A course of lectures on the theory and practice of midwifery : in which, every thing essentially necessary to the true knowledge of that art will be fully explain'd ... / by John Leake.

## Contributors

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# DECTURES On the THEORY and PRACTICE OF MIDWIFERY: IN WHICH,

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- Every Thing effentially neceffary to the true Knowledge of that Art will be fully explain'd, and clearly demonstrated; particularly, those Operations which are conformable to the Principles of mechanical Motion.
- Of the Form, Structure and conftituent Parts of the Female Pelvis.
- Of the Organs of Generation, and the Doctrine of Conception; —— the Nutrition and Situation of the Fatus in Utero, and its gradual Increase from its Rudiments to the Time of Birth.
- The Pathology, Treatment and Cure of the various Diseases incident to Child-bearing Women and Infants, with the Regimen neceffary to be observed, respecting the Non-Naturals, viz. Air, Diet, Motion and Rest, Sleep and Watching, Retention, Excretion and the Passions of the Mind.
- The Antient and Modern *Manner* of delivering Women in laborious and preternatural Cafes compared; with a View of the Advantages and Defects of the Means proposed for that End.

\*\*\* For the clearer Demonstration of Operative Midwifry (whether fimply by the Hand or the Application of Instruments) the feveral Methods of affifting both in natural and preternatural Labours, will not only be deferibed according to the most approved modern Practice, but likewife diffinctly shewn, by an artificial Representation of each difficult Case, upon Machines for that Purpose; constructed upon new Principles, and made to the most exact Imitation of real Women and Children.

The Whole will be illustrated by fuch anatomical Preparations as are applicable to each Lecture; together with various practical Observations, extraordinary Cases, and necessary Cautions; but particularly, by real Labours.

By JOHNLEAKE, M. D.

Member of the Royal College of Phyficians, LONDON, And PHYSICIAN MANMIDWIFE to the

Westminster New Lying-in Holpital,

At his Houfe in Craven-Street, in the Strand.

LONDON, A. D. 1767.



# PROPOSALS.

\*\* The Students who attend these Lectures, for their more expeditious and effectual Improvement, and with a View to reduce the Theory of this Art, to real Practice, will, when sufficiently qualified, be admitted Pupils at the Westminster New Lying-in Hospital.

THE Expence of attending the first Course, --- 3 Guineas---And For every future Course, ---- 2 Guineas.

A private Course, - - - - - Six Guineas.

Ten Guinea Pupile. Every Gentleman paying down ten Guineas at the first Course, shall be entitled to attend every future Course for the Space of one whole Year; and shall also, without further Expence, be admitted a Pupil at the Westminster New Lying-in Hospital, for fix Months, where he will have frequent Opportunities of extensive Practice, and also the Advantage of seeing the Treatment and Manner of prescribing for the various Disorders incident to Child-bearing Women and Infants;---a Branch of Science effentially necessary to all those who intend to practife Midwisery: These Pupils will also have the Liberty of taking down such remarkable Cases as occur during the Time of their Attendance; and will likewise be taught the Art of Injecting and the Method of making such anatomical Preparations as tend most to illustrate the Science of Midwifery.

House Pupils. { Dr. Leake will take two House Pupils in the Winter Season, for any limited Time, not less than three or more than fix Months, on the following Conditions.

> For three Months, 24 Guineas. For four \_\_\_\_\_\_ 30 \_\_\_\_, And For fix Months, -----40 Guineas.

The Privileges of Houfe Pupils (including Board and Lodging) will be precifely the fame in all Respects, as those of the ten Guinea Pupils. Women will be privately inftructed in the Art of Midwifery, and Female Pupils will foon be properly qualified by having conftant Opportunities of Practice at the Westminster New Lying-in Hospital, where, if required, they will also be allow'd to refide, towards their more expeditious Improvement and complete Knowledge of every Thing relative to the Office of a Midwife.

\*\*\* The Money to be paid at the first Lecture ;---at which Time, the Hour of Attendance will be made convenient to a Majority of the Pupils, who are defired to apply before the Commencement of each Courfe, the first of which, for the Winter Season, will always begin early in the Month of October, and continue regularly, from Time to Time, throughout the Year, as advertifed in the *public Papers*.

Note, The Apparatus may be feen at the Doctor's Houfe, where a Syllabus of the Lectures may be had, and further Particulars known; or at the Hospital near Westminster Bridge, any Saturday between the Hours of Twelve and One.

# Of the Intent and real Advantage of an Apparatus, in teaching the Practice of Midwifery.

T may not, in this Place, feem unneceffary to fay fomething on the Defign and real Use of *Machinery*, or that Kind of *Apparatus*, which is intended as an *artificial Substitute*, for the real Bodies of *Women* and *Children*, on which to teach the Art of Midwifery.

In the practical Part of Midwifery, there is a Kind of Dexterity required, which can never be taught by Defcription 3---nothing but Practice itself can render it attainable, or adapt the Hand of the *Pupil* to the easy and judicious Performance of the several Operations of this Art; which, like those of Surgery, ought first to be confined to the dead Body.

'Tis true, that before any one can be deem'd a Proficient in Midwifery, he must have frequent Opportunities of real Practice; but it is also true, that living Bodies are very improper Subjects for initiating Pupils in the operative Part of this Art:---How then shall they begin to practife?---Not on real Subjects, to the manifest Danger of the Patient and the Ruin of their own Reputation, but upon artificial Bodies, fo mechanically and naturally constructed, as nearly to correspond with the several Parts concern'd in Parturition.

> But it ought to be remark'd, that the bare Name of an Apparatus, which is much eafier obtain'd than the Apparatus itfelf, is not fufficient to give it Value;---that will beft be known by examining and viewing it comparatively with others; for, Machines badly constructed, are fo far from being ufeful, that they do much real Harm, by mifinforming the Judgment of the Student, and giving him a false Idea of Nature both in the Touch, Figure and Disposition of the several Parts.

This induced me to beftow no fmall Labour and Expence on that Apparatus, on which I propose to demonstrate the Practice of Midwifery, having executed all the principal Parts of it with my own Hands; and having also, for several Years pass, been constantly making Alterations and Improvements in it, from time to time, as upon Tryal, I discover'd its Defects, in order to render it as complete and useful as possible; being thoroughly convinced, that what is commonly call'd Machinery, (made and fold by Mechanics as it generally is) would prove totally useles; for, they are not only unacquainted with the anatomical Structure of those Parts which it ought to refemble, but also with the Uses to which it will afterwards be apply'd.

By the Ufe of this Apparatus, each difficult Cafe will be reduced to a Demonstration, which will afford the Pupil fuch folid introductory Knowledge, as will not eafily be forgot ;---For Inftance, he will become acquainted with the Method of Touching in the Time of Labour, and the Information from thence arifing; but particularly, he will acquire a certain Degree of Dexterity in the Application of the different Sorts of Instruments ufed in difficult Labours; and laftly, in preternatural Cases, he will learn the Method of turning the Child with more Eafe to himfelf and Safety to the Mother :---These three principal Points of Midwifery are attainable, by this artificial Kind of Demonsliration on the Machine, which may be look'd upon as the most direct Road to prastical Knowledge, that can possibly be pointed out for his Improvement and future Success.

# SYLLABUS

(3)

OF THE

# Several LECTURES.

# Introductory Lecture.

A N Historical View of the Rife, Progrefs and present State of Midwifery; together with the Theory and Practice of the best Antient Writers.

A general Account of the Doctrine, Writings and Improvements of the most eminent Modern Professors of Midwifery; particularly, those who now give public Lectures on that Science in different Parts of Europe.

Of the Use and Abuse of Instruments, with a comparative View of the several Advantages and Defects, resulting from their Mechanical Structure, Action and Manner of Application.

Of the Method proposed in the Course of the following Lectures.

# LECTURE II.

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The Anatomy of the Female Pelvis, with a Description of the Form, Situation, and Connection of the several Bones of which it is made up, viz. the Os Sacrum, Coccyx and Offa innominata; with their Ligaments, Cartilages and furrounding Muscles.

The Division of the Offa innominata into their feveral Bones, viz.

# Ilium, Ifchium, & Pubis.

The Dimensions of a well form'd *Pelvis* at its Brim and Bottom, its Extent from Side to Side, and from the Back to the Fore-part; with the Depth of its Back, Fore-part and Sides.

The Capacity and Figure of its Cavity, and the Difference between a well-form'd and difforted *Pelvis*; also of the Marks which diffinguish the Male from the *Female Pelvis*.

The Caufes of a *dillorted Pelvis*, and its dangerous Effects to Childbearing Women.

Of the Shape, Structure and different Diameters of the Fætal Cranium; with the great Advantage of understanding clearly the Proportion which the Infants Head bears to the Pelvis, as it passes through its Cavity in different Directions.

Remarks on the Membranous Connection of the Bones which compose the *Infants Scull*:—different from that of the *Adult*,—and, how corresponding with the Intention of Nature in facilitating the Birth of the Child.

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# LECTURE III.

Of the Female Organs of Generation, viz.

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particular Species of Hirring

seral Cantes, as relative to

Externally the

Pudenda, Meatus Urinarius, Clitoris & Nymphæ.

Internally the

Hymen, Vagina, Os internum & Uterus; Fallopian Tubes, Ovaria and Ligaments.

Contiguous Parts { Vefica Urinaria, Rectum & Perinæum.

Of the Figure of the Uterus in the Virgin State and after Pregnancy; and also of the gradual Distension of its Fundus, Cervix and Os internum at different Periods of Gestation.

\*\*\* The feveral Parts will be fhewn in their natural Situation with *Phyfiological Obfervations* on their Structure and Ufe.

# LECTURE IV.

Of the feveral Diforders incident to the Parts of Generation, and the Method of their Cure, viz.

The Prolapfus Vaginæ & Uteri, with the different Peffaries invented and recommended for the Relief of those Complaints and the Manner of their Application.

Stone in the Bladder,—its bad Confequences to Women in-Labour.

Of the Menstrua, when obstructed or too large in Quantity.

OF Twins, Superfactation, falle Conceptions and Moles.

Of the imperforated Hymen and the Operation necessary for its Cure.

— Furor Uterinus, Chlorofis and Fluor Albus;—how to diffinguish the last from a Gonorrhæa virulenta, from the Menses decolores, or from the Discharge of an Ulcer in the Womb; with their several Causes and Cure.

---- Cancer of the Womb and Dropfy of the Ovaria.

Of Ruptures in general, and of a particular Species of Hernia peculiar to Women.

Of Sterility or Barrennefs, with its feveral Caufes, as relative to both Sexes, and the most effectual Methods of Cure.

# LECTURE V.

Of Generation and the Menstrual Flux.

The antient and modern Doctrine of Conception, and the various Opinions advanced by different Authors on that Subject.

Of the Genitura of the Antients.

-The Ovi-parous System of Fabricius, Harvey and Malpighius: -Animalcular System of Leeuwenbock and Hartfocker, and the corpufcular, organical System of M. Buffon.

Of the *impregnated Ovum*, and its Defcent into the Uterus by the Fallopian Tube; with the progreffive Order in which the feveral Parts of the Embryo are fuppofed to be formed, and the Manner how they gradually unfold themfelves in Magnitude and Figure, from Conception to the Time of Birth.

Vivi-parous and Ovi-parous Animals,—their Analogy confidered in the Manner of their Production.

Æquivocal Generation—justly exploded by the Experiments of Redi.

-Ext

Of Twins, Superfætation, false Conceptions and Moles.

# -Extra-uterine Fætuses, and the Production of Monsters.

The Signs of Conception,—how diffinguished from an Obstruction of the Cataminia, the encysted Dropsy or other equivocal Marks of Pregnancy.

At what Period of Time, Women are most apt to Conceive.

The Term of a Womans going with Child.

# LECTURE VI.

Of the Complaints which follow Conception, with their various Caufes, and palliative Method of Cure, Viz.

Naufea, Vomiting and Longing for unnatural Substances.

The Force of the Mothers Imagination confidered, in marking or mutilating the Child.

Of the Harmorrhoids, Costivenes, Samelling of the Legs, or Difficulty of Breathing; and also of the several other Disorders which arise from the Distension of the Uterus, Fulness of the Vessels, or Compression of the Viscera, in the last Months of Pregnancy.

The Treatment and Cure of the Gonorrhæa Virulenta and Lues Venerea, during Pregnancy.

Diseases of the Fætus in Utero.

Of Abortion or Miscarriage from a Fault of the Constitution,— Shortness of the Funis, — a Schirrhous Placenta or the preternatural Conformation of the Uterus;—from Frights, external Violence, or any Cause which occasions a Seperation of the Placenta; with the most effectual Methods of Prevention.

Abortion

Abortion at stated Times,-feldom admits of a Remedy,-and why?

The true Miscarriage, -- often mistaken for a Mola or falfe Conception.

Of Incontinence and Obstruction of Urine, at the latter End of Pregnancy, with the Method of passing the Catheter.

-The supposed Hysterical Motion of the Womb,-how distinguished from the Motion of a Child.

Rules and Cautions for the Conduct of Women during the feveral Stages of Pregnancy.

\*\*\* In this Lecture will be fhewn a curious and uncommon Abortion of fix Months, in which the buman Fætus is beautifully feen thro' the transparent Membranes, fwimming in its own Liquor.

# LECTURE VII.

onlidered, in marking

# Of the Fætus.

The Situation of the Fætus in Utero, at different Periods of Gestation.

Of the *Placenta* and its *Membranes*, and of the Quantity, Quality and Use of the Liquor Amnii or contained Waters.

-The Funis Umbilicalis or Navel-string, and the Course of its Veffels traced to their Origin, with their several Connections and Dependancies respecting the Mother and Child.

Of the Circulation and Nutrition of the Fætus, and of the Parts peculiar to it, viz. the Foramen ovale, Canalis arteriofus and Ductus Venofus.

Of.

# Of the Allantois and Urachus.

Experiment to difcover, whether a Child was still-born or destroy'd after the Birth; with necessary Cautions in Cases of Evidence against the accused.

# LECTURE VIII.

## Of the Signs which precede or accompany true Labour.

The Caufe and Effects of Labour Pains:—Of the expulsive Force of the Uterus, and the disproportionate Length of its Fibres, in the gravid and unimpregnated State.

The Method of Touching in the first Months of Pregnancy, but particularly at the Time of Labour; with the Information from thence arising, viz. Whether the Woman is with Child, or no, whether in Danger of Miscarriage, and also what Changes of the Os Uteri indicate Labour, and distinguish the true Pains from those which are spurious;—how to promote the one and relieve the other.

The great Advantage of being thoroughly converfant in the *Art* of *Touching*, and of truly diftinguishing the *presenting Parts* from one another; with Remarks and neceffary Cautions in doubtful Cafes.

Of the gradual Dilatation of the Os Uteri, by the Protrusion of the Membranes, or the Pressure of the Childs Head.

Of the too early Rupture of the Membranes, and Discharge of the Waters.

-----The preternatural Strength or Rigidity of the Membranes, and how the Progress of the Labour may be retarded in both the above Cases; with the Methods to remedy these Inconveniences.

The Signs of a dead Child.

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The bad Confequence of hastening Labour unseasonably, in natural Cases and the Danger of Delays, or of giving forcing Medicines where the Child prefents in a wrong Position.

The Treatment of the Patient during the Time of Labour, with the Tenderness and Delicacy necessary to be observed by the Operator on that Occasion.

# LECTURE IX.

The Division of Labours, viz. Natural, Difficult, and Preternatural.

Of the *Position* most conducive to the *speedy Delivery* of the Woman in the feveral Kinds of *Labour*, and the Methods practifed in different Countries on that Occasion.

\*\*\* A natural Labour artificially reprefented on Machinery (in a Manner not hitherto attempted) diffinctly and minutely flewing the gradual Dilatation of the Os Uteri and Protrusion of the Membranes; with their alternate Distension and Relaxation, as the Pains come on and go off.

The Rupture of the Membranes, and Evacuation of the Waters exactly imitated by a Discharge of Air.

An artificial Demonstration of the Wombs progressive Contraction as the Child advances in the Birth.

The Manner how the Childs Head prefents to the Birth in natural Cases,—the Turns it makes in passing through the Pelvis,—and likewise of guarding the Perinœum from Laceration.

and how the Progress of the Laboration by remated in both th

Qulas

#### Oulds Obfervation upon this Occasion.

\* The Force of Preffure on the Infants Head exemplified by an 'Artificial Factus, fo conftructed, as to allow of the fame Motion in the Bones of the Cranium, as in that of the natural Child; and to give the most clear Idea how the Magnitude of its Head is leffen'd by the Effect of the Labour Pains, and how the Birth is thereby render'd more easy and expeditious.

Of Tying and Cutting the Navel-string, and extracting the Placenta or After-birth; with Remarks on the Conduct of Animals in the Division of the Funis, and likewise on the Orbicularis Muscle in Fundo Uteri, as described by Ruysch.

Of the preternatural Adhesion of the *Placenta*, where it cannot be separated by the Operator, without the Danger of a *Flooding* or *Inflamation* of the Uterus.

The Method of discovering whether there is a fecond Child or no.

### LECTURE X.

#### Of Difficult Labours, where extraordinary Affistance is required.

The various Caufes of difficult or laborious Cafes; particularly, the Weakness of the Patient and Absence of her Pains, from Anxiety of the Mind, Floodings or other profuse Evacuations; — A narrow or distorted Pelvis, Rigidity or preternatural Construction of the Passages, Induration of the Os Uteri, or wrong Position of the Childs Head; — its being too large, over-ossify'd or Dropsical.

General Rules how to affift in the various Kinds of Laborious Cafes.

Daventers Sentiments on the Obliquities of the Womb confidered.

The Method of Practice when the Birth is retarded by the twifting of the Funis round the Childs Neck.

Of the Specuum Matricis and Apertorium of the Antients, and also of the different Sorts of Forceps, Fillets and other Contrivances of the Moderns, with their feveral Advantages and Defects. ( 12 )

### LECTURE XI.

\*\*\* A Difficult Labour represented by an Artificial Woman and Child; thewing the Method of applying the Forceps and other Kinds of Instruments, in the several Positions of the Childs Head.

#### Of the Face or Ear prefenting.

The Manner of knowing by the Touch, when the Infants Head is advanced low enough in the Pelvis for the effectual Application of the Forceps.

Of the Cafes where the Forceps cannot be applied with Succefs, altho' the Head prefents.

Of the particular Cafes which require Instruments,—how long the Use of them may be delayed,—and at what Time their Application becomes absolutely necessary for the Preservation of the Mother.

The Method of difcovering by the Touch, the Narrownefs of the Pelvis, or extraordinary Bulk of the Child's Head.

Of the Terebra Occulta, Long Sciffars and Scalpel Ring; with the Manner of opening the Childs Head, when too large to pass, and the Life of the Mother is in Danger; also how to extract it fafely afterwards by the Fingers, Forceps, Tire-tête or Crotchet.

### LECTURE XII.

Of Preternatural Labours, where the Child prefents itself to the Birth in a wrong Polition.

\*4\* The feveral Kinds of Preternatural Labours artificially reprefented on Machinery.

The

of the Moderna, with the

The Method of Turning the Child, and delivering by the Feet.

Mechanical Knowledge apply'd to the Operation of Turning the Child,-how ufeful.

The Use of the Noose, and the Manner of fixing it.

Practical Rules and Cautions in the various Kinds of *preternatural* Cafes, where the Child is to be turn'd.

Remarks on the Infufficiency of the Glass Uterus, in demonftrating the Manner how the Child is to be turn'd, in Twin Cafes, or otherwife.

# LECTURE XIII.

The Method of delivering when the Feet, Knees, or Breech prefent.

How to affift with the Finger or Blunt Hook, where the Child comes double with the Breech, and cannot be turn'd and brought by the Feet.

Of the Child lying a-cross the Uterus, and presenting with its Back, Belly, or Sides.

Of the *Placenta* prefenting *loofe* or *adhering* to the Os Uteri, and how to act in the above Cafes, for the Prefervation of the Mother.

# LECTURE XIV.

Of the Funis prefenting before the Childs Head, and the Danger of its Compression in the Passages.

The Method of delivering where the Arm or Shoulder prefents.

Of the transverse Position of the Arms, between the Hind-head and Pubis, where the Child is brought Footling.

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Of

Of the fafeft and most expeditious Methods of extracting the *Child's Head* when detain'd by the Narrowness of the *Pelvis*, and the Danger either of *Delays* or *much Violence*; together with fuch practical Cautions as are necessary in fuch Cafes.

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The Manner of extracting the Child's Head when separated from the Body, and left in the Userus; with the Use of Amands Net, the Terebra Occulta, Tire-tête and Forceps.

# LECTURE XV.

Of *Floodings* before Delivery, from external *Violence*, *Fevers*, the *Paffions* of the Mind, or from any other Caufe that will preternaturally encrease the *Momentum* of the Blood, and occasion a *Separation* of the *Placenta*.

Of Floodings after Delivery,—from the over basty or violent Extraction of the Placenta, or a Portion of its remaining in the Uterus;—the Distension of the Womb by a fecond Child, or the Want of its due Contraction after Delivery from a general Weakness of the Solids.

# Convulsions,-their various Caufes.

The Methods neceffary to be taken for the Prefervation of the Patient, either in *profule Floodings*, or *ftrong Convulfions*; particularly, in the four laft Months of *Pregnancy*, both with respect to *Medicine* and *Manual Operation*.

# LECTURE XVI.

Of the Delivery of Twins, or a Plurality of Children, and the Extraction of their Placentæ; with Remarks on cutting and tying the Funis of the first-born Infant.

Of the Birth of Monsters, and the Extraction of false Conceptions, Moles, or Polypose Tumours of the Uterus.

Of the Cæfarian Operation.

#### LECTURE

# [ 15 ]

# LECTURE XVII.

The Treatment of Women after Delivery, and of the Regimen necessary to be observed.

Of the Diforders to which they may be fubject during the Month, viz.

After-pains, Contusion or Inflamation of the Uterus, and Laceration of the Bladder or Perinæum; also of the Medicines and Applications necessary in the Intention of Cure.

Obstruction or Incontinuance of Urine.

Of the Inversion of the Womb, and Prolapsion of the Rectum.

Of the Lochia, when obstructed, or too large in Quantity; and of the Effects of Opiates in the above Cases.

Of the Milk-Fever, enlargement of the Breasts, or Soreness of the Nipples.

-Topical Applications for repelling the Milk,-often pernicious, and why?

Of the Rash, profuse Sweats, or other critical Evacuations supervening the Milk-Fever or Obstruction of the Lochia.

The Collostrum or first Milk;—its Qualities and Effect on the fucking Infant.

Of the Nature and Secretion of the Milk;—how render'd medicinal to the Infant, by the Effect of Medicines administer'd to the Nurse.

The Evacuations necessary at the End of the Month.

### LECTURE XVIII.

The Treatment of a new-born Child.

Of washing the Infant, and of its first Dress; with Remarks on the antient Custom of Dipping new-born Children in Northern Countries. D 2 Of

Of the Diforders in general which attend the first State of Infancy, and the most approved Methods of Cure. FUT TO ME

[ 16 ]

Of Fractures and Diflocations, and also of a Species of the imperfect Hydrocele peculiar to new-born Infants.

Mould-shot Head, Hydrocephalus, and Of the Spina Bifida, Confinement of the Tongue, and The I destrated Charler- hanzs, C necellary in the Int Obstruction of the Passages.

Hernia Congenita, 10 constation and 10 noi Tatio Of the Toothing and Watery Gripes. hof milio rad

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Tinea, Of the Red Gum and Discharge from behind the Ears.

Of the noute and chronical Difeafes in general, incident to the second State of Infancy , - their Pathelogy and Method of Cint.

> Small-Pox, and the Artificial Method of communicating that Difeafe by Innoculation. Meafles, Tuffis Convultiva,

> > 121da statella

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And Epilepfia Infantum.

Of the {Rickets, Atrophia, and Worms.

Practical Cautions respecting the indifcriminate Use of Bleeding, Blifters and Opiates, in the Difeafes of Children.

Directions for the Choice of a Wet-Nurfe,- the Indications to be taken from her Habit of Body, and the Quantity and Quality of her Milk, with Rules for the Regulation of her Diet in Diforders incident to the Sucking Infant. INIS.