, or Convulsions; sometimes to Melancholy or Madness; and sometimes to Epilepsies or Apoplexies.

*NOW* because this *Affection* observes *Lunar Periods*, and in extreme Cases, is near a-kin to the *Falling-Sickness*;<sup>[71]</sup> *Cœlius Aurelianus* informs us, That it was call'd by the *Ancients* the *little Epilepsy*: And as it admits of *periodical Accessions* and *Circulations* (I mean coming and going *Fits*) which depend chiefly upon the Power and Influence of the *New* and *Full-Moon*; so it is to be treated with respect to *Cure*, in a different manner; one way in the *Access*, another in the *Interval*.

*BUT* this *Cure* is as different, as the Causes and Degrees of the *Distemper* are various; wherefore I can, by no means, enter upon it in this place, for Brevity-sake.

#### CHAP. XIII. Of the SYMPTOMS of the middle Three Months.

THE FOETUS having receiv'd a distinct FORM, constituted of various *Organical Members*, and produced of divers *substantial Matters*, takes a various *Situation*; the different *Members* possessing different *Places*, according to the *Institution of NATURE*.

AFTER an absolute and compleat Conformation of ORGANS, the rational Soul is infus'd and adapted; which is the ultimate Perfection of the Human FOETUS: By which it becomes MAN and receives Life, living and subsisting henceforward by its own vivacious Faculties, distinct from those of the MOTHER. Now the Great and All-wise CREATOR undoubtedly is the only Supream, Efficient, and Immediate Author and Finisher of this noble Work; which, according to the nicest Calculation of the greatest Masters of Nature, is most commonly accomplished about the Beginning of these Middle Months: At which time, the usual Turn of Nature necessarily occasions different Effects to the Child-bearing Woman; which are call'd SYMPTOMS of the Middle Months.

AND these SYMPTOMS, in short, I reduce to the following Seven in Number; viz. 1. Coughs; 2. Palpitations or Heart-Beatings; 3. Swoonings or Syncopes; 4. Watchings; 5. Pains in the Hips and Loins; 6. Hemorrhages or Bleedings; and, 7. Fluxes of Blood. Of which, in their due Order.

# CHAP. XIV. Of COUGHS.

*COUGHS* are either *Humid* or *Siccid*: They are call'd *Humid*, when the *Humours* contain'd in the *Aspera Arteria*, of whatsoever Nature, are expell'd by its own Force thro' the *Mouth*. And *Siccid*, or dry COUGHS, when, notwithstanding great Pains and Trouble, nothing is *excreted*, only the whole Body fatigued by a continual irritated Endeavour to *Cough* and *spit-out*; whence arise Pains of the *Head*, *Hypochondriacks*, and other Parts.

THE Cause of which SYMPTOM is Four-fold, and proceeds either from the sharp acid Vapours of the Humours flying towards the Lungs, Wind-pipe, and Jaws; irritating the natural Faculty to Expulsion: Or, from the finer Part of the Blood, converting itself to the pectoral Veins: Or, from the Humours themselves ascending to the Head, and relapsing upon the Breast: Or, in fine, from the suppressed Albedines or WHITES, and whatsoever may vellicate the Aspera Arteria, or in any respect oppress or irritate the same.

THIS Symptom (however slighted or lightly esteem'd) is very Dangerous; forasmuch as it attenuates and weakens the *whole Body*, enervates or destroys its *Strength* and *Vigour*, causes difficult *Respiration*, excites *Head-Aches*, hinders *natural Rest*, occasions *Watchings*, promotes Defluxions, and finally gives *Origin* to *Fevers*, as well as most other *Diseases*: Besides that, it continually exagitates and distresses the *Muscles* of the *ABDOMEN*, or lower Belly; and thereby too commonly provokes *Miscarriage*.

*FOR* these Reasons this *SYMPTOM* ought to be carefully *mitigated*, if not *cur'd*, without any loss of Time: But the *Cure* itself, in my humble Opinion, may be easily effected, by evacuating the *peccant Humours*, by purging and corroborating the *Head*, and by the right *Use* of proper *Thoracick Medicines*.

# CHAP. XV. Of HEART-BEATINGS and SWOONING-FITS.

THESE Beatings or Palpitations are nothing else but a sudden Loss of all the Strength, with an immoderate *Concussion*, by a vehement *Diastole*, and molestous *Systole* of the *HEART*: From hence this *SYMPTOM* easily turns to a *Cardialgia*, *Lipothymia*, or *Syncope*; which are *All* of near *Affinity*, in the Case of the *Pregnant Woman*, so that I shall treat of them *conjunctly*, and first observe; that

THE Cause of all such SYMPTOMS are but Two-fold, and proceed either from a *flatulent* Substance of the *Humours*, ascending, thro' the Arteries, or the Vena Cava, to the HEART: Or from the Abundance of BLOOD, which (not finding passage by the WOMB) seeks to the superiour Parts, and thence oppresses the HEART and vital Faculty.

THIS Last is the most dangerous Condition, being (in such *Plethorick Women*) the certain *Prognostick* of imminent *ABORTION*: To prevent which unhappy *Accident*, the principal Part of the CURE, depends very much on cautious *Venæ-Sections*, or letting Blood, proper *Diet*, &c: Whereas, in the *First Case*, proper *Discutients*, *Cordials*, and *Corroborants*, are the most convenient and successful.

## CHAP. XVI. Of WATCHINGS.

THIS Symptom is nothing else, more than an immoderate *Exercitation* of the *SENSES*, from too great a *Motion* of the *Animal Spirits*: Proceeding from some acrimonious and siccid Vapours of the *Humours*, ascending to the BRAIN, and there disturbing the *Spirits*, by exciting their vehement Motion; which so exagitates the SENSES, that the vigilant restless *Woman* gets either none at all, or but very *short Sleep*.

*THIS* watchful *Affection* is distinguished by a *siccid*, or *calid* and *siccid Intemperature*; attended sometimes with a *Melancholick*, *Bilous*, or *Pituitous*, *Saltish* Matter; which is either essentially lodg'd in the HEAD, or communicated to it from the *Mouth of the Stomach*, or the Veins of the whole Body.

*SOME* have been so overtaken with this *SYMPTOM*, that they have not only continued *Awake* for some Days and Nights, but also Weeks and Months: Insomuch that *Hercules* Saxon<sup>[72]</sup> relates of his own *Father*, that He, being melancholick, suffer'd such like WATCHINGS, without the least SLEEP, *seven* Months long.

*HOWEVER* in the *Child-bearing Woman*, the least Degree of such immoderate *WATCHING*<sup>[73]</sup> is dangerous; insomuch that it often occasions *Deliriums*, and *Convulsions*, by the continual Stretch and *Tension* of the FIBRES.

*HOWEVER* the CURE of this *SYMPTOM* may (I hope) be well perform'd both by *external* and *internal Means*; externally, by proper *Lotions*, *Inunctions*, and *Frictions*; internally, by proper Soporiferous *Medicines* adapted to the Quality of the Intemperature.

# CHAP. XVII. Of PAINS in the Hips, Loins, &c.

ALTHOUGH these PAINS (in general Terms) are the Effects of the Compression of the extended WOMB, hanging on, and bearing too much upon the neighbouring Parts, by its Gravity and Weight: Yet the particular Cause of such SYMPTOMS (in my Opinion) is Twofold; and proceeds either from the Abundance of BLOOD lodging in the Veins of those Parts; or from the growing FOETUS, so extending the Ligaments of the WOMB, as to oblige the neighbouring Parts to sympathize. From hence the broad Ligaments cause the PAINS of the Back and Loins, answering to the Reins, to which Parts they are strongly fixed; as the round Ones affect the Groins, Hips, and Thighs, where they terminate. Which Ligaments are sometimes so violently extended, especially in the first Time of Pregnancy, that (by the Concurrence of any slight procatarctick Cause) they have been often known to break.

*THE Cure* of these *SYMPTOMS*, in the *first Case* abovementioned, depends chiefly upon cautious *Phlebotomy*, and good *Repose* in Bed; and in the *Second*, upon proper *Swathes*, *Unguents*, &c.

# CHAP. XVIII. Of HÆMORRHAGIES, or BLEEDINGS.

THESE Symptoms are to be understood to happen only from the superiour Parts; as Nostrils, Mouth, or Ears: And the Cause seems to be Three-fold: proceeding either from a more than ordinary Plenty of BLOOD; or from a gross Mixture of Humours and BLOOD, prompting Nature to Excretion; or, lastly, from a Debility and Weakness of the INFANT, when not able to attract the due Quantity of BLOOD to its Subsistence.

*IN* the *first Case*, the *Woman* usually looks *sanguine* and wellcolour'd, and hath more *Plethorick Marks* upon her; which, if it happens, without any great *Inconvenience*, as it is without *Danger*, the *Woman* may easily bear and dispense with it.

*IN* the *second Case*, the BLOOD so lost falls dropping away, and with *Pain*; it is ugly and *ill-colour'd*, of an *acid Quality*, and *stinking Smell*: And the PATIENT hath more *Cacochymic Signs* upon her, whereby she is threatned with *Abortion* and imminent Danger.

*IN* the *third Case*, the SIGNS of a *Debilitated Foetus*, and instant *Abortion*, are evidently presented; as mention'd in Chap. 29, and 30, of this *Section*: When, if she chance to escape *Miscarriage*, (which most commonly happens in this *Condition*, if not timely and artfully prevented) a difficult and laborious BIRTH is the certain *Consequence*; and sometimes a protracted Time of *BEARING* to the *Close* of the 10th, or (as I have observ'd) to the *Beginning* of the 11th *Month*.

*THIS Symptom* is to be judg'd of, and *cur'd* according to the above-mention'd, and what other concomitating *Diagnostick Signs* appear.

## CHAP. XIX. Of FLUXES of BLOOD.

*THIS Symptom* is to be understood to happen from the *inferiour Parts*; namely, by way of the *Hæmorrhoidal Veins*, or by the *Passage* of the *WOMB*, but most commonly by the *Last*.

*THE Cause* then of this *SYMPTOM*, happening by the *Hæmorrhoids*, is *Three-fold*; and proceeds, either from too great a *Quantity* of *BLOOD* abounding; or from the disorder'd and deprav'd *Quality* of that BLOOD; or from *Both* these *Indispositions* jointly: And this sanguine *Affection* is commonly without any great Danger (tho' not without some Trouble) to the *Woman*; ceasing gradually (of itself) after a safe and successful *DELIVERY*.

THIS Symptom from the WOMB, happens Four different Ways; to wit, either by the Vessels, which run to the Neck of the WOMB; or by Those, which tend to the Body and Cavity of the SAME; or by Those, that adhere to the Membrane call'd CHORION, and to the Infant, by which it attracts its Nutriment; or by Those, that Nature hath reserv'd for a Superfœtation, or the Necessity of expurging this BLOOD when it chances to be Superfluous.

WHATEVER way this *FLUX* happens, its *Cause* is *Three-fold*; and proceeds, either from an *Apertion* of some of the mentioned *Uterine Vessels*; or from their *Dilatation*; or from a *Rupture* of those Vessels.

THEY are open'd by a Redundancy or Superfluity of BLOOD; which Wise Nature takes this Method of fiercing and throwing-off, the Natural Evacuation being stopped. They are dilated by the Acrimony of the Humours, or by their own rarefy'd and thin Contexture, And, in fine, they may be bursten or broken, by a great Variety of Accidents; such as Running, Leaping, Falling, Striking, Lifting a heavy Weight, violent Motion, Coughs, great Pains, Vapours, Costiveness, Looseness, immoderate Heat, or Cold; as also by any violent Perturbation of Mind. *THE First Case* (being the Work of *Nature*) happens with great Ease, and without any Pain or Trouble; it *flows* moderately and regularly, is of *short Continuance*, and not attended with any immediate *Danger*, so long as the *Woman* enjoys her *Health*, and continues well-colour'd in *Complexion*.

THE Second Case is called an ANASTOMOSIS; and what happens by such irregular *Dilatations*, falls *Drop* by *Drop* away; and is All *Acid*, *Ill-colour'd*, *Stinking*, *Thin*, *Pale*, *Serous Stuff*.

THE Third Case is known by an immoderate and irregular *Flooding*, as it were in *Heaps*; attended with PAINS of the *Groins*, *Loins*, &c: And at last aggravated with *Faintings* and *Convulsions*. The true *STATE* of which *Case* is particularly noted in Sect. V. Chap. 7. Only give me leave to add here, that the *Procatarctick Cause*, is always sufficiently known, from the *Relation* of the PATIENT.

BUT however, it is also proper to know in all the above-mention'd *Cases*, from what *Place*, and by what *Vessels* this *Flux* happens: Which may be rightly thus distinguished; for if from the *Neck* of the WOMB, it flows orderly and moderately; as it likewise does, if it comes from *Vessels* no ways adhering to the INFANT: but if it arises from the *Bottom* of the WOMB, it flows in less *Order*, and greater *Quantity*; and if it happens, in fine, from the *Vessels* fixed to the *INFANT*, and the CHORION, then it does *flow* most irregularly of all, and in very great *Quantities*.

*THE Prognosticks* of this *SYMPTOM* are, either a<sup>[74]</sup> weak debilitated INFANT, or an approaching *Abortion*: But besides also, it sometimes portends a *hard*, *laborious*, and *protracted BIRTH*, perhaps even to the 11th *Month*.

WHICH Prognosticks are indeed founded upon sufficient relative Reasons: The First, because the INFANT is not able to convert the whole of the superabundant BLOOD, to its Aliment: The Second, because the INFANT (tho' perhaps Strong and Able enough) is depriv'd of its requisite Sustenance: The Third, because (according to Hippocrates, &c.) a sickly Gestation always indicates a difficult and laborious BIRTH: And besides the reason of a protracted Birth (beyond the ordinary Time) is very plain and perspicuous; because, if a strong healthy CHILD requires two Months, to recover itself after the first Onset or Attempt of the 7th Month, (as is more amply explain'd in *Chap.* 34. of this Section) it is but highly reasonable to think, that a *weak sickly One*, requires a *longer Time* of Gestation.

THE first Case of this SYMPTOM, seems to be the most favourable of the *Three*; yet I would advise such *Sanguine* or *Plethorick Women*, to guard against *one ill Consequence*, which I have known sometimes to happen in the same burthensome *Condition*: Namely, that from too great a *Plenty* or *Superfluity* of BLOOD, it sometimes runs through the *interiour Veins* into the *Cavity* of the WOMB, which renders the *Case* by far the most dangerous; because this BLOOD<sup>[75]</sup> (being out of its proper *Canal* or *Center*) irregularly extravas'd, immediately *corrupts* and *suppurates*; which corrupted BLOOD, in Concert with the *INFANT*, (whose *Aliment* is thereby impair'd) always obliges the WOMB, to dilate and yield up its *Contents*: So that, in short, this particular *SYMPTOM*<sup>[76]</sup> is, in all its different Cases or Conditions, the most Pernicious and Dangerous.

WHEREFORE it is, that the respective CURES of these sundry *Cases*, belong only to the Ablest *Physician*, and *That* (most properly) to *Him* who professes and practices MIDWIFERY: Because, when *Medicinal Helps* fail, and cannot prevent *Misfortunes*, *HE* will at least know best then, how to *Compose*, and *Mitigate* them, by delivering the Woman, if Necessity so require.

## CHAP. XX. Of the SYMPTOMS of the last three Months.

TWO third Parts of the common Duration and Conjuncture of CHILD-BEARING, being, by this time faithfully, if not so fully, accounted for; it remains now, that we also more particularly consider the MOTHER and her INFANT throughout the last *Three Months-Travail*. These are the *Finishing Maturating Months* of the *INFANT*: I mean peculiarly, as to its *Strength* and *Vigour*; since in other respects, the *Middle Months* have duly *perfected* the Ornaments of the *particular Members*, and gracefully compleated the SHAPE and FORM of the whole Body.

WHEREFORE, as, in these *latter Months*, the *CHILD* encreases in *Bulk*, *Vigour*, and *Activity*, it then affords the tender MOTHER incredible *Uneasinesses*, and grows sometimes almost *Obstreperous*: Which *Augmentation* of the *FOETUS* (of natural Consequence) occasions in her Constitution of Body various different *Effects*; call'd *SYMPTOMS* of the last *Three Months*.

*NOW* these *SYMPTOMS*, I hope I may pertinently reduce to the following *Nine*, in Number; namely, 1. *Dysuries*; 2. *Ischuries*; 3. *Stranguries*; 4. *Costiveness*; 5. *Tenesms*; 6. *Varices*; 7. *Inflations* of the *Legs*; 8. *Fissures* of the Belly; and 9. and lastly, *Water-Fluxes*. Of which I shall take leave to treat separately, in their proper Order.

### CHAP. XXI. Of DYSURIES, ISCHURIES, and STRANGURIES.

*THE Dysuria* is a painful and difficult *Excretion* of *Urine*; as the *Ischuria* is an entire *Suppression* of the SAME: And the *Stranguria* nothing but an *Effect* of the other *Two*; being an *Excretion* made Drop by Drop, with a continual *Stimulation* or *Propensity* to make Water, however without any acute *Pain*, tho' not without some *Uneasiness*.

NOW these three SYMPTOMS have all their respective Causes, which I shall not particularly enter upon here at large; but only, take notice by the By, that in the *Pregnant Woman*, they most commonly proceed from *One* and the same *Original*: Wherefore I shall in this Place discourse of them conjunctly; and observe that all three SYMPTOMS may proceed from the ponderous WOMB, lying upon, and depressing the Neck of the Bladder; and that the more heavily, the nearer the Woman is to her TIME. The pungent Acrimony of the URINE sometimes also occasions Incontinence, or want of Retention; as its Inflammatory Heat causeth almost a total Suppression. However, in short, such SYMPTOMS may likewise proceed from some crude and unconcocted Matter, obstructing and oppressing the Sphincter-Muscles.

*BE That* as it will, in the present *Case*, the CURE is but very seldom of great *Difficulty*; being frequently effected, by lifting up the *Bottom of her Belly* with both Hands when she is about to *make Water*: Or, by wearing a convenient large SWATHE. But if Need require, the *Region* of the BLADDER may be cherished with proper *emollient Fomentations*, *Injections*, or *Cataplasms*; as (upon any *Extremity* at last) a CATHETER may be prudently used.

*IF* the *SYMPTOM* however proceeds from any *Inflammatory*, or *Acrimonious Quality* of the URINE; it may be sufficiently helped by a proper, regular, cooling *Diet*: As, if it arises from any *undigested*, *crude Matter*; it may be assisted or reliev'd by a good *Draught*<sup>[77]</sup> of *warm* generous *WINE*; which not only helps *Concoction*, but also facilitates and promotes *URINE*: But in case of absolute *Necessity*, after all, gentle PHLEBOTOMY ought to be carefully used.

# CHAP. XXII. Of COSTIVENESS.

*THE Belly* discharges it self sometimes more *seldom* or infrequently; sometimes with more *Pain* and *Difficulty*; and sometimes in less *Quantity* than is convenient for *Nature*.

*THERE* have been many *Instances* given of this *Disorder*, by<sup>[78]</sup>Learned Men, where some PATIENTS have gone to *Stool* but once in *Eight*, once in *Fourteen*, and once in *Twenty* or more *Days*.

YEA,<sup>[79]</sup>Dominicus Panarolus relates of a certain Friend of his, whose *Belly* was so exsiccated, that he sometimes liv'd three *Months* without going to *Stool*.

*BUT* what I mean by *Costiveness*, is not that Distemper, where there is a total Suppression, for that rather belongs to the *Iliack Passion*; but that only, where the *Excrements* lodging longer than their due natural *Time*, perhaps three or four Days more or less, are at last voided hard and dry with some small Straining.

Which irregular *Accident* may proceed from many different *Causes*. Although in the *pregnant Woman*, I take the following to be the most *Common*: That is to say, the *Calidity* and *Siccity* of the *LIVER*, or *SPLEEN*; occasion'd by the *Lusty Child's* attracting too much of the *Radical* and Succid *Moisture* of the *MOTHER*, and compressing the *Intestines*.

THIS Symptom proves often of dangerous Consequence: For by the pressing Force, commonly us'd in such a Case to ease the BELLY, some Vessels or Ligaments may be easily and readily broken. And not only so, but the retain'd Fæces always affect the HEAD, and contaminate the BLOOD with noxious Vapours; and thereby impede or hinder the Concoction of the Ventricle, and the Separation of the better and purer, from the grosser and impurer part of the Chyle: Whence proceed many other various *Disorders* to the whole *Body*, from the long Retention of the *Excrements*.

*THE Cure* consists in temperating the *Calidity* of the *VISCERA*, and relaxing the *BELLY* by proper *Diet*, *Dissolvents*, &c. And in *Case* of any sudden *VOMITING*, which sometimes happens upon *Costiveness*, humectant and emollient *Clysters* may be most properly and cautiously used, to restrain and prevent all such *Revulsions*.

# CHAP. XXIII. Of TENESMS.

A TENESMS is an irregular *Retention* of NATURE, and nothing else but a continual *Desire* or *Inclination* of going to *STOOL*; attended with *Pain*, without voiding any thing but *Slime*, or an indigested MUCOSITY: And this is in the ANUS, what a *Strangury* is in the BLADDER; being *Both* a violent *Contraction* of the FIBRES, or *Disorder* of the SPHINCTER-MUSCLES.

WHICH tenacious Symptom proceeds from a great Variety of Causes, occasionally provoking the expulsive Faculty of the strait Gut, call'd the RECTUM, without a Power to expel; such as may happen to be an unusual Exulceration, or Constriction of, or an Acid-Salt-Humour in the same INTESTINE: So likewise a Stone in the Neck of the BLADDER, a Tumour of the adjacent Parts, or seminal Vessels, a frigid Intemperature, the Hemorrhoides, a Dysenteria, Dysuria, Ischuria or Stranguria, &c. may very shrewdly occasion the TENESMUS.

WHICH binding SYMPTOM is of the same dangerous Nature and<sup>[80]</sup>Consequence with the preceding Case; both having an equal *Effect* of Power, if not prevented, to expel and dislodge the INFANT. Which Notion cannot be otherways better maintain'd; for the WOMB being situated upon the Intestinum Rectum, must suffer great Commotions by continual Needings and Strainings in both Cases.

*BUT* the safest *CURE*, in short, in my humble Opinion, is to be perform'd by proper *Decoctions*, *Fomentations*, and absterging *Clysters*.

## CHAP. XXIV. Of the VARICES, or Vein-Tumours.

*THIS Symptom* is nothing else, than a *Distention* or *Dilatation* of the HIP, THIGH, and LEG-VEINS: Which however chiefly appears about the HAM; and it happens most commonly to *Plethorick Women*, who walk much, or exercise themselves more freely upon any Occasion.

THE Cause proceeds only from a *Plenty*, or *Superfluity* of the suppressed BLOOD, more than the *Infant* can consume: which being carry'd by the *Arteries* to the *lower Parts*, is thence received by the *Crural* and *Saphene* or *Ankle-Veins*. Insomuch that the WOMB, being (by this time) both *Ponderous* and *Bulky*, so presseth the ILIAC-VEINS, that it hinders the BLOOD in its *Course*, and obstructs its free *Motion* and *Circulation*; whereby (of consequence) these *inferiour Veins* must swell and distend themselves proportionably.

*HOWEVER*, the *Danger* of the *SYMPTOM* is not great; because after a safe *BIRTH*, when the super-abounding BLOOD and *Humours* are evacuated, these preternatural *Tumours* settle, and the VEINS return to their *Pristine State*.

WHEREFORE the only necessary Relief of this Malady, consists chiefly in the Woman's abstaining from too much Walking, and all other extravagant Exercises; upon indulging her inferiour Limbs, by keeping them rais'd upon a Couch or Stool, that the BLOOD may not settle too much to these lower Parts: Or (which is far better) let her prudently keep her Bed; in which Posture, the BLOOD can meet with no such Difficulty in returning by these Veins to the HEART, as it will find when it must ascend by the Woman's SITTING or STANDING upright; so that consequently it must needs circulate the more readily and with more Ease. Hence in short, it is, that from this more Free and Easy CIRCULATION in Bed, such Women are always more easy, or better dispos'd, and far less pain'd or troubled in the Mornings, than at Nights, in This Condition. *BUT* if, after All, the *PATIENT's* Convenience will not permit such *Indulgences*, Then a proper *Swathe* of three or four Fingers Breadth, is most adviseable; beginning to *swathe* this *Varicose*, or *Swelling Part*, from the *Bottom upwards*, as far as the *Varices* or *Tumours* extend. But in Case of more *Plethorick Marks*, at last, in the *other Parts* of the Body, *Phlebotomy* may be most safely made Use of.

#### CHAP. XXV. Of the INFLATIONS and TUMOURS of the LEGS.

*THESE* bloating *Symptoms* not only happen to some *Women* before, but also after *BIRTH*; especially when the LOCHIA, or Child-bed Cleansings, do not flow in a regular *Measure* or sufficient *Quantity*.

THE Cause of the present disorder'd Case, proceeds either from the Suppression of some Aqueous Flux of the WOMB; or from some such watery serous BLOOD descending to the LEGS; or from the Abundance of retain'd *Menstruous* BLOOD, more than the INFANT can dispense with: which, being of no Service either to MOTHER or CHILD, settles downwards to these aggriev'd Parts. But these Things are to be considered with this Distinction and Difference, that if the LIVER be debilitated, and the BLOOD becom's *Pituitous* or *Aqueous*, the Woman's LEGS are so Oedematous or Tumid, that when pressed with the Finger, it leaves the Impression of a *Dent* and *Hollowness*: But if the BLOOD grows corrupted and bilous, her LEGS are inflam'd, and sometimes occasionally *exulcerated*, as in *Scorbutick Cases*: And if none of *These* happen, then a gross thick BLOOD only abounds, tending vitiously downwards. Upon which there are only some *Livid* or *Blueish Marks*<sup>[81]</sup> to be discover'd with those *Tumours*, such as the VARICES or Swellings occasion in the preceeding Case.

*IN* fine, the *Woman* troubled with these *Symptoms*, commonly bears a *Female*; as all *Women*, having sickly times of *GESTATION*, generally do. However yet, tho' this swelling *Affection* is very troublesome, its *Danger* is not great; because it ordinarily ceases of it self with good Care after the *BIRTH*. Wherefore in this Condition a *CURE* is not always to be attempted, lest the *Humours* recoiling upwards, affect some *nobler Part*. Nevertheless, if the *SWELLING* be too considerably Painful or Troublesome, proper *Digerents* and

*Discutients* may be apply'd, and the LEGS fomented with a convenient *Lixivy*, *Decoction*, or *Cataplasm*.

# CHAP. XXVI. Of FISSURES or CHOPS of the BELLY.

*THIS Symptom* only happens to *Women* bearing their *first* or *second CHILD*; whole *lower BELLIES* have not yet been sufficiently *extended* by frequent *CONCEPTION*.

*THE Cause* proceeds only from the *natural Lenitude* and *Constriction* of the Skin of the *ABDOMEN* or *lower Belly*; which (in proportion to the *Growth* of the *INFANT*) must dilate and distend itself: So far as that towards the *latter Months*, it gives way to such a large degree, that it appears not otherways than as if the *SKIN* was to be divided, and almost crack or break by its thin *Attenuation*.

HOWEVER it occasions also very often great *Pain*, as well as a *permanent wrinkled DEFORMITY* of that *Part*. Wherefore *Laxative Liniments*, and proper *Unguents*, are pertinently to be made use of by way of *Precaution*, from the *fourth Month*, until the Time of Delivery.

# CHAP. XXVII. Of WATER-FLUXES.

THE Water which is gather'd in the Time of *GESTATION*, between the *Membranes* involving the *INFANT*, is at last upon the approaching *BIRTH* effus'd: For the *CHILD* having broke the AMNION, feels these *WATERS* troublesome, and consequently obliges the CHORION also to give way. From whence proceeds naturally a *copious Effusion* of the same WATERS.

*BUT* of this natural *Flooding*, I am not properly to treat in this Place; only of *that* preposterous FLUX, which happens before the due time of *BIRTH*, the *immediate Cause* of which proceeds from some *Procatarctick Accident*: Such as a *Perturbation of Mind*, an unlucky *Fall*, a *Leap*, a *Stroke*, or any other Violence.

THIS Symptom happens Two ways, either by a Disruption, or Dilatation of the MEMBRANES: the first by external, the other commonly by internal Causes. In the first Case, the FLUX comes suddenly, irregularly, and in a great Quantity; in the second, by little and little, or by degrees, and less in Quantity.

THE first Case is most dangerous, being the infallible *PROGNOSTICK* of instant *Abortion*, if not timely and judiciously prevented. The *second Case* is of the following bad *Consequence*, that this WATER, which has hitherto defended the INFANT from the *Rigidity* of the circumjacent *Parts*, being at last (how leisurely soever) exhausted and spent; the CHILD is soon sensible of its *Loss*, and finding its wonted SEAT become uneasy, it thereupon being restless or discontented, endeavours to move and seek for a *Better*: By which means (if *Abortion* does not presently ensue) it falls into a *preternatural Situation*, which (of course) occasions a *preternatural BIRTH*. But abstracting from *This*, the bare *Deficiency* of the WATERS, for moistening the *Passages* in time of *LABOUR*, is enough to effect the same Unhappiness.

*HOWEVER*, the *Cure* of this *SYMPTOM* depends chiefly upon a good *Regimen* of *DIET*, and *external*, as well as *internal Corroboratives*.

*IN* short, having thus discuss'd the several *SYMPTOMS* of the Nine *Months*, and such as are most common and familiar to the *Woman* during her FOETURA, or the whole Time of her *CHILD-BEARING*; I shall proceed now in the next Place with all due *Method* and peculiar *Regard* for her GOOD.

### CHAP. XXVIII. Of Acute DISEASES incident to the CHILD-BEARING WOMAN.

*IT* sometimes, and more than too often, happens, that besides the common *SYMPTOMS* of the *Months*, the *conceiv'd Woman* is also suddenly taken with some *acute DISEASE* or other; upon which I shall offer my sincere *Opinion*, and according to the best of my Judgment, give a brief *Account* of *Those* several *Maladies*, with their *Definition* and *Cause*, *Nature* and *Quality*, *Danger* and CURE.

*FIRST* then, the great *Galen* defines *acute DISEASES* to be such, whose *Motion is swift*, attended with sudden and immediate *Danger*.

*THE* learned *Brassavole* calls such *DISEASES Acute*, as come *suddenly*, continue a *short Time*, and have very severe or violent *SYMPTOMS*.

*THE* ingenious *Blancard* calls those *DISEASES Acute*, which are *over in a little Time*, but not without *imminent Danger*. Now *Those* are deem'd either *very Acute*, or *most Acute*; the *latter* is meant when the *Distemper* is over the 4th *Day*; but the *former* is that which continues till the 7th *Day*: For the more *acute* the *DISEASE* is, the sooner follows its *Determination*, either for Life or Death. Again, a Disease is call'd *simply acute*, when it lasts 14 or 21 *Days*; or lastly, it is term'd *Acute ex decidentiâ*, which lasts 42 Days at least.

AND according to the diligent Dr. Sydenham<sup>[82]</sup>, the Despumation of Acute DISEASES happens in 336 Hours; which he also justly applies to intermitting FEVERS, reckoning 5 Hours and a half for a Paroxysm: Because what we call DAYS in Acute Fevers, are so many PERIODS in intermitting Fevers: The only difference of Those consisting in that the one perfects its Fermentation at once, which the other accomplishes at reiterated Times, and divers Turns, by the same Duct of *Nature*. He farther still, observes that *Autumnal Quartan Fevers* continue six Months; in which Time, if the Number of the recurrent *Paroxysms* be summed up, they will exactly amount to the aforesaid 336 Hours, or 14 Days, which is the *Term* or *End* of the regular and *continual Fevers* of that Season.

AND the wise HIPPOCRATES observes<sup>[83]</sup> that as an exquisite *continual Fever* ceases within the 7th Day, so an exquisite *Tertian* has seven *periodical Circuits*; because every *Access* in the latter, makes up a *Day* in the former Case. Hence it is manifest that all *Epidemick Diseases* have their due and regular *Times*<sup>[84]</sup> of encreasing, continuing, and decreasing; and that These *Laws* of *Nature* are so constant and permanent, that however *Fevers* differ in other Circumstances, they are equal as to the Duration of *Time*; counting according to the *Periods* or Fits of the *intermitting*, and the continued Number of *Days* of the never *intermitting Fever*.

*GALEN*<sup>[85]</sup> further explains *Acute DISEASES*, and calls them *Two-fold*: The *one* attended with a continual FEVER; such as are *burning Fevers*, *Frenzies*, *Lethargies*, *Pleurisies*, *Squincies*, *Inflammations*, &c. The *other* without any Fever, such as *Epilepsies*, *Apoplexies*, *Convulsions*, *Palsies*, *Contraction of LIMBS*, *JOINTS*, &c. Now the<sup>[86]</sup> *Accesses* and *Crises* of all *These* proceed from the *Influence* of the *MOON*; which in over-ruling terrestrial Things, surpasses all the other PLANETS and STARS, not so much because of her *Power*, as by her *Approximation* or *Vicinity*.

THE Cause of both the one and the other seems to be the same; tho' it affecteth differently, according to the various Regimen and Disposition of the Woman: And it most probably proceeds either from the vitious Humours, which have abounded in the Body before Conception; or from such Humours as have been congested afterwards by the suppressed MENSES, or Months: Which being irritated by improper or depraved Food, by bad or negligent Regimen, either before or after Conception; those Humours (like Yest in Ale) ferment the BLOOD, to such a Degree, that (all on a sudden) the PATIENT is violently taken with one or other of those Acute DISEASES, which are determined by a certain Lunary CRISIS; that is to say, by a certain Motion of NATURE, accelerated by the Power of the MOON, to a gradual Expulsion of the peccant Matter thro' the PORES of the Body. But this CRISIS, in short, happens always with most Ease and Safety upon the *New* or *Full-Moon*, because the ambient *Air* does not at that time so much affect the *Superficies* of the Body, nor so violently repress the *Motion* of the *FLUIDS*.

HOWEVER, this melancholy Accident can never happen worse than to the Conceiv'd Woman; and the farther she is gone in her Time, the more Danger still. And that because of the Scarcity or Want of pure BLOOD, which ought to be imbibed by the Infant, either in part or in whole, according to its Age and Strength: Or, because of the Plenty of vitious BLOOD, which tends to no other end, than to imbecilitate the Woman, and render her incapable of suffering the Insults of such acute DISEASES. For Nature may (perhaps) be able to bear up against one simple Effect, but when it is joined and aggravated by another, the PATIENT is too often obliged to succumb, and yield herself up to be overpower'd in the Struggle of Life.

*BUT*, after all yet, *acute DISEASES* are not always *mortal* to the *Conceived Woman*; for, as Experience teaches, *SOME* have the good Fortune to *escape*, tho' indeed the Odds<sup>[87]</sup> are very great on the other Side. But of such sharp *MALADIES*, *those* without any *Fever* are reckoned most *dangerous*; because they are not only *Acute*, but also *most Acute*: And by *those* the *MOTHER* is more immediately endangered than the *INFANT*; whereas by *those* which come with a *Fever*, the tender *INFANT* is first and chiefly endangered, because of the *MOTHER*'s internal *Calidity* and *Depravation*, which easily affects, and soon suffocates or stifles it in a short time.

HOWEVER, it is very observable, that a Woman<sup>[88]</sup>, bearing a *FEMALE*, is more readily seized, and more easily freed or cured of *acute* DISEASES, than *she* who bears a *MALE*: And that because *FEMALES* are naturally more obnoxious to *Distempers*, proceeding from the *Retention* of the *MENSTRUA*, and consequently more *favourably affected*, because of the *natural Affinity* and *Familiarity* of the Case.

AND this is the Reason that *FEMALES*, after the *first Months*, do bear and sustain more *Pains* than the *MALES*; as daily Experience confirms, in that a *Female Miscarriage*<sup>[89]</sup> seldom happens after the *first Months*: whereas the *Male Abortion* is most of all to be feared, after the *TIME* of *Motion* or *Animation*, because the *ACETABULA*, or *Cavities*, being then more *siccid*, are the more easily broken by its *stronger Motion*.

*IN* Cases of *Acute* DISEASES, the worst is, that the necessary *Helps*, which such incident *Distempers* otherways absolutely require, are not always safe and convenient for the *Child-bearing Woman*: which Condition, (with respect to the *CURE*) renders the *CASE* one of the *nicest Points* in the *ART* of *Physick*. Wherefore I would, with Submission, advise, that *none* but the ablest and well-qualified *Physician* should undertake either the *Care* or the *CURE* of such a *PATIENT*. To whom I am not to prescribe *Rules*, and therefore I shall only refer him to his own more *Acute Judgment*, and the *Curious Solutions* of (that most learned *PHYSICIAN*) *Daniel Senertus*<sup>[90]</sup>, upon the *six following Questions*, thus stated by himself, *viz*.

I. HOW far slender Diet is convenient for the Child-bearing Woman, labouring under an acute Disease?

II. HOW far it is convenient to open a Vein or bleed this Woman upon such an Occasion?

III. HOW far it may be proper to purge her on the same Occasion?

IV. WHETHER Venæ-Sections or Purges are most dangerous in such a Case?

V. WHETHER it is practicable (in such a dangerous Case) to excite Abortion, for the Woman's Health and Recovery?

VI. HOW far Clysters, Diureticks, and Diaphoreticks are convenient on such Occasions?

*HAVING*, thus, now, in fine, briefly hinted upon the *sundry HEADS* of this *Chapter*, I shall, in the next Place, offer a few Words upon *THAT*, which (I think) is the most common Consequence of the foregoing *EFFECTS*, *viz*.

### CHAP. XXIX. Of the DEBILITY and WEAKNESS of the Fœtus.

BESIDES all the enumerated SYMPTOMS, Acute and Chronical Distempers, to which the Child-bearing Woman is subject; it also happens over and above (too frequently) that the INFANT becomes Weak and Sick in the WOMB.

THE Cause of which unhappy Accident I take to be fourfold: As it proceeds, either from a Debility and Insufficiency of the Parental SEED, or from a Scarcity or Want of requisite Sustenance, or from a certain Depravation of that Sustenance, or from some immediate Procatarctick Cause of the MOTHER; which may all be thus rationally distinguished, and severally accounted for; viz.

*THE Cause* certainly lies in the *SEED*, if the *Woman* has continued always *healthy*, eating, drinking, and living regularly.

*IT* may be imputed to the *Scarcity* of *ALIMENT*, if she has often laboured under *Diseases*, or been exposed to *Hunger*, *Want*, *Penury*, or any such like manifest retrenching *CAUSE*.

*IT* may be adjudged to a *Depravity* of *ALIMENT*, when the *Woman* (by a vitiated Constitution of Body) is subject to some certain *Distempers*; and, besides, in short, any *Procatarctick Cause* is discoverable from the *Relation* of the PATIENT.

*BUT* whatever the *Cause* may be, the *Diagnostick Signs* of this unhappy *Affection*, are commonly *One* or *more* of the following SIX; *viz*.

1. *THE* turgid swell'd *BREASTS* of the *Pregnant Woman*, all on a sudden<sup>[91]</sup>, fall and extenuate into a *Flabbiness*.

2.<sup>[92]</sup>*THEY* diffuse copiously a thin *Waterish Milk*, not half digested to its due Perfection.

3. *THE Menstrua* return at an uncommon *Rate*, and in an irregular *Manner*.

4. *THE Woman* personally is either very frequently *Sick*, or long expos'd to a lasting *Sickness*. Or,

5. *SHE* is either subject to a very frequent, or long continu'd *Looseness*, and constant *Diarrhæa*.

6. *THE Infant* which used (as it ought) to *move briskly*, is now but very *seldom*, and more *faintly* perceiv'd in *Motion*.

ON the other hand, the *Prognosticks* of this CASE, are briefly *Two*: For either *Abortion* follows, or (which is worse) the *Infant* dies; if not timely prevented, by removing the *Efficient Cause* of it, upon *comforting* and *strengthening* both the WOMAN and the CHILD.

*IN* a Word, the *Latter* of these tragical *Events* I shall refer to SECT. V. *Chap.* last. But the *Former* leads me more immediately to consider it in the proper Method of my Discourse.

# CHAP. XXX. Of ABORTION.

*WOMEN miscarry* so frequently, that if any curious Persons will diligently observe and examine that *Matter*, they will find the Number of MISCARRIAGES to exceed *That* of *timely* BIRTHS: Wherefore I have reason to think, that this *Head* deserves to be handled more at large, and to be more particularly insisted upon, in the following manner.

*THE Modern Practisers* in *MIDWIFERY*, distinguish MISCARRIAGES, by *four* different *Appellations*; according to the *four* different *Times* of the *Constitution* of the *CONCEPTION*. viz.

A MISCARRIAGE happening in the Time of *Spumification*, is call'd an *Effluxion of the GENITURA*: That which happeneth in the *Vegetation*, or Time of *Ramification*, or (as some will have it) before the 40th *Day*, is call'd a *Deperdition* of the EMBRYO: *That* which falls out in the *sensitive* Progression, or Time of *Carnification*, or (as others will have it) before the *90th Day* from *CONCEPTION*, they call an *Abortion* of the FOETUS. But what so happens afterwards preceding the *7th Month*, is properly call'd an entire *Abortion* of the INFANT.

*HOWEVER*, *Others* will have a *fifth Distinction* made; namely, what so happens in the 7th, 8th, and preceding the 20th Day of the 9th *Month*, to be call'd an untimely *BIRTH*; because tho' born with *Life*, they alledge it to be very seldom, or never really *Vital*, or likely to *Live*: Upon which I shall, in good Time, introduce my own *Sentiment* in the subsequent Chapters of this *Section*.

*NOTWITHSTANDING*, this *Definition* signifies but little to the Purpose; let the *MISCARRIAGE* happen when it will, and under whatsoever *Name* or *Denomination*, It is nothing else in general, than an untimely *Exclusion* of an imperfect and immature BIRTH;

which unhappy *Accident* may proceed from a vast Variety of *Causes*, stimulating *NATURE* to such a violent *Expulsion*.

*IN* treating therefore of this *Accidental BIRTH*, I shall make use of none of those *Distinctions*; but rather (to prevent Mistakes) shall call all its several SPECIES, of whatsoever *Time*, by the general (and most common) Name of *ABORTION*.

AND of this ABORTION, happen when it will, the proximous Cause is always the Expulsive Faculty of the WOMB; which being hurt, or violently disorder'd in any respect, irritates and debilitates the Retentive Power: And then again, on the other hand, this Retentive Faculty (tho' not the proximous Cause) is sometimes first hurt or injur'd, and by that means incapacitated to retain the INFANT; which (in that Case) offends and provokes the Expulsive Power<sup>[93]</sup>, which is the proper proximous Cause of all ABORTIONS.

BUT most commonly the Expulsive receives the First Hurt; from whence the Retentive is oblig'd to Sympathize, and yield to its overruling Motions. And, according to Galen<sup>[94]</sup>, the Expulsive Faculty may be injur'd and irritated by Three different Causes; viz. 1. By the Bulk of the INFANT, when the WOMB cannot distend itself far enough to contain it: 2. By its Weight, when heavier than the WOMB and Ligaments can bear: And, 3. By the Humours (when the Membranes break) flowing into the WOMB; occasioning a Mordacious Itching there, or putrefying the INFANT in its Place.

*TO* which *three Efficients*, some Modern Authors have thought it sufficient to add the *similar*, *organical*, and *common Diseases* of the WOMB; together with some *Procatarctick Causes*.

*HOWEVER*, because I have generally observ'd *Those*, to be very promiscuously and confusedly treated of, I shall (according to my best Ability) endeavour to reduce the many different *Causes* of *ABORTION* to such plain *Heads*, and set them in such a clear *Light*, that they shall prove evident and manifest to the meanest *Capacity*: That *Women* (whose peculiar *Good* I have only at Heart in the Performance of this Work) may readily conceive them, and thereby be enabled (in most *Cases*) to prevent their greatest *Misfortunes*. And that whether the *Cause* happens proximously and immediately from a *stimulated Expulsive*, or mediately from a *læs'd* and *injur'd Retentive Faculty*.

WHEREFORE I shall now reduce those *Causes* to the following *Four general Heads*; namely, 1. To the *Constitution* of the MOTHER: 2. The *Constitution* of the INFANT: 3. The *Symptoms* of the MONTHS: And, 4. To the various *Procatarctick Causes* of this Tragical Case.

FIRST the Causes of ABORTION, proceeding from the Constitution of the MOTHER, are Three-fold, and respect either her whole Body, her WOMB only, or its neighbouring Parts. THOSE respecting her whole Body, are,

I. *THE four Intemperatures* of the Body; as the CALID, which, by its *Hot Quality*, exhausts the *Humours* (that are naturally necessary) to the Prejudice and Loss of the INFANT.

II. *THE* FRIGID; which, by its *Cold Quality*, vitiates and attenuates the INFANT'S *Aliment*, to a starving Condition.

III. *THE* SICCID; which, by its *adust dry Quality*, scorches and consumes the *Ligaments*, that they break, like so many *Strings* that snap before the *Sun*: Upon which the INFANT (being deprived of those *Mediums*, through which NATURE has appointed its *Sustenance*) corrupts and decays, like a *PLANT* in *Arid Sandy Ground*.

IV. *THE* HUMID *Intemperature*; which, by its *moist Quality*, debilitates the *Retentive Faculty*, hinders the *Ligaments* to consolidate and close firmly, and opens the shut *Orifice* of the WOMB. But besides all This also, by filling the *ACETABULA* with *superfluous Humours*, it may suffocate and stifle the *INFANT*.

V. A *nimious* and too great an *Obesity* or *Fatness*, and too great a *Gracility* or *Leanness* of the *Woman*'s Body: For the *One* converts the *CHILD*'s *Nourishment* to itself; and the *Other* starves the *INFANT* for want of its *natural Requisites*.

VI. A *PLETHORY*, or too great a *Repletion* of BLOOD in her Body; which frequently choaks and suffocates the *INFANT*.

VII. ALL Corporeal Causes, exagitating the Spirits and Humours; which have the same Effect and Force to irritate the Expulsive Faculty.

VIII. *ALL Diseases* incident to the Body, whether they be *Acute*, *Remiss*, or *Diuturnal*; which may easily effect *ABORTION*. But

*SECONDLY*, The *Causes* on the part of the WOMB, are not to be lightly or slightly considered; because if it be not both naturally well

*constituted*, and carefully well *dispos'd*, it can neither foment, cherish, nor retain the INFANT. For the least *Flaw* of its *morbifick Causes*, stimulates to a great Degree the *expulsive Faculty*: which *Causes* are, in my Opinion, as follow; viz.

I. *THE* WOMB'S *Præternatural SIZE*, either in *Magnitude*, or *Exiguity*: The *one* giving room for the *Infant*'s too much tumbling or too frequent Motion; and the *other* restraining the *CHILD* too much, even to the *suppressing* and *stifling* of it.

II. *ITS præternatural CONSTRICTION* or *Coarctation*; which may resist its necessary due *Extension*, for containing the growing INFANT.

III. *ITS præternatural DENSITY*; which may not only hinder the requisite *Distention*, but also prevent the SECUNDINE<sup>[95]</sup> from being firmly connected to the *Vessels*.

IV. *ITS LAXITY* of the *Orifice*, or *Lavity* of the interiour *Surface*; proceeding from *pituitous*<sup>[96]</sup> or *viscous Humours*, which slacken the *Ligaments*, and give way to the FOETUS.

V. *THE* WOMB's too *frigid* and *siccid Intemperature*; which Qualities are the greatest Enemies to *Nature* and all the *Actions* of *Female LIFE*.

VI. *ITS frigid* and *humid Intemperature*; which (abounding with *Mucosities* or *slimy Humours*) so relaxes the *Ligaments*, that they cannot hold or detain the *INFANT*.

VII. *ALL* obdurated and confirmed *Tumours* and *Ulcers*, all *Erysipelas* and *Inflammations* of the *WOMB*: Which often prove the *Causes* of the same *Effect*.

VIII. A *præternatural Situation*, or an *oblique Position* may become the *8th* and *last Cause* of *ABORTION*, which I shall mention on part of the WOMB.

*FROM* hence I come, *Thirdly*, in a due Method, to *Those Causes* respecting the *neighbouring Parts*; which I humbly conceive to be as follow.

I. *ALL Diseases, Pains*, and what *Causes* soever of those *Parts*, may tend much to deject or affect the *Spirits*, and stir up the *Humours* with unusual Alteration.

II. *ALL Causes* and bad *Affections* compressing the *lower Belly*, and exagitating or straining its MUSCLES.

III. A *præternatural Site* and inapt *CONFORMATION*<sup>[97]</sup> of the *Umbilical Vessels*, for their due Operation.

BUT then again, Secondly, It also often happens that, tho' the pregnant Woman labours under no Disease or Misfortune, either in BODY, WOMB, or neighbouring PARTS, yet notwithstanding the Expulsive Faculty is irritated to EJECTION by several Causes of the Constitution of the INFANT itself, as follow; viz.

I. *ITS præternatural* BULK, or vitious *Conformation*, oppressing and straining the WOMB, either in *Whole* or in *Part*.

II. *ITS Debility* and *Weakness*, or contracted, infirm, feeble *Constitution*, as mentioned in the preceding *Chapter*.

III. *THE Death* of the *INFANT*, emitting nauseous *Vapours* and putrefy'd *Matter*, stimulates the WOMB sooner or later to *Expulsion*: And (in this *tragical Case*) the *sooner* the *Better*; as will hereafter appear.

AND moreover, *Thirdly*, the *SYMPTOMS* of the *Months*, frequently prove *Causes* of *ABORTION*; of which *SYMPTOMS*, having already treated particularly, I shall in this place repeat little or nothing, only refer the READER to their respective *Chapters* in the preceding *Part* of this SECTION: And yet under this present *Head*, may be also comprehended all *Acute Diseases*, which (too often) prove of the same bad *Consequence*; as is evident from Chap. 28.

FOURTHLY, There is a great Variety of Procatarctick Causes, distinct from all those above-mentioned, which most frequently occasion ABORTION: And Those are Two-fold, INTERNAL and EXTERNAL. Of which the Internal are as follow, in my Judgment.

I. *THE Passions* of the Mind (mentioned in SECT. I. *Chap.* 5.) because such immoderate *Affections* too much excite the *Humours*, and incense the *Spirits*.

II. *VICTUALS*; if taken *too much* at a time, suffocate the *INFANT*; if *too little*, it is *starved*, and the *MOTHER* brought to a very low Condition of Life; and if *improper*, or of ill *Concoction*, the *CHILD* is thereby either much *weaken'd*, or (which is worse) it dies of course.

III. *DRINKING* immoderately, extinguisheth the *natural Calidity* of the WOMB and the *INFANT*; as certainly *strong* or *hot Liquors* 

impress a vitious Intemperature upon Both.

IV. *WATCHINGS* a-Nights, too much exhaust and dissipate the *Spirits*; as too much SLEEP, on the other hand, dulls, lessens, and obtunds the *natural Heat*.

V. *ALL* inward disorderly *Causes* dissolving the *Uterine* ACETABULA, *Ligaments*, or *Vessels*, by which the *INFANT* attracts its *Nourishment*.

VI. ALL Venenated, Cathartick, and Diaphoretick MEDICINES, Acrimonious Clysters, Venæ-Sections, Baths, &c: Which partly by exagitating the Spirits and Humours, and partly by diminishing the Aliment, occasion frequent ABORTIONS. Again

*THE external Procatarctick Causes* are These, which ensue in their due Order.

I. *ALL* inclement *Constitutions* or bad *Influences* of the WEATHER, WINDS,<sup>[98]</sup> and AIR; such as *Cold*, which pinches; or as *Heat*, which intercepts the *Breath*, and stifles the *INFANT*, &c.

II. *SMELLING* or *Touching*, *Sitting*, or *Treading* upon some Sorts of pernicious HERBS.

III. *ALL* violent MOTIONS, immoderate *Exercises*, &c. such as *Running*, *Leaping*, *Dancing*, *Riding*, or *Coaching*, *Lifting*, or *Carrying a heavy Weight*, also *long Fasting*, *strait Lacing*, a *Fall*, a *Blow* on the *Back* or the *Belly*, &c. as I hinted before occasionally.

IV. *ALL frightful* OBJECTS, and *sudden Surprizes* by hasty NEWS, FIRE, or such like terrifying Accidents.

V. *ALL astonishing* and terrible affecting *NOISES*; such as sudden Claps of *Thunder*, *Cannons*, *Guns* &c.

VI. *ALL* nauseous STINKS, on the one hand, and odoriferous SMELLS, &c. on the other, being *both* disagreeable and dangerous.

*THOSE*, and many other *trifling Matters*, such as the *SMELL* of an *extinguished Light*, or *Candle*, are known (too often) to be the *Reason* and *Cause* of *ABORTION*: which made (that great *Naturalist*) *Pliny*<sup>[99]</sup> justly take occasion to deplore the FRAILTY of Man.

*"HE* bewails and is asham'd (as he expresseth it) to think how *frivolous* the *ORIGIN* of the *proudest of Creatures* is; such a mere TRIFLE (as is mentioned) being frequently the *Cause* of his

FATALITY. And the Philosopher most pertinently adds, that He who now glories in so many VANITIES, trusting in the Strength of his Body, vaunting in the Riches of his Possessions, and upon every Smile of Fortune, believes himself to be a GOD, &c. little considers how many ways he might have miscarried in coming into the World, or how many ways he may yet, even to-day, go out of it, and come to his last GASP, as Anacreon, the wanton Lyrick Poet, did, who was suddenly choak'd with the STONE of a Grape; or as Fabius (that noble Dictator of ROME) dy'd, who was immediately strangl'd by a HAIR in a Draught of Milk."

I say, *He* little considers, how many *Trials* and *Hardships* he was expos'd to, before he had BEING: or, how many ways he might have been *stifled* before he had BREATH, and have been *dead* even before he was BORN.

WHICH Consideration leads me to the Thought of another Cause of ABORTION, mentioned by the holy Prophet<sup>[100]</sup>Hosea, where he says: "Because they have deeply corrupted themselves, and separated themselves unto that Shame at Baalpeor, (i. e. defiled themselves at the Statues of PRIAPUS) their Glory shall fly away like a Bird, from the Womb, from the Conception, and from the Birth; dry Breasts, and a miscarrying Womb shall be given them, &c."

AND having thus far briefly defin'd and descanted upon *ABORTION*, and the *Nature* of its *Efficients*, I come now, in the next place, to shew by what *DIAGNOSTICK SIGNS*, every *Woman* may infallibly know an approaching or instant *MISCARRIAGE*, either in *herself* or *another*: As also to set forth, by what *PROGNOSTICK SIGNS*, she may know the *Danger* she is threatned with upon that Occasion.

WHICH Undertaking, I hope, may prove conducive to the Welfare of that tender SEX; it being too common for *Women* to neglect the *proper Means*, through a supine *Ignorance* of the *Nature*, and *Danger* of their CONDITION. But This, however, is generally owing to indiscreet OLD WOMEN about them; (as I have often observ'd, and oft'ner had Occasion to hear) who either keep the *PATIENT* in *Suspence*, wheedling and telling her idle Stories, that the CASE is not so *dangerous*, the *Pains*, *Floodings*, &c. will go off in good Time, and the like: Or afterwards (upon appearance of more severe growing SYMPTOMS) they extenuate the *Danger*, telling her to submit with *Patience*, the common MISFORTUNE cannot possibly be prevented, &c.

TO which usual Suggestions, I answer; that as the one is an ignorant and imprudent Insinuation, the other is a downright Falsity: For in the first CASE, the Woman is diverted by foolish Hopes from applying for proper ADVICE, until perhaps it is past all REMEDY; and in the second, she is misled very often to her utter RUIN: Since whatever hath not yet happen'd, may peradventure be happily prevented; and even upon the last Extremity of the most violent Occasion, the Severity of the CASE may possibly be averted by good Management, and the Danger entirely compounded for by proper Conduct.

WHEREFORE, I cannot but think, it is worth any Woman's while to know the MARKS of an *approaching* and *instant ABORTION*: Whereof the *DIAGNOSTICKS* are as follow, *viz*.

I. A sudden *EXTENUATION* and *Falling* of the BREASTS<sup>[101]</sup>; sometimes only of *One*, but more commonly of *Both*: That of *One* denoting the *Woman* to bear TWINS, of which she is about to lose *One*; and which, if the *right* BREAST falls, is a MALE; but if the *left*, a FEMALE.

II. A WATERY MILK flows<sup>[102]</sup> in Abundance from those *FALLEN BREASTS*, discovering the future Danger.

III. *PALPITATIONS* of the *Heart*, frequently accompany'd with a *Coarctation* of the *Sides* and *Upper Belly*, very much incommoding the PATIENT.

IV. A *GRAVITY* or *Heaviness* of the *Loins*, and *Thighs*; *Gnawing* of the *Stomach*, *Pains* of the *Head* and *Eyes*.

V. A *TREMOR*, or *Trembling* and *Quaking FITS*, attended with a *Frigidity* of the exteriour *Limbs*.

VI. A *Rigor* and Stiffness, or a *Vibration* and Concussion of the *SKIN* and *MUSCLES* of the whole Body, with a concomitant *Chilness*.

VII. *HORROUR*, *Fevers*, *Faintings*, *Swoonings*, and sometimes *Convulsions*, *Cramps*, &c. all foreboding the coming *Malady*. These are the usual and principal Marks of an *approaching ABORTION*: Which when *Instant*, and the *Time* at Hand, then the

VIII<sup>th</sup> *DIAGNOSTICK* plainly appears; which is a *corrupt WATER* flowing *first*, next a *bloody WATER*, then *pure* BLOOD, after that small *Clods* of BLOOD, and at length, the INFANT itself (*form'd* or *inform'd*) follows of Course.

*HENCE* I proceed to the usual *Prognosticks* of *ABORTION*; which take as follow in their proper Order, *viz*.

I. *ALL Women* are more endanger'd in a MISCARRIAGE, than in a *Natural Birth*: because THAT happening at a *preternatural Time*, is of greater *Violence* than THIS. For like as *ripe Fruit*, whose *Stalk* is so loose in its Season from the *Tree*, that the *Fruit* falls of its own Accord: So it is in a *Natural Birth*, for the *Vessels* and *Ligaments*, by which the INFANT adheres to the WOMB, easily loose and break spontaneously; which in an Abortion, must needs happen by a more dangerous painful *Force* and *Violence*.

II. *THO' Women* (in this *Case*) may frequently escape with their *Lives*, yet their *Natural Constitution* is thereby too often broke at least, and debilitated, or thereupon subjected to one or other heavy *SYMPTOM* or *DISEASE*; if not also rendred quite *BARREN*.

FOR sometimes, because of the Pains, Flux, or Putrefaction of the retain'd BLOOD, Fevers, and other Distempers generally ensue: Sometimes by the violent Disruption of the Vessels, great Floodings and Loss of BLOOD happen; upon which Faintings, Swoonings, Convulsions, and at length DEATH it self follows: But, in fine, Convulsions happening<sup>[103]</sup> either at the Time, or after ABORTION, the Case is most dangerous; for then the PATIENT seldom escapes.

III. *THE first MISCARRIAGE* is most *dangerous* to all; because the *Genital Parts* are more streight or constricted, and less acquainted with such severe distending *Pains*: And besides the ORIFICES of the *Vessels* being so violently dilacerated, the *Party* often continues afterwards *Sterile* or *Barren* the rest of her Life<sup>[104]</sup>.

IV. *LEAN* and *tender Women* are much endanger'd in *ABORTION*, by Reason of their *Debility* and *Infirmity*: As Women too fat are, on the other Hand; because of the great *Astriction* and *Narrowness* of the PASSAGES.

V. *THE younger* the ABORTIVE *Production* happens to be, the less the *Woman* is endanger'd; because the *larger* the INFANT is, it gives

the greater *Pains* and *Ruption* of the *Vessels*.

VI. *WHATEVER* happens in the 7th or 9th *Month*, may be reckon'd a *safe BIRTH*, provided the *Child* be ALIVE: Whereas if DEAD, it is extremely dangerous. But above *All*, the *Eighth MONTH* is to be most *dreaded*, not only because of the *Largeness* of the *INFANT*, but also because of the *pernicious Quality* of *that* MONTH; as will hereafter more amply appear in Chap. 34.

WHICH Consideration leads me farther to observe; That, from the Beginning of the 5th, until the Middle of the 6th Month, the INFANT is least liable to Danger<sup>[105]</sup>: So next in the 4th, and from the Middle of the 6th, until the Close of the 7th Month: Then of course it is safer in the 3d and 2d Months, than in the 1st or 9th. For the least Cause may expell the EMBRYO in the First, and break the Mature Ligaments of the INFANT in the Ninth. But of all the whole Time, as I said before, the 8th Month is the most<sup>[106]</sup> dangerous, both to MOTHER and INFANT: according to which Consideration and Order of TIME, the prudent Physician may, with more or less either Fear on the one hand, or Assurance on the other, exhibit or prescribe proper REMEDIES for the Preservation or Recovery of his PATIENTS.

FROM whence I come in the next place to offer my serious Sentiments upon the CURE of this Malady, and the Prevention of ABORTION: Which difficult Work depends chiefly upon the Preservation of both MOTHER and INFANT; for when the MISCARRIAGE is once over, the CURE then does not much differ from the Case of a natural BIRTH.

HOWEVER in all Cases of this nature, it is an infallible Maxim, that it is more easy to prevent MISCARRIAGE, than to relieve or rectify the Miscarrying Woman; and more proper to begin that Prevention BEFORE, than AFTER Conception: Because the most proper Remedies for obviating many Causes of ABORTION, cannot so well be adhibited to the Woman after she is PREGNANT. And besides, as those Causes are very Different and various (as more fully appears from what has been said); so the Manner and Method of Prevention cannot be altogether exactly Uniform; every Cause requiring its respective CURE, before a Prevention can be effected.

*WHEREFORE*, in my humble Opinion, the *first Step* towards this *Prevention* is to weigh well and consider carefully the

CONSTITUTION of the yet unimpregnated Woman; in order to know and discover the *Cause* or *Causes* either of BODY, or WOMB, which may or can occasion any future ABORTION. Now in this CASE, *Women* having once *miscarry'd*, or oftner, methinks they may easily find out the CAUSE *Themselves*, by the Help of their *Midwives*; which being done, they should endeavour to have it remov'd, and effectually cur'd, before they conceive any more. However, if it chance to be neglected at that time, it may be more prudently undertaken afterwards, with such *Precaution*, as the *Nature* of the CAUSE and CONSTITUTION of the Woman require: Always remembring, but especially before or about the usual Time of ABORTION, to make use of proper Corroboratives for strengthening both the *INFANT* and *WOMB*; since *Women*, *miscarrying* from any one internal Cause, commonly bear their Conceptions to a certain TIME, which they cannot exceed, unless that *Cause* be judiciously removed beforehand.

*I ONCE* had an accidental Opportunity of being fully satisfied of the Veracity of this CASE, in a *Woman* of good Note in the City of *Dresden*; who *miscarried fourteen Times* in less than *eight Years*; being never able to *go* beyond the *tenth Day* of the *fourth Month*, and commonly losing the FOETUS about the *last* of the *Third*.

*AT* my Arrival in that *Place*, I found my *Credit*, for my necessary *Supplies*, upon a certain MERCHANT; who (with great Concern) gave me this melancholick Account of his SPOUSE, desiring my good *Offices*, if possibly any Means could be of Service. Upon which, I first made it my Business to discover, *that internal Cause*, wherein *she*, and her ordinary *Midwives*, had been so often mistaken; this being done, I happily performed the CURE, tho' (as a *Traveller*) I had not the Satisfaction of staying there to see the *Consequence*. But, however, by my last Advices from the grateful *Husband*, I find *she* is now MOTHER of two pretty *Boys* and a fine *Girl*.

*THE Cause* of ABORTION then being duly and discreetly *first* discovered, if it proceeds from any *Intemperature* either of the BODY or the WOMB; the *same* may be prevented chiefly by introducing the *contrary Temperament*, according to *Hippocrates*'s<sup>[107]</sup> Judgment, that *Contraries are the* REMEDIES *of Contraries*.

*IF* it proceeds from too much FATNESS, her *Body* is to be reduced; if it comes from too much LEANNESS, a convenient *Diet* and good

*Regimen*, &c. will help to restore her.

*IF* it happens from a *PLETHORY*, the too much abounding *BLOOD* is to be circumspectly lessened: As the Humours are to be judiciously evacuated, if it arises from a *Cacochymy*; and all Causes affecting the Spirits and Humours are to be carefully removed and avoided.

*DISEASES* of the whole *Body* are to be prevented as much as possible, by a *Regularity* of proper *DIET* and *REGIMEN* of Health; but whenever *These* are incident, they ought to be cured, as the *Nature* of the *DISEASE* and *CONSTITUTION* of the *Woman* will prudentially permit.

*IF ABORTION* happens from any *Cause* on the part of the WOMB, *that* must absolutely be removed before *CONCEPTION*, and resisted afterwards during the *FOETURA*, by the discreet *Use* of proper Means.

*IF* it arises from any *Cause* of the *Neighbouring Parts*, that is to be carefully managed or avoided, and *prevented* more easily than *cured*.

AS to the Causes on the Part of the INFANT, I shall refer the *READER* to the preceding *Chapter* only; as I do likewise if it comes from any *SYMPTOM* of the *Months*, or from any *Acute Disease*, to their respective *Chapters* in this *SECTION*.

*FINALLY*, If it proceeds from any *Procatarctick CAUSES*, either *internal* or *external*, all such are to be sedulously avoided and prevented; but whenever *These* happen, they are generally *cured* by proper *ALTERATIVES* of an *Astringent Quality*, for confirming the *Ligaments*; and *CORROBORATIVES* for comforting the *INFANT*, and cherishing the *WOMB*.

BUT supposing, at last, the Case desperate, and past all REMEDY, through Negligence or Delay, that the CURE cannot possibly be effected, nor the Misfortune of Instant ABORTION prevented; why then the Woman ought to be carefully comforted and strengthened, the Ligaments relaxed, the Passages dilated, and the expulsive Faculty assisted; so that the worse Consequences and greater Danger may be averted.

AND having now, in fine, thus at large treated upon the Subject of ABORTION, it leads me methodically (of Course) to touch upon all other BIRTHS respecting *Time*; I mean *Legitimate* and *Illegitimate* 

BIRTHS: Which (however) I shall discuss in as *Succinct Terms* as I can, to oblige the READER. And *first*,

# CHAP. XXXI. Of a LEGITIMATE BIRTH.

A *Legitimate BIRTH* respects TIME only, and that is properly so called, which most frequently happens, according to the *Common Law* of NATURE.

*IT* is never sufficiently to be admired as *Wonderful*, that MAN, who is born *HEREDITARY LORD* of the *Universe*, and invested with *SUPREME DOMINION* over all *Creatures*, should, however yet, be the only one deprived of some certain *definite Time* for his *BIRTH*<sup>[108]</sup>; it happening often in the *seventh*, commonly in the *ninth* and *tenth*, and sometimes in the *eighth* and *eleventh Months*, and *That* also at all Times of the Year: Whereas, on the other hand, all the rest of *inferiour Creatures* have their certain *prefixed Times*, both of *carrying* their *YOUNG*, and *bringing them forth*, beyond which they cannot go, nor controul the Order of *NATURE*.

HOWEVER, this being the Good Work and Will of the Great CREATOR, deserves more our silent Wonder and Admiration, than our bold Enquiry, or curious Scrutiny, into the REASON of it.

*BUT* notwithstanding, I hope, we may easily account for the *Latitude* of *TIME* allowed our *Births*, when we consider what has been said of the Times of *Formation* and *Animation* in their proper Places<sup>[109]</sup>. If then these require a proportionable *Latitude*, what wonder is it that the *Legitimate Time* of Birth is of such *Extent*? Not that I mean that the *rational Soul* is introduced either at different Times, or by Piece-meals, only that it is not *done* this or that Day *precisely*. And farther (according to *AVERROES*, that great *Commentator*) *Man*<sup>[110]</sup>, not only in the Womb, but also after Birth, even until his *Juvenile Age*, is but *a-generating*; and from that Time to old Age he begins to *decline*: yet we daily see that *this Change* is not equal to all, in that some Men do but arrive to their most robust and *vigorous State* about the fortieth Year of their Age, whereas

others come to that Length about the thirtieth, and most about the thirty-fifth.

AS it is an Auspicious Crisis which happens any Time of the Critical Day, whether anticipated or postponed by a few Hours: And as the Fruit of Trees have their constituted Time of Maturity, which notwithstanding some are perfected sooner, and some later; so (I think) it may be also in the present Case of Births.

*HOWEVER* yet, to go a little further, without Offence: As to the *Legitimacy* of *BIRTHS*, I don't see any Reason why every *Birth*, producing a *vital Child*, may not be justly esteemed timely *lawful*, whether it be of the *seventh*, *eighth*, *ninth*, *tenth*, or *eleventh Month*: But because few of our antient and learned *Predecessors* have been inclined to admit any standing *RULE* of such a large *Extent*, in this *CASE* we shall be far from desiring to establish any *New One*, or advance any *Paradox*.

*I SHALL* therefore (in this Place) only touch upon *That* which most *Authors* seem to have agreed upon, and reckon the most common *Legitimate Birth*; namely, which happens (at the soonest) about the *260th Day* from *CONCEPTION*, being the *first* of the *38th Week*, or the *20th* of the *ninth Month*; as it doth also sometimes fall out (*ten Days later*) about the *270th*, when it is neither *too soon*, nor *too late*; and which likewise (at the latest) happens before the *280th Day*; that is, the *last* of the *40th Week*, or the *10th Day* of the *10th Month*.

*BUT This* (if I may be permitted to speak my Mind) depends much upon the *Time of Conception*; it being my Opinion, that if the Woman did conceive when *recently purged*, I mean shortly after the natural Flux, she may *bring forth* in the beginning<sup>[111]</sup> of the *9th Month*; whereas, if when the *Menstrua* were almost ready to *flow*, towards *its Close*, or later: And if in the *Interval* betwixt these Times, she may *produce her Child* in the *middle* of the Month: Because as *Plants* or *Corn* arrive much sooner to *Maturity* after the *New* than after the *Full-Moon*, so it may be also with the *Fœtus*, because of the more or less *Vigour* of the *Womb*.

*HOWEVER*, in short, it is to be observed, that in all these *Cases*, we may commonly allow a few *more Days* for the *GIRL* than the *BOY*, as appears from *Sect.* I. *Chap.* 9.

AND, in fine, according to the Opinion of the most Learned and Curious *Practisers* in *MIDWIFERY*, this *BIRTH* happens always<sup>[112]</sup> at the *self-same Hour* of the *Day* or *Night*, in which the *Woman* CONCEIV'D: So that from hence it is, that most *BIRTHS* happen in the *Night*, or Dawning of the *Day*; wherefore they All agree, that a *Legitimate BIRTH* requires not only a certain definite Number of *Days*, but also of *Hours*, &c. To proceed therefore to

### CHAP. XXXII. Of an ILLEGITIMATE BIRTH.

AS an Illegitimate BIRTH also respects TIME, so That is only to be call'd so, which happens before or after the TIME instituted by the Law of Nature. Hence all unhappy ABORTIONS belong to this Head; which being largely handled (apart) in the Chapter just aforegoing, I shall only here cursorily touch upon That, which (in a distinct sense) is accounted an Illegitimate BIRTH.

THAT I may the better define *This Sort* of *BIRTH*, I shall *first* observe, that *Nature* has instituted Nothing *rashly*, nor in *vain*, neither does it ever act by CHANCE. *She* having then limited a certain TIME (however at large) within which all *Legitimate BIRTHS* happen, and all *vital Children* are born; of consequence, whatever happens *before* or *after* that *Time*, is an *Illegitimate BIRTH*, and seldom or never produces a *Living* or *Lively* CHILD.

HOWEVER, Vallesius<sup>[113]</sup>, Cardanus<sup>[114]</sup>, and some Others relate divers strange Precedents, and affirm that they have known and seen *Children* born in the *fifth* and *sixth Months*, which have liv'd to the Years of Discretion; It is notwithstanding my Opinion, that *Those great Men* giving ear to the frivolous *Relations* and idle *Reports* of *simple Women*, have suffer'd their *Credulity* to impose so far upon their better *Judgments*. And I am besides the more induc'd to think so, because since *Their days*, we have not heard of any *one Example* of this wonderful *Kind*, which deserv'd the least *Notice* or *Credit*.

BUT there are Others again; who (in a manner) ridiculing these Instances, fall into grosser Absurditys themselves; denying the LEGITIMACY of a seven or eight-Months BIRTH; yea, Some even of a Ten Months, after the Tenth Day, as well as of all posteriour BIRTHS. Upon which erroneous Mistakes, (if it may be without Offence permitted) I would freely offer my simple Judgment, in manner following: and thereupon, First,

#### CHAP. XXXIII. Of a Seven-Months BIRTH.

TO prove the LEGITIMACY of this *BIRTH*, and the *Possibility* of this *Month's* producing a *vital Child*, I need not confine myself to the *Judgments* of the most Wise and Divine *Hippocrates*, *Galen*, and *others*, nor to the *Principles* of PHYSICK in particular: but may justly appeal to All the rest of the *Liberal Arts* and *Sciences*, which (as far as I am duly acquainted with them) generally agree in *Defence* of This Position.

*IT* is (however) certain, that the CHILD born *before* the *Twentieth Day* of this *Month* is commonly *weak* and *infirm*. And for that Reason the *later* the *BIRTH* happens in the *Month*, the more *brisk* and *lively* is the CHILD: As I have more than once observ'd, that the *Latter Part* (about the *210th Day* from *CONCEPTION*) hath produced as sprightly vivacious *Children* as any at All. Wherefore, in short, I cannot help having full as good an Opinion of such a CHILD born about the *last* of the *SEVENTH*, as of any such born in the beginning of the *Ninth Month*, provided it be not expell'd by some *preternatural Cause*.

*TO* examine this nice Matter a little more clearly, let us inspect into the *Nature* and *Quality* of the *Month*: In order to which, I hope, we may rationally observe,

I. *THAT* (according to the best *Astrologers*) the latter of the PLANETS, (the *Moon*) influentially presides over the INFANT in this *Month*; whose frigid and humid *Qualitys* are thought to afford the several *Parts* of it a certain *Fatness*, thereby relaxing and easily distending the MATRIX: Which being done, and the CHILD now perfected by the whole Body of the PLANETS, that have *All* particularly (in their order) duly discharg'd their respective *Functions* towards its Perfection; provided it has a Competency of *Strength* and *Vigour*, it forwardly appears about the Close of this

*Month* with great *Ease* and *Facility*, and may continue both *Healthy* and *Lively* after its *Birth*.

II. *THIS* is universally acknowledged to be a *perfect* and *compleat* NUMBER; from whence *Cicero* calls it *NODUS OMNIUM*, or the *Knot* of all Things. As the Wise *Pythagoreans* justly term it otherwise the *Vehicle of Man's Life*: Not only because that, according to the *Violence* of any DISEASE, and the *Strength* of the PATIENT, a *CRISIS* happens either in the *Seventh*, or the *multiply'd Seventh Day*; but also because, as CONCEPTION is certain upon *Seven-Hours Retention*; and the Work of *Coagulation* perfected in *Seven Days*, so may That of full *Maturity* be in *Seven Months*, and accordingly this *MONTH* may very reasonably produce *vital Children*. But by the way,

HOWEVER fictitious such things as savour of Astrology, may be reckon'd by Some, yet who knows not that the Seventh Hour, and Seventh Day after its BIRTH, determines the CHILD either to Life or Death? Who does not well know, That in the Seventh Month, its TEETH begin to break out and appear? That in the Seventh Year (according to Plutarch) it changes its TEETH? Who does not find, That<sup>[115]</sup> the Age of Man depends upon SEPTENARY Mutations? That the First Seven Years conclude his INFANCY; as the Second finish his PUERITIA, or Childhood; and the Third compleat his ADOLESCENTIA, or Youthful Growing Age? To which his JUVENTUS, or more vigorous Youthfulness, succeeds; which is absolv'd in twice Seven Years more: For in This Juvenile Age, the Body attains to its full STATURE; as the Bones, Membranes, and Fibres arrive to their due Solidity.

THIS again is succeeded by the *Fifth*, call'd VIRILITAS, the *Virile* or *Manly Age*; consisting of *twice Seven Years* more, being in all *Seven times Seven Years*: In which MANHOOD, the *Facultys* of the MIND, as well as the *Strength* of the BODY, are most resplendent and perfect; tho' in almost All *Women*, the *Generative Power* begins to cease at this AGE, as their TERMS commonly do, however, not without a great *Disorder* of the Motion of the BLOOD.

THE Sixth Age of Man, or the SENECTUS, is compos'd of twice Seven Years more, and extends itself to Sixty Three: In This Old Age the Natural VIGOUR very much declines, the BODY waxes both dry and lean, the MEMORY begins to fail, and the PERSON grows more Anxious, Careful and Covetous. As in the Seventh and Last Age, (or DOTAGE, as it were) he becomes *Feeble* and *Decrepit*; which generally consists of *Seven Years* more. So that, in fine, according to this very rational and plausible *Computation*, of the Learned and most Ingenious Dr. *Sprengell*, the AGE and LIFE of MAN is commonly reckon'd to amount to *Seven times Ten Years*.

*IT* is also farther observable, that as the SOUL of Man has *seven* different *Appellations*, according to its seven principal *Offices*, (as amply appears by *Sect.* I. *Chap.* 4.) so there are *SEVEN Degrees* in the BODY, to compleat its *Dimensions*; viz. *Marrow*, *Bone*, *Nerve*, *Vein*, *Artery*, *Flesh*, and *Skin*: As there are also *SEVEN* in Number, which (according to *Macrobius*) the *Greeks* call *BLACK MEMBERS*; viz. the *Tongue*, *Heart*, *Lungs*, *Liver*, *Spleen*, and *Two Kidneys*, to consummate the *Compositum*. Yea, *Hippocrates*<sup>[116]</sup> himself confirms the *Efficacy* and *Præstancy*, *Fulness* and *Perfection* of this Number.

I have also remarkably observ'd, that the Number *Seven* is most powerful and signally predominant in *Cœlestials*; as the *Seven Circles* in the HEAVENS, according to the *Longitude of the Axle-Tree*: The *Seven Stars* about the *Artick-Pole*, called CHARLES'S-WAIN: The *Seven Stars* also call'd PLEIADES: The *Seven Planets*, giving Names to the *Seven Days of the* WEEK: The *Periodical Revolution* of the MOON every *Seventh Day*, running round the Compass of the whole ZODIACK in *Four Times Seven Days*; that is, considering her *Phases* as obverted to the SUN. And *Linus*, a most ancient celebrated Poet, sings thus:

"Septima cùm venit Lux, cuncta absolvere cœpit "Omnipotens Pater, atque bonis, & Septima, & ipsa, "Est etiam rerum cunctarum Septima Origo; "Septima prima eadem perfecta, & Septima Septem, "Unde etiam Cœlum stellis errantibus aptum "Volvitur, & Circ'lis totidem circum undique fertur.

THIS Number seems likewise to be of the greatest Esteem in *Religion*; and from hence among the *Hebrews*, to swear, is call'd *SEPTENARE*<sup>[117]</sup>, (that is, to *protest* by *Seven*:) So *Abraham* making the COVENANT with *Abimelech*, appointed *Seven Ewe-Lambs* for a Testimony: The *Seventh Day* the Great *CREATOR* rested from his Work: *Jacob* served *Seven Years*: *Seven Days* the People bewail'd the Death of *Jacob*: *Elisha* (the Prophet) said unto *Naaman* (the *Syrian* Captain) Go and wash thy self *Seven Times* in *Jordan*, and

thou shalt be made whole, and thy Flesh become clean: And, in fine, *David* said, *Seven Times* a day do I praise *THEE*, because of thy righteous Judgments.

THESE, and innumerable such like Sentences are not only couch'd in the Books of Moses, and the whole Volume of the Old Testament; but also expresly contain'd in the GOSPEL, and interspers'd through the whole Bulk of the New: As the Seven Beatitudes, the Seven Virtues, the Seven Vices, the Seven Petitions of the LORD's PRAYER, the Seven Words of our SAVIOUR upon the Cross, &c. But besides, in the Apocalypse or Revelation of St. JOHN, this mysterious NUMBER is most frequently mention'd, to denote its Efficacy and Excellency of representing some Ænigmatical Truth or Emblem.

*MOREOVER*, the *Divine Apostle* signifies and sets forth there, the *Persecution* of the *CHURCH* (under the Tyrants, *Domitian, Trajan,* &c. which began in the *Primitive CHURCH* in his own Days, and continued for three hundred Years, even to the Reign of *Constantine* the Great) by the *Allegory* of<sup>[118]</sup>*SEVEN SEALS*. He figures out the *Heresys* of the *ARIANS*, &c. (from the Time of *Constantine* to the Reign of *Theodosius*, being three hundred Years more) by that of<sup>[119]</sup>*SEVEN TRUMPETS*. And, in fine, he mystically alludes to the future *Plagues* of *ANTI-CHRIST* (from the Time of *Pope Bonifacius*, to these our present Days) by<sup>[120]</sup>*SEVEN VIALS*, according to the Interpretation of that most Learned Divine, *Peter Palladius* Bishop of *Rochel*.

I say, with Submission to wiser Heads, that *These* and the whole Train of those Sacred *Allegorical Allusions* used in this *Book*, might have been as pertinently express'd by any *other Number*, as the *SEPTENARY*; were it not that, this *Number* better implies a certain *FULNESS* of *Sacred Mysterys*: As I think that *Number* likewise (in all rational probability) may properly portend here, *PERFECTION* in *Maturity*, and *COMPLETION* in *Vitality* to every *Full Seven-Months* CHILD.

# CHAP. XXXIV. Of an Eight-Months BIRTH.

AS to this Point, the Case indeed differs much in my Judgment from the Former: For tho' I have heard some loquacious Women strenuously aver the contrary, because of their own rash Mistakes; yet I cannot help being of the same Opinion still, that this MONTH seldom or never produces a *living*, or *lively* CHILD: And that because, if the INFANT hath Strength enough, it must needs appear about the Close of the Seventh Month; but if not, the Attempts are the same, according to its greater or less Abilitys; (as most MOTHERS may very sensibly observe in their own Conditions, by its extraordinary Motions and Struggles at that Time) whereby it is so weaken'd and debilitated, that it requires the Eighth full Month, and Part of the Ninth, to recover itself, and recollect its exhausted Strength and Vigour.

ANOTHER Natural Reason besides may be given for This; because that this MONTH is peculiar to the Planet SATURN, which is an Enemy to all Creatures that breath LIFE: For he now returns not with the same Meekness and Lenity of Influence that he used in the First Month of the CONCEPTION, but with a far greater Severity of Tyranny and Enmity; as by his Frigidity, lessening and extinguishing the Native Heat of the INFANT, rendering it Unactive and Slow to Motion; so by his Siccity, constringing the Passages and Orifice of the WOMB: which, if so, must (of necessity) very much endanger both the MOTHER and the INFANT.

*BE* this as it will, yet it is most certain, that the CHILD born in this MONTH is always very *Weak* and *Sickly*; However if, by chance, it survives the *14th*, it may live till about the *40th Day*, when it most commonly *breathes its Last*: Yet if it also survives this *Time*, the greatest *Danger* being then over, it may, by the means of tender CARE and ART, be brought up as *others* are usually reared: But how *long-liv'd* soever, or well-governed its *Health* may be, it will still continue of a *weakly* and *tender Constitution* of Body, if not also half-witted<sup>[121]</sup> in Mind.

UPON this Head some Egyptian Writers mention, that because Dionysius, who was born in the EIGHTH MONTH, lived in the Island of NAXOS; therefore both this Number and the Island were dedicated to his everlasting Memory; Whereupon, they say, he obtained the Prerogative and Privilege from the GODS, that the Women of NAXOS only, in this MONTH, should bring forth in Safety, and their CHILDREN only enjoy Vitality.

WHICH Fable may however serve to satisfy us, that they have had no better Opinion of an *Eight-Months BIRTH*, in those Antient Days, than the Generality of Learned Men yet have in these Modern Times: signifying in the main, by this comical Allusion to that little Island in the Ægean Sea, that if, peradventure, an Octimestrian BIRTH, by its more propitious Destiny, should be determined to Life; that ought to be looked upon as something Extraordinary, and not laid down for any general Hypothesis: especially for this manifest Reason, because in all other Nations, such CHILDREN are commonly observed to be but short-liv'd; as the Women, labouring with CHILD at that critical<sup>[122]</sup> or fatal TIME, are absolutely exposed to the severest of excruciating PAINS, and the greatest of imminent DANGERS.

*MOREOVER*, *Hippocrates* himself testifies, that the very *Gestation*<sup>[123]</sup> of the *eighth Month* is the most *onerous* and *difficult* of all the Time, as well on account of the *Indisposition* of the *Womb*, as by reason of the *Mother's* being affected by the *disturbing Motions* of the *Infant*: Wherefore if the *Birth* then draws on, it receives a double Damage, and suffers as well because of these *Affections* of the *Mother* and *Womb*, as by its own proper *Motions* in precipitating itself.

*FROM* what is said, we may easily comprehend what *HIPPOCRATES* means by that obscure<sup>[124]</sup> Ænigma, which some have formerly reckoned more inextricable than any *Herculean Knot*, viz. *An Octimestrian Birth is and is not*; signifying thereby nothing else than that the *Child born* in the *eighth Month* (in some respect) may be supposed in *Being*, but really and indeed *is not*, because it soon vanishes and *dies*.

### CHAP. XXXV. Of a Nine-Months BIRTH.

THE Generality of Modern Writers have too strictly confined a *Legitimate* BIRTH, and tied it down to this very MONTH only; and *some* even restrain it to the narrow *Limits* of its *Latter Half*: Both equally affirming *That* TIME to produce the most vigorous and lively *Children*, and strenuously alledging it to be the *only* appointed TIME of *Nature*; because (as they say) *it happens most frequently*.

BUT unless they could produce some better natural Reasons than THIS, or any others indeed that I have yet heard of, they shall scarce influence me to agree with their popular Notions or vulgar Errors: For their fond Opinion seems not to be so much supported by any Arguments of Natural Reason, as by an imaginary Experience, founded upon Hearsay, or the general Misconstruction of WOMEN.

HOWEVER, in Condescension and Good-Manners to Female Authority (to which I owe all imaginable Deference) I shall not launch out into any immodest or disagreeable Contradictions; but, on the contrary, I shall endeavour to make it evidently appear from the Nature of the MONTH itself, that it indisputably induceth both Perfection and Vitality to the CHILD, whether it be born at this Time or not: For I must frankly own this Truth indeed, that many Auspicious BIRTHS happen in this very same MONTH, for several good Reasons.

I. BECAUSE then, if we will believe Astrologers, JUPITER now returns with his Serene Aspect, by his pure healing Heat and Humidity, cherishing and renovating the Life of the INFANT (which consists of those two vital Qualities) and quite effacing the former Mischiefs and Injuries of noxious SATURN: whereby he renders This ninth Month not only most conducive to the BIRTH, but also to the future Welfare and Prosperity of the INFANT.

II. *BECAUSE* this auspicious *Number* NINE is dedicated to the MUSES, according to the Order of the Celestial *SPHERES*: Hence as we have *nine moveable Spheres*, *viz*. the *Primum Mobile*, the *Starry Heaven*, and the *Spheres* of *SATURN*, *JUPITER*, *MARS*, *SOL*, *VENUS*, *MERCURY*, and *LUNA*; so there are *Nine* MUSES appropriated to them, to accomplish their *Harmony* or *Consort*.

III. *BECAUSE* to denote the *Sufficiency* of this NUMBER, there are also *nine* ORDERS and CHOIRS of blessed ANGELS; namely, *Seraphims, Cherubims, Thrones, Dominations, Powers, Virtues, Principalities, Archangels,* and *Angels*: Which the *Prophet EZEKIEL*<sup>[125]</sup> emblematically figures out by Nine STONES; as the Saphire, Emerald, Carbuncle, Beril, Onyx, Chrysolite, Jasper, *Topaz,* and the Sardis.

*BUT* besides the *Nine* internal and external SENSES, mentioned in *Sect.* I. *Chap.* 5. more plainly and familiarly denote the *Perfection* of this NUMBER: As, in like manner, the most learned *Authors* of all Ages take great Notice of it in the AGE of *Man*, calling *this Ninth*, together with the *Seventh*, CLIMACTERICAL *Years*.

*NOT* to mention the *Ninth Hour*, in which our Blessed SAVIOUR breathed out his Holy Spirit; the *Ninth Day* the *Antients* buried their DEAD, and many such remarkable Instances. Yet however, in most *Natural* and *Philosophical Cases*, this NUMBER implies still some *Imperfection*; because it comes short of the *Complement* of the Great *Number* TEN (being deficient by ONE) as St. *Austin* interprets it of the TEN LEPERS. Wherefore not to go too far in these MYSTICAL *Matters*, I proceed to

#### CHAP. XXXVI. Of a Ten-Months BIRTH.

AS to this Point, it is not only True in Part; to wit, during the First Ten Days of the 10th Month, as SOME would have it, but rather (in my Opinion) Altogether, and at any time of it, as LEGITIMATE as the 9th Month; according to Plautus the Comick Poet; Tunc illa quam compresserat, decimo post exacto Mense hanc peperit Filiam.

FOR altho' Women commonly reckon their BIRTHS more frequent in the Ninth Month; yet many Learned Men have left it (as a doubtful Controversy) undecided whether THAT or THIS be the most proper natural Time: Whereas Some of the first RANK<sup>[126]</sup> have more positively determined a Legitimate BIRTH to happen in the Tenth Month ONLY, according also to Virgil's excellent Poetical Computation—

"Matri longa decem tulerunt fastidia Menses."

*MOREOVER*, for a farther Proof of this Argument, I need only refer to *Solomon*, the wisest of *Kings*; who being the greatest *Master of all ARTS*, cannot be supposed to have been ignorant of This *Truth*: And whose express Decision of this Doubt, we have set down in the Beginning of the 7th *Chapter* of his *Book* of *WISDOM*; saying, "*I myself also am a mortal Man, and the Offspring of him that was first made of the Earth, and in my Mother's Womb was fashioned to be Flesh in the time of TEN MONTHS*, &c."

*BUT* farther yet, as to the *Nature* of this *Month*, *MARS* is presumed to succeed in it, who indulges the INFANT by his *amicable Qualities*, or *benign Influences*: For *He* is deemed a Friend to *LIFE*, as he affords *Vitality* to the *BIRTHS* happening in it.

AND again, this Number TEN is reckoned a Compleat and Universal NUMBER in all Sciences; because we cannot account

beyond it, but by *Replication*, a *Re-assumption* of the UNIT, or *Repetition* of the *Nine Figures*, to perfect the Progression. But farther still, to denote the Excellency and Perfection of this MONTH, there are TEN *Singers* of *Psalms* mentioned in Holy Scripture; namely, *ADAM*, *ABRAHAM*, *MELCHISEDECH*, *MOSES*, *ASAPH*, *DAVID*, *SOLOMON*, and the *three Sons of CHORAH*: TEN *Musical Instruments*: TEN *Strings* in the *Psaltery*: TEN *Curtains* in the *Temple*: TEN *Commandments* instituted and given directly by GOD himself: AND, in fine, the TENTH Day after *Ascension* the *HOLY GHOST* came down, &c.

THERE are besides also TEN Parts, of which MAN himself consists intrinsically; viz. the Spirit, Brain, Lungs, Heart, Liver, Gall, Spleen, Kidneys, Testicles, and Matrix: And likewise TEN Simple Integral Parts constituting the MAN, to wit, Bone, Cartilage, Nerve, Fibre, Ligament, Artery, Vein, Membrane, Flesh, and Skin. In short just so, after this manner, there are TEN Months required to form and maturate the MAN, in the substantial Completion of THESE to Perfection.

*BUT*, after All, lest I should be thought, by this way of Reasoning on the *Numbers* of the *MONTHS*, to vend some fictitious *Notions* for mechanical *Causes*, or vain *Fictions* for the *Laws of Nature*, I shall in this Place, to avoid that Censure or Reproach, make a small *Digression*, and that upon *NUMBERS* in general.

*FIRST* then, I think it appears very Plain from the *Three preceding Chapters*, that *NUMBERS* are of a certain wonderful Efficacy and Virtue even in SUPERNATURALS.

SECONDLY, In Natural Things also the Virtues of NUMBERS (so mystically constituted and mysteriously intended) are conspicuously manifest: As is evident in the Herb, call'd PENTAPHYLLON, which is said to resist Poisons by Virtue of Number FIVE; as one Leaf of it taken twice a day in Wine, cures the QUOTIDIAN; three, the TERTIAN; and four, the QUARTAN Fever. So likewise in the Herb HELIOTROPIUM TRICOCCON<sup>[127]</sup>, three Grains whereof cures the TERTIAN: and four, the QUARTAN Ague. In like manner, as a Serpent, if struck ONCE with a Spear, dies; but if TWICE, is said to recover Strength. So much for the Curious.

*HOWEVER*, These and many other Things might be mentioned, both in *Natural*, and *Supernatural Beings*, upon the wonderful

*Power* and *Efficacy* of *NUMBERS*: Which plausible *Doctrine* not only the most Eminent *Philosophers*, but also the most Learned *Catholick DOCTORS*, namely, St. *Jerom, Austin, Origen, Ambrose, Athanasius*, &c. All unanimously teach; as well as the most famous Dr. *Rabanus* (Archbishop of *Mentz*) who in his Time compos'd an excellent *Book* to this purpose chiefly upon the *Virtues* of Numbers.

BUT notwithstanding all This, I am far from believing that there is any peculiar Virtue in NUMBERS, considered abstractedly: Only, I would hereby demonstrate, that as the Omniscient CREATOR has appointed every thing a certain TIME for its Production, Augmentation, Perfection, Declension, and Duration; so in all probability, the same *Decree* or Good-Will of *Divine Providence* may have ordered NUMBERS, and Sett-Days or Times to concur with the apparent Necessity of Corporeal, Natural, and Mechanical CAUSES. For in Truth, at last, I cannot think that, unless there had been some great and distinct Mysterys of GOD and Nature comprehended in Great DIVINE<sup>[128]</sup> *NUMBERS*. the would otherwise have recommended That *Search* to the World of Understanding to count the NUMBER of the Beast: saying, It is the Number of a Man. But to proceed:

#### CHAP. XXXVII. Of an Eleven-Months, and all posteriour BIRTHS.

As to this MONTH, many Authors<sup>[129]</sup> agree to legitimate its BIRTH; because of several repeated *Instances* that really happen'd in their Days: To which I can add ONE of my own proper Experience, during my itinerant Practice in the City of Praque. Where, as I came recommended to the Acquaintance of some Eminent Physicians of the Place, I happen'd once to be call'd (by one of them) to a Lady in LABOUR; whom I had the good Fortune to deliver immediately, of a fine, lusty, and lively Girl. After which, I had the Honour to attend her in *Child-Bed*; I mean, to visit and prescribe for her, by the concurring Advice of my Honoured Friend (the most Learned and Ingenious Dr. Von Overberg, who was her near Relation) in order to prevent some Disasters under which she had formerly suffer'd on the like Occasion. Upon This, she was pleas'd to tell me out of her own Mouth, that, before the Day of her DELIVERY, her Husband, (who was a *Colonel* in the Imperial Service) had been gone to the *Army*, then in Sicily, TEN MONTHS and two Days; so that this Proculean CHILD was born (at soonest) the *Third Day* of the *Eleventh Month*. And in this Case, I dare say, I was no ways mistaken, or impos'd upon; that *Lady* being endued with no less true *Honour* and strict *Virtue*, than she was otherways deservedly esteem'd, of a singular good *Character*, and great *Distinction* in that Place.

UPON which happy Occasion, I was the first Time fully satisfy'd, and convinc'd, as to the due Proportion and Distinction of the *Four* controverted Terms; viz. that, by how much the *latter Part* of the TENTH MONTH is preferable to the *Beginning* of the NINTH; by so much is the *Beginning* of the ELEVENTH, preferable to any *BIRTH*<sup>[130]</sup> happening in the *latter Part* of the SEVENTH MONTH: So that, upon the whole Matter, I can find no plausible Reason why All *Those* may

not be accounted *Legitimate terms* of Time in *Child-Bearing*, as well as the *latter Part* of the *NINTH*, and *Beginning* of the *TENTH MONTH*.

WHICH probable Opinion we may the more readily agree to, and acquiesce in; especially because (if what has been said of the rest of the *PLANETS*, in the respective *Chapters* of *This* and the *First SECTION*, be true) the *SUN* in this *ELEVENTH MONTH* returns to take care of the *INFANT* (yet unborn;) by virtue of whose vivacious *Influence* and beneficent *Quality*, *BIRTHS* of this *MONTH* are accounted no less *vital* and *successful*, than any *others* differently time'd.

THERE are also many Authors, over and above, who make mention of BIRTHS, in the Twelfth, Thirteenth, Fourteenth, and Fifteenth MONTH. Yes verily, and there is one remarkable Instance, of the Physical College at Montpelier, where a grand Consultation was held about the Year 1590, in Favour of a certain MARCHIONESS; who (after some fair Legitimate BIRTHS) had Two<sup>[131]</sup> running successively, the one in the Eighteenth, the other in the Twentieth MONTH: upon which, divers curious Reasonings happened, and various Sentiments were deliver'd. However, because such Precedents are so very few and uncommon, I shall take up no more Time about them. Only

*AS* to what is said in this, and the preceding Chapters, touching the *Months*, I desire to be understood, as meaning *Solar*, not *Lunar* Months: By *Solar* Months, I mean that Space of Time, which the *Sun* continues in either, or every, *Sign* of the *Zodiack*, comprehending thirty Days.

*BUT* it may (perhaps) be objected, that the *Antients* (especially the *Greeks*) reckon'd their Years by *Lunar Revolutions* only, and had none else but *Lunar Months*. To which I answer, that the *Wise* and *Divine HIPPOCRATES* computes<sup>[132]</sup> the Time of *Birth* by *Decads of Weeks*; which *Decad* contains Seventy, as every Week consists of Seven full Days: Hence *He* makes out the Legitimacy of a *Seven-Months Child*; because that *Term* comprehends *three Decads* of Weeks, or 210 Days: And hence it is evident, that he has measur'd that Time of *Gestation* by *Solar* Months, of which each contains 30 Days, answering alike in *Births* of all Months. For if we *divide* those 210 Days to each; or if we *multiply* 30 by 7, we'll find a *Product* of 210

Days in all. And this *Computation* he farther elucidates, saying<sup>[133]</sup>, *As thirty Suns form the Fœtus, so seventy move it, and two hundred and ten perfect it*. Hence it is evident and certain, that HIPPOCRATES also considered and regarded the *Circuits* of the *Sun*. Which leads me farther, to

## CHAP. XXXVIII. Of the Reasons why ONE Number of Months, Weeks, and Days, is more Auspicious to BIRTH, than ANOTHER.

WHAT has been said in the Seven preceeding Chapters particularly, concerning Months, Weeks, &c. leads me directly to descant upon THESE in general: Which Topick, tho' I could willingly resign it to the more Judicious to enter upon, and recommend to the more Learned to discuss; yet lest I may be thought to evade or omit any material Point which I have undertaken, I shall endeavour (according to the Best of my weak Capacity) to explain, en passant, and to unfold this Mystery, by declaring the most plausible Orthodox Reasons why ONE Number of Days, Weeks and Months, is more Auspicious to the BIRTH, and affords more Vitality to the CHILD than ANOTHER.

*IN* handling of which *Subject-Matter*, as I propose to be very *Brief*, so I shall only observe in short, that such *Reasons* are chiefly founded upon a *double Principle*; That is, of daily *Experience*, and natural *Knowledge*.

I. UPON daily *Experience*; in that it is notoriously well known that CHILDREN born in *different Months*, are not equally *Vital* or *Lively*; and in that it is evidently manifest, that the *7th*, *9th*, and *10th*, and perhaps the *11th Month* also, are endued with some certain *Virtues*, and prevalent *Qualitys* before all OTHERS in this Case.

II. UPON Natural Knowledge; insomuch that it is the Opinion of all Judicious Naturalists (either Philosophers or Physicians) that this inferiour World is moved and govern'd by superiour Bodys, and that all Terrestrial Vicissitudes and Changes depend upon Cælestials, and those chiefly upon the SUN and MOON: which both possess great influential Virtues, and exercise great directing Powers over all *Inferiour Bodys*. From hence the *Antients* always maintain'd, that the *Periodical Accessions* and *Circulations* of many *DISTEMPERS* depended entirely on their noxious *Influences*; especially upon that of the *Moon*, because of her *Proximity*.

*NAY*, some *Authors* have advanced so far, as to ascribe the only *Cause* of them to the *Powers* of the *STARS* and *PLANETS*. But tho' I am no ways to countenance *These Notions* to this ridiculous Length, nor in the least to defend the vain *Fictions*, or foolish *Ostentations* of the vulgar ASTROLOGERS; yet I shall make no scruple to assert that both the STARS and PLANETS are concurring or co-operating, tho not sole efficient Causes, in these Cases: And This, I hope, I may rationally be allow'd to do, supposing I had not the direct Authority of such a Great Man, as the most Learned and Excellent Dr. *Mead*<sup>[134]</sup>, over and above to back me; who says, "*It is moreover to be* consider'd, that the rest of the STARS and PLANETS have each their Power and Influence, which tho' they be not Equal to that of the SUN and MOON; yet notwithstanding they conspire to augment or diminish their Powers on human Bodys; and this Concourse is of so great Consequence (says this Eminent Author) that we must refer to it the sudden and hidden Power of most Distempers in all Countries, &c."

*BUT* the *Powers* of the two great and glorious *LUMINARYS*, we are more *sensible* of, as they are more manifestly *conspicuous*; and *These* we may in many other *Cases*, (as well as in *BIRTHS*) hold for *efficient Causes*.

FOR who knows not that the Influence of the SUN fructifies all sorts of *Grain*, and ripens *Fruit*, *Corn*, &c? Who knows not that by its *Force* or *Influx* only, divers *Animals*, *Insects*, &c. engender and spring out of the *Dust* and the *Earth*? Or, who knows not that its *Power* prompts all Creatures to *Coition*, and excites them to propagate their respective *Species*, each one its own *Kind*, &c.

*NEITHER* is the *Influence* of the MOON less evident: For does it not change the *Constitution* of the *WEATHER*, raise the *AIR*, heighten the *WINDS*, swell and exagitate the *Surface* of the *SEA*, and finally, augment and increase the very *Tides* of the OCEAN? Do not all *Animals*, as well as the *Menstruous* and *Pregnant Woman* sensibly feel the *Power* of the *LUNAR Influence*? Yes verily, as my last quoted *Author* justly<sup>[135]</sup> observes, *unless their REGIMEN be perverted*, by

which means the Body may be disqualify'd or rendred unapt to receive the Impression.

*NOW this* does not only happen to *Four-footed Beasts*, and all that possess the dry *LAND*; but also more especially to the *Inhabitants* of the *SEA*: And how remarkable is it, that the very *Shell-Fish*, (how closely soever shut up, and how low soever buried, as it were, in the very *ABYSS* of the *Deeps*) cannot be exempted from the sensible Impression of this *LUNAR Power*? To this Point and Purpose (I think) *Lucilius*<sup>[136]</sup>, that Learned Poet, manifestly alludes, saying,

*"Luna alit Ostrea, & implet Echinos, Muribus "Fibras & Pecui addit.* 

And after *Him*, *Manilius*<sup>[137]</sup>, that great *Astronomer*, writes à *propos* upon this *Topick*, when he says,

*"Sic submersa fretis Concharum & Carcere clausa "Ad Lunæ motum variant Animalia Corpus.* 

THESE Things then being evidently so, and it being a most certain and undeniable *Truth*, that the SUN and MOON have each their respective *Influence* upon all *Inferiour Bodys*: (as has also been already shewn in Sect. I. Chap. 8.) I come now to observe that such *Mutations* as are *Quick* and *Brief*, or such *Changes* as are accomplished in a *Few Days*, may be entirely ascribed to the *Power* of the MOON: As in the *Reverse* of these *Cases*, which cannot be determin'd under a *Long Time*; the *Course* of the SUN is more chiefly to be consider'd and principally regarded.

SO Acute Fevers (because SHORT) are generally assuaged and dissolved in 14 Days: Whereas Quartans (because LONG) on the contrary are only determin'd in six Months. It's true indeed, the Antients ascribed these Laws of NATURE, to Pythagorean Numbers, and distinguish'd the Times of FEVERS according to their Critical Days, which they strictly animadverted, as they laid great Stress upon that Ceremonious Observation.

HOWEVER, Galen made a far stricter Disquisition in this Matter, and conceiv'd (as the *Truth* indeed is) that the Accessions and Crises of FEVERS had no Connexion with any NUMBERS or odd Days, but took Origin only from the Efficacy of the Moon: (as is more fully explain'd in Chap. 28. of this Section.) According to which *MAXIM*<sup>[138]</sup>, *Acute Distempers* have their *Circulations* in *Seven Days*, and take their *Accesses* and *Declinations* from the *Course* of the MOON; which every *Seventh Day*, when NEW, HALF-FULL, or FULL, has her greatest *Influence*.

*HE* farther observes that the *Quarter-Day* of the MOON may fall upon the *6th* or *8th* Day of the DISTEMPER, and consequently *either* of *these Days* may determine it as well as the *SEVENTH*. For (according to Dr. *Mead*'s excellent Judgment) the *Dissolution* of a FEVER sometimes happens *To-day*, which according to the ordinary *Course* of the DISTEMPER ought to happen *To-morrow*; or, on the contrary, the *same* may be procrastinated till *To-morrow*, which might be expected *To-day*: And *That* for the various *Reasons*<sup>[139]</sup> most ingeniously by him alledg'd and irrefragably established.

*IN* fine, such *Mutations* and *Circulations* of Things as are perfected and perform'd in a *few Days*, are directed by the *Property* of the *Moon*: whereas such *Changes* and *Alterations* as require the Dissolution and Determination of *Months*, refer only to the *Government* of the SUN. Which I would have thus candidly understood, *viz*.

AS from the beginning of the *Month* to the FULL-MOON are almost 14 Days, which accomplish half the Lunar Circuit, and comprehend two Quarter-Changes; so from the Beginning of Spring to the End of Summer are six Months, which comprehend two Seasons or half of the Year: And so that Mediety or Half of the Month, from FULL-MOON, to the Time of Occultation or NEW-MOON, answers to the other six Months, from the beginning of Autumn to the last of Winter, which conclude the other Half of the Year.

FOR as we divide the *Course* of the *MOON* by *4 Weeks*, according to its 4 quarter *Changes*; so we distribute the *Course* of the *SUN* into *4 Stations*, according to the *four Seasons* of the Year: Hence it is that all *Times* of the *Year* answer in proportion to the different *Weeks* of the *Month*, and all *Stations* of the *SUN* (in like manner) to the different *Changes* of the *MOON*. Wherefore as the *7th Day*, which is the 4th Part of the *Lunar Month*, determines *acute Distempers*; so the *Change* of the *Season* of the Year dissolves *Diuturnal Diseases*. The *SPRING* commonly shakes off any *Malady* generated in *WINTER*, as the *SUMMER* does what is begun in the *SPRING*; and

the *AUTUMN* discusseth any *Affection* excited in *SUMMER*, as the *WINTER* does what happen'd in *AUTUMN*.

THESE Things being thus cleared-up by the way, we have now only to consider, that the Time of *GESTATION* is no *Acute*, but a *Diuturnal Effect*; and that BIRTH is nothing else but the CRISIS of the same *Affection*, according to<sup>[140]</sup>*Hippocrates*'s Sense. Which, if so, it is evidently manifest that, in defining the *Time* of BIRTH, we ought chiefly to regard the *Course* of the *SUN*, and strictly observe the *Number* of *MONTHS*; However so, as not to neglect the *Motions* of the *MOON*, and consequently, we ought also to consider duly the neat *Number* of *DAYS*: Wherefore (I say) in BIRTH we are to have a just Regard to, and take a strict Observation of, not only the *Changes* of the *MOON*, but also of the *Mutations* of the *SUN*; because both the *One* and the *Other* act very powerfully in *BIRTH*. Which I thus beg leave to illustrate as follows, *viz*.

AS the first seven Days have the greatest Power of determining Acute Diseases, so the first three Months of GESTATION (which answer to those Days) determine the CONCEPTION: And as of those the 7th Day is the most powerful, so of these the third Month is the most prevalent. From hence it is that the FOETUS suffers such manifest Alterations and Changes of Nature in this MONTH: For it is now metamorphos'd or chang'd from an Inanimate into an Animate Being: It now becomes a Living and Moving Body, subsisting henceforward by its own proper vivacious Faculties; yet not so however, that this MONTH can be presum'd to produce a vital Birth: No, because as every perfect and plausible CRISIS of the 7th Day, requires the Concurrence of the digested Humour, together with the Ability and Strength of the PATIENT; so in BIRTH, the Disposition of the INFANT must necessarily concur with all These, which it can never be suppos'd to do in the short Space of Three Months.

MOREOVER again, as the Days of the Interval from the 7th to the 14th, have but small Power in dissolving acute Diseases; so neither have the 4th or 5th Months (which assimilate these Days) any Efficacy tending to BIRTH. Wherefore if an unlucky Ejection of the Foetus happens in these Months, it can be no otherwise judged of, than as when Symptomatical (not Critical) Excretions fall out on DAYS not Decretory: Hence we (of consequence) may collect, that the very First Time, in which a legitimate Term can be suppos'd to concur effectually, together with the *Disposition* and *Strength* of the *INFANT*, in case of BIRTH, will be (as *Hippocrates* has well observed<sup>[141]</sup>) about the *182d Day*, or at the *half Year's End*: Which (however) he calls a *Septimestrian* BIRTH, because the *Ancients* reckon'd their Year by *Lunar Months*, as they did their *Months* by the Course of the MOON; whereof 13 with some *Days* of the *14th Month* constitute the *Solar Year*: Not that I mean they in the Interim were at all ignorant of the *Solar Periods*. And however, tho' this *Number of 182 Days* make but up *six Solar Months*; yet, as it comprehends *seven Lunar Months*, and almost constitutes three DECADES of *Lunar Weeks*, there can be no *Repugnancy* in that *Wise Man's Meaning*, whatever some literal *Interpreters* may imagine to the contrary.

NOW this sixth Month being the second Solar Mutation, in it the WOMB begins to be more severely oppress'd with the Weight and Bulk of its Burthen; for now the INFANT has assum'd Perfection, and (perhaps) got Strength sufficient to undergo its Fatigue in LABOUR, and Power enough to support Life, after its BIRTH; especially if procreated of the more vivid, valid, or excellent SEED; whose powerful Faculty and vigorous Quality may perhaps have perform'd the Work of Formation in 30, which otherwise would require 35, or more Days: In this Case (of consequence) the BIRTH will succeed at the above-mentioned happy Time; as appears more amply from what has been already set forth in SECT. 1. Chap. 9.

*NOW* from what has been said, I hope it appears highly reasonable to compute the *legitimate Time* of BIRTH, not only by *Months* and *Moons*, but also by *Weeks* and *Days*: Which however yet, I look not upon to be any very full, exact, or sufficient satisfactory *Calculation*; because (I think) we have also just Reason to compute this *Time* even by *Hours* and *Minutes*. Therefore how just soever *Aristotle's* Observation (mentioned by *Pliny*<sup>[142]</sup>) may be, *that no Animal expires but in the Reflux or Ebb of the Sea*; I am yet positive, that Monsieur *Paschal's* Notion (mentioned by Doctor *Mead*<sup>[143]</sup>) *that all Births as well as Deaths fall out in the Reflux, and that no Animal is born or dies in the Flux*, may be rationally controverted: For I must needs assert that, without any regard to his *Senarian Fluxes* and *Refluxes*, *BIRTHS* happen at every *Hour* of the *DAY* or *NIGHT*: and perhaps more naturally too in the *FLUX*, than in the *REFLUX* of the *Sea.* And this, I think, may appear evident, even from the self-same Reasons by which he endeavours to make out the Contrary<sup>[144]</sup>; namely, that intermitting *Fevers* have their greatest *Paroxisms* in the Time of the FLUX, whereas they cease in the REFLUX by *sweating*: collecting from hence, that the Motion, Vigour, and Force of *Distempers* are chiefly advanc'd in the *Senary* of the *FLUX*; and on the contrary, that they are dissolved in the *Senary* of the REFLUX. Which Observation, with respect to *Fevers*, this most excellent *Doctor* has found experimentally<sup>[145]</sup> *True*, as a great many others have also done.

BUT in the Case of a Woman in LABOUR, as (with Submission) I judge the Paroxisms to differ from the Nature of those in a Fever, so I humbly conceive that the Effect must prove the REVERSE. For the Paroxisms in BIRTH, are nothing else than the Pains or Pangs of LABOUR; and who knows not that (in Case of a natural Situation of the INFANT and the WOMB) the greater These are, the more Success and Expedition attends the BIRTH? And who again knows not, that in this Case, the more vigorous Motion the INFANT makes, and the more Force and Strength that attends the Pains, the sooner the DELIVERY is perfected? Which, of consequence, according to his own Opinion, will fall out in the Senary of the FLUX? In fine, again I farther observe, that, as the REFLUX may be the appointed Time of Nature destinated to Death, so may the FLUX be allotted to BIRTH; which (in my Mind) is as opposite to Death, as the FLUX is to the REFLUX of the Tide of the Sea.

WHEREFORE I am obliged to repeat it again here, that we ought to calculate the *Legitimate Time* of BIRTH, not only by *Months*, *Weeks*, and *Days*, but perhaps also by *Hours* and *Minutes*; and *that* because, according to the Great *Galen*'s Observation<sup>[146]</sup>, as the *Year*, *Month*, or *Week* does not consist of entire *Days*, so neither does the *DAY* of entire *Hours*: For as the *Year* consists of 365 *Days*, six *Hours*, and a few *Minutes*; and the *Month* of thirty *Days*, ten and a half *Hours*; and the *Week* of seven *Days*, two *Hours*, and twenty-seven *Minutes*; so the *Day* (in proportion) consists of 24 *Hours* and 21 *Minutes*: From whence I conclude (with that wise *Man*) that we can make no very nice *Computation* in this Affair, by *full Days*, without FRACTIONS. WHEREFORE it is that the most Learned and Inquisitive Boethogynists, or Female Physicians maintain, that they have always observed their WOMEN to bring forth the self-same HOUR of the Night or Day, in which they conceived: And This also daily Experience seems to confirm for Truth; because it is certain, that most BIRTHS happen in the Night-Time, or Dawning of the Day; at which Times, we may very probably suppose the Generality of Parents to be most employ'd that way: Whereupon, if This be True, Mr. Paschal's Position will fall of course; and then that Assertion of a Legitimate BIRTH's requiring, not only a certain and prefinite Number of Days, but also of Hours and Minutes, will more rationally be establish'd in its Room: Notwithstanding that Saying of Hippocrates<sup>[147]</sup> himself, after having distinguished upon the Times of BIRTH, That these Things fall out in a few Days more or less.

*HOWEVER*, in fine, from what has been said, (I hope) the *Reasons* I have given here, why *one Number* of *Months*, *Weeks*, and *Days* is more auspicious to the *BIRTH*, and more fortunate to the CHILD, than *another*, are by this Time made manifestly clear and self-evident. Now these Things being thus briefly accounted for, I must proceed in the next place (with the READER's good Leave) to provide for and prepare the *Pregnant Woman*, against the *Expiration* of these *Months*, *Weeks*, and *Days*.

### CHAP. XXXIX. Of the DIET and REGIMEN of the Woman, before and about the Time of BIRTH.

THO' the Woman ought to be cautious of her DIET and REGIMEN during the whole time of Pregnancy, as advis'd in Chap. 3. of this SECTION; yet she is now oblig'd in the first place (especially from the beginning of the 9th MONTH) to be much more circumspect; to use nothing but FOOD of good Nutrition and easy Concoction, of an Aperitive and Laxative Quality, little at a time, but frequently taken.

II. *SHE* ought to *stir* often, and exercise herself *moderately*, without *stooping* or *bending* the Body too much, lest the *UMBILICALS* may entangle the *Infant*.

III. *SHE* should discreetly rest herself at certain Times, and indulge herself in composing *Sleep*; lying altogether on her BACK, not on either *Side*, that the INFANT may freely turn itself.

IV. *FROM* the *tenth Day*, proper Emollient and Laxative *Decoctions* by way of *BATHS*, may necessarily be used twice or thrice a *Week*, for moistening the *Passages*, and facilitating the BIRTH: Or otherwise, the BELLY and proper *Parts* need only be fomented with *Cloths*, or *Spunges* dipp'd in such *Decoctions*, and the neighbouring *Places* anointed with apposite *Liniments* or requisite *Ointments*: But no *Laconick* or *Sweating* BATHS or BAGNIO'S, ought to be used at this *Juncture*; notwithstanding some contrary *Opinions*.

V. *THE Infant* is to be cherish'd, and strengthen'd by proper *Cordials* inwardly taken, as well as by outward *Applications*.

VI. *THE Room* or *Chamber* in which the Woman is to undergo her TRAVAIL and *Lying-In*, ought to be conveniently *temperate*, neither too *cold* nor too *hot*: By reason that the *one* certainly constringes and shuts the *WOMB*; as the *other* dissipates and debilitates the *Spirits*.

In short, I have known *Women*, who have often had most painful, lingring, and laborious BIRTHS before; to have been *LAID afterwards* with the greatest Ease imaginable in a very short time, by only carefully observing the *above-prescrib'd REGIMEN*. Wherefore I shall take leave to go on farther, to

#### CHAP. XL. Of the Natural Causes of BIRTH, and Pains of LABOUR.

*THE Causes* of a *Legitimate* or timely natural *Birth*, are chiefly *Three*; viz. I. The suppressed or defective *Respiration*, by the encreasing *Calidity* of the HEART; which defatigates the INFANT so much, that it cannot live without more free *Ventilation*.

II. *PENURY* or *Scarcity* of ALIMENT; the INFANT now requiring *More* than it can possibly imbibe from the *Mother*; and therefore it is forced to seek, what *Nourishment* it farther requires, Elsewhere.

III. *THE* strict *CONFINEMENT* of its narrow *Lodging*; the WOMB being now too little to accommodate and entertain the well-grown-INFANT: Like to the YOUNG of *Birds* or *Fowls*; which neither finding sufficient *Aliment* nor *Room* in the EGG, restlessly seek for *Both*, and in vain endeavour for *Either*, until at last they break the *Pellicules*: Which as soon as the *Mother* perceives, she scratches or pecks the *Shell*, and so brings out the oppressed indigent CHICKEN. Thus also in the *WOMB*, it happens not unlike; for, when the *Membranes* break, the *Humours* and *Blood* flow plentifully; and upon this Occasion various *Pains* afflict the Woman: Which are always the greater and more severe in the *First BIRTH*; because of the *Coarctation* of the *Passages*, besides the *Party*'s being unaccustomed to such sorrowful Griefs, and penetrating Pains.

NOW the Reasons why WOMEN only, are so much afflicted with dolorous Pains in BIRTH (the rest of the Creatures being in a great measure of Proportion exempted from them) ought, as some Divines would have us believe, to be ascribed only to the SIN of the First Woman; GOD resolving (for that Reason) to punish her whole SEX, by subjecting them to those Calamities mentioned in the holy

Scripture<sup>[148]</sup>: "I will greatly multiply thy Sorrow, and thy Conception; in Sorrow thou shalt bring forth Children, &c."—–

*BUT* besides this *Doctrine*, I conceive there are *Four* very considerable *natural Causes* that may be reasonably assign'd for it; *viz*.

I. *THE DEBILITY* of *Human Nature*, which in Time of *Labour* requires sometimes the whole *Strength* of the WOMAN, and sometimes that of the *INFANT* too; and that commonly above what *Either* can well afford.

II. THE dull *Sedentary Life* which *Women* generally lead and indulge themselves in; as appears plain from what I have often observed in *Germany* and *Holland*: For the *Women* of those *Countries* generally accustoming themselves to some sort of active *Labour* and industrious *Exercise*, have much easier *BIRTHS* than any *Others* that I know.

III. *BUT* one general and universal *Reason* of it is, that the *Bone* call'd *Os CoccyGIS*, which is loosely join'd to the inferiour Extremity of the *Bone* call'd SACRUM, bending outwards during the Time of *LABOUR*; as the *CHILD* advances, its *Head* presseth the *Gut* call'd RECTUM hard against it; which causeth most severe, acute, and extreme *PAINS*.

IV. ANOTHER principal and universal Reason of it, is, the BULK of the Head of the INFANT; which (according to Albertus Magnus) is equal in the time of BIRTH, to the rest of the Whole Man; causing a violent Dilatation of the WOMB, that is very strait in comparison of this BULK; and That being a very sensible Membranous Composition, This must (of Necessity) occasion most grievous and almost intolerable PAINS. Whence I come to

# CHAP. XLI. Of the CAUSES of a sooner, or later BIRTH.

MANY great Men have written and answer'd promiscuously on this *Head*, suggesting a vast Variety of *Reasons* for it: But as *Every One* is left to think and judge the Best he can for Himself, so I shall (in this place) only animadvert upon *Those Causes*, which I most entirely approve of; and as they are *Fivefold*, so I think, they either depend upon the *Genital Seed*; the *Formative Faculty*; the *Temperature* of the WOMB; the *Constitution* of the WOMAN; or the *Influence* of *Superiour Bodies*.

I. *THE natural Cause* may depend upon the SEED: Because as there is among GRAIN several *sorts*, some of which fructify and ripen in *Three*, some in *Four Months*, and others which require much *longer Time*; so it may be also in *human* SEED, that it may differ as much in its Kind. Which Truth is very evident from what has been frequently observed, that *Women* bring forth the *Children* of different FATHERS, at different Times; whereof I shall only mention the remarkable Instance of *Vestilia*<sup>[149]</sup>: who was thus deliver'd of *Three Children* to her *Three several Husbands*, HERDITIUS, POMPONIUS, and ORSITUS, all noble Citizens of *Rome: viz.* Of the *one* in the *7th*, of the *other* in the *11th*, and of the *last* at the Expiration of *8 Months*.

II. *THE natural Cause* may also depend upon the *FORMING FACULTY*; so far, as the *Formation* and *Perfection* of the *FOETUS* depend upon its *Strength* or *Debility*: For as it may be evidently observ'd after the *BIRTH*, that *some Children* grow a-pace and very suddenly; *others* (because of a *sickly Constitution*) thrive but very little, and grow slowly; so it happens also with the *FOETUS* in the WOMB: for the *stronger* that this *Faculty* is, the sooner *Formation* is perfected, and consequently the sooner the *BIRTH* follows successfully.

III. *THE* Natural *Cause* again may depend upon the *Temperature* of the WOMB: Because that the *Woman* (being the only *one* of all Creatures which tolerates *Copulation* during the time of *Pregnancy*) may be, by its frequent or immoderate *Use*, disorder'd in that noble *Part*; which may infallibly confound and pervert the regular TIME. For as the BUDS of *Vines* cherish'd in the Bosom of the *Earth*, may be easily cut or dissipated by the *Plough*; so as at least to alter the TIME of *Fructification*, if not quite to destroy *Them*: So it is not very unlikely with the INFANT in the WOMB; and therefore wise *Nature* (sollicitous of *Propagation* and *Preservation* of the *Human* FOETUS) will not allow that a *Woman* should have one *precise Time* of *BIRTH*.

IV. *THE* Natural *Cause* may also depend upon the *Constitution* of the MOTHER, so far as her *Habits* of Body, and *Way of Living*, are conducive (or *not*) to the *Maturation*, *Perfection*, *Strength*, or *Debility* of the *INFANT*.

V. AND finally, the Cause may depend upon a superiour Influence, in so far that, as we see with our Eyes, such Grain as is sowed, and such Plants or Trees as are planted in the Interlunium, or silent Moon, and before Full-Moon, to fructify and ripen sooner than others: Or, as we see and perceive our very Nails and Hair which are cut in that Time, to grow faster and sooner, than what is so cut after the Full-Moon: So we may as easily comprehend by our Reason, that these Times may have the same Natural Effect in the<sup>[150]</sup>Human Seed. And as then the Parts are more Succulent, and the Generative Virtue more excitated, not only in the Human Seed, but also in all other Seeds and Roots, what wonder is it, that the Womb be also more efficacious and prestant at the same Conjuncture?

This I take to have been *Pliny*'s<sup>[151]</sup> Meaning, saying none are *born* in the 7th Month, but they who have been *conceiv'd* in the very *Change* of the *Moon*, or within a Day of it, under or over. Hence I may justly observe, that all *slower Births* have been *begotten* at opposite Times; for which, I think, I have also sufficient Authority from<sup>[152]</sup>*HIPPOCRATES* himself, saying, when a *Woman conceives* after *Full-Moon*, that *Conception* must, of Necessity, reach the 11th Month.

*HAVING* thus far (according to the Best of my Judgment) dilucidated these *Cases*, and having hitherto conducted the *Woman* 

with Child, and brought her safe this Length, thro' all the Difficulties she has been expos'd to, and the many *Hardships* she has met with in her Gestation or Bearing-Time, to the compleat Number of her MONTHS, or precise *Time* of her *LABOUR*: It remains now, that I should also direct her Safety upon that emergent Occasion; since if we should now lose our good and fruitful Woman at last, all our previous Pains and Care have been Labour in vain, and nothing but *Frustration*. But, because the *Work* of *DELIVERY*, does not always depend upon the *Woman* herself, and but seldom in these *Countries*, upon the *Physician*; before I commit her to the *Hands* of the rude or unskilful, (whether MAN or WOMAN-MIDWIFE) I shall in the next Place, (with all due *Deference* to my *SUPERIOURS*, especially the eminent Professors of Physick, and Practisers of MIDWIFERY in the City of LONDON) endeavour to instruct such Persons in the *Fundamentals* of their *ART*, and to qualify them with the necessary Knowledge, and indispensible Duty of their BUSINESS.

*IN* fine, I shall attempt now to perform This *Undertaking* in the plainest and most succinct *Terms* following.

#### SECT. IV.

#### CHAP. I. Of MIDWIFERY.

*BIRTH*, and whatever may depend of, take Rise from, or have any antecedent, concomitant, or consequent Relation to it, is the only proper Business of MIDWIFERY, and justly deemed the common Boundary of the *Knowledge* and *Practice* of the *MIDWIFE*.

WHICH Art of MIDWIFERY is (in itself) as excellent and ingenious, as its *Practice* is useful, and absolutely necessary to the *Commonwealth*; insomuch that this will admit of no *Contradiction*, when we rightly consider the following few, but important, general *Heads*, to which I reduce it throughout this Work, *viz*.

I. *THIS Art* distinguisheth a *Fertile* from a *Sterile* or Barren WOMB; it supports and corroborates the *one*, and rectifies and cures the *other*, in most (if not in all) *Cases*.

II. *IT* distinguisheth an impregnated from an unconceived WOMB, a real from a false *Big-Belly*, and a natural from a preternatural *CONCEPTION*.

III. *IT* teacheth the *Regimen* of the conceived Woman, for averting the Severity of the SYMPTOMS of the several *Months*, and all acute *Diseases*, in order to strengthen the *Infant*, and prevent any MISCARRIAGE.

IV. *IT* instructeth by the *Touch* or *Handling* only, to discover, from time to time, the true *State* and Condition of the *Conceived Woman*,

not only during the Time of *Pregnancy*, but also before and in the time of LABOUR.

V. *IT* immediately (in the beginning of LABOUR) discriminates a *Natural* from a *Preternatural*, and an *easy* and *speedy* from a *difficult* and *lingring* future BIRTH.

VI. *IT* presently discovers any *one* or more of the many different, general, or particular *CAUSES* of *difficult* or *preternatural* BIRTHS.

VII. *IT* informeth the fair *Practiser* how to remove and correct those *CAUSES*, and deliver the *Woman*, not at all by *butcherly Instruments*, but by *Judgment* and *Help* of HAND only.

VIII. *IT* sheweth not only how to extract *dead Children*, and sometimes MONSTERS, but also false *Conceptions*, *Superfœtations*, *Moles*, &c.

IX. AND Lastly, this ART teacheth the true *Regimen* of the *CHILD-BED-WOMAN*, and her *BABE*, together with the proper *Methods* and *Means* of *HELP* in all Cases incident to them *Both*.

THESE Heads (I think) fully comprehend the whole Art of MIDWIFERY: And what can be more *ingenious* now? What can be more *conducive* to the common Good, or more *serviceable* to any Country, than the Preservation of the Health and Lives of its multiplying WOMEN and CHILDREN?

THIS Art has been in such Esteem among the ANTIENTS, that it was (in all Ages) the *Study* of the most Learned PHYSICIANS; tho' its Practice succeeded best only, first in France, then in Italy, and afterwards in Germany. For in these Countrys their Women of all Ranks (the most Precise and Virtuous) have accustom'd themselves (upon this Occasion) to lay aside all childish Bashfulness and imaginary Modesty, in order to secure their Own and their Childrens Safety, by inviting the Assistance of both SEXES. And indeed MEN (whom I may justly call the truest and best Boethogynists) being better versed in Anatomy, better acquainted with *Physical Helps*, and commonly endued with greater *Presence of* Mind, have been always found readier or discreeter, to devise something more *new*, and to give quicker *Relief* in Cases of *difficult* or *preternatural BIRTHS*, than common *MIDWIFES* generally understand; By which means it comes to pass, that this ART is now brought to its greatest *Perfection* in these *Countries*: Insomuch that,

if I might be allowed to adopt a *new Term* into our Language, instead of *MAN-MIDWIFE*, which seems to be a Contradiction in *Terms*, I would call him the ANDRO-BOETHOGYNIST, or *Man-Helper of Woman*, for his excellent Skill in *MIDWIFERY*.

MOREOVER, the Authors of these Countries have not been remiss, in communicating their Experience and Methods taken to prevent and remedy the many various Difficulties which have occurred in this nice Affair. No, Senertus, Rod. à Castro, Viardel, Mauriceau, Portal, Daventer, Bartine, Garofanzzo, Pfizerus, &c. have promerited our immortal Praises as well as Thanks, for such famous and generous Instances as they have given of their great Beneficence to MANKIND.

THE Four latter have made vast Improvements of this ART: but particularly, the most Learned, Ingenious, and excellent PHYSICIANS, and Men-Midwives, (as vulgarly called) Sig. Garofanzzo and Pfizerus (my most honoured Instructors in this ART) have absolutely perfected the WORK begun by others; for their Rules are firmly founded on sound Anatomy, and their Doctrines are more extensive, particular, plain, and infallible, than all their PREDECESSORS Discoveries.

*THEY* explain this ART upon firm *Mathematical Foundations*, and solid *Demonstrations* of Truth. Besides they give many new, and most necessary *Directions*, in regard to *Touching* or *Handling* of Women; whereby *MIDWIVES* may not only foresee all *Difficulties*, which can possibly happen, but also prevent them in due Time.

THEIR great Ingenuity and Dexterity in this ART, has (to the Glory of GOD Almighty's good Providence, and the Honour of their own Profession) rendred the Use of INSTRUMENTS, not only needless and superfluous, but also odious and ridiculous. They instruct us how to remedy the most difficult Occurrences, by a right Understanding of the Business, and a nice subtile skilful HAND only, without any manner of other INSTRUMENT; excepting only in the Case of a MONSTROUS or dead BIRTH.

UPON whose great Authorities, and the small Knowledge I myself have of the Parts of Generation, if I affirm the imminent and manifest Danger of such dilating INSTRUMENTS, as are commonly us'd upon every trifling Occasion, I hope it will not be taken amiss by the READER: Since my Design is not so much to discourage any in their *Practice*, as only to excite such *Practitioners* to apply themselves to the above-mention'd far more Safe, Easy, and Commendable METHOD: which if they shall think fit to do, the Excellency of the *Profession* will shine as bright *Here* as in *other* Parts of the World; and at the same time, the absurd Imputations and false Suggestions of the Ignorant (who imagine all Women to be deliver'd either by CHANCE, or by such barbarous USAGE) will be clean wip'd off: For (I am fully satisfy'd) that our ART, no ways depends upon CHANCE or FORTUNE, and running any Risque or Hazard; but (to the contrary) on as firm a Foundation, and as infallible Rules, as a great many other Professions, which however vet are sometimes subject to ACCIDENTS. All which I shall endeavour to make evidently appear, in the next SECTION; where I shall treat of the CAUSES of *difficult* and *preternatural BIRTHS*, together with the respective *Methods* of preventing, correcting, or removing them effectually.

## CHAP. II. Of the Qualifications of the Ordinary MIDWIFE.

IT is indeed indifferent whether *Men* or *Women* practise this *ART*, so the *Practisers* be properly adapted, and duly qualified for the Purpose of so great a WORK. As for Instance, in *France*, MEN only profess this Business; in *Italy*, and *Germany*, MEN and WOMEN promiscuously; in *England*, *Scotland*, *Holland*, &c. MEN are stiled Extraordinary MIDWIVES, being seldom or never call'd but in extraordinary *Cases* of difficult and preternatural BIRTHS. Wherefore, upon this Account, I shall *first* observe and denote the *Qualifications* most requisite and absolutely necessary for *WOMEN* practising this ART.

NOW as all Arts and Sciences require Instruction, Application, Pains, and Time, for qualifying any Person to become a MASTER in the Practice of them; so the ART of Midwifery requires not the least Regard, Attention, and Information. Wherefore it is quite wrong for any Persons, who have not a Body and Mind particularly adapted to this Business, to spend their Time in qualifying themselves for, and applying themselves to the Performance of this good Office. For such as These ought to leave This Province to THOSE Persons, whom Nature has more signally mark'd out for the Purpose.

AND that I may the better distinguish upon what I have here propos'd, I shall *first* speak in the *Negative*, and *then* in the *Affirmative Sense* of the Affair; Or *first*, of her *Natural*, and *then* of her *Acquir'd Qualifications*.

I. *THEREFORE*, *She* who would discreetly undertake MIDWIFERY, ought not to begin the *Practice* too *YOUNG*, nor continue it till grown too *OLD*: For the *one* will want, perhaps, due *Experience*, as well as decent *Gravity* and *Solidity*; the *other* will, peradventure,

want requisite *Strength* and *Vigour* of Body, as well as the Free *Exercise*, and ready *Use* of her *Senses*.

II. *SHE* ought to be no *weak*, *infirm*, or *diseased* Person, incapable of undergoing the *Fatigues* which the Business too often requires: Such as *watching Night* and *Day*; turning the *INFANTS*, when in a wrong *Posture*; or extracting them at length; which *Action* frequently requires the full *Strength* of a strong *MAN*, instead of a weak *Woman*. For *thus* the most learned and excellent *Fabricius d' Aquapendente*, testifies of himself, that he has often been so *weary* and *tired*, that he has been obliged to leave the Work for his *Assistant* to finish; and as *Daventer* also (a robust Man) relates of himself, that in the coldest Time of *Winter*, being but thinly *cloathed*, and at a Distance from any *Fire*, his *Hair* has been wet, and all his *Body* in a SWEAT, and both his *Loins* and his *Limbs* have aked egregiously some Days after *delivering* a Woman.

III. *SHE* ought not to be too *Fat* or *Gross*, but especially not to have thick or fleshy *Hands* and *Arms*, or large-*Bon'd Wrists*; which (of Necessity) must occasion racking *Pains* to the tender *labouring Woman*.

IV. *SHE* ought not to be *lame* or *maim'd*, nor have stiff or crooked *Fingers*, *Hands*, or *Arms*; for these *Parts* are to be used in different *Manners* and *Postures*, even so that the *Success* of the LABOUR often depends upon their *Readiness* and *Agility*.

V. *SHE* ought not to be, *negatively* speaking, a *conceiv'd* or *Childbearing Woman*; because *This* may be of bad Consequence, not only to the *labouring Woman*; (who depends on her, for more than she's able to *perform*, especially in a *strong* LABOUR) but also to the conceiv'd *MIDWIFE* herself, and her own *INFANT*.

VI. *SHE* ought not to be an *Ignorant, Stupid, Indolent,* or a *dull* Person; and especially not incapable of conceiving Matters distinctly, or judging of Things aright: Neither ought *she* to be a *Self-Indulger, Slothful,* or *Lazy*; nor a *Light, Dissolute,* or *Daring* Person: *She* ought not to be *inconsiderate, negligent,* or *forgetful;* nor *proud, passionate,* or *obstinate:* Neither *peevish, morose,* or *surly;* nor *fearful, doubtful,* or *wavering-minded:* neither ought *she* to be a *Tipler* or *Drunkard,* nor a *Tatler* or *Vagabond,* nor a *covetous,* or *mercenary* Person.

BUT on the other Hand, in the Affirmative, SHE (First) ought to be a Woman of a good middle Age, of solid Parts, of full Experience, of a healthy, strong, and vigorous Body, with clever small Hands: Since nothing can be more agreeable and conducive to the Art of MIDWIFERY, than slender Hands, long Fingers, and a ready Feeling.

II. SHE ought to be *Grave* and *Considerate*, endued with *Resolution* and *Presence of Mind*, in order to foresee and prevent *ACCIDENTS*; *Sagacious* and *Prudent* in difficult *Cases*, so as not to take *All* upon her own Shoulders or *Judgment*, but to have immediate *Recourse* to the ablest *Practiser* in the *ART*, and freely submit her *Thoughts* to the discerning *Faculty* of the more Learned and Skilful.

III. SHE ought to be Watchful, Diligent, and Expert in all Cases and Conditions that can or may occur; so that no Opportunity in the Beginning of the LABOUR be lost: Since I have more than once observ'd, that the Neglect or Mistake of improving a critical MINUTE, hath cost the MOTHER many violent or heavy Pains afterwards, and the CHILD also its Life. For which Reason it is of the greatest Importance, to nick the Opportunity, conformable to Cato's Saying

#### Fronte capillata, post est Occasio calva.

IV. *SHE* ought to be a true *Fearer* of GOD, a *Conscientious* Person, of good *Life* and *Conversation*: Since Matters of the greatest *Moment* are committed to her *Care*; and depend entirely upon the faithful *Discharge* of her Duty: For *she* has the first and best *Opportunity* of shewing her *Compassion*, and *Tenderness* to Mankind, in this *Infant* and *Helpless State*. In short, CHARITY ought always to engage her, to be as ready to help the *Poor* as the *Rich*; the *LIFE* of the *One* being as Dear as the *Other's*, and the *Image* of *GOD* being equally stamp'd upon *Both*: For the ineffable *Recompence* of CHARITY far exceeds all other *Considerations* of trifling GAIN.

V. *SHE* ought to be *Patient* and *Pleasant*; *Soft*, *Meek*, and *Mild* in her *Temper*, in order to encourage and comfort the *labouring Woman*. SHE should pass by and forgive her small *Failings*, and peevish *Faults*, instructing her gently when she *does* or says *amiss*: But if she will not follow *Advice*, and Necessity require, the MIDWIFE

ought to reprimand and put her smartly in mind of her *Duty*; yet always in such a manner, however, as to encourage her with the *Hopes* of a happy and speedy DELIVERY.

VI. *IN* like manner as she ought to be *Modest*, *Temperate*, and *Sober*, so she ought to be *Faithful* and *Silent*; always upon her *Guard* to conceal those Things, which ought not to be spoken of.

*THESE*, in fine, are the chief of the natural *Qualities* requisite for *MIDWIFERY*; from whence I come to the *Theoretical* and *Practical Part*, without which all *Others* are (in effect) Nothing to the Purpose.

# CHAP. III. Of the THEORETICAL and PRACTICAL Knowledge of the MIDWIFE.

*SHE*, who finds herself thus (properly) adapted both in *Body* and *Mind*, according to the *Rules* of the preceding *Chapter*, does a Good and Laudable Work, if she also studies to *qualify* herself well, *first* in the *THEORY*, and then in the *PRACTICE* of *Midwifery*.

*WHICH*, in order that she may most easily and accurately do, I shall reduce the whole *Theoretical Part* (absolutely necessary) to the following *Seven general Heads*; of Which she ought not only to have a general and superficial, but also a distinct, special, and perfect *Knowledge*; viz.

I. *OF* the *external* and *internal Parts* of Generation, and the *adjacent Parts*; together with a competent Skill of the respective *Substance* and *Nature*, *Connexion* and *Function* of each of *These* in the Time of *BIRTH*.

II. OF the PELVIS, or *Bason*, and its *Contents*; together with the true Knowledge of its *Bones*, their *Form* or *Figure*, *Office* and *Connexion*, &c. upon that Occasion.

III. *OF* that Wonderful *Body*, the MATRIX, and its *Vagina* or *Neck*; together with the understanding of its *Substance* and *Structure*, *Duty* and *Function* in Time of LABOUR.

IV. *OF* the Strange Natural *Qualities*, and amazing singular *Faculties* of This *Body*, in distinguishing all its peculiar *Properties*.

V. *OF* the TOUCH, or *Handling* the *Woman*; together with knowing its many various *Uses*, and manifold distinct *Advantages*.

VI. *OF* the *Genuine*, and *Real*; as well as of the *Spurious* or *Bastard-Labour-Pains*: How they differ in themselves, and are to be carefully distinguished.

VII. *OF* the *Method* of LAYING the *Woman*, and *Manner* of extracting the AFTER-BIRTH; together with all the *heterogeneous* and *preternatural Contents* of the WOMB.

THESE speculative Heads, in short, shall be the particular Subjects of the respective Chapters, of the consequent Part of this SECTION, for the requisite Instruction and indispensible Qualification of all young MIDWIVES: As the Practical Part shall be the Subject-Matter of the two next following SECTIONS. Which Practical Part, I shall now likewise reduce to the Three subsequent general Heads; of which she ought also to have a full and compleat Knowledge, viz.

I. *OF* the various *Methods* to be taken for the present *Ease*, and expeditious *Relief* of the LABOURING *Woman*.

II. *OF* the discreet *Method* of *TURNING* an ill-situated *INFANT*, (whatsoever the preternatural *Posture* may be) and drawing it forth *safely* by the FEET.

III. *OF* Her own personal *Duty* (as *MIDWIFE*) both to the *MOTHER* and the *CHILD* after *Delivery*; as also towards all *Labouring Women*, to whom she may be call'd, upon *critical Conjunctures*.

THESE I call practical Heads, because they depend more upon Practice and Experience, or Judgment and Charity, than upon any fundamental Rules; which however yet ought also to be reckon'd Branches of her THEORY.

BUT notwithstanding all these natural and acquir'd Qualifications, the young MIDWIFE is not to run at once into the Practice: Nor to hurry herself rashly to lay Hands upon the ARK, before she is thoroughly well accomplished for so sacred a Work; lest (like Uzzah) she be punished for her Temerity; whereof I have seen several exemplary Precedents. No, the Work is too important, and the Concern too weighty for that hasty indiscreet Undertaking; for there is no less than the Life of the MOTHER, and one CHILD at least, (if not sometimes more) at Stake: Both which may be soon saved, or quickly lost, according to the Good or Bad Conduct and Management of the MIDWIFE.

*WHEREFORE*, to the End, that she may obtain the necessary *Experience*, and perfect her Judgment, &c. in due Course, she ought

to satisfy herself at first to go (for some time) as an *Assistant* to some *skilful Woman* of good Business, and so by degrees advance herself into the *Practice*: Because *Dexterity* in this *ART*, is only acquir'd by *Time* and *Exercise*; the *practical Part* of *MIDWIFERY* being attended with so many complicated Circumstances of *accidental Difficulties*, that it is almost impossible for any Persons, who never apply'd themselves this way, to believe how much it differs from all the *THEORY*, that the most ingenious *MAN* can make himself *Master* of.

I SHALL only (in this place) farther explain, what I mean, by the *MIDWIFE's Duty* to all *Women* in *LABOUR*, to whom she may be call'd upon *critical Conjunctures*; as the latter part of the abovementioned last General *Head* purports: namely this, That the *MIDWIFE*, in the Course of her *Practice*, ought always to observe carefully, and follow strictly the *Rules* of *EQUITY* and *CHARITY*: That is, supposing the *MIDWIFE* to be sent for by a Person in LABOUR, whose *Case* is Natural and all Things likely to go well; and in the mean time, after she has taken her in Hand, is peradventure sent for to *another Woman*, whose difficult or preternatural *Case* threatens imminent *Danger*.

*IN* this *Case*, the *MIDWIFE* knowing herself to be better qualified than *Others*, and that *Another* not equally expert is able to lay the *Former*, she ought to attend and assist the *Latter*: And *That* also notwithstanding the *First* be RICH, and the *Latter*, POOR; since *GOD* is no *Respecter of Persons*.

*BUT*, if it happen, that *one Rich*, and *another poor Woman*, want HELP both at a time, and are in equal Danger: In *that Case*, without any regard to the *one's WEALTH*, or the *other's POVERTY*; the *MIDWIFE* is to assist *Her* first, whom *Divine Providence* first call'd her to, or first engag'd her withal. And as the *Cases* of *Women* in LABOUR may differ, so she ought impartially to act and dispose of herself; having always an Eye to something *superiour* to, and far above that of mean LUCRE.

## CHAP. IV. Of the QUALIFICATIONS of the Extraordinary MIDWIFE.

THE Extraordinary MIDWIFE, or Andro-Boethogynist (whether *Physician* or *Surgeon* practicing this ART) ought not only to be endued with all the *Qualities* and *Qualifications* mentioned in the *Two* preceding *Chapters*, but also to excel the WOMAN-MIDWIFE in many special *Particulars*, and ingenious *Points*; which no ways belong to her *Female Province*.

FOR it is not enough that He knows how to relieve and *lay* the *labouring Woman*, however difficult or preternatural her *Case* may be; nor is it sufficient that he understands how to *help* and succour both the *MOTHER* and the *INFANT* after such a *Delivery*: No, so much of his Business might be easily learn'd and enhanced by *old Women*, were they but *Docile*, and not such obstinate *Creatures*.

BUT He ought farther also to know (first) how to prevent all preternatural *Disasters* incident to both the *one* and the *other*, in their respective *States* of CHILD-BED and INFANCY: And, *Secondly*, how to administer Relief and perform the CURE, in *Case* of any dismal *Accident* whatsoever to *one* or *either* of them in their dangerous Condition.

MOREOVER, his Knowledge ought neither to commence nor terminate in these Things; it being also his *Duty* over and above to know, how to conduct the *Woman* safely through all the *Months* of *GESTATION*, and to avert from her the *Severity* of their respective *SYMPTOMS*, to which she is so much expos'd, as mentioned in their proper *Chapters*, SECT. III. And not only so neither, but He ought also to understand well, how to guard against the Accesses of all *Acute Diseases*, so as at least to avert their ill *Consequences*; and especially (of course) to know thoroughly how to prevent *ABORTION* itself.

*THESE* are the *Cases* which most commonly require the ingenious Assistance of the *Extraordinary MIDWIFE*: And *These* are they which try his *Skill* and *Knowledge* most, as the *Tempest* or *Storm* best discovers the *Judgment* and *Capacity* of the *MASTER*-MARINER.

AND yet, neither ought even *these Limits* to be the narrow *Boundary* of his STUDIES: Since the more extensive his ART and *Knowledge* is, especially in what relates to the *natural Constitution* of WOMEN, the *fitter Man* He is to take upon himself the *Practice* of this noble and most ingenious *Profession*.

*NOT* that I would be thought tacitely to insinuate in this place by the By, as if my own *Knowledge* was in any degree SUPERIOUR to *other Men's*: No, I am too sensible of my own *Weakness*, to mean so, or to entertain any such vain selfish Thought; neither have I any fond *Ambition* to aim at standing in *Competition* with *others* in these Respects. For it shall suffice me, and sufficiently gratify my Highest *Aim*, if possibly a simple Word may drop from my *Pen*, which the more Ingenious may sometime improve to the common Good of *Women*, and the Welfare of their *Children*: And this I would desire the more, because I know no larger *FIELD*, that the *Learned* can launch out into; nor any profounder *Study*, that they can descant upon, than the *Nature* and *Constitution* of this tender SEx, which is so peculiarly different from all other *Natural Works*, and so singularly discrepant from all other *Created Beings*.

*BUT* more particularly in order, that the *MAN-MIDWIFE* or *Andro-Boethogynist* may be thus duly qualify'd and completely accomplished;

I. *HE* ought not only to be liberally *instructed* and generously *educated*, but also to be a *MAN* of good *Breeding* and *Conversation*, as well as *Courtesy* and *Complaisance*.

II. *HE* ought not only to be a *MAN* of diligent *Study* and sedulous *Application* of Mind, but also of great *Humanity* and *Integrity*, *Temperance* and *Sobriety*, endued with solid *Resolution*, quick *Apprehension*, and great *Presence* of Mind.

III. *HE* ought not only to be a MAN of *strict Virtue* and *Chastity*, but also of unspotted *Life* and *Conversation*, *Charity* and

*Companion*; delighting in *Hospitality*, and doing *GOOD*; acting the *Christian* as well as the *Gentleman* in all respects.

IV. *HE* ought not only to be a Man of known *Discretion* and *Secresy*, *Sagacity* and *Judgment*, but also of a pleasant *Countenance*; neat and clean in *Person* and *Cloathes*, Agreeable and Decent in *Words* and *Actions*, carefully adverting (at all times) to give no Occasion of *Shame* or *Confusion* to the *Labouring Woman*, or the *By-standers*.

V. *HE* ought, in fine, to *handle* Her *decently*, and treat her *gently*; considering *Her* as the *weaker Vessel*, whose elegant tender BODY, will admit of no *rough Usage*: Wherefore upon this Account it is, that I would have all *Practitioners* whatsoever in this ART, debarr'd from the *Use* of *INSTRUMENTS*, which would secure many a MOTHER from being wounded or mangled, and many an *INFANT* from being cut or torn to Pieces.

*NOT* that I would be thought for all that to imitate Mr. *Mauriceau*, saying of himself (in some Passages of his *Book* of *MIDWIFERY*) that *he differs from all others*: No, far from it; For I have the *Indisputable Authority* of the most Learned and Polite *Practisers* on my side, as mention'd before in *Chap.* 1. of this *SECTION*.

HOWEVER yet, I do not deny, but that INSTRUMENTS have been universally used, till of late Years; but the reason of That is Plain: Because in former Times, MEN were only call'd upon *extraordinary Occasions*; some of which (however Skilful and Ingenious) had not the Opportunity of *Laying a Woman* perhaps in many Months. For which Reason it could not be otherways, but that they must have been at a loss in not understanding thoroughly the *Practical Part*, having so few Opportunities of improving *manual Operation*: Whereas since the *Politer Part* of the World has call'd them generally to the ordinary and common *Practice* of this *ART*; they have advanced their *Dexterity* by degrees, and are now come to the length of discharging that *Office* by *Slight of Hand* only, which formerly required so many *frightful INSTRUMENTS*.

I may well indeed say *frightful*; for what can be more inconsistent with the tender *NATURE* of *Women*, or more *terrible* to them, than to see MEN come *armed* against *Themselves* and their *tenderer INFANTS*, with *Knives*, *Hooks*, *Iron-Forceps*, &c. thereby (as it were) to *help* them in time of their extremest *Agony*? For my part, I am Positive, that let who will use *INSTRUMENTS*, they *kill* many more *INFANTS* than they *save*, and *ruin* many more *WOMEN* than they *deliver* fairly: And this, I think, will be easily agreed to, by all those who have any Knowledge of the *Parts* of *Generation* in that SEX; as (I believe) it is also sufficiently evident even to *Those* who have no *Judgment* that way, by the notorious *Fatalities* and tragical *Events* they daily hear of in Fact.

HOWEVER I know, some Chirurgeon-Practitioners are too much acquainted with the Use of INSTRUMENTS, to lay them aside; no, they do not (it may be) think themselves in their Duty, or proper Office, if they have not their cruel Accoutrements in Hand: And what is most unaccountable and unbecoming a Christian, is that, when they have perhaps wounded the MOTHER, kill'd the INFANT, and with violent Torture and inexpressible Pain, drawn it out by Piecemeal, they think no Reward sufficient for such an extraordinary Piece of mangled Work.

*BUT*, in short, I would advise such to practise *Butchery* rather than *MIDWIFERY*; for in *that Case*, they could *sell* what they *slay*; but in *this*, by *handling* MAN so, they only bring *Infamy* upon their *Profession*, and expose it to the *Contempt* and *Hatred* of OTHERS.

*COVETOUSNESS* is the blackest of *Vices*, and in this *Case* (I am sure) it is an unpardonable SIN, to thirst after sordid *Lucre* for procuring the *Health* or preserving the *Life* of our Neighbour; as, I doubt, is but too common among some mercenary People: Who (as we have been creditably inform'd) have refus'd to take *Women* in Hand at the very Point of Extremity or Time of Need, before a certain SUM of *Money* was first deposited; tho' perhaps borrow'd upon *Pledge*, or collected amongst their charitable *Neighbours* for *GoD*'ssake.

I do not say however, but that the *Workman* is worthy of his *Reward*, and *That* which ought to be paid according to the *Merit* and *Dignity* of his Performance; not according to the *Time* he spends about it, as hired *Labourers* are paid their WAGES: No, that fruitless *Labour* would not be worth while; no *Gentleman* would undertake MIDWIFERY upon such unprofitable *Terms*: For as it is in his Power to save the *Life* of the MOTHER, or the INFANT, or *Both*, (which he often does effectually) *He* undoubtedly deserves an extraordinary *Recompence* worthy of so great and good a PIECE of SERVICE.

*BUT* notwithstanding all This, an extravagant *Price* is not to be arbitrarily demanded, nor ought the Reward to exceed the *Ability* of the *PATIENT*; neither are *Those* to be forsaken or left destitute of *Help*, and expos'd to imminent *Danger*, at all Hazards of *Life*, who cannot afford us *MONEY*: But rather (on the contrary) they are to be forthwith taken in Hand chearfully, attended by Night or Day diligently, and a trifle of MONEY given (by us) rather than *taken* from them, when our *Fellow-Christian*'s Circumstances so require it. For *this* is the right way to secure *GOD's Blessing* to *Ourselves*, and *Success* to all our *Endeavours*.

AND, in short, I humbly pray, that HE may (out of his infinite *Goodness* and *Mercy*) always enable ME, according to my best Inclinations, faithfully to perform these good *Offices*, which I know to be so much my indispensible and incumbent *Duty*, in that *STATION*, his All-wise *Providence* hath allotted me, as to the Affairs of LIFE.

WHENCE I come, in the next Place, by due Order, to treat particularly of the *Contents* of the preceding *Chapter*; and, *First*, to set forth an *Anatomical Description* of the several PARTS of *Generation* in manner following.

# CHAP. V. Of the External Parts of GENERATION.

*THESE Parts* are generally so well known, that I would not so much as mention them, out of *Modesty*, were it not, that, I presume, the *young MIDWIFE* may find something in the ensuing *Description* worth her singular *Notice*; which however, I shall not so much insist upon: But succinctly—

*BEGINNING* with the *First*, call'd the VULVA or PUDENDUM; we find it situated below the Os PUBIS, having a great *Chink* or *Fissure* in the *Middle*, as it has the FRÆNULUM and PERINÆUM in the *lower Part*. And above the *Chink* there is a little *Protuberance* occasioned by *Fat* under the Skin, call'd MONS VENERIS.

THE two LABIA VULVÆ being a little separated, the NYMPHÆ appear, join'd one to each interior Side of them: *They* are two small Pieces of red *Membranous Flesh*, much resembling *Pullet's Gills*: *They* encrease the Pleasure of *Copulation*, and direct the Course of the *Urine*.

*IN* the upper Part of the *Chink*, next to the Os PUBIS, are several little round *Substances*; which the most ingenious *Fallopius* call'd the CLITORIS, almost hid under the *Skin* denominated the PRÆPUTIUM.

A little deeper, or straight below the CLITORIS, is the URETHRA, or *Orifice* of the Neck of the Bladder; being a little *Hole* as big as a *Goose-Quill*; which discovers itself by a small Eminence, and is about two *Inches long*.

*BETWIXT* the *Muscle*, call'd SPHINCTER URETHRÆ, and the inner *Membrane* of the *VAGINA*, are several small *Glands*; whose excretory *Ducts* are the *Holes* observable about the *URETHRA*, call'd<sup>[153]</sup>*LACUNÆ GRAFFI*; which discharge a *Liquor* for lubricating

or making the VAGINA slippery, and encreasing the *Venereal Titillation*.

*IN* the *Orifice* of the VAGINA, there is a slender subtile *Membrane* situated a-cross, which is call'd the HYMEN, of a different *Form* in different *Women*; being sometimes *Annular*, and sometimes *Semilunar*: It is almost always to be found in *young Girls*, having a small *Hole* into the VAGINA; which *Hole* in ADULTS is somewhat larger. In the first *Act* of *COPULATION* this *Membrane* is torn, which generally occasions an Effusion of a little *Blood*; but this may also happen by many other *Procatarctick Causes*<sup>[154]</sup>, and accidental Occasions.

THE GLANDULÆ or CARUNCULÆ Myrtiformes are constituted of the contracted Fibres of the dilacerated HYMEN; and are situated on the Side opposite to the URETHRA, next the ANUS, in the FOSSA Magna, or Navicularis; being the same Place where the HYMEN was at first established. These are small fleshy Eminences, and are sometimes Two or Three, and sometimes Four or Five in Number: They are deficient in GIRLS, and defaced in those WOMEN who have had CHILDREN.

THE VAGINA or Neck of the WOMB, is a long and round Canal, reaching from these Caruncles to the Orifice of the WOMB; not very unlike a strong small Gut: Its Orifice is narrow in Virgins, and in All Women much narrower than its other Parts: It's Substance (according to Ruysche's Observations) is membranous, nervous, papillary, and wrinkled WITHIN; which consequently must be of an exquisitive SENSE: In Virgins the WRINKLES are very Large, especially in the Fore-Part; but after frequent Embraces they are Less, and after repeated BIRTHS, they entirely disappear.

THE VAGINA lies betwixt the Bladder and the strait Gut, or RECTUM; with which last it is wrapt up in the same common Membrane, from the PERITONÆUM, adhering to it, all its Length upwards, from its Orifice to that of the WOMB, and quite round on the lower Side, as it does to the Neck of the BLADDER above.

*IN* MAIDS, the *VAGINA* is about Five Inches *Long*, and one and a half *Wide*: But in *CHILD-BEARING-WOMEN*, it cannot be determin'd; because it *lengthens* in the time of *PREGNANCY*, and *dilates* in time of *BIRTH*; having likewise (in all) some little *Holes* or *Ducts* in it, which discharge a *mucous Liquor*. The *VAGINA* Serves

also, in fine, for a necessary *Conduit* to the *MENSTRUA* and *LOCHIA*, as it does for a proper *Passage* to the *INFANT*, &c.

THESE are, in short, all the *external Parts* of *GENERATION* in *Women*; and *these* have all their proper respective *Functions* assign'd them by NATURE; contributing conjunctly and severally to the *Charms* of *COPULATION*: Which *ACTION* alters the very *Course* of the BLOOD, and *Motion* of the *Animal SPIRITS*; and consequently sets all the describ'd *Parts* in full *AGITATION*. Namely, thus

THE LABIA dilate: the ORIFICE swells: the NYMPHÆ give way: the CLITORIS (of exquisite Sensibility) erects: The GLANDS (by a *Protuberancy* of the Parts) yield their *succous Contents*: The VAGINA draws close: The *Fibres* of the WOMB complicate to open its *Orifice*: The *Branches* of the *Spermatick* ARTERY contract to draw the Extremities of the *Tubes* to the *OVARIA*, as they carry the SEED to them: The SEED circulating in the *Veins*, which open in the *Cavity* of the *VAGINA* and *MATRIX*, it ferments immediately with the *Mass of Blood*: This *Fermentation* swells the *Membranes* of the Tubes, opens the *Cavity* of the WOMB, and disposes *All* perfectly for the right Reception of the *impregnated* EGG.

*FROM* hence we may plainly see, in what a miraculous *Order* and *Manner*, all *These Parts* minister, and are subservient unto that (yet more) admirable and wonderful *Body* the WOMB. Which being thus in brief *anatomically* described, I come next in Course to

# CHAP. VI. Of the Internal Parts of GENERATION.

*IN* discoursing of *These*, I shall begin with the chief *Part*, to which the rest are but *Subservients*.

FIRST then, the MATRIX or Womb, is situated in the upper Part of the Cavity of the PELVIS, or Bason, between the Bladder and Streight Gut. It is placed there in the Middle of the HYPOGASTRIUM, for the Convenience of COPULATION, and the more easy and ready Extrusion of the INFANT.

SECONDLY, The Bones of the PELVIS (as described hereafter below) stand as a Rampart, fencing it against all external Injuries; That is to say, the OS PUBIS protects it before; the SACRUM behind; and the ILIUM on each Side: Like as the BLADDER and RECTUM on the other Hand defend this Noble Part again from the Rigidity of these BONES.

THIRDLY, the Figure of the WOMB, from its internal Orifice to its Bottom, in a Natural State, resembles a large compress'd PEAR. Its Length is about three Inches; its Breadth two in the Hinder, and one in the Fore-Part; its Thickness half an Inch large: But I take the Dimensions of it, in general, to differ accord-to the Age and Constitution of the BODY.

*IN MAIDS* however its *Cavity* is much *less*, and can scarcely contain the Bigness of a BEAN: whereas in *Women with Child*, the *Dimensions* and *Figure*, as well as the *Cavity* itself differs, according to the different *Times* of *GESTATION*.

AS I have said before, its Anterior Part coheres above with the BLADDER, below with the RECTUM; the Hinder Part being free: But the lateral Parts are tied by Four Ligaments of different Sorts; whereof Two are placed Above, and Two Below; the Superiors are

called LIGAMENTA LATA, or broad; the *Inferiors* ROTUNDA, or round *Ligaments*.

THE two broad Ligaments are Membranous, and call'd ALÆ VESPERTILIONUM; which spring from the PERITONÆUM, and join the WOMB on each Side to the OSSA ILIA: So that the OVARIA are fasten'd to one End of them, and the TUBÆ Fallopianæ lie along the Other.

THE two round Ligaments arise from the Fore and lateral Part of the Bottom of the WOMB, and pass thro' the Rings of the Muscles of the ABDOMEN, terminating in Fat near the GROINS. They are of a hard Substance, pretty Big at the Bottom of the WOMB; but smaller and flatter, as they approach the OS PUBIS. Now Those Four Ligaments serve to keep the WOMB streight, steady, and firm in its proper Place before BIRTH, and to restore it to its natural Position, by the Help of CONTRACTION, After.

THE Orifice of the WOMB opening into the VAGINA, is of the same Figure with the Nut of the PENIS: This in VIRGINS is very small, scarcely admitting a Specillum or Probe; in OTHERS it is much larger; but in Women with Child, several small Ducts or Vesicles open among the RUGÆ, which discharge a Glutinous Liquor to close and seal up this Orifice, till the Time of BIRTH.

THE Substance of the WOMB is Solid and Muscular, composed of a various PLEXUS, or Web of fleshy Fibres, woven like a NET, with the Interposition of innumerable Vessels, of ARTERIES, VEINS, NERVES, &c. Without, it is surrounded with a Thin and Smooth Membrane from the PERITONÆUM; and within its Cavity, furnished with a Thick, Porous, and Nervous one, call'd the proper Membrane of the WOMB.

THE Veins and Arteries of the WOMB, proceed from the Spermatick Vessels, and HYPOGASTRICKS; which Vessels are all inserted in the proper Membrane. The Arteries convey the BLOOD for its Nourishment; which accumulating and abounding there in great Quantity, at Maturity of Years (when no more is requir'd for the Encrease or Growth of the Body) it distends the Vessels, and distills into the Bottom of the WOMB: Whence proceeds the Blood which nourisheth the FOETUS in the Pregnant Woman, and the Monthly Terms or MENSTRUA in the Woman not with Child; which Evacuation, MEN Themselves are also subject to in a great Measure;

(notwithstanding their inconsiderate *Detractions* and vain *Talk* on this Head) save only that in THEM the *Redundant Humour* passes off a different Way by *Urine*, by the *Nose*, and sometimes by the *Hemorrhoidal Veins*, &c.

THE VEINS Serve only to reconduct to the Heart, the BLOOD which is neither wholly evacuated nor consum'd, as I observed more at large *Before*. But the NERVES arise from the *Intercostals*, and those of the Os SACRUM; remarkable *Branches* of which run along the Back of the *Clitoris*, from whence this *Part* is susceptible of the very slightest *Impression*.

THERE are moreover other small Vessels, springing one from another, which tend to this Orifice, and serve in Plethorick Women with CHILD, to carry off the Superfluity of the Humours. And, in short, prudent Nature, seems to have so ordered These to prevent ABORTION, which might easily happen, if the pregnant WOMB was too much expos'd, or was to open itself for this Purpose.

THE Seminal or Spermatick Vessels are Four, like as they are computed to be also in MEN, and differ only in being shorter. The Blood Vessels are very winding; and the Spermatick Arteries arising with a narrow Origin from the Aorta, form various Plexus's, and Inosculations, as These do: And the Spermatick Veins (tho' without Valves) have the like Inosculations with the Arteries, which however in These are more conspicuous.

THE OVARIA, or TESTICLES, are Two Bodies, on each Side One, annexed to the Bottom of the WOMB, at about Two Fingers Distance, near the broad Ligaments: They are fixed to the PERITONÆUM at the ILIA, nigh the Spermatick Vessels: Their Figure is almost Oval, a little depressed on the Upper Part, where the SPERMATICKS enter.

THEIR SIZE is generally about half as *Big* as *MEN*'s are; but *this* differs according to the *Age* and *Constitution* of Persons: Their *Surface* is smooth, and even in *Virgins*; but wrinkled, uneven, and dry in *old Women*: They are encompass'd with a proper strong *Membrane*, deriving its *Original* from the *PERITONÆUM*; which also covers all the *Spermatick Vessels*.

THEIR Substance is Membranous and Fibrous, interwoven with a vast Number of Vessels; among which are some round Vesicles, containing a viscous HUMOUR, when boil'd, of the Colour,

*Consistence*, and *Taste* of the boil'd *White of an Egg*: From whence they are call'd EGGs, because of this *Analogy*. *These* also differ in *Size* and *Number*, according to *Age* and *Constitution*, although (ordinarily) the *Biggest* of them scarcely equals a *PEA*; and there are in *some* Persons 10 or 12 of them, in *others* (perhaps) but *One* or *Two* discernible.

THE TUBÆ FALLOPIANÆ, are Two winding Canals, resembling Two Trumpets, situated on the Right and Left Side of the WOMB, annexed close to its Bottom, by their double Membrane; which is only a Continuation of the exterior and interior Membranes of the WOMB: They in SIZE equal a little Finger about the Middle; tho' the Cavity opening into the WOMB, will scarce admit a Hog's Bristle; but the other Extremity, floating loose in the ABDOMEN, will admit the Point or Tip of a little Finger: They are of a Membranous and Cavernous Substance, about 5 or 6 Inches long, and have the same Veins, Arteries, and Nerves, as the OVARIA.

THESE Tubes, to be brief, (in time of COITION) are erected by a copious Influx of *Blood* and *Spirits*; which also, by the Assistance of their *muscular Fringes*, embrace the *OVARIUM*, transmit the *prolifick Masculine* SEED, afterwards receive the *impregnated* EGG, and at last convey it thence into the WOMB. In fine, these are all the *internal Parts*, as I conceive, tending to *GENERATION*. But more particularly, to proceed to

## CHAP. VII. Of the PELVIS.

THIS being that *Cavity* in which the WOMB is placed, and through which the *INFANT* passes in time of *BIRTH*; it is my Opinion that a distinct *Knowledge* of it is highly necessary for all *MIDWIVES* to accomplish their *Practice*: For without that *Qualification*, they cannot help committing a great many *Blunders*, and being guilty of innumerable *Mistakes*; since they must proceed upon gross *Uncertainties*, and use their *Hands* like *MEN* groping in the *Dark*, as hereafter will more plainly appear.

THIS is that Cavity betwixt the OSSA INNOMINATA and OS SACRUM; which join themselves in the *Posterior Part* of it on each side, by *Cartilages* and *Ligaments*: so that they, forming there a strong and firm *Juncture*, compose this *Cavity* of the *PELVIS*, which is vulgarly call'd the *Bason* of the WOMB.

THE upper Part of the OSSA *PUBIS* forms the *Borders* of this *CAVITY before*, and the Hanging forwards or bending down of the OS *SACRUM* makes *Those* of it *behind*; as the OSSA ILIA compose the *same* on each side.

THESE OSSA ILIA are (by some) call'd the Wings and Bounds of the PELVIS; but they are mightily mistaken, who imagine that they surround or encompass the PELVIS: For they are only annexed to it on each side, and more extended towards the Back than the Forepart. As they are also very much in the wrong, who think that the Cavity of the PELVIS extends in its Length, according to the Length of the BACK-BONE: since it rises from the Bottom obliquely, ascending Forwards, and so proceeds, as if a Person might, through its Passage, easily touch the NAVEL.

*IN* fine, it is here Remarkable also, that we do not always find the largest *PELVIS* in *Women* of the largest SIZE, but often the quite *contrary*; for it differs as the *INFANT* does in *Bulk*, exactly

answering to the *Bigness* of its HEAD: And in some *Women* it is *Deeper*, in some *Larger*, in some *Broader*, in some *Flatter*, in some more *Oval*, and in some at last *Rounder*. From whence arise sundry *Observations* both useful and necessary, for the better *Information* of *MIDWIVES*.

## CHAP. VIII. Of the BONES of the PELVIS.

I Doubt not in the least but *This* and the *proceeding Chapter* will seem needless, and appear superfluous to some Persons, in the *Practice* of *MIDWIFERY*; namely, to such as know not the *New Improvements* of this ART: But especially to such as are accustom'd to the *Use* of INSTRUMENTS, they'll appear altogether *Useless* and *Vain*; since such *Practitioners* can easily (upon any Occasion, without the curious *Anatomical Knowledge* of *these Parts*) first slay the *INFANT*, and then either *deliver* or *kill* the *WOMAN*, as *Chance* may *direct* their *SHARPS*.

*BUT* for my Part, because I have no Notion of such sort of *WEAPONS*, I shall endeavour to acquit my self more *honourably*, and teach my *Followers* another way, and *That* without BLOOD-SHED; as I hope will hereafter more amply appear.

AND FIRST therefore in speaking of the Bones of the PELVIS, I shall begin with the OSSA Innominata; which are two large Bones joined to the Sides of the OS SACRUM. They are compos'd of Three distinct Pieces, each of which has its respective Name: The FIRST and superior is call'd OS ILIUM; because the Guts ILIA lie upon it directly. It is Large and almost of a Semicircular Figure, a little Convex and Uneven on its External Side; as it is Concave and Smooth on the Internal. In short, it is join'd to the Sides of the three Superior VERTEBRÆ of the OS SACRUM, and is Larger in WOMEN than in MEN.

THE SECOND and Anterior is call'd Os PUBIS; which is united in the Forepart to its Fellow-BONE of the other Side, by an intervening Cartilage: By the Extension of which Cartilage, the Ossa PUBIS in Young Women, sometimes recede a little from One another, to facilitate a difficult BIRTH. THE THIRD is the Inferiour and Posteriour, call'd Os ISCHIUM, or COXENDIX, which has a large Cavity call'd Acetabulum Coxendicis; and This receives the Head of the Os FEMORIS; the Supercilium or Top of which Cavity joins the Os PUBIS.

THESE Three Bones, until the Age of Puberty, may be seen distinctly, tho' afterwards they grow together, and become one BONE, without leaving any Mark of Division. They adhere on each side to the Os SACRUM by two Strong Ligaments; the Upper of which passes from the Posteriour Acute Process of the Ischium to the SACRUM; as the Lower joins the Tuberculum Ischil to the SACRUM.

THESE Bones in WOMEN are more distant or separated from One another, and are smaller than in MEN; especially the Os PUBIS, to the end that the Cavity of the PELVIS, and the Angle betwixt the Os PUBIS and ISCHIUM, may be the Larger, for the more commodious Bearing of the INFANT, and the more easy Exclusion of it in BIRTH. But from hence I would no ways infer, that the OSSA PUBIS and ILIA sever themselves in time of LABOUR; (notwithstanding the Opinion of some Authors) for I am fully satisfied of the contrary: Because I have conducted more than one Woman in my Time, upon walking out of one Chamber into another, immediately after DELIVERY; which could never have happen'd in Case of such a distant or dislocated Separation.

THESE Bones call'd Innominata are of wonderful Use and Service: For besides that they form the PELVIS, and defend every Part of its Contents, they also give Connexion and Juncture of the rest of the Body, to the Thigh-Bones; as they likewise give Rise and Origin to many MUSCLES, and are the Basis of Support of the SPINE of the Back, as well as of all the Superior Parts. Whence I come à propos to descant a little upon this particular Part, as far as concerns our present Purpose.

*THE* SPINE then is that *Bony Column* or *Ridge*, which extends itself down the *Back* from the HEAD to the *Fundament*, containing the *Spinal Marrow*, and resembling the *Letter* S in figure.

*IN* This SPINA therefore we must consider its *Fivefold Division*; namely, into NECK, BACK, LOINS, OS SACRUM, and OS COCCYGIS. The First *Three* consist of 24 VERTEBRÆ; whereof the *Neck* has 7, the *Back* 12, and 5 belong to the *Loins*. *Those* of the NECK bend *inwards*; those of the BACK *outwards*, for enlarging the *Cavity* of the THORAX;

*Those* of the LOINS bend *inwards* again; and *Those* of the OS SACRUM *outwards*, to enlarge the *Cavity* of the *PELVIS*.

THE VERTEBRÆ of the *two last* concern us most in this Place; wherefore I shall say no more of the *rest*, save only by the By, or coincidently, as they fall in my way. *Those* of the LOINS then are the *Thickest* and *Broadest*, and the *Last* of them is the *Largest* of all the VERTEBRÆ; as their *Cartilages* are thicker and stronger than any of the *Others*, and their *Acute Processes* are at a greater *Distance* from one another. From whence it comes to pass, that the greatest *Motion* of the BACK is perform'd by the VERTEBRÆ of the LOINS.

THE VERTEBRÆ of the OS SACRUM grow so close together in Adults, that they make but one large solid BONE, of a Triangular Figure; and yet not without the Mark of a four or five-fold Division: As in CHILDREN, it consists of many more Pieces or Divisions. However, its Basis is tyed to the last VERTEBRÆ of the LOINS, and the Upper part of its Sides to the ILIA; as its Point is to the OS COCCYGIS.

THE OS COCCYGIS is also in Adults, for the most part, but one entire BONE; tho' in younger Persons it is compos'd of 3 or 4 small Divisions; Of which the Lower is still less than the Upper; till the Last ends in a small Cartilage. It is join'd in its Glenoide Cavity to the Extremity of the OS SACRUM; being short and bent inwards: It supports the INTESTINUM RECTUM, and yields to the Pressure of the INFANT in Travail: But MIDWIVES ought not to thrust it back or repel it with Violence; No, they should rather handle it gently, if they would prevent dangerous Consequences, as well as great Pain to the Woman in LABOUR.

FROM hence it is manifest, that they are mistaken who imagine that the Opening and Enlargement of the PELVIS, in making way for the INFANT, does depend upon the Separation of the OSSA PUBIS: For it much more depends upon the yielding of the OS SACRUM, or its giving way naturally; especially This Part of it call'd OS COCCYGIS. Neither doth the Straitness of the Upper Part of the PELVIS so much occasion a difficult BIRTH, as the small Distance that is betwixt the Points of the OSSA PUBIS, call'd OSSA SEDENTARIA or Seat-Bones, and the OS COCCYGIS: No indeed, neither of These can be any great Hindrance to the Passage of the INFANT; since all BONES, never so closely knit together with LIGAMENTS, may be moved extensively upon occasion, by carefully and gently stretching the said LIGAMENTS. But, in short, it most commonly happens, that the *Ill Position* of the INFANT itself, or the bad *Condition* and *Situation* of the WOMB, or *Both*, occasion a difficult or preternatural BIRTH.

BUT I would here farther observe yet, that as these BONES differ frequently both in Form and Size, according to the different *Constitution* of the Body; so neither are *they* always of the *same Substance*: For in *some Women*, we find a great many *Nervous* and *Cartilaginous* LIGAMENTS, which penetrate into the *solid Substance* of the BONES themselves; in which the LIGAMENTS are so fast bound together, that it is hard to distinguish whether they are *One* or *More* BONES. From whence, however, it will hereafter appear, that *One Woman* is more easily delivered than *Another*; the BONES in *One* being more firm and immoveable, altogether resisting any *Relaxation*; which in *Another* are more loose and pliable, easily give way and yield freely to the *Force* of the Endeavouring and Struggling *INFANT*.

THE Contents of this SECTION will appear more evident, by looking curiously upon a *Female SKELETON*: In which (for Distinction's-sake I recite *This*) that the lower Parts of the *Seat-Bones*, are generally more *distant*, and not so much bent *inwards*, down towards the Point of the Os COCCYGIS, as in a *Male SKELETON*. Which Difference, in short, the Omniscient CREATOR has so order'd, for preventing difficult *BIRTHS*; and yet, notwithstanding all this wise Provision of Nature, they happen too often in the World. However, having thus, in fine, described the PELVIS and its BONES, as far as is requisite for *MIDWIVES*, I come next, more particularly to describe that astonishing *Piece* of GOD's *Handy-work*, to which all the afore-mention'd *Parts* are ordain'd to *minister*, and that both *conjunctly* and *severally*, without any *Exception*: viz.

## CHAP. IX. Of the WOMB.

I Say this is that *Body*, which the *Learned Great Men* of all Ages have esteem'd and look'd upon as the most wonderful MIRACLE of *Nature*, not only because of its singular *Substance* and *Structure*, but also of its peculiar *Qualities* and *Faculties*.

AS to the Substance and Structure, I have before observed in Chap. 6. of this SECTION, that it is singularly composed, of an innumerable Multitude of Fibrous Vessels and Muscular Parts; which being All most curiously interwoven, are admirably form'd together in its Constitution.

BUT how particular soever I have been on this Head, in Chap. 5, and 6. I must resume this Topick here, and add, that the WOMB, and its Vagina or Neck, are closely join'd together: For it terminates in a POINT near its Orifice, intrudes itself into the Vagina, and hangs so down, that in Women not with CHILD, and sometimes also in the first Months of Pregnancy, This sharp POINT may be perceiv'd by the Touch.

AND how closely soever this Orifice of the WOMB is shut after Conception or during Pregnancy; yet in a BIRTH it is so expanded, that the WOMB and Vagina both seem to have but One and the same Cavity, like a BAG of equal Dimensions; there being then no Difference perceivable between that Orifice and the Vagina, excepting that the VAGINA is Softer and Thinner.

THE WOMB may be otherwise aptly compar'd to the EARTH; because the same Degree of Affinity that the EARTH has to the Seed of Plants, the WOMB bears to the Seed of Men: It being the very Secundary Cause in the Constitution of the Human Conception; not indeed the Instrumental only, but also the Active Cause: For whereas the Instrument takes Motion from, and operates by Virtue

of *Another*, the WOMB only *acts* of *itself* and *operates* by Virtue of its own *Active Faculties*.

BUT more particularly, the WOMB has sundry proper Actions in this Constitution, which are peculiarly dependent of, and accordingly discharged by ITSELF only; and therefore it is not the sole or pure Instrumental Agent. But the Reason that I call it the Secundary or Disponent, not the Primary Cause, in constituting the FOETUS, is, because the Actions of the WOMB do not precisely terminate in this Constitution, but chiefly in disposing the Causes constituting the MAN. And as (I think) there are Eight such Actions belonging to the WOMB, I shall undertake to define them all particularly in a few Words. And,

I. *THE FIRST Action* of the WOMB is, that by its *attractive Faculty*, it may allure the *Masculine Seed* infus'd by Coition into the FUND of its *Capacity*, after the same manner as a *famishing Stomach* snatches at the Victuals by the *Gullet* from the *Mouth* of the Eater.

II. *THE SECOND* is like unto the *FIRST*, and consists in *attracting* (after the same manner) the *Muliebrian* SEED from the Vessels of the TESTICLES, into the same *Cavity*.

III. THE THIRD Function of the WOMB, is the Copulation and mutual Conjunction of the SEEDS of both Parents; which it prepares and perfects by its innate Power, constricting itself in all Parts: And this Action, I do not (in this place) call a Permistion of these SEEDS, as it is generally term'd, because a Mixture is properly perform'd only by the concording Qualities and mutual Actions of two or more miscible Copulatives, without any Assistance of the Thing Containing.

IV. THE FOURTH Office of the WOMB, is an Effusion of the Menstruous Blood upon the aggregated Seed, from a Relaxation of the little Orifices of the VEINS terminating in its interiour Surface.

V. *THE FIFTH Action* of the WOMB, is, the *Retention* of those three conjoin'd *Bodies*; to effect which *Work*, the WOMB contracts itself on all sides, and shuts up all its *Orifices*, even to the sensible Animadversion of the WOMAN.

VI. *THE SIXTH Function* of the *WOMB*, is to excite the Virtue of the *Torpent Lifeless* SEED, and rouze it up from *Idleness* to *Activity*;

as the latent Virtue of Physick in the Body is *excited* to Operation by the *natural Heat* of the VISCERA.

VII. *THE SEVENTH Office* of the WOMB, is (after the FOETUS is Form'd and Organiz'd) the *Attraction* of the BLOOD from the *Maternal Veins*, into the *Umbilical Vessels*, for its *Nutrication* and Growth.

VIII. *THE EIGHTH* and last *Function* of the WOMB, is *Birth*, which I shall remember to speak more particularly of in its proper Place.

*FROM* all which we may easily collect the sundry proper *Uses* of the WOMB, and readily comprehend that it is not only destin'd by *Nature* to admit the SEED, and receive the *impregnated* EGG from the OVARIUM and the *Fallopian Tube*; but also to contain the *Organizing Matter*, and all necessary *Principles* (*Active* and *Passive*) for constituting the *Conception*; fomenting the receiv'd SEEDs, by its natural *Calidity*, preserving the same, and preparing the *Maternal Blood* by its inherent *Temperament*, for the Use of the FOETUS: Which FOETUS it surrounds and defends from external *Accidents*, by its Substantial *Corpulency*; containing and nourishing the INFANT, about the Space of 9 or 10 *Months*, by its Faculties of *Extension* and *Attraction*; and at last forcing it into the World, by *that* of *Expulsion*.

*UPON* which Occasion, that the *MIDWIFE* may the better discharge her *Duty*, and assist the *Labouring Woman* more effectually, without Fear or Danger, and without committing any Blunder or Mistake; as I have already taught her in what *Place* the WOMB is seated, to what *Parts* it tends, and how it is *annexed*, &c; so I shall now proceed to describe its *Qualities* and *Faculties*, so far as is necessary, and absolutely requisite in the *Practice* of *MIDWIFERY*. And, FIRST, then—

#### CHAP. X. Of the Extensive Faculty of the WOMB.

NATURE has endued the WOMB with this *Faculty*, to the end that it may (in *Pregnancy*) extend and dilate itself Day by Day, in *Proportion* to the *Growth* of the INFANT, *Secundine*, and *Humours*.

NOW the WOMB in its *lower Part* being straitly tied to the *Intestinum Rectum* and *Bladder*; it is to be understood that the *Distention* happens mostly in its superiour Part or *Bottom*: Which is not only most *Free* and at greatest *Liberty*, but also *Thickest* and aptest for *Dilatation*.

THIS will appear more evident, when we consider how the INFANT adheres to that Part, the *Bottom*, by means of the *Secundine*: How the INFANT also as it grows, begins to separate the *Humours* in the *Secundine*, which (of consequence) encrease as the *Infant* does: And how again the Encrease of the *Humours* fill up the *Chinks* and VACUUMS, as I may call them, which the INFANT cannot possess. From hence it is that the WOMB extends itself in the *Form* of a PEAR, only a little *Plainer* at Both Ends.

*THUS* the *Secundine* adhering<sup>[155]</sup> to the *Bottom* of the WOMB, by its *thicker Part* (call'd the *PLACENTA*,) thence it is that the WOMB encreases and extends itself more in its *Bottom*, than in any *inferiour Part*.

WHEREFORE the WOMB being most extended in its upper Part, call'd the *Bottom*; and both the *Bladder* and *Rectum* below being soft loose *Parts*, it necessarily follows, that the WOMB may freely *ascend* and *descend* upon Occasion, as we often find it in the *Cavity* of the *Belly*; which, however, does not happen to All *Women* alike.

BUT, in short, these extensive and ascensive Faculties of the WOMB, chiefly residing in its Bottom; I would have it laid down for a certain Maxim of Truth, that These exert themselves, without any the

least *Extenuation* to the *Uterine Substance*: Which Position leads me directly to consider——

# CHAP. XI. Of the Substantial Density of the WOMB.

TOUCHING the Thickness of the Pregnant WOMB, Authors have differ'd extremely: Some thinking, that as the WOMB grows Larger, it grows Thicker; and Others the Reverse, that as it extends, it grows Thinner.

*NOW* these *Opinions* being both diametrically opposite *One* to the *Other*, as *Both* (perhaps) may be contrary to *Truth*, I shall freely and ingenuously offer my *Sentiments* in a few Words; not that I vainly desire to engage myself in any *Controversy*: Save only, because the true *Knowledge* of this Point, is so Material and Consequential for all *MIDWIVES*, especially in *Cases* of difficult and preternatural BIRTHS, that I cannot well excuse myself, should I pass it by with *Silence* in this Place.

*MR. MAURICEAU*, in his *Book* of the *Diseases* of Women, contradicting the Authority of *Riolanus*, *Bartholinus*, and the whole Body of the most Renown'd and Ingenious *Anatomists*, both *Ancient* and *Modern*, is at great Pains to make us believe, that the *impregnated* WOMB is (like the *Bladder*) in this Case; *the more it is extended*, *the thinner it grows*.

BUT as his quoted Authority of Galen and Carol. Stephanus cannot be sufficient against so many good Authors of the contrary Opinion; so neither will his Demonstrations of WAX, nor Comparisons with the WOMBS of Animals, be sufficient to make out his Argument, against confirm'd Experience, common Sense, and current Reason. Which Point of Experience I judge this Author to have been deficient in, otherwise he would certainly have given us some particular Instance or other of it, and not had Recourse to Inconsistencies for supporting his new-fashion'd unreceiv'd Notion. For what Comparison can there be betwixt an Animate and Inanimate Body? Or what Affinity betwixt the WOMB of Animals and that of *Women*, who are form'd after the *Image* of *GOD*, and (by a *Prerogative* above all other *Creatures*) are furnished with a *WOMB* very *different* from them?

I ingenuously acknowledge, when I first met with this *Author's Works*, not daring then to be too *Positive* in this *Point*, I was put into some *Suspence* of Judgment; which made me not only consult with the best of *Authors* and *Professors* of ANATOMY, but also induc'd me to embrace every Opportunity of satisfying myself otherways to a full *Conviction*.

WHEREFORE at all Dissections of pregnant Women, where I have been present, I carefully observed and took notice of this particular *Point*; upon which I must needs affirm, that I always found the WOMB (however Big or Little) of its natural Thickness, and rather thicker than thinner: For tho' It is expanded by the growing Infant, &c. yet it may (most probably) be equally condensed, by the Imbibition of the *fluent Humours*, which consolidate into *itself* by the *Pores* of its *Plexus Body*. Nay, I have not only satisfy'd myself in *dead*, but also in *living Bodies*, with respect to this Matter; for by passing *One Hand* into the *WOMB* to take away the Secundine, when the Other laid upon the BELLY, I clearly discerned the Truth by SENSE, and have sometimes found the WOMB not only incredibly *Thick*, but also RIGID withal: And in this Matter, I have not been singular; for I find the *ingenious Daventer* writes to the same purpose, upon this *Head*, in his Book of *Midwifery*. Having therefore thus, in short, perceiv'd the *Thickness* of the *WOMB*, both with my *Hands* and *Eyes*, I must trust my SENSES, and prefer my *Experience* before any *Man's bare Conjecture*; for tho' I often see not those Things which I believe, yet I must still believe those Things which I see.

WHENCE I conclude, that the WOMB, tho' of a different *Bigness* from the *Conception* to the BIRTH, is always, at least, of one *Thickness* with the *unconceiv'd* WOMB: Which the *Divine Wisdom* (no doubt) has so ordered for the *Preservation* of the MOTHER and INFANT; for if the WOMB in Time of *Pregnancy* did grow *Thinner*, according to its *Extension*, it must of Consequence grow *Weaker*, and, in that *Case* the INFANT would be liable to perforate it with *Foot* or *Hand*, which would infallibly terminate in the *Loss* of both their LIVES.

BUT besides, if the WOMB was so Thin and Weak as Mr. Mauriceau imagines; as the Pregnant Woman would be liable to imminent Danger every Moment Before, as well as In Time of LABOUR; so the MIDWIFE would be exposid to the greatest of Difficulties: For who then durst, without Horror, offer to turn the INFANT, so closely compressid in those thin Membranes of the WOMB? Or who could have Resolution enough to separate and pull away the AFTER-BIRTH?

HOWEVER, I could produce innumerable Instances of most Learned and Ingenious Men to support my above-mentioned Opinion; but I shall content myself now with ONE, who (I think) is of sufficient Authority: For hearing lately that Mr. Mauriceau's mention'd Book (which I had only read before in its Original French) was translated by Dr. Chamberlain, I doubted not but I should fully discover that Eminent TRANSLATOR's Sentiment upon this single Point; whereupon this most famous Physician and Boethogynist marks by way of Observation or a Bene Notandum, that his Charity for his Author makes him believe that French-Women differ in this Point from Our English, with whom it is apparently otherwise order'd. And in the farther Explication of his Author's Opinion on this Head, he adds, That Experience will convince any inquisitive Person of the Contrary.

*TO* which I reply, in short, with all due Submission, that the *French-Women* do not differ one Jot in this respect from *Ours*, nor *Ours* from any *Others*: Which (no doubt) the worthy *Doctor* was very sensible of, notwithstanding his great *Complaisance* to his *Author*.

# CHAP. XII. Of the various Local Motion of the WOMB.

ALTHOUGH the Ligaments are fixed to the WOMB on each side, under the Tubes, near the Bottom, on purpose to keep it duly in the Middle, from falling to either Side; yet we may easily perceive, FIRST, That the Pregnant WOMB, as it dilates and extends itself most (in the Bottom) above the Ligaments, so it rises Highest and becomes Heaviest in that Part; by which means it cannot always be contained in the narrow Compass of the PELVIS, and the Larger the INFANT is, the Higher the WOMB rises (above the Ligaments) in the BELLY. Insomuch that when the Cavity of the PELVIS is not sufficient to contain a large WOMB, fill'd with One or more well-grown INFANTS, together with the Secundines and Humours, it must (of necessity) ascend into the Cavity of the BELLY; as is evident from Chap. 10.

SECONDLY, The WOMB being in Form of a PEAR, much larger above than below the Ligaments, and that superiour Bulk being only sustain'd at the lower Part by subtile Ligaments apt to extend, as well as supported near the Orifice by the Bladder and RECTUM, which are soft, loose, and extensive Parts: Hence, I say, we may easily conceive, that as These are not sufficient to hinder a large WOMB from ascending above the Borders of the PELVIS into the Cavity of the BELLY; so neither are they able to keep it from leaning or inclining this or that way, by reason of its Weight in the Bottom, which is always the farther distant from the Ligaments, the more it is extended: And the extended WOMB being not of the same Firmness and Solidity with THAT in a natural State, is the more apt and ready to move aside, either on the Right or the Left Hand.

NOW this various *Motion* of the WOMB, in short, will appear more manifestly *Probable*, when we consider how variously *Women* with CHILD move their *Bodies*, bending them every way for *Relief*, when

oppress'd with *Pain*; both *sitting* and *lying* in different *Postures*: All which may easily give the WOMB a *Tendency* this or that way, sliding either *Forwards* or *Backwards*, to the right or the left *Side* of the Person.

#### CHAP. XIII. Of the Oblique Situation of the WOMB.

I Doubt not in the least but among the *Many*, some will reject *this* THESIS as *False* or *New-fangled*; but *They* who are *Ignorant* of it, are meer blind *Novices* in the *Art* of MIDWIFERY: For repeated *Experience* has taught *Myself* and many *Others* the Certainty of this *Truth*; as will more amply appear from the following Discourse.

THE Womb having then ascended into the Cavity of the BELLY, if its pointed Parts tend perpendicularly into the PELVIS, so as that its Orifice may be easily touch'd on every Side with the Fingers, its Bottom is placed about the NAVEL; and This I call a right or natural Situation: But when otherways, the Posture is changed, inclining this or that way, and the Orifice suspended so High, that it can scarce or not at all be touch'd, I call That a wrong and preternatural Position, or oblique Situation of the WOMB; which may not only be occasion'd (as is said) by the Weight and Bulk of its Bottom, above the extended and relaxed Ligaments, but also by many other different Causes; such as an obdurated Gland, a Cicatrix, an Ulcer, an Obstruction of the Vessels in the Ligaments or adjacent Parts, &c.

*HENCE* it is that the *wrong Positions* of the *WOMB* are manifold, which would be very tedious to enumerate exactly here; but only, that I may not pass by what is so *material*, I shall reduce them to a *Four-fold Difference*; as the *Ancients* did the *Winds*, because of the *Four Regions* or *Limits* of the Heavens. And *Those Four* will (I hope) comprehend all other *wrong Situations* of the *WOMB*, not very improperly or *mal-à-propos*, as *Ovid*<sup>[156]</sup> has comprehended *These* in the following elegant *Verses*, viz.

*"Eurus ad Auroram Nabathæáq; regna recessit, "Persidáq; & radiis Juga subdita matutinis. "Vesper & Occiduo quæ littora sole tepescunt, "Proxima sunt Zephyro, Scythiam septémque triones*  *"Horrifer invasit Boreas. Contraria Tellus "Nubibus assiduis, pluvióq; madescit ab Austro.* 

THE first bad Position of which is, when the Bottom of the WOMB is placed on the *left Side* of the Woman, a little raised or depress'd; the Orifice being turn'd towards the SPINE of the right Os ILIUM or Os PUBIS, against which the INFANT in time of BIRTH commonly pushes its *Head*, beats out its Brains, and sticks there to Death: Or else passing the said SPINE, it lies *a-thwart* the PELVIS.

THE Second ill Position of the WOMB is, when the Bottom is seated on the *right Side*; the Orifice being turn'd towards the *left* Part of the PELVIS, directly opposite to the other Position, and attended with the same Inconveniencies.

THE Third is, when, in Women having large Bellies, the WOMB hangs too much Forwards; the Orifice being turn'd towards the Os SACRUM: So that the INFANT falls down by the Head into the Bent, or crooked Cavity of the Os Coccygis, where it fatally sticks fast.

THE fourth Oblique Situation of the WOMB is, when its Bottom is press'd too near the DIAPHRAGMA, and its Body too near the VERTEBRÆ of the Loins; the Orifice being elevated, is thereby turned too near the OS PUBIS, where the INFANT striking its Head against these Bones, remains immoveable and perishes: Or, (which is worse) sliding with its Head upon the OSSA PUBIS, it is turn'd on one or other Side or Backwards; when (commonly with Hand or Arm out of the Body) it lies a-thwart the Passage, and infallibly occasions its OWN or its MOTHER'S Death, or Both; unless (as in the three preceding Cases) it be in due time prevented by the Assistance of some very skilful HAND.

THOSE are the Four most difficult and principal wrong, or chief *preternatural Situations*, of the *WOMB*; from whence we may easily frame a competent Conjecture of the *Rest*; to wit, when the *Bottom* of the *WOMB* is more or less turn'd to the *right*, or the *left Side*, or *forwards*, or *backwards*: Since as *that* differs more or less from the *natural Position*, so the BIRTH in like manner is (of consequence) the more or less *Difficult*, as will hereafter manifestly appear.

# CHAP. XIV. Of TOUCHING or HANDLING the Woman.

THE Midwife ought to have a special Knowledge in This Matter, since a Thing of so much Moment as *LIFE* itself often depends upon it; yea, and *this Knowledge* is of absolute Necessity to all Persons practising MIDWIFERY, because many different Points of the greatest *Importance*, are thereby plainly discover'd: But before I enter upon these Things, I would have it rightly understood, that nothing else is meant here by the *Performance* of the TOUCH, than (upon having first pared the *Nails* short, equal, and smooth) passing the two Forefingers of either Hand, (previously well anointed with Fat or Butter, when proper Oils are not to be had) through the VULVA into the VAGINA, in order to reach the Orifice of the WOMB, and to discern its FORM, by feeling it on each Side.

AND it is not only requisite that the Woman in LABOUR be touched, before her Pains come on, because then the Membrane containing the Humours being loose, the INFANT'S Posture may be the better distinguish'd; but the same TOUCH also is to be continued during the Force of the Pains, the better to know their Nature and Effects; whether the INFANT continues still at the Passage or not; and whether the Humours are contracted length-ways, or press'd into a Flat Form, and the like. For after the Pains are over, it is easily to be perceiv'd, whether they have promoted the BIRTH or Not.

*BUT* during this *Performance* of the TOUCH, great Care must be taken not to handle the *Membranes* containing the *Humours* too roughly, lest they should break in the Action.

*NOW* that the MIDWIFE may the more readily perform her TOUCH, she must take good Heed to what is said of the *Cavity* of the<sup>[157]</sup> PELVIS: for as it rises from the *Bottom* obliquely, ascending forwards; so, upon this Occasion, in seeking for the *Orifice* of the WOMB, she must not thrust her *Fingers* streight along according to the *Length* of the Body, towards the bending of the Os SACRUM; but guide them *upwards* from the *Bottom*, as if thro' the VAGINA, she would touch the *Navel*: For Thus her *Hand* being turn'd inward, and her *Fingers* tending towards the *Navel*, the *Orifice* of the WOMB lying directly in the way, she meets with it readily at first. Whereas they who go otherways to work, seek it in vain, and find it with Difficulty.

THIS Observation I thought the more requisite in this Place, because *MIDWIVES* not accurately understanding the *Situation* of the *Bones* of the *PELVIS*, think that the WOMB and its *Neck* or VAGINA reach according to the *Length* of the Woman, and make use of their *Hands* accordingly: First hurting the VAGINA and RECTUM in the Bending of the SACRUM; and then finding no farther *Passage* for their *Fingers*; but being altogether ignorant of the above-mentioned Method of finding the said *Orifice*, they are very often surpriz'd, fall into great *Confusion* for want of better *Instruction*. Whence I proceed to——

#### CHAP. XV. Of the various Uses and Advantages of the TOUCH.

*BY* the TOUCH then, to be brief, the *MIDWIFE* gains the certain *Knowledge* of the following important *Heads*: viz.

FIRST, Whether a Woman be with CHILD or not: For I must needs own, that some of the most certain Signs of Pregnancy are discover'd by the TOUCH; since the WOMB shuts itself close up, immediately after CONCEPTION, and its Orifice becomes more pointed, hard, and solid, resembling (according to Mauriceau's just Comparison) the Mouth of a Puppy newly pupp'd.

*BUT* in time of the *INFANT*'s ripening, this *Orifice* begins to *swell*, and becomes *softer*, *smoother*, and *thinner* than it was Before.

SECONDLY, The MIDWIFE discovers by the TOUCH, whether the Time of BIRTH is near at hand, and how near it is. However, in speaking to this Point, I desire to be rightly understood, not meaning *Miscarriages*, or *Illegitimate BIRTHS*, but only such as are intirely *Legitimate*.

AS then the *INFANT* advances in *Maturation*, so the *Orifice* of the WOMB from the *Third Month*, grows *smoother*, *thinner*, and *softer*; and consequently the more *smooth*, *thin*, and *soft* it appears at any time afterwards to the *TOUCH*, so much the *nearer* draws on the *Time* of BIRTH.

*IN some Women*, this *ORIFICE* begins to open two or three *Months* before BIRTH; and this *Aperture* enlarging itself by degrees, becomes soon as wide as a *Shilling-Piece*, when the *Motion* of the *INFANT* may be distinctly perceiv'd: And in *others* it is so much more enlarged, that one single *Pain* or two accomplishes the BIRTH.

BUT as all Women are not alike, so this RULE will admit of sundry Exceptions; for strong-body'd Women, Women of their First Child,

and those somewhat in Years, their WOMBS continue generally shut up to the last, and open not without the severest *Pains*: And not only so, but the *Orifice* of the WOMB differs also, in all difficult and *Preternatural Cases*, as well by reason of its own *oblique Situation*, as of the *INFANT*'s ill Posture. For this Reason it is, that an Experienced and Judicious *Hand* is most requisite upon such Occasions; since such an *One* can clearly distinguish, what *Another* cannot so much as guess at.

THIRDLY, The MIDWIFE immediately knows by the TOUCH, whether the Woman be taken with the real and genuine LABOUR-PAINS or Not. Which is a Point of the greatest Moment; since as it is of bad Consequence to delay the BIRTH, when the Woman is so taken, especially if the WOMB and INFANT be Both well situated, lest the Pains should vanish, and the Opportunity of DELIVERY should thereby be lost: so, on the other hand, to force a Woman to LABOUR, unseasonably, when but seiz'd with Bastard-Pains, is a most pernicious Thing.

BUT both these Cases too often happen, even to the Hazard, if not the Loss also of both LIVES; especially the Latter, when the MIDWIFE does not know how to distinguish these False Pains, either the Cholick, or other Gripes, from the genuine Pains by the TOUCH: As will be more fully and amply explain'd in the next following Chapter.

*GIVE* me Leave to say then, that BIRTH is not to be provok'd by any Means, until the *MIDWIFE*, by touching the *Orifice* of the WOMB, is certain, that the Woman labours under the *True Pains*; which is not to be judiciously suppos'd to happen before the *Seventh Month* at soonest.

BIRTH at that Time approaching, the Woman is afflicted with great PAINS in her Groin, Loins, and about the Navel, tending downwards with a depressing Force upon the WOMB and other Private Parts. But these PAINS are not continual, for they only go-off and come-on by turns; at which Time, by their violent Depressure, the MIDWIFE finds the Orifice of the WOMB open, or at least opening, and upon Renewal of the PAIN, she finds it more and more dilated and relaxed: whereas, on the other hand, when the PAINS are Spurious, they disperse themselves through the whole Body, as well

as the *Abdomen*; and then the WOMB (as if it were securing itself) is found more closely *contracted*.

FOURTHLY, It is likewise well known by the TOUCH, whether the BIRTH will be *Easy* and *Speedy*, or *Difficult* and *Lingring*, on several Occasions: 1. When the *MIDWIFE* finds the *Head* of the INFANT and the lower Part of the WOMB fallen into the *Cavity* of the PELVIS, so that *She* can touch it in the Confines of the VAGINA: 2. When the *Orifice* of the WOMB is very soft, thin, and wide-open, so that (through it) she finds the *Head* of the INFANT foremost, without any Obstruction by the *Arms* or *Umbilical Vessels* in the way, between the *Head* of the INFANT, and *Orifice* of the WOMB; as often happens: And, 3. When the *Humours*, by the *right Situation* of the WOMB and the INFANT, are found compressed into a *Flat Form*. I say, when Matters are found so (by the *TOUCH*) in this *Natural Posture*, there is no great doubt (under GOD) of a *Speedy* and *Easy* DELIVERY.

WHEREAS, on the contrary, when the Orifice is found by Experience higher, little or not at all open; sharp, hard, and thick, with the Humours pressed up length-ways: Then the Case is quite revers'd, and the MIDWIFE, if she understands her Business, must resolve to sweat at her Work.

*NOW* the Reason of such *Difficult* BIRTHS commonly proceeds, either from the *wrong Situation* of the INFANT, or *That* of the WOMB; the *latter* of which always occasions the greater *Difficulty*, especially when it is accidentally join'd with the *First*, to a vast Degree of *Aggravation*: Of which, as follows of course.

FIFTHLY, Another Advantage of the TOUCH, is the truly Knowing whether the INFANT be in a Natural, or Preternatural Posture. For the MIDWIFE finding the Orifice of the WOMB so open, that it admits one or two Fingers, she may distinctly feel the Chin of the INFANT in a Natural Position, lying forwards on its Breast, and the Neck in the Middle of the Orifice, or streight Before it; so that the Head being foremost and lowest within the Borders of the Orifice, the Fingers cannot pass any Farther.

HOWEVER, supposing the Clunes, Knee, or Elbow, to present themselves *First* in the ORIFICE; It is true, they have their *Roundness*, but then they are easily distinguished from the *Head*: For the Globular Part of it is much broader and smoother, than either Knee or Elbow, and harder than the Buttocks; which Fleshy *Part* is soon distinguished from the *Bones*, or the *soft Membrane* betwixt the *Bones* of the HEAD.

BUT as a capable MIDWIFE can hereby distinguish all These with Facility, even before the Waters begin to flow; so I need not mention the Hands, which distinguish themselves by the Fingers, as the Feet do, by the Toes or Heels; and the Navel-string discovers itself by its Softness, Thinness, and Roundness: All which, however yet, are more easily known when the Membrane is broke, and the Waters have actually flown. For the Parts, which were before covered with this Membrane, lie now naked in the ORIFICE: Hence it often unluckily happens, that few MIDWIVES make an exact Scrutiny, about the Situation of the INFANT, till this Time of FLOODING; erroneously thinking they are then soon enough, which is an unaccountable Mistake; as will hereafter abundantly appear.

*SIXTHLY*, It is perfectly known by the TOUCH, whether the WOMB be in a *Natural* or *Preternatural Posture*, as is plainly taught more at large in the foregoing *Chapter*.

*FINALLY*, in short, we most assuredly know by the TOUCH, what is proper to be done in all *Preternatural Cases*, upon giving *Assistance* both to the MOTHER and INFANT; as hereafter will fully appear by a more copious *Dissertation* to that Purpose.

### CHAP. XVI. Of the Genuine and Spurious LABOUR-PAINS.

THE sole Reason I add this *Chapter*, is, because our common *MIDWIVES* are so often mistaken, and do so frequently err in this *Point*, having no thorough-pac'd *Knowledge* of either sort of these *PAINS*: For when she comes to a Woman, taken ill with severe *PAINS* in the *Belly* or *Loins*, being ignorant of the accurate Nicety of the TOUCH, she presently concludes *These* to be the true *labouring PAINS*, because they indeed often resemble them very much; and she farther finding perhaps the *ORIFICE* a little *relax'd* and *open*, expects it to enlarge to her Satisfaction. Which, however, not answering her Hopes, nor the *PAINS* encreasing; she endeavours by *stimulating Medicines* and other sinistrous *Means*, conformable to the perverse *Rules* of her PRACTICE, to raise and provoke *Them*: So that this, in short, is the *Cause*, not only of many an *untimely BIRTH*, but also too commonly of many an *untimely DEATH*.

NOW the Wind-Cholick, either in the Lower or Upper Part of the Belly, occasions frequent racking PAINS, as do also the HUMOURS by Virtue of their Acidity, corroding the Intestines; and these Mordacious PAINS are generally attended with a subsequent Looseness. In which Cases, I always use proper mitigating and repelling MEANS, (such as a Carminative and Emollient Clyster, &c: upon extreme Occasions); which proper Means infallibly answer my Ends in either Condition. For if the PAINS that afflict the Woman are Spurious, They are thereby suddenly laid and repressed; and if Genuine, These very self-same Means most effectually promote and advance them to BIRTH.

*BUT* again, *some Women* are taken with a mix'd Complication of *Genuine* and *Spurious*, or *Real* and *False PAINS*, that are properly called *Tergiversant*; which one Moment seem to *depress* the *BIRTH*,

and *encourage* the Woman to LABOUR; and the next convert themselves into scatter'd CRAMPS, and other contracting *PAINS*: And these dispersed *Bastard-Pains* are always more pernicious to the Woman, than the most severe *natural* LABOUR-PAINS: *This Case* is also easily distinguished by the TOUCH; which done, the *false wandring Pains* are first to be assuag'd or carry'd off, before the *BIRTH* can well succeed.

*NOW*, as to the real *Natural* and *Genuine Pains*, They are, (methinks) in short, easily to be judged of by the *Manner* in which they always seize the *Woman*; viz.

I. *FROM* the *Navel* downwards to the *Groin*, reflecting towards the *Loins*, with a depressing and bearing down upon the WOMB and PRIVITIES, as occasionally mentioned in the preceding *Chapter*: And tho' *These* are intermitting (not *continual*) *PAINS*, yet their Severity and Violence extenuate the *Umbilical*, and protuberate the *Genital Parts*, opening and distending the *Passages*. But besides, as the *Blood* is exagitated and fermented, it excites a Velocity of PULSE, and a *Redness of Face*; whilst the BELLY waxes *Fiery-hot*, and a *Feverish Shivering* or *Trembling-Fit* invades the *whole Woman*, especially the inferiour LIMBS, but without any *Frigidity*.

II. *THE Membranes*, with their *Contents*, which *MIDWIVES* commonly call the *Gathering of the Waters*, now present themselves at the *Orifice* before the *Head* of the INFANT, resembling (to the TOUCH) *Abortive Eggs* without any SHELL: upon *These* breaking, the *Waters* begin to flow; at first more *Sparingly*, but by and by more *profusely*, and at last a *waterish Blood* follows, when a *GIRL* is to be born; or a *pure-colour'd Blood*, when a *BOY*: But I also farther distinguish the *BIRTH* of an approaching *BOY* from *that* of a *GIRL*, by the *Labour-Pains*; for in the *first Case*, these are far more severe and penetrating, and accordingly the *BIRTH* much more expeditious, than in *Case* of a *GIRL*: In which (however) the *PAINS* are more constant and regular.

III. AND now, at last, the OSSA COCCYGIS and COXENDICIS begin to yield, and give way; while the Bottom contracts, the Orifice of the WOMB opens, and the VAGINA dilates itself fully: So that now, and not before, most of the abovesaid Signs evidently appear, I give my patient Woman the WORD to Labour her best; because if she

begins *sooner*, she too much debilitates both *Herself* and fatigues the *CHILD* before its due Time.

MOREOVER, I have seen some Women in LABOUR taken with a sudden Vomiting, that I suppose proceeded from the natural Sympathy, which the STOMACH bears to the WOMB: Whereupon it discharges a certain Viscous Matter, which I have always observ'd, upon its turning Bloody, to presage an easy LABOUR, and an expeditious DELIVERY.

*FARTHER* yet, the *MIDWIFE* must always remember, that when the commenced *real PAINS* of *Labour* chance to cease, the Woman's *Labouring Efforts* must also terminate with them in Course: And as this *Case* denotes a *Debility* of the *Expulsive Faculty*; so if it be not both *Timely* and *Judiciously* assisted, It may prove of the worst of Consequences. In a word, so much I have thought previously *necessary* to my Purpose, before I enter upon—

### CHAP. XVII. Of the True Method of LAYING the Woman.

UPON this Occasion, the *MIDWIFE* ought, in the *first place*, carefully to observe the CONTENTS of the foregoing *Chapter*; and, *Secondly*, To follow this general RULE, which I lay down out of absolute *Necessity*: viz. *That the Woman be delivered, and the Child brought forth into the World as soon as possible after* FLOODING; and *that* because the WOMB immediately, after *This* is over, falls, shrinks, and contracts itself again, and of Consequence compresses the *BIRTH* very closely.

BUT in order to effect this Matter, as much depends upon the right Situation or Placing of the WOMAN; so I advise, in the first place, that, as soon as the WATERS begin to flow, She be commodiously placed either in a BED, CHAIR, or STOOL, properly adapted for that Purpose, and laid with great Skill and Judgment, not too Supine, nor altogether Upright; but (as it were) between a standing and lying Posture: having her Back a little erected for the freer Respiration, and the better LABOUR; with her Thighs at a due Liberty and Distance, only separated as much as possibly they may; her Knees a little elevated; her Feet stayed against something Firm, and her Heels bending Backwards.

HOWEVER I must farther observe in this place, that the POSITIONS of parturient Women are very various and different; some doing this Work (as above) in a Bed, others in a Stool, and some again I have seen deliver'd standing, and leaning only a little Forwards upon the Bed-stead. Hence, I say, that the POSTURES in time of LABOUR, differ not only according to the Necessity, but also sometimes (in Natural Easy Cases) according to the Custom of the WOMAN.

*BE* that as it will, I would advise all *Labouring Women*, FIRST to make *Choice* of a dextrous and ingenious *MIDWIFE* to attend them

at that *critical Juncture*, since the poetical *Proverb* (*Accidit in puncto, quod non speratur in Anno*) holds as True in *BIRTH* as in any *Case* I know; for *some Women* after having sundry repeated Natural easy *BIRTHS*, come at last to suffer by some difficult or *preternatural Accident*, which may happen in a *Moment of Time*.

SECONDLY, I would advise all parturient Women, to give themselves over into the Hands of such a *MIDWIFE*, to be universally advised and entirely directed by her Conduct: And thus being under the watchful *Eye* and diligent *Care* of the prudent and skilful *MIDWIFE*, the good *Woman in her Travail* has Nothing else to do (besides following *Instruction*) but only to assume *Courage* and *Resolution* to assist her own *PAINS* as she feels them coming on, by drawing and holding her BREATH, as if she was to sob or sigh, by contracting the *MUSCLES* of her *Belly*, as much as possible; insomuch that the forcible *Impression* may bear alike upon each side of the WOMB, and depress the *Diaphragma*, which (of Consequence) suppresses the WOMB. But then again in this *Case* I would observe briefly, that she is strictly to regard the *TIME* of a *right true Travail*, as at that Juncture only to use these her best and strongest *Endeavours*.

BUT now to return to the Duty of the attending MIDWIFE; as occasion requires, She is to direct her WOMAN, either to *lie*, *sit*, *stand*, or *walk*, keeping her always *Warm*, and as close *cover'd* in Time of TOUCHING as possible; for the least Breath almost of *Cold Air* may occasion *Convulsions*, and *other* most dangerous *Accidents*.

BECAUSE I have often observ'd Women to be Costive and bound in their Bellys upon this Occasion, which is of dangerous Consequence, I would therefore advise in this Case to adhibite a gentle Emollient Clyster; not only that (by the RECTUM being so emptied) there may be the more Room for the necessary Dilatation of the PARTS, but also that the unfortunate Effects of COSTIVENESS may be timely prevented: And the same Means I would use, in Case of Heavy, Dull, or Languid PAINS; ordering the Clyster only in this Case to be made a little more Carminative; as mentioned in the preceeding Chapter.

*BUT this* however I would have done in the *Beginning* of the *Travail*, and reiterated (if need so require) before the *CHILD* be advanced too far *Forwards*.

NOW the MIDWIFE finding all things in a Natural Posture, and the CHILD in a Forward way, is to advance her Hand skilfully, (which at every individual TOUCH ought to be fresh-anointed with the Oil of white Lillies, Roses, &c. or Fresh-Butter, Hogs-Lard, or whatsoever of this Nature is readiest at Hand) entering the ORIFICE with the Fingers-Ends, dilating it by opening them gently as the PAINS come on: Thrusting gradually the Sides of the ORIFICE towards the OCCIPUT or Hinder part of the CHILD's Head, and moistening these Passages also with what she uses for her Hands.

WHEN the VERTEX, or Crown of the Head, appears without the *Privities*, the *MIDWIFE* most commonly calls out or says the CHILD is in the *Passage*; and the *parturient Woman* then finding these Parts (as it were) scratch'd or prick'd with PINS, often groundlessly imagines that her *MIDWIFE* deals roughly by *Her* with *Nails* and *Fingers*; whereas that *Pungency* is only occasioned by a violent *Distension*, or perhaps a *Laceration*, sometimes inevitably made, by the BULK of the *Head* of the *INFANT*.

HOWEVER that be, and whatever the Woman may think or say, the MIDWIFE is only to mind her own Business, and discharge her Duty faithfully upon this CRISIS; in order to which, it is now High Time that she also place herself in a convenient Posture to receive the BIRTH: Which (when advanced as far as the EARS, or thereabouts) she is to take gentle hold of, by both Sides of the HEAD with both Hands; so that by this Means she may be ready and able, against the first Onset of the next good PAIN, to draw forth the CHILD. In doing whereof, she must take special Care that the NAVEL-STRING be not entangled about the Neck, or any other Part, lest the Secundine or the Womb itself thereby suffer Violence, and consequently cause either Flooding, or break the String, which may render the Case dangerous and the BIRTH difficult.

*BUT* in thus attracting the *INFANT*, the *MIDWIFE* must carefully observe, not to draw the *HEAD* straight-forwards, but move it gently from *Side to Side*, that the *Shoulders* may the more readily and easily take Place: For *these* must immediately follow the *HEAD* without *Loss of Time*, otherways the *BIRTH* may be strangled in the *Passage* by the *WOMB* shutting upon its *Neck*: To prevent which *Tragical Catastrophe*, the Cunning Expert *MIDWIFE* directly slides in her *Fingers* under the *Arm-Pitts*, and then draws discreetly the *BODY* forth without any Difficulty or Danger.

THUS, in fine, We have discreetly deliver'd our good WOMAN, in Case of a Natural Easy Birth; but on the other Side, in difficult and Preternatural Cases, the several Conditions and Circumstances will mightily differ from the Beginning; because in these the PAINS are not always sufficient to produce the BIRTH. Hence it is sometimes more convenient for the *WOMAN* to be *Passive*, rather than *Active*; especially when the Position of either the *Womb*, or the *Infant* is Preternatural: For then it is the MIDWIFE's whole Business to labour more than the WOMAN; then her ingenious TOUCH is of infinite Service to the PARTURIENT, since by that only she can distinguish the Degree of the *Ill Situation* whether of the *CHILD* or the WOMB. Which being dextrously done, She is in the next Place, prudently to consider what kind of *POSTURE*, *Sitting* or *Lying*, is most convenient, that she may the *better* discharge her own good Office and Duty: Of which I shall treat more particularly in the following respective *Chapters*; since it still remains here, by the way, that we also deliver our above-mentioned Woman of her AFTER-BIRTH. &c.

#### CHAP. XVIII. Of the Method of Extracting the SECUNDINE,

&c.

AFTER all, to perfect or finish the Woman's DELIVERY, it still remains that She be freed of her AFTER-BIRTH, or SECUNDINE. Now this I advise to be done with all imaginable Speed, after the CHILD is born, even before the NAVEL-STRING is cut: Because the WOMB immediately contracts itself, so that This cannot be accomplish'd afterwards without great Difficulty.

HOWEVER, I know beforehand, that my Method of performing this Work, which I am about to lay down, will be thought a strange *Innovation* in *Midwifery*; but without any regard to that, in speaking to this *Point*, I shall *First* suppose this *Body* to be already loosen'd from the WOMB; in which *Case* the MIDWIFE has nothing to do, but to draw the *STRING* gently, which she holds in *One Hand*, twisted twice or thrice around one or more of her *Fingers*, while she passes the *Other Hand* into the WOMB, following always the *STRING* (as her *Guide*) to the Place where the BURTHEN lies: And where, as in this *Case*, it naturally presents itself to the ORIFICE, *She* stretches her *Hand* up length-ways, taking hold of it betwixt her *Fingers*; and thus, by the Assistance of the *other Hand* always attracting softly the *STRING*, she brings it at last most commodiously away.

SECONDLY, I shall suppose, in the mean Time, this Body to continue fixed to the WOMB, either in Part or in Whole: In which Case, if in Part, the MIDWIFE finding by the TOUCH the other Loose Part, moves her Hand thither betwixt That and the WOMB, shaking or stirring it gently backwards and forwards, until such time as it is entirely loosen'd, when she proceeds as Before: But if in whole, and that it sticks very Fast, then the MIDWIFE places her Hindmost Fingers on its Exteriour Part against the WOMB, and her Fore-

*Fingers* against the *Inside*; so that thus by pulling softly on all *Sides* quite round, it is easily *loosen'd* and *extracted* as Above.

*THIRDLY*, I shall suppose this *SECUNDINE* also (tho' loosen'd successfully) to be so very *Large*, that it cannot pass through the *ORIFICE*: In this *Case*, I only desire my *deliver'd Woman* to concur with me, and behave herself as if she was forcing or expelling the *CHILD*; for then whilst I at the same time gently attract the *STRING*, it immediately follows.

I very well know that Mr. *Mauriceau* and all others either in and *before* his Time, teach quite different *Methods* of extruding the AFTER-BIRTH; such as are by the WOMAN's blowing in her Fist, putting her Finger in her Throat, and the like; which when the poor *Patient* has done, and stood them All out *ineffectually*, together with their many other various *uncertain Experiments* to no *Purpose*, and none of them have succeeded (as it has often happen'd): Then at last, and not till then, they direct the aforesaid Method of the HAND to be used. But now-a-days, we know better Things than to run such indiscreet *Risques*, when we may go a safer Way to work; or to make use of Uncertainties, when we know more Infallible Means. As I shall, I hope, make this *Method* plainly appear to be; notwithstanding all the great Cautions of those Authors publish'd, and the Difficulties they make of it in our Practice of MIDWIFERY: And that I will endeavour to do from the following Considerations, viz.

I. *IF* after the BIRTH of the INFANT, the *Hand* be presently pass'd into the WOMB, it slips in together with Part of the *Arm*, as far as is needful, without the least *Trouble* or *Inconvenience* to the *WOMAN*; the WOMB as well as its ORIFICE continuing always, so long as *this* may be done, sufficiently *Open*: And thus the BIRTH maybe skilfully accomplished or perfected, as it were, in an *Instant*; while *others* (trying their vain *Projects*) spend many trifling *Hours* about it, and it is *ten to one*, if at last they succeed.

II. *BY* these means, moreover, I presently know whether there be *One, Another*, or *More INFANTS* to follow; whether there be a *dead CHILD, false CONCEPTION*, or any *Foreign Body* whatsoever, lodged in the WOMB; whether any *Part*, or *Pieces* of the SECUNDINE, or *Membranes*, or *Lumps* of *Clotted Blood*, be left behind and retain'd: All which I propose to bring away either *before*, or *after* the

SECUNDINE, as Occasion serves, with the greatest *Safety* as well as *Expedition*.

III. *AFTER* having thoroughly searched on all *Sides*, and thus duly cleans'd the WOMB, by continuing my *Hand* in it, until it contracts about that *Hand*, first *above* towards the *Bottom*, and then *below* towards the *Orifice*, which happens very quickly: I find myself *then*, by great Experience, able to rectify all *Oblique* and *Preternatural Situations* of the WOMB; as in *Case* of a PROLAPSUS, (or *Falling down*) I can hereby move it carefully *Up* again: If it lies too much *Backwards*, by elevating it while it gradually contracts, I can easily bring it *Forwards*, to its *Natural Position*: If it hangs too much *Forwards*, I can quickly reduce it *Backwards*: If it tends to *either Side*, I can directly move it to its Center. And thus, in short, I hope I may be allow'd gently and gradually to restore the WOMB to its *Natural Place* and *Posture*, how *Preternaturally* and *Obliquely* soever its *Situation* may happen to be disorder'd.

*NOW* This being so successfully done, I can, in fine, assure and secure any *Lying-in-Woman*, that her WOMB is both duly *purg'd*, and naturally *shut* again as it ought to be; which I take to be the greatest *Satisfaction* the CHILD-BED-WOMAN can conceive in her Condition. Whereas,

IV. THEY who leave all these Things to mere NATURE, risque their PATIENT's future *Welfare*, and very often her *Life* too, as innumerable Tragical Examples witness: For NATURE itself most particularly requires our special Assistance in this Case. But (according to their indifferent Notions) it is Time enough to assist NATURE, when it is found *Deficient*; and then, in *Case* of EXTREMITY, they unanimously agree that there is no other way to help or save the Woman's LIFE, but by this METHOD of Manual Operation. To which I answer, that NATURE operates not in an Instant, but (in all Cases) requires a competent *Time*, to discharge its respective *Functions*; and being left too long to itself, for want of Help, is many a-time (by intervening Accidents) found at last Incapable: Upon which, then They, beginning their Endeavours to second it, generally come too late. For if the *Case* does not prove to be past all *Remedy*, it is at least (by this Protraction of Time) often rendred not only difficult, but also desperate; as will evidently appear in the Case in hand, from what follows, viz.

I. WHILE They (conformable to the general and universal Practice of common MIDWIVES) expect the Performance of NATURE, or the Success of their trifling Means, in the mean time, the Orifice of the WOMB is so closely shut up, that in the space of an Hour or two, it cannot be penetrated, without renovating the most severe racking PAINS to the Woman, who (perhaps) has been sufficiently spent before, by the DELIVERY of her INFANT, and is now consequently incapable of standing out the renew'd PANGS: whereby of course She must succumb at last, and give up the Ghost, for want of Timely Help; as innumerable Instances confirm for an undeniable Truth. But,

II. *SUPPOSING* the *Woman* to be able to undergo the *PAINS*, yet the WOMB is however contracted, and the *SECUNDINE* bound so close up, that this *Body*, which before adher'd *Cake-ways* to its *Bottom* in a *smooth* and *broad Form*, is now so squeez'd into a *small* and *long Figure*, that it is even now a *Difficulty* next to Impossible, to reach the *Bottom* of the WOMB, and still a *harder Task* to extract an entire *Secundine*, without prejudicing the WOMB.

III. *THEY* who altogether neglect *Manual Operation*, may (I confess) sometimes *deliver* their WOMAN, when *Success* accidentally answers their *WISH*: But without this *Mean*, they cannot possibly restore a *prolaps'd*, *fallen-down*, or an *obliquely situated* WOMB, to its *natural Position*. No, to the Contrary, Nothing is more common among ignorant unwary *MIDWIVES*, than to *invert* and *draw down* the *Bottom* of the WOMB itself, by pulling the *Navel-String*, as they foolishly intend by *means* of it only to extract the *SECUNDINE*. Neither does the *Mischief* always end here, but mistaking this *Body*, when so found by their TOUCH, they immediately imagine it to be the *Head* of another INFANT; and persevering in this *false Conjecture*, they manifestly expose the poor WOMAN to the Hazard of her *Life*. Neither,

IV. *POSSIBLY* can *They*, without the *Use* of the HAND, so cleanse the WOMB of the *Reliques* of the *SECUNDINE*, which may stick up and down to the WOMB; or of the *Pieces* or *Parts* of the *Membranes*, which may remain there; or of the *clotted Blood*, which commonly stays behind. From hence therefore it necessarily follows, that (without the *Means* of the HAND) *They* cannot be Positive or Certain in any *Circumstance*, relating to the *True State of the Woman*. *They*  can neither assure Herself, nor those concern'd, that her WOMB is duly purged; if (perchance) of the *SECUNDINE*, which they may guess at by the *Sight*, yet not of the *Fragments* of the *Membranes*, nor of the *clotted Blood*, which they can never be certain of, but by this METHOD. I mention these *Things*, because the *least Part* of EITHER being retain'd, or left *Behind* in the WOMB, may cost the WOMAN her *Life*, as innumerable *Precedents* do testify. Nor,

V. *CAN* they possibly secure the *Woman*, that her *WOMB* is *duly shut and contracted*; much less can they (without these *Means*) affirm that it is orderly *situated* in its *proper natural* CENTER: By the Neglect or Fault of which *Condition*, she is not only rendred *Barren* afterwards, but also most infirm all the Days of her *Life*.

BUT notwithstanding how plain and easy soever, I have endeavour'd to make out the above-mention'd METHOD, I would over and above recommend *It* only to the *judicious* and *well-qualify'd MIDWIFE*; by no Means to those that are *ignorant* in the *Parts* of *GENERATION*, nor to any *stiff clumsy-fisted Person*: And that for the *Two following Reasons*; viz.

I. *LEST* the STRING (by some *Accident* or other) should break, and she, missing this *Guide* to the *SECUNDINE*, should take *One Part* for *Another*, and consequently *dislodge* the WOMB instead of the *AFTER-BIRTH*; which has undoubtedly often happen'd by such blind DOINGS, notwithstanding this very remarkable *Difference* between *Them*, that the *SECUNDINE* distinguishes itself from the *Other*, by a great many little *Inequalities* on the Outside, occasion'd by the ROOTS of the *Umbilical Vessels*. And,

II. LEST she should unwarily either break, tear, or scratch the WOMB, with her thick, fleshy, rough, and rigid HAND, or with her stiff and crooked FINGERS: Either of which Accidents, may give ORIGIN to various Misfortunes; such as a PROLAPSUS, or Falling-down, a preternatural Flooding, an Inflammation, or Gangrene, &c.

BUT we will now, in fine, suppose that the Ingenuous MIDWIFE has after All discharged her faithful Duty in these Respects, with Care, Lenity, and good Conduct, as well as with great Art and Judgment: In which Case, it only remains, that she take the necessary and usual Care of the CHILD-BED-WOMAN and INFANT; as hereafter will be directed in the respective Chapters of SECTION VIth, to come.

*IN* the mean Time, these curious *Things* being thus amply premised in this Place, the READER has no more superfluous *Repetitions* to expect concerning *them* in the following *Performance*: And therefore with these *Preliminaries* I conclude my *Fourth SECTION*.

#### SECT. V.

### CHAP. I. Of BIRTH.

*MAN*'s appointed Time may as reasonably allude to his *BIRTH*, as to his *DEATH*: His *Days* and his *Months* (mentioned by holy JOB<sup>[158]</sup>) being as much determin'd, *naturally* speaking, in the *One*, as in the *other Case*.

THE INFANT thus being thoroughly ripen'd, and arrived to full *Perfection* of MATURITY, the *Hour* approaches, in which it scorns any longer *Confinement* to such narrow Bounds. For the *Animal Spirits* being discontented, for want of due *Liberty* and free *Motion*; the *Vitals*, for want of *Refrigeration* and *Refreshment*; and the *Natural Spirits*, for want of sufficient *Respiration* and *Nutrition*: *They* all concur to make a *Commotion*, and (as it were) a victorious *Revolt* or an *Effort* pushing for *CONQUEST*.

*THE INFANT* being thus irritated, immediately shakes off its *Fetters*, breaks the *Ligaments*, rents the *Membranes*, thrusts through the *Enclosures*, and makes its most vigorous *Attempts* to enlarge itself from the *Prison* of the WOMB, into that of the WORLD.

WHICH Enlargement depends very much indeed upon NATURE, but more particularly on the Strength and Vigour of the INFANT, seconded by a peculiar Faculty of the WOMB, that by degrees is drawn-in to Consent, and Endeavour to dislodge and expel its troublesome and obstreperous GUEST. *NOW* the *INFANT*, during the whole Time of *Gestation*, adhering to the *WOMB*, by the *Umbilicals*, as the *Fruit* does to the TREE by the *Stalks*, upon this Occasion distends the *WOMB*, and having valiantly turn'd itself, breaks the *Membranes*, and dissolves the *Acetabula*: When also the *Orifice* of the *WOMB* is competently open'd; and *That* (in *Avicenna*'s memorable Words<sup>[159]</sup>) at the Command of the great *GoD*. Upon This the *Waters* flow; the *Umbilicals* parting from the *WOMB* and their proper *Vessels*, and the *Veins* and *Arteries* of the *SECUNDINE* severing themselves, in like manner; As ripe *Fruit*, or the *Leaves* of TREES in *Autumn* fall-off naturally, or break from their proper *Stalks*.

THUS the WOMB, exerting its extensive and expulsive Faculties, excludes the Legitimate INFANT: To which great Work also, the Painful Labours, and Labouring Pangs of the MOTHER (in the manner they happen with the contracted Spirits, depress'd Midriff, and compress'd Muscles of the ABDOMEN) contribute not a little Help. And, in short, this stupendous Work or Action is called BIRTH; and is nothing else, but an Exclusion of the mature CHILD.

WHICH BIRTH proceeds either from Causes of the INFANT, or from Causes of the WOMB: Of the INFANT, because through the strict Confinement of a narrow Place, and Defect<sup>[160]</sup> of Aliment, and Refrigeration, It kicks and spurns for its EXIT: Of the WOMB, because about that Time, being overloaded and aggrieved by the Bulk and Weight of the CHILD, it endeavours, by its own expulsive Faculty, to disburthen itself, and propel or drive it forth to the utmost of its Power. For——

AS it is the proper Function of the STOMACH, to eject the noxious Humours by Vomit, and deject the Natural Excrements into the INTESTINES; as it is also the Office of the RECTUM to evacuate the Fæces; as likewise the Profusion of the Urine is the Action of the BLADDER; as again the Extrusion of all fuliginous Matters is the Work of the HEART and LUNGS; and as, at last, the Effusion of the Genital SEED (in Venery) is the Operation of the Virile TESTICLES: So the Exclusion of the Mature FOETUS is the Eighth<sup>[161]</sup> and last proper Action of the WOMB; which is justly deem'd the only Primary Agent and Active Cause of BIRTH, as the excluded FOETUS is the Passive.

*BUT* this *BIRTH* is not always *Uniform*; for as it differs in *Time*, so it does also in *Manner*: From hence we have with respect to the TIME, *Legitimate* and *Illegitimate BIRTHS*, which being already discuss'd<sup>[162]</sup>, I shall resume nothing by way of *Repetition* in this Place: And with respect to the MANNER, we have also two general SORTS, namely, *Natural* and *Preternatural BIRTHS*; which together with their particular *Branches*, I am now to enter upon, without any farther Digression.

# CHAP. II. Of Natural BIRTHS.

*BY* a *Natural BIRTH*, I mean nothing else, but that which is perform'd without any *ART* or *Artificial Means*; which *BIRTH* (of itself) strictly observes the Order and Appointment of *Nature*: That is, in the *INFANT*'s coming *Head foremost*, *Face downwards*, *Arms following*, extended (along the *Sides*) strait *upwards*, towards the *Thighs*.

*HIPPOCRATES*'s *Reason*<sup>[163]</sup>, in short, for the *CHILD*'s thus turning and presenting itself, is very good; *viz*. Because of all the *Parts*, the HEAD is the Heaviest about the Time of *BIRTH*, as appears more at large from *Sect*. I. *Chap*. 10.

*BUT* besides this Argument, I believe Wise *Nature* has also order'd it *thus*; because *This* indubitably is the most *safe* and *easy Manner* of *EXITION* both for the *Mother* and *Infant*: Insomuch that by all other *Methods* of *EXTRACTION*, *One* or the *Other*, and sometimes *Both Lives* are, or may be, endanger'd, if not very dextrously perform'd, according to the best Laws of Art and Judgment, as by and by will more manifestly appear.

*BUT* because I have generally observ'd most *Authors* to treat promiscuously of *BIRTHS*, not only accounting some, which are really *Natural*, to be *Preternatural*; but also both handling and writing of them as *such*, only because attended with some difficult Circumstances: I shall (in this place) take Leave to make an agreeable *Distinction* betwixt the *different Sorts* of *Natural BIRTHS*, in order to make every thing the more clear and obvious to the *Conception* of the READER. Upon which Account therefore, I shall reduce *These* to *two Heads*, and that under the TITLES of *Natural Easy*, and *Natural Difficult BIRTHS*.

THE FIRST of which I include in this *Chapter*; but because in this *Case* (which I call a *Natural Easy BIRTH*), *Nature* alone always

performs the *Work*, without any Help of *ART* or *Artful Means*; and because also the MIDWIFE (upon this Occasion) has but little or nothing to do, save only to observe the concluding *Chapters* of the last preceding SECTION; and upon receiving the CHILD, immediately to manage and provide both for the MOTHER and the INFANT according to their several *Necessities*, as hereafter shall be inculcated in the respective *Chapters* of the next following SECTION: I say, for these *Reasons*, I have no Room here to insist farther on this present HEAD; wherefore I proceed in course to the *SECOND Sort* of these *BIRTHS*. Namely——

# CHAP. III. Of Natural Difficult BIRTHS.

THO' indeed every difficult Expulsion of the INFANT, from whatsoever Cause it may proceed, is verily a Difficult BIRTH; yet I shall here distinguish a difficult One from a preternatural BIRTH; not only that I may thereby, the better avoid the Confusion which others have led themselves into, by treating of BOTH promiscuously, but also that my Method may tend the more to the peculiar Benefit and Advantage of the Ingenious READER.

WHEREFORE I call that a *Difficult BIRTH*; where, notwithstanding the *Figure* and *Dimensions* of the *CHILD*, answer in all respects to its proper *natural Posture*, in a *Perpendicular* WOMB, duly situated, yet the *Exclusion* of the *INFANT*, is retarded, by some certain *Opposition* or *Difficulty*. From hence proceeds the real *Difference* between *This* and the *Natural Easy BIRTH*, forasmuch as *This* always requires *less* or *more* skilful *Assistance*, according to various Circumstances, and *That* but *Little* or *none at all*.

*NOW* the *Causes* of *Difficult BIRTHS* are very various, and according to the *Nature* of them, *This* sometimes proves equally as dangerous as the *Preternatural*; but when so it happens, I have commonly observed the *Fault* to be, for the most Part wholly owing to the arrogant *MIDWIFE*, who either knew not how to remove the *Cause* and facilitate the *BIRTH herself*, or delay'd applying betimes to some *Abler Person*, for the *Relief* and *Safety* of her Labouring *WOMAN*.

HENCE arises a Fundamental MAXIM, which I would lay down for a memorable *Rule* to all such IGNORANTS; that no *MIDWIFE* ought to keep a WOMAN in this Condition under her *Hands* (especially in a *Place* where extraordinary *Help* is to be had) any *longer*, than she finds the *Advances* of *BIRTH* answer to the Proportion of *Time* spent about it: But forthwith she ought to deliver her up to the *Care* of the more Skilful and Judicious *Practiser* in this ART. In which *Case*, of *Compliance* and *Condescension*, she is to be highly commended for her tender *Care*, and cautious *Concern*; whereas upon acting contrary to this good *Rule* out of Pride or Obstinacy, and the *fatal Accident* ensuing, I have known the *MIDWIFE* to have been try'd for her *Life* in the City of *Venice*.

BUT that I may render every thing Plain and Easy to the Apprehension of the weakest READER, by reason that the Causes of Difficult BIRTHS are both different and numerous, I shall again reduce them to Two CLASSES; namely, External and Internal: The External, I shall include in the next following Chapter; but the Internal Causes, requiring a more Curious and Extensive Dilucidation, may (I hope) be pertinently divided into a Three-fold Difference; viz. Causes of the MOTHER, of the INFANT, and of the PASSAGES; which I propose to handle particularly, all in their due Order. But First,

#### CHAP. IV. Of Difficult BIRTHS, proceeding from External Causes.

*IN* all *difficult Cases*, the CURE or *Remedy* chiefly depends upon the certain *Knowledge* of the *Nature of the Case*, and the *Cause* of the *Difficulty*: Since (according to *Celsus*<sup>[164]</sup>, that noble *Roman Physician*) it is not to be suppos'd that *He* should know how to *remedy Diseases*, who knows not their *Original Causes*.

*FOR* as in other *Cases*, so also in *MIDWIFERY*, the *Cause* being known, the *Difficulty* is easily remov'd; but especially when it only proceeds from *External Causes*, it requires no great ART, save only the *MIDWIFE*'S particular *Notice* and discreet *Animadversion*.

AS, FIRST, for Instance, in Case of any Difficulty, occasion'd by an Intemperature, or inclement Constitution of WEATHER and AIR; the more adverse or inclement the WEATHER is, the more tender Care ought to be taken of the Labouring Woman: Namely, in SUMMER, when the Heat scorches so much as to dissipate the Woman's Strength, she ought to LABOUR in a Ground-Chamber backwards, which may be strewed (for the Purpose) with Vine or Willow-Leaves, Rose-Water, and a little Vinegar; as it is customary in hot Countries.

*IN* WINTER, when the *Cold* pinches so as to condense and astringe the WOMB and the *Passages*, she ought to LABOUR in an *Upper-Room*, kept moderately warm with one continued *Fire*; the *MIDWIFE* rubbing gently the *Hypogastrick* and *Ischiatick Regions* every now and then with hot *Cloathes*.

*IN* SPRING and FALL, when parching dry *Weather*, with *North* and *East Winds* most abound, the *MIDWIFE* ought not only to rub these *Inferiour Regions* with hot *Cloaths*; but also to qualify the *Influences* of the *Siccid AIR*, by anointing the *Passages* with proper *Unguents*.

A SECOND External Cause may proceed from the Passions of the Will or Mind, as it often does from *Fear* and *Despair*, *Dejection* and *Pusillanimity*: In which *Case*, it is the *MIDWIFE*'s Duty to encourage her WOMAN by the Hopes of a Speedy DELIVERY, and doing well under GOD's Blessing. When the Cause arises from Anger or Sorrow, these are to be assuaged by the repeated *Christian Exhortations*, and Friendly Admonitions of the MIDWIFE and GOSSIPS. When it comes from *Pride* and *Obstinacy*, as has been the *Case* of some *Lofty* Women; who (deeming themselves too good, to be treated after the common Course of Mankind) have refused to undergo or permit the proper *Means*, absolutely necessary for their own *Relief*; THIS ought to be severely check'd by the *Company*, especially by the *nearest* Friends; the MIDWIFE (by proper Remonstrances) convincing her to her Shame of her obstinate SIN. When it proceeds, in fine, from Bashfulness or too strict a Modesty, she may be justly reprehended of Folly; for no Woman of good SENSE (how Modest and Virtuous soever) will expose her own *Life* or her INFANT's to *Danger*, for the trifling *Fancies* or *Caprices* of her own vain Imagination, especially in a *Case* where *like things happen to All* equally of Flesh and Blood.

*BUT* when it happens to proceed from the *Woman*'s being illaffected, or owing a private *Grudge* or *Hatred* to any in the *Company*, (as I once knew it to be the *Cause* of a difficult and lingring *BIRTH*) *She* ought to speak her Mind freely, at least to her *MIDWIFE*; who ought to give the *Person* civil Notice to retire forthwith, for certain Reasons, &c.

A THIRD *External Cause* of a *difficult BIRTH* may proceed from a *wrong Position*, or other *sinistrous Methods* taken to assist the WOMAN: In which *Case*, such *Inconveniencies* are to be alter'd, and better *Measures* practis'd; for *thus* the *Cause* being removed, the *BIRTH* differs in Nothing from *That* of the *Natural Easy Case*.

WHENCE I come, in the next Place, to speak of *Difficult BIRTHS*, proceeding from *Internal Causes*; and because they are *Three-fold*, as has been before observed, I shall assign them as many respective *Chapters*, treating of *Each* in their due Order, as mentioned.

#### CHAP. V. Of Difficult BIRTHS, proceeding from Causes of the MOTHER.

*IN this* (as in the *former Case*) the MIDWIFE must use her most acute and nicest *Judgment*, to find out the particular *Cause* of the *Difficulty*. Which being done,

I. *IF She* finds it arises from the WOMAN's being too *Young*, or too *Old*, of her *first Child*, or too *Lean* at last; *she* is to anoint the *Passages* with proper *Unguents*, which ought to be done some time *before*, as well as in the *Hour* of *LABOUR*: When *she* is likewise to employ her *subtile Hand*, in assisting and augmenting the *Dilatation* of the *Orifice*; as is requisite also in *Case* of the WOMAN being too *Fat* or *Gross*.

II. *IF* the WOMAN be too *small*, *short*, *crooked*, or *misshaped*, not having a *Breast* strong enough to forward and bear down her *PAINS*; or if she be over *tender*, *sensible*, and *apprehensive* of *PAIN*; or too *weak*, and not *able* to contribute or assist by her own forcing *Endeavours*; or *short-winded*, and not capable to constrain her *Spirits* downwards: In all these *Cases* she is to be kept *upright*, for the more free *Respiration*, as well as for encreasing her *PAINS*, *standing* or *walking* about the Room, according to her *Strength*, being supported under her *Arms*, and not put to BED until at least the *WATERS* are broke. But, in the mean Time, the *weak* and *tender* WOMAN ought to be now and then comforted and refreshed with *fresh soft Eggs*, good *Broths*, *Jellies*, a little *Wine* and *Toast*, a little *Wine* and *Water*, or such like convenient *Things*, as well as with the *Hopes* of a *speedy* DELIVERY.

III. WHEN the PAINS are not Natural or Genuine; but Spurious, Faint and Languid; or Shifting and Tergiversant; such are to be assuaged by proper Lenitives and Anodynes; which being regularly done, the *Genuine Pains* may be excited by proper *Clysters*, and divers other Means. But I would advise none to a *Profuse Use* of *MEDICINES* in such *Cases*, since I well know that many a *WOMAN* has lost her *Life* by using *dolorifick Medicines*, prescribed by imprudent *MIDWIVES*, without considering, or so much as knowing the true Circumstances of the *Condition*: Whereas in most *Cases*, by the ingenious *Motion* of an *Experienc'd Hand* only, the PAINS may be sufficiently awaken'd, and the BIRTH safely promoted.

IV. WHEN the Difficulty proceeds from the Debility of the WOMB, or its Expulsive Faculty, not being able or capable to Exclude the INFANT, because of a more strong and valid Retentive Power: In this Condition, if there be no evident External Cause to be obviated, it depends chiefly upon the Subtile Hand of the MIDWIFE, to assist the WOMB in its Function; and otherways the PATIENT is only to be treated as in the Case of the weak and tender WOMAN abovementioned.

V. WHEN the WOMAN is taken with any Acute Disease, the BIRTH is to be prompted by all safe Means; and if a Natural DELIVERY does not presently succeed, an Artificial one must (without Loss of Time) be undertaken. As in the Case of immoderate and continual Floodings, with concomitant Convulsions, which always proceed from the Separation of the SECUNDINE (either in whole or in part) from the WOMB, and happen many different ways, as already mentioned at large<sup>[165]</sup>.

*IN* these *Cases*, especially if the SECUNDINE is found (by the TOUCH) at the *Orifice*, there is no Hope of *Stopping* them by any other *Means*, than by *delivering* the WOMAN; which now the *sooner* done, the *better* (for saving two *Lives*) and *that* whether at full time of *Reckoning* or not. But this *Operation*, I conceive, is to be most discreetly *Undertaken* in the manner following, *viz*.

THE Woman is to be placed in BED, with the Upper and Lower Part of her Body almost equal, then the MIDWIFE is gently and gradually to introduce her *Fingers* into the Orifice, dilating it cautiously with one or two, until she can enter them All; when opening the MATRIX by Degrees, she gets in her Whole Hand, and thereby first carefully tears the Membrane with her Nails, if the WATERS are not previously broke: Then she puts her Hand in the same Membrane to the INFANT's Feet, seeking them in their Place, where they are to be found, when they don't present themselves at *First*: Because, the *Hold* by the *FEET* being *Better*, it is more easy to *deliver* by *Them*, in this Case, than by the *HEAD*, or any *other Part*. After *this* the *FEET* being found, the CHILD is easily *turn'd*, as long as the WOMB is loose and slippery, and the *Humours* not quite flown off; which being nicely done, the *FEET* are to be drawn out *both together*, if possible; but if otherways, *they* must be drawn down *separately*, with *great* Caution: And so being conjoin'd or held fast together, they are to be drawn forward with *one Hand*, whilst the *other* is circumspectly thrust towards the *Knees* or *Buttocks* of the CHILD, in order thereby to turn also the whole Body of the *INFANT*, so that its *Face*, *Belly*, and *Toes* may tend downwards towards the *RECTUM*.

*IN* this *Posture* the CHILD may be gently and gradually extracted with Ease; next the *SECUNDINE* must be fetch'd away in its Turn, and lastly the WOMB is to be thoroughly cleans'd of all *heterogeneous* Bodies, as formerly directed<sup>[166]</sup>. And thus the WOMB (having yielded up its *Contents*) immediately contracts, by which *MEANS* of divine Appointment, the Vessels close and shut firmly, and consequently the *FLUX* ceases, together with all the concomitant *SYMPTOMS*.

BUT it is to be well remembred, that this Operation ought to be timely perform'd; that is, before the WOMAN has lost too much Blood, or is too much spent; in which Condition such a painful Attempt would but accelerate her Death. As to her Regimen next, upon this melancholy Occasion, She must be duly provided for beforehand, that she may be able to undergo and stand out such an extream difficult DELIVERY; and afterwards, that she may recruit her Spirits, and retrieve her exhausted Strength: For which Purposes, she ought to be supplied from time to time with some good Broths, Jellys, and a little generous Wine, smelling continually Rose-Vinegar, and applying repeated warm Toasts dipt in Wine (in which Cinnamon has been infus'd or boil'd) to the Region of her HEART, as also Napkins dipt in a Mixture of Water and Vinegar about her REINS, in order for turning the Course of the FLUX.

THESE Things being all duly and artfully perform'd, the PATIENT (under God) will soon *recover* and be *in Statu quo*. Now *These*, in short, are all the *principal* and most common *Causes* of *difficult* 

BIRTHS proceeding from the part of the MOTHER; which being thus discussed with all Brevity, I go on to—-

#### CHAP. VI. Of Difficult BIRTHS proceeding from Causes of the INFANT.

*IT* sometimes also happens, that the *Difficulty* in LABOUR arises from the INFANT: And *that FIRST* when *Two* or *More* strive for *Priority* in *BIRTH*.

NOW this Condition the MIDWIFE can no otherways distinguish or discover, but by the TOUCH; and when the one is more forward than the other, 'tis not to be done or known, until she has even touch'd the very Fund of the WOMB: Because sometimes it so happens, that One CHILD has its Hands and Feet so intermix'd, that whatever way She turns her Hand, she finds Legs or Arms, Hands or Feet, which often deceives MIDWIVES, believing there are TWINS. But in this perplex'd Case the most sure and only certain Sign, is, when she feels two Heads or two Backs; for then she cannot be Mistaken, since one Body cannot have two Heads, unless it be a MONSTER, which may be soon discover'd by feeling if the double Head be fix'd to one and the same Body.

BUT in the Case of TWINS or more Children (as long as they come right) the DELIVERY is perform'd, as if the Woman had but ONE, in the Natural Case already Stated; so that I shall repeat or recapitulate Nothing of what I have said, only that the AFTER-BIRTH, or BIRTHS are not to be touch'd, until all the CHILDREN are Born: Upon which drawing gently the Navel Strings (in their Turns) with the One Hand, the Other brings them forth easily and orderly; as is set forth more fully in SECT. IV. Chap. 18.

A SECOND *difficult LABOUR* may proceed from the *Weakness* and *Debility* of the INFANT, or from its being too *Small-grown*; in which *Case*, both the WOMAN and the MIDWIFE are to use their best mutual *Endeavours* to promote the *BIRTH*, since the *CHILD* can do

little or nothing for itself, and the *Less* it is, the less it is affected with the *THROWS* of the *Mother*, and the less *Impression* her Impulses make upon it: Whereupon *Nature* is to be assisted in this weak *Condition* by all convenient *Means*, whereof *THAT* of the *Agile* or *Nimble Hand* is the most effectual.

A THIRD *difficult BIRTH* may proceed from the INFANT's being too *Big*; In which Place I must previously apprize the *READER*, that I no ways mean a *MONSTER* or *Hydropical CHILD*, but only *One full, well,* or *Big-grown*, which is only reckoned too *Big* in regard of the *Maternal Passages*, which may be too *Small* in Proportion.

*IN* this *Case*, there is an absolute Necessity for *Manual Assistance*, since the PAINS (however penetrating or forcible) cannot effect the *Work*. But and if the *INFANT* is fallen down (well turn'd) into the PELVIS, the MIDWIFE using her best and most skilful Endeavours to *dilate* the *Passages* below near the Os CoccYGIS, the CHILD may be easily brought forth (without any dangerous *Instrument*) by her dextrous *Hand* only accomplishing the *Work*. In the mean Time, however, it is to be minded always, that *This* is still more safely and commodiously done by the FEET, than by the HEAD, after carefully dilating the Os CoccYGIS, taking this Opportunity in the beginning of the LABOUR, before the *INFANT* is too much press'd down into the PELVIS.

NOW these are, in fine, the most common *Causes* on the Part of the *INFANT*, whence I come to touch upon *difficult BIRTHS*, proceeding from *Causes* of the *Passages*; which, because they are various, I subdivide into a *Fivefold Diversity*; viz. *Difficult BIRTHS*, proceeding from *Causes* of the MEMBRANES, from *Causes* of the PELVIS, from *Causes* of the BONES of the PELVIS, from *Causes* of the BLADDER and RECTUM, and from *Causes* of the VAGINA: And because all these require to be singularly explain'd, and particularly insisted upon, I shall assign them as many respective *Chapters*. And *First*—

#### CHAP. VII. Of Difficult BIRTHS, proceeding from Causes of the MEMBRANES.

SUCH Difficulties as These, in *BIRTH*, may arise, *FIRST* from the *Strength* and *Firmness* of the MEMBRANES; when they happen to be so *gross*, *callous*, or *thick*, that the *INFANT* cannot easily break through them.

In this *Case*, when the *MIDWIFE* finds the *Orifice* of the WOMB sufficiently dilated, for the *Circumference* of the HEAD, and the CHILD so forward in the *Passage*, that it is ready for *BIRTH*, and only impeded by the rigid or stiff MEMBRANE; then *she* has just Authority to break it gently with her *Nails* and *Fingers*; taking Care in the ACT not to draw the MEMBRANE towards *her*, because thereby the *SECUNDINE* (of which the MEMBRANE, tho' distinguish'd from the PLACENTA, is in Effect, but the *Thinner Part*) would be untimely separated from the WOMB, and the *INFANT undone*, unless presently *Born*.

BUT the MIDWIFE, after All, must always remember, not to attempt *This*, before these mentioned *Signs* are obvious to her *Touch*; otherways the WATERS being too soon discharged, the *CHILD* is left behind, the *Passages* grow dry, and *that* which might have been an *Easy* and *Speedy*, proves a *Difficult* and *Lingring BIRTH*.

AND the self-same Consequences arise from the Weakness and Tenuity of the MEMBRANES; when they are so thin and soft, that they break, and the WATERS (which are destin'd to lubricate and moisten the Passages) flow before their Time: In both which Cases, the Office of the WATERS must be supply'd by proper Fomentations, and Oils, which (however costly) falls far short of the Effect of what is so Natural. However, in short, neither of these Conditions, under the diligent Hand of the expert MIDWIFE, can differ far from the Case of

an Easy BIRTH, as already defin'd; wherefore I proceed regularly to

### CHAP. VIII. Of Difficult BIRTHS, proceeding from the Causes of the PELVIS.

DIFFICULT BIRTHS on part of the Passages, happen frequently, because of some perverse Form of the PELVIS, in these Respects; as by its being either too Large, too Narrow, or too Smooth. But that I may be the better understood in this Matter: FIRST, by a PELVIS too large, I mean such an One, as is so in comparison with the WOMB or INFANT; in which Condition, as the Womb can neither be firmly fix'd, compactly inclos'd, or duly supported, so neither can the HEAD of the Infant and the WATERS be exactly depressed upon the Orifice: Hence it often happens, that (besides the MIDWIFE's careful Hand) the Privities are the best, if not the only Defence, against both the WOMB and the CHILD's falling out of the Body.

SECONDLY, By a PELVIS too small, I mean, such an One as is so, in Consideration of the SIZE of the whole Body; in which Condition, the INFANT commonly answering to that Proportion, its Head can by no Possibility pass thro' the PELVIS, in a WOMB well seated, without great Force, by which Means the WOMB may be easily turn'd obliquely: And thus consequently the Smallness of the PELVIS, may sometimes prove the Cause of a Preternatural, as well as of a Difficult BIRTH; and not only so, but also the Death of both the MOTHER and CHILD may ensue thereupon, unless timely deliver'd by an Artful Hand.

THIRDLY, By a PELVIS too smooth, I mean such an One, whose Distance betwixt the OSSA PUBIS and the prominent Part of the OS SACRUM is too narrow; in which Condition, tho' the WOMB be well placed, it cannot admit the Head (especially if large and well-grown) without great Difficulty: And this smooth PELVIS may also very easily turn the WOMB (either way) obliquely, and consequently prove

of the same dangerous consequential *Effect* with the preceeding *Case*.

HENCE (I think) it evidently appears, how necessary it is that all *MIDWIVES* should not only know the *Form* and *Size* of the *PELVIS*, but also the *Situation* and *Connexion* of its *BONES*, as already describ'd at large<sup>[167]</sup>, that *she* may thereby the better distinguish the *Circumstances* by plainly discerning the *Causes*, and judge accurately of the *Position* of both the *WOMB* and the *INFANT*; so that in the beginning of the LABOUR, she may immediately discover how the PELVIS and its *Entrance* is form'd, whether *Large* or *Narrow*, *Smooth* or *Round*.

FOR this Reason, the *first Thing* that the *MIDWIFE* ought to do, when she comes to a Woman in LABOUR, is to try by the TOUCH, how all is circumstantiated, with respect to these Things; and *This* is to be done before the WOMB and the CHILD are fallen down into the PELVIS, that she may contrive her *Work* accordingly. Because sometimes the *Exclusion* of the *INFANT*, is to be hoped for, from the PAINS only; sometimes *Nature* is to be prudently assisted; sometimes there is an absolute Necessity for *extracting* the CHILD (without loss of Time) by an *Artful Hand*, as will hereafter more clearly appear; and sometimes again the same Necessity obliges us to protract the BIRTH, than we may save One or Both Lives: As in the Case of a smooth Pelvis, the Os Pubis and the Vertebræ of the SACRUM being but little distant, the CHILD's *Head* is stopped; when if the MOTHER should labour much, or endeavour to force an expeditious *BIRTH*, its tender *Head* (of course) must suffer in proportion; Or perhaps the BRAIN may break, by so hard a *Pressure* against the *Bones*; or, finally (which is worse) it may be so closely squeez'd between the *Bones*, that both the MOTHER and the INFANT may peradventure die, before any *BIRTH* can possibly succeed or come happily into the World.

BUT in this critical Condition, the WOMAN is to labour gently, and bear her PAINS (how violent soever) patiently; the MIDWIFE always directing the Head, at the same time by her safe Hand, into the larger Space; by which Means at last, it passes gradually through that narrow Passage without the least Danger.

*THE* same also is the *Condition* when the *PELVIS* is too *small* or *narrow*; for by the *Woman*'s labouring gently and deliberately, the

*Head* is depressed softly into an *oblique Figure*, and passes easily by Degrees: Whereas, on the other hand, if it is forced by *Violence*, it becomes *flat* and *broad*, and consequently incapable of *Passing*, if not also *dash'd* to *Pieces*, as aforesaid.

HENCE we clearly see, how easily *Ignorance* in this Point, may lead common MIDWIVES into the grossest of *Mistakes*; For what is more ordinary with them, even in all *Cases*, than to advise the WOMAN to *strong Labour*, and to force her to *violent Depressions*: Insomuch that SOME have *Arrogance* enough to carry their BOTTLES or POWDERS about them, of which they neither know the *Quality* nor *Virtue*; taking them only as they are told (by the confident QUACKS or *Mercenary Hands* which vend them) that they may encrease and promote the PAINS of Labour, and *This* without having any regard to the *Form* of the PELVIS, or the *Position* of either the *WOMB*, or the *INFANT*.

*IN* short, the mature *Consideration* of this very CASE, was not the least *Motive* which induced me to the WORK in Hand: since I cannot but heartily commiserate so many fine delicate WOMEN, as are *thus* every day miserably handled, tormented, and exhausted, by the preposterous Management of such indiscreet and imprudent MIDWIVES. I may well say exhausted, or worn-out; This being too evident, from the vast Number of most beautiful Women, who, by this ill-manag'd *Condition*, (notwithstanding they have all along heretofore, enjoy'd a good State of *Health*, together with the Affluence of other Worldly Blessings) have been more dejected and broken both in Complexion and Constitution, after one or two BIRTHS, than some others (judiciously and expertly delivered) have been after *Twenty*: Such is the great *Difference* betwixt the unskilful Hands or Conduct of common MIDWIVES, and those Dextrous TOUCHES or ingenious Operations of the more judicious Andro-*Boethogynists*. Whence I come in Course to——

#### CHAP. IX. Of Difficult BIRTHS, proceeding from Causes of the Bones of the PELVIS.

THE READER may easily conceive, by the way, that *these* are neither to be made *bigger* or *lesser* by ART; notwithstanding which, by using them *Skilfully*, and treating them *Judiciously*, many a *Difficult BIRTH* may not only be prevented, but also many a *LIFE* saved, as will manifestly appear from what follows.

*NOW* the *Bones*, upon which the Success of the *BIRTH* chiefly depends, are the Os CoccyGIS, and the Point of the SACRUM; which sometimes bend too much *inwards*, and thereby obstruct and render the PASSAGE so *narrow*, that no *BIRTH* can possibly succeed. And again, It sometimes happens, that the *INFANT* falling down into the *PELVIS*, and presenting itself *Head foremost*, is oppos'd and stopped there by the Os CoccyGIS: As it also sometimes falls out, that the *Shoulders* stick fast against the *Edge* of these BONES; or the *Buttocks* falling down and offering themselves *first*, may be so fastened or affixed to them, that they can never be *extracted*.

THESE Misfortunes may proceed from *Either* of these two different *Causes*; viz. Either from the *Grossness* or large *Size* of these *Parts* of the INFANT, or from the *Narrowness* of the *PELVIS*, occasion'd by an ill *Position* of its *Bones*, particularly of the Os CoccygIs; which *Bone* when the *Head* cannot make it yield or move, neither can it then possibly reach the *Orifice* of the WOMB, to dilate it sufficiently: And, in short, if the *Head* cannot effect this *essential Point*, much less can the *Buttocks*, or any other *Part* be supposed capable of doing it.

BUT in all the above-mentioned Cases, I am sensible, that most *MIDWIVES* (not knowing better) ascribe the whole *Difficulty* to the *Orifice* of the WOMB and the VAGINA; upon which they ignorantly fall

atearing and dilating both the One and the Other, (never minding the *Point* of the SACRUM); and finding *these Orifices* but little open'd, notwithstanding the frequent *Repetition* of very severe *PAINS*, they imagine that their substantial *Hardness* or *Thickness* is the only CAUSE: So that therefore (without regarding any *adjacent Part*) they go on violently dilacerating sometimes the *Mouth* of the WOMB, and sometimes *That* of the *PRIVITIES*, (as I have found it by Experience) quite to the RECTUM. For such is their *Stupidity* in this Condition of LIFE (as *Daventer* well observes) that whilst they *thus* tear and rend the WOMAN to Pieces in a manner, they allow her to sit over and above with the *Point* of the Os SACRUM, upon her *Seat* or *Bed*; or in some other wrong *Posture*, which so presses and confines the Os COCCYGIS at the same Time, that neither of these can move: Not minding at all that the chief *Pressures* and *Impulses* of the HEAD, must first bear upon the Os Coccygis in order to remove it, before it can effect the *Dilatation* of the *Orifice* or *Mouth* of the *WOMB*. Thus they spend the WOMAN's Strength in vain, break her Spirits, and ruin her Constitution thro' Ignorance; whilst a capable Person, administring seasonable and judicious Help, according to the Circumstances of the *Case*, refreshes *Nature*, renews *Strength*, gives Courage, and fills the (otherways languishing and despairing) WOMAN, with Hopes and Assurances of a happy DELIVERY.

IN short, the True Method of Delivering and helping the WOMAN conveniently, in the different Conditions contain'd in this Chapter, depends entirely upon repelling or thrusting back the Point of the Os SACRUM, together with the Os Coccygis. I say (therefore) the whole Point of the Os SACRUM, and that Fleshy Part lying about it, is to be thrust back and dilated, so that the Passage may be sufficiently opened for the INFANT to pass through; which patent Dilatation is to be promoted by pressing also back the Os Coccygis. Now these Things, in short, may be all done cautiously without creating any intense Pain, or the least Damage; and thus the obstructed Passage being clear'd and open'd, the BIRTH advances regularly of Course, and the CHILD is born with the greatest Ease, in the Space of a few Minutes: Whereas otherways (without the Use of these Means) both its Own and the MOTHER's Destiny may be precarious or uncertain after some Days LABOUR.

THUS it is certain, that by assisting a Woman in LABOUR seasonably and skilfully, her PAINS are happily excited and encreased; whereas, on the contrary, by *imprudent Treatment* they unhappily cease and vanish, to her great Prejudice. Moreover, daily *Experience* teaches us, that the very *different* TOUCHING of Things, occasions different *Sensations*; and from thence it is, that the *dextrous MIDWIFE* knows by *one* way of TOUCHING, how to promote the *PAINS* of *Labour*; and by *another*, how to retard or put them off according as the Necessity of the *Case* requires; which hereafter will appear more at large.

BUT that we may more particularly satisfy such MIDWIVES, of our Method of repressing these BONES, and Delivering the WOMAN in the abovesaid *Cases*; I must add, that, after placing the *PATIENT* in the most convenient *Posture* for a *WOMAN* in *Labour*, as before fully enjoin'd<sup>[168]</sup>, I would direct *Her* to be *supported* by two Women, and mov'd so far off the BED or COUCH, that the Point of the Os SACRUM may be free to yield or give way *backwards*, without any the least *Impediment*: Then I would pass my whole *Hand* at once (being first well anointed or dipp'd in Oil) into the VAGINA, and from thence (if the *Head* will admit it) into the *WOMB*, as occasion should require: where, upon opening my Hand broad, that it may press equally every where, I turn the PALM upwards, and the BACK downwards against the RECTUM, and the OS SACRUM: Thus I extend my *Fingers* as far as possible to the *Head*, thrusting it a little backwards, rather than hinder my Hand from being firmly placed against the Os Coccygis: Upon my Hand being thus properly placed, as soon as the PAIN begins to threaten (which I commonly perceive before the WOMAN) I advise her, to make good Use of the approaching Pains, in order to Labour mutually, and depress with all her Power, promising her my most faithful Assistance: By which Time, as soon as the PAINS have seiz'd her, and she doing her *Part*, I press my HAND backwards, first softly, and by degrees more strongly, against the *Point* of the SACRUM, bringing it at the same time gradually *downwards*, that I may thereby make Room for the *Head* sliding the same way; so that the more *severe* the *PAINS* are, the more I depress still, and the *harder* I press down with *Effectual* PAIN, the more vigorously and successfully the WOMAN is able to Labour.

THUS I enlarge the Passage with great Moderation, so that the INFANT'S Head succeeds or follows my Hand, as I bring it by little and little back again; and this adviseable Method I would reiterate as often as the Case should require, always encouraging my WOMAN, by the most obliging Words: Upon which She suffering no PAIN in vain, finds immediate Relief, recovers her Strength, recollects her Spirits, and by jointly labouring her Best with all her Force and Might, at last produces her CHILD with Comfort and Satisfaction, whilst I congratulate her upon the Success of being a joyful MOTHER.

BUT supposing by the way, that the INFANT offers its Buttocks first, they being neither so round nor hard as the HEAD, I would then intrude all my Fingers into the WOMB more easily; some of which (or sometimes All) I would pass into the Orifice of the WOMB under the Buttocks as before into the VAGINA. Now my HAND being placed there, I intently observe the PAINS as they come on; then inviting the Woman to Labour, I gradually press backwards as hard as I can conveniently, drawing my HAND downwards as before: But if in attracting it so, the HAND should slide too much out of the WOMB, (which however I endeavour to prevent) while the PAINS are yet upon her; then as soon as they are over, I pass it up again, that I may be ready against their Return. And this I would reiterate upon every PAIN, so that the CHILD (guided by my HAND) may slide down at every Turn, until at last the Passage is so dilated, that it may advance gradually with ease into the World.

BY these judicious Means; forcing back the OS COCCYGIS by the Pressure of the HAND, as the PAINS come on, I may not only dilate the Passage, and enlarge the Orifice of the WOMB; but also upon retracting the HAND by degrees, I can gradually attract the CHILD out of the WOMB, through the Narrowness of the PELVIS: And thus, by this curious ART, (which I take to be one of the chief Points belonging to MIDWIFERY) I do fairly deliver the WOMAN, who by no other Means whatsoever, could be preserved, together with her INFANT, in all Probability.

*HOWEVER*, tho' I have candidly laid down this *Method*, (conformable to the Doctrine of the most excellent and ingenious *Instructers*) yet I would not advise every coarse *Clumsy HAND* to undertake it, nor *such* as are not thoroughly acquainted with the

*Parts* of Generation: For this *Performance* requires *Judgment* and *Prudence*, as well as ART and *Experience*. But however yet in *Case* of *Necessity*, where no *Extraordinary Person's Assistance* can be had, as it often happens in the *Country*, the *Ordinary MIDWIFE* ought not to neglect her *Duty*: nevertheless, before she offers to attempt this piece of extraordinary *Skill*, she ought to be very certain that these *BONES* are the great *Impediment* and *Difficulty* of the Delivery.

## CHAP. X. Of Difficult BIRTHS, proceeding from Causes of the BLADDER and RECTUM.

*DIFFICULTY* in *BIRTH* may also proceed from the *BLADDER*, as (in like manner) it may from the *RECTUM* or *Strait Gut*.

I. *FROM* the *BLADDER*, when affected with *Tumours*, *Ulcers*, or *Glands*, obstructing the *Passages*; which however is more frequently occasioned by *Stones* lodged in the *BLADDER*, or in its *Neck*: In either of which *Conditions*, the MIDWIFE, by dilating the *Passage* with a subtile *HAND*, must repel the *OS COCCYGIS* according to ART (as taught in the preceeding *Chapter*) that the *HEAD* in falling down, may the less offend the *BLADDER*.

II. *THE* same *Difficulty* may arise from the *RECTUM*, when it happens in the same *Manner*, to be affected with such obdurated *Glands*, *Tumours*, &c. for the *Consequence* is the same in shutting up the *Passages*: In which *Case* the *MIDWIFE* is to depress gently such *Excrescences*, of what kind soever, with her cautious *HAND*, and consequently to dilate the *Passages* by degrees (how much soever obstructed) for receiving the *Head* of the *INFANT*; always having a respect to the *affected Parts*, and bearing no harder upon them than Necessity requires.

*MOREOVER* sometimes it happens, that the only *Difficulty* in *LABOUR* proceeds from *hardened Excrements* in this *Gut*, which may as effectually stop or shut up the *Passage*, as any thing else, until duly voided and evacuated by *one* or *more* proper *CLYSTERS*, as Occasion directs.

*BUT* sometimes it also happens, that such *Difficulties* arise from the falling out of the *Fundament* by the strong and violent *THROWS* that the *Woman* Suffers in LABOUR: In which *Condition*, if the *CHILD* is very forward in the *Passage*, before it *happens*, it may be prevented by dissuading or hindering the WOMAN from *Labouring* so vehemently; but if it happen'd before that time, it must be left so until the *BIRTH* be accomplished; after which time, it is to be put up exactly, and reduced to its proper *Place*, in the same manner as the WOMB might be (in Case of its *Prolapse*, as mentioned in the following *Chapter*) after duly *fomenting* and *bathing* it with proper *Applicatives*: advertising always to use no *CLYSTERS*, in time of CHILD-BED; because such Means would readily excite it again to a slippery *Relapse*.

#### CHAP. XI. Of Difficult BIRTHS proceeding from the Causes of the VAGINA.

DIFFICULTY likewise in LABOUR may also arise from the VAGINA, or Neck of the WOMB; this Part being no less liable to the Affection of Tumours, Glands, Ulcers, &c. than any Other before-mentioned: In Either of which Cases, my above-mentioned Method in the foregoing Chapter, shall suffice for the MIDWIFE's Instruction; as also in Case of an Inflation or Inflammation of the Pudendum.

BUT sometimes also this Difficulty happens from the falling down of the VAGINA; which Accident may as well precede as follow after the BIRTH, and that by the Orifice of the WOMB pressing hard into that of the Privities: So that sometimes, when the MEMBRANE is broke, the Head of the INFANT, as well as the Orifice of the WOMB, slides down so far, as to hang out of the Body; whereby the stressed Ligaments (being too much relaxed) give way to the falling down not only of the VAGINA, but also of the WOMB it self.

IN this sad Condition the WOMAN must keep her BED, and her Body equally situated, that either the fallen VAGINA or WOMB, may recover and be immediately restored to its proper Place; which being done, other Matters may be easily prevented by the Care and Diligence of the prudent MIDWIFE, stopping and restraining the Orifice of the WOMB before it comes so far to that Extremity: Wherefore she ought to keep it up in the VAGINA (as much as possible) with her HANDS, until the WOMAN has happily extruded both the CHILD and the AFTER-BIRTH.

UPON This afterwards, *she* is to use her best Endeavours, to restore both the WOMB and VAGINA to their due Situation; laying the Wrinkles Smooth in their proper Order, not one upon another, then placing the WOMAN conveniently in BED, with her Head and

*Shoulders* declining, *Exsiccant* or *drying MEDICINES* are to be judiciously applied, and *Strengthening* or *Astringent Fomentations* often used; whereby (in good Time) *both* may be again confirmed in their proper Natural *Places*.

NOW having thus, in fine, candidly explained the *Different Causes* of all *Difficult BIRTHS*, and carefully laid down the *genuine Methods* of correcting and removing them, and consequently of *Delivering* the good WOMAN successfully in all such nice *Cases*, it remains now in Course that I proceed to——

#### CHAP. XII. Of Preternatural BIRTHS.

SUCH BIRTHS, (properly speaking) are only *Preternatural*, which degenerate from the *Natural*, in respect either to the *Situation* of the INFANT, or the WOMB, or of *both* these jointly: Such (I say) may be well call'd *Preternatural*, because of the imminent Danger that (in these *Conditions*) threatens both the MOTHER and the CHILD.

*HENCE* we find the Difference between *This* and the *Natural BIRTH*; in as much as the *One* depends entirely upon ART, and the *Other* merely upon NATURE: In *That* the *INFANT* is artificially extracted by the *Hand*, but in *this* it is naturally extruded by the *PAINS*.

HIPPOCRATES gives<sup>[169]</sup> us a *Two-fold-Cause* or Reason of a *Preternatural BIRTH*; to wit, the *Amplitude* of the WOMB, and the *inordinate Motion* of the Woman about the Time of *LABOUR*: Who, because of her afflicting *PAINS* and great *Ailments*, keeps her Body in a restless and unsteady *Posture*, throwing herself sometimes *here*, and sometimes *there*, sometimes on *One side*, and sometimes on *Another* through Uneasiness. By which means it cannot be otherways, but that the *INFANT* may be easily turn'd into some *Preternatural Situation*.

AND to These Causes, Senertus, Rodericus à Castro, &c. add the *Two* following; namely, the *Solidity* of the *MEMBRANES*, and the *Debility* of the *Head* of the *CHILD*: Because (as they well observe) when *This* is not strong enough to break through *Those*, the *INFANT* endeavouring it otherways, (with *Feet* or *Hands*) may readily fall into some *Preternatural Position*.

*BUT* because I find, that *Preternatural BIRTHS* deviate in different Degrees, and vary in many respects from the *Natural*, and *that* also according to a great Variety of *CAUSES* (no ways known to those most *Learned Authors*) but only of late discovered; I shall now

again reduce the different *Species* of *Preternatural BIRTHS* to four *Classes*; namely, *Preternatural BIRTHS* on Part of the *INFANT*, on Part of the WOMB, on Part of *Both* those jointly, and lastly on Part of some *intervening Accidents*.

*IN* treating of which, I shall according to my best Judgment, *state* these respective *HEADS* in due Order, and assign each its proper *Branches*; which I shall particularly discuss in brief *Terms*, for the Facility and Benefit of the *Candid READER*, whether *MAN* or *Woman-Midwife*; That they may (by this plain and easy Method) be enabled the more readily to judge of, and distinguish the several Circumstances, and consequently the better discharge their Duties (upon Occasion) to the Comfort and Satisfaction of those *PATIENTS* concerned, and the Honour of their own ingenious *Profession*.

BUT before I enter upon These, I would willingly in this place, previously subjoin a Word or two of Advice (by way of Precaution) to the Young Andro-Boethogunist: Which, in short, consists in this *Point*, that as it is the too common *Practice* here in *England*, for an obstinate SET of *Women* to keep their *Labouring PATIENTS* so long under their own Hands only, until the very last *Extremity*; so I would not counsel him at that Time, when sent for, upon such a ticklish Occasion, to go *Head-long* to such a *Work*, nor to undertake the DELIVERY of such a Woman, before He makes some requisite Observations: And that I mean no ways because of any Danger of the Preternatural BIRTH which she labours under, how difficult soever it may be; but merely, on account of the Woman's exhausted Strength and Ability, to undergo the respective Operation in her weaken'd Condition; which I would very much question in most Women, after One, Two, or Three Hours strong LABOUR, and that in Some far sooner, notwithstanding that others have been known to stand it out, and struggle a much *longer Time*.

HOWEVER, be this as it will, I commonly guess at the Woman's State of Ability, not only by her PULSE, if strong or weak, unequal or intermitting; by her EYES, if dejected; by her SPEECH, if faint; by touching the EXTREMITIES of her Body, if frigid: but also by some other SYMPTOMS, which infallibly appear, if the Woman be too far spent, such as Cold Sweats, Swoonings, Convulsions, Loss of Sense, &c. Whereupon I say in these Cases, it is more adviseable to let alone or decline the Office, than to undertake such a precarious uncertain

Piece of *Work*; because if the *Woman* happens to die under his *Hand*, He may perhaps be (however unjustly) blam'd for the errant *Midwife*'s Faults, or at least He will scarce avoid the CENSURE of the *Ignorant* and *Malevolous*.

*YET* this *Advice* (however wholesome and prudent) is, I confess, what I would but seldom have Recourse to, or follow myself, notwithstanding the worst *Consequences* of the *Case*; since as long as there is *Life*, there is *Hope* with me, by the Blessing of GOD: Which tho' never so *little*, I should think myself obliged in Conscience to do what both ART and NATURE command, and rather in all *Conditions* of LIFE to attempt an uncertain CURE<sup>[170]</sup>, than abandon the *Distressed* to certain DEATH, as some *Politicians* in *Physical* Affairs commonly do, who prize their vain *Reputation* above the LIFE of their Neighbour. But *thus*, in short, (for my own Part) I would chuse to *act*, because I have often seen, and known *NATURE* to have perform'd, and recover'd a weak spent parturient PATIENT, even beyond all human Probability.

NOT but that I would take the proper *Precautions* along with me, before putting my *Hand* to the critical *Work*, upon any such desperate or dangerous *Occasion*, by giving my ingenuous *PROGNOSTICK* to the nearest *Friends* and *By-standers* of the extreme *Danger* that both *LIVES* may be in: Whereupon after thoroughly examining all *Circumstances*, with respect to the CHILD, whether *One* or *More*, *Dead* or *Alive*, &c. I would chearfully begin my *Endeavours* to relieve the afflicted Woman, encouraging and exhorting her in the first Place, for GoD's-sake, as well as *her own*, and the tender INFANT's *Life*, to put herself entirely into my HANDS, to undergo her LABOUR patiently, and contribute what she can to the DELIVERY.

*BUT* to return from this pardonable *Digression* to what is here proposed; as I come first to speak of *Preternatural BIRTHS* on the part of the INFANT, I would observe that all ill *Postures* of the CHILD, in a WOMB well situated, are the only *Causes* (meant in this place) of *Preternatural BIRTHS* on its *own Part*: Which *Postures* being very various and different, and each requiring a different peculiar *Operation*; I shall *state* them particularly (as above-mentioned) and *that* in their respective *Chapters*, after the manner following: *viz.*—

#### CHAP. XIII.

# Of Præternatural BIRTHS, by the FACE's being turn'd upwards; or bent forwards, and the CROWN backwards.

AMONG the many various Preternatural Positions of the INFANT, I cannot but reckon THIS One: FIRST when, tho' the CHILD offers itself Head foremost, yet the FACE is turn'd upwards; and that because the INFANT in such a Posture can never be commodiously bent and adapted to the Form of the PELVIS.

*IN* this *Case*, the *MIDWIFE* ought to take special Care, that the HEAD *fall down directly* and safely, without being *hurt*, whilst she endeavours to bring it *forward*: For this Purpose, she is to enlarge the *Passage* as much as possible, dilating the *Privities*, and depressing the Os CoccyGIS; which however must be done, without lifting the HEAD with her *Hand*, for fear of bruising the FACE against the Os PUBIS. By this Method the *BIRTH* (how *Preternatural* soever) may be pretty well and easily perform'd.

BUT because the CHILD can only be said to be well turn'd, when it comes with its CHIN leaning upon its Breast, and its Top or Crown of the HEAD tending directly to the Orifice; I reckon THIS another Preternatural Position, when the INFANT presents itself with the CROWN bent backwards, and consequently with the FACE forwards: By reason that in this Case, the Orifice itself and all the rest of the Passage must be much more dilated, than in the natural Condition; and the HEAD (being thus bent backwards) requires more severe PAINS and hard LABOUR, to make it slide through the Passages.

*IN* which *Case*, the *MIDWIFE*, having timely discover'd this *Situation* by the TOUCH, ought immediately (upon the flowing of the *Waters*) to bend the *HEAD* gently *forwards* to the BREAST, all the while adverting to handle the FACE, especially the *Nose* and *Eyes*,

very tenderly: And to this End, the *Woman* may be laid down on her *Back*, with her *Head* low; by no means *labouring* with the *PAINS*, before the *HEAD* of the *CHILD* is so conveniently turned: which may be thus most properly perform'd; viz. By laying the Palm of the *Hand* on the *INFANT*'s *Breast*, near its *Throat*, pressing it entirely *back* towards the *Fund* of the WOMB; by which means the HEAD falls *forwards* of its own Accord upon the *MIDWIFE*'s *Arm*, and *she* withdrawing her *Hand*, will find the HEAD *well turn'd*.

BUT supposing the HEAD to be very strictly bent or pressed back, then the *MIDWIFE* is to attract it gently *forwards* by her *Thumb*, or *Fore-Finger* thrust into its MOUTH; or by the Points of all *Four* thrust betwixt the WOMB and the *back Part* of the HEAD. And thus, in fine, the HEAD being *well Turned*, and dextrously brought into the *Passage*; the *Woman* is then to be placed commodiously for *BIRTH*, and to labour her *Best* as in other *Cases*.

HOWEVER to this Case, I must add, by way of Remark for the MIDWIFE's farther Information and better Government, that, if the HEAD is not brought into the Passage, as soon as the Waters have flow'd, it commonly happens, that the HANDS offer themselves first; which if she do not instantly repel, the HEAD is turn'd up forwards with the FACE, near the Chin, upon the Os PUBIS; in which Condition, by reason of the Siccity and Contraction of the WOMB, the only Expedient is to thrust back the ARMS, and so passing the Hand under the CHILD'S Breast, to take hold of, and extract it by the FEET.

## CHAP. XIV. Of Præternatural BIRTHS, by the Hand, Elbow, Shoulder, Knees, or Buttocks presenting first.

THE CHILD also sometimes offers itself preternaturally to the Orifice, with its HAND, ELBOW, SHOULDER, KNEES, or BUTTOCKS first: In which Condition, the HAND always gives an easier BIRTH than the ELBOW, the ELBOW than the SHOULDER, the SHOULDER than the KNEES, and the KNEES than the BUTTOCKS: For the HAND being commonly placed near the Head, it is no great Wonder, if it presents itself before, or along with it; as sometimes (after Flooding) the HAND may slide together with the Head obliquely to either Side, and thereby either ELBOW or SHOULDER unfortunately fall into the Passage.

THIS is one great Reason, why I have before inculcated, that the *MIDWIFE* ought to be diligent and accurate in *Touching* her Woman, even before the MEMBRANE breaks, that she may thereby discover and prevent this *Case*: Which is easily perform'd, either by *repelling* the HANDS, or by pinching the *INFANT* sensibly by the *Fingers*, and then it soon retracts them; for thus, in short, by moving my own *Hand* seasonably, the HEAD (of its own accord) slips of course down into the *Passage*. But and if it happens otherways, 'tis no difficult Matter to *turn* and bring it down, by directing my *Fingers* beyond the FACE to the *CHILD*'s *Forehead*; which however must be done immediately after FLOODING: Whereas, if *This* be neglected until the *dry* WOMB is contracted, THEN, and in that *Condition*, the *FEET* may be looked for, which (in such a *Posture*) are soon found, with the *KNEES* next the *Belly*; and the *INFANT* may be readily drawn out by them. But

WHEN it so happens, that the CHILD comes with its KNEES foremost, it commonly has its LEGS folded towards the BUTTOCKS; by which means many a MIDWIFE has been deceiv'd, especially when she feels but one KNEE, mistaking it for the HEAD, because of its Hardness and Roundness.

*IN* this *preternatural Condition*, the *INFANT* must be stopped and hindered from advancing *farther*; wherefore having placed the *Woman* aright, I would gently repel the *KNEES*, that I may the more commodiously *unfold* the complicated *LEGS*, one after another; which I commonly do by directing *one* or *more Fingers* under the HAM, gradually along behind the *LEG*, until I come to the FoOT; drawing always a little *obliquely*, that I may come the easier to its *Extremity*: And thus, in short, having disengaged the *One*, I accordingly manage the *Other* after the same manner; and by bringing both *FEET* at last together, I finish my *Work*, as if the *Child* had come *FEET* foremost, of which in course.

*MOREOVER* again it also happens sometimes, that the *CHILD* falls with its *BUTTOCKS forwards*; in which *preternatural Condition*, the MIDWIFE must industriously prevent it from coming too low in the PASSAGE, before it be duly corrected or rectify'd; since the INFANT cannot possibly come, after this manner, into the World; unless it be very *small*, and the *PASSAGE*, on the other hand, very *large*. Wherefore in this *Case*, after the *Woman* is decently laid upon her *Back*, with her *Head* declining, I would advise to thrust back the *BUTTOCKS* as well as possible; then passing up my *Hand* along the *THIGHS* to the *Legs*, I would take hold of the *FEET*, and bring them gently, and one by one, forth gradually; which being done, I would attract them by the *HEELS* towards the *Side* as far as the Length of the *BUTTOCKS*; and then at last taking good *Hold* under the *HIPS*, I would easily and softly with the greatest *Deliberation*, draw out the whole Body successively.

#### CHAP. XV.

#### Of Preternatural BIRTHS, by the Breast, Belly, or Back, presenting first; and the INFANT's lying transverse.

SOMETIMES likewise the CHILD offers its BREAST or BELLY first, along with the Navel-string; which Preternatural Figure is most dangerous for the BIRTH, because of the Body's bending backwards.

*IN* this difficult *Case*, the attentive *MIDWIFE* places her *Woman* conveniently, as soon as the *Waters* have flow'd, and sliding her *Hand* into the WOMB, removes the *String*, and endeavours to bring the *HEAD forwards* into the *PASSAGE*; which she easily performs, as long as the INFANT is suspended on high, and its *Back* not too much *bent*, by putting-in her *Hand* gently up to the *hinder Part* of the *CHILD*'S *Head*, attracting it gradually *downwards*. But if in this *Condition* the *BIRTH* be fallen too *far down*, it is more adviseable *first* to attract the *FEET* considerately.

I say considerately, because it is not sufficient to penetrate with the Hand to the FEET; which however yet, in this Posture is pretty difficult: But also to know exactly in what manner they are to be drawn down; since it is no indifferent Matter to understand how that is to be rightly perform'd with Success. Wherefore I shall in this place take upon me to set forth two different Ways of Turning the INFANT in this Condition; viz.

I. I would *either* FIRST pass my *Right Hand* to the *Left Thigh* of the *CHILD*, and taking hold of it near the *KNEE*, push it *upwards* with my *Thumb*, drawing it at the same time *downwards* with my *Fingers* placed behind: *Thus* I would bring *down one KNEE* to the *Passage*, leaving the FOOT yet above, and then the *other KNEE* in its Turn; which being done, I would change my *Hand*, and put the *Left* up to the *INFANT*'s *Belly* or *Breast*; where, as I *thrust back* its Body

*upwards*, there is presently *Room* enough: then I would take hold again of *one* or *both KNEES*, to move the *CHILD higher*, that so the *FEET* may be more conveniently brought into the *Passage* one by one, if not *Both* at once: Or, upon the *LEGS* being bent with the *Right Hand*, and the *KNEES* brought into the *Passage* (as above) I would take hold of them below the HAM, and bring them past the *Orifice* of the WOMB, till the *FEET* are before the *Passage*; whereupon I would then readily endeavour to extract the INFANT by the *FEET*. *Or*, SECONDLY,

II. I would put my *Right Hand* up along the *Belly* to either THIGH, or KNEE, having at the same time a thin *Bandage* doubled and dipp'd in Oil, upon my Fingers' Ends, in order to be put about the KNEE, that I may attract it gently thereby; which I would draw out again by the *Right Hand*, whilst my *Left* holds the Ends of the *Bandage*, that they may not move out of their Place: Then I would take the Extremities of the *Bandage* in my *Right Hand*, attracting it softly thereby, whilst I pass up my Left into the WOMB, to thrust the CHILD's Belly upwards. By which ingenious and regular Means, I think, Dr. Daventer first moved the upper Part of the BODY *upwards*, and the FEET *downwards*, because the KNEES are thereby brought nearer to the Orifice. Now these, in short, are the only safe, and proper Methods to be taken in this present Case, or nice Conjuncture; because, by all other inconsiderate and temerarious Means, the INFANT'S LOINS may be twisted, its HIPS or KNEES disjointed, its FEET lamed, and itself at last quite lost or destroy'd.

*IN* like manner it happens not very seldom, that the *INFANT* comes with its BACK *forwards* into the *Passage*; and in this *Posture* the NAVEL-STRING falls commonly down *there*, so that besides *itself*, nothing else is to be felt by the TOUCH: In this *Case*, the MIDWIFE is to observe well the FLOODING; immediately upon which, *she* is to seek for the FEET, which are more easily come at than the *HEAD*, tho' the same is even also a very difficult TASK, by reason that the *CHILD*'s *Back* takes up the whole Space of *Room*; which, notwithstanding, must be cautiously done, and the *INFANT* discreetly extracted by *them*.

BUT again sometimes, the BIRTH lies also Transverse, or a-cross the WOMB; in which dangerous Case, I confess the MIDWIFE cannot well perceive, so as to distinguish Matters by the Touch, before

*Flooding*: Because the *INFANT* (swimming in the *Waters*) is as yet seated high, and then moving its HANDS and FEET variously, *she* sometimes feels *one*, and sometimes *another Member* at the *Orifice*; or, one Moment she finds *Something*, and another *Nothing* at all there. However, in fine, *she* may perceive the *Humours* most commonly compressed into an *acuminated* or *oblong Form*.

WHEREFORE in this difficult Preternatural Condition. the *MIDWIFE* ought primarily and chiefly to consider and discover the *Posture* of the *WOMB*, whether it be *direct* or *oblique*; since according to THAT she must proceed in assisting her Woman with true Discretion. As for *Example*, if *she* finds it in a streight or *natural* State, and the Waters sufficiently exuberant, extended length-ways, &c. as aforesaid, She must, without Loss of Time, break the MEMBRANE, and presently, removing all Impediments of HAND, FOOT, or NAVEL-STRING, judiciously direct the HEAD into the *Passage*; which may be very easily and safely done immediately upon the FLOODING. Whereas if *this Method* be delay'd, or not taken in *due Time*, and consequently the *HANDS* (as the readiest) present themselves to the Orifice first: In this Condition, I would lay the Woman discreetly upon her Back, with the upper Part of her Body lowest; after which, I would move the INFANT's Hands back with my own; whereby at the same time bringing its FEET into the *Passage*, I would in the next Place gently extract the whole Body with all possible Conduct and Success.

## CHAP. XVI. Of Preternatural BIRTHS, by the Feet presenting first.

*IN* like manner again, it often happens, that the *CHILD* offers its *FEET foremost*; which next to a *Natural BIRTH* is the most easy and safe *Position*, however I have been oblig'd to postpone it to the *rest*, for Method's sake: In this *Case*, the *MIDWIFE*, observing *one FOOT* presenting itself in the *Passage* after *FLOODING*, ought to stop and retain it *there*, that it may not slide through, until *she* meets with the *other*. In order to which Performance, *she* must immediately seek for *it*, with either *Hand*, according as she perceives the *INFANT*'s great *Toe* situated, since it is only to be sought for along its *Side*; and being found, it is to be gently *drawn down*, and placed near its *Fellow* in the *Passage*.

BUT it falls out sometimes, that the *MIDWIFE* comes too late, and finds *one LEG* so far through, that the BUTTOCKS are strictly confin'd: In this *Condition*, I would advise to lay the *Woman* conveniently upon her *Back*, with her *Head* low, that both the WOMB and the CHILD may *retreat* a little; then taking hold of the *right LEG* with my *Right Hand*, I would thrust the *INFANT back*, till the whole FOOT (or at least the KNEE) is brought back into the *Orifice* of the WOMB, in order that I may have the more *Room* for passing my *Hand* along the *LEG*: By which means I get hold of the *other*, that both may come forth successfully together.

WHICH Thing, happening so when it will, that both FEET are excluded, whether done spontaneously or by ART, they are never to be repell'd or thrust back again; but, on the contrary, the way is to be duly cleared for their PASSAGE; This being a very commodious Situation, provided the CHILD be well turned, I mean, with HEELS and BUTTOCKS upwards, and TOES and BELLY downwards:

Whereas, if otherways, the *CHIN* may be easily hooked upon the *OSSA PUBIS*; which (if not so happily *turned* at first) I commonly prevent in the most adviseable manner following; *viz*.

UPON attracting the INFANT, I turn it cautiously at the same time, using both Hands in the ensuing Method; namely, The One I put up under its *Body* as far as possible, whilst with the *Other* I hold both *FEET* together: Insomuch that by this Means I gradually *turn*, not only the *FEET* and the *LEGS*, but also the *whole Body*; bringing it always forwards in the Interim, till at last it lies with its BELLY downwards, and is out above half way: Upon this I then give my Woman the Motion, to begin her LABOUR and endeavour her Best; because the HEAD and ARMS must necessarily pass through All at once. For notwithstanding the contrary Opinion of most Authors, who teach us to draw down the ARMS one by one, and place them upon the *Body*, I cannot but agree with *Daventer*, and positively advise in this and all such other like Cases, to leave the ARMS about the *HEAD*, that they may be excluded along with it: Because, as he says, tho' the Woman in so doing, is obliged to force her INFANT forwards with all possible Endeavours, yet like a small transient CLOUD, it is soon over.

WHEREFORE I commonly make it my Business to prevent the Woman's PAINS, until I have brought the CHILD this Length; when allowing her a little Time to rest, I heartily encourage and positively promise *Her*, that, she performing her *Part* effectually, (by using all her *Strength*, and behaving herself as if the *PAINS* were most really pressing upon her, whether so or not) the BIRTH will immediately succeed: And upon this *Promise*, with the *PATIENT*'s mutual Assistances concurring, I never yet fail'd; neither will any Persons who faithfully and ingeniously follow this *Method*, in comfortably helping the Woman upon such an Occasion, by drawing the CHILD cautiously downwards, with whatsoever judicious Force: I mean not downwards, according to the Woman's LENGTH, but downwards towards the strait Gut. And as I every Moment insinuate to the *MOTHER*, that her *BABE*'s *Life* depends entirely upon her vigorous confederate LABOUR; so she mutually concurring with me, in endeavouring to do our *Best*, the AGRIPPA *INFANT* is presently brought forth to the great Satisfaction of Both.

BY these Means and Methods, we prevent the Tragical Consequences, which Mr. Portal and many others confess they have often met with in their Practice; viz. That the HEAD has been sometimes pulled-off from the SHOULDERS, or that the CHILD has been frequently stifled, by the WOMB's contracting and shutting-up about the NECK: Which was altogether owing to the injudicious Method of their Practice, in drawing down the ARMS awkwardly (as mentioned above) along the SIDES of the Body.

#### CHAP. XVII. Of Preternatural BIRTHS, by Two, or more INFANTS presenting themselves ill-Turn'd.

THIS Case also happens sometimes remarkably; upon which, if Both or All are contain'd in one and the same SECUNDINE, or when the MEMBRANES are broken, then the right VERSION is very difficult; not so much for want of Room, as because their HANDS and FEET are commonly interwoven and twisted together: In which preternatural Condition, when so complicated and entangled, they are to be unfolded and cleared off one another with the nicest Circumspection and Judgment.

BUT besides, farther, they are otherways, only to be treated in this difficult Point, as if there was but one CHILD; for turning them always One by One duly, I would bring all their FEET into the Passage, and consequently handle them, as if they had offer'd themselves so at first. The first CHILD being born, I would give it to the next capable Person to tie and cut its STRING; whilst I directly repass up my Hand, to seek for the other's FEET, by which I would also draw it forth, after breaking its proper MEMBRANES, in Case the second FLOODING is not yet over, and that notwithstanding the HEAD should present itself First.

BUT and if it happens, that each CHILD has its own proper and distinct SECUNDINE, and That of the INFANT already brought forth chance to be loose and separated from the WOMB; In that Case, I would presently fetch it away, and then extract the other INFANT, as long as there is any yet left behind, and that also by the FEET, as aforesaid: Whereas otherwise, the BIRTHS, together with the Constriction of their UMBILICALS, are to be previously accomplished.

*IN* fine, having *thus* accounted for all the *Preternatural BIRTHS* whatsoever, which may or can occur on the *Part* of the *INFANT*, and *that* conformable to the most nice and polite *Rules* of ART; It remains now in the next place, that I acquit myself in a consonant manner, with respect to *Those* proceeding from the *Part* of the WOMB. Of which *First* in general—

## CHAP. XVIII. Of Preternatural BIRTHS, proceeding from Causes of the WOMB.

MOST, if not all, Authors having hitherto imagin'd, that all *Preternatural BIRTHS* took their sole *Rise* and *Origin* from the wrong *Positions* of the *INFANTS* only; I come in this place, with all due Submission, not only to affirm a quite contrary *Opinion*, but also to lay down a directly opposite MAXIM: Namely, that the most difficult and dangerous *Preternatural BIRTHS* proceed merely from the ill *Situation* of the WOMB; which I take to be the most common *Cause* of the CHILD's wrong *Posture*. The Truth of which I hope to make evidently appear, to all such, who know and will consider, that this *Noble Part* is no less subject to various *Accidents* and different *Diseases*, than the *Rest* of the BODY; which springing from divers *Sources*, may rationally be suppos'd to occasion *Preternatural BIRTHS*, and *those* more or less dangerous, according to the *Nature* of the EFFICIENT: as for *Instance*,

IN Case of an Inflammation, Exulceration, Putrefaction, or the WOMB's being Schirrous, Callous, or Hard; affected with a CARCINOMA or Cancer; an obdurated Gland, Cicatrix, or any carnous Excrescence; or in Case of the WOMB's being Dry and Rigid, and the Orifice's being Hard and Thick, as commonly happens to WOMEN in Years, especially of their First CHILD; I say, from either of these, or any such like Causes, a Preternatural BIRTH may ensue, and that even tho' the PELVIS and PASSAGE be larger, but much more if those be narrower, and the Point of the Os SACRUM bent Inwards.

I. *IN* the *Larger* PELVIS, the greatest *Difficulty* of this *BIRTH* proceeds from too great a *Descent* of the WOMB; which relaxes the *Ligaments* and *Fibres* of the VAGINA, and so much depresses the *Bladder*, that an *Incontinency* of URINE presently follows, which in this *Case* is commonly succeeded by a *Falling Down* of the WOMB or

VAGINA, as already observ'd in *Chap*. XI. where the Diligent MIDWIFE will find the due *Method* of preventing such growing *Mischiefs*, and of opening the *Orifice* of the WOMB both safely and readily, and consequently *Delivering* her *Woman* more easily and expeditiously, with good Success as well as Security.

II. *IN* the *narrower* PELVIS, the *MIDWIFE* needs no ways fear the above-named *Accident*, and therefore is not to be at so much Pains in *retaining* the ORIFICE in its proper Place, whatever Trouble she may have in *opening* it; which would be no easy TASK, was not the OS COCCYGIS to be *thrust back*, (as set forth, *Chap.* IX.) And which I must (for this Reason) recommend once more to all Careful *MIDWIVES*, as the best and most effectual METHOD of performing this happy *Apertion*.

*FROM* what is said here therefore, we may now conclude, that a great *Variety* of CAUSES may subject the WOMB to a Diversity of ACCIDENTS, and *those* of sundry *Degrees*, which may more or less affect its *Motion* and *Situation*, as already set forth<sup>[171]</sup>.

AND hence it is that we have so many Degrees of Preternatural BIRTHS on Part of the WOMB, All which to enumerate particularly in this Place, would be a WORK as *Superfluous* as *Tedious*: wherefore, to be brief, I shall here also reduce them to the FOUR following, (as before mentioned, SECT. IV. Chap. 13.) viz. Preternatural BIRTHS, proceeding from an oblique Situation of the WOMB inclining Forwards, or Backwards, or to (either Side) Right or Left: which fourfold *Situation* of the WOMB may be rightly and properly compar'd to the Four Cardinal Points of the COMPASS, as the rest of its oblique Positions may be analogously adequated to the Collateral and *Middle Points*: For because, as they decline from the *Meridian*, and derive themselves from EAST, WEST, NORTH, and SOUTH, as formerly observ'd<sup>[172]</sup>; so *those* are less difficult *BIRTHS*, and branch out from the Four mentioned Extremities: since the WOMB, like a *Magnetick Needle*, may run quite round, and be ill-seated every way, or on every *side*. In all which *Cases*, the *INFANT* must absolutely be Turned; which Performance in any oblique WOMB, requires a competent solid *Knowledge* and sound *Judgment*, as well as the best adapted and experienced *Hands*. But of *those*, more particularly hereafter; and *First*, accordingly—

## CHAP. XIX. Of Preternatural BIRTHS, from the WOMB's inclining Forwards.

*IN* speaking to this critical *Point*, I shall *first* give the *Reason* of such a *BIRTH*, occasion'd by this *Position*; to wit, The *WOMB* hanging much *forwards*, especially in *Women* carrying it too *low* in the ABDOMEN, the *INFANT* (betwixt the *Pains*) must needs be forced upon the OS SACRUM, or the VERTEBRÆ bending *inwards*; which stops the HEAD that it cannot conveniently or without Obstruction fall into the PELVIS.

HOWEVER, in this Condition we suppose the INFANT to be well turn'd, I mean (both here and elsewhere) well turn'd in respect of the WOMB, with the Crown of the HEAD lying against the Orifice; than which nothing can be more Right or Natural in regard of the WOMB itself, nor more Wrong and Preternatural in respect of the PELVIS and Vagina of the WOMB, in this forward Situation: Because by reason of this Posture, the INFANT falls transverse upon the OSSA PELVIS, especially upon the OS SACRUM or hindmost VERTEBRÆ; upon which it commonly offers itself with the FACE prone or turn'd Downwards, tho' it is not brought forth, but with the FACE Supine or Upwards. For as it passes, it must be turn'd round, partly in a Circle, with its HEAD prone, and FEET drawn up under it; which happens not in the WOMB, but only as it passes the Orifice into the PELVIS or VAGINA.

NOW what I mean is more plainly *This*, that as soon as the INFANT comes into the *Turning* (which it must pass) it necessarily *bends* and *crooks* itself, as it finds its PASSAGE *bent* or *crooked*; by which means the FACE is sometimes *turn'd down*, and sometimes *upwards*: And *This proceeds* from THAT, in short, as soon as the HEAD begins to enter the *Orifice*, it presently fixes upon (and sticks fast to) the last VERTEBRÆ of the *Loins* standing *forwards*, or to the Os SACRUM; so

that it cannot naturally or possibly go *forwards*, except the HEAD is *bent downwards*, and the *Neck* and whole *Body* be accommodated to that BENDING.

HENCE it is, that THAT which just now was situated prone upon its BELLY in the WOMB, now passing through the VAGINA, is bent upwards supine upon its BACK; and from thence it's evident, that That Inversion is not properly in the WOMB, but in the VAGINA, or (if you please) in the Confines of BOTH: And, in fine, this forward Inversion (as it happens) occasions a most difficult Preternatural BIRTH.

*BUT this*, in short, happens to the *Woman* with *CHILD*, because her *WOMB hangs forward*, or is *resupin'd*, according to the *Depression* made on the *WOMB* by the *Intestines*, forcing it *this* or *that way*; or to either *Side*, as will by and by more fully appear<sup>[173]</sup>. But—–

*SINCE* it is most requisite to know presently in the *Beginning* of *LABOUR*, whether the *WOMB* be placed *forwards*, in order that the Means of Help may be taken accordingly; I shall in the *second place* add the *SIGNS*, or *Tokens*, by which the *MIDWIFE* may know this *Position* of the *WOMB*, and what *she* has best to do in such a nice ticklish *STATE* of Affairs.

*FIRST* then, *She* may know it, principally, by the *Hanging forwards* and *Thickness* of the BELLY, or perhaps by the good *Woman's Information* of the PLACE, where she chiefly feels the *INFANT* stirring; for it cannot *move* but where 'tis *placed*.

*HOWEVER* yet a prudent *MIDWIFE* will have no great regard to such *Uncertainties*, but betake herself immediately to *that* which cannot fail her, the TOUCH; which (in this *Case*) affords her the following certain *SIGNS*; viz.

I. *THE Orifice* of the WOMB is suspended *higher* than usual; which *she* cannot *Touch*, by reaching, without a great deal of *Difficulty*.

II. *SHE* can only *Touch* the lower Border of the *Orifice*, and that only as the WOMB hangs more or less *forwards*; and by no means the *upper Edge*, except the *Orifice* has begun to *fall down*.

III. *SHE* cannot at all, or very hardly, get her *Finger* into the opening of the *Orifice*, and because of that Difficulty, it must then also be *crooked* or *bent*.

IV. SHE will find the Orifice opposite to the bending of the last VERTEBRÆ or the OS SACRUM, and feel it so strongly pressed against the said VERTEBRÆ, when the Pains come on, that it cannot fall down: and lastly, she'll feel the WATERS (if they hang over the Passage) in a thin slender Form.

UPON This the Skilfull MIDWIFE finding these concurring SIGNS, she may be assur'd that the WOMB hangs too much forwards; which Condition requires the immediate Help of Ingenuity and ART to correct this ill untoward Position, and to promote the BIRTH expeditiously. But then these Things are to be carefully perceived and distinguished in the Beginning of LABOUR, before the PAINS have either closed up, or too much depressed the Orifice; yea, in short, even before it sensibly opens: since afterwards all those SIGNS are variously chang'd and alter'd, till at last they entirely vanish.

WHEREFORE let it be deem'd as a certain Rule, that the true Posture of the WOMB is always best discover'd by the TOUCH in the Beginning of the LABOUR: At which time may the Orifice be suspended never so high, the MIDWIFE ought to penetrate so far, until she reaches it; if not sufficiently with her FINGERS, the whole Hand is to be judiciously used, and passed up that Length, because this particular TOUCH is absolutely Necessary for that good End: Insomuch that if any Labouring Woman be against this manual Operation or opposes it, she thereby debars her MIDWIFE of an infallible Method, of discovering the true Posture of her WOMB, and consequently of taking the most immediate proper MEANS for Her own as well as her INFANT'S Relief.

BUT now supposing, after all, the *MIDWIFE* to be certain that the WOMB hanging too much forwards, in a prominent BELLY bearing pretty much out, is deeper depressed than it ought to be; *She* is obliged then in this *Circumstance* to consider accordingly how to correct this *Preternatural Situation*, and assist both the MOTHER and INFANT for the best: To which End, *She* ought FIRST to endeavour that the HEAD may *fall down* into the PELVIS, even to the *bending* of the OS COCCYGIS; and then, SECONDLY, *She* is thence to advance the HEAD gradually, that the *Exclusion* of the *CHILD* may be expedited and intirely perfected at last.

*NOW* in order that the HEAD, together with the *Orifice* of the WOMB, may be so discreetly brought *forwards* into the PELVIS, the

Woman is to be placed with the upper part of her Body lower than the inferiour; I mean, with Head and Shoulders bending downwards, and the Buttocks upwards; by which Means, the Bottom of the WOMB is elevated, and gives the Orifice an Opportunity of being brought more easily into the PELVIS.

THEN the parturient Woman being so placed, the MIDWIFE (using both Hands) ought to clear the WOMB, together with the Head of the INFANT, by putting the one up, as far as there's occasion, into the VAGINA, and laying the other upon the Woman's BELLY, in manner following: viz.——

THE Hand in the VAGINA is (by having two or three of its *Fingers Ends* extended to the upper Border of the *Orifice* of the WOMB) to move it a little beyond the *Head* of the *CHILD*, and to direct it into the *Mouth* of the PELVIS, so that it may fall the more readily down into the design'd Place. But in this critical Juncture the *MIDWIFE* must always take special *Care* not to squeeze or press the *Top* of the HEAD too much, nor to handle it too hard, lest *She* should thereby *wound*, if not also *kill* the INFANT.

AGAIN the Business of the *other Hand*, used externally, is to *drive back* the WOMB, by pressing the *Abdomen*; which must be perform'd also with great Caution and Judgement, not by drawing the HAND from *above downwards*, but pressing as much as the *Woman* can bear it, from *below upwards*; so that (if possible) the WOMB may be thereby *resupin'd* or turn'd *backwards*. Minding always, by the way, that

THIS Pressure of the WOMB is not to be attempted, before the one Hand is first conveniently placed within. But if all This Menage should not yet succeed the *first time* according to Wish, then it may be safely repeated again by turns so often, until the *MIDWIFE* feels the Crown of the HEAD; that is to say, till She feels the Borders of the Orifice quite round about hanging over the Entrance of the PELVIS. Upon which happy Discovery, she may with reason rejoice in her Labour, and be heartily glad of her good Success: Because now the Force of good depressing PAINS only will effectually perfect the Work.

*BUT* before Matters are happily brought this prepared *Length*, the *bearing Woman* is upon no account to begin her *LABOUR*; since *That* would not only be in *vain*, and otherways debilitate the Strength of her Body; but also be of great *Hindrance* to the MIDWIFE

(to whom all the *LABOUR* hitherto belongs) who, as *she* feels the *PAINS* growing and rushing in upon the *Woman*, before their proper Time, ought to charge her strictly, to forbear *working* along with them, and as much as possible to abstain from any *co-operating Depression*. And in fine, as the *MIDWIFE* by having her *Hand* diligently apply'd to the *Orifice* of the WOMB, by strict Attention, may most commonly observe, and previously discern the approaching *PAINS*, before the Patient *Woman* herself can be sensible of them: So she ought also for her *own helping Part*, *ex Officio*, to be quiet and attempt nothing till *Then*, but take her convenient *Opportunities*, always as soon as the *PAINS* are over.

THUS by seasonably lending NATURE an artificial helping Hand, BOTH jointly may easily effect, what neither can do separately: For as it sometimes happens, that the MIDWIFE ought to cease, while she perceives (by the PAINS) that Nature is a working, and therefore ought to work only when the PAINS are past; so it also falls out often, upon other Occasions, that she is to work along with the PAINS, and when those are past, to cease. And thus, in fine, according to different Circumstances, the discreet MIDWIFE knows always the NEEDFULL, what's to be done, or let alone.

BUT in this Place, I doubt not, many *MIDWIVES* will object, and say, How is it possible for Us to perceive the PAINS coming on before the parturient *Woman herself*? To which I ingenuously answer, that *This* also is one of the many Advantages of the TOUCH; since by *That*, I can presently feel a kind of subtile Motion, Contraction, or *Compression* beginning in the Orifice of the WOMB; which is only observable as the Muscles are affected with a New Sense, excited by a New Influx of the SPIRITS; occasioning a New Force or Impression upon the WOMB, which we commonly call a PANG: So that, in short, by distinguishing this Motion from others, I am always able to foretell or advise the Woman of what is a-coming, and to admonish her accordingly of her bounden DUTY, as the Case requires.

*MATTERS* now being fairly brought thus far, that the *Orifice* and the HEAD begin to slide down into the *PELVIS*; the *MIDWIFE* is at this Time to study how to succour and assist the *CHILD*, by rendring its *Passage* easy. In order to which, *she* must first observe to raise the *upper Part* of the Woman's Body a little, and give her some short *Respite*, before she offers to bring the *Orifice* into the *PELVIS*;

because the *Posture* above-directed, occasions considerable *Pain* as well as great Inconveniency: Which being done, the *Woman* for the future is to *sympathize* with every *PAIN*, and *Labour* as much as possible, co-operating mutually with them; since now the PAINS (by the Assistance of the HEAD) begin to open the *Orifice*, and gradually force the INFANT forward to its *Birth*.

HOWEVER yet the MIDWIFE ought in this Case, to be very careful in sustaining, and nice in keeping up the Orifice of the Womb, lest it should fall down together with the Vertex or Crown of the HEAD into the Sinus Sacri; which is a Point so curious and critical, tho' an Accident too common, that I dare well say, not one in Fifty Practitioners in MIDWIFERY understands it thoroughly; otherways I am confident, and morally certain, that many fine Women would have been living Monuments of their Ingenuity, who are at this day only the Dead Remains of their Ignorance.

THIS I think is past all *Contradiction*, when we consider, how some *Practisers* sacrifice the INFANT, first by *opening*, and (as they call it) *braining* the HEAD, and then by drawing it forth with their *Instrument* call'd *FORCEPS*: How *others* also esteem themselves *Masters* of the greatest *ARCANUM*, boasting that they can, without so much as *braining* the *HEAD*, extract the *INFANT* by their *Tool* call'd an *EDUCTOR*: How a *Third Set* again pretending themselves to be the only *genuine Sons* of APOLLO, come slily to correct the *Rest*, by fixing only a couple of HOOKS in the *Eyes*, *Ears*, or somewhere else in the Child's *HEAD*; by which means they as wretchedly produce the *innocent* dead *Babe* as any of the *others*: For it can no more be suppos'd to *survive* this cruel *Treatment*, than the other mentioned *Barbarities*; not to speak of the *Anguish* and *Perplexity* over and above, besides the real Danger all the while brought upon the *distressed Mother*.

UPON this grand Affair of Life and Death, the Desidious and Capricious *MIDWIFE* cries at length, GOD knows I have taken all the *Pains* and Care I could, but to no *Purpose*, for this or that trifling *Reason*, falsely alledged. The *SURGEON* (if he don't pretend the *CHILD* to be already *Dead*) says, Come, it is better to dispense with *one Life* than *Two*; *One must go*, &c. In consequence of which, he prepares his FORCEPS, EDUCTOR, KNIVES, HOOKS, &c. to draw out the *INFANT Dead*, or *Alive*, *Whole* or in *Pieces*, by such disingenuous and barbarous *Means* to save the *MOTHER*. Thus behold the excellent *Art* of *MIDWIFERY* ignorantly perverted! O Deplorable Woman! O Miserable Babe! How much abused! when there is no *other Mean* left to rescue the tender *Life* of the poor *Mother*, but by the massacrous *Death* of her dearest *CHILD*! This *Case* indeed would be very *Melancholy*, but Glory be to *GOD* who has neither left the *One* nor the *Other* to perish at this untimely or inhuman Rate, excepting it be by *Ignorance*, or *Wilfulness*, &c. as aforesaid: No, on the contrary he has provided an *EXPEDIENT* for every *Extremity*, and a *REMEDY* for every *Malady*, as in the present *Case* will appear farther by what follows, *Viz.—* 

THAT such Tragical Events may be prudently prevented, I use my constant and unwearied Endeavours to sustain the Orifice, that it may not come below its proper Place; and that having clear'd the HEAD of the WOMB, I may only bring *it* alone down; which I can much more easily do, than if it was cover'd about with the WOMB, sticking fast (as above) in the SINUS SACRI. And supposing the MEMBRANE to press strongly instead of the HEAD, I treat it all one as if it was the HEAD, taking always Care not to break it, tho' the forming of the WATERS is not to be obstructed; for which Cause, I upon all Occasions stretch out my Fingers wide, applying them only to the Edges of the Orifice, not to the Membrane: And this I continue doing, until the MEMBRANE spontaneously breaks; upon which I manage the Head as aforesaid.

THUS the Infant's HEAD being excluded with the Crown foremost, there is no more Occasion to be at any Pains in keeping up the Orifice; wherefore I now suffer it, together with the HEAD, to fall down past the Bending of the OS SACRUM; which now also, the major Part of it being bare, more easily happens, than it possibly could whilst it was cover'd with the Orifice. Upon this, that the CHILD may be farther relieved and brought out, I now again make use of both Hands, the one inwardly, the other outwardly, as before: But as the Condition is now much alter'd from what it was at that time, I at present proceed after a quite different Manner, and work along with the PAINS, resting only as their Force ceases: For thus I not only observe the PAINS my self, but also at the same time encourage my Woman to Labour, and to persist in her LABOUR with all her Strength; and by Turns, as the PAINS come on, to conjoin their *Force* with her own and my mutual *Endeavours*, in the manner following: namely,

HAVING One Hand in the Vagina, with its Back turn'd towards the RECTUM, I thrust very cautiously the Points of my Fingers as far as I can under the HEAD, where I hold that Hand constantly, until the PAIN comes on; laying the other Hand upon the Belly, about that Part where the Bottom of the WOMB lies: Then as I perceive the PAINS come on, I begin to work with both Hands; to wit, by pressing the internal Hand gently downwards, against the Point of the SACRUM to remove it back out of the way; whilst by the external Hand, I gently raise the WOMB into a resupine Posture, pressing it also softly downwards: I mean softly in Proportion (howsoever) to the Force of the PAIN: for as it gradually encreases, and more and more excites strong LABOUR; so I also by degrees press down more strongly.

HOWEVER yet the External Depression ought always to be Moderate, as the Internal ought to be Strong and Vigorous: Whereupon Matters being carefully well observ'd, (as laid down in Chap. 9.) no MIDWIFE needs be afraid of hurting her Patient Woman in the least; no rather, on the contrary, the more Strength I use now, the more grateful and agreeable I prove to Her being thus circumstantiated. And, in fine, the upper Part of the CHILD's Body being once past that Sinuous Bending above, it presently breaks out all together, and comes away so happily into the World. After which the MIDWIFE is only farther to behave herself with respect to both the MOTHER and the CHILD, as in the Natural Case<sup>[174]</sup>, carefully cleansing, restoring, contracting, and shutting the WOMB as Before. In a Word, with so great Success at last the BIRTH is accomplished, provided these Precepts be carefully and timely observed.

BUT that the Ingenious may be at no Loss in this momentous Affair upon any Occasion, we shall now particularly state the CASE, in which the ordinary MIDWIFE has thro' Ignorance or Negligence, let Matters come so far, that the acuminated or lower Part of the WOMB is fallen into the PELVIS; and the Orifice, together with the HEAD, is broken thro' into the crooked Sinus of the Os SACRUM, and is fixedup there; that the MEMBRANE is broke; that the Infant's HEAD is but a little bare; that the poor Woman (after the Fatigues of a strong or long Travail) is quite spent and tired; and finally, that all these Things have *happen'd* before the extraordinary *MIDWIFE* is perhaps sent for, or at least before He can conveniently be with the *Woman*.

*IN* this Pitiful *Case*, the HEAD being yet but a little *bared*, and sticking fast in the *Sinus* of the Os CoccyGIS (as abovesaid) the *CHILD* cannot possibly make any *Impression* upon the *Orifice*, so as to open it; and therefore the *Situation* of the WOMB is to be alter'd: In order to which, I first place the *Woman* on a commodious *Seat* adapted to the Purpose, such as upon a *Pallet*, or *Low Bed*, or some *Pillows* laid on the Ground; that she may lie with her FACE downwards upon her Knees, with her Head low; her Arms being supported with so many *Pillows* as are requisite to sustain her *Body* (leaning upon them) without moving.

*NOW* I doubt not but some People will think this a *strange helpless Posture*; but as strange as it is, it is certainly the most effectual, and the absolute best One, which can be devis'd for the *Woman's desir'd Relief* in this desperate *Condition*: For by the Help and Means of it, the WOMB is carried down into the lowest Part of the Belly, through its own Weight only; and consequently releases itself out of the foremention'd *crooked* SINUS; which that it may the sooner and more commodiously do, I put my Fingers into the VAGINA behind, betwixt the RECTUM and the HEAD of the Infant, where I press down the WOMB, till the *Orifice* is so far *forced back*, that there is *Room* enough to hold it up, in order that it may not relapse; and also that there may be Room for the HEAD to be depressed into, and open the Orifice. Thus the WOMB and the CHILD being at last *forced so far back*, by an expert *Hand*, the *BIRTH* may be successfully perfected by the above-prescrib'd Means and *Method*; provided always that the *Woman* has sufficient *Strength* and *PAINS* to carry her through the fatiguing *Tryal*.

*BUT* we will how suppose, for better Instruction-sake, her *Strength* to be quite spent, and the *PAINS* to be deficient; in this *CASE* the happy *Issue* of the *BIRTH* is most dubious; but however, then I place the *Woman* again as before, and depress the WOMB as much as I can, until I reduce the *Orifice* farther up into the *larger Space* of the *PELVIS*, that I may the more conveniently *open* it by the Help of an *inward Hand*; and by *that* also moving aside the *Child*'s HEAD, I then seek for, until I find, the FEET; which, upon the INFANT's being right turn'd, with its TOES *downwards* towards the

*Mother*'s RECTUM, I bring into the *Passage*. Now the FEET being thus in the *Passage*, the *Woman* needs not lie any longer in the abovesaid *Posture*; but, turning herself, may now lie with her FACE *upwards*: When I also give her previous *Notice* to prepare herself to *depress* vigorously; I mean as much as she can possibly, when occasion requires.

*IN* the Interim, holding the FEET all the while with my *internal Hand*, I attract them gently *outwards*, until the *BUTTOCKS* and the *BELLY* are excluded: Then taking fast hold of the *CHILD* by *one Hand* under the BELLY, and the *other* upon its BACK; I advise the good *Woman*, in *Case* she feels no *PAIN*, to behave herself as if the *PAINS* were most pressing upon *Her*, and to contribute by *forcing downwards* what lies in her Power; whilst I continually *attract*, and gently *draw* the INFANT towards me, until by this discreet *Management* the HEAD is totally excluded, together with the ARMS into the World. And *thus* at length the *Distressed Woman* may be happily delivered in all these different *Cases*, and difficult *Conditions* of Life. Whence I come to——

## CHAP. XX. Of Preternatural BIRTHS, from the WOMB's inclining backwards.

*Experience* teaches us, that the *WOMB* may be also too much *resupin'd*; or tending with its *Bottom backwards*, may be pressed too much towards the SPINE: So that its *Orifice* is not only raised *too high* in the BELLY, but is also so *obliquely seated*, that it no more answers to the *VAGINA* in a *right Line*, varying more or less, according to the Proportion of this *Tendency* to the BACK-BONE.

FROM this Posture of the WOMB now, it necessarily follows, that the HEAD (tho' never so well *turned*) falls upon, and is violently forced against the OSSA PUBIS; where the tender HEAD sticking, often happens by its own *Struggles* and the *Mother's PAINS*, to be grievously squeez'd and gradually crush'd, so that, until it is removed and brought into the *PELVIS*, the *Woman* can by no means bring forth her *INFANT*. Wherefore the diligent and careful *MIDWIFE* must (by due Attention) make it her Business to discern at the *first* TOUCH this *ill Position* of the WOMB, and presently upon the *first Pang* of LABOUR, try to help both the *MOTHER* and the *CHILD*.

WHEREAS otherwise the slothful and ignorant MIDWIFE, may continue the poor Woman in an irregular LABOUR perhaps some Days, without perceiving the HEAD to be fixed upon *these Bones*, always erroneously imagining the *INFANT* only to be situated *too high*, (because it lies out of the reach of her *shallow* TOUCH) and that it must in due Time *fall down lower* within her *Ken*. Or peradventure otherwise, when by the TOUCH, *she* feels a kind of *Roundness* or *Hardness*, thro' the WOMB, mistaking *This* for the HEAD, *she* thinks the *INFANT* is well turned, and wants only *strong PAINS* to drive it forwards with Success. THIS Ignorance is chiefly owing to her own Stupidity, in that she cannot clearly distinguish between the WOMB and the VAGINA by the TOUCH; nor the Orifice of the WOMB from the Parts of the CHILD, or MEMBRANE; which (in this Case) frequently occasions the Death of many a Dear MOTHER and INFANT.

BUT here it is to be moreover noted of this difficult Situation of the WOMB, that the MIDWIFE (how skilful soever) perhaps can either not touch the ORIFICE at all, or but very little, except it lies wide open, when she may touch at least some Part of the CIRCLE of the Border: For the HEAD being fixed upon the PUBIS above, the whole upper Part of the Edges of the ORIFICE can no ways peradventure be touched with the Fingers, which may only reach the lower Part that is Open.

UPON which, these *Fingers* are cautiously and prudently to be thrust in farther betwixt the *Neck* of the BLADDER, and the *Orifice* of the WOMB: Then being so near the Neck of the Bladder, a discerning *MIDWIFE* will feel a sort of a *Circular Border*, namely, that of the *Orifice* of the WOMB; which if she penetrates with her *Fingers*, she will also find the hard Part of the HEAD, which is *Smooth* and *Globular*, or the opening of the VERTEX; whence she may be certain, that the *INFANT*, as well as the *WOMB*, is too close to the SPINE of the *Back*. Whereupon she ought, without loss of Time, to assist and help the *CHILD* in the following *Manner*; viz.

SHE is to hinder the Woman from labouring all this while, advising her to bear and put by her PAINS, until this Posture of the INFANT can be duly corrected: In order to which, I would FIRST order the Woman to make Water, if she can, that the BLADDER being thereby emptied, may not be hurt by the Pressure of the MIDWIFE's Hand, or the CHILD's Head: SECONDLY, if the MEMBRANE is not yet broken, and the PAINS but few and faint, I would prescribe a gentle CLYSTER, not only to awaken These, but also to remove all Inconveniencies of the RECTUM: THIRDLY, I would then advise to lay the Woman in a convenient manner, upon her BACK with the superior Part of her Body lower than the inferiour, that both the WOMB and the INFANT may the more easily recede or give way back.

*THEN* taking cautiously Hold of the *Border* of the ORIFICE with the *Fingers* of *either Hand*, I would press and draw it *back* towards the *RECTUM*, whilst I employ'd my *other Hand* outwardly upon the

ABDOMEN, a little above the OS PUBIS: I mean, that the Child's HEAD ought to be thrust back a little with the Hand on the outside, pressing it discreetly down; as the ORIFICE is to be drawn back towards the RECTUM, and at the same time also downwards, with the internal Hand.

*IN* the next Place, as I feel the HEAD and the WOMB mov'd a little *downwards*, so I would also advise the good *Woman* to raise the *upper Part* of her Body, yet so as not to stir the *Lower*, and to *bend* herself as much as possible *Forwards*, sitting as if she was going to *Stool*: Because by this *Posture*, she raises both the INFANT and the WOMB *behind*, and consequently drives them *BOTH Forwards*, whilst I would in the *Interim* keep my *HANDS* very fast placed as aforesaid, ready to depress the *HEAD before*, that it may fall directly into the PELVIS. In short, the *HEAD before*, that it may fall directly now advise the *Woman* to observe her *PAINS*, and mutually *labour* with them what she can, with her Body mostly still in a *Sitting Posture*, or kneeling with her *Arms* conveniently supported.

BUT supposing the INFANT to stick very fast upon the PUBIS (which commonly happens by Loss of Time, or by misimproving a critical Minute;) and that the capable MIDWIFE finds both the MOTHER and the CHILD in this miserable Condition, thro' the Neglect and Ignorance of Another: In this Case I would lay the Woman altogether upon her BACK, with her HEAD low, and her BODY a little elevated; then by the abovesaid Method I would try to depress the Infant's HEAD, observing however yet not only to press it down from above, but also first to thrust it back, and depressing it at the same Time: By thus repelling it, I would save the tender HEAD from being hurt by the Depression; since otherways these BONES would leave a Dent or an Impression upon it, if not also wound it over and above.

MOREOVER, supposing that the MEMBRANE should break by Chance, and that by enlarging the Orifice, the HEAD should be much bared: Then I would let the Border of the WOMB alone, and endeavour to thrust my FINGERS betwixt the HEAD (towards its Upper Part) and the OSSA PUBIS; by which means One may most probably draw the HEAD downwards, along with the Orifice. However, in fine, this Case, (as well as all other preternatural BIRTHS) absolutely requires a sound Judgment, a quick *Comprehension*, a good *Conduct*, an easy *soft Hand*, and a dextrous gentle *Method* of treating the *parturient* and *patient WOMAN*. But, farther—

WE will again in the next Place *state* the CASE thus, that suppose the HEAD is too Big, and the CHILD so much compressed, that it cannot be brought into the PELVIS without great Trouble and Difficulty: In this Condition, before Matters come to an Extremity, I would (without Loss of Time) find out the FEET; in order to which, the Orifice (which is now commonly less open) ought to be cautiously open'd with a gentle Force, by thrusting first one, and then more FINGERS upwards, which are to be gradually distended, until at last the whole HAND is entered up to the Wrist: Whereby (after prudently breaking the MEMBRANE) I would now and then thrust back the HEAD, and put it upon one Side, as much as possible by ART.

BUT upon This here it must be carefully observ'd by the way, that I would pass my Hand close up along the INFANT's Body from the Orifice to the Fund of the WOMB, or to the FEET, that it may not come between the SECUNDINE and the WOMB, but betwixt the MEMBRANE and the CHILD: By this Method I shall neither hurt the WOMB, nor the INFANT; but the HAND distinguishing clearly all the Parts of the CHILD, I cannot miss finding the Feet with the greatest Certainty. Tho' I must acknowledge by the By, this to be the Work of a very strong and agile HAND, as well as of a sound and ready Judgment; because of the immense Labour and Difficulty, first in opening the narrow ORIFICE, and then in penetrating through it to the Bottom of the WOMB, as the INFANT obstructs the Way: not to mention the great Inconveniencies also besides, which arise from the Turnings and Windings, as well as from the Length and Constriction of the Passage. However yet—

THUS having found one or both FEET, I would draw them down both together, if possible, always turning the TOES towards the FACE. Whereas if only ONE can be found to be conveniently attracted, as it often happens, I make it fast by a running Knot on a broad Ribband, or by a certain Bandage, called MITRA, or with a soft Linnen Rag about four Inches broad; which I twist together, and hold in the Hand without the Body, as I pass the other up along this LEG, duly observing whether it is the Right or the Left, that I may know which of my HANDS will most commodiously find out the other LEG; and that HAND having reached the CHILD's Belly or Buttocks, I slide it along the THIGH to the other LEG: So that the FOOT being thus found, I bring it also down into the PASSAGE, according to the POSTURE of the INFANT.

BOTH FEET being now thus brought down, if they chance to be *ill-turned*, that is, with *TOES* up and *HEELS downwards*, I discreetly *turn* the *CHILD*, whilst I gradually draw forth the *FEET*. *These*, together with the *BELLY*, being fairly excluded, I hold the *FEET* with *one Hand*, whilst I put the *other* under the *BELLY* and *BREAST*, as far as possible: Or, resting the *FEET* in my *Lap*, with *one Hand* above, and *another* below, I take good hold of the *BODY*, attracting it gently. Upon this I advise and encourage my *Woman* now to *labour* her best, and that whether she feels any *PAINS* or not, since they are now no longer to be waited for with the Impatience of a happy *Delivery*.

*BY* this regular *Method*, in fine, the *HEAD* and *both ARMS* pass thro' the *Orifice* at once, and that without the least *Danger*; because the *Smoothness* of the *TEMPLES* affords always sufficient *Room* for the *ARMS*, as the *Orifice* relaxes and dilates, as has been already observed<sup>[175]</sup>. Now *this*, in short, I take, with Submission, to be the only genuine *METHOD* of perfecting a successful *DELIVERY* in the present *preternatural Condition*, whether the *BIRTH* be *Dead* or *Alive*: So that hence I proceed in course to——

## CHAP. XXI. Of Præternatural BIRTHS, from the WOMB's inclining to either Side.

*THO'* the *WOMB* may be *obliquated* (as has been said) either to the *right* or *left Side*; yet, to abbreviate this Work, I shall contract *both Situations* into *one*; and because the ingenious *Reader* may easily apply what is said of the *one* to the *other*, I shall only treat of that inclining to the *right Side*.

THE most difficult *Posture* of this kind is, when the *Bottom* of the *WOMB* is placed deeper in the *right Side* towards the LOINS, tending more to the *Back* than the *Forepart*. Which the MIDWIFE may know to distinguish by the following *Signs*; namely, 1. By the *Place* where the Woman feels the *INFANT* move most. 2. By that part of the *Belly* which is most pointed and hard on the Outside. 3. By trying the Woman in the beginning of the *Labour*, before the *Pains* have moved the WOMB out of its Place, she will find the Orifice of the WOMB suspended higher, compressed to the *Spine* of the left OS PUBIS or COXENDICIS; by which means the said Orifice cannot be touched without Difficulty; and by no means the *whole* of it, but only the lower Border. 4. She will find the INFANT's Head thro' the WOMB and VAGINA (tho' not bare) laid a-cross the PELVIS, but cannot come at the *lower Part* of it; only with one or more *Fingers*, she may sometimes penetrate betwixt the Spine of the said Bones, and touch the VERTEX.

*BY* these *Signs* the *MIDWIFE* soon finds her *Task* most heavy and perplexed; for from thence proceeds the following *Difficulties*.

I. *IN* this *Posture* the *INFANT's Head* (as soon as it makes the lead *Apertion* of the *Orifice*) is fixed upon the *Spine* of the left *OS PUBIS* or *COXENDICIS*; and the *Head* thus fixed cannot pass forwards, because those *Bones* cannot give way: From hence arise the *Aquæ* 

*Furtivæ*, or a flowing of the *Waters* by Stealth, or as it were, by *Distillation*; the *Orifice* as well as the *INFANT's Head* being shut up by the said *Bones*, so that neither the *Head* nor the *Humours* can open it; save only a little on the *lower Side*: Where the *Waters*, by pressing the *Membranes* downwards in an *acute Form*, break thro' that *acuminated* Part as they also force the *Head* upwards, near to the *Border* of the said BONES.

II. *IT* often happens, by these means, that the *right Arm* is excluded, and falls down to the *Shoulder* in the *PASSAGE*, the *INFANT* being left dry by the unseasonable flowing of the *Waters*: And the *Arm* being thus thrust forwards into the *PASSAGE*, the *Head* is more and more forced-back *upwards*, so that the *Neck* of Consequence is so bent, that it may easily break; and the *Crown* of the *HEAD* (falling against the *Spine* of the *PUBIS* or *COXENDICIS*) is so pressed upon it by the violent *Pains*, that the *BRAIN* may be readily affringed, and consequently the *INFANT* die before *BIRTH*.

III. *THE* most deplorable *Condition* of all is when, after all *Pains* and *Labours* suffered in vain, the MOTHER herself expires, without bringing forth her *Child*; as it too often happens, that after a long continued and miserable *Torment*, the BIRTH is not a Jot advanced, whereby of course the wretched *Woman* must undoubtedly *yield up the Ghost* for want of effectual *Help*. I say for want of *Help*, because the *Help* of such MIDWIVES as are ignorant of the various *Postures* of the WOMB, and the *Method* of correcting them; and of such as do not thorowly understand the TOUCH, but place all their Hopes in *Nature* and *Divine Mercy*; is as nothing, and of no Effect upon this *critical Occasion*: Since the audacious *Ignorance* of such Creatures serves only to tempt GOD and his *Providence*.

*HAVING* thus defin'd and laid down the fatal Inconveniences of this *Preternatural Situation*, I come now to shew People concern'd how to correct it and dispatch a happy *BIRTH*: In order to which, the *præliminary Articles* are the *MIDWIFE'S* indefatigable *Industry*, and accurate *Attention* to the Circumstances of Things.

THEN supposing an *INFANT* to be brought forth *HEAD foremost*; the *Woman* is to be placed with the upper part of her Body a little elevated, the *MIDWIFE* then finding (by the TOUCH) the *Orifice* to be but moderately press'd upon the *Left OS PUBIS*, or *COXENDICIS*; in this *Case*, she is to be laid down full upon the *right Side* a little

obliquely, that the WOMB may fall back by its own Weight, and not relapse against those *Bones*.

NEXT after this I would endeavour to get my right Hand-Fingers above the upper Border of the Orifice, and thereby remove it a little, and bring it down nearer the Cavity of the PELVIS. To facilitate which Work, I would order some of the By-Standing Women to raise her right Side a little, which of Consequence raises the WOMB itself; and thus I would, by raising and letting it down by Degrees, move it forwards into the PELVIS: However, always taking special Care, that the WOMB, together with the Head, do not slip down too far into the crooked Sinus of the OS SACRUM, so as to stick there, (as has been already precaution'd in the preceding Chapter:) to prevent which unlucky Accident, I would advise to apply all possible Care and Pains in the Beginning, to sustain and keep up the Orifice, and to bare the HEAD sufficiently before its Descent; observing also the same Management in point of the Humours, until the Membrane breaks; which being broken, I would treat the Head in Manner as aforesaid.

NOW tho' the HEAD in this Posture offers itself as if it were bent aside, because of the lateral Distorsion of the WOMB, I would first bring it to a right Position, and then manage it as if it had presented itself directly: And besides, the HEAD being thus directed into the PELVIS, I would always take care that the Woman's Body be bent a little towards the left Side, that the CHILD may the more readily be carried down by its own Weight into the PELVIS. But, in short, as to the farther Exclusion of the INFANT, and After-Birth, as well as the Cleansing and Contraction of the WOMB; These Things are to be perform'd, as directed by the foregoing Chapter.

HOWEVER, we will now state the *Case*, and suppose that the *Woman* is spent and tired out with continual hard *Labour*, before the capable *MIDWIFE* is sent for: Upon this *Condition* the *BIRTH* is to be hastened by all possible prudent Means. In order to which, I would (without Loss of Time) endeavour to *turn* the *INFANT*, and extract it by the *Feet*; Because to direct it otherways into the PELVIS, would be too tedious upon this Juncture. For to bring it *Head foremost*, would create vehement *Pains*, which infallibly would expose *both Lives* to extream Danger. But now, in fine, having thus at large insisted upon the various *Cases* of *Preternatural Births*, arising from the four extream *oblique Situations* of the WOMB; It

remains yet still, that I also subjoin a few Words, upon such *Preternatural Cases*, as may proceed from the less *oblique Positions of the same Body*; and that briefly in manner following—

## CHAP. XXII. Of Præternatural BIRTHS, proceeding from the Median oblique Situations of the WOMB.

AS the three preceeding *Chapters* concern only the Extremities of an *obliquated* WOMB, so they necessarily lead me in this Place to offer a short *Hint* Upon the *Median* or *Less oblique Uterine Positions*. Which notwithstanding their great *Variety*, according to the just Comparison formerly made<sup>[176]</sup>, I shall for Brevity-sake comprehend in *One*, and treat of in general *Terms* as subsequently follows.

I. *I* observe that however conspicuous and remarkable the *Difference* of these *Preternatural Postures* may be, especially *That* betwixt the *Four* mention'd *Extremes* and the *Natural Situation* of the WOMB; yet I fear, that there is too much Reason to suspect, that this *Difference* is but little known to the generality of *Practitioners* in *MIDWIFERY*, otherways I am sure *Patience* would not be so much cry'd up, or at least *Time* would not be so much trifled away, (at every difficult *LABOUR*) by the *Ordinary Boethogynists*, neither would the Use of *SHARPS* be so much practis'd by the *Extraordinary MIDWIFE*.

II. I observe, that tho' a WOMB *less oblique*, occasions a *less Difficult*, or more easy *BIRTH*, than any of the *Extremes*, yet the least Degree of an *oblique uterine Posture*, may be of great Hindrance, and imminent Danger to the *Woman*, whose attending *MIDWIFE* is ignorant of it, as well as of the exact *Method* of restoring it to its *Natural State*.

III. *I* would observe by the way, that as the fatal *Consequences* of such Ignorance, have already been sufficiently precaution'd in the preceeding *Chapters*; so it would be *supervacaneous*, and altogether needless to re-assume or repeat them in *This*: Wherefore I shall only farther, once for all, exhort and adjure such *MIDWIVES*, as have any

regard for their own *Consciences*, and the *Lives* of their Neighbours, that they would qualify themselves duly in these excellent Points of Knowledge. And *This* I have the more Reason to inculcate, because I never yet knew an assiduous *MIDWIFE*, who was *thus perfectly* well endued with the *essential Qualifications* of her PROFESSION, but the great *GOD* rather (to whom the Glory of all Things is due) perpetually compleated his own *Gifts*, and crown'd the *Labour* of her Hands with desirable *Success*.

FOR as the Husband-Man, who never sowed, can never expect to reap; or as the Gardener, who never planted, can never hope to gather; so neither can the MIDWIFE who was never regularly qualified, ever justly hope or expect to effect a happy DELIVERY; especially not in Cases of Difficult and Preternatural BIRTHS: Neither can the Consequences of her Mistakes or Ignorance on the other Hand, ever detract from, or lessen, the Divine Power, which is still the SAME, and can always do all Things that it will, but will not always do all that it can. Besides HE, who has been pleased to lay such Burthens upon us, to try the Patience and Constancy of One, and to exercise the Industry and Charity of another; HE, I say, often executes his Judgments upon some, for the Sins of both Offenders, that all Things may the more manifestly tend to his own eternal Glory.

IV. I come now in the *fourth* Place by certain *Demonstration*, to explain the Nature of a WOMB less *obliquated*, and to lay down the genuine Method of correcting any *Preternatural Situation* whatsoever of the disorder'd or distorted WOMB.

*IN* order to which, I would previously observe, that all such *Postures* of the WOMB, whether more or less, either tending *aside*, or *prone*, or *supine*, are only best discover'd by the *TOUCH*: Because the *Orifice* always answering in a *strait Line* to the opposite *Situation* of the *Bottom* of the WOMB, can never fail to shew its *Posture* to the judicious *MIDWIFE*.

HENCE if the MIDWIFE does but know exactly the Natural Position of the ORIFICE, she may thence easily conceive by how much it differs in an obliquated WOMB, and accordingly thereby readily judge whereabouts the Bottom is seated: Which Situations of Bottom and Orifice being known, she can consequently be at no loss to comprehend the Disposition of the whole Uterine Body. And if she

now remembers or recollects what has been said of *restoring* and *replacing* the most *extream*, or most *oblique* WOMB, she will have no Difficulty in restoring any WOMB *less oblique* to its *Natural Posture*; This depending entirely upon that Method, to which I refer<sup>[177]</sup>, for Brevity's sake.

*IN* short, I shall here only add, that if the *INFANT* offers itself *well turn'd*, in this *less oblique* WOMB; the *MIDWIFE*, having restored the WOMB to its right Place and natural *Posture*, will find nothing more to do, but to take Care to facilitate and enlarge the *Passage*, and receive the *CHILD* tenderly with the *Head foremost*. Whereas in *Case* the *INFANT* presents itself *ill-turn'd* in this WOMB, it is to be very circumspectly extracted by the Feet; as by and by will more amply appear from what ensues, *Viz.—* 

### CHAP. XXIII.

# Of Preternatural BIRTHS, proceeding from complicated Causes, of both the INFANT and the WOMB.

BY this sort of BIRTHS, I mean such as are Preternatural, both in respect of the Situation of the CHILD, and of the WOMB. Which complicated Preternatural BIRTH is (of all others) the most dangerous; because of an Indefinity of Accidents and Difficulties with which it is always attended, according to the many various Postures in which both the INFANT and the WOMB are found: All which to enumerate here, and to guard particularly against them, as I have done in the preceeding Cases, would not only augment the Bulk and Charge of this WORK, but also be in some respect altogether Needless: Because if I was to content my self to treat this Chapter in general (without descending to particular) TERMS, I would not doubt but that the ingenious Reader would even thence readily form a clear IDEA of all such BIRTHS, from the many different Cases already stated and discussed; which if thoroughly well understood, the Rest cannot but be easily comprehended.

*HOWEVER*, that I may not leave the weaker *Capacity*, or the doubtful *MIDWIFE* to the Uncertainties of her own scrupulous *Judgement*, I shall propose and resolve some of the most difficult and dangerous *Cases* belonging to this *preternatural Subject*, and *that* as far as is really requisite, in manner following; *viz.*—

I. WE Shall suppose that the *INFANT* is ill-turned, and presents itself *preternaturally*, with *FACE*, *CHIN*, HAND, ELBOW, SHOULDER, BREAST, BACK, BELLY, SIDE, BUTTOCK, KNEE, FOOT, or any other Part or *Member* first, in a WOMB tending obliquely forwards. In this *Condition*, I shall *first* show the *MIDWIFE* how, and by what *Signs*, she may know and discover such perverse *Postures*; and *secondly* 

how, and by what Means, *These* may be rectify'd, the *CHILD* extricated, and the *MOTHER* reliev'd in Life.

THEN as to the First Point, I would have it minded, that the TOUCH is the only Expedient, by which the Situation of the INFANT in any WOMB, whether Oblique or Direct, is to be discover'd and perfectly known. Which when the *MIDWIFE* finds to be preternatural, she needs not much trouble herself about what precise Part offers or comes first in the PASSAGE: Because of this short *Rule*, which I would not have her to forget; namely, That, when the HEAD does not present itself *first* in this complicated *Case*, the CHILD is to be drawn out by the FEET. For in this ill Position of both the INFANT and the WOMB, the Version of the CHILD succeeds more easily than if the HEAD was *foremost*: Wherefore I would lose no Time, but as Soon as I had discover'd all Circumstances aright, I would commence my Business upon this Occasion, before either the *MOTHER* or the *INFANT* are much spent, that I may perform my Work, while they both can mutually concur with me towards their own *Relief*; That is, while the WOMB is yet suspended in the upper Part of the PELVIS, and the Membrane not yet broken.

*IN* order to this *Second Point*, the *Woman* being commodiously placed, the *MIDWIFE* is to pass up her *Hand* into the *VAGINA*, and dispose the *Orifice* of the WOMB to open, which is now sooner done than if the HEAD came *first: This* being done dextrously, she is to put first *one* or *two Fingers*, then *all* of them successively into the *Aperture*; and when that is sufficiently enlarged, she is to penetrate into the WOMB, and either break the *MEMBRANE*, or wait its *spontaneous Breaking*, as she judges best by occurring *Circumstances*. In the next place, she is to look for and find the *FEET*; and, the *TOES* being always turn'd towards the RECTUM, they are to be forthwith brought into the PASSAGE: proceeding still farther in the due and regular *Method* of extracting the CHILD, as already taught<sup>[178]</sup> and dilucidated.

II. WE will suppose moreover, that the INFANT is *ill-seated*, and presents itself *preternaturally* with any of the aforementioned *Members first*, in a WOMB hanging *obliquely to either Side*. In this *Case*, I would sincerely advise the *MIDWIFE*, to lose no Time in opening the WOMB, breaking the MEMBRANE, turning the CHILD, and extracting it by the FEET: Because in this *Posture* of both the *BIRTH* 

and the *WOMB*, Experience has taught me that nothing can be safer and less dangerous than this *Method*, when ingeniously and presently perform'd with Dexterity.

*IT* is true indeed it may be *objected*, that I dissent in *this Matter*, from most (if not from all) *Authors*: To which I *answer*, in short, that *Those* from whom I do differ, were never acquainted with this *complicated preternatural Condition*, but always supposed the *WOMB* to continue in its proper Place, never dreaming of its various *Motion*, nor suspecting its *oblique Situation*; erroneously imagining all *preternatural BIRTHS* to proceed merely from the ill *Version* of the INFANT: In which *Circumstance* however, when it happens so, I confess they are so far in the right, that the HEAD is to be *first* brought into the PASSAGE, and the CHILD excluded by it with all possible Expedition.

BUT that I may farther elucidate the true State of this Case, as it becomes me to speak the Truth ingenuously, it is my candid Opinion that, in any oblique Posture of the WOMB, it is the safest, quickest, and most convenient Method to extract the INFANT by the FEET, and that presently in the Beginning of the LABOUR, either before or at least presently after FLOODING, as occasion requires. For this very Reason, and to this Purpose, I hope, I may farther justly lay down one certain Rule; namely, that all BIRTHS ill-turn'd, in a WOMB illseated, are to be rightly turn'd again, and drawn out by the FEET. Which Rule, if duly observed, will, I am positive, save a World of Women and Children, that otherwise must inevitably perish; since as for my part, I know no Situation of the INFANT in an oblique WOMB, more difficult or dangerous than the HEAD's offering itself first; and that because the BIRTH cannot be then turned without the greatest Difficulty and most extreme Pains.

*THIS*, in short, will be readily granted by All, who do consider or conceive that the *WOMB* (being fixed by *Ligaments* on both sides) is always more inclinable to *fall Forwards* or *Backwards*, than to either *Side*, and first most commonly *bends back* before it comes to any *lateral Posture*; and that from hence of consequence, the *WOMB* is *distorted* as well as *obliquely situated*. By reason of which *Distortion*, if the *CHILD* comes *Head foremost*, it falls down in the *PELVIS obliquely*; and tho' a judicious *MIDWIFE* may bring the HEAD directly into the PELVIS, yet the *Shoulders* following, must needs fall

upon the Pelvis *a-cross*, in its narrower Part; whereby of reasonable Consequence the INFANT must be distorted in the *Passage*.

*NOW* in this *Case*, no PAINS, how violent soever, can avail to force forwards the *BIRTH* so fixed upon these *Bones*; wherefore (I say) when the *WOMB* is thus *seated*, it is most safe in the *Beginning* of the *LABOUR*, to open its *Orifice*, break the *Membrane*, turn the *CHILD*, and take it out by the *FEET*; since by the HEAD's coming now *foremost*, both *Lives* are at Stake and in great Jeopardy.

HOWEVER yet it may be again objected, that I have already prescribed another *Method* in *Chap.* 21; *viz.* of bringing the *Orifice* together with the HEAD into the PELVIS, and promoting the *BIRTH* in that Manner: To this I *answer*, that my *Reason* for so doing, was not only to convince some People, that I know *their Method* as well as *my own*; but also to whet or assist the *Judgment* of such good *MIDWIVES* as cannot forsake their own old *By-Paths*; Not that I ever design'd to recommend *it* to any, tho' I must however acknowledge, that sometimes it may effect the desirable *Ends*; but according to the *Rules* of irrefragable *Truth*, and sound Judgment, we find that, in this *Position* of the WOMB, let the *BIRTH* offer itself as it will, the only laudable *Method* is without Loss of Time to extract the INFANT, and deliver the *Woman* as above-directed.

III. I observe upon the whole, that as the immediate present *Case* is applicable to either (*right* or *left*) *Side*; so what is said of the foregoing *Condition*, with respect to the WOMB's *inclining forwards*, may be easily apply'd to the *Case* of its *tending backwards*: Only with this considerable Difference, that the *oblique forward Posture* of the WOMB, is the most commodious of the *Four* mentioned *Extremes*, and consequently admits of a more easy *Exclusion* of the *BIRTH* by the *Head*, than any of the rest mentioned.

*NOT* but that either of these grand or complicated *preternatural BIRTHS* imply and prognosticate imminent Danger to the *MOTHER*, or the *CHILD*, or *Both*; as well as incredible *Labour* and *Fatigue* to the faithful *MIDWIFE*; who, in such *Cases*, can less distinctly feel, less commodiously handle, and more difficultly come at the Matter, so as to dispose the *INFANT'S Members* for *Attraction*, than in any other *Condition* of *BIRTH*: Hence it is, in short, that so many *MIDWIVES* are liable to the most egregious Mistakes, and unaccountable Deceptions upon these unlucky Occasions. But—

AGAIN farther, I hope I may freely speak my Mind, and openly avow, that the most of these BIRTHS proceed merely from want of seasonable and skilful Assistance in the beginning of the LABOUR: Because the BIRTH (however well seated then) by reason of the bad Situation of the WOMB, cannot possibly pass thro' the PELVIS of itself; and not being judiciously assisted at that nice Juncture, behold, from a Natural, it falls on a sudden also into a Preternatural Posture. From hence we have this extreme difficult and most dangerous sort of *Preternatural BIRTHS*, as will more conspicuously appear from a deliberate *Reflection* upon the preceding *Chapters*. And This much (I hope) may finally suffice any intelligent *Reader*, to conceive the different Circumstances of all complicated Preternatural BIRTHS whatsoever. Whence I go on to the Fourth and last Sort of Preternatural BIRTHS proposed; namely, Those proceeding from intervening accidental Causes; which because they are also different, I shall handle briefly and separately in the ensuing Manner; *viz.*—

#### CHAP. XXIV.

## Of Preternatural BIRTHS, proceeding from the NAVEL-STRING's coming first, and that either alone, or with some other Member.

AMONG the various unhappy Accidents, which may happen in or about the Time of LABOUR, the present Case is none of the most auspicious; in as much as it may, in sundry Respects, occasion a very difficult Preternatural BIRTH, according to the Difference of Circumstances: For the NAVEL-STRING having fallen down and come first in the Passage, may be variously turn'd, and consequently cause several and sundry Inconveniences, as follow, viz.——

I. WHEN the Umbilical Vessel falls down alone into the PASSAGE, without any other Part, the BIRTH is then commonly situated across in the WOMB; and in this Condition, BACK or BELLY, HAND or FOOT, may be probably expected to come first: Wherefore the active MIDWIFE ought to discover the real Posture by the TOUCH, and that at least before all the Waters are yet flow'd off and evacuated; and then betimes to fetch away the CHILD by the FEET, unless the HEAD be more convenient or pat for the Purpose. But these Cases being already particularly discussed<sup>[179]</sup>, I shall add nothing farther upon them in this Place.

II. *THE String* may fall down *double*, and so swell with *Cold*, as to obstruct the *Passage*, which however is but the smallest Consideration in this *Condition*, because by its hanging down *double*, it may be so shortned, that the *CHILD* may be detain'd, appending by it in the *Orifice*, until the BLOOD of the *Umbilicals* coagulating either by *Cold*, or by *Compression* in the *Passage*, the due *Circulation* is obstructed, and the INFANT expos'd to the greatest of *Dangers*, if a very speedy *DELIVERY* does not prevent the fatal Accident.

THE Prudent *MIDWIFE* ought always to be very sollicitous about this *Case*, making it her particular *Care* from the beginning of the LABOUR, as soon as perceiv'd by the TOUCH, and before the *Waters* break, to avert or hinder its either coming *before*, or *along with the* HEAD, by removing it judiciously according to *Art*. But supposing she comes too late to prevent the *Mischief*, and that the STRING is already in the *Passage*; then it is to be *put back behind the* HEAD immediately, and kept there until the HEAD be fully directed into and lodg'd in the *Passage*. However it sometimes happens that it cannot be kept-up so *long*, and that the *MIDWIFE*, whatever *Pains* she may take, cannot hinder it from extruding itself at every PANG: In this *Condition*, I would advise her (without delay) to extract the BIRTH by the FEET, and that notwithstanding the HEAD should be *foremost*.

III. *IT* also happens sometimes, that the STRING without hanging down, is variously compress'd betwixt the HEAD and the *Bones* of the PELVIS, which (stopping or impeding the *Motion* of the BLOOD) soon occasions the INFANT's inevitable Death.

*IN* which *Case*, if pressed against the OSSA PUBIS, having laid the *Woman* on her *Back* with her *Head low*, and the *lower Part of her Body raised*, I would press *back* the INFANT'S *Head*, and put the *STRING* as much as possible behind it; upon which, then I would bring the *Head* forthwith into the PELVIS, unless it be more convenient to *turn* and *extract* it by the *FEET*.

AS also, tho' seldom, it may happen, that the Umbilical may be pressed back by the HEAD against the Os SACRUM: In which State of Affairs, I would turn the Woman, if Strength may permit, upon her KNEES, whilst I employ either Hand on the Back Part, in order to remove the HEAD, how firmly soever fixed: Whereas if the Patient be weak, I would lay her upon either Side, drawing up one Foot to her Belly, for the Advantage of obtaining more Room, in order to effect the same Thing; which, tho' difficult, is no impossible Task for the expert MIDWIFE.

*BUT* if it chances to be pressed against either of the OSSA ILIA, having laid the *Woman* on the contrary *Side*, with the *lower Part* of her Body elevated, I would remove the *HEAD* with the opposite *Hand*, and free the *STRING*; proceeding otherways as in the former *Cases*, with *HEAD* or *FEET*, as I should find most convenient.

IV. *AGAIN*, it also sometimes comes to pass, that the *STRING* is found lying upon the *Forehead*, which is indeed most *dangerous*; but it is easily removed with good Judgement to the *Temples* of the HEAD, which I take to be a safe *Position*, because there the *Pressure* is much less aggravated.

V. *MOREOVER* it likewise sometimes happens, that the *STRING* comes along with the *Shoulder*, *Elbow*, *Hand*, *Foot*, &c. without touching the *HEAD*: Upon this then as soon as the *Humours* have flow'd, I would pass my *Hand* quickly up, and bring the *CHILD*, *Head* or *Feet foremost* into the *Passage*, according to its *Situation*, always detaining or stopping the *STRING* from coming out before the *BIRTH*: Whereas if the *STRING* be already excluded along with the *Foot* or the *Arm*, it is to be *repelled* with all necessary Speed, Conduct, and Caution, and then the *INFANT* ought to be dextrously drawn out by the *Feet*.

VI. I have also seen the *CHILD* brought forth by the *HEAD*, with the *Umbilical* circumvolv'd, or turn'd twice or thrice round the *NECK*; by which means of the *STRING*'s being so much shortned, the *BIRTH* was stopped or retained in the *Passage*: Upon this Occasion, I endeavour'd to slacken the *STRING*, and so bring it over the *HEAD*, but finding it too *strait* and *short* to be so ordered, I *tied* it in two places (at about two or three *Inches* distance) and then *cut it in two* betwixt the *Ligatures*: That being done, it was my Business to lose no Time in attracting the *INFANT* and delivering the *WOMAN*; otherways in this *Condition*, it would have soon expired.

## CHAP. XXV. Of Preternatural BIRTHS, from the AFTER-BIRTH's coming first into the PASSAGE.

ANOTHER Preternatural Accident to which the BIRTH is also sometimes liable, is the Falling down of the PLACENTA into the Orifice of the WOMB; which of course must needs obstruct the Passage, and prevent the timely Egress of the INFANT.

*NOW* tho' the ignorant MIDWIFE often occasions this untoward *Accident* by her own unskilful and imprudent *Treatment*, or rough and indecent *Usage*; yet the Ingenious *MIDWIFE* discovers this *Case* in time by *two* certain different *Ways*: Namely, FIRST, by the TOUCH, when she can neither feel the *MEMBRANE*, nor the naked *HEAD*; but (on the contrary) perceives a thick, soft, fleshy, boneless *Substance*: SECONDLY, by a *Bloody Flooding*, which constantly attends this *Condition*; whereby both the *MOTHER* and the *CHILD* are imminently endangered, as is already more abundantly set forth<sup>[180]</sup>: Unless the skilful *MIDWIFE* can prevent the fatal *Consequence*, by accelerating the *BIRTH*; which, however yet, is not to be rashly attempted without due Circumspection.

*BUT* notwithstanding the daring *Difficulties*, and time-serving *Precautions*, mentioned by most *Authors* of my reading and revolving, in this *Case*; I can conceive no extraordinary *Perplexity* which can attend it, if the *DELIVERY* be but *timely* or *seasonably* undertaken, before the *Woman's Strength* and *Blood* be too much exhausted. I know *Daventer*, *Peu*, and some *others*, make long *Ambages* or Circumlocutions upon this *Head*; for *some* are at great Pains to teach us how to perforate the *SECUNDINE* with a *Hair-Needle* instead of our *Fingers*, and *others* how to keep it back, until the *INFANT* be first born: But for my part, as I already foresee sundry *Difficulties* that will arise in these Practices, so I shall be loth to come into them, and that because——

FIRST, in penetrating the PLACENTA with any acute Instrument, the CHILD (if not the MOTHER also) may be easily wounded: SECONDLY, supposing it to be done with the FINGERS, the Hole must be dilated in proportion to the *Aperture* of the Mouth of the WOMB, and then *this* mangled MASS must be dispersed to *all Sides* of the Orifice; by which Means, Daventer himself acknowledges, that it often perfectly congeals with BLOOD, and sticks so fast to the WOMB or VAGINA, that the *Ignorant* would not only take them to be *grown* together, but also believe them rather to be one and the same Body: Which consequently must require both great *Pains* and *Difficulty* to be separated, and at last a very diligent *Scrutiny* must be made, that no Fragment be left any where Behind, since in this Condition no just *Conjecture* can be made by the Eye: THIRDLY, by retaining the SECUNDINE in the WOMB, when its heaviest and most bulky Part (the PLACENTA) is fallen down into the *Entrance*, let it be never so judiciously managed and moved, it possesses a considerable deal of Room, and consequently obstructs the Operation of the MIDWIFE's Hand, lying as a cross thwarting Impediment in her way, which at the same Time blockades or totally shuts up the Passage of the CHILD.

WHEREFORE, and considering that this *Body*, when so loosened and separated from the WOMB, can never possibly be any more *serviceable*; but, on the contrary, highly *detrimental* to both the *MOTHER* and the *INFANT*, as aforesaid; I cannot but be of Opinion, that it is both the safest and shortest Way, to extract the *SECUNDINE first*; by which expeditious *Step*, the *MIDWIFE* not only gains more *Room* to turn the CHILD, but also (this being done) she can much more commodiously draw it out by the HEELS: Animadverting always by the way, that in this critical *Condition*, the *BIRTH* must immediately follow the *SECUNDINE*, without the Loss of one Moment's Time, and *that* especially for stopping the *Floodings*, which would otherways not only soon suffocate the weak INFANT, but also in a short Space of Time effect the certain *Death* of the tender MOTHER.

## CHAP. XXVI. Of Preternatural BIRTHS, proceeding from the Death of the INFANT.

AMONG the many Preternatural BIRTHS mentioned, I think that of a Dead CHILD, may now at last justly take place.

*BUT* because this *Case* is too commonly mistaken, and that the *Live INFANT* is too often taken for *Dead*, and consequently the wretched innocent *Creature* treated accordingly; I think it may not be amiss, before I enter upon this DELIVERY, that I make a few previous requisite *Remarks*; by which the extraordinary *MIDWIFE*, who is commonly sent for too late, may perfectly know whether the *BIRTH* be *dead* or *alive*; to the End that, so also in Case of *Necessity*, it may be accordingly managed: Since in this fatal *Condition* I have known *several Persons* to have been grossly deceiv'd, who have depended upon the *Relation* of the sick WOMAN, or taken it upon the *Credit* of the ignorant attending *MIDWIFE*.

FIRST then I know it to be ALIVE, if, by laying my Hand on the MOTHER'S Belly, I find it stir or move: Or, SECONDLY, If I have not full Satisfaction this way, I would convey my Hand into the WOMB, as soon as the Waters break, to feel the Pulsation of the NAVEL-STRING; which the nearer I feel to the CHILD'S Belly, the stronger I find it beat, if ALIVE: Or, THIRDLY, I would put my Finger into the INFANT'S Mouth to feel its Tongue, which (if ALIVE) I should perceive it to stir, as if it would suck.

WHEREAS, on the contrary, we may know it to be DEAD, when a certain nauseous and cadaverous *Humour* flows from the WOMB: Or, when the *Woman* feels a great ponderous *Weight* in her *BELLY*, tumbling always towards that *Side*, which she inclines to, or lies upon: As also when we find the *CHILD cold* in the WOMB; or the *Umbilical* Vessel without PULSE; or the TONGUE *immoveable*: Or

lastly, when I perceive the *Dissolution of the Cuticle* on the Top of the HEAD, I am then positive that the FOETUS is DEAD; because, as *this* is not easily *dissolved*, neither does it happen immediately, but some Space of time after DEATH.

*IN* this *Case* then of a *dead CHILD*, the *Labour* is commonly lingring and dangerous, because of the few, faint, and slow *PAINS* which seize the *Woman*; so that *Nature*, being half overthrown by the *Death* of the *INFANT*, which now can no ways help itself, absolutely requires to be assisted by the most expeditious ART: And *that* best, in my humble Opinion, by the *Means* and *Method* following, *viz.*—–

FIRST I would endeavour to awaken and promote the PAINS, by one or more sharp and strong *Clysters*: But SECONDLY, if *these* do not succeed so expeditiously as necessary, I would introduce my Hand into the WOMB, sliding it all along under the BELLY towards the FEET; and so, with *Face* and *Breast* downwards, I would gently extract it by them; in the same manner, as if it was ALIVE. Only, in this *Case*, great *Care* must be taken, that the HEAD may not unhappily *sever* itself from the *Body*, and consequently *stay behind* in the *WOMB*; which Accident may easily happen in the *Passage*, especially if the *BIRTH* is any ways *putrefy'd*.

HOWEVER, after all, in *Case* of such an untoward *Occurrence*, I would still excuse myself from the *Use* of an EDUCTOR, and debar myself from the Practice of any *Instrument* whatsoever, save only that of my own natural *HAND*; which, I think, in all *Conditions* of *BIRTHS*, whether *Natural* or *Preternatural*, *Dead* or *Alive*, is solely *obliged*, and only best serves, according to the *Rules* of my *Profession*, to discharge the *Duty* of all the *INSTRUMENTS* in the *Surgeon's Shop*; excepting only in the *Case* of a *MONSTER* or a very *Hydropical CHILD*.

*BUT* in the present *Circumstance* of the HEAD's being separated from the *Body*, as soon as I have extracted the *CARCASE*, as above; I would instantly convey back my *Hand* into the *WOMB*, and put one or two of its *Fingers* into the *Mouth* of the *HEAD*, placing my *Thumb* under the *Chin*: For by *thus* taking Hold of it by the *Jaw*, I would extract it gently, and *that* with the greatest *Ease* and *Safety* to the *PATIENT Woman*.

NOW having thus, in fine, both particularly and at large, treated of the several Sorts of Natural, Difficult, and Preternatural BIRTHS: And having also for the common Good of Mankind, without any Affectation, Hesitation, or Reservation, candidly laid down, and ingenuously set forth the most certain, brief, plain, easy, and unprejudiced INSTRUCTIONS, which perhaps have ever yet been committed to PRINT, upon the excellent Subject of MIDWIFERY: And having likewise, in a Word lastly, for the true Direction and good Government of all MIDWIVES, fairly laid (as it were) and faithfully delivered the big-belly'd Woman, in every relative Case or Condition of BIRTH, which may or can happen to her: It now only remains, I would modestly think, that I should (in the next place) come to take all the necessary Care, and make the most requisite Provision possible for the perfect Recovery of my CHILD-BED-WOMAN; and that in the ensuing Method.

#### SECT. VI.

### CHAP. I. Of the DIET and REGIMEN of the Puerperial or Child-Bed-Woman.

THE Good Woman being now delivered, and laid in CHILD-BED, may rightly be compared to a SHIP, which, after a dangerous nine or ten Months Voyage, rides at Anchor in her PORT; where, tho' arriv'd with great Security, yet if not well moor'd against sudden Winds and Storms, she may perhaps at last drive from her Anchors and suffer SHIPWRECK: So in like manner if both the MOTHER and the CHILD be not duly taken Care of after the BIRTH, Both may be still expos'd to the Danger of DEATH. Wherefore, to prevent all such melancholy Accidents, I shall first point out the proper REGIMEN of the One, and then successively direct THAT of the Other, in the following Manner; viz.—

I. *THEN*, immediately after the *BIRTH*, a soft gentle *Closure* may be apply'd to the WOMB for repelling of the *cold Air*; of which we must be now very cautious, if we will *avert* the fatal *Consequences* that may thereby happen: As also a small *Plaister* of GALBANUM with a little *Civet* in its Center, may be applied to the *NAVEL* for attracting, or rather retaining the WOMB in its proper Place, where the *MIDWIFE*'s careful *Hand* has fixed it after the *DELIVERY*.

II. *THE Patient* having her *Body* wrap'd about with a *warm Cloth*, and her *Hips* girt round with the same, is to be placed conveniently

in a *warm* BED; that is, directly upon her *Back-Bone*, with her *Head* and *Body* a little elevated, for her *breathing* and *cleansing* the Better; as her *Thighs* and *Legs* also are to be stretched down close together: Whereupon *now*, if not *before*, she ought to have a little good *Chicken* or *Pullet-Broth* for her Refreshment; which being done, all *Doors* and *Windows* are to be shut, and the *Bed-Curtains* drawn close, that she may rest and sleep quietly.

III. *IN* the next place, the *Closures* are to be remov'd, and the *clotted* BLOOD taken away; which being diligently done, the *BELLY*, *LOINS*, and *PRIVITIES* are to be anointed with the Oil of *sweet Almonds*, or *white Lillies*, mixed with a little warm *Wine*, which may be repeated at pleasure, for allaying the *PAINS* of these *Parts*: And as the *Woman* is to be carefully kept always very *warm*, as well as disposed to *Rest* and *Sleep*; so every now and then, she is to be comforted with some small Matter of any convenient FOOD; abstaining however chiefly from *strong Meats*, as well as from all *hot* or *strong Liquors*.

IV. A DECOCTION of *Barley*, *Linseed*, and *Chervil*, or *Marsh-Mallows* and *Violet-Leaves*, with a little Honey of *Roses*, may be afterwards used *Milk-warm* three or four times a Day, by way of *Fomentation* for the first five or six Days of *CHILD-BED*: Or, instead of these Things, fresh *warm Milk*, or *Barley-Water* only may be properly used; always remembring that the *Parts* be duly cleansed from the *clotted* BLOOD, &c.

V. *IN* the mean time, the *Woman's* BREASTS are all along to be kept very close and warm-cover'd with soft *Cloaths*, that the *MILK* may not *curdle*; which however is no ways yet in the beginning fit for the *CHILD's Nourishment*, until the *Conflux* of the *MILK* and the *Humours* is over; which, upon the first days after *DELIVERY*, run in abundance to the BREASTS.

VI. *SPECIAL* Care also must be taken, when the *Woman* is resolv'd not to *Nurse* the *CHILD* herself, that the LOCHIA or *Child-Bed-Evacuations* flow-off plentifully, in order that thereby the *Shock* of the *BLOOD* may be averted from the *BREASTS*; which if not sufficient to prevent that *Inconveniency*, they may be properly anointed with the Oil of *ROSES* and a little *Vinegar* beat-up together; or a *CATAPLASM* of the Meal of *Beans* and *Vetches* mixed

with *Oxymel* may be applied to the *BREASTS*; or they may be fomented with a *Decoction* of the Leaves of *Mint*, *Dill*, or *Parsley*.

VII. *IN* the time of *Cleansing*, all Noise and Clamour about the *Woman* ought to be suppressed; and as she herself ought not to talk much, or *aloud*, neither ought any Person about her to be *obstreperous*: Because her *Repose* is not only thereby disturb'd, but also her *Spirits* exagitated; which violent Commotion of *Humours* may readily stop the *natural Course*. And as for the same Reason, all *Passions* of the Mind are to be suppressed; so the *Woman* is to keep herself as much as she conveniently can upon her *Back*, carefully avoiding frequent *TURNINGS* to either Side.

VIII. *AFTER* ten or twelve Days, proper Measures may be taken to fortify and strengthen the *Members*; and after she has fully done cleansing (which may be about the 20th *Day*, sooner or later after *DELIVERY*, according to the PATIENT'S *Constitution*, or her way of *Living*) some proper *Astringent Medicines* may be discreetly made use of, for corroborating and reconsolidating the *Parts*.

IX. *AS* to her *DIET*, during this Time, she ought to be very regular, and live *abstemiously* (especially the *first Days*) as if she had a FEVER, using only good *Broths*, *Jellies*, fresh-laid *Eggs*, *Ale-soup* made with fresh *Butter*, or the like; after which, she may begin by degrees to eat a little *Chicken*, *Pullet*, *Capon*, *Veal*, *Mutton*, or any thing else of good *Nutrition* and easy *Concoction*.

AS to her DRINK, if she has no Fever, she may use besides her Cawdles, small White-Wine and Water for Variety's sake; but in case of a Fever, Water boil'd with a little Cinnamon, or Coriander-Seed; or a Ptisan of Liquorish, Figs, and Aniseeds boil'd in Water; or small Ale a little butter'd, as the Woman pleases, are far more convenient; observing always carefully that her DRINK, of whatsoever sort, be at all times a little warmed.

X. *FINALLY*, as the *Child-Bed-Woman*'s Body is always to be kept open, if not otherways naturally so, by a proper gentle *CLYSTER*, repeated as often as Necessity requires, until the *Course* of the LOCHIA is quite over; so afterwards she ought to take one or more proper gentle PURGES, for cleansing the *Stomach* and the *Bowels* of such vitious *Humours*, as *Nature* could not otherways evacuate: Upon which, a repeated Strengthening *BATH* may be most pertinently used, as also, in order that she may again the more successfully *begin upon a new Score*, other proper Measures may be prudently taken.

*THUS* we suppose that all things have succeeded well with our *Puerperial Woman*; in which Condition the above-mention'd is her only requisite *REGIMEN*: But in Case of any *Preternatural Accident*, we must come to her *Assistance*, according as the Nature of *Circumstances* does require: Of all which in their Order, as they most commonly happen to the *Woman* in her present *Condition*; and FIRST——

# CHAP. II. Of the AFTER-PAINS.

THESE PAINS, which usually accompany or follow after the *BIRTH*, are common to all *Child-Bed-Women*; and in that *Natural Sense*, as they proceed only from the quantity of *BLOOD* abounding in the relaxed Womb, distending its *MEMBRANES*, or arise from its *Acrimony*; so they gradually cease, and in two or three days quite vanish: Wherefore I am not to insist upon *Those*, which only affect the debilitated WOMB.

BUT it often and too commonly also happens, that another Sort, justly call'd *Preternatural AFTER-PAINS*, afflict the *Woman*; which she sometimes feels about her *Loins* and her *Groins*, sometimes about the *Navel*, sometimes all over the *Belly*, and sometimes in the WOMB only, and that sometimes with a little, and sometimes without any *Intermission*.

THE most common Cause of which PAINS is generally one of the *Five* following; Viz. 1. The External AIR, especially the more frigid, which easily penetrates into the WOMB, if not carefully prevented: 2. Clotted BLOOD, or some other foreign Body left behind in the WOMB: 3. Some Acrid, and Mordacious BLOOD adhering to the WOMB, which excites and stimulates Excretion: 4. The SERUM vellicating or twitching the excoriated part of the WOMB: Or, 5. WINDS elevated from the Humours fermenting in its Substance; which, together with those turgent Humours, tear its tender TUNICKS.

NOW because these PAINS often excruciate the Woman as much as the *real* LABOUR-PAINS do, and since they are not always without *Danger*, Necessity demands that they should be either *cured*, or at least *mitigated*: Which may be most properly done, by convenient relaxing and attenuating *Medicines* outwardly applied, as well as inwardly taken, when the *Case* does not require the *Hand-Cure*, or manual Operation.

HOWEVER, yet more particularly, in respect of the PAINS, from what *Cause* soever they may proceed, *CLYSTERS* of *Milk* with the *Yolks of Eggs* are proper; as are also emollient *Fomentations* mix'd with attenuating and *Uterine Medicines*; a *Fumigation* of *BRANDY*; a *Decoction* of the *Recrements* of the *Regulus* of *Antimony*; such things being of a *sulphurous Nature*: And moreover, in fine, all *AFTER-PAINS* are eased by *Aromatick* and *Carminative Remedies*; such as Seeds of *Anise*, *Carway*, *Cummin*, *Fennel*, *Penny-Royal*, *Roman-Camomil*, &c. infus'd or boil'd in *Wine* or *Water*, adding thereto a very little *Mace* and *Saffron*.

### CHAP. III. Of the Suppression of the LOCHIA, or Child-Bed-Purgations.

THE LOCHIA are nothing else, but the ignobler part of the Blood and congested Humours, which after the BIRTH Nature evacuates and discharges out of the Uterine Vessels, in consequence of the Divulsion and Separation of the PLACENTA from the WOMB. Which LOCHIA however differ always according to the Constitution and Disposition of the Woman, and that not only in Quantity, but also in Quality: For if the PATIENT be otherways Healthy, and Welldisposed, these are at first of a florid rosy Colour, degenerating day by day into a Pale-dye; Whereas if otherways, they are sometimes Aqueous, and sometimes Bilous, Melancholick, &c. And, according also to the usual Habit of Body, and Way of Living, some Women flood more plentifully, others more sparingly; some a longer, and others a shorter Time: as for Instance—

A Woman given to Ease, and high Living, being delivered of a MALE, may cleanse from twenty to thirty Days; and if of a FEMALE, from thirty to forty-two Days at most, however still declining in *Quantity* from Day to Day: Whereas another given to Exercise, may flood only from eight to fifteen Days; and that also perhaps more sparingly, or by Intervals of one or two Days. But it oftentimes happens, that this Evacuation is either suppressed in Whole, or in Part; of which Suppression or Preternatural Retention, I am now about to speak.——

FIRST then, the Cause of this EVIL, proceeds either from an Obstruction of the Uterine Vessels, occasion'd by thick BLOOD stopping the Passages: Or, SECONDLY, from a Constriction or Compression of the same Vessels, occasioned by an oblique Situation of the WOMB, or by cold Air, cold Drink, or the like, which readily constrict their Orifices, as well as contract the WOMB itself: Or,

THIRDLY and lastly, the *Cause* may proceed from the *BLOOD*'s being retracted and converted to some *other Part* of the Body; which is most commonly occasion'd by some *Passion* or *Perturbation* of Mind, that may not only turn the *Shock* of the *BLOOD* to the BREASTS, but also retard the *Motion*, and thicken the MASS of the same *BLOOD*.

THE DIAGNOSTICKS however of this Distemper are manifest; for either no BLOOD is voided at all, or too small a Quantity, in respect to the Size, Temperament, and Constitution of the PATIENT: But besides, it may be also known by the following Symptoms; viz. a SWELLING of the BELLY, upon the Retention of the Humours that ought to be evacuated; a Difficulty of Breathing arises; PAINS seize the Abdomen, as also the Loins and the Groins; a Fever and Tremblings follow; as Faintings do upon a weak, quick and unequal Pulse; something fuliginous appears in the Urine; and a livid, black, grumous, or nauseous Matter is excreted.

HENCE proceed various PROGNOSTICKS; viz. Fevers, Spitting or Vomiting of BLOOD, Melancholy, Inflammations of the Liver, Quincy, Pleurisy, Frenzy, Dropsy, Apoplexy, and Madness itself: The least of which may prove of fatal Consequence, wherefore Delays in this Condition are most dangerous; because when any of these heavy SYMPTOMS has befallen the Woman, there is scarce any Hope left for her Recovery; whereas before, they may be artfully prevented, and the Cure duly perfected by convenient DIET, Venæsections, Revulsive Medicines, &c.

BUT more particularly the *Cure* ought to vary, according to the *difference* of the co-incident SYMPTOMS: For since continual *Fevers* and *Inflammatory Diseases* most commonly follow upon this *Suppression* or *Diminution* of the LOCHIA, we must take great Care that, endeavouring to promote the *FLUX*, and to open the *Uterine Vessels*, we do not augment the *FEVER* and *Inflammation*; which will certainly happen, (if without distinction) we use the *hot Medicines* prescribed by many AUTHORS.

WHEREFORE in this Case repeated Venæsections sometimes in the Ancle, and sometimes in the Arm; and cupping Glasses applied to the Thighs and Shins; as also Rubbing of the Legs and Thighs well, are generally sufficient Remedies; especially if followed with one or more Cleansing, or partly opening, partly cooling, and Emollient *CLYSTERS*, of a *Decoction* of *Mallows*, *Pellitory*, or the like; in which strain'd *Liquor*, the *Pulp* of *CASSIA* with a Dram of *Nitre*, and *Sugar*, and *Honey* may be dissolved: As also *Fomentations* and *Fumigations* of Emollient and Aperient *Medicines* that are not sharp, may be very pertinently used. Finally, the *Infusion* of JESUITS-BARK in Water, may be properly given three or four Times a day; and purging *PTISANS*, after the *first days*, are of good *Service* in the present *Case*.

# CHAP. IV. Of the immoderate Flux of the LOCHIA.

THE too copious and long lasting, or immoderate FLUX of the *Child-Bed Purgations*, is no less *Preternatural*, than the former *Case* of their being altogether *suppressed*, or in part *diminished*. Tho' it is however to be observ'd, that there can be no certain *Quantity* of flowing BLOOD, nor any certain *Time of Duration* of this FLUX prefix'd or determined to the *Puerperial Woman*, as aforesaid: Wherefore the *Excess* of this *Evacuation* is best known by the *Loss of Strength*, *sinking of the* SPIRITS, and the great *Uneasiness* of the PATIENT.

THE Cause of this Distemper is, either 1st, a too great Plenty of the abounding BLOOD; or 2dly, its Tenuity and Acrimony stimulating Nature to Excretion; or 3dly, too great an Apertion of the Uterine Vessels; or 4thly and lastly, a violent Extraction of the AFTER-BIRTH: For the Flux of the LOCHIA proceeding meerly from the Separation of the PLACENTA from the WOMB, the more strong and violent this Separation or Divulsion is, the more the Vessels in the Concave Part of the WOMB are torn or dilacerated; and so being either too much opened, or too difficult to reconsolidate, they discharge BLOOD immoderately.

HENCE, I say, this immoderate FLOODING, is not only known by the great Quantities of BLOOD voided, by its Continuance, or by coming away in Clods, and much at a time; but also by the Loss of Strength, and a Defect of SPIRITS; upon which follows a low, debilitated and frequent PULSE; Loathing of VICTUALS; PAINS in the Hypochondriacks, with a Twisting of the GUTS, and Griping of the BELLY; a Dimness of SIGHT; a Hissing of the EARS; and at last Swoonings or Convulsions, proceeding from the Depauperation of the BLOOD: Which after an immoderate FLUX always disorders the *SPIRITS*, because when the MASS of it is much lessened, it cannot keep its due *Mixture* and *Disposition*.

*IN* this *Case* the true PROGNOSTICK is, that, if all immoderate *Hæmorrhagies* are dangerous; because by them, the *Treasure* of *LIFE* (the *natural Heat*) is exhausted: *Then*, without Controversy, the immoderate *Flux* of the LOCHIA, whether after LABOUR, or after a *MISCARRIAGE*, is full of *Danger*; as coming upon the *PATIENT* at a most unseasonable time, when her *Strength* is already spent.

THE Cure of this Distemper ought to be well-weigh'd, and very cautiously perform'd, because the definite *Quantity* of *BLOOD* to be evacuated cannot be well or certainly known: And because if any Part of *That* be stopped, which ought to be ejected, it of course flows to some other Part, and excites Inflammations or other heavy SYMPTOMS. Wherefore this is only, in the Beginning, to be corrected by proper *DIET*, and some other convenient light Means: But afterwards by repeated *Venæ-Sections* in the ARMS, if *Strength* will permit; and proper Astringents inwardly taken, as well as outwardly applied; continuing always a Thickening, Cooling, and Astringent DIET: But farther yet, as the Patient grows weaker, she ought also to have some *corroborative Remedies*, to enable her to stand out the Cure. Fomentations for the lower Belly of OXYCRAT, or an astringent Decoction; Fumigations of the same Decoction, or of hot OXYCRAT, are very convenient and helpful on this Occasion, as are also *astringent* Injections.

*BUT* however sometimes, and not seldom, it happens, that this *Case* proceeds from the negligent or ignorant *MIDWIFE*, by her not duly *cleansing* the WOMB; by which Means, some part (how small soever) of the *SECUNDINE* or *Membrane*, or some *clotted BLOOD*, or perhaps a *MOLE*, miscall'd a *false Conception*, may be left behind in the WOMB; which distending that *Body*, occasions not only an immoderate FLUX, but also stirs up violent PAINS, not unlike to *those* of LABOUR: In this pitiful *Condition*, all possible Diligence must be prudently used to fetch away and remove this *Cause*, which is only most effectually to be done by the *Hand-Cure*, in the manner already abundantly set forth.

AFTER which, the PATIENT is to be treated as before, laying her equally flat upon her Back, and keeping her very still and quiet in BED; which BED may however in this Case be kept a little Cool, as

well as her *Chamber*, lest HEAT should provoke and continue the *Course* of the FLUX.

*MOREOVER*, in fine, it also sometimes happens, that immoderate *Purgations* proceed from some gross *Excrements* contain'd in the RECTUM antecedent to the Time of LABOUR; which, as they puff up the *Belly*, so they also commonly occasion severe CHOLICKS; but these being discreetly evacuated by a pretty strong emollient CLYSTER, the FLOODING immediately ceases.

### CHAP. V. Of the Acute Distempers incident to CHILD-BED-WOMEN.

WE are in this place only to consider the Acute Distempers of the Puerperial Woman, because the Time of lying-in is not of such a long Continuance as to admit of Chronick Diseases: And these Acute Ones, in short, which they are most commonly subject to, are continual FEVERS, (Either, 1. Essential, that is, FEVERS proceeding first from the BLOOD; or, 2. Symptomatick FEVERS, that is, such as follow upon the internal Inflammations, which often attend the Child-Bed-Woman;) as also Frenzies, Watchings, Lethargies, Convulsions, Epilepsies, &c.—

BUT more especially there is one particular kind of FEVER, which invades almost all labouring Women the third or fourth Day after the BIRTH, and is commonly call'd the MILK-FEVER; because about that time, the MILK begins to generate more plentifully in the BREASTS, taking its Rise from the Motion and Agitation of the BLOOD, which converts it from the WOMB to the BREASTS. This Distemper, resolving itself about the ninth Day by SWEAT, is of no dangerous Consequence; provided the PATIENT observes a good and proper DIET, and duly prevents all Cold, that might readily stop the SWEAT, and carefully preserves the MILK from coagulating or putrefying in her BREASTS, whence the Symptomatick FEVERS commonly arise: Wherefore, I say, this MILK-FEVER, being of the extended Ephemerick Sort, and ceasing of itself, requires no great Cure.

ONLY in this Case, it is a vulgar Error among the good Women, that because this FEVER lasts only four or five Days at most, coming on about the fourth, and ending about the ninth Day after the BIRTH, they take all Fevers in this time, for the MILK-FEVER; and consequently thro' this Mistake, neglecting, or not regarding duly the true Condition, the PATIENT is very often endanger'd: Which Mistake,

that they may for the future diligently avoid, I shall subjoin here some certain SIGNS of *Distinction* in due Course. But previously—

THE Causes of all FEVERS incident to the Child-Bed-Woman, are either the Suppression of the LOCHIA in whole or in part; or the vitious Quality of the Humours accumulated in Gestation, and exasperated in the BIRTH; or a vitious irregular DIET in the time of lying-in; or the cold AIR, or any such Accident by bad Management, may readily convert the MILK-FEVER into a putrid and dangerous one; as a latent CACOCHYMY may also easily dispose it to Corruption.

THE true DIAGNOSTICKS, in my Opinion, are as follow, viz. FIRST, the MILK-FEVER is known from hence, that it always begins about the Fourth Day, when the BREASTS begin to fill with MILK; and then the LOCHIA flowing regularly, the Woman finds a certain Gravity or Weight in her Back and Shoulders.

BUT, SECONDLY, when the LOCHIA are suppressed, whether in whole, or in part, 'tis then certain that the present *FEVER* proceeds from thence; the *BELLY* thereby swells and is puffed up, as also it is pained when touched; and the Humours, at last, putrefying in the WOMB, it ejects a certain faction or corrupt Matter.

WHEREAS, THIRDLY, if the FEVER neither proceeds from the *MILK*, nor from any Irregularity of the *LOCHIA*, why then it must necessarily either proceed from the *vitious Quality* and Preparation of the *Humours*; or from a *Cacochymical Habit* of Body; or from an *irregular Way of Living* in time of *GESTATION*.

THE most certain *PROGNOSTICKS* are as follow, *viz*. FIRST, All *Acute Diseases* in *Child-bed Women*, whose *Strength* is impaired by their *LABOUR*, are much more dangerous than in any *Others*. SECONDLY, These which proceed from the *Suppression* of the *LOCHIA* are most dangerous; because the *Humours* putrefying in the *WOMB*, occasion most severe *SYMPTOMS*, yea and too commonly *DEATH* itself, unless a lucky *Diarrhæa*, or a timely *Ejection* of the corrupted Matter, prevents the *Misfortune*. THIRDLY, The self-same is the unfortunate *Consequence*, when the *Distemper* proceeds from the vitious *HUMOURS*; for *Nature* then not being able to expurgate their abounding Superfluity by the *LOCHIA*, the *PATIENT* must needs be greatly endanger'd, if not overwhelm'd.

*THE* most adviseable *Cure*, FIRST, as to the *MILK-FEVER*, is only to be committed to *Nature*, the *Woman* using always a proper *DIET*, and carefully animadverting, that the *SWEAT*, in which it commonly terminates, be no ways checked, impeded, or obstructed.

SECONDLY, As to the Watchings, Deliria's, Epilepsies, &c. which the PATIENT is subject to in this Condition; as they proceed only from Vapours of the BLOOD and Humours, ascending to the Head, when the LOCHIA do not flow regularly, or when the Woman is Feverish: So the Cure of these distemper'd Cases depends (at first) chiefly upon retracting the HUMOURS from the Head to the inferiour Parts, and correcting the Course of the LOCHIA: Because, if these flow orderly, and the vitious Humours, from which such depraved Vapours as affect the Head, be removed and evacuated, all such SYMPTOMS quickly cease and vanish of their own Accord.

THIRDLY, in the other above-mentioned Cases, the PATIENT ought always to be treated according to the various Circumstances of her Condition; I mean, according to the attending SYMPTOMS, conformable also to which the ingenious Physician will always judiciously take his prudent Measures: Since the Cure does not always depend upon the same Method; especially when a symptomatick, or concomitant FEVER, joins the first, as it very often happens, by an Inflammation of some particular Part, proceeding from something of the vitious HUMOURS enforcing itself upon the same very Part.

*NOW*, in short, tho' such *Inflammations* may affect any *Part* of the Body, yet (I think) the most common *Case* is, that which affects the *PLEURA*; and from hence (the *Pleurisy* joining the *FEVER*) the *Woman* labours under both these complicated *Acute Diseases* at once. The *Cure* of which difficult and dangerous *Condition* belongs only to the ablest *Physician*, to whom I should be justly censured, in impertinently offering any *Instruction* upon this Subject. Finally, in a word, from what has been said in the *Chapter* of the *Acute Diseases* of Women with *CHILD*<sup>[181]</sup>, we may more fully gather what is to be prudently done to Women in *CHILD-BED*, afflicted with the like *Distempers*.

### CHAP. VI. Of the various other Accidents incident to the CHILD-BED-WOMAN.

*FIRST* then, Because these *accidental* Distempers are very many and numerous, as well as various and different in *Kind*: SECONDLY, Because *some* of them have been already treated, or occasionally discoursed upon at large: And, THIRDLY, because *others* are only to be named in this Place; I shall take leave to include and comprehend them all, for *Brevity's* sake, in this present *Chapter*.

*IN* order to which, I may first observe, that most (if not All) of these unfortunate *Accidents*, depend entirely upon the indiscreet *Conduct* of the *MIDWIFE* in time of *LABOUR*, or the *ill Management* of the *Woman* after the *BIRTH*: Since by the prudent and judicious *Means* of the expert *MIDWIFE*, many *Accidents* may be prevented, which otherways must necessarily happen, especially in difficult or *preternatural BIRTHS*; as also, on the other hand, by treating the *Woman* orderly, and guiding her carefully, many *Distempers* may be totally averted, which otherways will inevitably seize the *PATIENT*. As for Instance—

*IT* sometimes happens, that she is troubled with a *Prolapse*, or bearing down of the *WOMB*, or *Vagina*, or *Both*; as also sometimes with a *Falling out of the FUNDAMENT*: In all which unhappy *Conditions* the industrious *MIDWIFE* will find her *Instructions*, not only with respect to the *Cure*, but also with respect to the *Prevention* (which concerns her most) particularly set down and accounted for in *SECT*. V. *Chap.* 10, and 11. as she will also, upon *Perusal*, find the *Method* of preventing that deplorable *Accident*, of making a *Rupture* in, or renting the *Perinæum*, in *Chap.* 9.

*BUT* in *case* of *Contusions*, or Smaller *Rents* in the *VULVA*, or *Vagina*, which sometimes cannot be well prevented, especially in the

*First BIRTHS*; *such* are by no means to be neglected, lest they degenerate into malignant *ULCERS*: Wherefore they ought to be *cured*, as soon as possible, after the *Woman's DELIVERY*; which *Cure* is easily performed, when taken in hand *betimes*, by proper *Fomentations*, and convenient *CATAPLASMS*.

SOMETIMES again, the WOMB, the Belly, and the Feet swell much after the BIRTH; which SYMPTOMS commonly proceed from some Cold, or from drinking too much, or from either a Suppression or Diminution of the LOCHIA, or from any irregular way of Living during the time of GESTATION: By which means the vitious HUMOURS, resolving themselves into Flatulencies, swell and puff up both the WOMB and the ABDOMEN; and these Winds descending, have the same Effect upon the Legs. But the Cure, however, of all such SYMPTOMS, is readily accomplished by convenient DIET, proper Fomentations, and discutient Medicines.

HENCE I might orderly descend to an *Indefinity* of Particulars, deriving from the following general Heads, which I Shall only name at this time; viz. the various Diseases of the PUDENDUM and Vagina, as well as of the MATRIX itself, together with their coincident SYMPTOMS; as also the divers Distempers, and different SYMPTOMS of the Woman's BREASTS. But These Subjects being as different as numerous (which I have already hinted) I must refer them to another Opportunity; being resolved to keep the present Work, for the common Good, within the Purchase of all sorts of People as far as possible; and until such time as something on *these Heads* appears more judicious or elaborate, either from *my own*, or some more *capable Hand*, I hope *English Women* can be at no great Loss for good *Instruction*, or ready *Assistance*; especially not in this famous *City* of LONDON, which is, by the Divine Mercy, abundantly well-stock'd, and singularly well provided, with some of the most excellent *Physicians* of the Age, as well as with some very ingenious *Practisers* in the Art of *MIDWIFERY*.

AND, thus, in fine, having *piloted* the good *Woman* (as it were) thro' the *three Gulphs* of *GESTATION*; *BIRTH*, and *CHILD-BED*, and at last brought her into safe *Harbour*; we may now (I hope) securely leave her there, to *refit* for the same prosperous *Voyage* again; whilst we, in the next Place, undertake to provide for the

*Safety* of her *CARGO*, or direct the *Regimen* and *Nursing* of the *CHILD*. And FIRST—

# CHAP. VII. Of the Constriction of the NAVEL-STRING, and the Swaddling of the Infant.

*IF* after the *Torrents* of Difficulties and *Oceans* of Danger that the MOTHER has painfully gone through, and narrowly evaded, the CHILD should at last be lost; the *Comfort* of her *Burden* would be but small, and the *Reward* of her *Sufferings* but very little: Wherefore special *Care* ought to be taken to prevent such melancholy *Events*; in order to which, we are not only to remedy such *Indispositions* as it (too often) brings with it into the World, but also to defend it from the many periculous *Contingencies*, to which the *Tenderness* of its Body, and the *Debility* of its Age expose it.

*THE* first *Duty* then, that the *INFANT* requires of us after *BIRTH*, whether born by the *Head*, or extracted by the *Feet*, is the *tying* and *cutting* of the *Umbilical Vein*, or *NAVEL-STRING*; which being a thing generally well known, I shall have no Occasion to insist upon it, especially since tho' the common GossIPs may differ in the *Performance*, yet they always agree in the *Fact*.

*HOWEVER*, that we may not pass this *essential Point* by in Silence, in case a notable Word may drop by the By, I would,——

I. *OBSERVE*, that, until the *STRING* be cut, the CHILD is to be carefully laid on *one Side*, not on its *Back*, for fear that the *HUMOURS*, running to its *Mouth* or *Nose*, may choke it, for want of free Evacuation.

II. I would take notice, that, if need require, while the *MIDWIFE* is busy about the *Mother*, in extracting the *AFTER-BIRTH*, cleansing the *WOMB*, &c. the most capable of the GossIPs should *tie* and *cut* the *STRING*, especially if the *INFANT* is weak or ill; otherways it may be deferred until the *Woman* be entirely *delivered*, and fairly *laid*. Then,——

III. *AS* to the *Performance* of this Matter, it may be *tied* with a good strong *Thread*, laid four or five-fold, according to its Strength; and the KNOT tied close within *two Inches* of the *CHILD's* Body: Tho', I say, that the KNOT is to be *tied* close, yet it must not be so strictly *tied* as to cut asunder the *STRING*; which might easily happen, especially to the *INFANTS* of a tenderer Constitution. And the Reason that I would have the *Constriction* made *two Inches* from the Body, is this, That in case any *Blood* should happen to drop out afterwards (as it often happens) there may be *room* enough to *tie* it again nearer the *NAVEL*.

IV. *THE STRING* is not to be *cut off* close to the KNOT, but also *two or three Inches* from it; so that, if it happens to swell with Wind (as is very common) after being *tied*, it may be *loosed* again, the *Wind* discharged, and itself conveniently *retied*. But the far better and preferable way is, to tie this VEIN in *two Places*, and cut it asunder betwixt the *Ligatures*; being thereby secure from losing BLOOD. Some (I know) will not have the VEIN to be *tied* before the *CHILD* cries or makes *Water*; but, however, long *Delays* in this *Case* are no ways convenient, nor without Danger.

V. *THIS* VEIN or STRING being *cut*, must be wrapped up in a *three* or *fourfold Rag*, to defend the *BABE* from Cold or Pains of the *Belly*; which otherways might ensue from the *naked* VEIN's lying upon its Body: Which being done, this Part of the STRING is to be laid on the *upper Part of the Belly*, with a small *Boulster* on the Top of it; and then swathed with a *Linnen Swath* of about *four Inches broad*, to keep it firm and steady.

VI. *THE* first time that the *CHILD* is *unswathed*, a new KNOT ought to be made or *tied*, and that to prevent all *Danger* by Loss of *BLOOD*, which may readily happen by the first KNOT's relaxing, as the *STRING* begins to wither away or contract.

*THIS* being so duly taken care of, it remains only in general, that the Infant be presently *washed*, cleansed, and examined all over, and at last orderly *swaddled*. All which if the *MIDWIFE* does not perform with her own Hands, she ought at least to see it carefully accomplished: Upon which she may then say, she has faithfully discharged her *Duty* to both the *MOTHER* and the *CHILD*.

VII. *BUT* more particularly, in the *seventh Place*, I must take notice, that as soon as the *NAVEL-STRING* is thus duly handled and

provided for, the *INFANT* is to be tenderly cleansed of the adhering *Excrements*, and washed all over in a little warm *Wine*, *Milk*, or *Ale*; especially its *Head*, *Arm-Pits*, *Groins*, *Cods*, or *Privities*, &c. are to be softly cleansed and gently bathed with a soft *Spunge* or *Rag*, dipt in the same *Liquors*: But if the *viscous Matter* sticks too fast or close to the tender Body, a little *Oil of sweet Almonds*, or fresh *Butter*, may be added to either of the foresaid *Liquors*. As also the *Ears* and *Nostrils* ought to be well cleansed and unstopped with small Tents of *fine Rags* wet therein; and the *Eyes* wiped with a soft dry *Cloth*; as the *Mouth*, *Tongue*, and *Jaws* may be cleans'd by the *Finger*.

VIII. *THESE* things being all very carefully and tenderly performed, every Part of the Body ought to be diligently searched, in case of a *Dislocation*, or any other *Accident*, happened by *Violence* in the *BIRTH*, or otherways; that present *Remedies* may be used, according to the Nature of the *Circumstances*: And especially the two *Conduits* of the *URINE* and *ORDURE* are to be examined; since it sometimes falls out that *these* are not perforated, and consequently that the *Meconium* cannot be voided, which inevitably proves fatal, unless timely *Care* be taken.

IX. *AS* to the *URINE*, all *Children* discharge it as soon as born, at least as soon as they feel the *Heat* of the Fire; when if the *Excrements*, properly called *MECONIUM*, tho' improperly *COLLOSTRO* by the *Italians*, do not follow a little after; I mean within an *Hour or two*; then a small *Suppository* may be used, such as a *sugar'd Almond* anointed with a little boiled *Honey*; or a Piece of *Venice-Soap* anointed with fresh *Butter*; as also a little *Syrup* of *Roses* or *Violets*, mixed with the Oil of *sweet Almonds* by Expression, that is, drawn without Fire, may be given in the *Mouth*, anointing the *Belly* with the same *Oil*, or with fresh *Butter*; in like manner as a small *Clyster* (upon occasion) may be discreetly used and managed to purpose.

X. *THE INFANT* being in these respects *provided* for, it is now to be duly dressed and swaddled in its *Swathing-Cloathes*; and beginning with the *HEAD*, a *Compress* of a three or fourfold fine *Linnen Rag*, about *four Inches broad*, is to be applied to the *MOULD*, for defending the (yet open) *BRAIN* from *Cold*, &c. which *Compress* is to be carefully covered with, and pinned to the ordinary *CAPS* made on purpose. Next then, some small soft *RAGS* are to be

laid behind the *Ears*, upon the *Breast*, in the *Arm-Pits*, and the *Groins*; after which the *BABE* is to be wrapped softly up in *warm Blankets*, and discreetly *swathed*; not too strait, especially not about the *Breast* and *Stomach*, that it may *breathe* the freer, and the better retain the *MILK* it sucks. The *ARMS* are to be stretched along the *Sides*, and the *LEGS* equally *streight*, with a little of the *Bed* betwixt them; and the *HEAD* is always to be kept steady, as the whole *CHILD* is to be preserved *thus* warmly wrapped up, and judiciously appointed. But now because the *INFANT* is commonly committed to the *Nurse's Care*, I shall, in the next Place, enter upon the *Description* of the proper *Person* for that purpose.

# CHAP. VIII. Of the NURSE and her Regimen, together with the requisite Qualities of her MILK.

THO' the BABE may be brought up by the Hand only, without Suckling, as many Instances of very thriving Children testify; yet because the most natural, common, and commendable way is to suckle it, I come now to touch upon the proper NURSE, her Milk, and Diet. Upon which I first observe, that the prime and chief *Quality* of a good *NURSE* is, that she be the *Mother* of the *Fosterling INFANT* herself; and that because her *MILK*, being generated of the same *Blood*, of which the *CHILD* is formed, and has hitherto been nourished, is of a nearer *Affinity* with the Nature of her *BABE*, than the *MILK* of any *other strange Woman* whatsoever; which can differ no less from the Maternal Milk, than the own Mother, and the other differ in Constitution and Temperament of Body, Regimen, and Method of Living, &c. All which affect the INFANT in no small Degree; for as the BLOOD is generated of the *Chyle*, and the *Spirits* of the BLOOD, so the CHILD imbibes the very Manners and Disposition, as well as the gross Humours and Qualities of the NURSE with her Milk.

AS a Lamb sucking a Goat, changes not only its Nature, but even its Skin and Wool into the GOAT-Kind; so it is also among the rational Creatures: From hence we have justly the old Proverb, touching an *ill-natured Person*, that some Brute or other has been his NURSE. And hence it is that Romulus and Remus, the Sons of MARS (without any Reality) are said to have been nursed by a WOLF<sup>[182]</sup>; Pelias, the Son of Neptune, by a MARE; Telephus, the Son of Hercules, by a HIND, &c. Not that they ever actually sucked such Creatures, only their NURSES were of such Tempers and Natures, which they were thus supposed to have by the BREAST infused into them. AND, in short, daily *Experience*, as well as many *Learned Authorities*, may sufficiently convince us, that CHILDREN really suck in the several vitious Inclinations and depraved Passions of their *NURSES*; such as *Anger*, *Malice*, *Fear*, *Melancholy*, &c. Agreeable to which Opinion, *Diodorus* says<sup>[183]</sup>, that *Nero* the Emperor's *NURSE* was very much addicted to *Drinking*; which Habit *Nero* imbibed from *her*, to such a Degree, that the People took notice of it, and from thence instead of CLAUDIUS TIBERIUS NERO, call'd him *Caldius Biberius Mero*. The same Author relates of *Caligula*, that his *NURSE* used frequently to moisten her *Nipples* with *BLOOD*, that he might take the better hold of them; which (says the same *Diodorus*) was the *Cause* of his being so cruel and *Blood-thirsty* all the Days of his Life; that he not only committed frequent *Murders* by his own Hand, but even wished that all humane Race was but one NECK, that he might have the pleasure to *cut it off*.

*IN* short, *honest Parents* perceiving their *Children* to incline variously, *one* to *Thieving*, *another* to *Drinking*; *one* to *Stupidity*, *another* to *Barbarity*; are amazed at such *Degeneracies* of Mankind, not knowing after whom the *Child* can take those Propensions. But abstracting from *this*, how many fine *Children* do we daily see thrown into *Fits*, *Rickets*, *Consumptions*, &c. merely by *sucking* their imprudent *NURSES*, when enraged, or otherways in a Passion? If then the *Case* stands thus, that every *Disorder* of the *NURSE* is a real *Detriment* to the *INFANT*, surely, upon this Account, all *Parents* ought to know HER well, to whom they entrust these *Dear Pledges* of their sacred and natural Desires.

MOREOVER yet, besides all these Things, the tender *Care*, as well as the *Love* and *Affection* of the MOTHER to her own CHILD, by far surpasses that of any *mercenary NURSE* whatsoever. Wherefore the MOTHER, tho' perhaps not the best *NURSE* in other respects, is always preferable to a *STRANGER*: Which if People of *Probity* and *Honour* would more observe, I sincerely believe that there would not be so many graceless, disobedient, and undutiful *CHILDREN* of our Age. I do not think what I have read of *Scipio Africanus* to be any singular *Instance*; namely, that He esteemed *Her* more for his MOTHER, who nursed him two Years after his *Birth*, than HER who brought him forth, and then forsook him in the World. Agreeable to which, and most à *propos*, was the Answer of the Philosopher, Favorinus<sup>[184]</sup>, to the MOTHER of a certain Noble-woman in CHILD-BED, who was dissuading her Daughter to nurse the CHILD she had born; viz. I entreat thee Woman (says he) suffer her to be the whole and entire Mother of her own Son. And verily, SHE only can be properly so called, who carefully nurses as well as brings forth her own CHILDREN. Hence it is that the Earth is called the MOTHER of all Things, not so much because she produces all Things, as because she maintains and nurses what she produces.

ALL which, notwithstanding, there is sometimes a *Necessity* (on account of sundry Reasons) to provide another *NURSE* for the *CHILD*; wherefore I come now briefly to describe the most proper *Person* for this *TRUST*, and to set forth the *Qualities* of the most convenient *MILK*, for the wholesome Nourishment of the INFANT.

FIRST then, the *NURSE* ought to be a Woman between the 20th and 35th *Year of her Age*, perfectly graced with the *Blessings* and *Ornaments* of *Nature*; and a Person of *Probity* and *Reputation* in her *Rank*, endued with *Love*, *Pity*, and *Tender-heartedness*: As she also ought to be *sound* and *healthy*, of a good *Habit* and *Disposition* of Body and Mind, of a sanguine *Complexion*, and rosy *Colour*; of a *middle Stature*, having black or brown *Hair*, a *lively Eye*, *sweet Breath*, sound and white *Teeth*, with an agreeable chearful *Countenance*. In short, she ought also to be a *well-mannered*, *modest*, and *sober Person*, having middle-sized, well shaped, not flabby nor hanging down, but solid fleshy BREASTS, with elegant, firm, and well perforated *Nipples*.

SECONDLY, As to her *MILK*, it ought neither to be too *new*, nor too *old*; but at any time from the *Puerperial Flux*, until the 6th or 8th Month thereafter, it is not to be rejected; especially if it be of a good *Consistence*, neither too *thick* nor too *thin*, of a pure *white Colour*, an agreeable pleasant *Smell*, and a perfect sweet *Taste*.

BUT it sometimes however happens, that the *Milk* of a *NURSE*, otherways a very *proper Person*, degenerates from some of the abovesaid *Qualities*: In which *Case* it is no ways convenient to change the *NURSE*, especially if it so happen to the MOTHER; only the *MILK* is to be corrected according to *Art*, which may be easily performed by proper *Medicinal Means*, and that as well with respect to its *Quality* as *Quantity*: However, as *this Case* belongs to the *SYMPTOMS* of the *Breasts*, which I have already declined speaking

to, as in the foregoing *Chapter*, so I shall no ways enter upon it in this Place. But again——

THIRDLY as to her Regimen, such a NURSE is to make use of, and enjoy a good and convenient *Diet*; abstaining carefully from all *salt* and *sharp Victuals*, as well as from high-spiced *Meats*, and strong or spirituous *Liquors*. In short, as she ought to avoid all Sorts of *intemperate Air*, and keep herself clean both in *Person* and *Cloaths*; so she ought always to exercise herself by some light *Labour*, and keep herself in a moderate active Motion; prudently suppressing, at all Times and upon all Occasions, the various *Passions of the Mind*: By which means, any *Woman* as above described, may make a very good *NURSE*, and that even without abstaining altogether either from the moderate Use of *Wine*, or of *Conjugal Conversation*; notwithstanding the contrary Opinion of most *Authors*, provided only that she does not give the *CHILD suck* for an Hour or two after *Copulation*.

### CHAP. IX. Of the Diet and Ablactation, together with the farther Regimen of the CHILD.

BESIDES the external and internal Excrements mention'd in the foregoing Chapter, the INFANT in a few days after BIRTH, pukes up a certain Sort of viscid Phlegm; for which Reason it ought to have no SUCK until this Humour be evacuated, lest the MILK incorporating with that Matter, both should corrupt: To prevent which Inconveniency, some order a little Oil of sweet Almonds by Expression, and a small Quantity of Sugar-Candy, or a little fresh Butter and Honey mixed.

INSTEAD of which, however, I have seen some *Jewish Matrons* give also the new-born CHILD for the first Thing, a little SALT dissolv'd and mix'd in a Spoonful of *Hysop*, or *Saxifrage-Water*; which (tho' no improper *Prescription* in itself) yet I conceive their chief Reason for it to proceed from *Ezek*. 16. 4. where the LORD summing up the Duty of the *MIDWIFE*, says, *Thou wast not salted at all*, &c. Again farther—

THE Learned *Arnoldus de Villa Nova*, advises us to give the *CHILD*, for the first Thing, half a Scruple of fine *pulverized Coral* in a little of the *Woman's MILK*; and that (says he) to prevent *FITS*, to which new-born *Children* are very subject.

ALL which may be indifferently us'd, according to Pleasure, tho' I take a small Spoonful of Sugar'd Wine, given twice or thrice a day, for the first four or five days running, to be the most preferable Remedy for Prevention: By reason that the Wine cuts and loosens the Acid Humour, preparing afterwards by Concoction and Digestion what remains, as the Sugar temperates and helps to expurge the Acrimony: Which being duly done, I would order the INFANT always to rest, laying it not on its Back, but on its Side, that this morbifick

*Matter* may be the more commodiously voided by the *Mouth*, as already precautioned in *Chap*. 7.——

THIS *Humour* being then thus prepared and discharg'd, the *Breast* of some other clean and sound *Woman* may be given the *CHILD*, until the *Mother's Milk* be purified for its proper *Use*; which it can scarce be supposed to be, before the *Dissolution* of the *MILK-FEVER*, that is before the *ninth day* after *DELIVERY*: From which time, it is to be maintain'd and nourish'd for the first three or four *Months* by *BREAST-MILK* only; augmenting however its *Allowance* from day to day, in proportion to its *Age* and *Strength*, that the weak *Stomach* may never be overloaded, so as to occasion *Vomiting*, or (which is worse) a *DIARRHÆA*: To prevent which *Inconveniency*, let the *INFANT* rather *suck often*, and a *little at a Time*, than too much at once.

AFTER these first Months are over, a little thin PAP may be given it every Morning, and in time twice a day; which is commonly made of *Flower* and *Milk*, or *Ale*, with a little *Sugar* and *Butter*: But because FLOWER is of itself humid and viscid, and may not only occasion Pains and Obstructions, but also, engender Gravel and *Worms*, it ought to be first well *drued* in a new or clean earthen *Pot* in an *Oven*; or, what is better, the PAP may be made of the *Crumb* of a Loaf: Which Diet is properly observ'd, until the time of *Teething*, laying it still, a little after its *Meal*, to rest upon its *Side*, or now and then upon its *Back*, with the *Head* a little rais'd; however not in the *Bed* with the NURSE, for fear of overlaying it, but in a CRADLE close by her *Bed-side*; always very carefully covering the CHILD's *Face*, that the *Light* may not offend its tender *Eyes*, and render them any ways *distorted* or *goggled*: And as the INFANT may be brought up by the Hand without Suckling, so it may easily be accustomed to Sleep without Rocking. But be that as it will, as soon as the CHILD is furnish'd with TEETH, it is proper by degrees to use it to a little more solid Food, such as Bread and tender Meats or Fleshes, however, a little chewed by the NURSE: In the mean time no Crude, or Meats of hard *Digestion*, are to be allow'd it, because *such* Things produce a Corruption of Humours, whence Worms engender, and other various, grievous, and irregular Symptoms arise.

*BUT* before I proceed farther, I ought to observe, that the Duty of the Nurse does not consist entirely in the abovesaid Conditions; for

the *BABE* must be as duly *washed* and *shifted*, *unswaddled* and *reswaddled* as FED: Wherefore from the BIRTH, until the third or fourth *Month*, it ought to be *loosed* and *washed* all over in *warm Water* twice or thrice a day, before the warm Fire; as also in the night time if necessary, that the *Acrimony* of the *Excrements* may not offend it: Upon which at every singular Occasion, the NURSE may also *rub* its tender Body gently, not only for the better *Concoction* of its *Aliment*, but also for strengthening and consolidating its *Members*; which Offices being all carefully and affectionately done, the INFANT is to be *shifted toties quoties*, and orderly reswaddled in clean, dry and warm *Clouts* and *Blankets*. However yet, from the third Month until the *Teething-Time*, the Body needs only be *washed once a day*, or (if you please) every other day; as from thence forward it may only be *twice a Week*.

*MOREOVER*, when the *CHILD* begins to use its *Hands* and *Feet*, if it moves briskly from place to place, it is a good Sign of a strong and lively *Constitution*; as it is the *Reverse*, when it sits torpidly or drowsily still and unactive. Which notwithstanding, these *brisk INFANTS* are not to be allow'd such *Motions* too soon, I mean not to use their *Feet* prematurely or too fast, as many ignorant Nurses commonly encourage them to do: Because by these means, their tender Legs may be easily distorted or become crooked. Whereas when they are more firm and well-grown, they may be learned to walk by the help of the NURSE's *Hand*, or of a *Leading-String*; as afterwards they may be inur'd to walk of themselves, by the means of a small *Vehicle* or *Chariot*, as is generally well known in populous Places.

AS to the time of Ablactation, or weaning the CHILD from the Breast, it is not always the same; some being more robust and lively than others, and consequently may be sooner wean'd; but others are more weak and tender, and accordingly require longer time of the Breast. However this be, the INFANT ought not to be wean'd before it has its compleat Sett of Teeth; because if sooner, it can no ways duly prepare its VICTUALS by the Mouth, for Concoction in the STOMACH, which may be of very bad Consequence; Besides, in the time of Teething, especially about the Eruption of those call'd the DOG-TEETH, the CHILD is subject to Fevers, Pains of the Gums, and

various other *Symptoms*, which would certainly be of more *Danger* by far, if it was at that *Juncture* to be deprived of the *BREAST*.

OTHERWAYS, I take the due and proper Time for Weaning the INFANT, to be about the 18th or 24th Month, rather longer than shorter; because it surely finds the Benefit of this proper and benign Aliment all the Days of its Life. Yet at what time soever it happens to be done, the CHILD is not on a sudden to be accustomed to different sorts of VICTUALS, but rather, while it yet Sucks, to be gradually brought to the Use of what is most convenient for its Nutrition, such as Hen or Chicken-Broth, or the Soup of other Meats, mix'd with a little Crumb of Bread; or a Soup made of Ale, and Crumbs, with a little Fresh-Butter, which is of excellent Nourishment: As before, or about the Time that the INFANT is to be Wean'd, a little half chew'd Meat of any Sort, provided sweet and fresh, may be given it for a good weaning Repast.

UPON this Head, I shall only farther observe, that the *ABLACTATION*, or Weaning, always happens more conveniently in the *Spring* or *Autumn*, than in the *Summer* or *Winter*, and *that* more auspiciously with the *encreasing* than with the *decreasing Moon*: And *this*, because otherways, besides the *Alteration* which happens to the *CHILD* from the Change of its *Diet* and *Aliment*, another may easily affect it from the *Calidity* or *Frigidity* of the *Ambient Air*.

BUT besides, in short, that the *INFANT* may be the better and the more readily *Wean'd*, the *NURSE'S Nipples* may be anointed with the fresh *Juice of Wormwood*; or with a *Liniment* of the same *Juice*, *Honey* and *Aloes*; or any other proper *Ingredients*, discreetly us'd, that its tender *Lips* or *Gums* may not be inflam'd, nor the weak *Stomach* hurt or offended. However, the better way is, that the *NURSE* withdraw herself from the *CHILD's Presence*; upon which it is to be plentifully *fed*, as already advis'd, allowing it a little *Ale*, but no *Wine*, for its Drink.

NOW as to the *DIET* and *Regimen* of *Children* from *ABLACTATION* to the first *Seventh Year of their Age*, I would farther observe, that it differs yet altogether from that of more *adult Persons*, since their infirm *Habits* and tender *Bodies* can no way tolerate, or withstand the consequential *Effects* of an irregular *DIET*, or an Erroneous *Regimen*: Besides this Age requires *VICTUALS* frequently, and *that* not only what is sufficient for *Nutriment*, but also for *Growth*: And

moreover they ought still to be now and then *bathed* or *washed* at Times.

BUT touching the Affections and Passions of their Minds, great Care must be taken, that they be not provoked to Wrath or Anger, nor frighted with fearful Notions or Phantasms; since such Things make strong Impressions upon their soft Bodies, and frequently give ORIGIN to Convulsions, Epilepsies, &c. However, as Children are naturally more prone to Evil than to Good, and to Vice rather than to Virtue, they are not to be too much indulged; but from their Infancy upwards, all such perverse Faculties and Passions of Mind are to be so curbed and moderated, that they may become subservient and obedient to Reason; and that because this very Age is the proper Time to lay the Foundation of their future good Qualities and Disposition, agreeable to the Rules and Præscripts of a right rational OECONOMY.

I know *This* is sometimes accounted a hard *Task*, but if we consider that the *WHELPS* of Savage *Bears* and *Lions* may be so tamed, as to obey the *Motions* of their *KEEPER*, how much more easily may the *Sons* of *MEN* be inur'd to follow the *Laws* of right *Reason*? Their *Passion* first discover themselves most commonly by *Crying* and *Tears*, tho' sometimes also otherways; wherefore such *FITs* of *Anger* or *Passion* ought to be prudently reprehended in them; and when neither *Admonitions* nor *Commands* may prevail, then *Threats* ought to take place, that all *Frowardness* and *Obstinacy* may be stifled in the *BUD*; for the Mind of *Youth* may be justly compar'd to a *Mass* of *WAX* or *CLAY*, on which we may readily *stamp* what *Impression* we please to make.

FOR these Reasons, their Attendants, or such other Persons as may be occasionally about Children, ought carefully to avoid doing or saying any mean, base or vile Thing, especially in their Presence or to their Knowledge; since here the old Proverb holds most true, that, we are drawn by Precept, but led by Example. Wherefore to moderate and mitigate their Passions, CHILDREN ought to be allowed proper Diversions, and such Exercises of Body as their Age and Constitution will permit; and that also, because if they were to be brought up lazily or sluggishly, without Motion or Exercise, their VICTUALS which is now commonly given them both plentifully and frequently, could not possibly *disperse* itself nor *digest*, upon which the *innate Heat* would infallibly suffer a sensible *Decay*.

THESE Things being duly observed, it now only farther remains, that the *CHILD* be well train'd up, and carefully educated; instilling all along into its Mind the *Principles* of *Humanity* and *Morality*, and instructing it gradually in the Knowledge of Arts and Sciences; which it will even at this tender Age be found capable of Conceiving: For the Human Mind being naturally adapted to attain to the Cognition of all sublunary Things, may be thus endued and furnished with the most laudable Arts, before it can distinguish the USE of them; since according to the *Philosopher*'s wise saying<sup>[185]</sup>, Nostrum scire nihil aliud est, quam Reminsisci. Because (I say) the Mind of Man perceives and comprehends the Notion and Knowledge of all temporal Things in it self, notwithstanding that it cannot easily display it self, by reason of the burthensome Oppression of the *Body* and its gross *Humours*: Like as a *FIRE*, overlaid with *Ashes*, must be raised up and fomented, before its engender'd or retain'd Sparkles can exert themselves with any *Lustre*; so it is even with us, before the *Light* and *Instinct* of our Natures can shine forth: For as some *Roots* cast no *Smell*, or breathe no *Fragrancy* of themselves, unless they be softly touched or squeezed with the Hand; so neither do our Natural Powers and Faculties exert or show themselves, unless they be diligently exercised and cultivated.

THUS we have now guided and conducted the CHILD from its BIRTH, to the Seventh Year of his Age; which being only meant by the INFANT, that was safely Born, and continued all along in Health; I come now in the next place, to hint upon what is farther Requisite towards the rearing of such CHILDREN, whole Misfortune it may be, either to come into the World with Infirmities, or to be afterwards subjected to them in their Cradles. And FIRST,

#### CHAP. X.

# Of the various Symptoms and Indispositions wherewith the CHILD may be Born.

SINCE some only, not all CHILDREN, happen to bring Infirmities with them into the World; and because such Indispositions as are chiefly meant here, discover themselves presently at the Time of BIRTH, and require immediate Cure; I shall concisely enter upon, and briefly comprehend them All here, as they most commonly fall out, in this present Chapter.

*IN* order to which, I shall previously observe, that such *Inconveniencies* happening to the *INFANT*, may have a double *Origin*, and proceed either from a *Defect* in Nature, or the *Effect* of a difficult *BIRTH*: The *First* may take Rise from various Causes, such as of the *Parental Seed*, the *Forming Faculty*, the *Maternal* or *Uterine Constitution*, an *illegitimate Time* of *BIRTH*, and the like; as the *Latter* may also arrive, not only from a *Difficult*, or *Preternatural LABOUR*, &c. but also from the ignorant, rough Usage, or barbarous Treatment of the *MIDWIFE*. However, not to insist too long on these Things, it very often, and too commonly happens.

I. *THAT*, The *CHILD* suffers so much in the *Birth*, that (when born) it is hard to know, whether it be *dead* or *alive*, not one part of the Body being perceiv'd to *move*; which however may be *thus* well known, *viz*. by laying my *Hand* upon its *Breast*, I shall feel the Motion of the *Heart*, if alive, tho' never so weak; as I shall also perceive a small *Pulsation* of the *Arteries*, by touching the *NAVEL-STRING* near the *Belly*.

*IN* which *Case*, I would immediately order the *INFANT* to be laid in a *Warm Bed* or *Blanket*, and quickly carried to the *FIRE*; where its *Mouth* is to be open'd, as its *Nose* is to be clean'd and unstopp'd with small *TENTS* dipp'd in warm *White-Wine*, and *Linnen* wet with the

same applied to its *Breast* and *Belly*; spurting always in the mean time, a little of the same *Wine* into its *Mouth* and *Nose*, until it begin to stir: Or then I would distil a drop of *Aqua-Vitæ*, from time to time upon its *Tongue*, bathing its *Pulses* and *Nostrils* with the same, while I anointed its *Mouth* with *Honey*.

II. *IT* sometimes only happens, that the tender *FACE* is bruised *Black* or *Blew*, *Pale* or *Livid*; which may also as well proceed from the Bones of the *PELVIS*, or from the *CHILD's* being Born *Face-upwards*, as from the *MIDWIFE's* hard Usage. In this *Condition*, I would only order it to be frequently anointed with the *Oil of Sweet Almonds*, drawn without *FIRE*, that is, by Expression; upon which it soon recovers its *Natural Colour*.

III. AGAIN sometimes the INFANT is born with a KNOB or TUMOUR on the Crown of its Head, occasion'd by its hard Pressure against the ORIFICE, or by its strict Compression in the same: In which Condition, I would immediately foment it with warm Wine or Aqua-Vitæ, and apply a COMPRESS to it, either wet in the same, or in the Oil of Roses and Wine beat together; and the same Fomentation and Compress may serve for any other Part of the Body, which may be swell'd by rough Usage, or otherways, in a difficult BIRTH. But in Case of Suppuration, it must be open'd in a proper place with a LANCET, applying afterwards a Plaister of Betony. As also in Case of a Fracture, or any sort of Dislocation, the Parts must be join'd and reunited, and duly retain'd in their Natural Position by convenient Boulsters or Splinters, until they be firmly closed and reconjoin'd. Moreover

IV. *IN Difficult BIRTHS*, it very commonly falls out that the *HEAD* is pressed into an *oblong Form* by the *Bones* of the *Pelvis*, because the *SCULL* not being made of one piece, is not equally *hard* or *firm*; the *Sutures* being only surrounded with *Membranes*, especially the *Top* of the *HEAD* is so *Membranous* and soft, that the *Bones* forming the *SCULL* may be easily pressed one upon another; from whence we have this *oblong Figure* of the *HEAD*. However, in short, this may be corrected and reduced to its *Natural Shape*, by frequent, but cautious and skilful, *Handling*.

V. WEAK CHILDREN, and such as come *præmaturely*, or before their Time, into the World, have the *Mould* and *Sutures* very open, and the *Bones* far distant: In which Condition they are only to be

softly bound about with a small *Cross-Cloth*, committing the rest to *Nature*; which in time, and by degrees, will close up and consolidate these *Sutures*; and sooner or later, according to the *innate Heat* and *Moisture* of the *INFANT*, unite and join the *Bones* of the *HEAD*.

VI. SOMETIMES also it happens that the Child is Tongue-ty'd, by the too strait Astriction of its BRIDLE; so that this Member cannot freely extend or move itself, thro' the Capacity of the MOUTH; which in the Infancy impedes or hinders its Sucking, as in riper Years it does the Faculty of SPEAKING: In this Case, the TONGUE, being supported or held up, on each side of the String, by a small forked Instrument, ought to be cut a-cross by sharp SCISSORS as much as is needful; which however must be done with Caution, not to hurt the Veins under the TONGUE.

VII. *THE INFANT* is also sometimes troubled with a small round *Tumour* under the *TONGUE*, fill'd with *vitious Blood*, or *pituitous Matter*; which *Aëtius* and *Paulus Ægineta* call'd *RANULA LINGUÆ*; Which *Case* may be managed, and the *Tumour* dissolved by a little *Ammoniac Salt*, or such other proper *Remedies*; but if Occasion require, the same may be open'd by a *Lancet*.

VIII. *IT* also happens, tho' but seldom, that the *CHILD* is born with a close *Fundament*; and *that* sometimes shut up by the single *SKIN*, and sometimes by a *fleshy Substance*: In the first *Condition*, there appear some *livid Marks* of the *MECONIUM* thro' the *Skin*, which feels soft to the *Touch*. Upon which occasion, an *Apertion* must be made with a small *Incision-Knife*, a-cross, not long-ways, that it may the better receive a *round Form*, and not so easily grow again together; which however must be done with great Caution, that the *SPHINCTER* of the *Rectum* may not be hurt: And the *Meconium* being afterwards voided, whether by a *Suppository*, *Clyster*, or otherways; the *Orifice* is to be stopp'd up with a *Linnen-Tent*, anointed at the beginning with *Rose-Honey*, but afterwards with some drying and cicatrizing *Ointment*, such as *UNGUENTUM-ALEUM*, *POMPHOLYX*, &c. Dressing it always as often, and as soon, as the *Excrements* are evacuated, lest the *Apertion* should turn to an *ULCER*.

BUT in the other Case, where the FUNDAMENT is stopped up with Flesh, that neither any Mark nor Appearance of the RECTUM is seen or felt, whereby its true Situation may be known, or the proper place where the Aperture ought to be made; The Operation is much more

difficult, and the *INFANT* but seldom escapes the fatal Consequence of this *Misfortune*: Which Difficulty notwithstanding, we are diligently to do our Best upon such Occasions; to which End, an *Apertion* must be made within *half* an Inch of the *CHILD's Rump*, being the certain place of the *RECTUM*; which in the *interim* must be perform'd with the greatest Care and Judgment by a small *Incision-Knife* with one Edge, turning the *Back upwards*, and thrusting it so forward, until the *Aperture* be made big enough for the *Excrements* to pass thro', always prudently regarding the *SPHINCTER* as above; upon which the *Wound*, &c. are to be dressed and order'd, as in the preceding *Case*.

IX. *IN* like manner, it also may happen that the *INFANT* is born with its *Urinary Passage* shut up; upon which Occasion, a convenient *Apertion* must also be made with a proper *LANCET*: Which *Operation* must likewise be perform'd with great Prudence and Ingenuity.

X. *MOREOVER*, It also sometimes falls out, that the *CHILD* is infected with the *Venereal Lues*, from the Predominancy of that *Distemper* in the *MOTHER*; *which* Case easily discovers itself by many *Pustules* and *Ulcers* appearing at the *BIRTH* in diverse Parts of its Body, especially about the *HEAD*, *BELLY*, *THIGHS* and *CLUNES*: Upon which the *Cure* may be pertinently protracted to a more advanced Age, tho' prudent *Measures* may be taken, to keep the *Distemper under*, but if the *Condition* be Malignant, the *Remedy* is commonly prevented by *DEATH*.

XI. *FINALLY* as to the small or puny *Faults* of *NATURE*, such as a distorted or wry *Mouth*, crooked or flat *Nose*, thick or flabby *LIPS*, rough or ugly *VISAGE*, or the like *Blemishes*,——

*THE CHILD's Body* being tractable like a piece of *Wax*, or the *Potter's Clay*, These may be Judiciously corrected and Ingeniously amended, and a more Delectable and Amiable *FORM* given to<sup>[186]</sup> every *Part*; as in *Case* of any *Blemish* of the *EYES*, whether they be Discoloured, or Sparkling, Dim or Short-sighted, Squint or Goggle, Rolling or Goat-eyed; a Lovely *black Colour*, and a *graceful Beauty*, may be also artfully given them<sup>[187]</sup>.

*NOW* (I think) These are all the most common *Symptoms* or *Indispositions* which the *CHILD* brings with it into the World; which being thus briefly discuss'd, I come at length to——

#### CHAP. XI.

## Of the Sundry Symptoms and Diseases, peculiarly incident to the INFANT after its BIRTH.

*NOTWITHSTANDING* that the *CHILD* may be born free from all apparent *Symptoms* of any *Indisposition*, and however careful the Honest Nurse may be of its *Diet* and *Regimen*; yet it seldom happens, but it undergoes some one or more of the *following subitaneous Inconveniencies*, viz.—–

I. *GRIPES* or *Pains* of the *BELLY*, which may proceed either from the *MECONIUM*, its not being timely, or not fully evacuated; or from the *NURSE'S Milk*, its generating *Wind* and *acid Humours*, either by her using improper flatulent *FOOD*, or from the *BABE'S* sucking more *Milk* than its *Stomach* can digest: Or the same *Pains* and *Gripes* may also proceed from the *Effects* of cold *AIR*, or from *WORMS* in the *Intestines*, or from the *unseasonable use* of *PAP*, &c.

THIS Affection in general is known by the Inquietude and Crying of the INFANT, which is now (in a manner) averse to the BREAST, continually turning itself here and there, without Rest or Intermission of Pain; But more particularly, This proceeding from the MECONIUM, may be distinguished and known by the Colour of the Excrements, since the MECONIUM is always black, and as soon as it is altogether voided, the STOOL becomes pale; and that may be readily cured by the means already prescribed<sup>[188]</sup>. If this Affection proceeds from WIND, it may be known by the CHILD's frequently belching and the BELLY's swelling, if from COLD, the use of PAP, or from any pituitous viscid Humour, the BELLY is most commonly bound, and the Cure differs but little from the preceeding Case. If from corrupted MILK or acid Humours, the Condition is most commonly attended with a DIARRHÆA, and the Excrements are of a greenish or *Saffron Colour*: The *Cure* of which, depends upon proper *Abstergents* and Evacuations. If at last from *WORMS*, their proper *Diagnosticks* shew it, of which in their Place.

II. SOMETIMES an Extension or shooting forth of the NAVEL happens to the CHILD, and that frequently to the Bigness of an EGG, more or less; which Case is properly call'd an EXOMPHALON, and proceeds either from the continual Cries, or violent Coughs of the INFANT, or from a Laxation or Rupture of the PERITONÆUM, or sometimes from an Exulceration of the NAVEL.

IN this Condition, whatever the Cause may be, the sooner that the Cure is undertaken, the more easily it is perform'd; for which End, after removing the Causes of Crying or Coughing, the relaxed *PERITONÆUM* may be strengthened and astringed; as when bursten, it may be reunited and consolidated by proper CATAPLASMS and SWATHS; after replacing the Intestines (if fallen down) keeping the CHILD for the most part in Bed, with its BELLY always loose, and never too full.

III. AND the same is the Method of Cure, in Case of an Intestinal RUPTURE, otherwise call'd ENTEROCELE, i. e. HERNIA; only, That a *Truss* is now more convenient than a *Swath*: However in this Place I would observe that all Tumours of the SCROTUM, are not to be mistaken for the present Bursten Case; because the same may also happen from a Watry Humour collected in that Part, which is more properly call'd an HYDROCELE, and is easily distinguish'd from the ENTEROCELE: Insomuch, that, in this Condition the Tumour is most commonly, in one part of the SCROTUM, I mean in its Right or Left *Side*; when also the fallen *Intestines* may be perceiv'd by the *Touch*; as the *RUPTURE* or *Hole* through which the *Intestines* are fallen, may be by the *Finger*: Whereas in the *Case* of an *Hydrocele*, the *Tumour* is commonly in both Sides, and the SCROTUM is more puffed up, neither is there any Hole of a RUPTURE to be found in the PERITONÆUM. The Cure of which Case depends entirely upon proper Absorbents, or Discutients, for resolving and drying up the WATER, or dissipating the WIND, and afterwards upon Corroboratives for confirming the *Parts*. But after All, in the mean Time this *Tumour* is also sometimes, upon occasion, properly open'd by a LANCET to evacuate its preternatural Contents.

IV. AN Inflammation or Exulceration of the NAVEL may happen to the CHILD, by the String's falling off too soon, or before it be fully clos'd and cicatriz'd; which may proceed from any violent Agitation of the BELLY, by continual Crying, vehement Coughing, &c. as it also may from an unskilful Ligature of the STRING, or from cold AIR; upon which sometimes follows a great loss of Blood, and even DEATH itself, if not timely prevented.

THIS Inflammation is known by the NAVEL'S swelling-up, being red and hard with Heat and Pulsation; In which Case after appeasing the INFANT'S Coughs, or Cries, &c.—I would apply to it the Unguentum refrigerans Galeni & Populeon, each one half mix'd; or a small Bolster dip'd in the Oil of Roses with a little Vinegar.

BUT, and if the NAVEL continues Ulcer'd after the falling of the STRING from it; in that Case proper Desiccative and Astringent Medicines are to be apply'd, such as small Rags dipp'd in Lime-Water, but not too strong; or in Plantane-Water, wherein a little ALUM has been dissolved. If the ULCER be but small, a Pledget of Dry Lint will be sufficient; observing always to keep a good Linnen Compress on the Top of whatsoever Remedy is us'd, with a SWATH to keep all fast, until the NAVEL be perfectly heal'd and cicatriz'd; lest at the same time it should also force itself outwards, as in the 'foregoing Case.

V. *THE Child* is also very frequently troubled with the *APHTHÆ*, or *Ulcers of the Mouth*; commonly call'd the *THRUSH*: Proceeding either from vitious *Milk*, or from its *Corruption*, in the *STOMACH*; emitting sharp *Vapours*, which readily affect the tender Skin and Superfice of the *INFANT's Mouth*, and *that* the more easily, because the same *Tunick*, or *Skin*, which invests the *Mouth*, is common to the *Gullet*, which naturally communicates the *Affections* of the *VENTRICLE* to the *Jaws*. Hence it is that the *Nice Taste* of the *delicate TONGUE* so readily distinguishes all *Relishes*; and hence it is that the Ingenious *Physician*, by looking upon the *TONGUE* only, is able to judge of the prevailing *Intemperament* of the whole Body.

*THE Cure* of these *THRUSHES*, proceeding as aforesaid from the *acid Vapours* of bad *MILK*, or from its ill *Digestion*, depends properly and entirely upon defeating and obtunding the *ACRIMONY*, by *proper Absorbents*, and gentle *Purgatives*.

VI. ANOTHER Symptom not only familiar, but even Natural, to all CHILDREN, is their Teething; which tho' This be the mere Work of NATURE, yet because of the various Distempers and Symptoms, which commonly attend and conjoin this DENTITION, it is not improperly reckon'd in the CATEGORY of the Diseases of INFANTS: Which however is to be understood, not of the Simple DENTITION, but of the difficult Breeding of Teeth; Not but that the CHILD is furnished with Teeth even before BIRTH, tho' they lurk so long in their proper Sockets, being cover'd with the GUMS, until their due Time of Eruption<sup>[189]</sup>. Tho' in the Interim, it has been observed that some CHILDREN have brought eminent TEETH with them into the World<sup>[190]</sup>, as it is also for Instance, particularly reported of LEWIS the XIV of France.

BUT however the TEETH most commonly break out about the Seventh Month, and first those call'd Dentes Incisores, or the four fore-*TEETH*; which after a short *Interval*, are followed by the *two Dog-Teeth*, commonly call'd the *EYE-TEETH*; and at last succeeded by the eight *Cheek-Teeth* or *GRINDERS*, in each Jaw; the two last of the Molares, properly called *Dentes Sapientiæ*, springing only out about, or after the one and twentieth Year. Now as this Eruption, particularly that of the DOG-TEETH, because of their very deep Root and small Nerve, cannot happen without an exquisite Sense, and intense Pain to the INFANT; so, from the continual Solution of the GUMS, many præternatural Affections seize the CHILD, according to *Hippocrates's* Catalogue<sup>[191]</sup>; to which, in short, I must only refer: Because if I was to enter upon the particular Detail of all These, I should extend the *Limits* of this *WORK* beyond all measure; wherefore I shall endeavour to comprehend them all under the one following general Head; viz.—

# CHAP. XII. Of the Acute Diseases of INFANTS.

THE very tender Nature and infirm Constitution of CHILDREN, subject them to many various and grievous Symptoms, besides those to which they are expos'd by a vast variety of Procatarctick Causes. But as I am not in this place to enter upon the Detail of these particular Symptoms, neither shall I enumerate their respective Causes: Which however is the less requisite, considering the Regimen and Nursement of the CHILD already prescribed in the foregoing Chapters; since the least step, degenerating from what is there inculcated, may prove an effectual mediate Cause; for all that indeed, according to the most Learned and Excellent Dr. Harris, the only immediate Cause of all CHILDREN'S Diseases is, an Active and prevailing ACID<sup>[192]</sup>.

THIS Doctrine, in as much as the Constitution of INFANTS is undeniably most *Humid*, appears also evident from *Hippocrates*'s his own Words, saying, the Rise of all Diseases is one and the same, the Place only makes the Difference<sup>[193]</sup>. Hence we may justly conclude, *FIRST*, *That*, however the *Symptoms* may differ in *degree*, the Diseases of the INFANT-State are but very few: SECONDLY, That the *Cure* of *these* is far more Safe and Easy, than *those* of full *grown Persons: THIRDLY*, That the *Younger* the *Sick CHILD* is, the more easy still is the *Cure*: Because its tender Body, abounding with *Natural* and *acquired Moisture*, is soft and flexile, and consequently apt to receive any Alteration: And FOURTHLY, I observe that the INFANT easily falls into *Sickness*, or may be suddenly taken Ill, and as readily restored to *Health*, if but carefully and ingenuously *treated*: Because any *Impression* whatsoever, good or bad, is sooner received by a Soft, than by a Hard Body; tho', I confess, the same is more Lasting, if once strongly impressed upon the Hard adult Constitution.

NOW as to the Diagnosticks of CHILDREN'S Diseases, These depend chiefly upon the Relation of the NURSES; since all Sentiments taken from their unruly PULSES, or their (naturally) thick URINES, prove most Uncertain. However, as the STOMACH is always affected with an Acid Distemper, (whatever the reigning Disease may be, or howsoever it may be intitled by ingenious Authors) so it most commonly produces Fastidy or Loathing of VICTUALS, Vomiting of a thick GELLY, or a viscid and coagulated PHLEGM, sour Belchings, and EXCREMENTS of a sourish Smell, and a greenish Colour, especially in the Beginning. As afterwards—

*IF* the *Distemper* continues, the *PATIENT* turns gradually *Pale*, and its discoloured *FACE* is tinged a little *Green* or *Yellowish*; The *BELLY* swells with *Wind*, which breaks frequently *upwards*; one or more red *Pustules* (a certain sign of *Acidity*) commonly rise in the *FACE*, or upon some other *upper Part* of the Body; and the *INFANT* growing daily worse, *breathes high*, and *smells sour* or *ACID*.

*AGAIN*, As to the *Prognosticks* of these *Distempers*, of what kind soever they be, which afflict the *INFANT*; I cannot in short, but readily agree with the most Ingenious *Doctor* before-mentioned, who plainly tells us, that *These* depend chiefly upon the Method of *Cure*, and the *Conduct* of the *NURSE*; Wherefore I proceed to the *CURE*.

AS to this point then of the Cure of CHILDREN'S Diseases, I shall FIRST observe that, how many soever these Distempers are accounted, according to the REGISTERS of Polite Authors, by what Name soever they are denominated, and how learnedly soever defin'd, as they all proceed from one immediate efficient Cause, (which has been already hinted at) so the Cure of them all is the same, and depends, in like manner, upon One only regular Method.

SECONDLY, I observe that as this *Cause* is nothing else than an *Acid Humour*, abounding in the *Stomach*, and coagulating the *imbib'd Nourishment* of the *INFANT*, (as is evident from all the given *Diagnosticks*) so the proper *Method of Cure*, depends entirely upon obtunding that *Acidity*, dissolving those *Coagulations*, and eliminating the *peccant Matter*. But more particularly,

HAVING always a great and due regard to the natural Debility, and tender Constitution of the Young PATIENT, the Acid ought first to be prepared by prudent means, and then to be carried off by proper Medicines. I say prepared by prudent Means, because this is no indifferent Matter; For if we should take the same Method with these tender *Creatures* in this *Case*, that we do with more *adult Persons* we would certainly *miscarry* in our Attempts; or if we should attempt this Preparation, by *Alexipharmacks, Cordials*, (improperly so call'd) *Causticks*, or *Sudorificks*; these Things being most prejudicial to the Nature of *young ONES*, would rather promote the *Crudity*, than the *Concoction* of the *HUMOURS*.

THEREFORE the ingenious Doctrine of the Excellent Doctor HARRIS, must certainly take place here, namely<sup>[194]</sup>, that the most temperate Things most securely absorb the prevailing Acidity, and that the more Simple and Gentle the Remedies are, the more Safe and Certain the Cure is.

HENCE the simple Testaceous Medicines mentioned by him, are not to be paralleled in the present Case; since they effectually mitigate all Ebullitions, and gradually become the most safe and powerful Anodines: Insomuch, that they, in a word, as certainly asswage all the Pains, Gripes, Disquiets, Watchings, &c. of CHILDREN; as Narcoticks, or Opiats, do allay those of older People.

*THE* Body being then alter'd by these means, and the *Humours* duly prepared, they are to be forthwith ejected, or timely purged off, even from the *youngest INFANTS*, as well as from those of riper Years: The *Doses* and *Quantities* of all sorts, being discreetly adapted to the *Age* and *Strength* of the *CHILD*, under what *Form* soever they may be given.

UPON this Head, I might indeed pretend to expatiate, but because, whatever *I*, or any other ingenuous Person, understanding the Matter in Hand, may attempt to offer, will only terminate in, and be consentaneous to, what my last quoted Author has plainly laid down, and concisely comprehended in a few emphatick Words; I shall here also, for Brevity's-sake, set Bounds to my Progress. And thus, in short, having at large, and in every particular Respect, faithfully discharged my Duty, both as Physician and MIDWIFE, to the CHILD as well as to the MOTHER; I now take leave of both the one and the other, and in the next place, come briefly to touch upon the Reverse Cases.

#### SECT. VII.

#### CHAP. I. Of Præternatural Conceptions.

HAVING particularly defin'd the Natural Conception, in Chap. I. Sect. III. and hitherto treated of its various different Consequences, both in GESTATION, BIRTH and CHILD-BED; I come in the next place (conformable to my promise before-mentioned) to treat of the opposite and reverse Case, commonly call'd (by the Authors) a vitious or depravated CONCEPTION: Which however, I shall distinguish by the general TITLE of præternatural, as I have one Set of BIRTHS under the same Denomination, contained in Sect. V. But

*NOW*, because I judge all such *CONCEPTIONS* as well as *BIRTHS*, to be *præternatural*, which, tho' not according to the *ordinary Institution* of *NATURE*, are yet however not *repugnant* to *NATURE*: And because such *CONCEPTIONS*, as well as the *Præternatural BIRTHS* already defin'd, happen after many different ways and manners; I shall also reduce and divide them into *two CLASSES*, *viz.*—

FIRST, Præternatural CONCEPTIONS in respect of the Number; to which belong all Superfætations, and other Numerous CONCEPTIONS; And SECONDLY, Præternatural CONCEPTIONS in respect to the Form or Substance; to which belong all false CONCEPTIONS, MOLES, MONSTERS, &c. Of all which particularly and briefly in their due Order, and FIRST——

## CHAP. II. Of superfætations.

A *SUPERFÆTATION* is nothing else than a *Second* (after a *First*) *CONCEPTION*: Since if divers *INFANTS* may be *conceiv'd* at one *Embrace*, as will evidently appear from the following *Chapter*, we may easily believe, that *two*, *three*, or *more Embraces*, may most probably have the same *Effect*: Which is sufficiently confirm'd by the Experience of *Hippocrates*<sup>[195]</sup> himself, as well as by many other most Learned *Authors*<sup>[196]</sup>.

WHEREFORE I shall spend no time in reciting here any Instances I have met with of this Nature; only I refer the Curious to a very famous collected History of such BIRTHS, as in the Margin<sup>[197]</sup>. Whence the Certainty of Superfætation is not to be doubted, and much less to be disputed: And according to Aristotle the same may happen, after the Second or Third Day, from first Conception, as well as after so many Months<sup>[198]</sup>. But farther,——

THE Cause of all Superfætations is only an Apertion of the Orifice of the WOMB, at the Effusion of the Virile SEED. Which however (according to Avicen) only happens to such Women, as have plenty of BLOOD, or a Calid WOMB, desirous of Copulation, or to such as have their MENSTRUA after the first CONCEPTION.

SUPERFÆTATIONS however are not easily discover'd before BIRTH; at which time, Avicen advises to take Notice of the NAVEL-STRING; For (says He) if it be without folds or wrinkles, there is but one CHILD; if otherways, there's a Child for every Wrinkle: But I think the expert MIDWIFE using her Hand, as I have not unadvisedly inculcated<sup>[199]</sup>, will have but small Occasion for such Observations, and far less Need to trust to them.

*BUT* when more than *one CHILD* is found, they are distinguishable, (I mean *Superfætations*) from *These* conceiv'd at one time; *those* having each a *peculiar SECUNDINE*; *these ONE* only in Commune: As the *one* is also less vital and more imperfect, than the *other*; according to the interval of Time betwixt their *Conceptions*.

*THE Cure* or Prevention of this *Case* is much the same with the following, *viz*.

## CHAP. III. Of a Numerous Conception.

A Numerous CONCEPTION may happen either with, or without SUPERFÆTATION: And that without, may be truly call'd Monstrous; as all BIRTHS, exceeding the Number of the Woman's Breasts, or the SINUS'S of her WOMB, may be justly accounted.

I could also give many Instances of this sort of *BIRTHS*, where 3, 4, 5, and more CHILDREN have been born at once, but shall satisfy myself with *This*, which I think is one of the most remarkable, *viz*. That of the Countess Margaret,<sup>[200]</sup> Daughter to Florent IV. Earl of Holland, and Spouse to Count Herman of Heneberg; who, on Good-Friday, in the Year of our LORD 1276, and of her Age 42, brought forth at one BIRTH 365 INFANTS; whereof 182, are said to have been Males, as many Females, and the odd one an HERMAPHRODITE: who were all baptized, those by the Name of JOHN, these by that of ELIZABETH, in two Brazen Dishes, by Don William, Suffragan Bishop of Treves. The BASONS are still to be seen in the Village Church of Losdun, where all Strangers go (on purpose) from the Haque, being reckon'd among the great *CURIOSITIES* of *Holland*. For farther and more instances of this Nature, I refer the Curious to a large collected *History* of such, by the *Author* mentioned in the *Margin*<sup>[201]</sup> From whence the Certainty of Numerous CONCEPTIONS will evidently appear.

AGAIN the Cause of such Numerous CONCEPTIONS is (according to Avicenna's just Opinion) the Division of the SEED in numerous Portions, or Proportions; which may happen, either because of the WOMB, or because of the INJECTOR: Because of the WOMB, when its Cavity is larger than ordinary; or when it too greedily attracts to all its Parts; or when the divided SEED adheres separately to the singular Uterine Veins: Insomuch, that if what has been recorded of the abovesaid Countess be true, it is not improbable that, there may be a

*CONCEPTION* for every *Orifice* of the *Uterine Veins*, and that every *Vessel* may attract its own distinct *share* of the *SEMINAL Matter*, and thereupon initiate a respective *CONCEPTION*, tho' it cannot possibly bring it to *Perfection*.

*MOREOVER* the same may also happen, because of an irregular *INJECTION*, namely, when *that* is perform'd by *stops* and *intervals*; then the *WOMB* attracting accordingly, may occasion different *CONCEPTIONS*, according to the different *Immissions* or *Divisions* of the *SEED*.

*BUT* these *CONCEPTIONS*, whether *two*, *three*, or *more*, are always annexed to, and contained in one common *SECUNDINE*. And tho' the *Woman*, by reason of her good Constitution of *Body* and *WOMB*, may do well in the time of *Gestation*, yet her *Præternatural Condition* in the *BIRTH*, always threatens *Danger*, as is already made out more manifestly<sup>[202]</sup>.

*NOW* as to the *Cure* or Prevention of both *this* and the *preceding Case*, I know but one only grateful Method of performing it; *viz*. by refrigerating and reducing the too *calid WOMB* to a convenient *Temperature*, and using a proper *Regimen* of *Health* and *DIET*; and *that* both before and after *CONCEPTION*.

## CHAP. IV. Of False Conceptions.

*HAVING* already also particularly defin'd the *real* or *true CONCEPTION* in *Sect.* III. Chap. I. I come now in like manner to the *REVERSE* of that *Case*, properly call'd a *false CONCEPTION*. But that I may, in this Point, be well understood,——

A False Conception, in my Opinion, is nothing else, but a *Protuberancy* of the *Woman's Belly*, attended with some, if not with most, of the *Symptoms* of the Months of *GESTATION*: which however, is no ways occasion'd by a humane FOETUS, but (on the contrary) either by *Water* and *Winds*, or *Wind* and *Water* vitiously mixed; which is also pertinently call'd a *Dropsy* of the *WOMB*: Or then, by a corrupted *Viscid*, or *pituitous Matter* collected in the *WOMB*; and that either proceeding from weak and vitious *SEED*, or from some extraordinary *Intemperature* of the *WOMB*, which may hinder the *Elaboration* of the *SEED* and *BLOOD*, and consequently the *Accomplishment* of the *CONCEPTION*: Or the same may also finally proceed from the *Impurity* of the *MENSTRUA*, which may corrupt the *SEED*, and convert it to *Aqueous*, *purulent*, or *other HUMOURS*.

THIS false CONCEPTION is attended (besides the common Symptoms of a true CONCEPTION) with inordinate FEVERS, PAINS of the Head, Neck, Loins, Groins, Back, and Belly: Which BELLY swells sooner than in the Condition of real CONCEPTION; and which, if struck with the Hand, gives a Sound like a DRUM whence 'tis also call'd a TYMPANY: The whole Body is hence discoloured; the Feet, and sometimes the Face swells; and only a little (if any) watery MILK is found in the Breasts. THE Cure of the Case depends entirely upon proper Evacuations, peculiar to the Quality of what is to be evacuated. Whence I come to treat of the Conception of MOLES.

## CHAP. V. Of Moles.

A *MOLE* is properly nothing else, than a *fleshy Mass* (instead of a *FOETUS*) engender'd, of an *imperfect Conception*, in the *WOMB*. And is so call'd, because (*quasi Lapis Molaris*) like a *MILL-STONE*, its *weight* infests the *Woman*.

THERE are two immediate Causes of this CONCEPTION of MOLES, viz. the Superfluity of Matter, and the *infirmity* of the forming Faculty. Which, I think, is agreeable to Hippocrates his meaning, saying, that too much Menstruous Blood, or too little, weak, or insufficient SEED, is the only Cause of a MOLE<sup>[203]</sup>.

I know, that besides these, there are many other various *Causes* given by diverse *Authors*; yea I know that the *MoLE* it self is variously accepted among them: But as I am not to insist upon the *quibbling* Notions of other Men, so I shall only here observe,—

FIRST, that there is a vast Variety and Difference in the Substance, as well as in the Form of MOLES: SECONDLY, That there is sometimes but one, and sometimes two, three, or more MOLES, contain'd in One WOMB; and that, sometimes with, and sometimes without the Natural FOETUS as also sometimes separately, and sometimes adhering the One to the Other: THIRDLY, That in this Case, if the FOETUS be not directly kill'd by the Compression of its tender Body, it is at least in Danger of being misshaped, or perhaps monstrously formed, according to the Bulk, Weight, and Solidity of what is contain'd with it in the WOMB.

HOWEVER in regard to the FOETUS, when we are certain of its *Existence*; tho' in the *WOMB*, with *one* or *more MOLES*, it may perhaps be very safe; Therefore I again observe, that, in this Case, as long as the *Woman* is no ways endangered, the *Exclusion* of *BOTH* ought to be *Natural*, and accordingly the *appointed Time* waited for: When according to all *Authors*, the *MOLE* comes sometimes before,

sometimes with, sometimes immediately after, and sometimes a few Days, or perhaps Weeks, after the *FOETUS*. But such *MIDWIVES* as follow my *Method*, already plainly laid down<sup>[204]</sup>, will scarce trust their *WOMAN* with the Charge of a *MOLE*, one moment after the *Birth* of the *INFANT* and *Secundine*: Because by such means, yea, even by a small *Clod* of *BLOOD*, which is a far less matter, retain'd after the *BIRTH*, *Millions* of Women have lost their pretious *Lives*.

*IN* the mean time, as *MOLES* are most commonly generated *alone*, without any *FOETUS*; I come now to indicate their peculiar *Diagnosticks*, which the *Reader* may take as follows, *viz. FIRST*, the *Woman's BELLY* swells equally in all its *Dimensions*; whereas in *Case* of a *Natural Conception*, it is raised, and as it were acuminated or pointed towards the *NAVEL*, and a little compressed on *both sides*.

SECONDLY, The Orifice of the WOMB never shuts in this, as it does in the Natural, CONCEPTION: And the MOLE may be distinctly felt by the Touch, like a Globular Mass, in the Region of the WOMB and LOINS.

THIRDLY, Any expert Woman may also distinguish this Case, by its Motion; which is very different from that of a FOETUS, as also from that occasion'd by a false CONCEPTION as above described: The FOETUS having not only a total, but also a Partial Motion; which always differs according to the Part or Member moved; and is consequently first perceived about the fourth Month: Whereas the MOLE has no distinct Motion; only, as the Woman turns to either Side, she may feel it (like a STONE) falling to the same Side; and in her walking, she may easily perceive its suppressing dead WEIGHT.

FOURTHLY, Her Breasts swell, but give seldom any manner of *MILK*, and about the 4th and 5th *Months*, when she, who has a *Natural Conception*, is commonly best in *Health*; then the *MOLE-BEARER* falls worse; Her *Limbs* and *Legs* extenuate; her *Face* and *Skin* are all over discoloured, as the whole *Body* languishes; *PAINS* of the *Back* and *Groins* follow of Course, together with a Difficulty of *Respiration*; as sometimes also, *Wind* and *Humours* break out of the *WOMB*.

UPON the whole, the *PROGNOSTICK* of this *Case* is, that as the *MOLE-BEARING Woman* must in all respects, be very much discommoded, and afflicted with heavy threatning *Symptoms*, so she lives continually in Danger of her Life: And the longer she entertains

this unwieldy *GUEST*, the more rigid it grows, and the closer it sticks to her; so that consequently, the more difficult it is to dislodge or extract this *præternatural Body*: For as the *MOLE* has no *Secundine*, nor *Umbilical Vessels*, but adhering by its own gross *Substance* to the oppress'd *WOMB*, attracting its *Nourishment* directly from the *Uterine Vessels*; So it also fixes it self more and more strongly, and the longer the more firmly among them, to the great Prejudice and Damage of *NATURE*.

*NOW*, as to the *Cure*, or the *Delivery* of the *MOLE*, as has been said, the *sooner* it is undertaken, the easier it is performed: And in this *Case*, I know all *Authors* advise only, to endeavour its *Expulsion* by *Bleeding in the Feet*, by proper Baths, by strong and Acrid *Clysters*, &c. in order by such like *means*, to excite or stir up *THROWS* to open the *WOMB* and irritate the *expulsive Faculty*. But for my part, I would not too much afflict the *PATIENT* with these uncertain *means*, especially if the *Præternatural Body* be of any long standing; but rather at once betake my self, to that which cannot fail me, *that* is the *HAND-CURE*; after Bathing, relaxing and moistening the *PASSAGES* with *Oils* or *emollient Ointments*: And *This* I would undertake, and perform after the same manner, as in the *Condition* of a *Dead Child*, when the *PAINS* are altogether *Deficient*. Again farther—

I observe that, of all the *Countries* I know, there is none, whose Women are so subject to MOLAR CONCEPTIONS, as the Provinces of Holland: And moreover, by what I have diligently observ'd my self in those *Parts*, as well as by what I have comprehended from their most *Learned Men*, the *MOLES* generally conceived there, are very different from Others commonly conceived in other Parts; Insomuch that *Those* are of a strange, astonishing, deformed *shape*, having (as it were) something in them like the *Rudiments* of a *Work imperfectly* begun; such a Piece, as, for Example, a Limner may draw at the first Draught, with a rude Pensil; together with something of both Life and Motion: LIVING however only (as it were) Vitâ Plantæ, and moving but by *Palpitation*; as I have also seen and observ'd this *Body* to contract it self sensibly at the *Touch*, and immediately again dilate it self perceptibly. In the *interim* I must farther observe in this Place, that most commonly *NATURE* ejects these *Bodies* happily about the *fourth Month*; however yet, not always all at once, but most

frequently by *Piece-Meal* and in *Heaps*, not unlike as the *PUMP* does the *Bilge-Water* out of the *Ship*.

BUT here it may be ask'd, why the Dutch good Women, should be more subject to these Præternatural Conceptions than any others? To which I answer, according to the Sense and Sentiments of most of their own greatest Men; FIRST, that all over these Provinces, the very Borders of the SEA are inhabited, and a World of People live (as it were) in the very Jaws of the OCEAN; whose bellowing Waves and tumultuous Surges, are not only obvious to their Eyes all Day, but obnoxious also to their Ears all Night long; as they continually beat upon their Coasts, and sometimes too near their very Doors: From whence these Women cannot but be much affected and disturbed, if not also frighted in their very Embraces.

HOWEVER yet, I do not conceive This to be always the CAUSE, since MOLAR CONCEPTIONS are also very common in their greatest *Cities*; But as *those* happen there most frequently among the Sea-faring Men's Wives; so, I think, we may rationally account for them after this ensuing manner, viz. The Sailers arriving from their *Voyages*, and coming Home merrily with full Sail up to their very Doors, incontinently embrace their *WIVES*, without having any regard to their Natural Course, the SILENT MOON, or any other *Circumstance*; And the honest *WIVES*, having perhaps long wanted their Husbands, make no Procrastination, but eagerly fall to enjoying *One Another*; the good *Women* attracting as greedily the virile Benevolence, as *Nature* can prompt, or as *Cerberus* could snap at a *Piece*, or the *Hunger-starved* a *Bit* of *Bread*. Upon which, if no Efluxion happens in the Beginning, NATURE being incapable of elaborating such an unapt confused Matter, it is converted to a *MOLE*; which (as aforesaid) is frequently cast forth about the *fourth Month*, and call'd by them *een Manekindt*, as we for the same reason call it a *MOON-CALF*.

## CHAP. VI. Of Monsters.

WHEN the Parts destinated to the Generation of Man, are in all respects well constituted, *NATURE* in the Beginning fabricates a fair and comely *Conception*, and at last produces a *Lovely Creature* of its own kind, absolutely perfected, and compleatly furnished with all its own graceful *Ornaments*: Whereas if any *Deficiency*, *Enormity*, *Fault* or *Blemish* be actually in *Those Parts*, then the *conglomerated Principles* of *GENERATION* are variously form'd into different Sorts of prodigious CONCEPTIONS and *Monstrous BIRTHS*. However—

WITH respect to the Variety, as well as the Veracity of this SUBJECT, that I may make short Work on't, I refer the Curious Reader to the WORKS of Jacobus Ruffius, Cornelius Gamma, &c. who have not only described at large, the various Shapes and Figures of the most remarkable MONSTERS which have been Born, but also particularly noted the Times and Places of their BIRTHS; which they have authentically collected from many creditable Authors.

*IN* the small Conversation, by the *By*, which I have had either at Home or Abroad with the *Learned*, I have met with none who have deny'd the *Truth* of this *POSITION* in *general*; tho' some of my *Superiors* in this Place, have been pleas'd to contradict in *particular*, what I am just now going (and chiefly for that very reason) about to publish to the World, in the next following *Chapter*.

BUT notwithstanding that we all agree as to the FACT, yet I have found but few ready to discuss the proper Causes of Monstrous BIRTHS: Only so far, that some would have them to proceed immediately from the Commixture of Humane with Brutal SEED; others, directly from the INFLUX of the Stars; Some again, from a vitious Constitution, or oblique Situation of the WOMB; others also, from a Lascivious and enormous Act of Copulation; and some at last, from the sordid and corrupted SEMINAL Matter of the Persons *Copulating*. Which may be all indeed, in some respect, consentaneous to *Reason*; but notwithstanding, in speaking to such *Causes*, I think, we ought previously to consider the *Requisites* concurring to the *Production* of the *FOETUS*; what they naturally are, and how they ought to be *qualify'd*.

THE FIRST and chief of which is the Forming Faculty; 2ly. The two Instruments, by which this Faculty operates, viz. the SPIRIT or innate Seminal Heat, and the Imagination, 3ly. The MATTER, viz. both the SEEDS, and the Menstruous Blood; 4ly. And lastly, the PLACE, namely the WOMB: Whence I conclude that any one, or more, or (perhaps) all of THESE, degenerating from their due state or natural Qualities, may prove the Cause or Causes of a MONSTROUS CONCEPTION, or Æquivocal GENERATION.

AS to the Forming Faculty, it never errs or fails, but always performs its Duty, as far as depends upon it self, or its own Intention; tho' indeed it often happens to be frustrated by the Instrumentary Causes: As the most ingenious Artificer cannot finish his Work, however successfully begun, without a proportionable Metal to work upon, and corresponding Instruments to work by; So it is, in this Case, with the Forming Faculty: Hence it is that MONSTERS are also pertinently call'd, as they undeniably are, the Works of NATURE; however degenerating from its proper END, that it may effect something, even such a MONSTER, rather than that the indigested and unalterated Matter should remain in the WOMB, and turn either to a MOLE or a STONE, as has often happened<sup>[205]</sup>. Which being thus consider'd, we shall find the Error or Fault to ly either in the Instruments, in the Matter, or in the Place.

*FIRST* then, as to the *Instruments*, of the *two* above-mentioned, I take the *Imagination* to have the most prevalent *Power* in *CONCEPTION*; which I hope may be readily granted, considering how common a Thing it is, for the *MOTHER* to mark her *CHILD* with *Pears*, *Plums*, *Milk*, *Wine*, or any *thing else*, upon the least trifling *Accident* happening to her from thence; and *that* even in the latter ripening *Months*, after the *INFANT* is entirely formed, by the *Strength of her Imagination* only, as has been already manifestly set forth at large<sup>[206]</sup>.

*WHICH* if so, Pray, what wonder is it, if the *Woman* in time of *CONCEPTION* (which is by far the more *critical Juncture*) should by

the same reason *conceive*, and at last bring forth her *FOETUS* with a *Calf*'s, *Lamb*'s, *Dog*'s, *Cat*'s-*HEAD*, or the *Effigy* of any other thing whatsoever? And *this* the more especially, considering, that not only the *conceiving Woman*, but also the *copulating Man*, may effect the same thing; if he should imprudently set his Mind on such Objects, or employ his perverted *Imagination* that way. Now this absurd *Imagination* takes even place also among the very *BRUTES*, as *Lemnius* relates<sup>[207]</sup> of a *Sheep* with a *Seal's*, or *Sea-CALF'S HEAD*, having no doubt seen that Animal in the critical Time of *Conjunction* or *Conception*.

IN like manner, supposing such Women to conceive in their Minds, some deformed SPIRIT or ANIMAL, with Horns, Snout, Wings, Cloven-Feet, &c. (as has sometimes happen'd) What should hinder this Woman to produce a BIRTH with these Monstrous *Marks?* THIS is also therefore very possible, but more especially, when the *Disposition* of the *MATTER* acquiesces, which it certainly does when the SEED and BLOOD are impure: For, Is it not manifest to our *Eyes*, that some *CHILDREN* bring with them long *Hair* and *Nails* into the World, merely from the Impurity of these material Substances? Then supposing the Force of an absurd Imagination to have seconded the *Efficacy* of such *Sordid Stuff*, what a *MONSTER* might not these Jointly have produced? Wherefore I shall only add upon the whole of This, that as such impious and foolish Imaginations ought to be suppressed, so both the SEED and the BLOOD ought to be pure and temperate, to prevent such præternatural Productions.

NOW, as to the Heat and Spirit contain'd in the SEED, we may easily conceive its Effects, and such as have been in Glass-Works, and have seen GLASSES, made, may readily comprehend how MONSTERS are formed in the WOMB: For in modeling the GLASS, if the Work-Man blow the PIPE too much or too strongly, the Stuff is so extended, that the GLASS becomes both longer and wider than its due proportionable FORM; and so it may also happen in the WOMB, by an immoderate Action, or too great an Extension or Diffusion of the SEMINAL SPIRIT, which sometimes may only affect some particular Part, such as the HEAD, NOSE, MOUTH, EARS, &c. and sometimes the whole FOETUS disproportionably. SECONDLY, Hence we may rationally conclude, that a *superfluity* of *SEED*, and *super-abundancy* of material *HUMOURS* may, in like manner, produce *duplicated Members*, such as *Two HEADS*, *Four HANDS*, *Four FEET*, *Six* or *more TOES* or *FINGERS*, &c. and *this* especially, in case of the *Woman's* strange *Imagination* concurring; which may easily happen, by fancying herself sometimes to *see double* with her *EYES*, which *Deception* may probably proceed from the *Concourse* of *HUMOURS*, gross *VAPOURS*, and confused or distracted *SPIRITS*. And *This* in short, it is evident, holds also good among the *other Creatures* (*IRRATIONALS*) as *Lemnius* writes<sup>[208]</sup> of himself, that He saw a *Sheep* and a *Calfe*, each with *two HEADS*, and a *Hen* with *four FEET* and as many *WINGS*.

AGAIN, as from the Superabundance of MATTER, Geminated Members, or Superfluous Particles may proceed; so from the Scarcity of these MATTERS, Want of requisite Aliment, or from any partial Invalidity of the Natural Faculties, some Members or certain Particles may be either maim'd and destitute of their Natural Use, or then (which is worse) be altogether irregular, defective, or Unnatural.

LASTLY as to the Place, I mean the WOMB, in which the *Conception* is made; It ought not only to be *perpendicularly seated* in the PELVIS, or in a direct line from the VAGINA upwards, but also to be well conform'd and proportion'd: Otherways, as an ugly or unshapely exteriour FORM or MOULD of Wax or Clay, produces a corresponding deformed *IMAGE* cast therein; so the *WOMB* may as effectually be the Cause of a Deform'd or Monstrous BIRTH. And moreover not only so, but the WOMB ought also to be in its due Temperament and Natural State, free of all Distempers and Inconveniencies, such as obdurated GLANDS, ULCERS, CICATRICES, &c. Otherways, as a TREE planted in Stony Ground, its Root cannot diffuse or spread it self round every way, but being cramp'd and oppress'd, it *crooks* and *bends back*; So it is with the *FOETUS* in the WOMB, if oppos'd and resisted by the Constriction or Coarctation of the Place, or by any inherent *Præternatural Substance*, its *MEMBERS* cannot possibly be *articulately* and *distinctly form'd*, much less can they attain their *Natural GROWTH* and *FIGURE*.

*IN* short from what is here said, I think, the *Notions* of such Men, as will have *MONSTERS*, only and immediately to proceed from a

Coition with *BRUTES*, may evidently appear as *absurd* as *they* are verily *groundless*<sup>[209]</sup>: And for strengthening or backing of my Authority, I may add Galen's own Words<sup>[210]</sup>, saying, Vel semen Humanum in Utero Equæ, vel Equinum in utero Muliebri, aut non admitti, aut admissum corrumpi. Which is also farther confirm'd by Holy St. Jerom, saying,<sup>[211]</sup> non minùs absurdum est, Animal construi ex Equo & Homine, quàm Vitem Olivæ insertam, simul vinum & oleum proserre. Which Doctrine seems also most agreeable to Truth, in that there can be no Affinity or Concord betwixt these Specifically different SEEDS, neither in their Natural Actions, Aliment, Maturation, Time, or Manner of Birth, &c. to pass by all other disconsonant or incongruous Circumstances.

*IN FINE* therefore, for these *Reasons*, I believe Nothing of the many *fabulous Relations* extant, of the *Hippocentauri*, *Onocentauri*, *Minotauri*, &c. inhabiting the *LAND*, nor of the *Tritons*, *Nereids*, *Syrens*, &c. which are said to possess the *SEA*; tho' indeed both St. *Antony*<sup>[212]</sup>, and St. *Jerom*<sup>[213]</sup>, maintain the Existence of the *SATYRI* and *SYLVANI*: But be these Things as they will, I believe, that the *Production* of every *MONSTER*, concurs to the *Perfection* of the *UNIVERSE*, and that sometimes such *Prodigies*, or rather *Dæmonical Illusions*, may appear, as well as *Monstrous BIRTHS* happen, by the Will and Pleasure of the great *CREATOR*, who would thereby signify and portend something *extraordinary*, or more than *NATURAL* to us *Mortals*.

# CHAP. VII. Of various deformed Conceptions.

THE particular Description of MONSTROUS CONCEPTIONS in the preceding Chapter, leads me, of Course, to treat of another Sort; which I shall comprehend under the Title of Deformed CONCEPTIONS. This Sort happening almost in all Countries promiscuously, tho' in some more frequently than in others, becomes almost in all Parts Daily obvious to our Eyes, so that we need be at no great Pains to prove the Reality of deformed BIRTHS, but rather inquire into the Causes of such uncouth CONCEPTIONS.

*IN* short therefore as to *these*, if we only look back and reflect on the three preceding Chapters, we will find the Causes of the present *Case* very evident and sufficiently manifest, if not particularly included in the *Latter*: Wherefore I have only farther here to observe, that all such *Præternatural CONCEPTIONS*, degenerate from the *Natural*, in proportion to the *Prevalency* of their *Cause* or *Causes*; So that the *Cause* being less considerable in *this*, than in the foregoing Case, instead of a MONSTROUS, we have only a deformed BIRTH: Such as a Scurf-Head, a discolour'd Skin, an ugly Visage, disagreeable Features, distorted Mouth, crooked Nose, Legs, or Arms, maim'd in whole or in Part, Tumours, Pustules, or Bubos about the *Groins*, &c. Which, tho' *these* and such like *Accidents* may verily proceed from either of the forementioned *Causes*; Yet I think, the most common and ordinary *One*, in all Countries, is an impure and unseasonable COPULATION: Such as is not only precisely forbid by the *Express Word* of *God*<sup>[214]</sup>, but also repugnant to right *Reason*, and even to common Sense.

FOR who can be so stupid as not to conceive, that this *Menstruous* Contagion, will naturally (tho' insensibly) creep into the *BLOOD*, invade the whole *Habit of the Body*, and tacitely infect the very soundest Constitution, even sometimes with the Venereal Pox, or

perhaps with an *Elephantiasis*, or the *Leprosy* it self? Nor does this *EVIL* end always here, but such *BIRTHS* are also generally as perverse in the *MIND*, as they are *Heterogeneous* in the *Person*; for like *BASTARDS* of *Nature*, they are commonly denudated, or destitute of all her laudable *Gifts* and *Graces*, which others, her *Legitimate Sons*, are happily born with and enjoy in Abundance.

HENCE it is, that, if they become not altogether Jolt-Heads, Foolish, or Delirious, they are most ordinarily otherways Lewd, Vitious, and Licentious Persons, if not also envious Traducers, and crafty Cozeners of Mankind: From hence likewise the Italians and Germans derive a memorable PROVERB, which they never forget upon dealing with such Persons, viz. to this purpose; Take Care of Him whom GoD has marked. For tho' some of Them, are capable of undertaking Nothing of any Moment, much less of accomplishing any laudable Work, NATURE it self thwarting their Career in every Enterprize, and the very STARS (as it were) concurring to their Frustrations: Yet others have subtile WITT enough to scrape together (per Fas aut Nefas) Heaps of contemptible Dross, much of affinity with their own vile Substance; which however, seldom prevents a base or ignominious CATASTROPHE to themselves, who are thus found established upon such a præternatural BASIS of Pollution.

*IF* then *these* be the direful *Consequences*, how unreasonably cruel are such *Parents*, who thus by Enterprising the Work of *PROCREATION* without *humane Decency*, and contrary to the very *Institution* of *NATURE*, involve their *Posterity*, in such miserable *Calamities*? But this sort of *BIRTHS*, I have also diligently observ'd, happens most frequently in *Holland*, and *that* chiefly for the *Reasons* and *Causes* mentioned in the foregoing *Chapter*. Which *Observation* leads me to the following *Matter of FACT*, which (without any intended *Reflection*, or *Reproach* upon any particular *Country*, or rather, as *this* would be, upon *Human Nature* it self) I shall ingenuously relate, not only to clear up the *MYSTERY* of a certain *Truth*, which I have found, to be *controverted* in this Place, and *that* even among some of the more *Learned* themselves; but also for *Morality* and *Instruction* sake to the *Reader* in particular, and for the *common Good* of *Mankind* in general, *viz.*—–

*THAT* these *BIRTHS* in those *Parts*, are often attended and accompany'd with a *Monstrous little Animal*, the likest of any thing

in Shape and Size to a *MOODIWARP*; having a *hooked Snout, fiery sparkling Eyes*, a long *round Neck*, and an acuminated *short Tail*, of an extraordinary *Agility* of *FEET*. At first *sight* of the World's Light, it commonly *Yells* and *Shrieks* fearfully; and seeking for a *lurking Hole*, runs up and down like a *little Dæmon*, which indeed I took it for, the first time I saw it, and *that* for none of the *better Sort*. Moreover—

THE following accidental Passage is so remarkable, that I cannot pass it by, in order to satisfy and convince others of this admirable *TRUTH*; Namely, that, not many Years ago, in coming from *Germany* over East and West Friesland, to Holland, I took Passage in the ordinary Fare-Vessel, from the City of Harlingen for Amsterdam, over what they call the Zuyder-Zee; Which is commonly reckon'd a *Voyage* of 10 or 12, Hours, tho' at this Time we happen'd to be near 36 Hours on our Passage. Amongst the better Sort of the Passengers, who possess'd the Cabine, there happen'd to be a Woman big with Child, of a very creditable Aspect, who afterwards told me, that She was bound for Amsterdam, on purpose to buy some Necessaries for her lying-in at the easiest rate; when in the interim, the good Provident Woman, was taken all at once, aboard the Ship, with a sudden and surprizing LABOUR: Upon which occasion, in short I immediately lent her a *helping Hand*, and upon the Membrane's giving way, this forementioned ANIMAL made its wonderful Eqress; filling my Ears with dismal SHRIEKS, and my Mind with greater Consternation.

WHEN not immediately recollecting what I had either heard or read of this *MONSTER*, I could not help continuing in my Surprize, until I heard some of our *Accidental Company* call it *de Suyger*, as they went about to kill it: Upon which I immediately laid the *Woman* of a pretty *plump GIRL*; who, notwithstanding all this, had no *Deformity* upon it, save only many *dark*, *livid SPOTs* all over its Body; which I prognosticated might turn to a *Universal Scurf*. In the mean time I order'd the *Express'd Oil* of *ALMONDs* to be diligently us'd, as soon as we landed.

*AFTERWARDS* I had occasion to talk with some of the most *learned Men*, of the several famous Universities in these *Provinces* upon this Head; who ingenuously told me, that it was so common a Thing, among the *Sea-faring*, and *meaner sort of People*, that scarce

ONE of these Women in Three escaped this kind of strange BIRTH; which my own small Practice among them afterwards also confirmed: Insomuch, that I always as much expected the Thing de Suyger, as the CHILD it self: And besides the Women in like manner, make a respective suitable Preparation, to receive it warmly, and throw it into the Fire; holding Sheets before the Chimney, that it may not get off; as it always endeavours to save it self, by getting into some dark Hole or Corner. They properly call it de Suyger, which is (in our Language) the SUCKER, because, like a Leech, it sucks up the INFANT'S Blood and Aliment.

UPON this Head, and to this Purpose, I might produce the Authorities of sundry good Writers, but shall content my self here at present with ONE of the same Nation, viz.<sup>[215]</sup> The most Learned and Eminent Levinus Lemnius, who gives us a very remarkable and particular Account at large, of a certain BIRTH, which began with a MONSTROUS MOLE, succeeded by the SUCKER, and ended with the Production of an excarnificated MALE-CHILD.

THESE things then being so, and proceeding merely from the immediate *Reasons* above-mentioned, ought to serve for a memorable *Caution* to all *PARENTS*, that, in their conjugal *Duties*, they behave themselves orderly and decently, not like insatiable *BRUTES*; but, like rational *Men*, to the end that their *Families* may be preserved, and their *Persons* succeeded, not by an opprobrious *RACE*, but, by a *univocal Generation* of hopeful *CHILDREN*, Men of *Probity* and *Integrity* both in *BODY* and *MIND*.

# CHAP. VIII. Of Imaginary Conceptions.

THERE remains yet one Sort of spurious CONCEPTION, which happens without any virile Help or Assistance, merely by the Force of Imaginary VENERY: Especially among Salacious Women, a Seminal Fluxion may happen upon many coherent occasions; which joining and incorporating with the MENSTRUOUS BLOOD, may be so much fomented by the Uterine Calidity, and the other Faculties of the WOMB, that the Rudiments of an imperfect ANIMAL may be amassed and conceived. But—

AS the Masculine SEED (the efficient Cause) which ministers both FORM and LIFE, is wanting, it can assume neither of these Perfections: The Maternal Matter serving only to bring it to a rude indigested Consistency, or a confused fleshy Substance of a strange and uncommon FIGURE.

THIS in short, is no ways improbable, if we consider that HENS, without the COCK's assistance, lay Eggs; however, of such a Nature, that whatever Pains the HEN is afterwards at to sit and brood upon them, the Eggs can never be animated so as to produce CHICKENS. Or, if we consider, that tho' feminine Trees or Roots, having of themselves less Power and Strength, as they are only imbued with a frigid and infœcund Humidity, may smile a little in their SEASON; yet, because of the natural Deficiency of HEAT, and their innate Debility or Impotency, they only yield an empty or imperfect Rudiment of either FRUIT or SEED, unless, by the Vicinity and delectable Conjunction of the MALE, they participate of its Fœcundity, as Pliny testifies<sup>[216]</sup> of the PALM.

*AGREEABLE* to *this Position*, the Practical Observations of many eminent *Physicians*, teach us, that *WOMEN* have and may conceive at this rate, without any *virile Energy* or *Concurrence*; of which Dr. *Burnet*<sup>[217]</sup> gives us a notable Instance, concerning a certain Noble-

*Woman*, a *Matron* of undoubted *VIRTUE*, who some Years after her *Course of Nature* had alter'd, in the 56th of her Age, brought forth several fleshy *MOLES*, as he calls them, and *that* attended with a great *Flooding*, and the most severe *Pains* of *LABOUR*, as if in the *Case* of a *Natural BIRTH*. Again moreover—

DO we not know, in fine, that the *necessitous*, and such as suffer *Want*, may be refreshed purely by the *SAVOUR* of our *Dishes*? And that the *Hunger-starved* may be satiated merely by the *ODOURs* of our *Kitchins*? As possibly thus may the *marriageable GIRL*, but more readily however the *WIDOW*, fill her self with her own odd *IMAGINATION*; and being debarr'd the *Enjoyment* of her *PARAMOUR*, hug him tacitely in her *Bosom*, and embrace him heartily, however *absent*, in her *Mind*. Which, if frequently done, may occasion a *Collection* and *Commixture* of gross *Humours* in the *WOMB*; whence a *deformed Concretion*, or *shapeless MAss*, may be engendred, and *that* only by *Imaginary VENERY*. To which *Case* and *Purpose*, I think, *Virgil*, very pertinently alludes,<sup>[218]</sup> saying—

Scilicet ante omnes furor est insignis Equarum, Continuóque avidis ubi subdita flamma Medullis, Vere magis (quia vere calor redit ossibus) illæ Ore omnes versæ in Zephyrum stant rupibus altis, Exceptantque leves Auras, & sæpe sine ullis, Conjugiis vento gravidæ, mirabile dictu, Diffugiunt.——

AND thus at last having particularly, treated of all the distinct and different *sorts* of *CONCEPTION*, to which the *Woman* can be subject; I come now in the *next place*, to address my self to *HER*, who was never yet capable of any *CONCEPTION*; and *that* in the *Chapter* and *Manner following*, viz.

#### CHAP. IX.

#### Of the Sterility or Barrenness of Women.

AS STERILITY is in it self a *Præternatural Faculty*, so I cannot but think, that, in the *CLASS* of *Præternatural Conceptions*, that of a *NON-CONCEPTION* may at last pertinently take place.

NOW I remember the *Reader* was referred to this *Place*, by Sect. II. Chap. 5. where I promised to expound the unsuccessful *Act* of *Copulation*; as I there briefly did the *Reverse-Case*: And after having all a long *thus* far forward, safely conducted the *Fertile* or *Fruitful WOMAN*, thro' the different *Trains* and *Consequences* of the successful *Act*, I have left *Her* in a safe *Condition*, together with the *Dear PLEDGE* of her *Natural Fœcundity*; whilst in the next place, I come now to treat of the *Præternatural BARREN WOMAN*.

*IN* order to which, I *FIRST* observe, that the *Jews*, and almost all other *Nations*, deemed it the greatest *MARK* of *Infamy* imaginable, for a *WOMAN*, to yield no Children; as is evident from the *Scriptures*, how *HAGAR*, the fruitful Chamber-Maid,<sup>[219]</sup> despised SARAH, her barren Mistress, &c. But moreover——

SECONDLY, We may observe, that, upon every provoking Occasion, the LORD himself threatned them with this Curse; as one of the greatest INSTANCES of his heavy Displeasure, and One of the severest Judgments, that his VENGEANCE could inflict on them for their Sins, as is also manifest from repeated INSTANCES of Scripture, particularly from the Words of the Holy Prophet, saying,<sup>[220]</sup> They sowe the Wind, and shall reap the Whirlwind: Their Glory shall fly away from the WOMB: Their Root is dryed up, they shall bear no Fruit, &c.

THIRDLY, We may easily conclude that, such a Sentence passing from the Mouth of the most high JUDGE, the Supreme Physician, and Omnipotent himself, could never be revers'd by the Art or Ingenuity of MAN: But as Christians have no Reason to suspect themselves to lay under this accursed *Sentence*, so they may well look nearer *Home*, and take a view of the many different mediate and immediate *Causes* of *STERILITY* or *NON-CONCEPTION* in them.

FOURTHLY, however, before I enter upon *these*, I would previously have it noted, that, sometimes the *Fault*, or *Cause* of the *Woman's not conceiving*, lies in the *MAN*; and may proceed from many diverse *Diseases* or *Symptoms* in him, as particularly mentioned, and treated of at large,<sup>[221]</sup> by the most Learned *Senertus*, to which we refer the *Curious*; Because we have nothing to do with the *MAN* in this place: Wherefore that I may return to the *WOMAN*, I say——

THE immediate Causes of STERILITY in her, are manifest from the very Definition of CONCEPTION: Which, according to Galen,<sup>[222]</sup> is nothing else, than a Comprehension of SEED in the Womb, for the Generation of Man. But here it may be requisite, to explain this general Term of Comprehension, which I would have understood to imply four particular Qualities of the WOMB, viz. Attraction, Retention, Distribution, and Fomentation. Hence it is that such Women must needs be BARREN, as cannot either attract the effused; or retain the attracted; or distribute and alterate the retain'd SEED through the Parts of the WOMB, and excite its latent Virtue to ACTION; or lastly, such as cannot duly foment and nourish the same SEED, when regularly distributed; and These, I think, are all the immediate Causes of BARRENNESS: As Those, for which the SEED either cannot be attracted, or retained, or distributed, or fomented, are the mediate Causes of STERILITY.

*NOW*, as to the *FIRST* of *These* then, the *Attraction*, or the *attractive Faculty*, may fail in its Duty *two ways*, viz. either because of its own *Debility*; or because of some præternatural *Impediment*. The *Debility* or *Imbecility* of this Faculty may proceed either from a *Defect of Spirits* in the *Seminal Vessels*; or from either of the *Intemperatures* of the *WOMB*, whether *Natural* or *Adventitious*: And *Impediments* may happen in *Attraction* many different ways, such as by a læs'd or extinct *Venereal Appetite*; by the *Woman's Aversion* or *Indifference* to her *MATE*; by the perverse *Affections* of the Mind, such as *Melancholy*, *Grief*, *Anger*, *Fear*, &c. by *Causes* of the *VAGINA*, or *Orifice* of the *WOMB*; by a *Coalescence*, *Ulcer*, *Membrane*, *Carnous* or *Scirrhous Substance*, or any other kind of *Tumours*; as

also by a *Constriction*, *Distortion*, or *Compression* of the *ORIFICE*; or at last by too much *FAT*, &c.<sup>[223]</sup>

SECONDLY, the Retentive Faculty may come short of its Duty three different ways; namely, either because of its own Imbecillity, or because of some *Præternatural Impediments*; or because of the *Object* it self. The *Imbecillity* or *Impotency* of this Faculty may proceed either from the Intemperature of the WOMB; or from the Abundance of some slimy Mucous Humour in the same: And its Impediments may happen from a Prolapsus, an Inflammation, an immoderate Flux, the Whites, a Gonorrhæa, Worms, Scirrhous, or other Tumours, Ulcers, or the Cicatrix of an old Sore in the Body of the WOMB; as also from the Amplitude or Laxity of the ORIFICE, whether Natural or Adventitious: Which Accident frequently happens even to Child-bearing Women, sometimes by an ABORTION, sometimes by a difficult BIRTH, and sometimes also by the rude Usage of an ignorant MIDWIFE, that they can never more Conceive, until they be duly *Cured*: Again, the *Cause* may be in the *OBJECT*, or SEED it self; when it is either *impure*, acrid, vitious, and disagreeable to the *WOMB*; or deprived of its natural *Heat* and *Spirits*.

THIRDLY, the Distributive or Alterative Faculty may be also impugned in its Function, 1st, by its own Debility, occasion'd by either of the *Diseases*, or *Intemperatures* above-mentioned; or 2dly, by the discording *Qualities* of the *Seminal Matter*; or 3dly, by some certain Disproportion betwixt that *Matter* and the *WOMB* it self: Since as all *SEEDS* do not answer alike in *one Field*, some requiring a Pinguid and Loose Soil, others a Lean and Slender Ground: so it is with the *WOMB* and the injected *SEED*: For, however fruitful the *One* may be, if the other be not of a proportionable Foecundity, no CONCEPTION can possibly follow: Hence it is that many Women have been accounted BARREN in their first Marriage, who have had several *Children* to a second Husband. Again, as some SEEDS perish and are guite lost in *moist*, *clayish*, or *marshy Ground*, and *others* decay and are burnt up in an Acrid, Sandy, or Gravelly Field; So it is also with the Human SEED: For, in the too cold, or moist WOMB, it is extinguished, and in the too *Hot* or *Dry* WOMB it is corrupted<sup>[224]</sup>.

FOURTHLY, the Fomentation, or the Nutritive Faculty may be deficient in its Office of attracting sufficient Aliment to foment and nourish the SEED; which however, is most commonly occasion'd by

Want, or Scarcity of *Blood* in the *WOMB*, proceeding from *perverse Evacuations*, *Penury* or *Necessity*, an *Atrophia*, *Consumption*, or the like, or then, in fine, by the *Impurity*, or *vicious quality* of the *BLOOD*.

*NOW* These, I think, are all the most common, as well as the most prevalent *Causes* of *STERILITY*: Tho', according to *Johannes Anglicus*, there are also several *external Causes*<sup>[225]</sup>; which however, I shall here pass by in Silence; lest, as some good *Women* are at great Pains to rectify their *barren Wombs*, *others* should thereby take Sinistrous Measures to suppress their *FERTILITY*. And in this *CLASS* may be included the *Medicines* call'd by the *Greeks*  $\varphi\theta\dot{}\upsilon\alpha$ , because they are endued with certain *occult Qualities*, which extinguish the *SEED* and obstruct the *CONCEPTION*<sup>[226]</sup>.

*HAVING* thus defin'd the mediate and immediate *Causes* of reputed *STERILITY*, I can scarce, because of either of *these*, call a *Woman* really *BARREN*; Since I have known some of the most difficult of *these Cases* to have been duly *cur'd*, and diverse *Women* to have conceiv'd, after many Years *BARRENNESS*, and prov'd the Joyful *MOTHERS* of hopeful *Children*; of which I could give some signal *Instances*, if I took Pleasure in swelling this *Work*: Hence it is, that the great Philosopher and Physician, *Daniel Senertus*, only disswades the *Ingenuous* from undertaking this *Cure*, in the Cases of vicious *Hereditary Dispositions*, venenated *Constitutions*, or other heavy *Diseases*<sup>[227]</sup>.

*MOREOVER*, we find that the very best of the *Ancients* have been at great Pains, in distinguishing exactly the *curable*, from the *incurable BARREN WOMB*: Yea *Hippocrates*, *Galen*, &c. have given certain Directions, founded upon the solid *Truths* of their Immense Knowledge and Heavenly Wisdom, to try and discover the *One* from the *Other*; as *they* have also taught us to Judge of every particular *Cause* affecting the *Curable WOMB*. But to facilitate these Nice *Discoveries*, I shall subjoin some few *Diagnostick Signs*; because except we know the particular *Cause*, we can never pretend to remove it, and without removing the *Cause*, the *Effect* can never cease, or be *cured*. Not but that——

I *KNOW*, that the ingenious *Physician*, undertaking this *Cure*, requires none of my *Instructions*; which notwithstanding, I hope, He will allow me to prosecute my Method in treating of *this Case*, as I

have done of some *others*; and *that* the rather, considering it is generally well known, that sometimes a Fool has put a Wise Man in the right way. Wherefore I heartily wish that some Word may drop from my Pen, that may prove instrumental to wipe off the imputed Blemishes, and promote the real Glory of WOMEN; And this I could wish the more, because I am fully convinced that many are ignominiously branded with BARRENNESS, without any sufficient Cause: Insomuch, that I verily believe, that, upon an ingenuous Tryal, not one real or incurable BARREN WOMB, would be found in Ten of those, which are this Day so reputed. But à propos—

As I have reduced all the *Causes* of *STERILITY* to the above said *four CLASSES*, so I shall reduce the *Diagnosticks* to the same number; and thereby demonstrate how it may be easily discover'd, whether the *FAULT* lies in the *Attractive*, *Retentive*, *Alterative*, or in the *Nutritive Faculty* of the *WOMB*; and how every particular *Cause* in any of *these* may be plainly distinguished, &c. In order to which, then—

TOUCHING the FIRST, inquirendum est primò, an ad Venerem apta sit Fæmina, & quidem an Veneris Appetitum habeat, & an Membrum virile rectè admittere possit. Horum enim si alterum desit, Causa, cur non concipiat, procul dubio in Attractrice hæret; ut etiam, si statim à Coitu, aut post breve Intervallum semen effluat. I say, These are the infallible MARKS of a læs'd Attractive Power, which also denote some Fault of the WOMB, such as an oblique Situation, a Compression of the EPIPLOON or CAWL, or some obdurated Substance, impeding the SEED to reach the Cavity of the WOMB: The Particular of which is easily to be discover'd; the Situation by the ingenious TOUCH; the Compression of the OMENTUM or EPIPLOON happens only to Fat Women; the Substance or Tumour (of whatsoever kind) if not found in the Passage, lodges in the WOMB it self.

SECONDLY, If the Party labours under any of the aforesaid Causes debilitating or impeding the Retentive POWER; some are manifest to the Woman her self; as in the Cases of any immoderate Flux, a slimy or illuvious Evacuation, a Gonorrhæa, the Whites, a Falling of the WOMB, &c. others are obvious to the MIDWIFE's Touch, as in the Case of Tumours, Ulcers, &c. and in Case of either Intemperature, Dropsy, Inflammation, Worms, &c. all such are

abundantly evident to the *Physician*, after duly examining, and considerately weighing the *Disposition* or *Temperature* of the whole Body *in general*, and of the *WOMB* in *particular*.

THIRDLY, if the Alterative or altering Faculty be læs'd or impotent, then, after some Days Retention, an Effluxion of the SEED happens, and that either because of some Intemperature of the *WOMB*; or of some discording *Quality* in the *SEEDS*, or in the *WOMB*, as above; or lastly, because of a Want or Scarcity of BLOOD for forming the FOETUS. As to the Intemperatures, I have already observ'd, that, they may be readily distinguished by the ingenious *Physician*; But the *Disproportion* betwixt the commixed *SEEDS*, or between *these* and the *WOMB*, how much, and in what they may differ one from another, is not so easily known; because this Fault may be as much in the MAN, or perhaps more, than in the WOMAN, as has been already hinted: In this *Case*, the *Physician* is to weigh and consider well the *Temperatures* of the whole Body, and especially that of the Genital Parts of both the MAN and the WIFE; and as much as possible, to reduce *that* of the *One*, to the more convenient *Temperature* of the *Other*,<sup>[228]</sup> correcting *Both* in what may be found requisite; according to the Direction of *Lucretius*, in these Verses:

*"Usq; adeo magni refert, ut Semina possint "Seminibus commisceri generaliter apta, "Crassáq; conveniunt liquidis, & liquida crassis.*"

FOURTHLY and lastly, if the Nutritive Faculty be faulty, the Case is plain and manifest; since it generally proceeds from one or more of the following Causes, viz. from Want or Penury; a Pining away or Consumption; immoderate Hæmorrhagies, whether happening by Superiour or Inferiour Parts; hard Labour; too much Fat, or too much Leanness: As the same may also happen from an Obstruction or Suppression of the MENSTRUOUS COURSE; or from its vicious or impure Quality; and, in fine, from any severe Symptom or Disease whatsoever.

*THUS* having discover'd the genuine and precise *Causes* of *STERILITY*, the *Cure* is as good as half perfected; but that it may be altogether and effectually perform'd, the next thing requisite in this place, would be to treat of every *Cause* and its respective *Cure* particularly;<sup>[229]</sup> but as these do chiefly belong to the *Diseases* of the

PUDENDUM, VAGINA, and WOMB; which I have already declin'd entring upon at this time, for the *Reasons* mentioned in Sect. VI. Chap. VI. I shall here only add in *general Terms*, that tho' the *barren* WOMB is justly compar'd to an insipid, ungrateful, or unfruitful *FIELD*, because neither the *one* nor the *other* produces any thing Good of it self: Yet as we see the barren Lands emproved and become fruitful by the *Industry* of the *Husband-Man*; and even wild *Roots* and *barren Trees* in time produce plentifully by the Care and Diligence of the Gardener; So the Heavenly ART of Physick exerts it self strenuously in improving the barren WOMB, miraculously supplying the Defects, and regularly correcting the Defaults of NATURE; restoring or replenishing it with a desirable and grateful *Fœcundity*: I say, as convenient *DUNG* comforts the *sterile Field*, so does proper Physick the barren WOMB; It elevates the low and renovates the exhal'd Spirits; It vanguishes the Imbecility, and corroborates the *Nerves*; It reduces the *languid Heat*, and all the Intemperatures of the genital Parts, to their respective, due and natural Temperaments; removing naturally all Obstructions, and wonderfully curing all the *Causes* hindering or withstanding the Procreation of Humane RACE.

AND, in fine, because proper *DIET* is of great Service to alter the *elementary Qualities*, and to convert the *Bad* into a *Good Habit* or Body; such *Women* are to be carefully directed to such a Judicious *Regimen* of *DIET* and otherways, as is most efficacious and convenient for their Purpose, either of *Health* or *Generation*. Now having so far prosecuted my Design, with respect to the *Barren*, as well as the *Fruitful WOMAN*; I, at present, take Leave of *Both*, and come, in the next place, to address my self to the *WIDOW*.

#### SECT. VIII.

### CHAP. I. Of the Symptoms incident to the State of WIDOW-HOOD.

AS the WIDOW has in her former Days, tasted both of the Sweets and the Sours of the MAIDEN, as well as of the marry'd State; so she is now also subject to all the Affections of the One, as well as to some of the Other. Whatever she may judge of her self, and however she may, in some measure, be liberated from the Solicitudes of the FIRST, and freed from the Anxieties of the other; yet she is still so far from being exempted from the Morbifick Consequences of the Natural Imbecillity of her tender SEX; that she now, tho' in different Respects and various Cases, participates of the Indispositions of BOTH.

HOWEVER yet, notwithstanding this Variety of Afflictions, to which the WIDOW is actually expos'd; I confess, that, I know not so much as one Disease or Symptom, which is singularly peculiar to Her self, that is, but what either the MAIDEN or the WIFE may be lyable to, as well as the WIDOW: Tho', in the mean time, I must also acknowledge, that, Those which I am now about to touch upon, may however, be justly esteem'd to be more familiar to Her, than to either of These, as will by and by more evidently appear.

UPON which Consideration, I hope the following *Heads* may here pertinently take place; not but that the *others*, I mean the *MAID* and the *WIFE*, may also sometimes, and perhaps frequently too, find their

*Case* included in the *THEME* of this *Section*, as well as the *WIDOW* Her self, according to the *Diversity* of their Circumstances.

FOR these Reasons, I shall begin with *That*, from which none of the *Three*, that is, neither the *MAID*, nor the *WIFE*, nor the *WIDOW*, can altogether plead Exemption, which notwithstanding, according to my best Judgment, is more immediately the particular *Root* and *Source* of the most, if not of all, the *WIDOW*'s *Distempers*, which however, that I may not too much over-run my Design of Brevity, I shall briefly comprehend under *One* or *Two Heads*, viz.—

## CHAP. II. Of the Hysterick Passion.

WELL might the excellent *Democritus* write to his *Scholar*, the far more excelling *Hippocrates*, that the *WOMB* is the *Source of Six Hundred Griefs*, and the *Spring of innumerable Sorrows to the WOMAN*: Because of the manifest *Sympathy* or *Affinity*, which the *WOMB* has with almost all the other *Parts* of the Body. And as we may reasonably conclude from such an *Affinity*, that these *Symptoms* must needs be both *Numerous* and *Different* in Kind; so I think, for the same Reason, they may be *All* pertinently comprehended under the *General Title* of *Hysterick Maladies*.

BUT before we enter upon the Particulars of these Uterine Affections, it may be first requisite to make out the Reality of this Affinity or Consent; which will be no difficult Matter, when we consider FIRST, the three Principles, in which the same consists, viz. in a Similitude of Parts; in a Vicinity of Parts; and in a Connexion of Vessels. SECONDLY, how by these, as the WOMB is a Membranous Substance, it has a Substantial Affinity with the MEMBRANES: And by its Vicinity, with the BLADDER, RECTUM, and INTESTINES; As by its Veins, Arteries, and Nerves, it has with almost all the other Parts of the Body; such as with the BRAIN, by Veins and Arteries, as well as by the NERVES and Spinal MEMBRANES; with the HEART, by Arteries; with the LIVER, by Veins; with the STOMACH, by certain Anastomoses, betwixt the Veins of the WOMB, and those of the Mesentery, as well as by Arteries; with the SPLEEN by Arteries; with the BREASTS, partly by Veins,<sup>[230]</sup> and partly by Nerves, &c.

HENCE it is that I can scarce find any Part of the Body, which may not be affected by the *Indispositions* of the *WOMB*; the *Heart*, the *Diaphragm*, the *Head*, the *Brain*, and consequently all the *Organs* of Sense and Motion, the *Liver*, the *Spleen*, the *Ventricle*, the *Mesentery*, the *Belly*, the *Bladder*, the *Rectum*, the *Back*, the *Loins*, the *Thighs*, the *Legs*, the *Arms*, &c. All which *Parts* are from thence subject to innumerable various *Symptoms*, which commonly come and go by *Periods*, after the manner of *Convulsive*, or *Epileptick FITs*, to which the *HYSTERICAL* have also a very near Relation; in that the *Circulation* and *Recourse* of all the *Three*, and some more such, *Distempers* agree exactly, sometimes with the *Course* of the *MOON*, and *SUN*, and sometimes with the very *Motion* of the *SEA*; and as *these* vary, so the *FITs* of either *Affection* come on quicker or slower<sup>[231]</sup>.

THESE Things are also most Judiciously made out by the excellent Dr. Mead, saying, that, the New and Full-Moon being of equal Power, this sort of Distempers sometimes reign in the one, and sometimes in the other, as the Body happens to be more or less fitted and adapted to receive the INFLUENCE; and as the abounding HUMOURS are more fitted for this, than that period of the PLANET<sup>[232]</sup>. And the same Author of great Experience, gives us an Account of a certain BOY of a Year old, who every Flood-Tide, was taken with Convulsive FITS, and every Ebb came to himself again<sup>[233]</sup>. Which Influence of the SEA, no doubt depends upon the MooN's approaching our Vertical Point, or that directly opposite, as the Flood encreases and comes to its Height, Moreover again,——

CONSIDERING the WOMB, not only as the Center, in which the vitious Humours are accumulated from all the other Parts, but also as the PUMP of the Body, we may readily conclude that as long as it regularly ejects the Menstruous Blood, it does at the same time duly evacuate together with it, all those Humours of whatsoever sort they be: Whereas we may easily conceive that whatever obstructs or impedes the WOMB in any of its natural Functions, may occasion various Symptoms to the Woman: However the most of these, as well as the most dangerous, take their Origin from the Retention of the SEED and the suppression of the MENSTRUA.

THE Menstruous Blood flowing in a natural Course to the Uterine Veins, when its Passage is so obstructed, that it cannot break forth; whether in VIRGINS, because of the Astriction of the ORIFICES; or in WIDOWS, because of the Thickness of the BLOOD, or of any other gross viscid Humour; in these Cases, it must of course regorge thro' the Branches of the VENA CAVA and the great ARTERY, to the Head, Heart, Liver, and Veins of the Midriff; whence of Consequence proceed various *Symptoms* in all these and their dependent *Parts*: Which notwithstanding, I take the too long retain'd *SEED* to occasion the more dangerous and severe *Symptoms* to the *WOMAN*.

BUT in Case of either of These, namely, either the Seminal, or the Menstruous Matter, beginning to corrupt, and consequently to acquire malignant Qualities, then they produce divers most severe and dreadfull Symptoms; and that not only in different PATIENTS, but also sometimes in one and the same Woman; and not only at different Times, but also sometimes at one and the same Time: However these Things always happen, according to the different Quantity and Quality of the corrupted HUMOURS, as well as according to the Constitution of the WOMB, in which the Corruption succeeds. Again more particularly—

*IF* the Malignant *Vapours* arising hence, penetrate to the *Heart*, (the principal *Organ* of *LIFE*, as well as of the *Circulation* of the *BLOOD*) I would observe, that, they occasion vellicating *Palpitations*, as also a *Dejection of Spirits*, and *Anxiety of Mind*, attended with frequent *LYPOTHYMIES* and *SYNCOPES*: If to the *Diaphragm* and *Lungs*, a *Difficulty* of *BREATHING*, attended (as it were) with *Suffocations* or *Strangulations*.

IF the MATTER ascends to the HEAD, and diffuse it self thro' the external Parts, diverse grievous PAINS assail the Woman, and that very differently; insomuch, that, sometimes the whole HEAD is (as it were) tortured, and sometimes but in Part; sometimes on the right, and sometimes on the left Side; sometimes in the hind Part of the HEAD, or CROWN, and sometimes in the Fore-Head or about the Eyes: Whereas if it tend to the BRAIN, and distribute it self among the ORGANS of Sense and Motion, both the internal and external Senses must needs suffer accordingly; upon which the poor PATIENT is not only taken with an APHONIA for Want of Speech, but also with a Helpless or Senseless Stupidity; and moreover, not only seiz'd with a Resolution or Debility of HANDS and FEET, but also with Trembling and Convulsive Fits.

*IF* the *same* ascends to the *LIVER*, the whole *Habit* or *Constitution* of the *BODY* is perverted: For as the *vitious Humours* are easily communicated from the *WOMB* by the *Veins* to the *LIVER*, so the affected *LIVER* again readily diffuses its *Infection* by the *Veins* to the whole *BODY*. If to the *SPLEEN* and *MESENTERY*, *Murmurings*, *Pains* 

and *Torments* arise in the *BELLY*; which are commonly attended with a *Pain* in the left *SIDE* and left *BREAST*, extending it self to the *JUGULUM*, or fore-part of the *NECK*, Difficulty of *Breathing*, frequent *Belchings*, a siccid bound *Belly*, and all the other *Symptoms* which usually are the *Concomitants* of the *Hypocondriack Affection*.

*IF* to the *VENTRICLE*, thence proceed *Fastidy*, *Pica*, *Vomitings*, *Pains* and *Gnawings* of the *STOMACH*, *Sobbings*, *Yawnings*, *Belchings*, &c. But, and if the said *MATTER* distributes it self thro' the whole *Circuit* of the *BODY*, then the *PATIENT* is frequently seiz'd, sometimes with a sudden *red*, and sometimes with a *pale Colour*; as also sometimes with a *sudden Heat*, and *Ardour* in her *FACE*, which she commonly perceives or feels to vanish and go off as suddenly: Again she is sometimes also taken with *sudden Cold*, and sometimes with as *sudden hot Fits*.

FROM all which, it evidently appears, how justly Galen says<sup>[234]</sup>, that the Hysterick Passion (under one Appellation) comprehends innumerable various *Symptoms*: Even so *many*, that at least (I think) they cannot be possibly comprehended in this *Volume*, which extorts another Apology from me in this Place; namely and plainly, that as I have no Ambition to be accounted any extraordinary PERSON of great *Learning* or *Reading*; so I far less desire to set up or give my self out for ONE of Universal Practice or Experience: And as at the Beginning, I only design'd this BOOK for the immediate Service of MIDWIVES, and the common Good of WOMEN and their *CHILDREN*, the *Poor*, I mean in general, as well as the *Rich*; So I am vet resolv'd, rather, to stifle or restrain my *Inclinations* for the present time, and suppress what might be otherways pertinently added on these Subjects, than to put it out of the reach of the Purchase of either of THOSE. I say, for these reasons, I shall not undertake at this time to enter upon every particular *Head* or *Branch* of the HYSTERICKS; only that I may not be censur'd as Churlish or Peevish to the more delicate LADIES, and tenderly constituted *Women*, who always labour and suffer most under these *Distempers*. I shall however yet endeavour to discuss particularly the most dangerous, as well as the most common Case, belonging to this general *TOPICK*; and not only so, but, according to my *Ability*, I shall also endeavour in *it*, if possible in a few words, to include and comprehend all the rest of these *Female Indispositions*: And *that* to the *Purpose*, and under the *Title*, following, *viz.*—

# CHAP. III. Of the Strangulation of the Womв.

THE preceding Chapter contains a general Account of the sundry various Hysterick Passions, together with their respective SYMPTOMS, as they affect the chief and Principal Parts of the BODY; whence I might descend to a great Variety of particulars; but as neither my present Time nor Design will permit my entring upon These in this place, I shall content my self with treating of This ONE; which as it is the chief and most dangerous of all the Uterine Affections, so 'tis the most Universal and Common.

*IT* comprehends, in short, many various severe, and even wonderful *SYMPTOMS* in it self; whence I conclude, that, he who sufficiently understands the *present Case* or *Condition*, may easily comprehend all the other Circumstances, belonging to the foregoing *general Head*; Since with whatever difference of *Symptoms*, or *Diagnostick Signs*, they may appear, the *Causes* and *Effects* are originally of the same *Nature*: For *This* is the very *Affection* which *Galen*<sup>[235]</sup> call'd the  $\omega vi \ \xi \ \upsilon \sigma \varepsilon vi \ \gamma$ , that is, the *Hysterick Passion*, and he might as well have said the *grand Hysterick Passion*: The *Latins* call it *Strangulatio*, or *Suffocatio*, or *Præfocatio Uterina*; because in the *FIT*, the *Woman* seems to be *Suffocated* or *Strangled* by the *WOMB*. But to the Purpose,——

HOWEVER variously and copiously the Ancients have defin'd this *EVIL*, I think the few following Words, may properly explain it, *viz*. This Suffocation is a Distemper of all the Natural, Vital, and Animal Actions, proceeding many different ways, from an ill or disaffected WOMB.

I say many *different ways*, according to the many *different Sorts* of the *AFFECTION*; because *One* is, when the *SYMPTOMS* of the *læs'd Natural Faculty* only appear; in which the *PATIENT* labours under *Inflations*, and frequent *Rumblings* of the *BELLY*, *Murmurings*,

Belchings, Pains of the STOMACH, Anxiety, Uneasiness, and sometimes Vomitings. Another different AFFECTION is, when the vital Faculty is læs'd or indisposed, in which the PATIENT is not only taken with Heart-Beatings, but also with Faintings and Swooning-Fits, with a small, frequent, and unequal PULSE. A Third is when the Animal Faculty is læs'd or disaffected, which may happen many ways; and in this Condition the WOMAN is depriv'd of Motion and all external Sense, however she retains the principal Functions, together with her PULSE and BREATH.

AGAIN, farther yet, there is another Sort of this Hysterick AFFECTION, in which the Motion is depravid, turning to various CONVULSIONS of the Legs, Arms, Teeth, Lips, Eyes, and so of the whole Body. As also moreover, there is still ONE, or a Fifth different Sort of this SUFFOCATION, in which all the Faculties of Life are seemingly abolished; so far, that (according to common Sense and Apprehension) the PATIENT differs in Nothing from a dead Person. Hence it has often happen'd, that such Women (upon a mistake) have been imprudently buried (for DEAD,) and sometimes had the good Fortune to return from their Graves to their Houses again; whereof many learned Authors give us remarkable Instances<sup>[236]</sup>.

*BUT* if it should be ask'd, in short, how it is possible for the *WOMAN* to *live*, after she has lost both her *PULSE* and her *BREATH*? I can only refer the Curious to *Galen*, who has fully answer'd that *Question*<sup>[237]</sup> (according also to the Sentiment of *Heraclydes*) *viz.*—*That tho' the Refrigeration of the whole Body, and its principal Parts, is so great as to intercept both the Pulse and the Breath; Yet the Woman, no less than other Animals, such as Snails and others of that kind, which live in strict obscurity, may have Transpiration sufficient, thro' the whole Circuit of the Body, to defend LIFE*<sup>[238]</sup>.

*IF* so, then, that there are so many different *Sorts* of *UTERINE STRANGULATIONS*, there must also (of Consequence) be as many peculiar *Causes*: Which, tho' all take *Origin* from the *WOMB*, yet do not arise to this Pitch, unless *two other Causes* concur with it. Viz. *ONE* from the *Part affected*; *ANOTHER* from the *Passages*, thro' which the *WOMB* communicates this *AFFECTION* to it. But in short, the *principal immediate Causes* are *THREE*<sup>[239]</sup> viz. *retain'd Menstruous Blood*, *vitiated Seed*, and putrid Humours, or corrupted

*Matter*, contain'd in any part of the *WOMB*; which immediate, and concurring *Causes*, I come now to Speak to, *viz.*—

AS to the *FIRST* then, I think the *retain'd BLOOD*, is not sufficient of it self to induce this *AFFECTION*, because we know, many to be free from it, who yet labour under the *suppress'd MENSTRUA*; wherefore the *Imbecillity* of the *Principal Parts* admitting the *HUMOURS*, must concur with the *Latitude* of the *Passages*, thro' which the *BLOOD* is communicated to them: Which *Three* conspiring together, the *SUFFOCATION* of course succeeds with Aggravation.

*IF* this *BLOOD* flows thro' the *Veins* and *Arteries*, into the *HEART*, it occasions a *SYNCOPE*, which is a most severe *Affection*.

*IF* it ascends into the *BRAIN*, it occasions various *Symptoms* according to the *Quality* of the *BLOOD*, *viz.*——If it is *Pituitous*, it induces a *SUFFOCATION* with *SLEEP*, resembling a *LETHARGY*: If it be *Bilious*, the *AFFECTION* is most furious, and the *PATIENT* is (as it were) almost *Mad*, tearing her self, pulling her *Hair*, renting her *Cloaths*, &c. If the *BLOOD* be *sweet*, she only fancies *AMOURS*, and meditates upon *pleasing CHIMERAS*: As, in fine, if *Melancholick*, it seizes her with a *Sadness* of *HEART*, and *Dejection* of *MIND*.

BUT as to the SECOND Cause, the retain'd SEED induces not only These, but more grievous Symptoms, since as soon as it is corrupted and refrigerated, it becomes the worst of POYSON<sup>[240]</sup>: And as it reaches the principal debilitated Parts, it draws on the most dangerous sort of SUFFOCATIONS; in which the PATIENT lies for Dead, the whole BODY being extremely refrigerated, or benumb'd by this venenated Matter. Which Accident however may happen promiscuously to all Women, abounding with such morbifick Contents in the WOMB, as sometimes falls out to MAIDS, but more commonly to WIDOWS, whose Bodies as well as WOMBS abound with pituitous HUMOURS; as also sometimes to Pregnant Women of Cacochymical Habits, and to Puerperial Women not cleansing sufficiently.

I know by the way, that some modern *Writers* define the *Case* otherways, and will have *MEN* to be also lyable to the same *Distemper*, which they alledge proceeds chiefly from the *Blood* and *Spirits*: But the *Reason* why I think *they* are exempted from it, at least from its *Severities*, is because, what they *lose* in *Nocturnal Pollutions* or otherways, is always ejected or thrown *without Doors*;

whereas what the *other SEX* so *emitts*, may be still retain'd *within*; and consequently by a long *Detention* there, may be converted into *VENOM*, or a *Poysonous Humour*.

*HOWEVER*, this happens more readily and frequently to *WIDOWS*, than to *VIRGINS*, because in the *one*, the Passages are not only dilated, but also Nature is accustomed to such *Emissions*, as the *other* is yet wholly a Stranger to. Moreover——

AGAIN, this AFFECTION may also proceed from too great an *abundance* of *SEED* in those, call'd the *Seminal Vessels*; tho' not to such a dangerous Degree: In which *Case*, if the *SEED* be *Acrimonious*, a *Convulsion* may happen; if otherways, the *PATIENT* seems only to faint and fall away, with a sort of a grateful *Indulgence*, without any great Change of *Countenance*, or Alteration of *PULSE*; tho' she often continues with her *Eyes* shut, Starting and Wakening (as it were) frequently: And as upon returning to herself, she falls *a-sighing*, so a little after, the *SYMPTOM* recurs again.

FINALLY, as to the third Cause, Supposing this AFFECTION to seize Women, who not only Purge regularly, but are also satiated with Virile Conversation; or, as it sometimes happens, to take Old Women: In these Cases, the Cause is undoubtedly very different from those mentioned, and proceeds either from Winds, Vapours, or putrid and corrupted Humours, contain'd in the WOMB, and communicated by various Passages, to the HEART and BRAIN: And this Corruption may readily succeed in the WOMB, because, as *it* is a part very different from any other of the BODY, endued with peculiar Faculties, so if it be not well disposed, the vitious Humours may also corrupt in it, after a peculiar manner; if not in its own Cavity, in the Uterine Vessels, as most frequently happens.

UPON which, I observe that, if these Winds or Vapours are communicated to the HEART, thro' the Veins and Arteries, the SUFFOCATION happens with Palpitation: If to the BRAIN, with a Vertigo, a Tingling of the Ears, and a Suffusion from the Phantasms of the Eyes: Whereas, if the deprav'd Humours or Vapours, ascend there, thro' the Nerves, various Convulsions happen; especially if the BRAIN abounds also with frigid Humours. And these, in short, according to the foresaid Authorities, are all the Proximous and immediate Causes of the HYSTERICK PASSION. HENCE I come now to touch upon the mediate Causes of the same Distemper, which may be easily conceiv'd by any who understands those of the suppressed MENSTRUA, GONORRHÆA, &c. which Cases I can by no means enter upon at this Time, for the reasons mentioned in the last preceding Chapter.

BUT from what is said (I hope) this Uterine STRANGULATION, together with all its Differences, may be easily distinguished by the ingenious Reader. However yet, because all its different Sorts have some degree of Affinity, with other diverse Symptoms, which no ways proceed from the WOMB; I come now to propose some SIGNS of Distinction, first in general, and next in particular, viz.——

*THE general SIGNS* then are *Three*, by which I think, the *HYSTERICK* may be readily distinguished from all other *Affections*, namely,—–

I. *IT* is a *Muliebrian Disease*, and that only familiar to some of the more *delicate Women*: When therefore we know, from the *PATIENT* herself, or from those about her, that she is obnoxious to this *Affection*; the *HYSTERIC Symptoms* also appearing, we need not suspect any other Distemper. II. *Hysterical Women* complain frequently of their *WOMBS* being ill-disposed, and out of order. As, III. *They* are most commonly helped and freed from the *PAROXYSM*, by holding *Fœtids* to the *NOSE*, and *Suaveolents* to the *PUDENDUM*; which holds good in no other *Affection*. But more particularly—

THIS Distemper differs from a SYNCOPE, in that, a SYNCOPE is precipitant, and seizes the PATIENT all at once, tho' 'tis but of short Duration; Whereas in this, some evident SIGNS of an approaching Paroxysm always precede, and the Evil continues sometimes for several Hours and perhaps Days: In that, the PULSE is quickly abolish'd, or at least seemingly ceases; in this, it remains, however small, except in the aforementioned extreme FIT: In that of a SYNCOPE, cold Sweats appear, and the Countenance changes pale; and when the HEART is severely affected, it may be probably conjoin'd with the HYSTERICK Affection.

NOW This Distemper differs also from an *EPILEPSY*: For in That the Convulsive Motions are not always join'd with it, or if they be, they are not so *universal*, affecting only one or other Member: In *EPILEPTICKS*, the *PULSE* is greater than ordinary; but in *HYSTERICKS*, it is the *Reverse*: In that the *PATIENT foams at the Mouth*, and loses the principal *Functions* of Life, especially the *Memory*; in *this* they *foam not*, neither commonly lose any *internal Sense*; but only awake like *those* who have been asleep.

THIS Affection differs again from the APOPLEXY, in that the PARTS are not so much affected, nor their feeling so much abolished; in that there is no continual Snoaring, and the PULSE is only diminished and depraved, which in APOPLECTICS most commonly remains entire: In short, the one is preceded, as well as accompany'd with diverse Symptoms; whereas the other assails the PATIENT suddenly, without any previous Notice or Signification.

AGAIN the HYSTERICKS differ from a LETHARGY; in that This is attended with a FEVER; That not at all: In This the PULSE is raised higher and is stronger; in That it falls always lower, and is weaker.

MOREOVER, there are diverse *Experiments*, mentioned by *Authors*, to distinguish a *PATIENT* in the extreme *FIT* of this *Passion*, from a Person actually *DEAD*: Such as *Lint*, *Feathers*, or *burnt Paper* being held to the *MOUTH*; if moved, the *PATIENT breathes*. A *Glass of Water* being set upon the *BREAST*; if stirred, there is some *Motion* and *Dilatation* still in the *BREAST*. Or, in fine, a *Looking-Glass* well wiped, being held to their *MOUTHs*, if infected, the *PATIENT* is still and certainly *alive*.

HOWEVER, all These Things, I look upon to be merely trifling and uncertain in this Case; because, supposing the WOMAN not to breathe, as has been hinted; How then can she expire so much from her LUNGS, as to move a Feather, or infect a Glass? Or, how can her BREAST have any such a Motion, as to move Water in a Glass? Considering well, what has been already said, that it is only by internal Transpiration, that she draws the Breath of Life; which is neither effected by the Motion of the BREAST, nor the LUNGS; but rather by a certain obscure and latent Motion of the HEART, and the internal Arteries: In such manner, as some Animals, living in Cells of Obscurity, seem to be refrigerated, or benumb'd and DEAD the whole Winter-Season.

BUT in this Case, the more certain Method is, to try the PATIENT with proper Sternutatories, such as are otherways useful in all such PAROXYSMS, for if alive, she will be quickly mov'd by Sternutation: As when the Body begins to send forth a Cadaverous Smell, it is a certain SIGN that the innate Heat is extinct with the LIFE, and that

the *Body* is no more supported by the *SOUL*. Wherefore the safest and surest way is, not to *bury* such *PERSONS*, before the *Expiration of 72 Hours*, reckoning from the beginning of the *FIT*: Because, if in this Time, which is the *CRISIS*, or *Term* of the *Circuit* of all the *HUMOURS* in the Body, they do not *revive*, there is no more Room left for *Hopes*.

*IN* the next place, I come to mark the *DIAGNOSTICKS*, whereby it may be best distinguished, which of the before-mentioned *immediate Causes*, gives *Rise* to the *HYSTERICK PASSION* in any *Woman* labouring under the same *Malady*. And, I. *IF* it proceeds from the *Menstruous Blood*, in this *Condition*, the *Natural Course* must needs be suppress'd, either in whole or in part: And the Difference of the *Quality* of this *BLOOD*, is evident from the foregoing *Symptoms*.

II. *IF* from too long *retain'd SEED*; the *PATIENT* is to be suppos'd regular in her *natural Flux*, as she is *Calid* and *Sanguine*, either from *high Living*, or *want of Exercise*: In *this* the *SYMPTOMS* are all more severe and dangerous, than in the *other Case*, and upon the declension of the *PAROXYSM*, or the *Fits* going off, a certain *HUMOUR* flows from the *PUDENDUM*, occasion'd by the *Constriction* made in the *WOMB*.

III. *IF* from corrupted *Humours*, the *PATIENT* not only *Purges* regularly, but also enjoys her *HUSBAND*: Hence in this *Case*, I would conclude that she either labours, or has labour'd under some *Uterine Distemper*, such as a *Satyriasis*, *Pruritus*, *Furor*, *Gonorrhæa*, *Fluor Muliebris*, *Ulcers*, *Impostumes*, a former *Suppression*, or *Irregularity* of the *MENSTRUA*, or the like: As also many *Learned Men* agree that a *Præternatural Situation*<sup>[241]</sup>, namely, the *WOMB's* ascending to the *superior Parts*, compressing the *LIVER* and *DIAPHRAGMA*, and consequently the *Lungs*, *HEART*, or *STOMACH*, may induce various *SUFFOCATIONS*; Which, I think, is also confirm'd by *Reason* and *Experience*. For—

WHO knows not that the *Ligaments* of the WOMB, may be so relaxed and extended, that it may fall down to the very *KNEES*, as I have seen it? And who may not thence conceive that in the same *Laxity* of the *Ligaments*, the WOMB may be as well driven upwards by Winds, Vapours, or too much gross *BLOOD* in the *Ligaments*; or by ungrateful Odours approaching the WOMB, as it may also be

attracted by pleasant and grateful *Smells* at the *Nose*? Not that I mean here, by the by, that the *WOMB* is capable of *Smelling*, and therefore shuns disagreeable Fœtors; but only that its *Spirits* and *Heat*, especially in *Those*, who abound with deprav'd *Humours*, are attracted either way by agreeable *Odours*, or fragrant *Smells*.

NOW in this Case, the WOMB may be plainly found by the Touch, ascended in the Form of a round Ball; Which however may be easily brought down, and replaced in its natural Posture, by any skilful experienced Hand, previously well anointed with the OIL of Spike, Spikenard, White Lillies, or the like. Again farther, to prevent its Return, some nauseous Smells, may be apply'd to the Nose, or the Reverse to the PUDENDUM; as also the superiour Parts of the Body may be tyed strait with proper Bands or Ligaments.

BUT more particularly, as to the proper Diagnosticks of the imminent PAROXYSM, or approaching FIT of Suffocation, these are, Grumblings in the ABDOMEN, a Distention and Pulsation in the BACK and Hypochondriacks, a Weariness of the whole Body, an Imbecillity of the LEGS, Belching, Nauseating, Gaping, a pale Face, and a sad Countenance; attended at last with the aforesaid Sense of Strangulation, as if the PATIENT was a-swallowing a Ball, &c. As also I have known some Women to have been taken with a long FIT of Laughter upon this occasion, others with that of Crying; as probably some may confusely act both at once.

HOWEVER, It is to be observ'd in this place, that, as the *Distemper* is not equally violent in *All*, nor always attended by the *same*, or the same number of *Symptoms*; so neither are the *FITS* equally long or frequent, but invade and seize the *PATIENT* according to the quick or slow gathering of the *Morbifick Humours*, which are also sooner or later discussed: Which *Humorous Particles* in our Bodies, like as in intermitting *Fevers*, have their due Times of *Digestion, Accumulation,* and *Exaltation*; which *Height* as soon as they have arrived to, they suddenly, and as it were in a Moment, break out into *Action*: Or else *These Humours* may lye dormant in the Body, until by some *Procatarctick*, or *External Cause*, they are exagitated, and set at *Work*.

*NOW* this *Agitation* of *HUMOURS* depends not only upon the *Course* of the *SUN* and *MOON*, but also sometimes more particularly upon the *Change* of the *AIR*, and the *Motion* of the *SEA*. As to the *Solar* and

Lunar Influences upon the Animal Machine, they are already abundantly set forth<sup>[242]</sup>, wherefore I shall resume Nothing of *them* in this place: And as to the *Efficiency* of the *AIR*, I would observe it to be always most considerable about the *Two Equinoxes*; as at these *Seasons* the most impetuous *Winds* and violent *Storms* happen; and that continually the most severe at *Noon* and *Midnight*; that is to say, when the *SuN* is in our *Zenith*, or in the *Nadir*, *viz*. in the *vertical Point* over our *Heads*, or the quite *opposite* under<sup>[243]</sup> our *Feet*. These *Changes* however come a little before the *Vernal Equinox*, but follow the *Autumnal*; because of the various *Distances* of the *Moon* in its *Perigæum* and *Apogæum*.

*MOREOVER*, at these *Seasons*, and indeed at all Times, the *AIR* swells or rises highest, at *New* and *Full Moon*, from the conjunct Power of both the *Planets*: Hence the diligent *Mariners* and *Husbandmen* always observe the *Weather* to change, and *Winds* to rise upon these Occasions; and, not only so, but also, a constant and certain *Recourse* of *Winds* and *Weather* to happen at certain *Seasons* of the Year; and *that* from some certain necessary *Natural Cause*, which always acts in the same manner.

As to the *Motion* of the *SEA*, its Efficacy upon the *Animal Fabrick*, may be easily comprehended, considering only what is said; together with this Truth, that, at all *Seasons*, the *AIR* is highest, and the *Winds* strongest, when the *TIDE* of the *Flood* is at its highest Ascent. For as the *SEA* swells, so the *Ambient AIR* in 25 Hours, is twice raised to a considerable great *Height*, from the *Attraction* of the *MooN* approaching the *Meridian*: And the same swelling of the *AIR* must necessarily follow, as often as the *SUN* comes to the *Meridian* of any place, either above or below the *HORIZON*; tho' (as aforesaid) it is always *highest* at *New* and *Full MOON*: And *lowest* of all, when the *MOON* is but half *Full*; the *Planets* then drawing each a contrary way: As it is *middling*, during the Time between the dimidiated *Orbs* of the *MOON*, and the *New* and *Full MOON*<sup>[244]</sup>.

CONSIDERING then that the Ambient AIR and the surrounding SEA are both fluid Bodies, and that the Changes of the ONE agree so exactly with the Tide of the OTHER, we may rationally conclude, that they are both (in a great measure) subject to the same LAWS of Motion<sup>[245]</sup>. Hence it is, that, the great Physician<sup>[246]</sup> says, that the Fluxes and Refluxes of both these ELEMENTS are so ordain'd, by the

Wise *Councell* of the Almighty *CREATOR*, to keep them from *Stagnations* and *Corruptions*, which would be noxious to all *Creatures*, that by these means are preferred in a better Condition. Which is also confirm'd by *Experience*, from that, in clear and open places such *Valetudinarians* as are ready to *Die*, recover their *Health*, and the *Soundest Constitution* in moist close places, grows *SICK*.

FROM the whole, it is evident, that the Motions of the AIR at the flowing of the SEA, upon the New and Full Moon, and in the Æquinoxes, change the Fabrick of the Animal Bodies: But these Changes are always most remarkable in those of weak and sickly Constitutions; whereas those of Strong and Healthy Bodies more readily repel or evade their Influences. Hence it is that our Bodies so much Sympathize, and so manifestly correspond with the Cœlestials, as the Experience of a great many Ingenious Authors testify<sup>[247]</sup>: And hence again it is that the HYSTERICK, no less than any other PATIENT, keeps Time strictly with these Superiour Bodies, as the Register of a vast many Examples, and even daily Experience it self teaches for Truth. Now having thus far prosecuted the Diagnosticks, as to the Signs and Symptoms of the Distemper, I come at length to——

*THE Prognosticks* of this *Uterine SUFFOCATION*, which I shall but briefly hint upon; and *FIRST*, observe, that where the *HUMOURS* overcharge the *Body*, and are implicated among themselves; in this *Case* the *FITS* do not always keep their *Legitimate Times*, nor their *proper Insults*, but are sometimes more *frequent*, more *sharp*, and more *diuturnal*; in like manner, as a *Concourse* of *WINDS* excites the most violent *STORMS*, according to the *Poet*<sup>[248]</sup>,

*"Unà Eurusque Notusque ruunt, creberque procellis" "Africus, & vastos volvunt ad Littora Fluctus:* 

So a *Concourse* and *Confluxion* of *HUMOURS*, must needs aggravate the *Distemper*; but more especially, when the afflicted *PATIENT* is taken with a *Complication* of *Distempers*, such as when the *HYSTERICK FIT* is join'd with a *Syncope*, or severe *Convulsions*, &c. *then* the *Case* is most dangerous.<sup>[249]</sup>

—— —— —— "Nam corpore in Uno "Frigida cum Calidis Pugnant, Humentia Siccis, "Mollia cum duris, Sine pondere habentia pondus.

These Things, consisting in the *Corruption* and *Inflammation*, or in the *Quantity* and *Quality* of the *peccant HUMOURS*, concur with the *other Causes*, above defin'd, that the *Circulations* of the *Distemper* are either shorter or longer, more frequent or more rare, or more safe or more dangerous in the Event.

SECONDLY, I observe in this place, that, if the Distemper does not carry off the PATIENT, as often happens in the foregoing Condition, it commonly degenerates at last into an Apoplexy, or Palsy, Stupidity, or deep Melancholy, &c. Wherefore I come now finally to treat of the Method of its Cure; which is twofold, One in the Access or FIT, and another in the Interval. Then as to the First—

*IN* the *FIT*, *Revulsive* and *Repressing Remedies* are most apposite, together with *Corroboratives* for the *HEART* and *VENTRICLE*, as well as for the *WOMB* it self. But because *Revulsives* are of many and different kinds, they are to be discreetly us'd, according to the Nature of the *Cause* from whence the *Evil* proceeds: For if suppressed *BLOOD* be the *Cause*, in that *Case*, *Galen* agrees with *Hippocrates* that an *Inferiour Vene-Section* is convenient, and that even tho' a *Syncope* join the *SUFFOCATION*, because the *One* is but the Effect of the *Other*<sup>[250]</sup>: Remembring always that such *Bleedings* must be done with great Prudence and Caution, because of the present *Prostration* of the *Strength* and *Spirits*, and *Refrigeration* of the *PATIENT*'s whole Body.

WHEREAS if the PAROXYSM proceeds from venenated SEED, or depraved Humours, no VEIN is to be open'd; but instead of That, I would lay the *Woman* supine in her *BED*, for breathing the freer, and loose all her Laces, Garters, &c. Then if Strong Sternutatories, Fætid Smells, Vellication of her Ears, Nostrils, Pilorumve Pudendi, did not help her Condition; I would use dolorifick Ligatures, and Frictions of THIGHS, LEGS, and FEET; or apply Cupping Glasses without Scarification to the THIGHS and GROIN it self: As also proper Liniments, Clysters, Suppositories, Pessaries, &c. are convenient Suffumigations Means: And sometimes of GALBANUM. ASSAFOETIDA, Old Leather, Cloth, Sulphur, Partridge Feathers, Horse-Tetters or Warts, &c. Or (which is reckon'd Best of all) a few

of the *PATIENT*'s *Hairs* of her *Head*, burnt, and held to her *NOSE*. Or, while I should often tickle the *NOSTRILS* with a *Feather*, or my *Finger* dipp'd in the sharpest *Vinegar*, *Oleum Succini*, or the like, I would anoint the *PALLET* with *Triacle*, *Mithridate*, or such other Things dissolv'd in pleasant *WINE*.

HOWEVER, in such Cases, as well as in all others, à mitioribus adhibitis, progrediendum est ad valentiora; I say, we are to begin with the more gentle, and proceed gradually to the more strong and powerful REMEDIES; using all proper Means with the utmost Prudence and Discretion, and *that* only according to the absolute Necessity and imminent Danger of the *incident Case*. Now moreover, I would add for *such* as lose both *PULSE* and *BREATH*, that some of the above *REMEDIES* are not only requisite; but also, according to the excellent Horatius Augenius, a little generous WINE with Nutmeg, Cinnamon and Cloves, adding five Grains of MUSK, is altogether proper for this PATIENT<sup>[251]</sup>: Tho' for others, who have not quite lost all Sense and Motion, nothing is perhaps more pernicious than the USE of such Odoriferous Matters, since I have known several *Women* to have been immediately *suffocated*, even by the very Smell of MUSK, CIVET, AMBER, &c. But when the Sick PATIENT lies (as above) for dead, if such Odours can excite the WOMB, they can likewise move the Arteries, and give Hopes of *Recovery*; upon which occasion also, I would apply hot *Sear-Cloths* to the *Regions* of the *HEART* and *WOMB*: Or, if I suspected the HEAD to abound with *frigid Humours*, I would moreover apply Vesicatories behind the EARS, or an Issue, or drawing Plaister to the *NAPE* of the *Neck*, always cherishing the *STOMACH* with proper Fomentations: As also according to some, the Hoof of an ELK, is a present *REMEDY* in all such *Suffocations* or *FITS of the Mother*<sup>[252]</sup>.

*BY* the above-mentioned, which are all the most prevalent *Means* in the *ACCESS*, we will now suppose the *PATIENT* to be *recover'd*; in which *Case*, the next step needful, is to guard against, and prevent the *Return* of the *FIT*, and consequently to *Cure* the *DISEASE*; which can only be effected by removing the *Cause*, whatever it may be: And *This*, in my Opinion, may be most effectually perform'd in manner following, *viz.*—–

*IF* the *Distemper* proceeds from the *suppressed BLOOD* or *MENSTRUA*, This is by proper *Means* to be reduced to its *Natural* 

*Course* and *Condition*. If from a retain'd *Seminal Matter* in the *Uterine Vessels*, the *Cure* depends chiefly upon a proper *Regimen* of *Diet* and *Exercise*; frequent gentle *Purges*, and repeated inferiour *Venæ-Sections*: Whereas if already collected and venenated in the *WOMB*, and the *Body* consequently *refrigerated*, no *VEIN* may properly be touch'd or open'd; but in this *Case*, as if the *Evil* proceeded from *vitious putrid HUMOURS*, it is to be evacuated in the same manner, as in *other Conditions* of the *humid Intemperature* of the *WOMB*; always corroborating and fortifying the more affected or debilitated *Parts*.

*NOW* this Method of *Cure*, in short, being taken from the wisest of the *Ancients*<sup>[253]</sup>, I shall farther add *one* singular and essential *Step* towards the perfecting of it; namely, if it be so, that the most severe and dangerous *Symptoms* of this *DISTEMPER* proceed from the *Retention* of the *vitiated SEED*; then of Course and without Controversy, the *HYSTERICK PASSION* must needs be most familiar to *WIDOWS* and *marriageable VIRGINS*; to whom I must finally say, *Let them Marry*.

Si tales etenim pruriginosas, Connubio destinari contingat, ac Semen subdito virili Pessulo elici, in usumq, procreandæ Sobolis depromi, protinus illas efflorescere videas, ac faciem roseo, nitidóq; colore perfundi, blandas denique atque Amabiles, minúsq; tetricas ac morosas. Quod etiam docet GALENUS, Exemplo viduæ cujusdam, quæ multo Semine effuso, à Symptomatibus integrè est liberata<sup>[254]</sup>. Itaq; dico, tales dissuetæ maturæve viro sunt tempestive elocandæ. In fine, MARRIAGE will very much help such indisposed Persons, according to the Wise Judgment, Advice and Direction of the best Antient WRITERS.

### CONCLUSION.

*BEFORE* I close this finishing *Chapter*, I must entreat the *READER*'s Patience, and finally observe (by way of *Recapitulation* upon it, which will also serve to Answer the same End upon divers places interspers'd throughout this whole *BOOK*) that I am very Sensible before hand, that some considerate *Readers*, even among the *Learned* themselves, will be ready to stop or cavil at some of my *Sentiments*, and say, *Quo te Mœri Pedes? Et quæ te Dementia cepit?* 

I know that they deny, with the *Peripatetick Aristotle*<sup>[255]</sup>, the Existence of the *Muliebrian SEED*. Nay, I farther know, that, *this* is not all, which they will *object* against; for the *Four Galenick HUMOURS* will be as hard to *digest*. But as I leave all *Men to think and judge for themselves*, without differing with any for dissenting from me in *Opinion*, so I know that *Men of Probity* and *Ingenuity* will allow me the same *Privilege* and act in a suitable Manner: Whereas I doubt not but some *Momus*, or *Zoilus*, or some *Member* of the Body of the *Sophistical SCIOLISTS* will rise up, and pronounce me either altogether *Ignorant*, or an unjust *Vilifier* of the reigning *Modern Opinions*, by laying down some Authentick *Positions* of the *ANTIENTS*,

THIS cannot more certainly befall me, than I expect it; wherefore, I am not only in some measure upon my *Guard*; but also otherways resolved to hear, and even bear such *Controversial Wranglings* with Patience: Which I need think the less of doing, or suffering with Pleasure, considering the many Glorious *Examples* already set before my Eyes of *Those* who have deserved the greatest *Applause*, and the *Best* of Mankind in all Ages. To pass by some living *MONUMENTS* of *Detraction*, who are at this Day universally acknowledged to be *Eminent* and *Excellent Men*; have not some of the best *Authors* that ever wrote been unjustly scourged by the *black Tongues*, and even scandaliz'd by the *Satyrick Pens*, of their *COTEMPORARIES*? And are

not the same *SUFFERERS*, I mean their *Names* and *Memories* immortaliz'd at this Time, through all *Nations*? Besides, in short, will they not continue to be so through out all succeeding *Generations* for their essential *Helps* and ingenious *Discoveries* in the Noble and Heavenly Art of *PHYSICK*? Moreover, have we not too many *Instances* of *THIS*, to go no farther, in *England*, even too well known to require a *Repetition*?

*HOW* vain then would it be in me to hope to escape the Common *Fate* of all *WRITERS* in general? No, before ever I *put Pen to Paper*, I plainly foresaw, that, in this degenerate Age, no honest Man could safely subscribe to the genuine truth of Things, without suffering by publick Malice, under the *Character* of being reckon'd either an Ignorant or an *obsolete SINGULARIST*.

HOWEVER, yet, as I would willingly avoid being ranked among litigious *Disputants*, so I have taken Care (if it be possible) to mitigate the *Censure*, by not insisting too stiffly upon any *TOPICK*, which may be suppos'd to tend more to curious *Speculation*, than to real *Practice* in our *ART*: Neither have I set off any *Hypothesis* with recommendatory *Glosses*, nor other fine *Embellishments*, serving more for *Ornament* than *Use*.

BUT that I may not seem at last altogether to give up, what I have been advancing, however in modest *Terms* and upon authentick *Authorities*, I ingenuously answer and confess, that, I have in diverse respects and in sundry places in this *BOOK*, spoke my Mind freely, and impartially, however without Prejudice, and *that* sometimes also contrary to the *Opinions* of many famous *WRITERS* in Vogue, as well *Ancient* as *Modern*; by which means, I may perhaps have disgusted some, otherways, most *Judicious READERS*: However, considering the different *Grounds* upon which Men commonly form their *Judgment* of *AUTHORS*, if I have but the Happiness to please in some Things, I have all that I am ambitious of.

WHEREFORE, as it was neither for Applause nor Reputationsake, but merely for the Common Good of Mankind, that I undertook to write modestly, so I resolved at the Beginning, that, neither Malice nor Envy should deter me from publishing what is True, and, to my certain Knowledge, confirmed by Experience. I have carefully perus'd other Men's WORKS, Moderns as well as Ancients, to gain the Knowledge and discover the Truth of Things, and I gratefully acknowledge what *Benefit* soever I have reaped from them, whose *NAMES* I am not asham'd to affix to this *BOOK*, by the *Help* of their elaborate and ingenious *WRITINGS*: Desiring thereby to convince the *REVOLVER*, that I neither reject the hard *Labours* of the *Ancients*, nor despise the laudable *Endeavours* of the *Moderns*, *much less* would I be thought to decry or find Fault with any particular *Performance*; especially considering that I meet with none so *empty*, but that I get something by, which I emprove to my own Advantage.

BUT as far as I have found them mistaken, since Mortal Eyes cannot see beyond their HORIZON, nor the best of Men exceed the natural Limits of human Frailty, I have thought it my Duty to forewarn POSTERITY of their Mistakes, not only according to the laudable CUSTOM of the Ancients, but also according to my plain Notion of the genuine Nature or true CHARITY; which I think consists not in contemning, detracting and calumniating one another, but rather in cleansing SCIENCES from the Dross of Errors, that so the Right Way may be pav'd to our Successors by a continued Series of Time, which may be effectually done by Many, that cannot possibly be accomplished by One; because of the Brevity of LIFE.

UPON the whole, it is most certain that TRUTH is known but of a *few*; whereas false *Opinions* go current in the Stream with the rest of the World: Nay, TRUTH scarce yet ever carried it by Vote in any respect, insomuch, that the most evident Testimonies of Sense, too often yield place to imbib'd Opinions, and Men blindly reject the manifest Evidence of their own Faculties, by which Truth in many Cases is only to be discover'd: And indeed I know how hard it is otherways to enquire exactly into the common *Truth of Things*, so as to give a Satisfactory Demonstration, or a general Satisfaction to All: Which notwithstanding, I verily believe that the Sons of ART, who know the *Principles* and *Power* of *NATURE*, and understand her various *Operations* upon all *Bodies*, by the means of her inferiour Agents, the four *ELEMENTS*; and such as have attain'd any competent Knowledge in the SPAGYRICK ANATOMY of Things, especially of Fluids, Water, Wine, &c. will be at no great Loss to conceive the Probability of both the one and the other abovementioned *Hypothesis*.

ACCEPT then, in fine, Benevolent READER, This short and plain Performance of PHYSICK and MIDWIFERY; which, if it should not happily answer to your *Expectation*, I would fain have you believe, that it will far less correspond with my *WISH*. If then any Thing be found *useful* or *acceptable* in it, you are to ascribe that to *GOD*, the *Author* of all *Wisdom*; you may impute what is otherways perform'd, to *Man*'s Understanding and Practice blessed by *GOD*: Therefore being every where mindful of *Humanity*, *read*, *revolve*, *enjoy*, and *correct*; *reflecting* in the *Interim*, not so much upon the *little that* I have done, as upon *that* which others have not hitherto perform'd concerning the same *Subject*.

I could with *Pleasure* have continued *The Performance*, and, according to my *Design* at the *Beginning*, have added two *SECTIONS* more, *viz. One* upon the *Symptoms* and *Diseases* of the *WomB* and the *Passages*; the *other* upon the various *Symptoms* or *Accidents*, relating to the *MENSTRUOUS* and other *Uterine Fluxes*: But as the *Work* has already by far exceeded the *Limits*, which I design'd it at first, I shall here for the present Time fix my *PEN*.

I Pray GOD, in short, the Fountain of Life, and Source of all Science, that HE may enable others to conceive what has been said, better than I have been capable to explain; and grant that the Fruit of my LABOUR may conduce to the Health and Preservation of all good WOMEN and their CHILDREN: All finally, upon the whole Work, redounding to the eternal GLORY of his own most Holy Name.

FINIS.

# AUTHORS Names quoted in this Work, disposed Alphabetically.

A.

Ægineta Aetius Agrippa Corn. Albertus Magnus Alcinous Alexandrinus Jul. Anaxagoras Antony St. Apollonius Apuleius Aquinas Thom. Areteus Aristotle Arnoldus de villa Nova Augenius Augustin St. Aurelianus Cæl. Averroes

#### Avicenna

В.

Baglivius Bartholinus Bellini Benedictus Alex. Blancard Boerhaave Boetius Bonaciolus Bottonus Brassavolus Burnet Thom.

C.

Cardanus

Cato

Catullus

Celsus

De Chales

Chamberlain

Cicero

Claudianus

Cordcæus

Cyprian St.

Daventer

Democritus

Diocles

Diodorus

Diogenes

Donatus Marcel.

E.

Empedocles Etmullerus Eustachius

F.

Fabricius Gul. Fab. d' Aquap. Fallopius Favorinus Fernelius Florentinus Nichol. Floyer Sir John Forestus

Galen Gamma G.

Garofanzzo Gaffendus Gellius Goad Guillaume de Paris

H.

Harris Dr. Harvey Heister Helmontius Heraclides Hercules Saxon. Heurnius Hippocrates Hoffman Hollerius Homer Horace Horstius Howel

Jerome St. Johannes Anglicus J.

Lactantius Langius Laurentius And. Levin. Lemnius. Licetus Linus Lucilius Lucretius Lusitanus

М.

Macrobius Manilius Marcellus Marcus Marci Mauriceau Mead Dr. Menabeus Mercatus Mercurialis Montanus

Moor Sir Thomas

Morgagnus

Newton Sir Isaac

N.

## Ovid

Palladius Panarolus Paræus Paschal Paulus Jurisconsult. Persius Pfizerus Pindar Pinæus Plato Platerus Plautus Pliny Plutarch Pontanus Proclus Pythagoras

Rabanus Ranchinus Rhases R.

0.

Riolanus Riverius Rocheus Rodericus à Castro Ronssæus Rufus Ruffius Ruysch

S.

Schenckius Senertus Solomon King Soranus Spigelius Sprengell Dr. Sydenham

Terentius Thuringius Trincavellius Tulpius

Ulmus Marc. Ant.

U.

T.

Valeriola Vallesius Velthuysius Vesalius Virgil Vives

W.

Wierus

Z.

#### Zebizius

Zacch. Paulus

Courteous Reader, having been sometimes call'd from the Inspection of the Press, there may be some literal and a few verbal Mistakes; which as the Sense is not perverted, I hope you will candidly pass by.

Adieu.

- <u>1</u>. De Partib. Anim. lib. 1. cap. 5.
- <u>2</u>. Lib. 2. Sat. 1.

3. Sat. 5.

**<u>4</u>**. Book of Wisdom, 8, 19 and 20.

5. Prov. 4. 23.

- <u>6</u>. Book of Wisdom, 9. 15.
- <u>7</u>. Prov. viii. *from* 22, *to* 32.

<u>8</u>. Gal. 4. 6,

9. Rom. viii. 17.

<u>10</u>. Psalm 8. 24. 104, 139, &c.

<u>11</u>. Lib. 15. do part. Us. Sect. 1.

<u>12</u>. Matt. xxvi. 38.

**13**. Bonacciol. Mercat.

<u>14</u>. De Natur. Puer.

15. Galen Ruf. Mercat.

<u>16</u>. Hippoc. de Natur. Puer. Fortun. Licet. de perfect. Constitut. Homin. in Uter. Rod. à Cast. de Nat. Mul.

<u>17</u>. Eccles. xi. 5.

<u>18</u>. Book of Wisdom, ix. 13, 14.

<u>19</u>. Psal. cxxxix. 13, 14, 15, & 16.

<u>20</u>. De perfect. Constitut. Homin. in Utero.

<u>21</u>. Hippoc. de Natur. Fœtus.

22. Aristot. 7. de Hist. Animal. 3.

**<u>23</u>**. Harv. in Exercit. Ettmul. Prax. cap. 25.

<u>24</u>. Heister. in Compend. Anatom.

25. Marc. Ant. Ulm. de Utero Mul. S. 1. c. 7. Amb. Paræus, L. 23. c. 42. Ranchin. de Morb. Virg. S. 1. c. 4. And. Laurent. Horat. Augen. &c.

<u>26</u>. Avicen, Vesal. Fallop. Wier. Plater. Spigel. Heister. Morgag. &c.

<u>27</u>. Sect. 5. Aph. 39.

<u>28</u>. De Muliebrib. lib. 1. Comm. 4 & 6.

<u>29</u>. Hippoc. Lib. de Glandulis.

<u>30</u>. De Hist. Animal. Cap. 12 & 3.

<u>31</u>. Sever. Pin. in Opusc. Physiol. & Anat. cap. 5. Pet. Forest. Schol. 28. Observat. 55. Plin. lib. 36. cap. 19. Anselm. Boet. lib. 2. de Lapid. & Gemm. cap. 165. Melch. Sebiz. de Not. Virg. Thuring. &c.

<u>32</u>. Hipp. Lib. de Morb. Virgin.

33. Lib. de Morb. Virgin.

<u>34</u>. Joh. Lang. Lib. 1. Epist. 2.

35. Sect. 3. Epist. 19.

<u>**36</u>**. Georg. 3.</u>

37. Lib. 3. Fen 21. Tract. 1. cap. 12.

<u>38</u>. De occult. Nat. Mir. lib. 1. cap. 9.

39. Gal. lib. Art. Med. Hipp. ac Gal. 5. in Sextum vulg. Morb. Hipp. lib. de Sterilib.

<u>40</u>. Hercul. Saxon. Oper. pract. p. 3. c. 28. Rod. à Cast. de Nat. Mul. lib. 3. c. 13.

<u>41</u>. Lib. de Opific. Dei, pag. 823.

<u>42</u>. Pag. 65.

43. Pontan. l. 10. de reb. Cœlest. Jul. Alexandrin. de Salubrib. c. 14. Amat. Lusitan. Cent. 3. Cur. 39. &c.

44. Herc. Sax. Prælect. pract. part 3. cap. 30.

45. Plin. Nat. Hist. lib. 8. cap. 21.

<u>**46</u>**. Genes. xxx.</u>

<u>47</u>. Thom. Aquin. contra. Gentil. lib. 3. Hen. Cornel. Agrip. lib. de Occult. Philosoph. &c.

<u>48</u>. Lib. 7. Cap. 12.

<u>49</u>. Lib. 4, Od. 4.

<u>50</u>. 1 Cor. 7. 5.

<u>51</u>. Marcus Marci de Ideis Operatric. Horstius Tract. de Caus. Similitud. Fœt. cum Parent.

52. Lib. 3. de Morb. Mul. cap. 6.

53. Hipp. lib. de Genit.

54. Aristot. lib. 3. de Histor. Animal. cap. 3.

55. Quæst. Medic. Legal. lib. 1. tit. 3. quæst. 1.

<u>56</u>. Hipp. 4. Aph. 1.

57. Hipp. 5. Aph. 31. Forest. l. 16. Obs. 38.

<u>58</u>. Rod. à Cast. de Morb. Mul. lib. 3. cap. 22.

59. Trincavel. lib. 3. de curand. partic. hum. Corp. Affect. cap. 5. Forest. lib. 8. Obs. 7. Ludov. Vives in Comm. ad lib. 27. August. de civit. Dei, cap. 25. Lang. lib. 2. Epist. 12. Florent. Serm. 5. tract. 4. cap. 36. Brasavol. Comm. ad lib. 5. Aph. 24. Hippoc. &c.

<u>60</u>. Rod. à Cast. de Morb. Mul. lib. 3. cap. 11.

<u>61</u>. Florent. Serm. 5. tract. 4. cap. 36. Brasavol. 5. Aph. 24. in Comm. &c.

<u>62</u>. 5 Aph. 34. Diemerbroek lib. 1. Anatom. cap. 24. Lang. de Valetud. Gravid. Disp. 41. Bagliv. Prax. chap. 13. lib. 1.

- <u>63</u>. Galen 4. Aph. 17.
- <u>64</u>. Galen. 3. de Loc. Aff. c. 8. Avicen. l. 3. Tr. 5. cap. 1.
- <u>65</u>. Gal. 3. de Loc. Aff. c. 8.
- <u>66</u>. Hipp. 3. Aph. 17, 23, 31.
- <u>67</u>. Lib. 1. de Loc. c. 2.
- 68. Hipp. 4. Aph. 17. Zacut. Lusit. Prax. Histor. l. ult. c. 1. Num. 4.
- <u>69</u>. Aret. 1. de Caus. Chronicor. c. 3.
- <u>70</u>. Galen. 3. Aph. 17.
- <u>71</u>. De Morb. Chron. lib. 1. cap. 2.
- <u>72</u>. Prælect. Pract. Par. 1. cap. 11.
- 73. Hipp. 2. Aph. 3, 7. Aph. 18. Bellini de Morb. Capit. pag. 535.
- 74. Hipp. 5. Aph. 60. Brassavol. in hunc Aphor.
- 75. Hipp. 6. Aph. 20. Cels. l. 2. c. 8. p. 70.
- <u>76</u>. Hipp. 5. Aph. 60. Brassavol. in hunc Aphor.
- 77. Hipp. 7. Aph. 48. Heurnius in hunc Aphor.

78. Alex. Bened. lib. 19. de curandi Morb. rat. cap. 36. Fernel. lib. 6. de part. Morb. & Sympt. cap. 10. &c.

- <u>79</u>. Observ. 1. Pentecost. 1.
- <u>80</u>. Hipp. 7. Aph. 27.
- <u>81</u>. Aet. lib. 16. cap. 12.
- <u>82</u>. Observ. cap. 5. de intermittent Feb.
- 83. Sect. 4. Aph. 59.
- 84. Galen. de Crisib. lib. 2. cap. 6. &c in Comment. in 4 Aph. 59.
- 85. In Comment. in Aph. Hipp. 23. lib. 2.
- 86. De diebus decretor. lib. 3.

<u>87</u>. Valleriol. lib. 1. Observ. 1. & lib. 6. Observ. 6. Hipp. 5. Aph. 30. Forest. lib. 2. Observ. 27. & lib. 6. Observ. 6. Hollerius in hunc Aphor. &c.

- 88. Rod. à Cast. de Morb. Mul. lib. 3. cap. 21.
- <u>89</u>. Ibidem.
- <u>90</u>. Lib. 4. Pract. Med. de Mul. Morb. Part 2. Sect. 5. cap. 3.
- <u>91</u>. Hipp. 5. Aph. 37. Cardan. in hunc Aphor. Lang. disput. 41. c. 3.
- <u>92</u>. 5. Aph. 52. Holler. in hunc Aphor. River. Prax. l. 15. c. 17.

- 93. Senert. I. 4. p. 2. S. 6. c. 2.
- <u>94</u>. 3. De Fac. Nat. cap. 12.
- 95. Senert. lib. 4. p. 2. S. 6. c. 2. de Mul. Morb.
- <u>96</u>. Hipp. 5. Aph. 45. Etmuller. de Convulf. c. 9.
- <u>97</u>. Guliel. Fabric. Cent. 2. Obs. 50, & 51.
- 98. Hipp. 3. Aph. 12. Heurn. in hunc Aph.
- 99. Lib. 7. Hist. Nat. cap. 7.

<u>100</u>. Chap. ix.

- 101. Hip. 5. Aph. 37, 38. Cardan. & Brassavol. in hunc Aphor.
- <u>102</u>. 5. Aph. 52. River. Prax. l. 15. c. 17.
- <u>103</u>. Sydenh. Prax. Med. lib. 3. cap. 13.
- <u>104</u>. Senert. de Morb. Mul. lib. 4. p. 2.
- <u>105</u>. R. à Cast. de Morb. Mul. l. 3. c. 21.
- 106. Hipp. Lib. de Octimest. Part. Plin. Nat. Hist. lib. 7. cap. 5.
- 107. 2 Aph. 22. Hoffman. Method. Medend. l. 1. cap. 13.

108. Plato 5. de Repub. Aristot. 7. de Hist. Animal. cap. 4. &c. 4 de Gen. Anim. cap. 6. Sect. 10. Problemat. 30. Gellius, lib. 3. Noct. Attic. cap. 16. Plin. lib. 7. Nat. Hist. cap. 5.

<u>109</u>. Sect. I. Chap. 7, 8.

<u>110</u>. in Com. 2. de Generatione.

<u>111</u>. R. à Cast. de Nat. Mul. l. 4. c. 2.

<u>112</u>. R. à Cast lib. 4. cap. 4.

113. De Sacra Philos. cap. 18.

<u>114</u>. Lib. 1. Tract. 3. Contrad. S.

115. Sprengell in Sect. 10. Aphor. Celsi 9.

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- <u>117</u>. Corn. Agrip.
- <u>118</u>. Chap. 4, 5, 6, & 7.
- <u>119</u>. Chap. 8.—18.
- <u>120</u>. Chap. 18. to the end.
- <u>121</u>. R. à Cast. de Nat. Mul.
- <u>122</u>. Plin. lib. 7. cap. 5.

123. Lib. de Octimest. Part.

<u>124</u>. Lib. de Alimento.

<u>125</u>. Chap. xxviii. 13.

<u>126</u>. Plat. 5. de Republ. Aristot. 7. de Hist. Animal. c. 4. Phavor. apud Gell. lib. 13. c. 16.

<u>127</u>. Plin. Nat. Hist. lib. 22. cap. 21.

128. Revel. xiii. 18.

129. Plin. lib. 7. cap. 5. Gell. Noct. Attic. lib. 3. cap. 16. Cardan. lib. 1. tract. 3. cont. 8. Amat. Lusitan. Cent. 1. curat. 27.

130. Aristot. 7. de Nat. Animal. 4.

<u>131</u>. Senert. lib. 4. p. 2. S. 6. cap. 1.

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134. Lib. de Imper. Solis & Lunæ, cap. 1.

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137. Astronomic, lib. 2.

<u>138</u>. De Dieb. Decretor. lib. 3.

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140. Lib. de Septimest. Part.

<u>141</u>. Lib. de Septimest. Part.

142. Nat. Hist. lib. 2. cap. 98.

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144. Philos. Transact. Numb. 202.

145. Cap. 2. de Imper.

<u>146</u>. 3 Crit. 9.

<u>147</u>. Lib. de Alimento.

<u>148</u>. Genes. iii. 16.

<u>149</u>. Plin. Nat. Hist. lib. 7. cap. 5.

150. R. à Cast. de Nat. Mul. lib. 4. cap. 2.

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- 153. Heist. Anat.
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- <u>159</u>. Lib. 3. Fen. 21. Tract. 1. cap. 1.
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- <u>176</u>. Vid. SECT. 4. Chap. 13. & SECT. 5. Chap. 19.
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- <u>181</u>. Vid. Sect. 3. Chap. 28.
- 182. Plutarch. in Vit. Romuli.
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- 184. Apud Aul. Gell. lib. 12. cap. 1.
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- <u>190</u>. Plin. Nat. Hist. lib. 7. cap. 16. Ronssæus de vitæ hum. Primord. cap. de Dentit.
  - <u>191</u>. Sect. 3. Aph. 24, & 25.
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  - <u>198</u>. *Lib.* 7. *de Histor. Animal. cap.* 14. & *lib.* 4. *de gener. Animal. cap.* 5.
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  - <u>205</u>. Senert. lib. 4. Part. 2. Sect. 4. Chap. 10. Herc. Saxon. P. 3. cap. 29.
  - <u>206</u>. *Vid*. Sect. 2. Chap. 7.

- <u>207</u>. Lib. 4. Cap. 7.
- <u>208</u>. Loc. cit.
- <u>209</u>. Herc, Sax. P. 3. C. 29.
- <u>210</u>. Contra Pindarum lib. 3. de Us. part. cap. 1.
- <u>211</u>. Homel. 7. super. caput 3. Epistolar. Pauli.
- <u>212</u>. In vitâ suâ.
- <u>**213**</u>. Loc. cit.
- <u>214</u>. *Levit*. 15 24, &c.
- <u>215</u>. Lib. 1. Cap. 8.
- 216. Lib. 3. Cap. 4.
- 217. Thes. Med. pract. lib. II. Sect. 19. Sub-Sect. 3.
- 218. Georg. 3.
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- 223. Hipp. 5. Aph. 46.
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- 225. Cap. de Sterilit.
- <u>226</u>. Senert. L. 4. P. 2. S. 4. C. 2.
- <u>227</u>. Loc. Cit.
- 228. Galen. 5. Aph. 61.
- 229. Herc. Sax. Prælec. Pract. P. 3.
- <u>230</u>. *Hipp. 5. Aph. 37, 38*, and *50. Vesal. L. 5. C. 5.*
- <u>231</u>. *Tulpius Observ. Medic. lib.* 1. cap. 12. and *lib.* 2. cap. 43.
- <u>232</u>. De Imper. Sol. & Lun. Cap. 2.

<u>**233**</u>. Ibidem.

- <u>234</u>. *Lib.* 6. *de loc. aff. c.* 5.
- 235. Lib. 6. de loc. aff. cap. 5.
- <u>236</u>. Alex. Bened. Pract. lib. 10. cap. 10. Paræus lib. 24. cap. 19. &c.
- <u>237</u>. *Lib.* 6. *de loc. aff. cap.* 5.

<u>238</u>. Nic. Rocheus lib. de morb. mulieb. cap. 4. Mercurialis lib. 4. de morb. mul. cap. ult. Albertin Bottonus lib. de morb. Mul. cap. 43, &c.

**2**39. Senert. lib. 4. P. 2. S. 3. C. 4. Rod. a Castro. lib. 2. S. 1. C. 1. Herc. Sax. P. 3. Cap. 27.

<u>**240</u>**. *Gal. lib. 6. de loc. aff. c. 5.*</u>

<u>241</u>. Hipp. lib. 1. de morb. mul. Paulus lib. 3. c. 7. Fernel. lib. 6. pathol, c. 16, &c.

<u>242</u>. Vid. Sect. III. Chap. 28. 38. Sect. VIII. Chap. 2.

243. Goad's Astrometeorologica, De Chales de Art. Navigandi.

<u>244</u>. Gassendus's Philosoph.

245. Newton's Princip. lib. 3.

<u>246</u>. Mead de Imper. Sol. & Lun. Cap. 1.

<u>247</u>. Bagl. de Experiment. circa Sanguin, Apul. de virtut. Herbar. c. 9. & 65. Helmont. de Asthm. & Tuff. Sect. 22. Floyer, de Asthma, pag. 17, &c.

<u>248</u>. Æneid. 1.

<u>249</u>. Ovid. Met. Lib. 1.

<u>250</u>. Hipp. com. 4. Acut. tex. 23. 24. 25. & 82. Galen. in Comm.

<u>**251**</u>. Lib. 12, Tom. 1.

<u>252</u>. Apol. Menab. de Alce C. 10. Senert. l. 4. P. 2. S. 3. C. 4.

253. Hipp. Aet. Paul, Avic, Gal. Herc. Sax. Rod. Cast. Senert. &c.

<u>254</u>. *Lib.* 6. *Loc. Aff. cap.* 5.

<u>255</u>. L. 1. de Gen. Animal. Cap 20.

### **TRANSCRIBER'S NOTES**

- 1. Silently corrected typographical errors and variations in spelling.
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