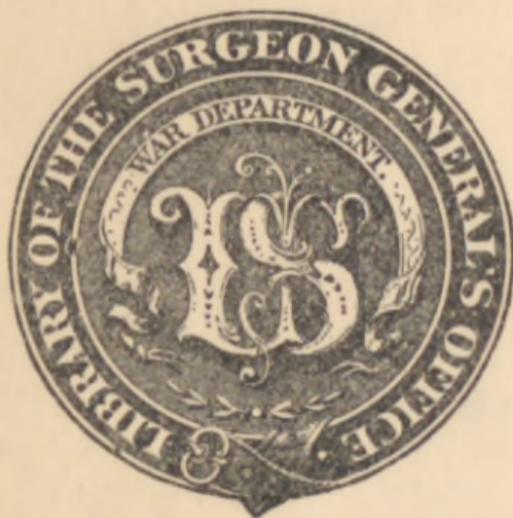


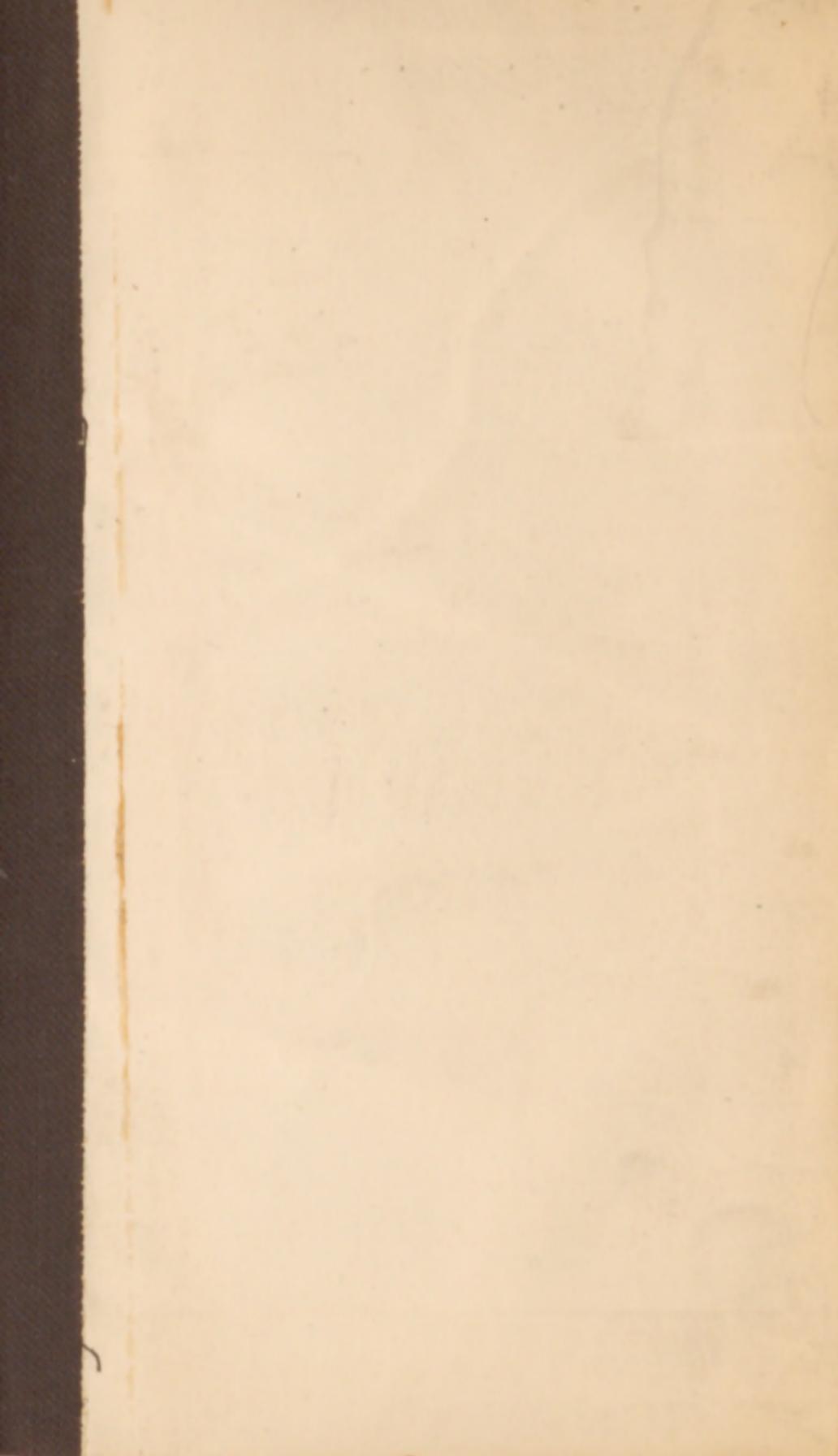
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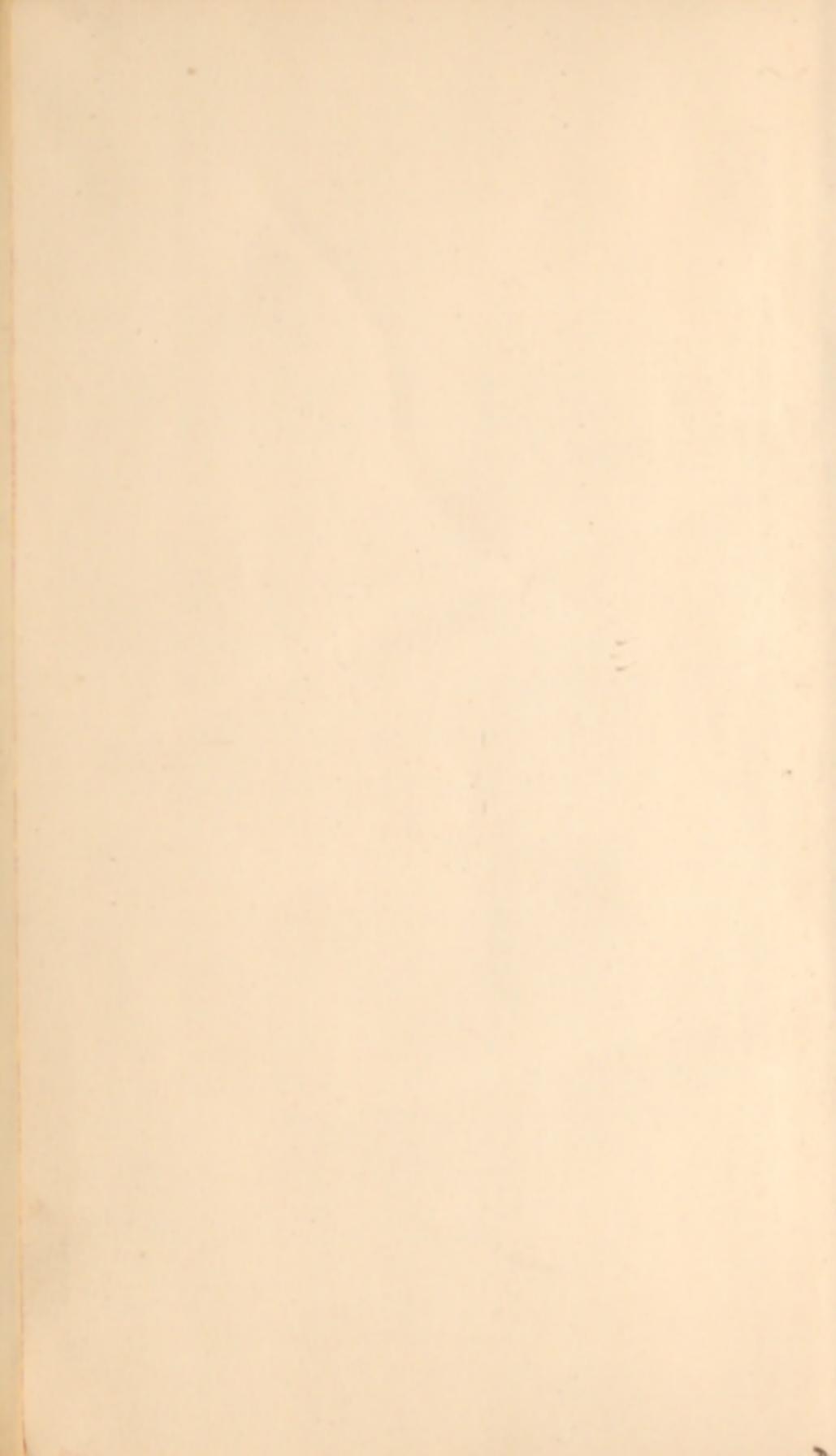
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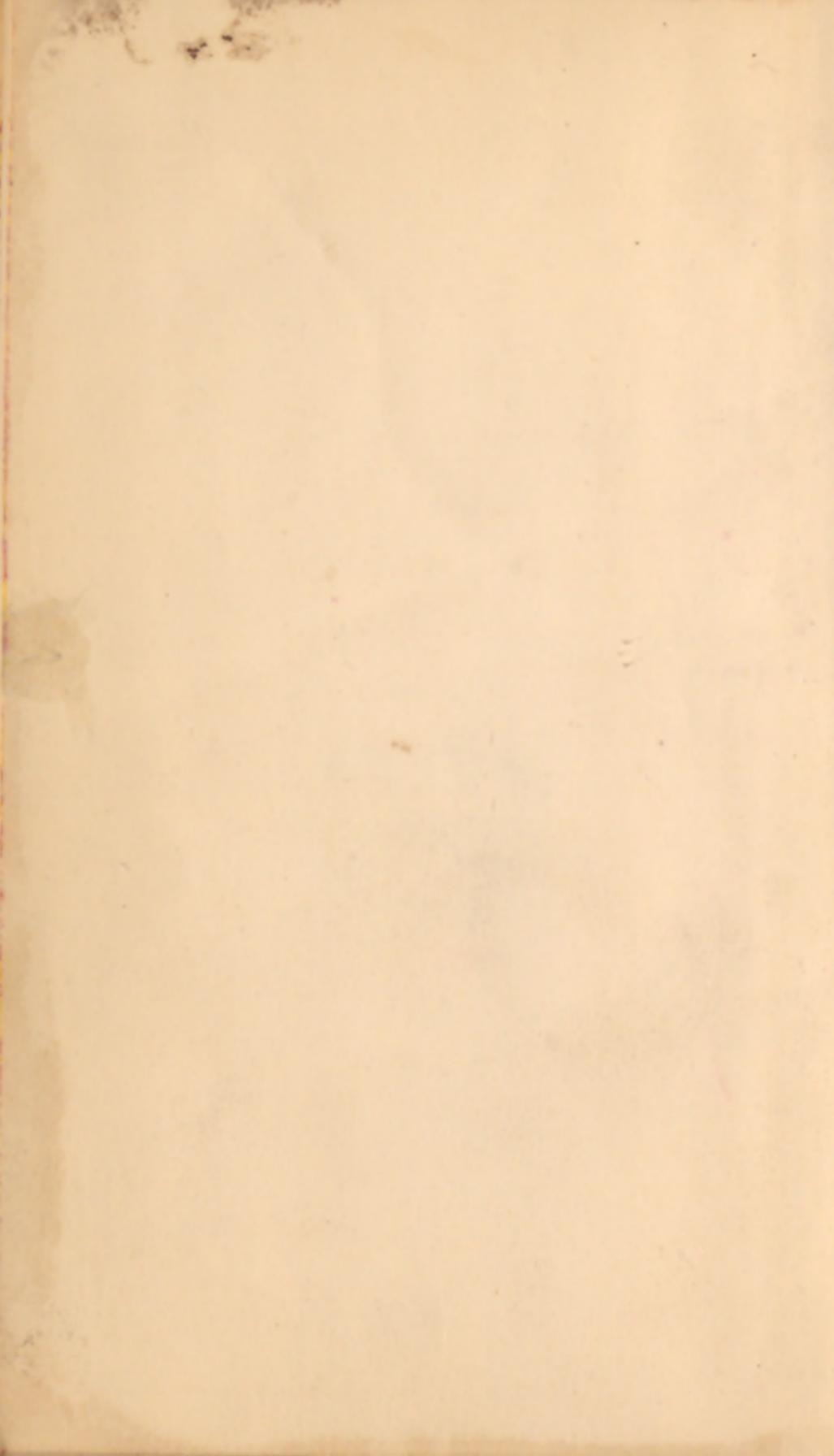


ANNEX
Section *Children*

Number *20449*







THE

FEMALE

MEDICAL REPOSITORY.

TO WHICH IS ADDED,

A TREATISE

ON THE

PRIMARY DISEASES OF INFANTS:

ADAPTED TO THE USE OF THE

Female Practitioners and Intelligent Mothers;

THE TECHNICAL TERMS ARE EXPLAINED,

AND AN ATTEMPT HATH BEEN MADE TO REDUCE THESE BRANCHES OF

"THE HEALING ART

TO CONCISENESS AND PERSPICUITY.

BY JOSEPH BREVITT, M. D.

Graduate in Midwifery, Member of the Corporation of Surgeons in London, &c.
late Medical and Chirurgical Practitioner in the British Army in Europe
and the W. Indies—author of the "History of Anatomy," &c.

"Medicine is God's second cause of Health."

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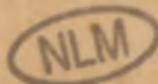
1810.

J. Robinson, printer.

DISTRICT OF MARYLAND, ssf.

BE it remembered, that on the 26 day of June in the thirty-fourth year of the Independence of the U. States of America, James A. Hunter & Joseph Robinson, of the said district, have deposited in this office the title of a book, the right whereof they claim as proprietors, in the words following, to wit: "The Female Medical Repository, to which is added, a treatise on the primary diseases of Infants: adapted to the use of the Female Practitioners and Intelligent Mothers: the technical terms are explained, and an attempt hath been made to reduce these branches of "the healing art." to conciseness and perspicuity. By Joseph Brevitt, M. D. Licentiate in Midwifery, Member of the Corporation of Surgeons in London, and late Medical and Chirurgical Practitioner in the British army in Europe and the W. Indies—author of the "History of Anatomy &c." "Medicine is God's second cause of health." In conformity to the act of the congress of the United States, intituled "An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times herein mentioned; and also to an act, intituled "An act supplementary to an act, intituled an act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned, and extending the benefits thereof to the arts of designing, engraving, and etching historical and other paintings."

PHILIP MOORE,
Clerk of the District of Maryland.



3 Apr '51

PREFACE.

THE real necessity of a publication, similar to the present, I may presume, would need no additional recommendation by way of preface, had not the general maxim evinced a singularity, if not an impropriety in offering our labors to the public without: Suffice it to say; a long and successful practice, in this branch of "the healing art," and the many lamentable proofs of the ignorance and abuse of it, alone hath induced my attempt.

If I have reduced the labors of the learned, to an approached familiarity, with the minds of those this work is principally designed to instruct, and amongst whom a very great majority of this practice is intrusted and established, if I can be assured of the inexpressible satisfaction, of having contributed in rescuing a mother or her infant from the rapacious jaws of ignorance and death, my hope will enjoy an exquisite gratification, and my labor an ample return. Or further, if it may emulate an abler pen to forward my attempt to a nearer approach of excellence, my assistance, wishes and works are cheerfully offered

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him ; far be it from my wish to depreciate so laudable a design ; the service of my fellow brethren, and the preservation of the present and rising generations, in whom we may continue to live and flourish, dictates my every wish.

As a purity of expression and sentiment has been my guarded care through this treatise, I am led to hope, the most virtuous mind will find no reason to fear an offence, though the most delicate subjects have been considered.

INTRODUCTION.

MIDWIFERY is the knowledge of pregnancy, or the gravid state of the female, together with the changes natural and diseased, of which, this state is an evident cause.

These variations, from the general order of nature, at other periods, require little or no medicinal assistance, generally; while the latter too frequently confound the endeavours of the most skilful physicians, and judicious attendants.

It is also, most essentially requisite for the practitioner in midwifery, to possess an accurate anatomical and mechanical knowledge of the parts concerned in this practice, both in the mother and child, and also, to be expert in the rules of proportion, established by the best authors and professors on these subjects, before he can obtain any true information in the science, or practice with any share of approved confidence or general approbation. The anatomical part, then necessarily forms my first section.

They who presume to offer themselves as practitioners for the assistance of child-bed woman, without the possession of this necessary acquire-

ment, are not only imprudent and unfit persons, but ought to be more feared and guarded against, than the dark assassin, or the infuriated armed savage. The innumerable lives of infants that are, not only lost that may be restored, but the *murders* wantonly committed, are deplorably too obvious to every discerning mind to be controverted, as will be exemplified in the succeeding pages.

I am very apprehensive, this want of information must too generally prevail; at least with the female practitioners I may speak with more confidence; though in justice I must with pleasure acknowledge there are some, even in this circle, of merited exceptions: public demonstrations are not sufficiently general and supported to afford the opportunities of practitioners universally acquiring this necessary knowledge, therefore the exertions of too many have been but too much established on the mechanical principles of practice only.

This publication is more particularly offered for the assistance of women likely to become mothers, in regulating aright their conduct, during their pregnancy, labor and after-management; and also to afford them a knowledge, in these eventful periods, of the propriety, or otherwise in the attendants and their measures pursued.

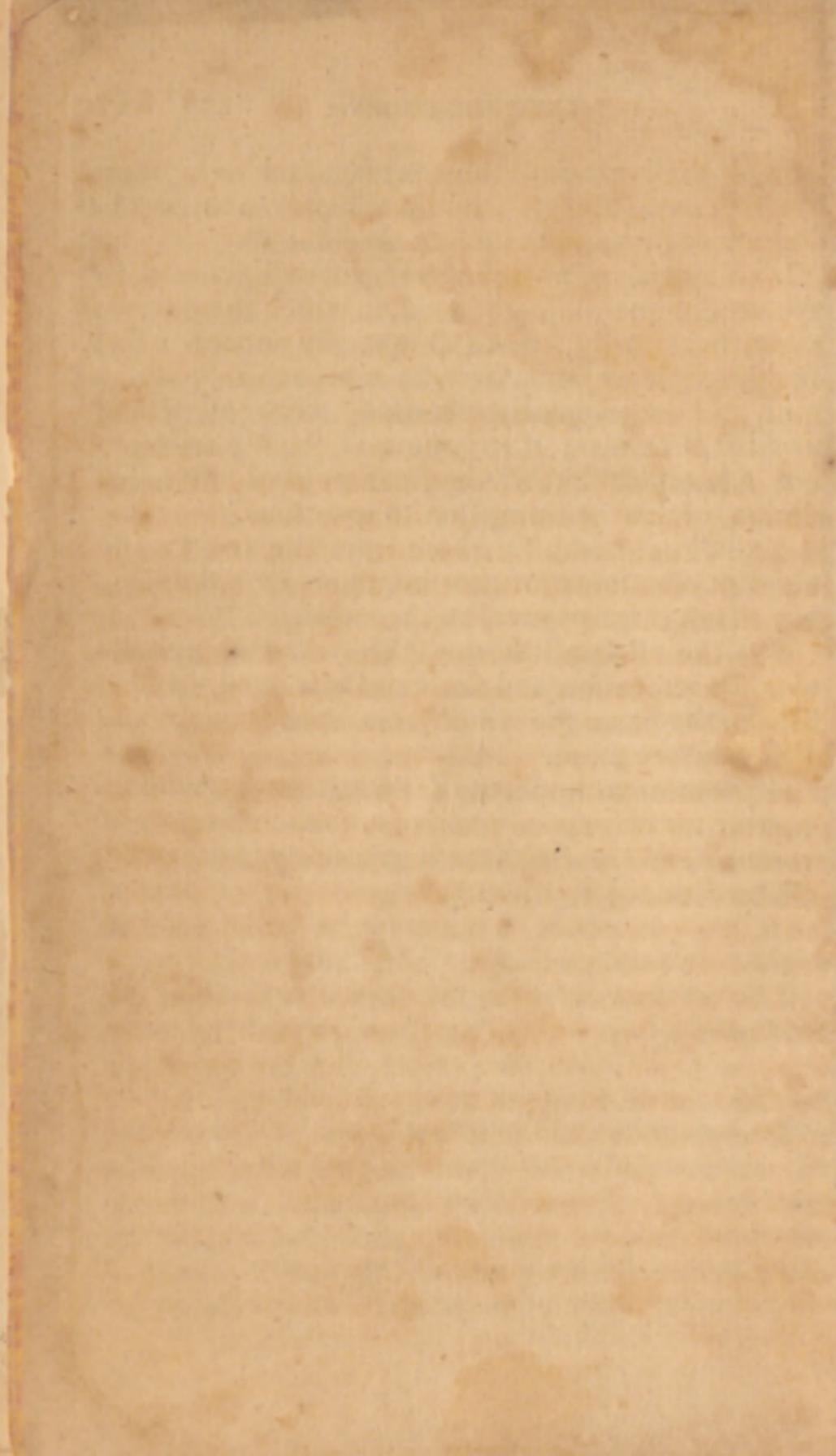
It is further offered for the assistance of female practitioners, or others who may have been prematurely, and improperly introduced, into the practice of midwifery, without the opportunity of receiving a scientific knowledge: I shall therefore, as much as the nature of the work will admit, avoid technical terms; but as some may be indispen-

sible, I shall attempt an explanation as I treat the different subjects ; and a glossary will be added for their more complete elucidation.

The mother or nurse merely, may dispense with the first, or anatomical section, in which these terms must necessarily, more frequently occur : but the practitioner must ever be reproachfully ignorant, and consequently dreadfully to be feared and avoided, to whom it may be said, "he possesseth not anatomical knowledge, as the basis or "foundation of his presumption to practice."

I shall occasionally quote from the truly valuable publications of the humane Dr. Buchan, which I highly approve, and recommend to be kept to read in all families ; and also from such authors as have wrote for, and are familiarly read, by persons of the class for whom this work is more particularly prepared.

I presume to hope, my little tract may be found useful, for occasional reference, to such as may be recently, and, perhaps too immaturely engaged in, the practice of midwifery.



SECTION I.

ANATOMY.

OF THE PELVIS.

ANATOMISTS, for distinction and demonstration, have divided the human body into the Head, Trunk, and Extremities : and the Trunk is again subdivided into the Thorax, Abdomen and Pelvis.

The last of these divisions, viz : the Pelvis, with its appendages and contents, are the only parts of the mother immediately concerned in the practice of midwifery : necessarily none others (except what relates to the fœtus or child, which will be illustrated in proper place) may be esteemed as essentially necessary to be explained in this work.

The female pelvis, with its appendages and contents, are composed of many parts ; and are divided into hard and soft :

The hard parts, or bones, form the basis or fabric of the whole, and serve to give it shape and firmness ; and will, therefore, it is presumed, be the first, most proper for demonstration.

Every student or practitioner is recommended to procure the possession of a real female pelvis, well formed, if possibly practicable ; and accurately examine it generally, and particularly as the descriptions are pursued ; for all representa-

tions, either by plates, drawings, casts, or descriptions, alone are insufficient and imperfect.

The pelvis has received its name from its supposed approaching similitude to a bason, and is composed of eight bones, viz.

The os sacrum, or sacred bone posteriorly.

The os coccyx, vel coxygis, a mere continuation from the os sacrum. And in some quadrupeds so elongated as to form the tail.

The ossa innominatum vel ilium, or hips, which are situated on each side, forming the anterior lateral and inferior portions.

The os innominata in infancy is divided into three distinct portions or bones, which anatomists have called

The os ilia, which forms the hip, or superior broad portion ;

The os ischium, the inferior part, or seat ;

The os pubis, the anterior or share bones.

As soon as the body arrives at maturity, these several bones, become completely ossified or grown together, by a strong union, and are called os innominata, which however, still retain their infantine appellations for the purpose of ease and accuracy in demonstration : and will be here separately considered, previous to giving a description of the pelvis entire.

Each of these bones or portions, has its fellow, which, when taken complete form at least four fifths of the whole pelvis.

On the external surface of these bones, is found a deep depression or cup, called the acetabulum, which receives the head of the thigh bone ; to which it is tied or united by a strong round liga-

mentous rope called *ligamenta rotunda*, or round ligament, inserted into the middle of the bottom of the cup in which the thigh bone rotates.

The acetabulum is situated in a posterior, lateral and somewhat inferior situation, and has a portion of each bone of the innominata in its formation: which will be considered separate when treating of the bones distinctly.

The os ilium, or hip bone, is of the class of flat bones, i. e. it is not exactly a flat bone, but of an irregular form; but its approaching, when viewed altogether, nearer the flat figure than any other, anatomists, have consequently arranged it in that class: this same rule must be kept in mind, as we go along in all other bones of different formations, for the purpose of order and demonstration. To wit, there are many bones of the skeleton, that are not immediately of the form of a cylinder or rounded, but as they approach nearer to that figure than any other, are therefore considered of the class of cylindrical bones: and so of the rest.

The hip bone forms the superior and by much the largest portion of the os innominata: the superior semicircular edge, is called its spine; and is covered by a strong cartilaginous substance on the outer surface, which is called its dorsum or back; it is found to be irregularly convex, for the attachment of muscles and other soft parts; and gives out four processes, called the spinal processes of the hip bone.

Two are situated superior, and anteriorly.

Two are situated inferior and anteriorly: and continued as far back as the transverse section of the acetabulum, of which it forms one third.

The internal surface of this bone is concave, or hollowed to enlarge the dimensions of the cavity of the pelvis : some way down its inner surface, is observed, a sharp ridge which arises posteriorly and is continued forward till it unites with its fellow, when it nearly surrounds the whole cavity of the pelvis, and is called the brim of the pelvis : above which is situated an aperture or opening for the passage of the medullary vessels.

The os ischium, or seat bone, is the second of the innominata, and is of an irregular form ; it is continued inferiorly where it gives out a tuberosity on which we rest when sitting, and by some, this portion has been therefrom called os sedentarium : this bone also gives off a second process, continued forward and upward, and on its superior part forms the segment or part of a circle, and unites with the os pubis.

On the superior thick portion of this bone posteriorly, is formed a sharp process called the spinous process of the ischium, from whence several muscles arise, and has attached to it the sacrosciatic ligament, which is a strong ligamentous substance extended from one process to the other, leaving an opening which is closed by soft substance.

The os pubis or share bone, is the last of the innominata ; it originates at the acetabulum, where it is largest, diminishes as it advances forward and inward, when it again increases and gives off a process inferiorly, which unites with the ramus or leg of the ischium, forming a large oval aperture called the foramen ovalæ vel thyroidea ; it is afterwards united with its fellow by a strong cartilaginous

union called symphysis pubis, which together form an arch extending from one side to the other of the pelvis anteriorly.

The os sacrum, the sacred or haunch bone, is situated immediately under the last vertebræ, or bone of the loins, to which it is attached by a strong intervening cartilage; it is generally called the first of the false vertebræ, and is of an irregular triangular figure, internally concave, externally unequally convex or rounded: it is the lightest bone of it's magnitude in the skeleton, on account of the many perforations through it, and the abundance of its cancelli: it derives it's name from the religious customs of the antients in making it an offering in sacrifices.

This bone is divided, in infancy, into five distinct portions which become ossified into one as the body advances to maturity: these marks of separation, are however, still seen to exist in the adult, or even extreme age, by four transverse lines on it's anterior or inner surface.

This bone is found to be widest superiorly and diminishes as it decends; it has a continuation of the vertebral perforation for a portion of the spinal marrow which passes through it, giving off several branches of nerves; the elongation of the spinal marrow through this bone is found like the bone itself, to diminish greatly in diameter as it descends. On the superior and lateral part of this bone on each side is found an indentation or notch which opposes a simular one, on the inferior lateral surface of the last bone or the vertebræ of the loins on each side, and when brought into contact form two openings, through which pass the

twenty fourth pair of nerves ; below these are also four other apertures on each side, through which pass some very large nerves to be distributed to the parts of generation and lower extremities. On the posterior or external surface are also an equal number of perforations, through which pass nervous branches, to be continued and distributed to the muscles and adjacent soft parts.

It is strongly united on each side to the ossa ilium or hip bones, by a broad extended surface, where are found innumerable processes perforating corresponding depressions in the ilium ; and an equal number from the ilium perforate indentations in this bone, so that their union is the most compact and immovable.

The os coccygis vel coccyx or rump bone, is by some anatomists considered, only as a continuation or elongation of the sacrum : it derives its name from its supposed approached resemblance of a cuckoo's bill, and is made up of five distinct bony portions : at the time of birth it is in part cartilaginous ; but at puberty, the ossifications or formation of bone is complete, but they still remain united by cartilage.

It is of a triangular figure, decreasing from above downward nearly to a point. It has an extensive motion forward and backward, at the junction of each bony portion, but most so at the union with the inferior surface of the os sacrum. It is internally very concave for the support of the intestines and muscles that are attached to it. It is externally very convex.

The last or fortieth pair of nerves pass through an aperture formed by a depression on each side

of the superior surface, antagonized by two in the opposite situations, brought in contact, on the lower side of the os sacrum.

The mobility, or motion of this bone diminishes as the person advances in age, and more especially when the cartilaginous divisions have not been kept flexible, which soon become ossified; this is probably one reason women who remain long unmarried have in general difficult and laborious labors: and in advanced age it becomes one complete bone with the os sacrum.

Having now considered, the bones forming the pelvis separately, I come next to speak of them generally or when united, and which forms or completes the pelvis.

The pelvis, forms a large cylindrical cavity, to envelope and defend from external injuries it's contents, viz. the intestinum rectum, or last intestine, urinal bladder, muscles, ligaments, nerves and blood-vessels; to which, in the female are added the womb and it's appendages for the purpose of child bearing.

The female pelvis, is necessarily materially larger than the male and differs essentially in it's figure: by which principally the skeleton is distinguished from the other.

It is above widely expanded by the hip bones for the support of the abdominal viscera, &c. And is contracted for someway downward when there is observed a ridge or elevated line, continued nearly round the internal surface: all above this line or brim of the pelvis is called the superior or large pelvis; all that portion below it

is denominated, the inferior, lesser, or true pelvis.

The professors and authors on midwifery have established the following mensurations, - for the rule of proportion of a standard, or common size pelvis, viz.

From the lower edge of the symphysis or angle of the pubis to the protuberance of the sacrum anteriorly, - 4 1-2 inches; from side to side, at the brim of the pelvis, - 5 1-2 inches; from this measurement the diameter of the pelvis approaches an oval form internally; it's greatest extent being from side to side, which in the male pelvis is reversed, it's greatest diameter being from the pubes to the sacrum.

From one tuberosity to the other of the ischium, 4 inches; this is the outlet of the pelvis or those parts on which we rest while sitting or the os sedentarium: the passage at these parts is reversed to its opening superiorly; which in delivery is a circumstance must be kept in mind, for essential reasons which will be exemplified when treating that subject more immediately. The pelvis measures in depth posteriorly, from the top of the os sacrum to the extremity of the os coccygis,

When extended - six inches;

On the side - four inches, and

Anteriorly, or in front - two only.

These are the measurements on proportions generally laid down and established as the dimensions of a standard pelvis: yet a pelvis may vary materially from these, and in no way distorted or disarranged. Per example; a woman above or below the middle or common stature, for which

these dimensions are applied : differing very materially in the proportions of the other parts of the body, it must necessarily be expected to differ in the pelvis also, and no malconformation exist.

The oblique situation of the pelvis is a circumstance also of the first consequence to the accoucheur to be kept in view : it has, in many publications been described as horizontally situated in the erect position of the body, and thereby rendered the descriptions inaccurate and false throughout, and consequently the young practitioner, among others, into irretrievable error, in deciding the projection of the sacrum for the presentation of the head of the child, which has been wantonly perforated and the patient murdered.

When the person stands erect or upright, the position of the pelvis is obliquely forward and downward.

When lying in the horizontal position, the pelvis is reversed, obliquely upward and forward.

When half sitting, half lying, as when bolstered up in the bed, the pelvis is horizontal.

When leaning or inclining forward from the erect posture, as when resting the arms upon the back of a chair, &c. the pelvis is erect or perpendicular.

It is of the most essential consequences to be conversant and expert in these rules in the practice of midwifery ; where the practitioner omits to apply them he is necessarily, some times led into fatal errors, and by an absurd malpractice may lose both the mother and her offspring.

The pelvis is best measured by the hand, which

is the only true mode, and after a little practice may be ascertained with great expertness and accuracy.

Having now gone through the descriptions of the hard parts or pelvis, I proceed next to explain, the dimensions and form of the foetal head; and to shew it's necessary changes or elongations in it's passage in parturition or birth.

OF THE FŒTAL HEAD.

Of the head of the Fœtus or Child. It is composed of eight bones in the formation of the skull; and thirteen in the face, and critical accuracy may also add the four small bones in the organization of the ear. But as I propose to enter into an explication of such parts only as are essential to the plan of the work, the first or those bones which compose the skull, need only to be demonstrated, for the rest the student is referred to works more particularly written on anatomical subjects.

The eight bones of the cranium or skull, are divided into six proper, or concerned in the formation of the skull alone, and two common to the skull and face, viz.

The os frontis, or forehead, which forms the fore, and part of the superior portion of the skull, and is supposed to approach, in similitude of figure, to the cockle-shell form. The ossaparietaliæ, vel bregmatis, are two bones situated one on each side, forming the sides and middle portion of the superior part of the skull: they unite with each other in a straight line, on the top of the head; this junction is called, the sigittal suture; and anteriorly, with the posterior portion of the os frontis, forming what is called the sutura coronalis or co-

ronal suture. The os occiptis, the occiput or hind-head, forms the whole of the prominent portion posteriorly ; and unites it's superior edge, with the posterior edges or terminations of the ossaparietalia ; whose junction constitutes what is called the lambdoidal suture, from it's supposed resemblance to the greek letter (Λ) lambda.

The ossa temporum or temple bones, form the lateral portions of the skull inferiorly.

The two bones, common to skull and face, are the os ethmoides and sphenoides, and are found situated on the inferior part of the skull internally, these bones being no way concerned in the practice of midwifery, need no description here.

This general and superficial view of these bones appear to me all that may be absolutely necessary to know of them in this practice, as tending to assist in a general description or knowledge of the fœtal head and it's formation : for a more minute account I would refer my reader to some esteemed anatomical work * Of sutures which unite these several bones, or are formed by their union, it is requisite to be more descriptive, as an accurate knowledge of their situations and courses is of the first consequence, as will be shown hereafter.

* See the " History of Anatomy."

THE SUTURES.

The *suturæ coronalis* or coronal suture, unites the *os frontis* with the *ossa parietalia* : it originates some way behind and above the orbit and rises obliquely upward and backward to the middle of the superior part of the skull, where it forms an obtuse angle, when it is continued obliquely downward and forward in the same direction on the other side.

The *suturæ lambdoidalis* or lambdoidal suture, originates some way behind and above the ear, and is continued obliquely upward and backward to the middle point on the back part of the head, where it forms an obtuse angle, when it is continued obliquely downward and outward in the same direction on the opposite side.

The *suturæ sagitalis*, or sagital suture, unites the *ossa parilia*, on the top of the skull, and is found to progress from the obtuse angular point formed by the lambdoidal, in a straight line to the angular point of the coronal suture, where it commonly terminates ; though frequently it is found to separate the frontal bone down to the nose.

The *suturæ temporalis*, the temporal or squamoso suture, originates some way above the ear, and is continued upward and backward in a semicircular line till it unites posteriorly with the lambdoidal suture ; when they are continued together

downward, backward and inward, on the inferior portion of the skull, and this part of the suture has been named *additamentum suturæ lambdoidalis*, or the addition to the lambdoidal suture.

There are in addition to these sutures the transverse, ethmoid, sphenoid and zygomatic, but they are so inconsiderably concerned in this practice, that I conceive them not necessary to be described in a work of this nature.

At each end or point of the sagittal suture is commonly found, in infancy, an insufficiency of ossific or bony matter, so that a considerable vacuum in the skull is detected at these parts, and are called the greater and lesser fontinels, or openings of the head, but as the infant advances to the adult state or mature age, these openings are found completely filled up, and the sutures are all firmly united except prevented by diseases as hydrocephalus, rickets, &c. but the vestiges remain to the most advanced age; however some times the ossific deposit is not sufficient at the fontinels, and a distinct ossification, or formation of bone is commenced from the centre, which is continued in a radiated manner, till the deficiencies are entirely filled by distinct triangular bones which are called *triquetra*. The form of the head approaches the oval figure, and is nicely adapted to the dimensions of the pelvis, the sutures being perfectly loose, admit the head to mould, elongate and accommodate itself to it's passage; it admits a considerable compression and diminution on it's sides, which much lessens it's circumference, and in proportion increasing it's length, till it approaches some what the

conical or sugar loaf figure, by the loose attachment of the sutures, which allow the bones to lap over, or ride upon each other, like the scales of a fish, while neither the skull nor it's contents suffer any injury, but soon recover their natural positions.

The advantages of this admirable piece of mechanism of the skull of an infant at the time of birth, admits the head to pass with ease and safety, when, had it been one complete, and consequently irresistible bone, it's passage could not, except the head was preternaturally small, possibly be effected safely.

The shoulders and pelvis of the fœtus also mould to compression; the first by their loose attachment (by muscles or flesh only) to the body; the latter by the ossa innominatum being composed of three distinct bones at this period, as already explained * (which see); by this wise formation of the child ye may be apprized of the impropriety in hurrying, (by instruments or otherwise) nature in her work; who is so kindly disposed to accom-

* Well may we declare with David: How fearfully and wonderfully we are made! let the atheistical infidel read this, and acknowledge the hand of divine wisdom through all it's works, and on his faltering tongue tremble out, forgive me my blasphemous temerity! O my father and my god.

That the study of the medical profession, so liberal in itself and extensively useful to the world, should be the cause of any of it's votaries becoming or remaining infidels, which is much to be feared is the case, is to me a specimen of the most extraordinary perversion of the human mind, I can possibly conceive: a person accurately illumined with a knowledge of the mechanism of his own frame, to deny a "first great cause," must be worse than mad he must be desperately wicked. "Let no such man be trusted."

moderate herself to the most desperate cases, and complete with safety, what is but too often destroyed by officious impatience and murdering ignorance.

OF THE DISTORTED PELVIS.

Of the distortion or malconformation of the pelvis. Any material alteration in the formation of these bones either natural or diseased, must, in an equal proportion, retard and make difficult the progress of parturition; and if in any very great degree, and the child full grown, it is then totally impracticable, without injury to the mother or offspring. In the course of this work I shall endeavour to make these discriminations with as much minuteness and accuracy as I am capable of and which is a subject that will require the practitioners invariable attention.

The pelvis may measure it's full distance from the symphysis pubis, to the projection of the sacrum, and the diameter be very considerably diminished, by their branches being depressed, or convexity lessened on the external surfaces, forming an angle instead of an arch at their junction; and if the distance, in the last instance be found diminished, the angle of the pubes becomes still more acute, which in an equal degree, is found to increase the obstruction of the passing of the fœtus.

The os coccygis, is sometimes found curved up like a hook, but this distortion never obstructs the progress of labor, (as has been asserted) for

when it exists, it is found to be always in an equal degree turned to one side.

The os. sacrum, is also sometimes forced inward by the gravitating weight of the trunk, &c, and the bones softened by diseases, i. e. the ossific or bony matter is absorbed, leaving little more than the membranous portion: the bones in this case become soft and flexible, as in the ricketts, a disease very common among European children, but happily for us, it exists but very rarely upon this continent: it is generally brought on by dibility, the consequence of bad nursing.

This distortion sometimes, causes the internal concave surface of the sacrum to become convex or prominent, consequently very materially to diminish the cavity of the pelvis.

This disease generally, in an equal degree affects the inferior extremities; and if violent the head shares of it and becomes much enlarged, the superior extremities, ribs, and the whole spine partake of the disease; in the anatomical theatre in St. Thomas's hospital, Southwark, London, the professor of anatomy, Henry Cline, exhibits the skeleton of a child, about four years old, so universally affected by this disease, that not the smallest bone in the body but what partook of it and suffered distortion.

The tuberosities of the ossa ischium, may also be too near each other and consequently in an equal degree diminish the aperture or outlet of the pelvis.

The vertebræ of the loins are sometimes so protruded forward as to diminish the cavity of the pelvis; sometimes the distortion is confined to the

brim and larger pelvis which is difficult to be discovered till the labor is someway advanced when, the conical point of the head descends sufficiently to be discovered by the touch: and the bones at the sutures are found to lap considerably more than common over each other, and leads you to suspect the distortion.

These are the principal, or most common distortions to which the pelvis is subjected; and when in a very great degree the expulsion of the fœtus is reduced to an impossible event for nature to accomplish: in this case manual operation must be the dernier resort: either upon the fœtus by lessening the head, or upon the mother by incision, as the circumstances of the case may point out, and justify, per example:

The cæsarian section, &c. which in it's proper place will be considered.

A woman naturally well formed, and borne many children with ease and safety; may afterwards have the pelvis become distorted, by accident or disease, as fracture a softening of the bones, &c. The pelvis may generally be judged of by external appearances, which however is only a probable decision, viz.

Too great a curvature of the spine, or vertebræ of the loins inward. The legs and thighs crooked and shortened, the navel appearing at a greater distance from the head than the feet; and the woman has a shuffling walk bring forward first one hip, and then the other: under these circumstances, there is very great reason to suspect, the pelvis equally shares the distortion: these are subjects I should always wish to avoid

the attendance of it if practicable—however, though it is generally it is not universally, the case: for women with all the external marks just now described, have been found with tolerably well formed pelvis; and have, though perhaps with extraordinary difficulty, borne many healthy full grown children.

The spine may be curved to the right or the left; (a circumstance frequently caused by young girls quilting,) and the pelvis no way deformed—as a maxim, when a woman is well proportioned in the lower extremities, and walks well, the pelvis is generally well formed, whatever contortions the spine may have suffered.

OF THE FEMALE ORGANS

OF GENERATION.

Like the male are formed of many parts situated externally and internally, and which are principally concerned in forming the soft parts necessary to be known in the practice of midwifery: and are all subordinate to one principal organ situated internally, called Matrix or Uterus or womb, which is a strong fibrous body of an oblong triangular figure, supposed to have an approached resemblance to a winsor pear. It has three apertures or openings, one situated inferiorly and somewhat anteriorly called the mouth of the womb or *os uteri*, and from its supposed similitude to the mouth of the tench fish, has been called *os tincæ*, a name by which it is most frequently designated: and one opening at each superior posterior angle, at the fundus or bottom of the womb, which leads to two passages, particularly described, first by Fallopius an ancient physician and anatomist, and have, consequently, been called after his name *tuba fallopiæ* or fallo-
pean tubes.

The womb is flattened on its anterior and posterior surfaces in virgins, but after impregnation,

it remains more globular. It is situated between the bladder and the last or straight intestine.

The womb is divided into its fundus, body and neck: The fundus forms its least angle, and is commonly of the breadth of two fingers in length, and its sides about one finger's breadth more; their junctions with the extremities of the fundus form the two posterior angular points; they are then continued downward and forward approaching each other, and form the anterior and inferior angle called the cervix or neck of the womb. It is externally of a whitish color, and of a solid substance made up of muscular fibres dispersed in many different directions, which render them difficult to be traced and unravelled. The late professor of anatomy, Else, in St. Thomas's Hospital, London, denied the existence of muscular fibres in the substance of the uterus, for the above reason, and was so bigotted in his error as to support it, in opposition to his own judgment on ocular demonstration. Dr. Lowder, late professor of midwifery in the same Hospital, exhibited to him a portion of the uterus marked uncommonly distinct with muscular fibres, and asked, "What is exhibited?" the professor in surprise, laconically answered, "*muscular fibres to be sure!!!*" on being assured it was a portion of the uterus, he put on his spectacles, made a more minute examination, and declared "They were *not* muscular fibres."

The uterus internally forms a very flat triangular cavity, which in the virgin state, or before menstruation, with difficulty will admit a hog's

bristle: but after impregnation always remains wider.

The inferior aperture, or mouth of the womb will admit the introduction of a small stillet.

At the edge of this orifice, are found its labiæ or lips, which are composed of a number of small glandular bodies, which separate a viscid lymphæ discharged through an equal number of excretory ducts observable on the surface near the edge of the orifice.

OF THE APPENDAGES

OF THE WOMB INTERNALLY.

Tubæ fallopianæ, or the tubes of Fallopius, are two small canals originating at each posterior angle of the uterus from whence the aperture is continued in a tortuous direction; at its origin, it with difficulty will admit a hog's bristle, but increases its diameter as it advances, like a trumpet and terminates in a jagged floating extremity called morsus diaboli where is found the ovaria.

The ovaria, or female testes, situated one on each side, about the size of a common nutmeg but are subject to much variation in this respect, in different subjects: Their texture is in part compact and spongy, made up of blood vessels and vesiculæ or bladders, in which is observed a transparent glairy fluid. Some physiologists have consider the vesiculæ, as ova or eggs, and others are induced to consider them as containing the female semen, as a celebrated professor, * has observed—

“When a woman dies with child one peculiar cavity is observed which was thought to be the calyx from which the ova drops, and is called corpus

* Hamilton.

luteum; but later physiologists think that these corporæ lutea are glands containing the female semen, which in the time of coition bursts and throws out their contents into the fallopean tube in the form of a liquid. A fluid evidently comes from the ovarium which mixed with the male semen is supposed to be conveyed through the tube into the uterus, to become rudiments of the future fœtus."

The number of these vesicles are different; in different women, and it is said each may produce a fœtus. Sabatier says they are commonly about ten or twelve, but Haller has found fifteen and upwards in each ovaria.

Ligamenta rotunda uteri, or the round ligament of the womb, originates from each side of the womb a little below and before the origin of the fallopean tubes, and pass through the perforation in the lower edge of the abdominal muscles, and are inserted in the groins where they are lost, in the adipose or fatty membrane immediately under the integuments or skins: they are made up of muscular fibres, nerves and blood vessels and serve to retain the womb in its natural situation. These several appendages receive one common covering from a continuation of the peritonæum, the membrane which envelopes the intestines and abdominal viscera, called the ligamenta lata, or the broad ligament of the womb.

The vagina, or the passage to the womb may be considered as partly internal and partly external, and unites the organs of generation which come under these distinctions or separate arrange-

ments: it is also an appendage to the uterus, therefore requires a distinct description in this place.

The passage is about four inches in length and its diameter nearly equal with the intestine, but in both respects subject to much variation: it is found made up of muscular fibres dispersed in different directions, and which frequently intersect each other through the whole extent, by which mechanism they are found capable of lengthening, shortening, contracting and dilating the canal, in the time of parturition &c. It has also innumerable glands and blood vessels, and is internally lined by a fine villous membrane, intersected with excretory ducts and contracted *inplacæ*, or small transverse folds which are found nearly obliterated after childbirth. The inner or posterior extremity of the vagina is found united with the mouth of the womb, which it receives protruded some way within its cavity near the anterior extremity are found two small glandular bodies discovered and described by Cowper, called after his name.

OF THE EXTERNAL ORGANS

OF GENERATION.

Mons Veneris, or mount of Venus, is situated at the inferior termination of the abdomen, immediately above the pubes, and is made up of adipose and cellular substances collected under it, and forms a kind of cushion which at puberty becomes covered with hair, at its inferior part is found to commence the labia pudendæ or alæ, which may be considered as a continuation of the mons veneris, and are found to bifercate or divide immediately below the pubes, forming a sinus which is continued to within about an inch of the anus or intestinal outlet, when they are again bounded by the perinœum, a fleshy portion between the vulva and anus, and these terminations of the fissure are called the superior or anterior, and inferior posterior commissures.

The labia are found to be more ligamentous than the mons veneris, diminishing as they descend and terminate in mere integuments: they are internally lined by a fine glandular membrane, separating a sebacious fluid to lubricate it's surface, and is abundantly supplied with nerves and blood vessels.

Lacunæ, is a small hole observable on each side on the inner surface of the labiæ, when separated, which are the termination of the excretory ducts from two small follicular glands of the same name, separating a viscid fluid.

Nymphæ, are two fleshy productions formed by a duplicature, or fold of the internal membrane of the labia and are sometimes called labia minoris vel interna or the lesser or internal lips: they commence by an acute angle, and are continued downward and outward, separating wider from each other as they are continued on the outside of the mouth of the vagina, where they are insensibly lost: they have also small glandular corpuscles which separate a sebacious mucus to lubricate the parts adjacent.

Clitoris, is a small prominent red body found situated in the angle of the nymphæ which serves it as a prepuce or covering, and appears like an imperforate glans: it is internally made up of a spongy substance and very elastic coats: some-way towards the pubes it is found divided into two crura or legs, and is inserted into the rami of these bones; it is abundantly furnished with nerves and blood vessels, and of exquisite sensibility; it is capable of extension, and subject to much variety in size.

Urethræ, or the excretory duct from the bladder, is found in a straight line, about one inch below the clitoris, surrounded by small labiæ or prominence of muscular fibres forming a sort of sphincter muscle.

Os Externum or aperture of the vagina, immediately below the urethræ, is surrounded by

a sphincter muscle originating from the perinæum continued upward and forward on each side of the os externum, and insensibly lost in the cruræ of the clitoris.

Hymen, is a fine membranous covering extending nearly over the os externum, and is peculiar to infancy, leaving only a small aperture for the escape of the menstrual evacuation, and is of a crescent-like form. It is ruptured on the consummation of matrimony, and totally destroyed by parturition, leaving only a few irregular eminences on the inferior portion of the orifice: and from their supposed approached resemblance to myrtle leaves have been called *carunuclæ myrtiformes*. This membrane by some is considered as the test of virginity, but it is a very fallacious dependence, as it may be destroyed by too great a flux of the menses, imprudence, and other particular accidents, as inflammation, ulceration, cancer, &c.

The perinæum, is that fleshy portion situated between the posterior commissure of the vulva and the anus, about one inch in length, and divided into two equal portions by an external cutaneous line, called the *raphæ*. A knowledge and attention to this part is in the practice of midwifery of the first importance, as will be explained in its proper place,

MENSTRUATION,

Is a periodical evacuation peculiar to the female, and returns generally every month, but in many cases subject to much variety.

It receives it's name from the latin word *mensis*, a month: in some this evacuation is found to return every three week's or less, while in others once only in five or even six weeks or more; and in a third class the intervals are uniformly irregular. It has been asserted by some to be influenced by the periodical changes of the Moon * as in lunatics, but that this idea is erroneous, is self evident from the evacuation itself, for there is not a day in the year but in which some women menstruate, consequently had the lunar revolutions regulated this effect, all women would have menstruated at the same time, and had the same vacations; but as this is found not to be the case, others have endeavored to account for it in a different manner, but it is still mere hypothesis and appears ever will remain so—some assert plethora or too great a fulness of the blood vessels is the cause by which evacuation they are emptied and relieved; but this opinion is controverted by the most relaxed habits affording frequently

* Aristotle.

the most profuse evacuations; and the quantity of blood being diminished, or it's texture reduced does not appear to lessen this discharge. A late celebrated and ingenious professor* attributes it to topical conjection, which opinion is supported by this fluid's incapability of coagulation, and consequently has been asserted by some, not to be blood, but a red fluid separated by the womb itself as the secreting organ, from the general mass of blood. This hypothesis is further supported by the glandular corpuscles found between the tunics of the womb, for the purpose of regulating and making fit this organ for conception, and afterwards for the nourishment and support of the *fœtus*.

This evacuation is found to commence in this climate about the age of fourteen, in more southern latitudes much earlier, while in a more northern clime it frequently remains till maturity.

The first appearance of menstruation is said to determine the age of puberty or ripened years, and at which period a considerable change evidently occurs in the female, the breasts enlarge, the countenance becomes more clear and animated, and the pubes covered. In infancy is observed to transude, only a whitish colored fluid, and in the young girl a sort of serum which is now evidently tinged with red blood or fluid: it is however observed the sooner the discharge commences, the sooner it finishes, which is generally about the forty-fifth, to the fiftieth year, when the womb is rendered no longer capable of

* Dr. Cullen.

concoction, but in this respect is subject to much variety.

The uterine evacuation does not flow in a stream but gently drips for three or four days, though most commonly for three only; and the quantity discharged is generally between five and ten ounces.

Some authors have asserted the menstrual fluid is discharged from the vagina, but the evident superiority of vascular distribution in the uterus, supports a contrary opinion, and Dr. Ruysch, in Holland, confirms this, where he says, "He saw an inverted uterus and the menstrual fluid issuing from the parieties of it's internal surface."

Having now attempted the anatomical descriptions of the pelvis, and parts of generation, together with the menstrual evacuation; I shall conclude this section, but it may be well to premise, the descriptions now given, I am very sensible, are insufficient alone, or even others much more elaborate and perfect (to which I consider my attempt as a mere introduction by way of clearing the path of some difficulties and familiarizing the language of science) to convey that anatomical knowledge required in this practice: public demonstrations should be attended, where preparations are exhibited, and cases afforded, by which only an accurate knowledge either general or particular can possibly be acquired; where these are not enjoyed a real pelvis should be procured, and accurately examined; as the descriptions are pursued together with the assistance of esteemed anatomical plates and drawings, of which those of Albinus, Drs. Hunter, Smellie,

Hamilton, and others bear the pre-eminence for accuracy and elegance in execution. * The most proficient pen is alone incapable to convey that clear, true and permanent knowledge which may be acquired by the plan just now described.

The second section will be descriptive of the diseases of these parts, their causes, and methods of cure.

* See the History of Anatomy.

SECTION II.

FEMALE DISEASES.

MENSTRUATION OBSTRUCTED.

Is divided into two kinds, viz. Retention and suppression.

Retention, when the usual time for their appearance has elapsed, and they do not flow.

Suppression when they have appeared periodically from time to time, and from some cause, (conception excepted) they cease to return, or are checked during the time of the flow.

It is difficult, precisely to assign any time for the commencement of this evacuation, as different women, have very different periods; some sooner, and others much later, and no inconvenience, or mark of disease may exist; as before observed, when treating on menstruation, in the close of last section: climate, habit, mode of living &c. all tend to change, very materially, the actions and states of both solids and fluids, which compose the human frame.

Causes. The retention or non-appearance, is frequently symptomatic, as well as idiopathic, i. e. the consequence or effect; as well as the cause of diseases: per example: In consumption, debilitated constitutions, &c. the blood is improverished, the quantity reduced, and the vessels flag in their

actions, consequently the disposition to menstruate is not excited.

In this case our attention is called to the primary disease, or cause; in restoring the constitution, and tone or actions of the blood vessels; when the discharge will necessarily flow.

Spare diet, a sedentary, inactive life, warm rooms, or clothing, &c. are all remote causes producing debility, of suppressed and irregular menstruation. In suppression, any of the above causes, to which may be added the various passions, fear, grief, anger, &c. cold applied to the lower extremities, and more especially when moisture be enjoined; sometimes the Hymen may be imperforate, and the separated fluid retained till the additional accumulations, at every period of menstruation, become self-evident, by the protrusion of the membrane externally, and the inconvenience of the collected fluid, together with the evident change which the constitution suffers. I had a case of this kind in a young woman of about eighteen years of age, a few years past, who came from the other side of the Alleghany Mountains on purpose to be cured; her surgeon there mistaking it for polypus, or some fungus exerescence, which blocked up the os externum, endeavoured to tear it away, and gave her much pain: I experienced no difficulty to detect the true state of the case, and assured her I could relieve her with as much ease as letting blood; accordingly a day was appointed, I made a longitudinal incision of about one inch, through the membrane which protruded like the head of a child, and I compute the discharge altogether to

be about a gallon of stagnated menstrea, of the consistence and appearance of balsam of sulphur, or tar, which continued to discharge itself for a day or two, gradually diminishing. I recommended a cerated sponge tent to be kept in the incision till the next period of menstruation, to prevent a reunion. I heard no more of her complaint: she is still, I believe, in this city, in blooming health.

Reflection. It is evident in this case, that the cavities of the vagina and uterus itself were gorged with the accumulation. The complexion sallow, appetite destroyed, the stomach loathing the appearance of food, the body emaciated, and frequently a spitting of blood or red matter from a regurgitation, in consequence of the total obstruction: It doubtless, if not relieved, would soon have ended in consumption and death.

Symptoms. Relaxation of the whole system, debility, pains in the back, loins and hips, increased and difficult breathing, laborious action of the body, sluggishness, indigestion, but at times preternatural appetite, the face becomes pale and sometimes of a yellowish hue, with a dark circle or disk round the eyes, legs and feet swelled, and sometimes dropsical, violent palpitations of the heart, faintings, a dull heavy gravitating sensation, pains in the head, sometimes blood issues from the lungs, eyes, ears, &c. apoplexy, spasms, convulsions, asthma, &c.

Cure. In an imperforate Hymen, the membrane should be punctured with a lancet or trocar, and the accumulated contents will immediately escape, and the cause be removed when effects

or symptoms only remain to contend with, as vacuity, debility, &c.

But the greatest care is required in this operation, lest the adjacent parts be wounded; and also to distinguish accurately this disease from a protrusion of the mouth of the womb, glandular enlargements, &c. when irretrievable injuries may accrue, from imprudent incisions.

In retention from other causes, we must direct our endeavours to restore the generally impaired habit, and to excite the discharge: The mind should be kept easy and cheerful, exercise encouraged, with the advantage of a free open dry air, a wholesome nutritious diet, of easy digestion, which (with the other powers of the body) is generally much impaired; at times sitting over the steams of hot water or the use of the warm bath, will be found to relax the extreme branches of the uterine vessels, increase the momentum of the blood, and dispose the vessels to throw out their contents; generous liquors may also at times be given with advantage in this case, and medicines of the tonic and astringent kinds, may be added, as bark, steel, &c.

Bandages applied round, and over the hips and loins, may also tend further to assist and dispose the blood into the extreme branches in addition to which, opium by the mouth and injection may be administered with advantage, as it tends to alleviate the pain and remove spasmodic affections, which are sometimes required also of a more stimulent kind, as castor, assafœtida &c. The intestines should be kept moderately soluble during the cure: for this purpose the purgatives of the

more stimulent, or drastic kind are found most efficacious, as jalap, black hellebore, scammony, aloes, mercury, bitter apple, &c. these are found to influence the circulation, and promote the discharge: in addition to which horehound has been much extolled by the French: Hellebore, has also frequently been used in the form of tincture, but its action is violent, and if given in a full dose, is found to purge too roughly, and profuse, and even to vomit.

Savin, has been used externally with success, and from the essential oil it contains, there is no doubt, but it acts as a very powerful stimulent.

The madder root, has been looked upon by some as a specific, in stimulating the uterine vessels, by its penetrating properties, as when mixed with food, is found to tinge the most compact bone, i. e. the enamel of the teeth, which experiment I have seen proved in feeding young pigs. Cantharides, or Spanish flies, in tincture, from its stimulating effects on the neck of the bladder has been recommended, but for its general effects on the system, I believe, but little is to be expected from it: and is objectionable from its tendency to produce strangury, or suppression of urine; I should therefore be extremely cautious in using it.

Electricity, generally and sometimes locally applied, has frequently been known to restore the discharge.

Ligatures on the thighs,* have been used and may be serviceable; when an accumulation, or

* See Medical Essays.

indisposition of the vessels to action exists they have succeeded; but should be used with much caution and art.

Cold Bathing may be used where exercise cannot be freely given, but in any local affection in the viscera of the body, or dropsy, it is found to be prejudicial.

Antimonials, and mercurials, have been successfully given when other medicines have failed; but are improper in weak and debilitated habits.

Mercurials should never be used where a salivation may be induced, but as alteratives, where it never produces a quick cure, but acts in a gradual manner in promoting a free circulation and removing obstructions.

The prevention. The female youth ought to use free exercise in the air, and indulge a cheerfulness, and volatility of disposition, as indolence of either body or mind, engenders a viscid and languid state of the circulation and secretions, and consequently produces a train of baleful diseases, as scrophulæ or evil, scurvy, glandular obstructions, nervous diseases, &c. cold, tight garments, astringents or binders, either in food or otherwise, unwholesome food, or any thing injurious to digestion should be carefully avoided. *

Menstruation, immoderate flux of—Irregularities in this periodical evacuation are commonly attendant on bad health, weak and debilitated habits; consequently the most healthy, are generally the most regular, both as to period, and quantity: to preserve this then, in due time

* See Ricketson on Health and the Nonnaturals.

and proportion, is to observe and employ every practice, which conduces to invigorate and strengthen the system, sweeten the blood and juices, and promote a free and active circulation; for this purpose, exercise, wholesome nutritious diet of easy digestion, with the advantage of a free, dry, pure air, all tend to establish and preserve that health of body and mind in which all things go well: consequently, the studious, sedentary and inactive life, together with the stimulating and weakening effects of luxurious banqueting, in high life, have diametrically an opposite tendency, in producing a weakened and relaxed fibre, a thin and acrid state of the blood and other juices, and dispose these women to menstruate more frequent and profuse than the more laborious poor: in these the exercise of labor gives a sweetness to the well earned morsel, which all the contrivances of confectionary, and extravagance strive in vain to afford; digestion is well performed, the chyle, or nutritious fluid, plentifully separated and conveyed with speed and vigor to the general mass of blood, which it continually restores and supplies, and the circulation is forwarded with freedom and vigor to the most extreme arteries, by their own contrastile powers, while the various secretions purge and throw off the numerous impurities and superfluities, as they are separated, and health, rosy health is the blest consequence.

It is considered, an immoderate flow of menstruation, when it occurs more frequently, continues longer, or is more abundant than ordinary: yet any of these variations may exist in a small excess separately or jointly, and yet constitute no

disease : as most women are subject to some irregularities, consequently where the health, action or strength of the body is not impaired, little more is required than rest, and a solubility of the intestines.

Causes. Every thing tending to produce plethora, or a fulness of the blood vessels ; more especially those branches distributed to the womb, and its appendages ; and increase the texture or red particles of the blood, and thereby stimulating an increased action in the uterine vessels, to throw their contained fluids in such profusion, as to constitute the irregularity on which I am now treating : of these, full, gross, nourishing diet, strong malt, or vinous liquors, &c. and frequent intoxication, violent exercises, as jumping, dancing, raising heavy burthens, vomitings, and straining of the frame generally ; falls, blows, &c. in which contusions may be caused : obstinate costiveness, straining violently at stools, &c.

The menstrual flux, in increased profusion, is also attendant on weakened and debilitated habits, in which the contractions of the extreme vessels, which deposit this fluid in the womb, are relaxed in their contratile powers, and thereby rendered incapable of containing their fluids against the least efforts, or actions, which may force them into their terminations.

This state of the body, is induced by abortions, frequent and difficult labours, drinking much weak, warm, enervating liquors, as tea, coffee, &c. and every thing tending to relax or weaken the action of the organs, and the system generally.

Plethoric symptoms.—Head-ache, violent palpitations of heart and arteries, vertigo, or faintings,

&c. sometimes nature relieves herself, by expelling the superabundant accumulation, from the eyes, nose, mouth, &c. sometimes the hæmorrhoids, or bleeding piles, or some other outlet, is opened for its discharge.

In relaxed habits,—The contractions of the extreme vessels, are rendered feeble, and incapacitated of restraining a profuse discharge, which tends further to weaken and relax the system, and increase the discharge; if not timely prevented. The consequent symptoms, or effects, are general debility, and feebleness of the body, a want of appetite, indigestion, palpitations of the heart, frequent faintings, a great irritability and susceptibility of the mind, subjected to the most violent emotions on the slightest occasions; these symptoms are commonly followed by the fluor albus, or whites, (which I shall treat of distinctly) swellings of the feet and legs, dropsies, consumption, and death closes the scene.

Cure. In plethoric, or too great a fulness of the habit, the antiphlogistic, or spare diet treatment will be found generally to succeed: but as soon as the pulse becomes softened and more regular, the lancet must be discontinued, otherwise the discharge becomes a consequence of relaxation and weakness, or what is called astenic which I conceive to be a much more dangerous state of the disease, and difficult of cure; as a well known maxim, "It is much more easy to pull down, than build up," exemplifies. The remote causes (if possible) should be obviated, the person should retire early to rest, in the horizontal posture, with the head placed rather lower

than the feet, that the course of the fluids may be diverted, external heat and light should be avoided, as warm chambers, soft beds, light rooms, &c. as these tend to promote the discharge; a mattrass necessarily would be preferable, in a darkened room. The body should be kept soluble by the mildest aperients, as an infusion of senna and prunes, castor oil, rhubarb, cream of tartar, manna, or such like, and such other means, as tend to reduce fever, plethora, irritability, &c.

In debility.—An opposite mode of treatment to the former, will be found necessary in this case; astringents externally, and internally applied, cloths wet with vinegar and brandy, or vinegar alone, and applied to the loins, belly and pubes.

Internally,—May be given the infusion of rose-leaves with vitriolic acid, or the tincture of steel in the spirit of salt, or tincture of saturn, with occasional opiates, and such other medicines as tend to weaken the nervous influence and irritability; if these means prove insufficient, more active and immediate applications will become requisite, and recourse must be had to the mode of cure prescribed for violent floodings, which see.

After the evacuation is stopt, it will be requisite to restore the constitution, and strengthen the relaxed solids, by tonic medicines, as bark, steel, &c. cordial aromatics, together with the assistance of gentle exercise, mild astringents, and generous nutritious diet.

At every periodical return of the menses, it will be necessary to remove every disposition to cos-

tiveness by some of the mild aperients mentioned above; a composed and tranquil mind, the exercise moderate, and at times the indulgence of the sofa may be permitted, during the period of menstruation; every existing cause should be carefully avoided, for irregularity to a woman naturally regular, is often productive of the most violent symptoms, and consequent diseases.

That period of life at which we generally find a cessation, or discontinuance of menstruation, viz. from forty to fifty years of age or upwards, is also a circumstance which requires the utmost care and good management; otherwise the foundation of innumerable chronic or hectic diseases will be laid, and the patient become a miserable sufferer for life, which, however in this case is generally short; and on the other hand, such women that pass this period without contracting any of the above diseases, it is observed, become more healthy than at any former period of life, which may be continued to a very advanced age: it therefore is surely requisite for every woman to observe that conduct and regularity which tends to establish this very desirable event.

It will be well, then, at this period, if the woman is of a good habit of body, to reduce somewhat of the quantity and quality of her mode of living, more especially of the nutritious kind; to take a few aloetic purgatives and preparations of steel, and yield to a few repeated bleedings from the arms, in small quantities. In more weak and relaxed habits these precautions are, perhaps, less necessary.

It very frequently happens, women, at this period, have tumefactions, or swellings, more particularly on the lower extremities, which ulcerate and are disposed to suppurate for some time; and in women of a full habit, they ought to be considered salutary, and accordingly promoted, by soft warm suppurating poultices, fomentations of mucilaginous herbs, as mallows, mullen, and such like, mild digestive ointment, &c. If they are hastily and imprudently checked, they are generally followed by an acute or chronic disease: if of the former, the person is commonly soon carried off: If of the latter, the miserable sufferer may linger out a few years, a life of pain and sorrow, and at last die, a worn out exhausted constitution, when, perhaps much more than the meridian of life has not elapsed.

It would be prudent to solicit or assist the disposition to evacuate or throw off the superfluous matter from the blood, by the applications of mild digestives and occasionally soft poultices, till the usual disposition to evacuate the superabundant accumulation gradually disappears, when an issue or seton, and aperient medicines ought to be employed, before they are permitted to be dried up.

COI₄

FLUOR ALBUS OR WHITES.

This disease may be considered by some, as a more advanced state of the last, or an effect remaining of which repeated immoderate menstruation is commonly a cause; however, as it some-

times exists entirely independent of the former, or rather when no appearance of its excess hath happened, I conceive it merits a distinct description:—

It is commonly a whitish coloured discharge, though sometimes yellowish, pale green, or even dark coloured, separated from the posterior extremity of the vagina, and the mouth of the womb.

It is often observed, like menstruation, to be periodical; and in proportion, as this discharge is increased, the former is diminished.

Women abounding with serum, and of a lax-fibre, are generally most subjected to this disease, more especially on the first approach of menstruation, and at the flower of age. But has been known in young children, and advanced age, consequently, no period of life can be considered entirely exempt from it.

It is found to be extremely injurious to weak habits, and therefore requires our strict attention.

Causes. Frequent, and immoderate menstruations, abortions, violent extractions of the after birth, a sedentary inactive life, a poor spare diet, close confinement to study or otherwise, extreme indolence, warm cloaths, and heated apartments, whatever has a tendency to weaken and relax the system, exposure to cold, and moist air, and sometimes the cause might be local, as whatever might be productive of irritation on the mucous glands of the vagina, from whence this discharge principally originates; drinking too much warm, weakening, enervating liquors.

Symptoms,—In this disease, are also very similar to the last, a general debilitated relaxed habit is induced, indigestion, a sallow complexion, and a weakness of the general system.

The discharge, on its first appearance, is generally mild, but after a long duration, it becomes acrid, and erodes, ulcerates and inflames the adjacent parts; pain, and weakness in the back and loins, and much fatigued on a slight exertions.

Cure. A gentle vomit, is frequently given in the early stages of this disease with advantage; and occasionally an opiate to allay the irritation, which frequently prevents rest, and consequently tends further to induce debility, and increase the disease: The warm aromatic gums and balsams, which have a stimulating, and bracing effect on the urinary passages: of this class are the gums olibanum, galbanum, amber; balsams of capivi, and turpentine, cantharides, &c. to these must be joined, moderate exercise, in a dry open atmosphere; a nutritious and easy digested regimen, with medicines of the tonic, astringent properties, as bark, steel, port wine, pyrmont water, to which may be enjoined occasional astringent washes, or injections of Japon's earth, allum, infusion of red rose leaves, or strong green tea, &c. with the use of the cold bath, and every method which braces the fibres, stimulates the actions of the blood and its vessels, and tends to restore the general health, tone and vigor of the system.

However, sometimes this disease is the effect of a full, gross, plethoric habit, when the mode of treatment must be the reverse of the foregoing: as repeated bleeding, opening medicines, a diminu-

tion of the mode of living, more especially of the things affording too much nourishment, as eggs, milk, animal food; also of indulgence too long in bed, &c. to these restrictions must be enjoined exercise, and every thing which reduces the habit to that temperament in which health only can be said truly to be established.

ON THE DISEASES OF THE GENITAL SYSTEM.

Before I commence a description of these diseases, it may be well to premise, that the existence of the obstacle of false delicacy too generally prevents a timely discovery, and necessarily, frequently the wished-for relief: Natural modesty, more especially in the fair sex, so highly commendable, and much to be admired and approved, is, when carried to too great a length, or exceeds a certain limitation, justly accounted false delicacy, and ought to be overruled, i. e. when health and life may be the risk of such extreme prudence, it then, certainly becomes blamable. In all cases of this nature, if in a young woman, I would recommend a more aged and experienced matron should be consulted, and be permitted to make a strict examination, in an early stage of the complaint, and if there appears any thing extraordinary for which she is not able competently to account, an experienced physician ought immediately to be consulted, when by a timely discovery, and a thorough knowledge of the case, with proper applications the disease may be re-

moved; which is certainly much more likely to be ascertained in the beginning of the disease, than when further advanced, or complicated with many others, of which this, the primary disease may be the cause and means to establish: per example—an imperforate hymen obstructs the evacuation of menstruation, till the increased accumulation causes distention, inflammation, irritation, consumption and death: when had it been early ascertained and punctured, the cause would have been removed, the accumulation discharged, and the disease of itself cease, without further applications: as in the case of the young woman before recited.

OF THE FUROR UTERINUS,

Or an itching of the genitals. This disease is said by some, to be a species of, or a more advanced state of the fluor albus, in which an increasing acrimony of the discharge, is the cause of irritation, excoriation, heat, itching, and pain; and the brain also partaking of the affection, from the sympathy which exists between the brain and uterus, is an effect only, while others as pointedly deny the doctrine, and avow the primary cause to exist in the brain, and nervous system: the celebrated Dr. Cullen was of this last opinion, and called the disease nymphomania: however as the cause seems to be undetermined, I would refer the inquisitive reader to such authors as have wrote more particularly, and elaborately, upon these subjects, as Cullen, Astruc, Hamilton, White and others, and proceed to the symptoms.

Symptoms. An acrimony of the mucous secretions of the genital system, an itching, irritation, heat, and inflammation, an increased hard pulse, melancholly, taciturnity, redness of the eyes and face, irregular hysteric affections, as crying, laughing, &c. alternately; libidinous speeches and gestures, and an uncommon latitude in the whole deportment, and if not timely relieved, the symptoms relax and increase till the patient loses her senses, and she degenerates into madness, when there remains but little hope of a cure.

Method of treatment. Bleeding repeatedly after moderate intervals, as the strength of the patient will admit, or till the pulse is somewhat softened and reduced. The antiphlogistic or spare diet plan of regimen generally; injections or lotions of sugar of lead, or rose or elder flower water, the white camphorated ointment of the old Edinburg pharmacopea, cooling brisk purges with nitre, cooling diuretic [diluting drinks, as ptisan, barley, or tamarind water, broths, gruels, or mallows tea, frequent emollient glysters, the tepid bath, occasional opiates to allay the irritation, both externally and internally, and these are sometimes advantageously combined with other narcotics, as henbane, hemlock, tobacco, &c. which should be occasionally injected into the vagina.—Camphor internally combined with small doses of nitre, have been found beneficial: sometimes the irritation has been discovered to be seated in the urethra, or water passage, when bougies have procured relief.

Mons Veneris, is subject to inflammation, heat, burning, lancinating pain, of excessive tenderness to the touch, which point out cancer deep seated.

Labiæ pudendæ, are also subject to inflammation, ulceration, cancer, dropsical enlargements, excoriations, and of being grown together: this last affection frequently assumes a venereal appearance, and consequently requires our most careful attention to discriminate with precision; our determinations should be influenced by the patient's situation and character, and our decision pronounced with the utmost diffidence and caution, otherwise an innocent character may suffer undeservingly, and the feelings of a sympathetic mind regret the imprudence of a hasty, and perhaps erroneous judgment. It would be well in this case to permit the nurse, or other attendants, to use for a while their own endeavours; if the symptoms disappear all will be well; if not, it may be suspected to be of a venereal taint, and treated as such. See venereal disease.

The cicatrized membrane to be carefully divided with a knife or lancet, and frequent use made of some healing detergent lotion, or ointment.

The nymphæ, or internal labiæ, are subject to the diseases of the external, just now described, and come under the same mode of treatment.

The Clitoris. This part is subject to inflammation, excoriation, ossification, and a preternatural enlargement, and when in a very great degree, it constitutes what is generally esteemed the hermaphrodite, that monstrous production, said to partake of both sexes, but from my own observa-

tions, and information from others, have always found it to consist of the disease just now described: However, much may be said upon this diseased enlargement, and anecdotes quoted, but as they would tend only to feed the minds of salacious appetites, and in no way illustrate the disease or its cure, delicacy, which I am determined to pursue as far as clearness and elucidation will permit me, forbids recital of them. I shall therefore, proceed to the method of cure.

Cure. Which consists of its removal either by the knife or ligature, and the parts afterwards healed with digestives, vulnerary balsams, &c.

The Urethra, or excretory duct of the bladder. This canal is subject to spasm, inflammation, excoriation, sometimes also calculous or stony concretions are found to obstruct or block up the passage, and cause many painful and dangerous diseases: it is subject to violent relaxation or loss of tone, and also a diminution of its muscular substance or coats of which it is composed, when the patient is rendered incapable of retaining the urine, which involuntarily escapes.

Cure. In this last case, rest only is frequently found to be sufficient; while others require bark, steel, and other tonics, or bracing medicines, with the use of the cold bath, and astringent lotions: a blister applied to the region of the os sacrum, is found frequently successful in producing strangury, or a suppression of urine, which is the effect desired.

In fungous excrescences, the bougie is the best remedy. In contusions, emollient applications

and fomentations. In excoriations, detergent, and healing balsams! In inflammation, blood letting generally and locally if the case requires it—opening and sudorific, or sweating medicines, a low cooling regimen, &c.

In gangrene, or mortification, bark, steel, port-wine, &c. in as large, and repeated doses as the stomach will bear. In stones lodged in the passage, the warm-bath, with such other means, as tend to dilate the passage should be first used, which if ineffectual, an incision made immediately upon the stone, when it is to be extracted, with a small pair of forceps, or any other convenient instrument, and afterwards the parts to be treated as in the existence of a common wound, and palliate the most urgent symptoms.

In spasmodic affections. The medicines of that class called antispasmodics, as camphor, asa-fœt' da opium, castar, vilerian, musk, lavender, &c. with the use of the warm bath.

The Vagina,—Is subject to most of the diseases just now described in the urethræ, and come under the same mode of cure. In addition to which, the imperforate hymen is sometimes found to shut the passage entirely, but the inconvenience is not discovered till puberty, or the time of menstruation commencing; when the accumulation increasing at every menstruation by its retention, the protruding membrane, with its attendant symptoms, render this externally obvious (see menstruation obstructed); great care is required not to mistake this disease, for the protrusion of the membranes as in labor, which, to the superficial touch, is extremely simular. The diame-

ter or width of this passage, is generally equal to the intestinum rectum, or last gut, but is sometimes subjected to a diseased diminution or narrowness; * this may be natural, or the effect of accident or disease, as erosions, ulcerations, or laceration from severe and difficult labors; and sometimes it is spasmodic, and is to be treated as such.

The cure must be attempted by emollient poultices and fomentations: the introduction of a compressed spongetent smeared over with soft pomatum, or some unctuous substance: the sponge imbibes, or drinks up the secreted fluid, and consequently becomes swelled, and expanded, and the passage gradually enlarged: the tent should be removed every morning, cleaned, dried, and applied as before.

If this and every other application proves ineffectual, recourse must be had to incision, as the last expedient, which is an operation requiring the greatest caution, judgment and expertness. If the patient has not had a child the process of parturition will be found generally sufficient to effect a cure; it is therefore advisable to wait this, as the expulsion of the fœtus, will sufficiently dilate the contractions of the muscular fibres, of which this passage is evidently composed.

Sometimes there is such a mal-conformation of the genital system, as the vagina forming a small opening or canal only for the evacuation of the menstrual fluid: and in other cases, has been known entirely wanting, and sometimes preternaturally situated. The late professor, Lowder, in St. Thomas's Hospital, London, relates a case

* See Hamilton's physician—case 1—page 80.

in his practice, of the vagina terminating in the intestine, by which the child was born; and there was in the possession of the late surgeon John Hunter, Leicester square, London, in his extensive and very valuable museum, a preparation of two distinct vaginas in the same subject; which he purchased from the late Dr. M'Kenzie, preceding professor of midwifery to Dr. Lowder.

This canal is also subject to violent relaxation, or loss of tone, in consequence of which the womb gravitates into it, and is found, as in the early months of pregnancy, much shortened, attended with a prolapsus uteri, or falling down of the mouth of the womb, as will be more minutely illustrated in the immediate succeeding section.

This canal is further subject to polypus, or fungous tumors, situated differently; sometimes so high up as to include the mouth of the womb itself, in which case our endeavors towards a cure are too generally foiled. When they are not situated inconveniently high up, and are supported by peduncle, or neck, it is considered practicable to attempt the removal, which may be done either by the knife, or ligature: this last mode I should always prefer, the part being of great vascularity, i. e. abundantly supplied with blood, and vessels, perhaps a fatal hæmorrhage or effusion of blood (which would be difficult, from the situation of the disease to suppress) and would inevitably succeed, the extirpation with the knife, which is an inconvenience the latter operation has not attached to it.

The single or simple, and double canulæ, with silver wire, have been invented for this operation,

but generally the fingers of the operator will be found sufficient.

The late celebrated and ingenious professor Dr. Wm. Hunter, has said, "a polypus in the vagina, ought never to be removed, unless you distinctly discover the mouth of the womb; for otherwise, you might include it in the ligature, which would be productive of the most fatal consequences." It is presumed the doctor was once, himself guilty of this fatal error, and witnessed its distressing morbid consequences, for which reason, he lays this strict injunction on his pupils and followers.

The *carunculæ myrtiformes*, or the remains of the hymen, sometimes require extirpation: fungous excrescences are sometimes found, on the aperture of the vagina, and also on the perinæum, or that fleshy portion between the vulva and anus, and put on a venereal appearance, but sometimes are not so; if they are not venereal, they are generally soon removed by an application of savin and blue vitriol stone, of each equal parts, finely powdered separately, and afterwards well mixed; or caustic. If these applications are ineffectual they are to be suspected of a venereal taint and treated as such.—(See venereal disease.)

Of the diseases of the female genital organs, internally. Os Uteri, vel Tincæ, or mouth of the womb, is sometimes entirely closed and obliterated; which may exist from its first formation, or may happen in consequence of laceration, inflammation, ulceration, &c. when the raw surfaces being brought in contact may unite and form a cicatrix, or scar; this defect is seldom discovered

until the period of menstruation or puberty, when the same effects (as to the constitution) are observed as in the imperforate hymen, (which see) but with this difference, it rarely admits of a cure, except the propelling force of the menstrual accumulation disunite or lacerate the adhesion, or point out the mode to obtain it, otherwise a sterility or barrenness must unavoidably be the future consequence. Sometimes cancerous affections exist here, which are first scirrhus, when the womb itself becomes equally affected, which is discovered by an excessive tenderness upon examination, and is also accompanied with a very foetid discharge. This disease seldom admits of a cure, but is palliated by narcotics. as opium or hemlock internally, and an injection of the solution of lead, with a spare cool abstemious regimen, occasional bloodletting, and more especially if it is accompanied with a suppression of menstruation: the body should be kept soluble, with gentle aperients, as manna, cream of tartar, soluble tartar, castor-oil, rhubarb, or some such like mild medicine.

Some have recommended a solution of the sublimated mercury, in a decoction of sarsaparilla root; also the terraponderosa; Dr. Wallis Johnson, recommends bleeding with leeches upon the perinæum, and the body kept soluble with mild cathartics and nitre combined.

The uterus, or womb, is also subject to most of the last mentioned diseases; and comes under the same method of treatment.

The vagina is also subject to polypus or fungous excrescences in different situations.

A case of uterine polypus has been in the London hospital, Mile End, so large as to gravitate to the knees.

It is said a polypus originating from the fundus or bottom of the womb, is much more plentifully supplied with blood, than when it is from the os uteri or vagina, as these parts are of less vascularity.

In scirrhusity, of the mouth of the womb, or its appendages, the martial flowers have been known particularly serviceable.

Tympanites Uteri, or wind pent up in the cavity of the womb, which is caused by a relaxed state of its fibres, and incapability to contract: this disease is sometimes found after child birth, when the cavity of the womb remains imperfectly closed, and on exertion in any exciting cause to action the wind escapes with a loud noise: and to this disease, is often attached a morbid state of the vagina.

The cure, consists in the use of bark, steel, cold bathing, a light nutritious diet, gentle exercise, a free open dry air; astringents and tonics applied to the parts have also been found serviceable.

The womb is also subject to a diseased thickness of its tunics or coats, which is generally formed from indurations subsequent to violent inflammations, ulceration, and *cicatrices*, scirrhous, &c, and is to be treated by alteratives, occasionally brisk purgatives, local electricity, mercurial frictions, &c.

It is also subject to a diseased reduction or diminution of substance, which is generally from an opposite cause, as relaxation suppuration, drop-

sy, and diseases after delivery, where both these last diseases, in their proper places will be more particularly treated, (which see).

The Ovaria, or female testes, are also subject to inflammations, suppuration and the formation of hydatids i. e. small vesicles or bladders, containing a glairy transparent fluid; which are sometimes increased to a confirmed dropsy* and comes under the same mode of treatment. †

The abundance of accumulated fluid in some cases is incredible—Dr Lowder exhibits several preparations of enlarged Ovaria, by dropsical accumulations; some the common size of a hog's bladder when distended, others equal to that of the bladder of an ox, and one which contained sixteen gallons; and further asserts, that he had seen one which contained a collection of thirty-two gallons, so that this diseased increase, I think, may with propriety be admitted to be almost unlimited.

This disease is distinguished from an ascites or common dropsy in the belly, by the swelling being first detected circumscribed and situated to one side: the lower extremity on the diseased side only, is affected with a slight palsy, and dropsical swellings, the enlargement is also more perfectly felt in the vagina: but as the disease increases it is found to occupy the whole abdominal cavity.

Cure. The digitales ‡ or fox glove, has been

* See a case in Gooch's observations.

† See Monro on dropsy.

‡ See Withering on the Digitalis.

lately much extolled in the cure of the dropsy, and has, I believe, in advanced stages of this disease frequently effected a cure; by causing an entire evacuation, and has been much more frequently given without any such wished-for success. However, in the treatise referred to, you have an impartial account of its failures and successes, not only as they occurred in the doctor's own practice, but in letters received from practitioners, where its effects have been minutely observed and impartially described.

Fresh squills, or sea onions, both in substance and tincture, together with the eleterium, or wild cucumber, have been esteemed excellent evacuents in dropsical diseases.

Gum Guaiacum, is said to have been very efficacious in this disease:—In the military hospital in South Carolina, in the late revolutionary war on this continent, in the observations of Surgeon Burk, which I cannot give better than in his own words:

“The military hospital in South Carolina, during the absence of the principal surgeon, was committed to his care, who observed “that the dropsy was very prevalent among the soldiers: their disorders were produced by the warmth of the atmosphere, and the poorness of the men's diet; the powers of the soldiers were weakened, and as the blood was not sufficiently corroborated the aqueous part more easily separated, and oozed through the relaxed sides of the vessels, into the cellular texture and membranæ adiposæ; and at length made its way into the cavity of the abdomen. Mr. Burk found that the usual methods

with drastic remedies were very ineffective, even when tonics were interposed, and they frequently progressed from anasarca to ascites: for a rheumatic complaint some time before Mr. Burk had himself taken the tincture of guaiacum, and he observed that it operated as a brisk purge and promoted urine and perspiration, in a very considerable degree while agreeable to its character in the materia medica it increased his strength spirits and appetite, hence he concluded, the medicine that possessed such eminent virtues would be admirably serviceable to patients who labored under a disease of weakness and accumulation. He made the attempt, and his success even surprized his expectations: The medicine was used throughout the hospital, and with a proper regimen found it to be a more certain cure for dropsy, than bark for intermittent fevers."

"The discharge of the water was sometimes so rapid that it was judged necessary to apply a flannel swathe round the body, in order to compress the vessels lest there should be a deficiency of blood at the ventricles of the heart, and its motions should not be excited."

"One of the dropsical patients, who was a man of quick feelings and a lively temper, was so elevated with a relief at once so speedy and unexpected, that he went with a party of his friends and drank till he was in a state of intoxication, the liquor threw him into a state of insanity, and to shew his courage tore off his swathe; the utility of the bandage was immediately proved, the patient fell down suddenly and instantly expired."

The ovaria, is sometimes found to contain tufts

of hair, which has been differently accounted for; by some to be abortive conceptions, * consequently we are led to conclude they are not found in young unmarried women, but in such as have had commerce with the other sex.

Tubæ fallopianæ or fallopean tubes are subject to most of the diseases described in the ovaria, and are often complicated with them, consequently come under the same method of treatment.

OF HYSTERIC AFFECTIONS.

They are principally brought on by an increased irritability of the womb, and consequently are peculiar to the female; as this disease has assumed such various and complex appearances, it has received a variety of appellations descriptive of each, but it is agreed decidedly to be of the nervous class, and consequently comes under that mode of cure.

Causes. The principal of which are, irregular and suppressed menstruation, excessive evacuations, either by blood, stool or otherwise; violent emotions of the mind, flatulent and acescent food, every thing tending to weaken the constitution, and increase the nervous irritability, and in some cases it appears hereditary.

Symptoms. Care should be taken minutely to discriminate these from those of an epileptic kind, which are more violent and alarming.

An impression on the womb, with a sense of motion like a globe or ball which appears to rise

* See Astruc's diseases of women—page 284.

towards the chest, when the various organs, and more especially those, which possess a more active sympathy with the womb, become affected; hence, the contractions and affections of the diaphragm, and muscles of the abdomen, chest and neck; which bring on a difficulty of respiration, and sense of suffocation: the stomach produces vomiting of sharp acrid matter, or green bile: a languid unequal pulse, palpitations of the heart, which is also observed in the jugular veins on the sides of the neck, and is afterwards communicated to the brain, productive of pain, succeeded by convulsions, a coldness of the extremities, with flatulency and distention of the belly; the urine pale or limpid, and separated in large quantities, a violent irritability of the mind, followed by involuntary laughing and crying, a general tremor, with convulsive twitchings: after the fit the patient in some instances is restored to perfect health, and that almost instantaneously, though apparently reduced to approaching expiration.

Cure. In plethoric habits or too great a fulness of blood, (and in which the head is much affected) the use of the lancet with mild brisk purgatives are indicated as the constitution will bear; the warm bath to the lower extremities, with frictions and occasional antispasmodics and anodynes, as musk, opium, camphor, assafoetida, valerian, &c. both by the mouth and glysterwise: the bowels being first opened with a common house glyster, as common salt, gruel and broth: pungent fumes may be applied to the nose, as warm vinegar, burnt feathers and such like.

In the intervals of the fits, their return may be prevented, by removing the most irritating causes, strengthening and restoring the nervous system, which may be generally effected, by opening the bowels and the various secretions, that may be obstructed ; and renewing the habit by bark, wine, steel, exercise, especially on horseback, a milk regimen, and such other restoratives as are of easy digestion and nourishing properties.

OF STERILITY OR BARRENNESS.

It may proceed from causes natural or diseased : of the former, many are incurable ; for where a deficiency or any omission in the formation of nature exists, art generally fails to supply it.

But in the latter, I by no means entertain so unfavorable an opinion. I mean not under the present head to attempt to account for all the causes generally received of this disease, for that would carry me, ad infinitum, beyond my object in view, which is conciseness and perspicuity ; when I should perhaps at last leave my reader mere vague hypotheses, and embarrassing contradictions. The physiological enquirer may be requited, and the impertinent and disgusting appetite of sallacious curiosity gratified in the works of Hippocrates, Harvey, Cheselden, Spalanzini, Astruc, Aristotle, Manning, Bonnet, Liebenhock, Haller, &c. &c. I afford no such food ; but mean to treat of it, as a disease, or the effect of disease, with such mode of cure as my knowledge of the subject may afford.

First then of the natural causes and defects; the impotency may exist in the male, and is sometimes curable, and sometimes not so: but my descriptions being solely confined, in this treatise to the diseases of women, and children, merely as children, without respect to sex in them; this therefore comes not under my present consideration.

The mouth of the womb is sometimes imperforate and admits not of a cure, or may be situated preternaturally to one side: Scirrhus, cancerous or any diseased inorganic state of the womb or its appendages, diseases of the mind, as the various passions, immoderate, suppressed, irregular or painful and insufficient menstruation, an excessive fluor albus, the various diseases of the ovaria (which see) the difference of temperature of body, in the parties concerned.

Affluent and luxurious living, indolence and inaction, which are the consequences of the former and every thing tending to induce a relaxed habit and vitiated humours.

Prevention and cure. When it may be merely a symptomatic affection, or effect of any primary disease, recourse must be had to the most rational mode of cure of that disease, and if successful fruitfulness will be the necessary consequence. Per example. If violent relaxation and vitiated humours in the blood and juices prevent conception, or destroy the embryo when formed, restore the fluids by proper resolvents and restoratives, brace and invigorate the body with bark, steel, exercise, cold bathing a nutritious and generous diet, more particularly of milk and vegeta-

bles, which has been said to restore fruitfulness both in male and female after living several years without offspring.*

The red sage has also been extolled by the ancients so much, that the Egyptians constrained their women to use it on every occasion, to promote conception and fruitfulness.

On the contrary, sometimes the habit is too plethoric, the womb and its juices too much heated, and a barrenness be the consequence; in this case, the cure consists in a treatment dimetrically opposite to the former; occasional blood-letting, a spare light diet, diminish the animal and increase vegetable portion. The drink should consist the chiefly of ptisans, barley water with nitre: abstaining from wines, and all high seasoned food, use much exercise, to cause an increased circulation, and assist the blood to throw off its superfluous humours and reduce its density, which would be further obtained by occasional cooling purgative medicines, as soluble tartar, cream of tartar, and such like, till the body is reduced to that moderate temperature and harmony in all its functions, in which true health can be said only to be found, and in which exists a fitness for all things necessary for our peace, fruitfulness and every blessing we enjoy; to preserve which, I would recommend exercise, industry, good but plain diet, and that most excellent of all medicines, a truly virtuous and religious life, in which

* See Dr. Cheyne's note in Buchan's Domestic Medicine, page 601.

alone, I am persuaded are found that peace and good in this temporal state, in and through whom all our blessings spring here, and remain established without alloy eternally hereafter.

SECTION III.

ON PREGNANCY AND ITS EFFECTS.

By the womb being in a grave state, we mean pregnancy, when the male semen has been deposited within its cavity, and incorporates with, or fecundates the ripe ova in the ovaria, or produces conception.

The particular phenomenon of the animal race producing each, their own species, or conception in the female, has been the subject of a variety of physiological disputations and inquiries, for time immemorial, and has been productive of many ingenious theories, and speculative ideas; as well as absurd and far sought hypotheses: nor have we at this day any thing better than mere conjectures, and doubtful reasoning concerning it:—however as it is a subject not necessary for my plan, I shall begin where this ends, in pregnancy.

As soon as conception has taken place and the embryo in any degree formed, we find a very considerable change to have taken place in the body of the woman: The menstrual evacuation is totally or partially checked: if but partially, we find it to decrease at every repeated period, till it totally disappears.

The cavity of the womb which was before flat, becomes now more globular or rounded; and we

find, if we examine, the womb itself becomes more weighty upon the finger, and consequently gravitates into and shortens the vagina: at about the third month, we find the mouth of the womb, somewhat softer and more dilated, and smeared over with a slimy mucus.

Till after this period, the womb occupies the cavity of the pelvis; after which, becoming too large to be contained, it rises into the cavity of the abdomen or belly; draws the os uteri along with it, and the vagina upon re-examination is found to be considerably lengthened, and the mouth of the womb receded from the touch.

The bulk of the womb continuing to increase at every menstrual period, the enlargement now becomes self evident externally; which in the latter months advances so high up, as to be in contact with the breast bone, occupying all the anterior portion of the abdominal cavity.

The substance of the womb during impregnation, is generally not much altered (except rendered so by disease) in which case it may suffer a morbid change of increase or diminution; the first state is often productive of disagreeable effects, in the latter the most fatal consequences.

In an increased thickness of the substance of the womb, the woman has a sense of bearing down, which is apt very much to alarm her, however, it generally goes off in a month, and requires only encouragement, as bespeaking a good labor—and a medicine for the mind, as saline draughts, &c.

In the latter case, or when the substance of the womb is reduced to a preternatural loss of thick-

ness or substance, it will not admit of a regular distention in every part: and in the latter months may be subject to laceration or giving way, and the foetus and contents escape in the cavity of the belly. Sometimes the womb in this case will admit of its full expansion, and at the time of labor, in its strong efforts to contract, it may give way, in the diseased part, and the foetus, &c. escape into the abdominal cavity as before. The woman in this case feels the most excruciating pain, the womb loses the further power of contraction, which is followed, by faintings, convulsions, and death soon relieves the miserable sufferer.

The uterine vessels are branches from the spermatics and hypogastrics, which I need not explain; and are commonly distributed upon the surface of the womb, in zigzag, or serpentine directions; by which wise mechanism, they admit the expansion of the womb, during its gravid enlargement, without being ruptured, or too violently extended, so as to impede the circulation of the blood through them.

The blood vessels of the womb are found to be without valves; and on one particular part externally, is always found a group of them, running in all directions; opposite this part is attached, internally, the placenta or after-birth.

The common signs of pregnancy, or the womb having become in a gravid state; are,

1. Absent menstruation, at the regular time of appearing:
2. Nausia, vomiting particularly in the morning, but often relieved upon lying down.

3. Prejudiced against common food, or what is at other times desired :

4. A desire for unnatural food :

5. A changed appearance in the face :

6. A peevishness of temper :

7. Slight febrile actions, not improperly called pregnant fevers :

8. Uncommon pains—as too the ache, &c.

9. Enlarged breasts, with increased tenderness ; and the aureola, or disk round the nipple, darkened in its color :

10. Quickening, or the first sensation of the child's motion : Authors have divided, or extended the symptoms of pregnancy, into an almost unlimited number, where the curious have access. Any of these various signs may exist, (except the last) and pregnancy not have taken place : therefore it is requisite to have a combination of them, before any decision can with certainty be made.

If the absence of the menstrual evacuation be admitted as a sign, it is requisite to be informed, if the woman before marriage has been subject to omissions or irregularity ; if not, and the woman young and lately married, we may receive it : and also a woman may menstruate during her pregnancy.

Women who are pregnant generally lose their appetite and flesh, and belly also, in the first months : but about the fourth month, they begin to enlarge.

If they enlarge in the first months, it is a disease and not pregnancy.

Women may omit menstruation, the breasts enlarge and become tender, and discharge a glairy milk like fluid, and not be pregnant.

A dropsical ovaria frequently gives rise to a suspicion of pregnancy; which is generally attended, with high coloured urine, deposited in small quantities: but in pregnancy generally of a light yellow colour.

The womb thus enlarged in its size, while it is yet contained within the cavity of the pelvis, and from its increased weight at its fundus or bottom, (where the embryo is situated,) gives it a disposition to gravitate, and elevate the mouth of the womb, and causes it to make pressure upon the neck of the bladder, the fundus of the womb is increased, both in bulk and gravity, which gives it a disposition to retroversion or overturning, especially if the pelvis be large; when the fundus of the womb presses against the intestine, and causes violent costiveness, followed by tenesmus or a disposition (with forcing) to stool, without effect, as in dysentery or bloody flux. This diseased alteration of the situation of the womb is discovered by examining for the mouth, which is, in this case, too high up to be felt; and the fundus of the womb is found to bag posteriorly: this is a never erring proof of the presence of the disease.

It is found generally in very large or small pelvises, rather than the standard size; but may be produced by many other causes.

The Cure,—Consists in, first emptying the bladder and intestine: if this can be effected without fever, there is no danger, and vice versa.

When you have accomplished the above, the womb may be attempted to be returned to its natural situation; which is done by introducing the hand into the vagina, and carry it along the concavity or hollow of the sacrum, till you force the fundus uteri, above the projection of the sacrum: sometimes there exists a difficulty in introducing the hand entire into the vagina of a woman who has had no birth; in this case you are not to use very violent efforts, but to introduce one finger at a time, (first greasing well the hand, with soft pomatum, fresh lard, or some unctuous substance) till the whole hand passes.

The distention of the urinal bladder, brought on in this case, will sometimes be so great, as to cause it to occupy nearly the whole cavity of the abdomen anteriorly; being flattened on both sides, posteriorly by the enlarged and expanded womb, and anteriorly by the abdominal muscles; which the patient will frequently suppose to be dropsy: and it will require our strictest attention to obviate the mistake, as a very sensible fluctuation of water exists.

In this case, it is requisite to attempt the introduction of the catheter, to draw off the water immediately the disease is detected. In this operation, in common cases, it is immaterial what kind of catheter may be employed; sometimes from the increased length of the urethra, or water-passage, the male catheter is found to be the most convenient: In parturition, when the head of the child is found to press against the symphysis pubis, it is recommended to use the flat catheter,

of which the least degree of curvature is sufficient.

Contraction, spasm, inflammation, and an alteration in the direction or situation of the urethra, will cause a difficulty in passing the catheter; in this case, the elastic catheter will be highly serviceable.

The catheter should be introduced gradually, and with but slight exertions or force: the mind of the operator, should be kept as serene and composed, at this period, as possible.

In passing the finger to discover the meatus urinarius, or opening to the bladder, it should be continued about one inch in a straight line from the clitoris; where may be felt a small soft, spongy rising, or eminence, composed of a few strata, of muscular fibres, forming a sort of sphincter muscle to the aperture, which is found contained within: except this examination be done very delicately, the pulpy rising is destroyed or depressed, and it escapes the observation; and also if it is not continued in a straight line from the clitoris, the aperture to the urinal duct will escape the point of the catheter, and it will find an introduction into one of the excretory ducts of the lacuna glands, which are situated on each side, and are sometimes equal in size, with the meatus urinarius.

If an obstruction to the introduction of the catheter, should be present, the instrument should be gently moved in every direction with much time and caution, till it passes, which sometimes will be a very considerable time first. Dr. Lowder has used a quill when a catheter was not at hand: sometimes it is requisite to introduce the

finger into the vagina to keep up the womb, during the introduction of the catheter, and even longer, till the waters are off. The catheter is known to be in the uthera by its passing immediately under the branches or symphysis of the pubes, and being discovered by the finger in the vagina to be surrounded in a smooth membranous sheath, formed by the tunics, or coats of the uthera.

If the head of the foetus should be found to be the impediment to the introduction, it may be moved somewhat backward and upward, and it will pass in a more erect direction than usual.

Delivery in some instances, may bring on an inversion of the uterius; when the urethra will be found directly downward.

It is highly requisite to examine occasionally, the extremity of the catheter, as the perforations in this part sometimes become blocked up, and thereby prevent the passage of the water.

Some authors have asserted, "that the bladder in this disease, is frequently divided into distinct chambers, by the transverse sections or compressions of the womb:" the catheter, must therefore, necessarily, be in different situations, to draw off the whole of the waters.

In inflammation, use emollient injections with opium—fomentations—camphorated oil rubbed upon the groin and lower region of the belly.—The warm bath, &c.

The state, or more particularly the diseases of pregnancy, are, discovered to be universally accompanied with an inflammatory or febrile action, from the sily properties of the blood; conse-

quently, small bleedings, as the causes become urgent, may be employed with advantage, in every period of the state.

The cavity of the womb, which before impregnation was flat, becomes now more globular, from the distention of its additional contents: this distinction in the early months, is confined to the fundus or bottom of the womb, while its neck and mouth remain unchanged: it is found, if examined in the vagina, the womb is become more weighty upon the finger, and consequently gravitates into, and shortens the passage: and at about the third month, we find the mouth of the womb smeared over with a slimy adhesive mucus, which it completely stops; this is also offered as a further impediment to menstruation during pregnancy: * after this period the enlargement of the womb exceeds the dimensions of the cavity of the pelvis, consequently, rises above into the cavity of the abdomen, and draws the mouth of the womb along with it.

The diseased alterations, the consequence of pregnancy, arise commonly from irritation and sympathy; which may be further distinguished, into primary or direct, and secondary or intermediate causes; per example, the womb after conception, acquires an increased irritability, and from the direct sympathy which exists, between it and the stomach, the latter becomes equally affected; when vomiting, indigestion and other diseases, which will be presently separately considered, are the general effects: these then may be

* See Hamilton's Female Physician.

admitted as consistent with my distinction. The primary, first or immediate consequence; and every part of the system, is more or less affected, from the sympathy, which universally prevails with the womb.*

The secondary or intermediate effect may be diseases of the brain, as head-ache, giddiness, fainting, &c. from the immediate consent between them; this then is the effect, or an effect; or a cause, in the effect of a primary cause and so of the rest.

These diseases or effects of pregnancy, may be divided into those of the early and latter months; and quickening, which commonly occurs near a middle period, draws the line of distinction, and which I propose to treat of in the regular order of succession.

As we cannot immediately discover the causes of all pregnant diseases, we must by conjecture and reason, regulate our conduct in the mode of treatment: as the womb when gravid retains blood, and consequently produces plethora and irritability; and requires the use of the lancet with opening medicines: but these as well as every active medicine should be administered with extreme caution at this time.

Many authors have endeavoured to establish rules; to ascertain the progress of pregnancy; which in general, I believe are tolerably applicable, viz.

* Est enim uterus principales quæ totum corpus facile in consensum trahit.

Harv. exercitat de partu.

About the fourth month, the womb becomes so enlarged, as not to be contained within the cavity of the pelvis; and ascends to the abdomen, when the increase externally, may be said to commence.

- The fifth month it is found above the pubes :
“ Sixth month, midway, between the pubes and navel :
“ Seventh month, as high up as the navel, which is found to protude :
“ Eighth month, midway, between the navel and breast bone.
“ Ninth month, or full time, to press against the under part of the stomach, occupy the whole of the abdominal cavity anteriorly :
“ The intestines are found forced behind, against the back bone, and violently compressed, which causes, at this advanced period, the incapability of retaining any thing upon the stomach; with the general disposition to costiveness, or obstructions in the bowels, which should be carefully guarded against; and in order, comes next to be considered.

OF THE DISEASES OF THE STOMACH AND INTESTINES.

Vomiting is a very general attendant on early pregnancy, though sometimes it is found to continue in the latter months; and except it is very violent, it is best left to nature's management; as I conceive it so far from being prejudicial or dan-

gerous, that I believe it to be serviceable in discharging acrid and other injurious matter; it also tends to give energy to the womb, and is generally found to be relieved by retiring to the horizontal position; but if it continues in excess, recourse must be had to more active remedies: we should inquire into the state of the habit, and if plothra should be the cause, the lancet may be cautiously used; but this frequently is the effect of irritability when bleeding would be found to be injurious: the vomiting ought never to be totally checked without first opening the bowels, by gentle cooling cathartics, or by glysters: if the stomach will not retain the former sufficiently long to affect the bowels, the saline draughts, in a state of effervescence or ferment, may be given combined with bitters, of which the colombo root has been found best to succeed, when every thing else has failed; to these, absorbent earths may be added; and occasionally an opiate is requisite, when they have been found most successful, in the form of pills. Magnesia and mint, peppermint, or cinnamon waters: elixir of vitriol in cold water, or cold chamomile tea, to which may be added, some aromatic, and occasionally light cordials are required, of which the confection of kermis in cinnamon water is found to be the most grateful.

Sometimes, vomiting proceeds from a tenderness of the belly, and stomach; in this case (which proceeds from inflammation) we must bleed, foment externally, give opiates, both by the mouth and glysters: some have recommended the theriaca andromica; or London treacle of

the shops, to be applied externally; but the best application is the expressed oil of mace with opium, or cloths wet with laudanum and applied to the region of the stomach, a change of air is necessary where the case is not dangerous.

In frequent inclinations to vomit without evacuation, gentle emetics have been by some esteemed the best remedy; but for my own part, I should be extremely cautious in using them: sometimes however, vomiting will continue in spite of every endeavour to the contrary, until the time of quickening, when it will generally, of itself, cease.

Indigestion—Or a depraved appetite is another attendant of pregnancy, from the same cause as the former, and is commonly productive of longings or desires for strange and unnatural food, which, if not materially objectionable, may be indulged.

The Navel String, or the connection between the mother and child being entirely dispossessed of nerves, and of course sensibility, the mother's influence over it, to cause any particularity in marks has been denied by the most able teachers and writers upon these subjects; while others have as arduously contended for its existence.

As the stomach is at times loaded with humors of an alkalescent or acid quality, the desires are varied, as the one prefers the most savory and high seasoned food, and the other acid fruits, vegetables, and drinks of the most cooling properties, and might in both cases be indulged with advantages. In this case the acid elixir of vitriol with aromatic bitters have been serviceable.

Heart Burn—Improperly so called, for it is not any disease of that organ, but sour painful eructations from the stomach, with a painful sense of heat in the throat and fauces, and found frequently to attend women throughout the whole period of gestation or pregnancy: it often is a consequence of indigestion, when sharp acrid humors are secreted and accumulated in the stomach which frequently cause anxiety, sickness, and a disposition to vomit.

In weakness and indigestion, the stomach may be cleansed with a dose of calomel and rhubarb, or rhubarb alone; and afterwards, strengthened with bark and vitriol, to which may be added any of the stomachic bitters with occasionally a little generous wine or spirits.

If acidity abounds, as the cause of these complaints, any of the absorbents, as chalk, prepared oyster shells, magnesia and peppermint, or cinnamon water, aniseed or common water; this coming in contact with the abounding acidity, neutralizes or decomposes it, in which a fermentation is produced, which is still of further advantage in expelling flatulency.

If bile superabounds, and occasions heart burn, the sweet spirit of nitre in a glass of water, will generally be found to afford relief; or a dose of calomel and rhubarb, which frequently causes it to take the intestinal course and produce a free evacuation downward; when the complaint is violent and irresistible by these means, a gentle vomit of ipecacuanha or strong chamomile tea, or an infusion of daffodil root, or the blessed thistle is found to be the most effectual remedy.

If grease abounds in the stomach, and is the cause; a glass of brandy, spirituous cinnamon, aniseed, or pepperment water, generally procures relief.

Some authors* have asserted the chewing of green tea dry, has cured this disease in pregnant women.

Costiveness. Is a complaint which pregnant women are frequently attended with, through the whole period of gestation: if not prudently guarded against by regimen, medicine and exercise. The form of medicine for this troublesome complaint, should be of the most mild, soluble, aperient and cooling properties, as senna and its electuary manna, castor oil, soluble tartar, rhubarb and magnesia, and such like: if the intention is answered by any of the above remedies, the effects are always better than when drastic or more heating and violent purgatives are used, as jalap, aloes, scammony, bitter apple, &c.

The aloes are in more common use among the lower class of people, on account of their cheapness, and convenience in forming into pills; but I should object to them on account of their heating and drying qualities, which after their operation, leaves a greater disposition to costiveness or intestinal obstructions than before.

The common cathartic salts dissolved in simple mint or cinnamon water, is said, will often rest upon the stomach better than aperients of a less nauseous taste: and the cooling dissolvent properties which they possess, would lead me to prefer them: Thus far then may be considered, as the

* Buchan.

prevention and cure of the first stage of this disease : I come next to speak of it in its more advanced state : a long and continued obstinate costiveness may be brought on by indolence and inaction, remaining too long in the horizontal posture, too warm clothing, soft beds, and other things which divert the secretions to the surface of the body ; all heating and astringent or binding regimen ; the fœces by remaining too long in the intestines become indurated or dried, to such a degree that nature in all her efforts, and every medicine, both by the mouth and glyster, fails to effect their discharge ; and yet a small quantity of dissolved fœces may have escaped between the column of hardened excrements and the intestine, and often prevents the disease being thoroughly detected and relieved, till an examination be made ; the pain in the efforts to expel them, which returns periodically, attended with a dry feverish heat, tension of the abdomen, inflammation of the parts and soreness on examining the belly externally, should lead us to suspect the presence of the disease : which if not timely relieved, generally terminates in mortification of the intestine, and death soon closes the scene.

The Cure—Consists in dividing the dry hardened fœces with a convenient instrument ; as the handle of a table spoon, and afterwards to be scooped or picked out and washed away by repeated emollient glysters of broth, gruel, starch, or such like.

Dr. Lowder has said, he has known a bougie passed into the hardened excrements to soften and break down their texture, and they are after-

wards totally expelled: This operation is very familiar among farriers, and is called raking.

Hemorrhoids, or piles,—This is a disease to which the female, from constitution, and sedentary life, is more subjected than the other sex; and more particularly during pregnancy, from the compressions which the intestines suffer; by the enlarged and gravid womb.

This disease is distinguished, into bleeding and blind piles; the first when blood is discharged from the Hemorrhoidal veins, or blood vessels distributed about the termination of the intestine.

The latter when the vessels are distended and protrude, but discharge no blood.

They are also distinguished or divided into external and internal: The first when they are found to protrude and assume various appearances, when they are readily distinguished.

The latter when they are situated internally, and are discovered by great pain and tension on going to stool, or slight motion: these last described, are always productive of most pain, and difficulty of cure; while the outward piles generally relieve themselves; for when their distensions are complete, the side of the vessels give way, burst and throw out their contained blood, and the disease is relieved at least temporarily or for the present, till the accumulation again exists: sometimes, however, this discharge is immoderate, and tends greatly to weaken the patient; in this case, it must be provided against, by treating as in immoderate menstruation, (which see.)

The common causes of piles, are plethora, obstinate costiveness, and venal obstructions, or

more immediately in the hemorrhoids, or veins situated in the parts where piles when present, are found always to exist :

The cure. Open the body with mild cooling purgatives, as manna, senna with cream of tartar or sulphur, or both, which is perhaps preferable ; bleeding generally and topically ; this latter operation is more conveniently done by applying leeches to the piles most tumefied and enlarged, soft poultices, or frequent washings with a weak solution of sugar of lead, fomentations of an anodyne quality, as poppy heads, &c, sitting over the steams of hot water, or emollient herbs, as mallows, mullen, slippery elm bark, &c, and the warm bath, which may be advantageously enjoined.

This disease is frequently productive of the hemorrhoidal cholic, which is also relieved when the disease is removed ; but in this case laudanum in tincture of rhubarb, and peppermint or cinnamon water, may be given to alleviate the pain.

Piles bleeding to excess, has induced dropsy : in this case the cold drawn linseed oil, with tincture of rhubarb given internally, has rarely failed to relieve : ointment of elder mixed with brown sugar, or sulphur and laudanum has been esteemed an excellent application :

The balsam of capivi given internally is found to cool and open the bowels, and alleviate the pain ; some recommend each pile to be pressed with a steady firm compression to procure relief ; but this, I conceive would tend to bruise the tumor more than remove or relieve the disease.

Crude sal armoniac, and salt petre finely powdered and mixed together, has been recommended by Henry Cline professor of anatomy and surgery in St. Thomas' hospital in the borough of Southwark, London, to be applied to an inflamed and tumified tonsil, and the discharge of blood which it produced, procured immediate relief, the hint caused me to make the same application to a pile which was attended with equal advantages.

As these various complaints of women receive a disposition during the growth, from the generally improper mode of bringing up girls, to a too much confined and sedentary a life, under the false impression of making them delicate and genteel, and acquiring what are esteemed the accomplishments of education, as music, drawing; tambours and other fine needle work, which are in fact superfluities, the acquiring of which, sap the foundation of health in the bud, and lay an establishment for all the train of future maladies, irregularities, costiveness, indigestion, weak and depraved appetites, head aches, vertigos, hysterics, and the train of maladies attendant on elevated and polite life; while the rustic maid with a roseate bloom on her cheeks, animation in her eyes, and health and life in all her actions, rarely knows any thing of these things, she breathes the pure air, and draws in health at every inspiration. Her body is healthy and vigorous and her mind free and unimpaired by the maladies brought on by polite education and restrained action, and when she enters the married life, her offspring are most likely to partake of the health of the stock they spring from: it was al-

ways an observation of mine from very early life, that girls called tomboys, if the prudential care of the parents, especially the mother restrain from running into licentiousness, are the most healthy mothers and generally the most domestic and best wives, and if I should be blest to raise my daughter, I propose to encourage this disposition with no other restraint, but prudence.

Women during pregnancy, from biliary and uterine obstructions, are sometimes subject to spots or blotches, appearing in different parts of their bodies, but more especially about the face, neck and breast; some are anxious for their removal, but otherwise are of no importance; use laxatives, exercise, ripe fruits and a vegetable diet, and wash with rose or elder flower water; if these do not answer, tell the patient they are not bad signs of her future well doing and she will endure them with patience and satisfaction.

OF ADVANCED PREGNANCY, AND ITS DISEASES.

The advanced state or latter months of pregnancy are very properly considered to commence after quickening, or first sensation of the motion of the fœtus, in the womb, which at this time becomes much enlarged and occupying a greater portion of the cavity of the belly than the other viscera, which suffer necessarily, more compression, consequently obstructions are more frequent and lasting, the circulation of the blood is more languid, the diseases are more acute and danger-

ous; therefore require greater attention and management than in the early months: Costiveness and its consequences, which have been before treated of, are found more obstinately to prevail, therefore require continually to be obviated, by occasional mild and cooling cathartics, and injections of broths, gruels, starch, and such-like; otherwise it is productive of a disturbed stomach which require gentle emetics of ipecacuanha or cardus benedictus, i. e. the blessed thistle.

If fever should succeed, an occasional use of the lancet may be employed advantageously, however, if not timely removed, is sometimes productive of a diarrhoea dysentary or tenesmus, i. e. violent painful and weakening evacuations by stools, or as the last term implies a frequent inclination to stool, with bearing down and nothing is discharged, but an acrid irritating mucus, with much pain and burning, which is esteemed much more weakening than the former state, and is relieved by emollient and strengthening injections of oil with laudanum, or castor oil or rhubarb given internally, with light nutritious healing regimen, as sago, vermicelli, calf's foot jelly, salop, tapioca and such like.

Stranguary—Or frequent inclinations to pass urine, which is voided with much pain in small quantities, this obstruction frequently occurs in early pregnancy, from the sympathy which exists between the bladder and the womb; and is generally relieved by a mild regimen, nitre and barley water, ptisan, or such like: but in the latter months, it is caused solely by the pressure of the enlarged womb upon the neck of the bladder;

women frequently from restraint,* or false delicacy in company, cause a voluntary suppression of urine which I would recommend to be overcome by retiring either with a friendly female, or alone. If the cause should be suspected by the male part of the company, the more thinking and well bred will never seem to notice it, in such a manner as to give to the most susceptible modesty, the least apprehension or cause for pain, the lady need not hazard the blush; for the libertine, I should be led to hope, will invariably meet that reproach and condemnation, even from his own sex, his ungenerous, unfeeling, and I hesitate not to declare, his unmanly and reproachful conduct merits.

These causes frequently bring on a total suppression.

In all cases of stranguary, the bowels should be emptied and kept soluble by mild cooling purgatives and glysters, and if inflammation arises, bleeding will become indispensably necessary: opiates to allay occasional spasms and irritation, and the water should be drawn off. [See the use of the catheter.]

Involuntary emissions of urine frequently occur in the latter months of pregnancy, especially in the erect posture or standing, or on the slightest motions or exertions, as coughing, sneezing, &c. however these complaints admit only of pal-

* It is said, the truly humane and justly celebrated Dr. Fothergill died a martyr to his indiscretion, in suffering the calls of nature in this way, and thereby brought on such diseases in the urinal passages, as terminated only with his life.

liation in the pregnant state, and the cure follows when the cause be removed, which is the compression suffered by the gravid enlarged womb, on the side of the bladder; however, these are symptoms indicating a good labor, for the presentations in these cases are generally natural and well disposed.

Anasarca or Dropsy.—Women when gravid are generally subjected to anasarca or dropsical swellings of the lower extremities, from the compression of the womb on the sides of the blood vessels: which has, in some, given great uneasiness in suspecting it may continue after delivery, or through life, but of this there is no danger: sometimes in violent swellings of the feet and legs the patient becomes alarmed lest they should burst: which would be dangerous and difficult of cure: in this case the feet may be steeped in warm water, or rubbed with the warm hand, or camphorated oil, to remove the tension of the skin, and relieve the pain: if these, or other such simple applications fail of relief, the skin on the top of the foot may be slightly scarified with the shoulder of a lancet, or scalpel or scarificator, and the water will gravitate from the upper parts of the body and gradually escape, till the tension is removed, or sometimes I have applied a small blistering plaster, about the size of a dollar, with good effect, where there has existed a strong objection to the operation; however, for fear of stranguary brought on by the sympathetic effect of the neck of the bladder with the action of the blistering flies, the operation, which is very slight and of inconsiderable pain, should be preferred.—

But neither of these modes of relief should be attempted, until the distention becomes so great, as to oppress the breathing, which it will do when violently charged, by the water returning from the lower extremities to the body, after reclining in the horizontal posture, from the communications this cellular membrane possesses, throughout the whole body; it is found situated immediately under the skins, between them and the muscles or flesh, and the receptacle of the fat, which situation this fluid occupies, the former being generally, in these cases, nearly removed.

It is requisite in these cases to use as much rest as possible, with flannel bandages upon those whose situations will admit them to rest.

These bandages are found not to agree with every one, but sometimes produce oppression upon the chest, by forcing the water towards the upper parts of the body, and cause a laborious difficulty of breathing: when such are their effects, they should be discontinued, and gentle opening medicines be given and often repeated.

The veins on the lower extremities, and on the surface of the belly, in the latter months of pregnancy, from compression become varicose or so violently distended and enlarged, as to assume a strange torturous and alarming appearance; sometimes they are relieved by gentle compression or bandage; if from too great a fulness of blood, bleeding has been advantageously applied, which is further assisted by gentle purgatives and a spare cooling regimen.

These several diseases are invariably removed after delivery, when the cause, i. e. the compres-

sion of the enlarged womb is taken off, these effects insensibly die away.

There is sometimes a black appearance on the surface of the belly, which the patient frequently mistakes for morbid or mortified, but it is merely extravasated blood, from the small venal branches being ruptured by the distention of the belly: apply warm camphorated oil rubbed in with the warm hand, or a soft of poultice of bread and milk or bruised flaxseed.

Ascites, or Dropsy in the cavity of the abdomen or belly. This diseased accumulation of water in the cavity of the belly, let it be remembered, is perfectly distinct from and has no connexion with anasarca, or the accumulation in the cellular texture between the skin and the flesh, but is confined to a circumscribed cavity, and has no communication with any other beyond its own extent; therefore while parturition or delivery cures the one by removing the cause of the disease, viz. compression, it avails nothing in this, though they may and often do exist, at the same time, the one is removed while the other remains.

This disease is sometimes present in pregnancy and furnishes the patient with many pertinent and embarrassing inquiries; but it is found generally to assist delivery, as it relaxes the fibres and assists their delitations: it is said, a person laboring under this disease, may become pregnant, but these are two things frequently mistook for each other.

When pregnancy has been mistook for dropsy, and the operation of tapping been performed, and the trocar or instrument employed perforates the

substance of the womb, afterwards the child's head or elsewhere, and the death of the mother and her child been the inevitable consequence.

Pregnant women in the last stage of the dropsy will certainly be carried off by the disease.

Some have asserted this has been cured by pregnancy or delivery: women frequently deceive themselves, in entertaining and nurturing this opinion, that their delivery will effect their cure, but affords very little hope of success, as the cavities containing the liquor amnii, or child's waters as they are commonly called, and the diseased accumulation in dropsy, are perfectly distinct: the womb itself being surrounded by the dropsical collection.

As the treatment of this disease would be injurious to pregnancy in promoting abortion, &c. it is to be delayed until after delivery, and tapping or otherwise not to be attempted, except death indicates the necessity, and it requires to be performed in the most cautious and skilful manner. For the cure of dropsy, see Ovaria diseased, section 2.

Herniæ or Rupture.—This is a very dangerous disease in the time of pregnancy, and every prudent practitioner who can obtain any foreknowledge of the existence of it will endeavor to avoid attending such patients; for if it be irreturnable, it is productive of the worst and most alarming consequences: while a returnable rupture is often happily cured by pregnancy, by the womb being so much distended forces back the intestines to the back bone, and closes the aperture

through which the intestine protruded, which may be found firmly to adhere or grown up by the time pregnancy is completed.

The cure (surgically) for ruptures, is to return the protruded intestine to its natural situation, and confine it by a truss, or some other proper bandage: use the horizontal position, and every thing tending to prevent and remove costiveness, flatulency and every cause of distention in the intestines: an irreturnable hernia in advanced pregnancy, or at child birth, is very likely to become strangulated.

The cure, or prevention from speedy and inevitable death, consists in the operation of dilating the orifice, or ring through which the intestine protrudes, with a scalpel or crooked bistory.

As this operation is not to be attempted, but by the most expert surgeon, of accurate anatomical knowledge, to attempt to explain it in a work not principally intended to investigate surgical operations or for such as have not been professionally and scientifically learned, but for family assistance, would be vague and absurd; but those who wish a description of this operation, may find it much more accurate and elaborate than I could give it (except I was to quote their words) from the works of Gooch, Bell, and others who have wrote particularly on these subjects: however, when a rupture appears to resist the common efforts to return it, it may be assisted by applications of cold astringents, as vinegar and water, Goulard's lead-water, &c. if these fail, recourse must be had to emollient applications, as soft warm poultices, fo-

mentations and the warm bath, emollient injections with cooling soluble medicines by the mouth, as manna and cream of tartar, soluble tartar, castor oil and such-like, to empty the intestines and reduce the bulk of the protruded portion of intestine; small doses of ipecacuanha to produce a slight nausea or sickness, will very frequently relax the rigid contractions of the aperture, when every other method has failed: If these and such-like methods are ineffectual, recourse must immediately be had to the operation* as the only prevention of death, when strangulated or mortified.

When a rupture exists during the process of child birth, it should be carefully supported while the labor pain continues; and after delivery again supported by proper bandages, carefully guarding against inflammation, distension, and their usual consequences by bleeding, purging &c. as the constitution may support.

The Venereal Disease—or the disease of Venus, or the foul disease, as it is commonly termed; is sometimes found to exist during pregnancy. Some contend the infection received after conception, cannot be communicated to the fœtus in utero; as the mouth of the womb is so firmly closed, which prevents the virus passing into its cavity:

* See Cheseldon's anatomy.

In St. Thomas' hospital in Southwork, London, was a man who supported the operation of a considerable portion of the intestine being removed, being mortified, it cicatrized, or healed to the opening in the groin made in the operation, through which the excrements ever after involuntary passed.

but I must confess, I am of a different opinion, the womb may not always be perfectly closed, or how is it superfœtation takes place after conception, if the mouth of the womb was closed, the male semen could not possibly pass to the womb, for future fecundation, and the womb already gravid, which is a circumstance celebrated authors may be brought forward who advocate, as well as others who oppose this theory; * if so the virus of the venereal disease may pass the mouth of the womb and infect the fœtus in utero: however, it much more frequently occurs at conception, or the mother being previously diseased.

Sometimes the child may be excoriated or hurt in the passage, and coming in contact with the virus or the ulcerated parts in the mother, may assume a venereal appearance, in a few days after the birth: but I should be led to presume, the adhesive matter found generally dispersed over the whole surface of the child's body, &c. after birth, would tend to ward off the venereal poison and prevent its attacking the tender surface of the infant: or otherwise, the washing and cleansing so necessary and generally used to free the child from this matter, which is frequently a work of much labor, would inevitably remove the venereal virus, before its irritation could produce inflammation and absorption, by which mode only the infection could be communicated in this case, †

* See Haller's pathological observations, page 107.

† I have seen instances of children being born of diseased parents, at the birth apparently free of every mark of infection; and in a few days or weeks, break out in every virulence of the disease in its most confirmed state.

however this is merely hypothesis. So that I am led to conclude whenever a child is infected with the venereal disease from diseased parents, the infection must be generally premature to the birth.

The venereal disease is divided into two stages, simple and virulent, or local and confirmed, i. e. confined to the parts of generation, or dispersed through the system and habit universally affected.

I shall say nothing of the cause, but proceed to the *symptoms*, which are an increased secretion of mucus, heat and irritation in the vagina and parts adjacent, which become inflamed and tumified, and an evident discharge appears; at first simple and limpid, afterwards acrid and opaque, which inflames and ulcerates whatever part it comes in contact with, if not immediately removed by washing or otherwise: this disease is milder in women, but often of more difficult cure, than in men; and the more virulent the disease is, the sooner it appears after infection, and admits of more difficulty of cure.

In the confirmed state, the symptoms are more violent, and generally distributed throughout the system; the ulcerations are found to become foul at the bottom, with a buff colored covering, and hardened base, very much indisposed to heal; and from the absorption of the virus in these ulcers called chancres, being conveyed to the glands in the groins they partake of the disease: one or both becomes enlarged and tumified: and at length the whole system becomes affected, like inoculation: blotches of a scorbutic nature are found on the skin, which peel off, and at length

assume a copper colored appearance ; pains, swellings and at length rottenness of the bones of the skull, * arms, legs, &c. Ulcerations in the throat, fauces and nose, which is at last destroyed and falls in, and extracted with the palate of the mouth, with a pair of forceps, † attended with excruciating nocturnal pains, when warm in bed.

Treatment.—If this, or any other peculiar disease should occur during pregnancy, you may treat it in every respect as at other times ; but only to bear in mind, all active medicines, as emetics, cathartics, &c. should be administered with a sparing hand.

A pregnant woman with a confirmed lues venerea should not be salivated, except there be time sufficient, to complete the cure before delivery ; otherwise we should only palliate the most urgent symptoms and salivate after the month :—In this case mercury, (of which corrosive sublimate is by some esteemed the best) should always be combined with opium, to prevent cholick, or passing off too hastily by the bowels.

In the simple state of this disease, when it is local, and confined to the parts of generation and

* Professor Cline exhibits the skull of a man with the frontal bone perforated like a cullender by this disease.

† A man also exhibited himself in the anatomical theatre of St. Thomas' hospital, London, in whom the palate bone of the mouth had come away, after being seven years married and had had several children. He declared his wife to be a virtuous woman, and that he had never defiled the marriage bed himself, his general character substantiated his report.

So latent, yet potent, are the effects and progress of this noxious disease.

adjacents, mercury is unnecessary, but when it may be used, it should be as an alterative, i. e. in small and frequently repeated doses, in which no sensible operation is discovered: however, in general, with cooling purgatives and diuretics, the washing the diseased parts frequently with milk and water, or a weak solution of sugar of lead with mucilage of gum arabic, (i. e. the gum dissolved in water) will be found to be sufficient to effect the cure.

Internally, give cooling laxative medicines, as cream of tartar, soluble tartar, sulphur, neutral salts, and such-like; accompanied with rest, a spare thin diluting diet, avoiding wines, spices, and every thing of a heating irritating quality.

In the confirmed state, mercury is the only remedy we can depend upon; which should be introduced into the system, both by the mouth and skin, the form of strong mercurial ointment, rubbed alternately on the inside of each thigh, till a soreness with a copper taste in the mouth is detected, which is a proof of the constitution being saturated or sufficiently charged with it: we should then desist for a few days, till the symptoms somewhat abate, then resuming our applications as before, and continuing for ten days or a fortnight after every symptom of the disease disappears; great care should be taken to clean the mouth three or four times every day to prevent the most disagreeable consequences.

I had some few years since, a patient among the Cyprian dames, whom I was necessitated to salivate, and gave particular injunctions when the soreness and copper taste were produced, to

desist from the means, and apply to me for instructions; but she imprudently doubled her dose, under the old error, if a little was good, more was better. and her tongue was swelled out of her mouth, which with the inside of her cheeks were one entire raw surface; her attendants scarce deserved the name, her mouth was taken no care of, she got well, but her tongue was grown fast to the cheeks, she could not bring her teeth in contact, necessarily she could not masticate, but had to live upon suction and spoon meats. I attempted to separate the tongue and restore its liberty, but she would not submit to the operation, and left this city in that condition, and for aught I know, may remain tongue-tied for life, as a punishment for her indiscretions.

The mercurial course ought not to be attempted, after the sixth month of pregnancy, as the debility and relaxation produced, may endanger abortion: but any time previous to this, if prudently managed, both mother and child may receive a radical cure.

Bubos or venereal tumors, in the groins or elsewhere, are best to be repelled, or caused to be re-absorbed, or again taken up into the system; which will be generally effected by rubbing with mercurial ointment and camphor, or washed with a solution of sugar of lead: if however, suppuration, or the formation of matter in them should have taken place, and it is considered as impracticable to persist in repelling in this case, they must be forwarded by continual and frequently repeated applications, of warm suppurative poultices, as bread and milk, bruised flax-seed, or such-like;

during this process every thing of an opening quality should be desisted from, as prejudicial to suppuration: on the contrary, the body should be supported, by a nourishing diet and generous regimen, that nature may be assisted in her efforts, to throw off the offending matter, in the way she may have pointed out, which always should direct our endeavors, except contrary to reason and the common laws of the animal œconomy, as nature will sometimes, though rarely err; it then becomes the duty and office of the practitioner, to regulate and set aright by such means as the powers of medicine may afford.

After this tumor is broke or burst, or been opened with a scalpel or lancet, I always found it to be most advantageous to continue the poultices, with dry lint to fill up the cavity of the tumor, for three or four days or a week, till the most profuse of the matter may be discharged: when the mercurials may be resumed, with the abstemious diet: if the edges of the wound become hard and callous, apply caustic, red precipitate, or blue vitriol; and scarifications, with the shoulder of the lancet are found to be highly conducive to the cure.

Chancres—or venereal ulcers, are sometimes formed in different situations, and are best destroyed by caustic, red precipitate, or such-like, and afterwards cleansed and healed by detergent and cicatrizing balsams, or washes.

After a continued mercurial course, it is esteemed necessary to cleanse the blood and juices, by drinking largely of the decoction of the woods, as sarsaparilla, sassafras, guaiacum, china root,

mezereon, &c. and the constitution to be afterwards restored by bark, steel, a milk diet, change of air, exercise, &c.

Restlessness, and Inquietude—are common and troublesome attendants, to women in advanced pregnancy, and more particularly in the night season, although having a strong disposition to sleep; however, the woman is much refreshed by indulging and reposing upon the sofa, in the eve of the day, which I think should be indulged: It is presumed the absorbing powers of the child, are more than equal to what the mother can spare, consequently a woman naturally loses her flesh, during her pregnancy, and more particularly in the latter months: however, it is generally observed, such women have good labors and healthy children, which more than compensates for their sufferings.

If the mother grows fat, in the latter months of her pregnancy, with little inquietude, the child is generally small, puny, and poor, from its not having received its due proportion of nourishment: and if the child dies before delivery, the inquietude totally ceases; and therefore this cessation may be esteemed, a symptom of a dead child.

Women are generally relieved, by small and repeated bleedings and gentle cooling opening medicine. Hoffman's anodyne liquor, laudanum, &c. are sometimes occasionally used with advantage.

Erratic Pains—or pains wandering about, no where settled, are discovered in different parts of the body, but more particularly in the hips and

loins; the first from the pressure of the enlarged and gravid womb, made on the large ischiatic or nervous branches, as they pass through the perforations in the os sacrum, anteriorly. (See os sacrum.)

The last from the weight of the gravid womb and its contents, and the increased debility of the woman; these complaints, admit of but a temporary relief, or being palliated; by spirituous embrocations, or rubbings with camphor, opium, or such-like: till delivery removes the cause, and the pains consequently cease.

A pain in the groin is not unusual in the latter months of pregnancy, caused by the round ligament of the womb, which is inserted into and lost in the cellular substance of the groin, which being put upon the stretch from the womb's distention and elongation, or rising into the cavity of the abdomen. This is relieved by being rubbed with camphorated oil and the warm hand, emollient fomentations, or sitting in an incumbent posture, or leaning forward.

The pressure of the womb will cause numbness, or a sort of temporary palsy of the lower extremities, confined generally for the most part to one side.

The Cramp--is another attendant, from the same cause at this particular period; this is a very troublesome complaint, more especially in the night, but not dangerous; if violent, is sometimes relieved by small bleedings, and such medicines as abate the uterine irritation and spasms: The warm bath, opiates, camphor, antispasmodics, ge-

nerally, with friction, and embrocations to the parts affected.

In pendulous bellies. Pains are frequently caused in the lower part, by the pressure it makes on the share bones, and is best relieved by a supporting bandage or long napkin carried over the shoulders, and secured on the back of the neck.

It is not unusual, or without reason, that women as they advance towards the conclusion of gestation, though at other periods patient and resolute, will intimate their apprehensions for their safety, and well doing: it is our business in these cases, to endeavor to instil a confidence in their minds, of their situation, that nature, and the goodness of the "great first cause," is over all his works, to support and strengthen them, to go well safely through their sufferings: If it appears to be only an hysteric affection, little else is necessary, than friendly sympathy and support and a medicine for the mind, as a little syrup and mint, or peppermint water, or suck-like.

But if febrile symptoms attend, an increased pulse, heat, a foul tongue, costiveness, pain in any part, more particularly the belly, our greatest care and attention are required.

Procure an intestinal evacuation, by some mild opening medicine, or by a common house glyster: bleeding in a small quantity, is requisite, retire to rest, promote a gentle determination to the skin, more particularly of the lower extremities, by warm bathing, and afterwards wrapped in warm flannels, and support the constitution by wines, cordials: &c. during the intervals of fever.

Sickness,—Will also very frequently, accompany the latter periods of pregnancy, as well as the early months; which is caused by the compression of the womb, upon the bottom of the stomach, and admits only of palliation, by saline draughts in a state of effervescence or ferment, with laudanum, lavender or such like combined. The compression of the enlarged gravid womb, on the extremity of the intestine, very generally produces costiveness, which should, at this time more particularly, be carefully guarded against; as it disposes to a good labor and safe delivery, by emptying the intestines, and affording more room for the child, who requires all there may be to spare, which is generally little enough.

The same cause, or pressure upon the neck and fundus of the bladder, will occasionally cause an involuntary emission of urine, more especially when standing up right, which indicate a good labor, and happy uprising, from this state of sorrow and suffering, as before observed.

Epileptic Fits,—Assume a dreadful and alarming appearance, and may occur in every period of pregnancy, from accidents or otherwise: and are commonly attendant of the greatest danger, which is increased as the woman advances in her pregnancy.

Causes.—Irritation of the womb, from too great distention: a large fœtus, twins, triplets, &c. or any irritating cause; sometimes they are hereditary, or have descended from the parent to the child; or they may arise from frights, blows, or falls, and more particularly, when the brain or belly may have been injured; violent passions

of the mind, hysteric affections, repeated debauches, contagious diseases, &c.

Symptoms.—Pain in the head, unusual lassitude and weakness, stupor, drowsiness, dimness of the sight, palpitations of the heart, flatulency, languid pulse, and pale countenance: sometimes however, the fit comes on without any of these preceding symptoms, when the patient suddenly falls down, and is violently convulsed; the body, extremities and eyes are contracted and distorted, foams at the mouth, produces various frightful gesticulations, and an involuntary discharge of stool and urine follow.

Treatment.—If the vessels appear much distended, bleed, give opening medicines, a cool spare diet, exercise and free open air; if the stomach appears loaded with bile, or any other acrid offensive matter, a gentle puke of ipecacuanha or such like may be administered with advantage; but should be very cautiously employed on these occasions.

If the patient be nervous and debilitated, a very serious distinction, and a very opposite mode of treatment is required; the spasmodic affections must be allayed by medicines of the atispasmodic class, as musk, opium, castor, valerian, assafætida animal oil, camphor, cinnabar, &c. frequently repeated emollient glysters with some of the above ingredients combined: the legs and feet soaked in warm water, or the warm bath: if a stupor or insensibility exist, blisters, mustard poultices, &c. may be applied to the feet, legs or hands, with setons and issues kept open: the flowers of zinc have been much recommended and approved in

these cases, from one grain to three, three or four times a day.

The constitution is to be restored, with bark, steel and warm nervous cordials, cold bathing, exercise, open air and a light but nourishing diet.

OF A FALSE CONCEPTION, OR A MOLE,

Which generally consists of some diseased collection of solid or fluid matter, as dropsy, polypus, wind, &c. (which see) to these may be added, the dissolution or destruction of the fœtus, after being once formed, by obstructions to the circulation thro' the funis or navel string, or some such accident by which the embryo is deprived of future nourishment, life and growth: this, however, is improperly termed a false conception, as the conception and formation were perfect, but afterwards destroyed.

The secundines or after birth, is also sometimes retained in the womb, and becomes augmented by the occasional additional accumulations of coagulated blood, and is at last expelled in an indurated and enlarged state of a pulpy, fleshy, fibrous like mass.

The coagulated blood retained in the womb after delivery, or immoderate menstruation may become compressed by the contractions of the womb, into a fibrous like mass, which may also be further increased by additional menstua, or other matter; and from the enlargement of the belly, suppressed menstruation, pains in the head, and occasional sickness and vomiting, tumefaction,

hardness, and enlarged breasts, sometimes separating a glairy fluid, the abdominal tumor rolling from side to side, with the motions of the woman, all contribute to confirm her in her opinion of real pregnancy, until time discovers the mistake,

The destruction of the fœtus with its membranes or merely coagula, are generally expelled, and no dangerous consequences may succeed; but the former diseases are of a more serious nature, and require our nicest discrimination and care.

ABORTION & MISCARRIAGE.

By abortion may be understood, the untimely or premature expulsion of the fœtus: by some this is divided into a miscarriage, of the early and latter months; the first is called untimely or abortive; the last a premature birth: which if at, or after the seventh month, the child may bear the pressure of the atmosphere and live.

Causes.—A detachment partially or totally of the after-birth, or secundines, from the side of the womb internally: which is succeeded by violent floodings, and if they cannot be timely checked, soon terminate in abortion, and death of both the mother and her offspring: but as these are but secondary causes, or proceed as effects from others it will be necessary to inquire into the first, or original cause which may bring on a detachment of the after birth, and floodings; and then proceed to examine these as effects of a primary or first cause: and afterwards become the causes of

secondary, or ultimate effects, in their regular order : and these may be again divided into external and internal. And first, of

The external causes,—Are blows, falls, hurts, frights, violent passions, as fear, grief, surprize, joy, anger, &c. to these may be added violent motions, as jumping, dancing, rough riding, raising heavy burdens, medicines of strong operative properties, as strong vomits, purges, and all that stimulate to uterine contractions, &c.*

Internal Causes.—A dead fœtus in utero, which is detected by the following symptoms :

The fœtus loses its motions, and is no more felt, except as a loose dead mass falling from side to side, as the motions of the mother may be varied : the breasts become flaccid, pendulous, and cold ; the belly also partakes of the coldness and a subsiding of its tumor or enlargement : sickness, fainting, rigor and cold sweats ; a discharge from the womb, highly putrid and offensive : however none of these signs either single or entire afford ample positive proof, of the death of the child ; but should always lead us to suspect it, and regulate our actions accordingly.

Method of Treatment by way of prevention.—Women subject to miscarriage, should continue within doors, until after the fourth month of their

* I feel constrained to note here the horrid depravity of human weakness, in wretches lost to every sense of religion, morality, and that mutual attachment from a mother to her offspring, and every tender tie in nature, seek the means to procure abortion : nor are there wanting, in the other sex, infernals wicked enough to aid their endeavours.

pregnancy; and be permitted the free indulgence of the sofa or bed: avoid going upon the water, or any other situation that may subject them to frights: tight lacing is also very hurtful, also the passions of the mind should be particularly guarded against, by preserving a serenity and evenness of temper.

Pregnant women longing for any unnatural substance, except extremely inconsistent, may be indulged, as a peculiarity of humors separated in the stomach may indicate the propriety of the thing desired.

Miscarriages are generally found to occur between the third and seventh months of pregnancy; periods requiring particular guarded care, by prudentially avoiding every thing likely to disturb the system: the body to be kept open by mild soluble medicines: endeavour frequently to pass the water to prevent the compression of the distended bladder and intestines upon the womb, and assist to excite it to contractions.

Vomiting, during pregnancy, should not be practised, unless symptoms indicate their real necessity: when they should be given with the greatest mildness and caution.

Bleeding may be used sparingly when symptoms require it, but with extreme caution for fear of producing debility.

If the patient be prejudiced against bleeding, we should endeavour to overcome it, by convincing her of its real necessity.

Treatment — When symptoms of abortion or premature birth are apprehended, the patient should immediately retire to the sofa or bed:

All tightness in the dress relieved, and blood may be drawn from the arm, according to the strength of the patient, and urgency of the case: give nitre combined with mild opening medicines, and occasionally an opiate to allay irritation and spasms: the bowels to be kept open, by soft emollient injections, in small quantities for fear of increasing distention; a free open air, if dry, should be permitted through the patient's apartment, but the current not immediately over the bed, and the room darkened, as much light acts as a stimulus, in this case, should be carefully avoided in every form.

If on the contrary, the patient is very debilitated and irritable, a contrary mode of treatment will be necessary to be pursued: bleeding must not be attempted, the diet nourishing and increased, to which may be sparingly added occasionally light wines of the astringent class, as claret, diluted port, and other cordials: the irritation obviated by opiates, and styptics of colothar or burnt vitriol may be applied to the mouth of the womb, and cloths wet with vinegar, may be applied to the genitals, pubes, belly and loins: sugar of lead in solution, given internally in large doses, of from one grain to three or four has been recommended, and used to much advantage.

If the flooding continues, in spite of every endeavour to the contrary, recourse must be had to immediate delivery; by attempting an introduction of the hand, in the cautious manner before directed, and seek for the feet of the child, which must be brought down, and managed as in a footling case, (which see sect. 4) when the woman is

to be treated with opiates, spermaceti and other restoratives, in every respect as after a birth at full time.

The fœtus at any time previous to the fifth month, will rarely require manual assistance to extract it, the contractions of the womb itself, and the slight opposing force, met with from the smallness of its bulk, distends not the fibres sufficiently to impede its expulsion: however, this is found not to be the case at more advanced periods.

SECTION IV.

PRACTICAL MIDWIFERY.

Labour has generally been divided into three stages, viz.

First, The coming away of the liquor amnii, or waters :

Second, The expulsion of the fœtus, or child :

Third, The extraction of the placenta, or after-birth :

But these three are sometimes not distinct, but confounded with each other.

Dr. Lowder records a case of a woman who had the fœtus, placenta and membranes, with their waters, come away complete, and the woman did well, but this is a very rare case.

Labours are also divided into three distinct classifications, natural, laborious, or lingering, and preternatural. -

Natural labor, when the head presents at the full time, and the delivery completed in a reasonable time, by the efforts of nature.

Laborious or lingering, when the birth is protracted beyond the usual time, or cannot be accomplished without extraordinary assistance.

Preternatural, when any part of the fœtus presents except the vertex, or crown of the head.

The good women, further distinguish labours into sick, sleeping, wet and dry.

The two first of these, I need not describe.

By a wet labour, is generally understood, when the membranes burst early in the labor, and the liquor amnii continues coming away in continued small repeated quantities, during the whole period of parturition: and they esteem it a never erring mark of a protracted labor: which is generally found to be the case.

By a dry labour is understood, when the membranes do not give way until their proper time, and the laceration is from side to side, and the waters are immediately and entirely evacuated; and delivery generally soon follows.

In different periods and countries women are delivered in different situations and positions, from which they are not favorable to any deviation, in short, they appear distressed and make a formidable opposition, if any such thing be suggested: the practitioner must therefore accustom himself, that he may acquire an expertness and familiarity to all their different modes, for he will find it always much easier to give way himself in particulars of this kind, than attempt to stem the tide of opposition and prejudice; which after a little experience he will find to be no difficult task.

The nurse will sometimes request of the practitioner, even if a male, his instructions how the bed should be guarded! which is a thing, in itself, trifling and indifferent, and every old woman has a competent knowledge of. It is best to resign it to her superior judgment in this particular as a part of her province, and compliment her in permitting her to order as she thinks best, which,

by the way, she will do, however you may labor to instruct her to the contrary: it is a trap offered to detect your depth and experience, which, if you happen to be of a new fledged bearded appearance, they will use many such snares to discover. I have frequently, when young in years and practice, been very unenviably situated by these little artifices, however, experience and grey hairs have now placed me tolerably above their reach, and they will you, if you are penetrating and prudent: they expect you should be conversant in this and many such other trifling contingences, or they strongly suspect your ignorance in matters of more importance; and frequently will not hesitate to say so, this you must put by in the best manner your ingenuity can devise, resistance or high toned language is vain, especially in a young man. Age is sometimes staggered by it, to youth it would be perdition! I would very willingly lead you through a knowledge of all the etiquette, & modes of contending with it, but I freely acknowledge it is not in my power, it is in the book of long experience I have learnt that portion of it I possess, but cannot communicate it, by pen or speech; it is there you must learn it. It is this certain something, experience possesses and cannot convey, that gives age such advantage over youth; and causes the councils of the one to be heard with serious attention and implicit confidence, whilst the other is regarded with suspicion and doubt.

The sutures of the head are sometimes ossified or grown together at the time of birth, which is found to be a great embarrassment and retarding

of its extraction: this is discovered by making pressure upon the part presenting, i. e. the part first discovered by the touch; when the bones of the cranium are found to produce a peculiar kind of noise or sensation, by riding upon and rubbing against each other, similar to the cutting of a cork: but if ossification has taken place, they are rendered incapable of producing these motions or sensations.

OF PRESENTATION:

Or the part which presents, being the part first discovered by the touch of the accouchier: which may be the same, and yet the position of the foetal head be essentially different: per example, the face of the child may be towards the pubes or sacrum, or to either side or diagonally, and the vertex or crown of the head be the part presenting; and so of most other presentations.

A natural presentation, or what is commonly called when the child is *right* and *straight*, is when the vertex presents, and the face progressing from a lateral to a posterior position; which position and progression is discovered by examining occasionally the sigittal suture.

In a face presentation, which is so strongly marked by the features, as not to be mistaken, consequently needs no description: the chin of the child, is generally towards the pubes or belly of the mother; and the farther the chin is from the breast of the child the better: in a natural presen-

tation the closer they are in contact the more advantageous, for reasons which will be hereafter explained.

It is a bad case, when the chin of the child, in a face presentation, is towards the sacrum or back of the mother; but probably never occurred. Dr. Smellie, in his plates on midwifery, gives a drawing, representing the depression of the skull, in its passage under the pubes, but he never met with it.

It also is a very unfavorable position when the forehead presents, where the greatest diameter of the head, viz. from the chin to the vertex, becomes wedged in the narrowest part of the pelvis, and will generally be found to be best restored to a face case, by bringing the chin forward, if it be towards the pubes.

The breech and shoulders are the parts most commonly mistook for the head; but if accurately examined their characteristics are found so distinctly marked as to need not explanation. The armpits detect the first, the fissure between the buttocks and privities sufficiently decides the last.

OF THE FUNIS UMBELICALIS, OR NAVEL STRING,

Which is a vascular cord, continued from the navel of the child, to the placenta or aftercake; and is the only communication between the mother and *lætus* during pregnancy. This cord is made up of two arteries and one vein; these vessels are sometimes continued in parallel lines,

while in other instances, they assume a contorted appearance: the interstices of the vessels are filled up with a gelatinous substance, or mucus, deposited in membranous cells, which serve to prevent obstructions in the circulation of the blood through its vessels from compression, or sometimes the changed positions of the child, while in utero will form a knot, when, were it not for the elasticity of the intervening mucus, the circulation would be stopped, and the destruction of the child's life, be the inevitable consequence.

This cord may be in length from one foot to a yard or more, though commonly about two feet, its thickness also, which is dependant on its intermediate mucus, is subjected to much variety.

The funis being continued from the navel of the child, is commonly inserted into, about the middle of the after birth; but sometimes, it is attached to near its edge, which is, by some, esteemed a more favorable attachment for the separation and extraction of the placenta. Dr. Lowder exhibits a preparation of the funis originating from the side of the belly of the child.— There is found also in the navel cord, a membranous canal, through which the urine passes from the bladder of the child, before its birth, called the urachus: after the birth, the urine takes its natural course, consequently, this tube is no longer necessary, when it becomes a solid ligamentous cord, and through life acts as a suspensory ligament to the bladder.

OF THE PLACENTA, OR AFTERBIRTH:

Or Secundines; is so called from its supposed approached resemblance to a cake, and is a large vascular, rounded substance, flatted on its sides; of a membranous or fleshy appearance. Its substance is thick in the middle, or where the string is commonly inserted, and gradually grows thinner as you approach its edge; from which its membranes are given off, and are found to line the whole of the internal surface of the womb, forming a complete membranous bag containing the child and its waters: these membranes, more particularly in advanced pregnancy, are found not closely to adhere, when consequently a fluid will sometimes be found collected between them: the outer will sometimes burst, and this fluid escape, which has been called the false or bye waters; and no ill consequence ensue.

These membranes, where originally divided into two only, viz. the chorion and amnios, the first immediately lining, and in contact with the internal surface of the womb: the latter on the inside of the chorion completely enveloping the fœtus and its waters: but later physiologists have discovered the chorion to be composed of two layers of fibres, the outer spongy chorion, Dr. Hunter has called decidua from the Latin, de from, cado to fall, or caduca, which has the same signification, from the membrane after the ex-

traction of the placenta being found to fall off, and left to be expelled with the cleasings.

The internal lamina of this membrane, he has been induced to call decidua reflexa or true chorion from its seperating from the outer tunic at the edge of the after-birth, and reflecting an outer covering, which is continued with the amnios along the funis or navel string: these membranes are found to be vascular, spongy and rough.

The Amnios—or inner membrane, is of a transparent fine texture, but tough; internally smooth, externally rough, where it unites with the former membrane, which it is found to line throughout, and is continued over the surface of the after-cake and along the outer surface of the funis, to which it is firmly united, and affords an outward cover to this membrane, and surrounds and contains the child and its waters. * To the above membrane has been added by some, the allantois, or urinary membrane. Dr. Hunter, with others of equal celebrity, have denied the existence of this membrane in the human species, and avow it is to be found in the brute only. While Dr. Hale says, "if you first find the hole, whence the urine came forth, if the allantois is too much torn, you may blow up this membrane with a pipe to its dimensions, and you can separate much of it from the chorion." And this opinion is strengthened by Dr. James, and de Graaf, and is said to retain the urine which is conveyed from the bladder by the

* See Dr. Wm. Hunter's beautiful plates, on the gravid uterus.

urachus, and is situated between the amnios and chorion.

Liquor Amnii—or the liquor of the amnion, or waters, is a serous kind of fluid, and has many uses; it is found in the early months, thin, transparent and limpid; and in more advanced pregnancy, it becomes of a thickened, ropy consistence, and more opaque and darkened in its color: is also diminished in quantity as the pregnancy advances: The embryo floats in it and is entirely surrounded, which preserves it from the ill effects of compression, from external injuries: which is beautifully illustrated, by placing a wax feather in the centre of a bladder of water, and making compressions in different directions externally, when the feather will remain entire and unhurt, by the compression, the support afforded by the fluid being equal on all sides; but immediately it is withdrawn the pressure of the atmospheric air, which is unequal, destroys it. Compressions and injuries of this nature are continually made on the womb or its contents by uterine and muscular contractions, falls, blows, &c. and while the membranes remain entire, and the waters retained complete, the fœtus is preserved and nourished: but immediately these escape, the compression, acting directly upon the surface of the fœtus, the consequence is, it is either expelled or destroyed.

The waters at the time of labor, have a further use, in dilating the mouth of the womb, (and afterwards bursting its membranes) escape, and in the evacuation wet and lubricate the passages for the expulsion of the fœtus, which is thereby considerably facilitated.

Some have asserted, the child takes in a quantity of this fluid for nourishment, during its residence in the womb; on account of its becoming diminished in advanced pregnancy: that the fœtus may absorb or take a small portion by its surface, I will not take upon me to deny, but its saline or salt properties render it very unfit for nourishment.

OF THE SYMPTOMS OF APPROACHING LABOR.

Anxiety and fears for their well doing are commonly present with women at these periods: and indeed, this dejection of spirits is not confined to the human, but brutes evidently partake of it, seeking for solitude and retirement, and refuse every proffered aid.

A humane sympathy would lead us to soothe their sufferings, alleviate their fears, and encourage a patient confidence of her well doing, by a tenderness and attention to her complaints.

A woman's fears and anxiety, may frequently prevail upon you, to attempt her relief, before nature has so far forwarded her work, as to afford you the power of assistance; when your interpositions are injurious and unavailing.

The falling of the abdominal tumor, or burthen, as it is commonly called, is esteemed also, a symptom of approaching labor; with pains in the loins and back, attended with great restlessness: Rigors, or chills, in which the heat or powers of the body, are disposed to contribute their assis-

ence towards forwarding and completing this great effort of nature. Stranguary, or suppression of urine, and constipation, or obstructions of the bowels are symptoms of labor, caused by the head of the child descending and compressing the neck of the bladder and side of the intestines, which however will be by every prudent woman, who wishes to have an easy safe labor, and speedy recovery, timely obviated; by warm applications and fomentations, sitting over the steams of warm water, and frequent attempts to pass urine; occasional mild opening medicines, and laxative clysters, to remove intestinal obstructions, which further lubricate and soften the adjacent parts, by which the rigidity of the fibres will be relaxed, and delivery facilitated.

Sometimes, also the pressure of the progressing uterus will cause involuntary emissions of urine during the pain.

The mucus, or glairy discharge from the vagina is found generally tinged or streaked with blood, or a small quantity of blood is alone discharged, which the women generally, and very properly term, a shew of labor: and is caused by dilation of the mouth of the womb, in which several small branches of vessels are torn and give out their contents:

It is requisite also to distinguish between spurious or false pains, and genuine or true pains of labor.

The former are found particularly troublesome at the night season, and abate through the day: they are irregular in their returns, and of trifling and short duration: They are produced by cos-

tiveness and uterine compression and enlargement; the mouth of the womb remains firmly closed and no mucus or shew is discharged from the vagina.

The symptoms of true, or real labor having been already described, it is useless to repeat them; further than, the mouth of the womb is found dilated, the membranes protrude forward and are found during the pain, tense and firm upon the finger, the pains return after regular intervals, and affect very sensibly, the back and loins, and are continued round the belly and pubes; the inferior extremities also partake of the affection, and instances almost general afford abundant proof that no part of the system is excepted. If in the stomach more particularly, it produces vomiting; in the brain convulsions, and so of the other parts: and as the labor advances, the pains become more frequent and strong: till at last the intervals scarcely admits of being distinguished, and these are called by the good women the linking or bearing pains, when delivery generally soon follows.

In the earlier periods of labor, the woman generally cries, moans, becomes petulant and impatient, perhaps accuses you for want of assistance and relief, and leaving her to suffer, when she conceives it may be in your power to remove it, and intimates her sufferings are greater than women, have borne before her, and appears at times tinged with vehement accusations against you; which you must bear patiently and in good part, this is a critical moment with the young practitioner, and your actions and deportment will be as

as critically observed, by the attendant women, and their opinions formed accordingly of you: be especially careful that no irritation ruffles your mind, and nothing like reproachful returns escape your lips, but let tenderness, delicacy, and sympathy govern all your actions; endeavor to impress the mind of the poor sufferer, and her attendants, with your anxious care and good wishes for her service and safe delivery; that you sympathetically share in her pain, and would equally rejoice (if it were possible) in her recovery: Remember! I beseech you, *remember!* her actions and words are not, at this time, the effusions of cool reflections, but of a mind much disordered by suffering, and look upon her, and act by her as she deserves, as an object of tender pity and compassion, she will abundantly repay you by her gratitude and blessings after her delivery has been safely effected, and what is still more, the consolations and enjoyments in your own mind for having thus conducted yourself, with the complaisant looks of your patient, with sweet infant on her arm, declaring, and perhaps verbally pronouncing (next to her God and father of mercies) you, the saviour of the life of herself, and her beloved offspring; see her eyes glisten with a new, and perhaps till yet, inexperienced delight of maternal love and affection, a new and inexpressible glow of pure and seraphic fondness, till yet unknown, uniting her to the offspring and image of herself, or perhaps of her beloved husband, which she has just ushered into life and existence; if you have a soul, can these emotions escape you? they certainly cannot! if you are insensible of them, drop your

pursuit in this practice I beseech you—you are not equal to it, you are not worthy to be admitted to such superlative gratifications, and ought not to stand in the way of those who are capable of such sympathetic delights.

This my young friend is not mere theory, it is not the mere sallies of a wild and luxuriant imagination; but the effusions of long experience and deep reflections, and the delineations of practical truths; I would have you prize them as such, and profit accordingly. This flight I could pursue through volumes, it is inexhaustible, but let this suffice: now to my subject. As the labor advances and the pains become more forcible, she has a sense of lancinating pain, which is detected by an acute shrill piercing tone of voice, and these are called the cutting or rending pains; there is then, generally, a slight cessation, and the voice becomes more grave and deep, as the child progresses, when the parts dilate and she again raises her voice to its former, or perhaps increased piercing sharpness; that it sometimes appears to reverberate on the panes of glass in the windows, or upon such glasses as may be in the apartment; or otherwise she remains perfectly silent, except deep inward moaning, sweating at every pore and trembling at every joint; when violent and involuntary efforts of the system are exerted to expel the fœtus, and be delivered. There is then a solemn pause! or as the women sometimes express themselves, the divine presence seems to be especially present, to guard the poor sufferer in his great shock of nature, and soothe her sufferings in a momentary respite from pain, and per-

haps into a slumbering forgetfulness, to recruit the tone of the system: when the pains perhaps return in a slighter degree for the expulsion of the after-birth, &c. a circumstance with me always to be wished. I know not how the reader may feel affected, in studying the descriptions of the scenes just developed, but to me, while I am writing, they agitate the inmost recesses of my soul, from having repeatedly witnessed, and felt for, their actual existence.

These circumstances may appear insignificant and triflingly minute in a work of this kind, of professed conciseness; to me they are highly interesting, and may be turned to a good account by the experienced practitioner, by accurately observing them you may learn to judge of the progress of the labor, with nearly the minuteness and certainty of incessant examinations, and officious forwardness, which tend rather to retard, than forward the work, and leave behind excoriations, swellings, and soreness, which may have been prevented, but now remain for your own internal reproach and cure. Besides, these incessant examinations bespeak a greenness in practice, and an offensive indelicacy, in conduct.

I know this knowledge is not to be obtained but by long experience, and profound observations, words cannot convey it, reflections cannot fathom it: I have given you a general outline, I wish I could give you more, but sympathy and experience must complete, what theory can only point out; I have done my best for you and shall rejoice to see another do more.

After the membranes have been advanced as far as the outer aperture, if they do not give way before, I have always found it expedient to separate them, during the pain, with the nail of my fore finger, previously scraped sharp for that purpose; when the waters have been evacuated, and delivery generally soon follows; however, I would not recommend a forwardness to do this except nature seems tardy, and the progress of labor thereby unnecessarily suppressed.

This completes the first stage of labor, and the second commences by the head of the fœtus being found to progress forward, and occupy the place of the membranes before they gave way, or were lacerated, as described above.

The fontanel, or crown of the head, is found making its way from under the pubes, which may be facilitated by carrying the finger gently round the mouth of the womb, which is now found spread over the child's head like a tight cap or bandage, by which means its dilations are facilitated and the head forwarded: the contractions or throws of the womb are assisted by a slight and regular compression on the belly externally, which is perhaps better done by the woman herself, and is as good a position for her hands and arms as they may be employed in, and serve to keep her from improper attitudes: the contractions of the womb are further assisted by the actions of the diaphragm or midriff and also the abdominal muscles: The pains may now be permitted to have their natural and full effect, till the parts become externally swelled by the protrusion of the child's head on the parinœum, (or that fleshy portion be-

ween the parts of generation and the intestine) which now becomes put upon the stretch, and if not timely supported and assisted, may be lacerated or caused to give way by the rapidity and violence of its distention, which is productive of the most disagreeable consequences, and may continue long unhealed, and in some cases through life. The lamentable effect of this accident, is a division of the sphincter muscle of the anus, or termination of the intestine and inserted into the perinæum, and thereby rendered incapable to retain the excrements, which involuntary escape.

If the external parts are now sufficiently dilated, the head should be supported and kept back with the palm of the hand, and some unctuous substance, as sweet oil, hog's lard, goose grease, or fresh butter, applied and well rubbed into the perinæum and parts in extension, which will tend to soften their rigidity and assist the dilations: the parts clearly suffer as much distention as they can possibly bear, at every returning pain; therefore all attempts artificially to dilate them or to slide the perinæum over the head, is a pernicious mal practice, and tends much to induce laceration, which would have been prevented had it been omitted. It is a practice with some, to separate the perinæum with a knife or lancet to facilitate delivery, but such a barbarous attempt ought not to escape with impunity, for the reasons above recited.

It has been offered as an expedient with some to assist the progress of the child's head; but in general in a quick labor the head is disposed to advance before the dilations of the parts are suffici-

ently prepared to admit its passage, without injury or laceration: I should in these cases, invariably, be induced to keep back the emerging of the head, by an opposed force with the palm of my hand, as before described, against it, and permitting it to come forward in a very slow, easy and gradual manner; at the same time affording support to the perinæum.

The woman after the expulsion of the head finds an instantaneous cessation from pain and misery. It is recommended by some to bring the body immediately and directly forward, least it should suffer by its confined situation; however, later experience has proved this suspicion to be fallacious and prejudicial, and that it is better to wait for the returning action of the womb, when as the shoulders fall into the upper pelvis towards each side, being the longest axis at this part, it will be observed as they advance, they will make the same mechanical turn of a quarter section, and pass the external outlet forward and backward as the head had done before them: as this is an essential circumstance to attend to, to secure their safe passage without injury to the mother; the impropriety to use force in attempting their expulsion in a straight line, must appear obvious to common sense. The hips, if large, observe the same mechanical progressional change, and require a portion of the same care: as the shoulders advance it is still requisite to afford support to the perinæum, when we are to place the child in such a situation, that it may respire or breathe freely; keeping its head covered, and as soon as it has cried freely and forcibly, and the pulsation ceases

in the navel string, and not until then, it may be tied and divided; it must be obvious when we consider the change in the circulation of blood in the child, which takes place, at this juncture, in forcing its passage through a new set of vessels in the lungs now dilated and made free of access by respiration, and the aperture in the septum of the heart closed, by which it can no more take its usual course; the impropriety of immediately destroying the connection of circulation between the child and placenta, without allowing sufficient time for this important change to take place, which is when the pulsation ceases in the funis or string when it may be divided in the following manner, and the child given to the nurse or bystander.

THE METHOD OF DIVIDING THE FUNIS OR NAVEL STRING.

Several folds of thread or cotton, waxed flat like a piece of narrow tape, (which I sometimes use) or if round (which I think inferior to the first method) about the thickness of a crow quill, the flat thread or tape, not being so likely to cut, of which there is danger when the string is very rotten, which is sometimes the case.

The ligature should be made four inches from the belly of the child, a greater or less distance than this is found to be attended with many inconveniences; and a second ligature about two inches from the first on the side towards the mother, the intermediate space being previously emp-

tied of its contained blood by pressing it with the thumb and finger towards the placenta, when it may be secured with the ligature, by the operator or an assistant; these ligatures are to be tied sufficiently tight to prevent an escape of the contents, more than this is unnecessary and perhaps inconvenient, in endangering the cutting through of the string, which would be an awkward troublesome, if not a dangerous accident.

Some practitioners have thought one ligature on the child's side to be sufficient, as leaving the other untied will be attended with no dangerous discharge of blood on the mother's part, and that the placenta will discharge itself, become reduced in its bulk, less firm in its resistance, and thereby of easier separation: in this instance, I will not contend, but leave every one to act as practice and their own experience suggests: for my own part, I prefer the opposite mode, of using a second, or if it may be so called, a maternal ligature: as I prefer the placenta being gorged, to give it bulk and firmness, that the contractions of the uterus may act better upon it, and separate it more easily by its own efforts: besides, if so left without ligature, I have frequently found the remaining blood to escape upon the floor, bed clothes or operator: which has an indelicate and an offensive slovenly appearance, and may have been avoided by the above method and precautions.

Some have asserted that the string should always be tied and divided under the bed-clothes: but as accidents of tying and cutting off a part of the penis or fingers of the child has happened by this custom, I would always in this case, wish to see what I was about.

Of the extraction of the placenta or aftercake, secundines :—however, previous to any attempt being made to extract the placenta, it should be ascertained if there may not be a second child, to detect this (see twins) which is first to be delivered.

It always is best to wait from fifteen minutes to half an hour after the delivery of the child, before any attempt be made to extract the afterbirth, which time, the womb will generally contract, produce a slight pain sufficient for its separation, when very little force is necessary ; which would be further assisted by placing the woman's hands upon the belly with slight regular compression, upon the spot where the after birth seems to be attached, which is not always in the same situation.

The brute creation, are generally found after delivery, to separate the navel string with the mouth, and to assist the extraction of the secundines by drawing with moderate and regular force by the funis ; this may serve as nature's lesson to us, that this process may be assisted but not forcibly : therefore little more than to draw it away, if it were loose is all that is generally required : while much force, particularly in a weak and debilitated habit, may bring on a partial or a total inversion of the womb, or rather drawing it out of the vagina ; when very little hope of the patient's recovery remains : yet women have lived in this state, and the menses continued to flow, as mentioned by Ruysch, of Hollaud. A partial inversion of the womb is but rarerly detected and therefore our ignorance of the case prevents the

necessary relief being afforded. This is in a degree discovered by an inability to feel the womb globular externally, and is attended with pain, syncope, convulsions and death, if not timely restored; which is done by carefully and gradually introducing the hand and return it to its natural situation, when the hand is to be continued in utero, as a stimulus to its contractions, which we are to wait for, before it is attempted to be withdrawn: when this is discovered, the hand is to be regularly and slowly withdrawn as the womb closes upon or follows it.

This accident is commonly the consequence of too firm an attachment of the after birth, or as is commonly said, the afterbirth sticks, when it is imprudently and incautiously separated. I believe force is never necessary, but in cases of violent floodings and the woman's life is thereby in evident danger.

The hand of the midwife should be well lubricated with sweet oil, lard, or some such soft unctuous substance, and introduced gradually by the direction of the cord, with the utmost care and tenderness, when he will detect a soft spongy eminence or rising: he is then carefully to separate its edges all around, picking it with the nails of the thumb and fore finger, until the whole is detached: when it should be as cautiously and gradually brought away, in the direction of the vagina, together with its membranes, and coagulated blood, which are the principal causes of afterpains.

Sometimes the mouth of the womb, immediately contracts on the expulsions of the child, or

may be contracted in its middle, with the afterbirth in the fundus or bottom of the womb, this is called the hour-glass or figure of 8 contraction: in either case the hand is to be introduced as before directed; first inserting one finger, then a second, and a third and so on, until the whole hand has passed the stricture, when the afterbirth is to be firmly taken hold of in the points of the thumb and fingers, the hand preserving its conical figure, when it is to be brought away as before directed.

Perhaps once in a hundred times the string will be found so tender or rotten, as not to admit the necessary force to bring away the afterbirth: when the hand must be introduced as before directed and it must be extracted.

Some have recommended the afterbirth and its membranes to be left to nature to expel, which I believe she would generally do; but if it should happen to the contrary, putridity, spasms, convulsions and death would terminate the case as the effects of the fatal omission.

Women are also generally solicituous and uneasy until the afterbirth is away, conceiving, very justly, all may not be well: it is therefore, a point I should surely not omit to complete, before I left my patient.

OF DIFFICULT, LABORIOUS OR LINGERING LABORS.

Labor is generally admitted to come under the above terms, when protracted beyond its usual

duration, in natural cases: per example, twenty four or thirty hours.

From whatever cause it may arise, either in the mother or the child, or secundines: these causes are very numerous, as, erroneous treatment, rigidity of the parts of the mother, dryness, constrictions, tumors, distortions, &c.

In the child, from an increased bulk of the head, ossification of the sutures, the head not naturally situated, broad shoulders, &c.

If the labor be protracted by debility or weakness in the mother, so that the strength of the pains, are not sufficient to expel the fœtus, they should be allayed by an opiate; the effect of which will procure sleep, in which the parts will dilate, and the child measurably progress: strength will be restored to the patient, and vigor to the pains, sufficient to complete the intentions of nature with ease and safety.

If a rigidity of the parts should be the cause of a lingering case, with a dryness, artificial means are to be employed, as lubricating with soft pomatum, hogs lard, or injections of warm oil, or such like common house glyster, of gruel, broth, or flaxseed tea may be thrown up into the intestines, which will commonly procure discharge, of the contained hardened dried fœces, and assist to lubricate and relax the rigidity of the parts adjacent, and thereby forward the expulsion of the fœtus: indeed, injections of this kind should not be omitted, to be occasionally thrown in in all lingering cases; their advantages are too obvious, to every experienced practitioner to be denied.

But if the woman is of a full plethoric habit,

with a hard pulse sufficient to bear the lancet, and the rigidity of the parts do not readily give way to the above treatment, a copious bleeding, from twenty to twenty four, or thirty ounces of blood, *ad deliquum animi*, or until she becomes faint, will speedily and almost universally answer the purpose: the parts will be found most miraculously to relax and dilate and delivery follow very timely: I invariably do it where the pulse and constitution will permit, and am never disappointed.

I had very lately a case in point, the wife of Thomas Lloyd, shoemaker, the woman of a low stature, full habit and a rigid firm fibre, I found the mouth of the womb rigidly closed, and the child bearing against it: I proposed bleeding, giving her a full assurance of success; nothing could induce her to submit, though I had her arm tied up, and every thing prepared for the operation; this was about nine in the evening when I did not doubt but I should be able to retire timely with my family to rest; I had to desist, the labor was violent, the throws vigorous and continued: I remained with her till about two, when no advantage appeared to be gained, I tied up her arm again, it was in vain, nothing could overcome her prejudice to bleeding, she would sooner suffer a whole night of hard labor, than submit to it. I retired home and desired her not to disturb me, I called upon her about nine the next morning, the labor as severe as last night and no apparent progress, I again tied up her arm determined in my own mind to bleed to her, but I know not, if I persisted but she would have gone into fits, I had to desist,

and left her and declared I would call upon her no more till sent for, thinking the efforts of the system in the end would relax itself. I was sent for at nine in the evening, when her pains were excessive, but the rigidity still inflexible, I tied up her arm again, took the advantage of a pain, struck a vein, and it bled like a fountain: I took about thirty ounces of blood, when she began to change color and the pulse became soft, I stopped it, the parts dilated and the labor well and safely over in one hour; and I had no further trouble with her. This case without any more, (which I could give if required) is proof positive to the point, and admits of no controversy.

In weakened action, the uterine contractions are always much more effectually stimulated, by a draught of cold water, than by any spirituous or cordial liquor that may be offered: except the patient is very weak and faint, when they may be given moderately to advantage: otherwise they only serve to increase perspiration and ultimately weaken and relax the patient, reduce the efforts of nature, and destroy the strength of that operation, they were intended to invigorate and support. I am sorry to say, this deluded practice, is persevered in, and insisted upon by the deluded officiousness of ignorance; to the great prejudice of the patient, and hindrance of parturition.

These same objections cannot be opposed to cold water, which on the contrary, stimulates the womb to contract, invigorates and strengthens the patient.

A free admission of air into the room in these cases is found highly requisite and beneficial: and

not more persons should be admitted to be present, than are required in the assistance of the midwife; for the attendance and officiousness of superfluous persons may arise from a laudable motive of humane assistance, yet, when they are informed, that, so far from affording advantage, they very much retard the work, and increase the sufferings of the patient, they will surely be prevailed upon to withdraw, to at least an adjacent apartment where they may wait till their services are required: they are in the way of such as may be usefully employed, increase the heat of the room and of course the febrile disposition of the patient. Obstruct the admission and circulation of fresh air, so essentially necessary, and contaminate the air in the room with putrid effluvia, in short every way prejudicial.

In common cases, I never require more than two assistants: in lingering and difficult cases a fourth person may be needful, but rarely, if ever, any addition to these is requisite; the patient's spirits are to be kept supported during the whole process, her mind as serene as possible and her confidence of the practitioner's ability encouraged, on all occasions, for whenever a timidity or fearfulness is observed, it is suspected to be from a consciousness of insufficiency on the part of the practitioner; her hopes and exertions immediately flag, and the business is rendered difficult and lingering, which otherwise may have been timely and speedily over. However, let it not be understood from this caution, that it is here advised to run into an opposite conduct, and to encourage that roughness and violence, bordering on brutal

savageness; though when accompanied with the greatest knowledge and experience is always to be feared and condemned: but when ignorance, which is too often the case, goes hand in hand with obstinacy and officiousness, a ferocious and untamed tiger is not more to be feared.

There is a conduct and manner which steers between these extremes, and is the only one possible to recommend the practitioner to the approbation of all, with or for whom he may be concerned: and this consists in mildness, gentleness, extreme delicacy, unwearied patience, a modest confidence to support your own efforts, and a sympathising manner and language, to support the strength, confidence and patience of the patient; starting no difficulties or apprehensions of danger where none exist, with a view to enhance your own credit and engage an high opinion of your superior abilities, a common detestable empirical trick, which the man of sterling merit could not stoop to, it can serve only to alarm, and produce that danger which prudence would wish to avoid: as such an attempt is intended to impose upon those incapable to detect the artifice, such a reputation is a false and unmeritted one, and consequently, by no means permanent.

Sometimes a rigidity or want of dilatation of the mouth of the womb, will cause a tedious and protracted labor: it is best in this case, to wait a while for nature's own operations, which will frequently serve in due time, but if she fails in this, the head of the child is to be kept back, and the fore finger of the operator, being first well greased, is to be carried around and under the edge of

the os uteri, which is found drawn over the head of the child like a cap, leaving only a small opening, you are then to carry the finger by repeated gentle efforts over the head when the labor will commonly proceed; gentle nausea or sickness will also further promote the success of this attempt, but I am firmly of opinion there is nothing equal to a free use of the lancet as before described where the case will admit.

An increased accumulation of fœces on the intestines, will sometimes measureably protract the progress of labor: they therefore should be occasionally removed by injections and otherwise.

The pelvis of the mother may be preternaturally small, or the child's head oversize and pitched upon the brim, which may cause a detention of delivery; and the head becomes apparently wedged in the passage, when the use of instruments are said to be absolutely necessary. This then leads me to a description of the various instruments, their use and manner of application, and afterwards to investigate proofs that (as I have long since asserted, in a former advertisement of this work) in natural cases they are not only totally unnecessary but prejudicial.

The instruments commonly employed in midwifery have been divided into the distinguishing names of, safe and unsafe i. e. harmless and injurious.

Of the first class, or such as are said to be employed without injury to either mother or child, are the forceps, single blade and blunt hook, these have severally undergone much variety, but as I utterly disavow the use of them myself, in all

natural cases, and the parts favorably adapted, I shall only attempt a general description.

Of the Single Blade—This instrument is said to have been the invention of the late worthy and celebrated professor of midwifery, Dr. Lowder, in London whose excellent lectures and instructions I had the honor and good fortune to profit by, and from which I collected the principal materials of this work, I blush not to own.

The single blade, or as it is commonly called Lowder's folding lever, approaches the form of one blade or side of the forceps, with this difference, the end or point to be introduced is more bent and open, and it has also near the handle a joint upon which it folds like a knife to a convenient size for the pocket. The doctor was so extremely fond of it, as to carry it all times about him; but those who esteem these instruments to be sometimes necessary, I would not recommend this precept; for like a man continually carrying, any injurious weapon, it is a strong incentive to frequent and imprudent use, and often leaves an irreparable injury only to be repented of, and be rebuked and disgraced for.

Dr. Lowder, says much in favor of this instrument, that introduced with expertness and firmly applied on the occiput or hind-head of the child, and antagonized by the fingers of the operator, on the forehead, they form a kind of forceps and possess much power and purchase. And the head is further advanced in a face presentation, it may be reversed and applied upon the chin, antagonized by the fingers as before. He lays down, as a maxim, "the head must be ad-

vanced, at least two inches in the pelvis before it can possibly be applied."

Few may expect to arrive at the dexterity and expertness the amiable professor possessed in the use of this instrument; therefore, few, if any, should attempt it; I would be very sorry to mention my worthy tutor in any other terms than those of veneration, for I really loved him, and shall ever cherish and revere his memory: but this is a child of his own, and if I may presume, to take the liberty with his name, which I do with the greatest compunction of mind; he had the weakness to nurture his invention, with a paternal fondness, his offspring, I think, little merited.

Of the Forceps—having two blades have much greater power than the single blade, and may be considered as artificial hands, capable of being introduced when the hands cannot pass, and are said to assist delivery when the powers of nature are insufficient.

It is recommended to introduce the blade in the left hand first, and always in the direction of the ear of the child, consequently this precaution presupposes a maxim "the accoucheur is never to attempt the introduction of either of these instruments till the ears of the foetus can be distinctly discovered, and carried by the finger safe over it, otherwise there rests a danger of the instrument, escaping between the ear and head, and cutting the ear completely off," when it ceases to be an inoffensive assistant; and it is much to be feared this accident has happened more than once. After the blade in the left hand is completely introduced, the other blade is to be passed in the same

direction over the former, on the other side, and carefully directed by the fingers of the operator's left hand between the head of the child and womb: Otherwise the instrument may escape on the outside of the mouth of the womb, between it and the vagina, and inadvertently forced through, when spasms, convulsions, and death would soon be the inevitable consequences. Pause here! and consider well the above, before you advocate their use.

After the blades are both properly introduced and placed in their true situations; they are to be locked: but great care is here also required that the locking of the blades be on the outside of the mother, otherwise some soft parts may be included and excruciating pains, and irretrievable injuries may be the consequences:

After the blades are thus fixed, they are to be secured by a fillet being applied and fastened upon their handles; you are to draw down during the continuance of pain, in the direction of the hollow of the sacrum, and during the intervals the fillet to be taken off or loosened, lest the continued compression on the head, may be productive of much injury to the child. If the woman has no pains, you are to draw down, as long and as frequent, as common pains continue and occur, and make also the regular intervals of nature.

The head to be brought forward from under the pubes, in the direction of the hollow of the sacrum in a zigzag manner, drawing from blade to blade, and whenever it is found to bear against the perinæum and produce what is called the perinæal tumor, an unctious substance is to be well

applied, the part supported during the passage of the head to prevent laceration: when the instruments are to be taken off singly as they were applied.

The forceps may also be applied in a face presentation, from the chin to the vertex, or crown: when the sides of the face are anteriorly and posteriorly, in which situations the blades must be applied in those directions; great care is requisite that both bladder and intestine are previously emptied, as the blades of the forceps in this case are found to press upon these parts.

Having thus ingenuously given you a description of the single blade and forceps, their methods of application and use, I have to acknowledge the account is taken from other authorities, and not from my own practical knowledge, having rejoicingly to declare, I never used them, though, I believe, I may safely say, at least one thousand children may have been born under my care, among whom, doubtless many cases have occurred that others would have thought them indispensable and accordingly introduced, and I believe the general run of my practice in this way, I can with gratitude and heartfelt satisfaction declare has been as successful as most men. The blunt hook, being used only in preternatural cases, particularly the breech presentation, it will necessarily receive a description under that head.

Having now gone through a concise general description of the single blade, and forceps, their applications and use: I shall proceed next to prove, at least, to my own satisfaction, according

to my promise, in natural cases, they are generally not only unnecessary but prejudicial.

In a common case when the head is so far advanced as to distinguish accurately by the touch, the ear of the child, I never found any great difficulty in applying the fingers to assist forward the remainder: but wait with patience it is astonishing how much is done by waiting patiently for nature's own efforts, and she will commonly complete the business without your extraordinary assistance: but it may be urged, the extreme debility of the patient, brought on by long and continued pains and exertions, when the pains may die away, and the life of the child in danger from remaining so long in the passage; and preserved by timely assistance with instruments; assure yourself, in this case there is no such necessity for fear, though the child may remain twelve hours in this situation, the parts are relaxed by debility either habitually or brought on by the exertions of a delicate habit, suffer no compression, and the circulation through the funis no way impeded: it is only in the plethoric; and firm fibre, where the mouth of the womb and other parts are rigidly and obstinately contracted, and no disposition to dilate, which is opposed by the violent and nervous efforts of strong uterine contractions, that the child's life may be endangered from its situation which was the issue in the case of Thomas Lloyd's wife, before related, (which see) when I doubt not, had I been permitted the use of the lancet, as I wished, it may have been preserved: but in this case a very opposite mode of treatment must be pursued, an opiate should be given, the

room darkened, and undisturbed by noise or intrusions, when after a sleep of a few hours, nature will be so much recruited as to finish the delivery, with very moderate assistance.

As I esteem my authority, by no means sufficient to discountenance the use of the forceps and single blade, I shall therefore add the opinions of such characters, of established abilities and extensive practice as will place my opinion of them, upon very firm ground, difficult to be displaced or controverted successfully.

The justly celebrated and ever memorable, Dr. Wm. Hunter, late professor of midwifery and anatomy, London, when treating on the forceps in his public lectures invariably sent for his man John, who served the doctor in some sort as a confidant, as well as a servant, to seek for his forceps and bring them: the servant's long absence in seeking them, generally gave the doctor an opportunity to enlarge and animadvert upon other subjects, which he seldom failed to do, to the satisfaction and edification of his pupils: when after a long and unsuccessful attempt the servant would return to declare his fruitless research, the doctor would request him to make a second attempt which would not be of less time, perhaps than the first, when he would, in some obscure place, probably find them, for the doctor never used them but upon these occasions, and on the servant's return, they would be exhibited nearly destroyed by rust, when the doctor would declare, "there gentlemen, you are my witnesses, by the state of my forceps, how seldom I have used them," then followed the precious confes-

sion, "I assure you gentlemen, in the course of my long and extensive practice, I never used them, but once in my life, and if you will forgive me that, I will promise you never to use them again." I wish not to be understood as stating this upon my own authority, as receiving it from the doctor himself, it was not so, he died before my time in London, but I heard my worthy tutor Dr. Lowder, repeat it in his excellent lecture, whose veracity I never once doubted. Dr. Wm. Hunter's name and character can receive no celebrity from my notice, it is so well known and justly revered in the medical world, as cotemporary, with Dr. Wm. Cullen, late professor in Edinburgh, and his rival in the profession, as to render my description of him unnecessary and impertinent: his great improvements in this and other branches of his profession, his invaluable and incomparable lectures and instructions can never cease to be the admiration of his students while living; of whom, the gentleman to whom I served my apprenticeship was one, and used always to speak of him with enthusiasm, and frequently wished, with, I believe sincerity, he may, for my advantage live to instruct me also: the Father of mercies was pleased to remove him hence: before his wishes for me could be accomplished, however his seat was ably and successfully replaced by his successor, my worthy and beloved tutor Dr. Lowder, for whom my affection would far be from throwing into the shade by comparisons, even with this great character.

Those who are induced to doubt the high authority of this professional character, let them

examine his works where he still lives, which are numerous and invaluable, his incomparable plates on the gravid uterus, and then they will no longer hesitate to declare, this authority is sufficient.

But lest more may be required, I will add a quotation from a work on surgery, by Benjamin Bell—vol. 6, page 444.

“The necessity, however, of using these instruments, I believe to be a rare occurrence; they are indeed frequently employed; but this proceeds, in a great measure from impatience on the part of practitioners; who often force the delivery of the child, when nature, if left to herself, would effect it in a much more easy manner. This fact is so certainly well founded, and is of such general importance, that practitioners of every description, and more especially those who are newly entering on business, should never lose sight of. But not meeting with that attention which it merits, both the forceps and crotchets are daily employed with too much freedom, to the disgrace of the art, and often with irreparable injury both to the mother and child.”

As it is generally allowed that all forceps are liable to slip or lose their hold, a variety of different forms have employed the inventions of their advocates, and each contend for the superior advantages of his own: but none have yet been discovered, I believe, infallible in this respect, although employed by the most expert operators: however, such as admit the application of the most points in contact with the parts to which they are employed, indisputably hold a preference, but that this objection may no longer exist, Dr.

Leake, a professor in London, has invented a pair of forceps to which he has added a third blade,* he contends positively for its superior advantages, in not being liable to slip when well applied: and who, in the name of reason doubts it? a child's head in a monstrous invention like them must be as secure as the man's in the pillory: but the application of them is the difficulty: what practitioner among us, dare make the attempt? I freely confess, I should shrink from it, if I was an advocate for the use, nor do I conceive it can be done with safety by Dr. Leake himself, but if he will shew me a case he will effect with safety with his hand-vice, I am disappointed in my own views, if I could not have completed it, with probably more safety, if I had taken more time without any instrument at all, if left to my sole management. This then my sisters is a consolation to you, but they are his invention and he must support them, at the risk of life, reason and experience.

It would be almost endless for me to attempt to enumerate, much more so as to describe the various inventions of this nature, this then may suffice:

Let it be remembered I am writing for youth and inexperience, the aged and established in the practice, are free to exercise their own judgment, and if they are found in opposition to mine, I am no way offended. What may be safe in the cautious hands of age and experience, may be very destructive in the rashness of youth and imbecili-

* See Dr. Leake's description annexed to his introductory lecture.

ty: to these, therefore, I conclude this subject with my friendly advice, and especially to those who have learnt to be theoretically advocates for their use.

To be careful they have a profound knowledge of the subject anatomically, and mechanically, a never erring expertness in their applications, accompanied with an extreme delicacy and tenderness, a great serenity of mind and unwearied patience.

I shall proceed next to examine a few more of the causes of retarded parturition, and modes of management.

A distortion or diminution of the cavity of the pelvis will sometimes cause a protracted labor (see pelvis distorted) nature sometimes in these cases, may be insufficient to finish the work without extraordinary assistance, this however, I believe to be a very rare case, as a full sized head, if time be given will mould to and pass a very small and distorted pelvis: and much injury has been repeatedly done both to mother and child by an officious interruption, when nature is always disarranged and retarded in her operations.

A thickness of the membranes which renders them so tough as to require much force to break, although the mouth of the womb may be sufficiently dilated to admit the hand of the operator, and may thereby cause a lingering case: the waters in these cases will sometimes escape from between the membranes and head of the child to the fundus or bottom of the womb, when the membranes become spread upon the head of the foetus like a cap, which prevents it sometimes,

being immediately detected, which is best done by examining for the hair of the head, when you will discover the smooth slippery surface of the membranes; which is to be divided with the nail of the operator's fore finger as before directed, and the labor will proceed afterwards in its regular order and the waters escape with or immediately after the child.

There are sometimes causes of protracted parturition which are not to be discovered, till the child is in part in the world: as the funis being short or winded once or more times around the neck or body of the child; the passages in this case may be free and the soft parts perfectly dilated, and the pains of sufficient strength, and yet the child makes little or no progression: or it may be stopped after the head is in the world: in these cases, the string is put upon the stretch and from the firm attachment of the placenta or afterbirth to the fundus or bottom of the womb, the resistance is equal to, or greater than the propelling force, of the throws of the uterine contractions, the use of the forceps, would then necessarily be suggested and employed by their advocates; and in this case, if the efforts of the operator to extract, were continued and violent till the resistance be overcome, what would be the probable consequences? the cord must give way, the afterbirth be prematurely detached, or the womb inverted:

The first accident would probably produce the death of the child, and either of the last would eminently endanger that of the mother.

Sometimes in case of the funis round the child's neck and the child detained in its progression,

after the head is born the lungs may be brought into action, the change in the circulation of the blood in the child have taken place in this situation, and it cries firmly; when the resistance draws the string so tight as to endanger suffocation.

If it should appear impracticable to pass the string over the head with safety, which should always be first attempted, with moderate exertions to this effect, but no great force to be used, for fear of increasing the danger, and producing the fatal consequences above noted. A ligature may be applied, in an eyed probe or bodkin upon that portion of the string round the child's neck by passing it underneath, between it and the skin, securely tied and carefully separated, or cut through on the maternal side, and the child then given into the hands of the nurse and the completion of the labor proceeds as in common cases.*

* A case of this kind was verbally communicated to me for my opinion, by Kezia Norris, (a scientific and judicious female practitioner, in this city) when she half promised me, she would oblige the public with her own observations on this and other cases: I would be far from purloining her practical observations, or unfairly to anticipate her prospects, as I am abundantly convinced of her abilities; to give them to the world from her own pen, in a much more acceptable and elegant manner, than I am capable of. I merely wish to encourage her to the attempt.

The public are now in possession of her prospects, her powers are generally, well known, and her friends will be anxiously expecting a gratification of their wishes to see the completion from her own pen.

OF PRETERNATURAL PRESENTATION.

Or when the child presents with any part or member of the body (the vertex or crown of the head excepted) it is justly esteemed preternatural, or contrary to the general order of nature: these presentations have been divided into three distinct classifications, viz.

The first comprehends the lower extremities.

Second, comprehends the middle, or where some part of the body or trunk presents.

Third, comprehend all those parts above the axilla or arm-pit.

Of one or both feet presenting, or as it is commonly called a footling case: in this presentation, if the toes of the child are found to present, in the direction of the back of the mother, there will no necessity remain for art to alter the position, and vice versa: we proceed then first to describe the management of this case.

When the membranes have given way, and the waters escaped, and both feet are obtained, we recommend them to be taken hold of with a napkin, and to be gently drawn down, during the continuance of pains; these interferences of the accoucheur, will be considered merely as assisting the efforts of nature, rather than hurrying, or wishing to complete the delivery without her concurrence; which would be productive of many serious and perhaps fatal effects: this then neces-

sarily with a prudent operator, will prevent hurry or violence; which would leave perhaps, dislocated or fractured limbs with the child, and lacerations with the mother: after the child has passed the knees, we are to go on in the same easy and cautious manner, shifting the napkin occasionally, to obtain a better or firmer hold, till the breech and hips are passed also: when we may wait the return of the next pain, as there will generally be found, a short interval or respite at this period; during which the womb is recovering its energy and contracting to the diminished contents; when the pain will return and evidently press forward the child; we are now to direct the palm of the left hand, to support the body of the child, and soft parts of the mother, when we shall soon detect the navel string; directed along the belly of the child, towards its face: if this should be found much upon the stretch, it may be well to introduce the fore finger, occasionally between it and the belly of the child, and thereby relieve it, by drawing it a little down, till the child is advanced as far as the armpits: when I generally give the feet (still surrounded in the napkin) to an assistant, requesting her merely to support them in that situation, while the arms are extracted; which are to be done in the same easy and cautious manner, as the parts already described: for, as yet, there are no reasons to be alarmed for the safety of the child, by the compression of the string and the check of the circulation of the blood through it, as it will still go on sufficiently free; when I take hold of the child with both hands, encompassing the chest, as I would were it lying

on the floor on its belly, with its arm over its head, and I intended merely to raise it up or support it; the fingers being directed over the paps, and the thumbs upon the shoulder blades; when the fore finger of the right or left hand, it is immaterial which first, but only, one at a time, is to be directed along the side of the neck, on the same side, pressing or drawing down the shoulder, which is to be continued along the upper arm, till we arrive at the elbow joint; then pressing forward along the fore arm, till the hand escapes; during this process, it may be well to remember, the natural formation of the joints, and proceed accordingly, in a slow and cautious manner, bearing in mind, that a dislocation or fracture may be the effect of rashness; which the women are generally officious enough to detect and disseminate to our disadvantage: this being completed, the hand of the operator, is to be restored to its original situation, of supporting the breast of the child, with its arm included; when he is to proceed, in the same regular and cautious manner, with the other extremity: this being effected also; the assistant continuing to support the feet, we are to pass the finger of one hand, which ever is most convenient to the operator, (I generally use my left) along the breast of the child, taking care now to avoid every accident of compressing the string, to discover the chin, which if a little too much to one side, is to be pressed with the fore finger, on the side of the jaw, into its most desirable and correct situation; when the finger is to be past over the front of the chin and mouth, to obtain if possible, a purchase

upon the nose : and by moderate pressure bring the chin down upon the breast : it is by some recommended, to get the finger into the mouth for this purpose : but I should always prefer the former, if practicable, there being a danger of dislocating the jaw, or drawing it quite off : as now the string begins to suffer material compression, and the circulation of the blood obstructed, it is requisite we should be more alert, but still no way rash in completing the delivery ; or the life of the child will soon be lost : we are then to request a second assistant, with her hand well greased to come on the opposite side (the operator being between the two assistants) and support the perinæum, while the first assistant with the feet, bends them at the knees, and raises them towards the belly of the mother : the operator places the first and second finger of the other hand, against the occiput or hind head of the child, presses it backward and downwards against the supporting hand of the second assistant, with his antagonizing hand with the fore finger on the nose of the child, brings the chin downward and outward, completing the delivery in a sort of segment, or semicircular turn of the child towards the belly of the mother, which will be further assisted, by occasional and moderate efforts, of the first assistant with the feet, as she may receive her instructions from the operator, she being entirely passive, as to any will or act of her own ; for violence or hurry on her part, may destroy as well as assist every precaution of the operator, and lacerate the perinæum of the mother, or injure the body or limbs of the child ; which she will not hesitate to

throw, if possible, the censure upon the operator's head, and draw herself out clear at his cost. In this last division, or extraction of the head, the navel string being on its side suffers entire compression, and the circulation of blood through it, for the time being perfectly stopped: if therefore the child be not born in about fifteen minutes, from the head first entering the pelvis, its life must necessarily be the forfeit: we shall discover this in its expiring struggles; a convulsive drawing up of its shoulders, spasmodic actions of the body and extremities, and a cessation of pulsation in the string, &c.

Having now gone through a concise view of this case, we proceed to its variations.

When only one foot can be discovered and taken hold of, we are to bring that down, secure it by a fillet, being fixed over the ankle, then seek for the other, after which proceed as above: but sometimes the second foot is continued up along side the head, in which case the delivery must proceed without it, as in a breech case.

Another variation is, where the toes present forward, towards the pubes of the mother; in which situation the child could never be born safe, unless it was infinitely below the standard, and the pelvis of the mother above it: let it be remembered, the extraction would go on perfectly well, till we come to the head; when the chin would be locked upon the sacral bones, the convex protuberance of the hind head, hooked into the hollow of the os sacrum, and the womb contracted close upon it, in which case, it would be impracticable to attempt to force it back; and impossi-

le to reduce it to its proper situation, because the longest axis of the head would have to turn in the smallest diameter of the pelvis, therefore in his unfortunate situation, the only thing left to be done for the safety of the mother, is to use the ratchet, and bring away the head by piece meal; which may have been prevented, and safely concluded, by the following timely precautions: when the child is advanced as far as the knees, one leg is to be crossed over the other, which will give the child an easy inclination to one side, which inclination is still to be assisted, as the child advances, and the complete change effected, by the time the delivery is progressed to the navel in which case the head will safely follow the turning of the body.

The footling case is subject to be confounded with the hand only: in which case the distinguishing marks of the heel, which the hand wants, and the toes which are much shorter than the fingers, together with the space between the thumb and fingers, which is found wanting in the toes: I will not suppose any so ignorant as to be incapable of distinguishing the right foot from the left, and therefore shall not attempt its explanation.

The Breech Case—which if accurately examined, is not easy to be confounded with any other presentation: its softness in comparison with the head, the fissure between the buttocks, the parts of generation, and anus, together with the coming away of the meconium, or the contents of the intestines, which are of a dark tar like appearance; this coming away of the meconium, some-

times occurs in a natural presentation and when unaccompanied with the other distinguishing characteristics, is no proof of a preternatural case, but rather that the child is dead, and the power of retention destroyed: in this case when the child is favorably situated, with its belly towards the back of the mother and the feet in contact with the head, there requires no change in its position by manual assistance: we are to wait till it is progressed so far, as to be able to introduce the large curve of the blunt hook, into one groin; when we are, in the time of pain to draw down, after which an attempt may be made, to introduce it into the other groin and bring that forward; and so on alternately in a zigzag manner, till we are able to get in the fore fingers, when we may lay aside the instrument and draw down regularly and together, till the feet fall out: when the labor must be finished as before described in the footling case. The breech case affords some variations, which will require distinct illustrations, as where the belly of the child is forward, towards the belly of the mother: and where one or both feet present with the breech, being bent at the knees and the heels in contact with the buttocks: When the back of the child is to the back of the mother, and the feet extended along side the head, as in the first variation in this presentation, we are to begin to turn the child as we advance with it in this double position, so as to get it completely turned upon its face, when we arrive at the arm-pits; when the feet will fall out, and the labor be completed as before.

When one or both feet present with the breech, with the knees up and bent upon the belly; it is best to leave them in their situations, and proceed as in a breech case only; they will not impede the delivery, and injury will probably be done to the mother in attempting to bring them down, and reduce it to a footling case, by the sweep the knees will require, if a full grown child, and the pressure they must necessarily make upon the soft parts of the mother, which may produce contusion, inflammation, mortification and death may close the scene.

Some have recommended a fillet, to be passed in at one groin and brought out at the other, between the thighs and belly of the child, this is a very good and safe method, and affords a permanent purchase, but it is not always practicable.

In applying the blunt hook, be careful the bend of it is something more than right angle, and the point smooth, blunt and straight; or there may be a danger of forcing its point into the belly or groin; or at least a disagreeable excoriation and inflammation may ensue: which once happened to myself, in consequence of which, I had the point of my blunt hook filed off and polished, and its extremity somewhat straightened.

This perhaps, is as far as a prudent midwife ought or is justifiable to go: as in the remaining classifications, the child will require to be turned, or so far altered in its position, by the interference of art, as to reduce them to footling cases; after which, we are to proceed in the same manner, as before directed in these cases.

On Turning—which is the operation of art, to change the position of the child, while it is yet in the womb, in order to reduce it to a situation, in which it may be extracted. It may be necessary in almost every position of the child; but generally the presentations of the head, inferior extremities and the breech are admitted to be exceptions. When the expediency of turning is determined upon, it will be requisite first to have the bladder and intestines perfectly emptied, by attempting the introduction of the catheter, and administering warm lubricating injections: as these parts are necessarily much exposed to suffer, by pressure in turning the child, and when enlarged by their contents, serve only, to rob the operator of that room or space, he will find so indispensibly necessary. When the position of the child is accurately ascertained, whether of the back or belly, lying cross ways or either hand: the back is known, by the spine presenting with a large protuberance to each side, formed by the head and breech: the belly is detected by the navel string and softness of its surrounding parts, this position is further discovered by the inclination of the ribs pointing to the breech. The hand is distinguished from the foot, by the marks already described; when it is ascertained precisely, whether the hand be right or left, of which a mistake one would think not possible to be made by a person of any discernment, and yet men of experience, doubtless have done it, and thereby been exposed to be, for a time foiled in their attempts; giving themselves much additional trouble, and the woman much additional pain, which in itself, to

a sympathising mind, is always painful and desirable to avoid.

By deciding correctly as to the hand, analogy leads us to discover the further situation, per example. If the woman lying upon her back, and the child presents its right hand, and I take hold of it, as I would the hand of my friend, I am assured the back of the child, is towards the back of the mother; which situation will require to be changed, in the turning for reasons above exemplified. If the child gives me the back of its hand, with the thumb pointing to the left side of the mother, I am assured the belly of the child is towards the back of the mother; and shall have nothing to do but to bring down the feet, and finish as in the footling case.

The shoulder is discovered by its prominence, the axilla or arm-pit, &c.

The manner of Turning.—When the presentation and situation of the child has been finally settled, the mouth of the womb sufficiently relaxed and dilated; the operator is to take off his coat and roll up the sleeve of his shirt of that arm proper to be used; being determined by the conformation of the child: the hand is to be well lubricated with sweet oil, hog's lard, pomatum or some such-like unctuous matter: I stop here to query, as to the manner of proceeding thus far, remember not to strip in public, or so that the patient may see you, there is a method or delicacy to be observed in this and all your movements, which are narrowly watched by the attendants, and severely commented upon, if improper or indelicate: can it be necessary I should instruct you,

how you should take off the coat? You surely would not proceed in the rude and boisterous manner of a bravado, going to box!! the impropriety and cruelty of such a conduct, cannot otherwise (even while you are reading the observation) but strike you with a sense of compunction for the error: the effect of such an indelicacy, would perhaps be the death of the woman. All things being prepared, and the right time arrived in which we are to proceed, the membranes are to be broke, if not already given way of themselves, (which is rather an unfortunate circumstance) and the hand introduced somewhat in a conical form, the points of the fingers being first steadily and gradually introduced, endeavoring, at the same time to prevent the escape of the waters, by the hand forming a sort of plug: the whole hand being passed, we are to carry it along the inner smooth surface of the womb, rather than the rough unequal surface of the child, when you are to seek for the feet, take a firm hold of them and bring them down, reducing the hand to as small a compass as possible, and extract carefully and steadily; if it should so happen, that both feet are not to be obtained, (which we should not too easily give up) we are to bring down the one we have obtained possession of, and seek for the other afterwards, by a second introduction: the foot of the first being secured by a fillet passed over the ankle.

The hand is to be introduced during the interval or cessation of pain, when the stimulus produced by its introduction, will cause pain to come on and the womb to contract; when you must rest

till the pain is over, still keeping possession of the progress the hand has made : and afterwards proceed as before directed.

When the hand is introduced and the womb by its contractions presses upon it, rest, but never upon the parts of the mother : you will not always succeed in the first attempt ; when you have made an effort, and cannot turn for the spasmodic actions of the womb, give a full dose of laudanum and the spasms will cease : therefore set a resolution, if you may be foiled the first attempt, you may succeed the second, if not the fiftieth, for I wont say how many efforts may be required : but however observe well to preserve strength enough to the fiftieth, to act further ; for if you exert all your efforts in the first attempt, and exhaust your strength, your reason will sink in proportion, and you are no longer fit for action, when a second practitioner will have to be called in to finish what you may have completed, by a prudential reserve. In turning we should always bear in mind the mechanism of the child's frame, and formation of the joints ; and always avoid the back, and endeavor to make the breast or belly, and proceed on till you come to the feet, or otherwise you will be foiled : in passing backward avoid the protuberance of the sacrum.

If the child has been long dead in the womb and in a state of putridity, which is sometimes the case, the foot may come off in the attempt to extract it, in this case also, when the child is extracted all but the head, take care it doth not stick upon the pelvis, but remember to have it in the most favorable position before you attempt to

extract, lest from its putrid state, it may come off, when perhaps there may be work enough for half a dozen practitioners to perform or women to bear.

Sometimes the head presents obliquely, or is pitched upon the edge of the share bones, and cannot be altered in its position by the efforts of nature: in the exertions of art in this case, we have no alternative but to turn; but this being the greatest alteration in the position of the child we can possibly make, great caution is requisite.

Sometimes there are parts which fall down before the head, as the navel string, arm, &c. some practitioners in the first case would always turn, and others again would never proceed to this extremity.

The defence of turning in these cases, is the preservation of the child: this has been by some designated a preternatural case, however we must bear in mind the additional danger the mother may be exposed to! therefore, in my judgment we ought to possess every favorable circumstance to justify such a proceeding, as to authorise us to endanger the life of the woman, for the chance of the preservation of her offspring: my worthy professor admits, without turning one child only, out of ten may be saved; when with it five out of ten are preserved: this is turning by choice and not necessity, when we do this, the woman should be in a good state of health, a sufficiency of room, the womb globular, the water recently escaped, and the feet near to the mouth of the womb: but if there should be any fever, in-

inflammation of the genitals, or rigidity in the soft parts, we should never attempt to turn.

The Piles, a stone in the bladder, or a morbid thickness of the substance of the womb, are all very great obstructions to turning :

The belly, breast or head of the child may be so distended by air, water, or some putrid fluids collected, as may render them expedient to be evacuated before delivery can be performed, as these children are generally dead, or very soon would die, if alive, there need be no great hesitation to perforate them for that purpose. A dropsical belly may be perforated with a common trocar, or pair of scissors, or the finger forced in at the navel, if the tenderness from putridity be sufficient to admit of it : the breast is to be managed pretty much in the same way : But the hydrocephalus, or water in the head, is a much worse disease, and more difficult and disagreeable to manage.

OF A PLURALITY OF CHILDREN, TWINs, TRIPLETS, &c.

These are suspected by the size of the woman during pregnancy, and before labor : by the groove or gutter in the centre of the belly, and an enlargement on each side : by quickening a second or a third time, according to the number of children ; distinct and separate motions at the same time, in different parts of the body ; but these signs are difficult of application, and not to be depended on : Those who wish a more minute description of these signs, may find them in La Mott,

a French author translated by Tomkinson, an old publication highly valuable for its practical remarks and applications.

The most certain time, and manner of discovering a second or third child, is at the time of labor, after the birth of the first; when the pains generally are renewed, or continued: a fresh water bag is detected, and the child may be distinctly felt, by passing the hand over the surface of the belly, when it is as evident as though I put two children into a bag, took out one and examined on the outside whether it contained a child or was empty: when soon after, the head or whatever part may be presenting, will soon be distinctly felt by the touch, and the labor should be permitted to proceed, as in a single child, agreeable to the rules before laid down, observing that the afterbirth of one child should, on no account be attempted to be extracted till the last child be born: and in all cases, never before an examination has been made, and the operator's mind perfectly satisfied of the existence of a second child or not: as in the case of a second child, a most fatal flooding would be the consequence, the womb not being capable of contraction, and closing the mouths of the vessels, pouring out their contents on its inner surface.

In Europe, in case of estate, descending (according to law) to the eldest son: where there are a plurality of children, it is expedient to distinguish the first born by a bit of ribbon being fastened to his wrist: but in this republic of liberty where every child has a child's claim, such a precaution may not be necessary.

Monsters.—We shall not consider these philosophically, but as they relate to midwifery: there may be a redundancy or deficiency of parts, but the latter we shall entirely throw aside, for supposing a child wants a head, its delivery would be no way obstructed by this, or any other mere deficiency, but rather facilitated; only it sometimes confuses our practice in determining the presentation, but in these cases, we are to continue our finger higher up, till we discover a part we know. These monstrous productions of nature, are generally of the female sex. Some have attempted to separate two grown together, but they certainly did not consider their conformation; they are generally in this case born prematurely: but sometimes it has happened, that two well formed children have been joined together, by the breast or back: if this should be the case they must be delivered either by separating or taking them away piece-meal; this operation is called *embryotomy*.

The Cæsarian Section.—Or as history reports, one of the Cæsars being taken out of his mother's side, the operation has received his name: and is esteemed necessary, when the pelvis is so distorted and narrow as to render it impossible to bring away the contents of the womb by the natural passages. Dr. Osborne, late a professor of midwifery in London, has laid down as a rule, that a child cannot be born in less room, than one inch and a-half

This operation is divided into the complete and incomplete, and is sometimes performed upon the living subject, with a view to save both mother

and child : and sometimes upon the dead subject, with an intention of saving the child only : which should be done immediately after the death of the woman. if the child cannot be brought away by the natural passages which should be always first attempted, in which case we should be certain of the death of the woman, before we attempt to operate.

The operation is performed, by making an incision through the *linea semilunare* (or a tendinous line, found about midway between the hip and the navel) of about six or seven inches in length through the skins and flesh, and into the cavity of the belly : then making a second incision through the substance of the womb, taking care to avoid the group of vessels, opposite which is situated the attachment of the afterbirth : this opening must be sufficiently extensive to take out the contents, when the womb (if in the living subject) contracts, leaving the wound not more than two inches in length : the external wound, is put together by the intercepted sutures and dressed according to art. This operation (if possible) should be performed before the waters are off, that the contraction of the womb may be more complete. Henry Cline professor of anatomy and surgery in St. Thomas' hospital, London, prefers the incision to be made in the *linea alba*, or that straight tendinous-line, extending in a direct line from the navel to the symphysis of the pubes ; because he says, " you can vary the situation, by an inclination to the right or the left, and thereby more effectually evade the part on which the group of vessels are to be found on the

womb; while your operation is more confined in the former." But as this is a surgical operation, I would refer the minute enquirer to Bell's system of surgery, or any other system more convenient or preferred.

SECTION V.

ON THE MANAGEMENT OF WOMEN AFTER DELIVERY.

Immediately after delivery, if the child has cried strongly and the navel string safely secured with a ligature of narrow tape or eight or ten threads well waxed, it should be given into the hands of the nurse or one of the attendant women to wash and dress, as will be hereafter explained in the next and last section: and our attention should be devoted to the mother: we should have prepared a dry warm cloth of several doubles, with the face of it well smeared over with soft pomatum, hog's lard or goose fat, which is to be applied so as to cover the whole of the passages, to prevent the admission of cold air, and to lubricate and heal any contusion, bruise or excoriation which the parts may have suffered during parturition; any clots or wet should be removed, and a dry warm cloth or napkin placed under her, to keep from her any wet cloaths, and a napkin folded of about eight inches in breadth, drawn moderately tight round her as low down as the hips, and spare bones, and secured with four or five strong pins, or strings prepared and sewed on for the occasion: and she be permitted to rest, half an hour upon her left side, with her legs kept close, to secure

the greased cloth firmly in its situation; and if she appears weak or much exhausted she may take a little weak warm wine and water, or caudle made of oatmeal or fine Indian meal; her cloathing at this period, must be regulated by the season, the temperature of the room, &c. however as many as will keep her from being chilly will be quite sufficient, by this it may be understood, I would wish her rather cool than otherwise; too high a temperature of heat would endanger fever, flooding or some other such-like disagreeable consequence: after she is pretty well recruited, her linen, petticoats, &c. that may be wet, and are wished to be changed, may be drawn down carefully over her feet, or fresh ones properly prepared be applied in their place: the woman at this time must keep herself perfectly passive and permit this to be done, without the least exertion on her part: when she may be replaced comfortably in her bed, and be permitted to rest; unless the greased cloth applied to the passages should have become wet by the discharges, when another well warmed and greased as before, may be prepared and applied in its place, the swath or napkin may also be examined, and if found to be loose, may be tightened or reapplied; over which a warm double cloth may be applied, upon the surface of the belly: the intention of this tight bandage, is to compress the viscera and the relaxed parieties of the body, to press the womb towards its original situation under the pubes, and prevent the blood which has been forced by the compression of the enlarged womb, into the head and upper parts of the body, rushing with too

much violence and rapidity (after this compression being so suddenly removed) into its original channels whose relaxed sides would receive an over proportion, and that in the head too considerably and suddenly robbed of its due quantity, which revulsion would be apt to produce faintings, convulsions and perhaps death.—Some people make use of a handkerchief or cloth tied round, which makes a very unequal and confined compression, like a rope: and is therefore by no means so proper as the napkin or broad bandage as above. This being done, we should next examine the after-birth, to see if it be complete, for if we omit it, we may rest assured the woman or nurse will do it after we have left the house, and if found incomplete and any thing serious happen to the woman, will make use of this circumstance, no way to our advantage: though generally nature will throw off with the cleansings, any portion that may remain, yet if it should be any considerable part, I should always introduce the hand, properly prepared, and remove it before I left the house.

It is always an act of prudence, to stay sometime in the house, say an hour: after the woman is put to bed, for fear of floodings, convulsions, fainting, &c.—

Inflammations or lacerations, of the soft parts of the woman, which may be occasioned by a severe labor, imprudent, rough, or too much handling; are generally relieved by plentiful discharges and sweating, which in these cases, should be encouraged, by warm diluting drinks and soups, be scrupulously careful, to avoid every thing but

of a heating quality, as wine, spirits, spices, &c. But if these occurrences should be in any violent degree, and accompanied with febrile action, it will be necessary to let blood, apply warm fomentations and poultices, and open the bowels with emollient injections, or some cooling aperient by the mouth, as cream of tartar and manna, soluble tartar, castor-oil, electuary of senna, &c.

If the injury done, should be so great, as to bring on total or partial mortification; in the first case, the woman may be soon carried off, but if partial, we must encourage the system to a separation, by bark, wines and light nutritious diet, when the ulcers must be deterged and healed, during which process it may be well to introduce cerated sponge tents, i. e. sponge dipt in melted wax, or lint wet with some vulnerary balsam, to prevent the excoriated surfaces growing together.

The perinæum, sometimes becomes lacerated, if but partial, soft poultices, or soft rags dipt in balsam and sprinkled with powdered bark: if complete, i. e. entirely across into the intestine, the sphincter muscle situated at the termination of the gut, has its action destroyed, and the patient is incapable of retaining the contents, which involuntarily escape, some authors have recommended two or three deep seated stitches to be applied, to prevent the edges rubbing together, and becoming callous; but I believe in consequence of the jagged edges, these would be found difficult to apply, and not likely to hold on account of the softness of the parts: therefore I would enjoin in this case, perfect rest, keep the bowels soft with a cooling nutritious diet, and if inflamma-

tion should run high, occasional bleeding may be necessary.

Perspiration, if to a violent degree, is prejudicial: but a gentle moisture upon the surface of the skin, is salutary: the linen therefore, should be frequently removed, and fresh aired, warmed, and applied.

Fresh air, if warm and dry, may be admitted with advantage into the room; but the current must not pass over the bed or patient.

The patient's drink must be gruels, broths, panna, beef-tea, sago, salep &c. Chicken and veal broths, which the women generally have an idea are rather opening, therefore, when we order them it may be said to be in part with that intention.

After the woman has had a good sleep, and appears refreshed, the child should be permitted the breast, though the milk may not be come, the child's sucking will solicit and help it forward: the first milk is both food and medicine to the child, as it possesses an opening quality, which is not found afterwards, and is of essential service to the child, in purging off the black stools, or matter called meconium, which has been collecting in its bowels, during the greater part of gestation: but if the milk is found not to produce this effect in twenty-four hours after the birth, it will be highly proper to give the child a little magnesia and rhubarb syrup, manna, castor-oil, or some such-like mild cathartic, that the bowels may be opened; for the meconium by being too long retained, becomes acid; producing sharp griping pains, convulsions, &c.

The women generally expect, and wish some medicine to be given, after they are in bed; and the most approved of, is spermaceti, in some form or other; it is a medicine highly proper, as it possesses balsamic, restorative and nutritious properties; and its innocence leaves no objections to it, therefore it is advisable and prudent to administer it: in short, the women are generally so prepossessed in its favor, that if you omit it they will take it mixed with sugar candy, the yolk of an egg, or in some other form.

Flooding—A certain quantity or discharge of red blood, after the separation of the afterbirth, is common and requisite: from half a pound to a pound and upwards, but if it much exceed this, and the woman become weak and faint, and the discharge still continue to flow, it is time something should be done, as the patient may be considered in great danger of soon falling into convulsions, which may terminate in death: and are preceded by cold extremities, and a pale countenance: This may be occasioned by too sudden a delivery, in which the womb has not had sufficient time to contract, and close the mouths of the bleeding vessels. Great debility and relaxation brought on by floodings or other debilitating causes during pregnancy—large clodders of blood or part of the afterbirth being retained, or a partial overtion, by two great exertions being used, in extracting the afterbirth.

Treatment.—Applications of cloths wet in cold vinegar and spirits applied to the pubes and back, the fire taken out, and all the bed cloaths removed, except the sheet, to bring on cold to the

parts, which assist in constringing and closing the bleeding vessels: linen rags or sponge wet with a solution of sugar of lead, allum or vinegar, in the form of a plug and introduced into the vagina, or even ice wrapt up in a rag, and introduced as above, and procure sleep by an opiate, which invariably checks it, if obtained, and pressure on the belly, to promote the contraction of the womb. Give internally some red wine, with jellies, soups, broths, &c. in small and frequently repeated quantities: after which the constitution is to be restored, with bark, wine, cordials, a light nutritious diet, &c.

Evacuations.—A woman, for the most part, should have an evacuation, or discharge from the bowels in twenty-four, or at least thirty-six hours after delivery, if not, some mild opening medicine should be given, as castor-oil, electuary of senna, or such-like; and if this is found not to procure the effect desired in six or eight hours, a warm emollient injection may be given.

Stranguary, or a suppression of urine—A woman ought to pass water in twelve hours after delivery, if not she should be assisted by kneeling over the steams of warm water, warm emollient fomentations, of mallows, mullen, &c. warm water applied to the part, in a bottle or bladder, and if these fail, recourse must be had to the introduction of the catheter.

After-pains—are caused by clodders of coagulated blood, which are retained in the womb after delivery, and produce irritation in the nerves and fibres of its inner coats, which create contractions or repulsive actions to throw them off, and there-

by partake of a degree of labor-pain, the mouth of the womb being closed, rather opposes the action of the womb, and increases the pains, which however are greater or less, according to the size of the coagulum.

The woman involuntarily presses upon the surface of the belly, which assists the contractions of the womb, and its mouth is forced to give way, when they escape, and she is relieved: more will afterwards frequently be formed, when the pains and exertions for their removal, will return; these however are more trifling than the former, on account of the womb continually contracting and lessening its cavity.

Women with their first children, are rarely troubled with them on account of the nervous energy and contractile power of the womb, being greater than at any succeeding labor, by which they are forced off, before they are well formed, and it becomes closed too quick for future collections. When the womb contains a large quantity of coagulum, after the extraction of the after-birth, it may be felt through the parietics of the belly externally, as large as a child's head, so as to lead the woman to suspect there may be a second child, but of this we cannot be mistaken, for if the afterbirth, was to be delivered leaving a second child within its cavity, a profuse flooding would be the immediate and inevitable consequence: beside the inequalities of the womb in this case, would direct our decision; whereas in a collection of coagulum, the womb is distinctly felt to be round, and of a less size: we should always be certain no disease accom-

pain it, but we may take it as a maxim, if there be no fever, there is no danger, and vice versa.

Diagnosis The after-pains are distinguished from inflammation, and the child-bed fever, by the pains being movable: The pains seldom continue longer than thirty-six or forty-eight hours after delivery.

The expansion of the intestines, after the contraction of the womb, will sometimes cause a little uneasiness, in which case, opium is the best remedy we can give, but never give it in too large doses, except there exists some very urgent necessity. Castor, and salt of amber, are very good substitutes for opium, when it cannot be taken. Dr. Lowder used to recommend the following draught, for the relief of the after pains: cordial confection, twenty grains; spiritous tincture of rhubarb, two tea-spoonfuls; laudanum fifteen or twenty drops; syrup, a table-spoonful, pennyroyal water, three table-spoonfuls, mixed and taken.

Flatulency--or wind in the bowels will sometimes cause a woman to suspect, there may be a second child; but the directions given on the last subject, will readily detect that error: when we may give castor oil, cathart salts, with peppermint water, injections, &c.

Of the Lochia.--It hath been observed already, that immediately after the separation of the placenta, there is always a gush or two of blood; which is found to diminish both in color and quantity, till it becomes a mere serum, after which it entirely disappears: this takes place in some, women in about two weeks, while in others it con-

tinues three, or even through the month: It should never be interfered with except it be in extreme cases, and symptoms of inanition or weakness are the consequences; when it may be checked with an infusion of red rose leaves acidulated moderately with vitriolic acid, or lime juice; and if deficient in quantity (which I am always solicitous to guard against) it should be encouraged by warm flannels applied to the region of the belly, the feet steeped in warm water, a little pennyroyal, motherwort or catnip tea, taken warm, if these are insufficient and the pulse become hard, the breathing oppressed with evident affections of the brain, as head ache, a sense of flashing in the eyes and threatening delirium, blood must be taken, and if necessary repeated, the bowels purged, and saline draughts in the state of effervescence or ferment, frequently given: If it be attended with fever and tenderness or extreme sensibility to the touch, it points out inflammation of the womb, which suggests the necessity of our strictest attention, and most judicious conduct.

In inflammation, fevers, &c. we use repeated bleeding, injections, cooling regimen, and the diluting plan generally, as far as the urgency of the pulse will allow. In morbid symptoms, this plan would be highly prejudicial, and would end in death; an opposite treatment is therefore indicated as the bowels to be gently opened by the mouth and glysterwise, the feet immersed in the warm bath, and antimonials are sometimes very beneficial, with bark, steel, &c. If the morbid symptoms do not speedily give way to the above treat-

ment, we should call in the assistance of another practitioner,

The symphysis pubis, or the junction of the share bones will be brought into a state of inflammation, occasioned by delivery when it will become so thickened, as to leave the bones immovable upon each other, and render the patient incapable of standing, walking, &c. In this case give bark, steel, &c. with cold bathing, and every method of strengthening the general system; with proper bandages to support the affected part; some practitioners have been bold enough, when they have found matter formed at the juncture of the pubes, to introduce a lancet for its evacuation: this however is an operation to be attempted by the most expert only.

THE PUERPERAL OR CHILD-BED FEVER.

This disease has been differently described, by different authors: This fever is ushered in by shivering and chills, a violent pain in the head, especially over the eyes, which is succeeded by the hot fit, and this terminates in a profuse perspiration which seems to give a temporary relief to the disease, when in fact, it is only preparatory way for a second and perhaps more severe return: the belly becomes swelled and excessively sore, in so much so, that the slightest touch is productive of excruciating pain; before we pronounce the presence of the disease, we should be certain the bladder and intestines are emptied; as a violent

distention of these parts, may be productive of nearly the same symptoms.

This painful soreness of the belly, needs not be confounded with after-pain, they being subject to intermissions, this is permanent: they are varied in their situations, this is fixed: the pulse at first are hard and full, and the breathing oppressed, but afterwards the pulse becomes weak.

The lochia and milk, are in the first instance uninterrupted—the skin in some cases remains natural, in others it is very hot and dry, which is succeeded by a clammy moisture over its surface.

The bladder and intestine appear to partake of the disease, and the urine is passed with difficulty and pain, or perhaps suppressed altogether; it is found of a dark color, and leaves a sediment in the vessel.

The bowels are costive at first but succeeded by a looseness, which gives a temporary relief: after which the passages become excessively foetid, the pulse increases in quickness, the extremities become cold, and death terminates her sufferings.

The prevention of this formidable and fatal disease, is to permit the woman to have her regular rest, with her head raised moderately high, and not to disturb her in the night season with the child, food or drinks, except she herself requests it: a frequent change of well aired linen, the room kept moderately cool, and occasionally well ventilated with pure air, and not more visitors permitted than are absolutely necessary for the pa-

tients use, * let her sit up in bed with something thrown over the shoulders, when she takes nourishment, and kneeling over the steams of warm water, whenever she attempts to pass urine which should be frequently done: occasionally to attempt the erect posture; these precautions encourage the lochial discharges, and assist the bladder and intestines to throw off their contents; which prevents them remaining till they become too putrid, and impart this tendency to the womb and its appendages:—The drinks should be simple and cooling, and drank perfectly cool, as toast and water, barley water, thin gruel strained, sago, tapioca salep, with occasionally a little limejuice, orange or lemonade, if it does not produce gripings, or otherwise disagree with the bowels: when her appetite is increased she may be permitted light puddings, fowls, lamb or veal, well boiled vegetables of the antiputrescent quality and occasionally fruits of the same properties, as sweet oranges, tamarinds, prunes, &c. as the stronger animal food have a tendency to increase the putrid action, they should be carefully avoided.

* I am sorry to note the frequent and imprudent practice of the generality of female acquaintance imprudently crowding into the patient's apartment immediately they learn she is in bed, though they do it with the best intentions, it is the cause of a continual succession of disturbance to her when she should rest, makes the air of the room hot, foul and impure, and is a great source of many of the fatal diseases just now treated of.

I hope this well meant hint will be the means to prevent this imprudent and injurious practice, as the ninth is esteemed the critical day, I would fix this as their limitation, after which, if her recovery has been favorable, she may be visited.

Method of Cure.—When a chill or cold fit comes on, apply more bed-clothes, especially over the lower extremities; hot bricks wet and wrapped in flannels or bottles filled with hot water may be applied to the feet, and the legs well rubbed with hot flannels: as soon as the hot fit approaches the additional bed clothes should be removed, or even more; an injection may be now administered (to empty the bowels) of cooling quality, as warm water with molasses, water gruel or such-like; with a plentiful supply of any of the cooling drinks above mentioned, to which tamarind tea, or buttermilk may be seasonably added, and the room well ventilated with pure fresh air, more especially if it be at a warm season.

Thus terminating in sweating, the weak liquors should now be properly given somewhat warm, the temperature not exceeding the heat of the blood, by these means the perspiratory process may not be checked, and its natural termination may put an end to the disease.* If it be forced beyond

* Dr. Alexander, of Edinburgh, in his experimental essays has given us several experiments on sudorifics; he says, these experiments seem clearly to prove, that there is a certain degree of heat, which may be called the sweating point, always absolutely necessary to produce that evacuation, and that the farther the heat of any person is advanced above, or reduced below this standard, the farther he is removed from any possibility of sweating. But although there is a standard degree of heat at which, and perhaps at no other period, a sweat can be produced, yet we may reasonably conclude, that this degree is not the same in all persons, nor in the same person at all times, but that it rather differs according to the difference of constitutional heat, and other circumstances."—*Experimental Essays*, page, 166.

this point, or the body overheated by bed clothes, a hot room, and strong hot liquors, the consequence is, weakness and relaxation, an increased pulse, and the patient prepared for another and a worse fit which may terminate the case.

Medicine—Vomits in small repeated doses of tartar emetic, ipecacuanha, James's powder, &c. and these should be continued, till the stomach and bowels are perfectly cleansed: if the last are not sufficiently acted upon, some of the same purgatives may be advantageously given, as rochelle, or glauber salts, soluble tartar, &c. After which the saline draughts in a state of effervescence may be given and frequently repeated with excellent effect; some professors are partial to embrocating the belly with camphorated oil and laudanum. Dr. Saunders recommends blisters, or applying twenty or thirty leeches to the part as more effectual. If the vomiting or purging should continue, beyond what is wished, and the vitiated bile discharged, then the Colombo root in a state of infusion would be seasonably administered: If morbid symptoms appear, we must have immediate recourse to the bark and vitriolic acid in large and frequently repeated doses, to which yeast may be added with sometimes the best effects. This disease sometimes terminates in peripneumony, and gives the same tenderness to the breast, as was in the abdomen, when the tonics are of no service, and the disease is generally fatal.

When symptoms of gangrene or mortification come on, the patient loses all sense of pain, the pulse becomes natural, or nearly so, and the composure and confidence of recovery the patient

takes on, may deceive you when she is dying, and has done many very eminent men.

There is a disease which in many respects is so similar to this as to be confounded: but varies in being accompanied with stupidity, a glassy eye, and an enormous swelling of the belly, which contains a cheese like matter.*

The Milk Fever.—The secretion of the milk is found generally to be formed about the third or fourth day after delivery; though in some much sooner, even at the time of the birth, it is ushered in with rigor, followed by febrile action, thirst, a dry tongue, a sense of trickling along the armpits, followed by a distention of the breasts; which if not immediately relieved by the application of the child, become turgid and painful; when the head partakes of the affection, and a slight delirium succeeds.

The lochial discharges are found to diminish, at the commencement of the formation of the milk; discharge the contents of the bowels by an emollient injection, after which a mild cool purgative may be given, as castor oil, electuary of senna, rochel salts, with manna, &c. the patient to be restricted to a thin cooling regimen, the lochial discharges endeavored to be restored, by warm applications to the pubes and feet: warm drinks, or herb teas may be taken, to encourage perspiration, which may be assisted by small and repeated

* For a more minute account of puerperal fever, and most other female complaints, see "Dr. Charles White, of Manchester, in his most excellent treatise on the management of pregnant and lying-in women &c. a work I am under considerable obligations to."

doses of antimonial wine, Dr. James's fever-powder, &c. If the patient be of a full plethoric habit, and the febrile action run high, blood may be taken, and occasionally repeated, according to the strength of the patient, and urgency of the symptoms: The breasts may be lightly embrocated with camphorated oil, and the leaves of the red cabbage welted very soft may be applied over it, which act as resolvents, or thinners of the milk, and possessing something of an anodyne property, assuage the tension, and allay the pain: The general practice of applying acids with a view to repel the milk, is imprudent and injudicious and serves only (on the contrary) to inspissate the milk and retain it in the breasts: in case the milk does not flow freely, which is often the case, more especially with the first child, the lactiferous or milk vessels never having been brought into that action, afford a greater resistance than afterwards: in this case the fluid should be frequently and mildly solicited, rather than employ any violent exertions, in sucking, or using the air pump, which serves only to bruise the tender surface of the breast, increase the turgidity, or bring on tumefaction, and lay the foundation for inflammation, suppuration and a train of painful and tedious suffering, which prudent management may have effectually avoided: for this purpose a common black porter bottle or decanter, washed out with warm water, and immediately applied close upon the breast, including the nipple, is found to possess as much power of suction, as prudence in this case would prescribe; to which the continued embrocating, with a warm light

hand, will be found to be a powerful auxiliary ; after which, the breast should be covered with a rabbit or lambskin, dressed with the fleece on, and this side applied towards the breast : a moderate temperature should be carefully kept upon the breasts, as cold and very cold applications, constrict the mouths of the lactiferous and respiratory vessels, stagnate the contained fluids, and thereby increase the accumulation : whilst on the other extreme too warm clothing, or overheated applications, increase the inflammatory action, and hasten the suppurative process : The temperature then which I should prefer, would be that of the blood of a person in good health, without varying if it were possible, one degree under or over ; the warmth of the room, to be kept moderate and regular, which may be more precisely adjusted by having (where it may be convenient) a thermometer or weather glass always in the patient's apartment : if hard indurated lumps appear in the body of the breast, the best resolvent I have ever met with is an ointment made of the common Jemston leaves, or thorn apple, bruised and boiled in hog's lard, in the manner ointment of elder is made, I have rarely known this fail, to prevent the threatened suppuration, or as it is commonly called the mammary abscess : but if in opposition to our best endeavors, the breast will suppurate, it must be encouraged by the application of warm soft bread and milk poultices, with a little sweet oil or soft grease over its surface, this should be repeated three or four times in the twenty four hours : the suppurative process will be further promoted by a more generous regimen, and occasion.

ally a little porter and water warm, with a little sugar and nutmeg; if very painful give occasionally a mild opiate, and when the abscess is complete if it does not soon break of itself, a puncture may be made in the most dependent part with the point of the lancet, and the wound cleansed and healed, as a common glandular tumor: If after the wound is healed, an induration or hardness remain, the camphorated oil must be again employed in embrocation, three or four times every day, and keep warmly covered; if however it still continue, the mercurial plaster must be had recourse to; during all which time the bowels must be kept soluble. In the early suppressions of the milk or throwing it back upon the constitution, it is absorbed and carried along the course of the lymphatics, and deposited in the lower extremities, and causes them to swell and form what is called a milk dropsy: in this case opening medicines, saline draughts and bleeding—and at bed time a dose of Dover's sudorific powder, or Dr. James's fever powder, should be given and promote the secretion of urine by Celsea water, and old-hock, or cider and Lisbon sugar.

Of Sore Nipples—They being covered or defended by so very thin a skin, are very liable to become excoriated or raw, after a few repeated suckings of the child, especially the first, the friction produced in this action, between the mouth and the nipple, which soon removes the slimy mucus separated for its defence, by a number of little glandular bodies, found situated around the base of the nipple, for this express purpose.

The excoriation or soreness of the nipple is a very painful, and generally a very tedious and obstinate affliction, for which a great variety of remedies have been recommended, which would be vain to attempt to enumerate, much less to investigate; being multiplied almost to infinity, as solutions of sugar of lead, white vitriol, allum. &c. in rum or brandy; but these being all prejudicial to the child if taken in, the nipples require to be well wiped before the child can be permitted to suck, or griping and perhaps obstinate costiveness is produced, which soon brings on fever and a train of much suffering, which may perhaps terminate in convulsions and death: I have at this moment an infant of seven weeks old under my care, with fever and a paralytic affection of the left arm, which it does not use; the mother has sore nipples, and has probably used some preparations of lead, whose sedative quality, may have been the source of the disorder; a ring of bees-wax worn round the nipple, of sufficient thickness to take in the whole, has been recommended; this I think excellent, in healing and defending the part from the friction and pressure of the linen, bed clothes, or any foreign body; in addition to this, a large nutmeg hollowed out and applied over the nipple, this completely covers it from the cold air, and its warm aromatic quality, constricts and braces its relaxed and excoriated surface: such a contrivance is at all times convenient to come at, and may be worn pretty constantly, with but little incommoding; and should be had recourse to, as soon as the nipples are found to become tender: The best application, (as re-

commended by Dr. Underwood author of the diseases of children) is an astringent solution, prepared by burning green vitriol to whiteness and dissolving in pure water, the strength regulated by the taste, and applied three or four times every day, from the point of the fingers or with a camel hair brush, afterwards to be covered with the patient's hand, or some other contrivance to prevent its being wiped off, and after it is become dry, apply the hollowed nutmeg or wax ring, as before described. If any deep chaps exists, that the solution cannot conveniently come at, a little white cerate simmered with brandy, may be afterwards applied, or a little finely powdered gum dragon sprinkled on. The solution is best used first very weak, and may be afterwards applied with strength: he observes, "It has stood the test of the British lying in hospital, where it has a long time been used at my request, and with the expected success: though there are always in the hospital, many women thus affected, and out of such numbers, it is probable, all the various kinds of sore nipples, must have taken place." I have frequently used the remedy in my own practice, and have found its efficacy, equal to the doctor's recommendations.

This solution being a preparation of iron it is perfectly harmless, and on the contrary rather salutary, and therefore need not the caution of wiping the Nipple, when the child is applied to the breast. The doctor continues. "The first symptoms of such an unfavorable turn, are usually a deep lancinating or acute pain, hardness and tumor in some part of the breast, and a consider-

able diminution of the customary discharge of the milk by the nipple." "*This is the moment to prevent the apprehended mischief, as a very short delay renders the means ineffectual; the skin soon becoming discoloured, and the breast greatly enlarged. To remedy this, immediately recourse should be had to bleeding and to the laxative, and anodyne medicines: but above all to the sedative applications, which are usually found to be the most powerful discutients.— Sometimes however, solutions of crude sal ammoniac, with the addition of a good quantity of spirit; compresses of linen cloths, wetted in such a liquor, made moderately warm, and renewed as often as they become dry, are abundantly preferable to heating and relaxing fomentations, or poultices, to which surgeons have usually had recourse.*" When the above means are made use of in proper time, the inflammatory symptoms will soon disappear, the pain be entirely removed, and if the milk runs freely again from the nipple, there will be no further danger of suppuration: on the other hand, if there be not a very early and considerable abatement of the first symptoms, however slowly the process may go on, the breast will seldom fail to suppurate; in this state, therefore, the plan ought to be changed, in order to forward the work of maturation.

The whole breast should now be covered with a mild suppurative poultice,* till the matter be

* A very good poultice of this kind, is that formerly made use of by Plunket, and is preferable to the linseed

felt, and discharged—when the ulcer should be deterged, and healed as before described.

The Miliary fever—takes its name from the eruptions, which are small and very numerous, from the supposed resemblance of millet seed, or perhaps from the latin word, mille, a thousand: It appears to be a disease of a putrid tendency, and is generally brought on by too much heat and perspiration, produced by hot liquors, and an over load of clothes, together with every measure that has a tendency to increase heat and moisture, on the body of the patient; there appears to be no particular pathognomonic or distinguishing symptoms which are not common in most other putrid diseases. Dr. White has said, “Allionius a physician of eminence at Turin, has treated of this disorder more fully than any other writer, and from his account the following circumstances are extracted and prove the affinity of the miliary fever, with putrid diseases in general.”

“It may be traced to the same causes, which produce putridity in general, and the diseases consequent upon it.

“A miliary eruption often accompanies putrid and other eruptive fevers.”

cake To half a pint of milk should be put three table spoonfuls of finely powdered linseed: after boiling a few minutes add a small quantity of crumbs of bread, sufficient to bring it to the consistence of a poultice, to which is to be added, on taking it off the fire, the yolk of one egg. This will make a very smooth poultice, and much lighter than mere bread and milk; an advantage, in the case of much inflammation, especially in the glandular parts, too obvious to be particularly insisted on.

"Though women in child bed are generally first, and most universally attacked by it, it is not confined to them alone."

"Most things that are useful and noxious in putrid fevers, are the same in this."

It is attended, like other putrid diseases, with oppression of the breasts and spirits, great anxiety to which are sometimes added swelling and tension of the belly; by which it may be confounded for, or compounded with child bed fever. The patient is obliged to continue the causes of this complaint, and may be subjected to crop succeeding crop, but this by a judicious mode of treatment, may be prevented; these eruptions first appear in small vesicles or bladders in which is deposited, a sort of limpid serum, which afterwards become opake or pearly: Sometimes they are red, and are then called a rash, and sometimes both exist in an intermixed way, at the same period.

Treatment. Give small repeated doses of tartar emetic or antimonial wine, till vomiting is excited, which may be repeated as occasion may require; as the stomach and bowels may become loaded, with phlegm and saliva: if they do not act upon the bowels, an injection of an emollient nature may be administered, and daily repeated; after which the neutral, or saline draughts, in a state of effervescence, should be given and frequently repeated; or mindererus's spirit combined with antimonials: All kinds of extreme evacuations are to be carefully avoided; as bleeding, purging, &c. as these frequently and irrecoverably sink the patient, increase the putrid diathesis,

and render the case desperate, which otherwise, if properly managed, may have been easily and safely removed. The urine in this disease is generally pale and copious, and invariably weakens the patient: all medicines then that have a tendency to increase this evacuation, are highly prejudicial, and are to be carefully avoided.

The patient's linen should be frequently changed, and the room slowly, progressively and thoroughly ventilated; and the sweating gradually lessened. The diet should be light and nourishing, carefully avoiding animal food either in a solid or fluid state, as tending to increase putrescency; but rice, milk, light pudding, jellies, &c. are most excellently adapted.

Drinks—Jellies dissolved in water, toast and water, butter milk, tamarind tea, orange and lemonade, &c. If purging supervenes, the light astringents may be given, as rose leaves, brier leaves, pomegranate, &c. afterwards restore and strengthen the system, by bark, steel, exercise on horseback, &c.

If this disease appears to take an unfavorable disposition, and putrid symptoms rapidly increasing; the bark and cordials must be given, in large and frequently repeated doses; the aphthous affection in the mouth cleaned with detergent acidulated gargles, in which borax may be combined; if the pulse sink, blisters applied and repeated (as soon as they cease to discharge) on the same place, or dressed with strong fly ointment: mustard poultices to the feet and hands, and wine and stimulents must be freely enjoyed.

If the bark does not agree well with the stomach, it may be given advantageously in glisters.

Of the Prolapsus Uteri—or falling of the womb, the vagina, or intestine. A predisposition to this troublesome disease is brought on by every thing that tends to a general relaxation of the system, in which the tone or contractile powers of the muscular fibres, is diminished, and they rendered incapable of preserving the gravity of the womb and appendages, from falling from their natural situations; to which hard and lingering labors, falls, blows and hurts, seldom fail to increase or bring on the disease; mismanagement or too much rough interference during the time of labor, may frequently be another source; a practice too frequently, and much too generally persisted in, especially by midwives, to the great injury of the woman afterwards, by producing inflammations, excoriations and ulcerations, and the retarding the progress of nature, during the period of labor, the very circumstance they alledge as a reason for doing it is to inform themselves of it; a most monstrous mal-practice, that ought in every case and circumstance, to be cried down: I have illustrated (in a former section on natural labors) how well, the experienced and discriminating practitioner, may ascertain the progress and state of the labor almost without it; and in my opinion, till this experimental knowledge (for it is not learnt in theory) is in a good degree acquired, the practitioner ought not to be trusted alone. In a common case, I would not wish to touch my patient more than three times, till I was actually engaged in her assistance, though I

know, the good women expect something may, at all times be done for the patient's relief: our own sympathy and anxiety for the sufferer, spurred up by the importunities of her friends, may sometimes cause us to do more, than our better judgment justifies; they may accuse us of being cold and unfeeling, and not enough alive to our patient's welfare; but let not this cause us to run into the other injurious extreme, just now treated of, at the same time we must not observe a sullenness, and a haughty disdain to condescend to lower our own self propriety, or the vain imaginations of our own superior knowledge, to a level with the interested sympathising friends; this condescension, permit me to say, in my opinion is the mark of a great and a cultivated mind, and never fails to secure their tranquillity and resignation, in a full and endearing confidence of your correct and better judgment: give them an entire explanation of the *why* and *wherefore*, and their importunities vanish, like a mist before the effulgent rays of the rising sun on a summer's morn. The mouth of the womb will sometimes project out beyond the os externum or outlet, and bring a portion of the vagina along with it; this is often brought on by hard forcing pains, before the mouth of the womb is sufficiently dilated; by voluntary and unnecessary straining, a very large pelvis, may also predispose the woman to this complaint:

When the womb becomes gravid in the early months, while it is contained within the cavity of the pelvis, it is caused to sink lower into the vagina, and increases the complaint; but after its

enlargement, when it arises above the pelvis, into the cavity of the belly, it carries the mouth of the womb and vagina along with it and the disease disappears; this circumstance takes place after the fourth month. During the labor of a woman with this complaint, the womb should be carefully supported by the fingers of the accoucheur, and the horizontal posture scrupulously preserved and persevered in beyond the usual confinement, with a view to a cure, which will by these means, be sometimes happily effected. If however, after her getting up, she discovers a return of the prolapsus, the horizontal posture should be again resumed, and an attempt be made to reduce it to its proper situation, the parts to be frequently washed with a sponge moistened in some astringent liquor, as oak bark, pomegranate, brier leaves, tormental, &c. to which a little spirits or vinegar may be added: or if the sponge may be found insufficient, the womb syringe may be employed; these injections need only the chill to be taken off them; and after a few times using, are better applied perfectly cold: afterwards a tent of soft linen or sponge wet in some of the above liquors should be introduced into the vagina, over which apply a compress, and preserve it there by proper bandage. This application should be removed, and renewed at least night and morning, and if persisted in for a considerable time may eventually establish a cure.

If however the protruded portion is not easily returnable, and assumes an inflammatory appearance, emollient fomentations, of mallows, mullen, &c. &c. sitting over the steams of the

liquor in which these herbs have been boiled ; soft poultices, the bowels to be opened by the cooling cathartics:—and if the inflammatory action does not appear to subside, recourse must be had to bleeding, and afterwards to be reduced.

If the above plan is not found to be sufficient, recourse must be had to the use of the pessary; of which there are various kinds, some of wood and some of cork cut round with a perforation through them, the latter kind dipt in melted sealing or common wax, being more pliant and soft than the wood ones, I think are to be preferred: afterwards the general tone of the system is to be restored, by bark, steel, cold and shower baths, mineral waters, a change of air, to the most pure, moderate exercise in an easy carriage, a light nutritious diet, &c.

Swelled Legs—Will sometimes occur after delivery, from the absorption of putrid or noxious matter, which generally take the course of the absorbent vessels: great pain and tension is discovered along the whole course of the leg, a great depression of spirits, oppression of the præcordiæ or region of the stomach, excessive tenderness and sensibility of the part, febrile action with its concomitant symptoms, of foul tongue, restlessness, anxiety, quick pulse, and turbid urine.

The intentions of cure are, in steeping the affected extremity in warm water, embrocating it with camphorated oil, and covering it with warm flannels.

Give gentle purgatives, as rochel, or polychrysal salts, and anodynes combined with sudorifics as opium and ipecacuanha. Dr. James's fever powder, tartar emetic and calomel, to which camphor may be combined, &c. (bleeding, violent purging, blisters and all excessive evacuations are to be carefully avoided); after the febrile action is abated, the constitution must be supported, with wines, cordials, &c,

SECTION VI.

ON THE PRIMARY DISEASES OF INFANTS.

An ill conceived opinion has been for centuries established, that the diseases of infants admit but of little relief, from their incapability to describe their symptoms and sufferings, and thereby, (it is to be feared) many have been consigned to a premature grave, whose diseases may have been arrested and obviated, by a timely and judicious mode of treatment: even physicians till a late period, have suffered themselves, to be hushed into inaction on their behalf; and thereby, withheld that assistance, it was so amply in their power to afford; while they would hang with sympathising grief, over the little sufferer, declaring their own ignorance and incapability to afford them any assistance, lest they should form an erroneous opinion, of what, they thought, the hidden disorder and its real cause, pursue a wrong mode of treatment, and thereby only render the case worse, and consequently leave a higher probability of its fatality; and thus insignificantly trifle, till death has removed the cause of their anxiety: however, more is not to be expected

from man or medicine, than they really possess; for in some cases, apparently slight in the attack, and managed by the most vigilant and judicious physicians, the terminations may be in death; of which there were but little apparent reasons to fear, or symptoms to cause alarm.

It is no wonder then, under this contented and acknowledged ignorance in physicians, that the good women, with their simples had supplanted nearly in this practice, and assumed to themselves that prerogative, over the management of diseased infants, which, it is certain, it was not their province to assume, nor to the honor of the profession for them to possess: however, as their diseases are generally simple, and not complicated with others, the administrations of simple remedies, therefore, are generally crowned with success: this veil of ignorance is now happily removed from this important part of the medical profession, by the successful and erudite labors of Doctors Harris, Armstrong, Hunter, Underwood and others; whose works I would recommend, to be consulted by all, who wish a more minute and correct knowledge of the diseases of children, than I have either room or abilities to afford: this little treatise being intended as a compendium only, of the most simple and common place diseases, to which early infancy is subjected; more, I trust will not be expected, than is presumed. When better opinion or authorities are obtained, mine, like the pale light of the moon, retires peaceably and unhurt into obscurity, before the refulgent and more glorious rays of the rising orb of day. I proceed

then first, to investigate the fœtal circulation of the blood, before birth, to shew afterwards, the important change which takes place, on the first inspiration in the lungs; the most prudent measures to be pursued, to favor this change, which sometimes by haste and mismanagement is interrupted, and the life of the infant, budding as it were into a second existance, is forever nipped 'ere it has blown.

On the fœtal circulation before birth.—By the circulation of the blood is understood its passage from the heart, its fountain into the arterial system; which distributes it, by its infinite branches and ramifications, into every, the most extreme parts of the body, and it is returned by the corresponding veins; the arteries or beating vessels, have a continuation of that contractile power which the heart possesses, to force their contents onward, into the most extreme ramifications; and these motions are called, the pulsations or pulsatory motions of the heart and arteries; the veins possess no such actions.

The fœtus possesses a number of blood vessels, which are not to be found in the adult, viz.

The umbelical cord or navelstring, is generally composed of one vein and two arteries; though in this respect is subject to variety, and the interstices filled with an elastic gelatinous like substance: the termination of the vein is into the venaportarum of the liver, and those of the arteries into the placenta or after-birth. If we examine the arteries, they will be found to run along the cord, without giving off a single branch, and are continued along the posterior part of the

bladder, and inserted into the iliac branches on each side.

In the liver of the fœtus, is a peculiar vessel, called ductus venosus, which enters the vena cava, in a right line with the umbelical vein: but in the adult it is found impervious, and degenerated into a mere suspensary ligament of the liver. The heart of the fœtus, like the adult, is found divided into four cavities or chambers; the two superior are called auricles, and the two inferior ventricles; which are separated by a tendinous division, called, the septum of the heart; but in the fœtal heart, there is found this peculiarity, between the auricles is an oval aperture with a valve, called foramen ovale, through which the blood escapes, from one side to the other: and a vessel arises from the side of the pulmonary artery, which originates from the right ventricle of the heart, and is distributed through the lungs, called the canalis or ductus arteriosus, which terminates in the aorta; so that from this mechanism, may be seen, a very small portion of the blood passes to the lungs, merely a sufficiency for their support during the fœtal state or before respiration.

The blood in the fœtal heart, is propelled forward by the contraction of the right auricle, into the pulmonary artery: but from the compact state of the lungs it meets with a firm resistence to its passage, when it finds its way through the foramen ovale and ductus arteriosus, and from thence into the aorta or great artery, which distributes it through the system: from this, it may be seen, the fœtal circulation pursues but one

route, which will be found to be materially changed after inspiration, by which the lungs are dilated, the vessels in them set at liberty, by the compression being removed, their cavities are opened, and the blood forces its way through them: this circumstance generally causes the valve to close the foramen ovale, and the blood now takes a double course as will be hereafter touched upon.

The blood is conveyed to the child by the umbelical vein, and from it by the arteries: make a ligature on the cord, and in that part of it between the ligature and the placenta, the vein will be found turgid, and the arteries flaccid; and between the child and ligature, the arteries turgid, and the vein flaccid, and the pulsation recede or gradually decrease, from the ligature to the belly of the child. The umbelical vein is divided into two branches, one is continued to the vena porta of the liver, and the other to the vena cava, or large vein, and is called the *canalis venosus*: The liver is the largest viscus of the fœtus, and is larger in proportion than in the adult; yet all the blood that is brought to the liver, does not circulate through its substance, as a great portion is passed by the *canalis venosus*, which is situated directly opposite the umbelical vein, and conveys it directly to the vena cava, and from thence to the heart: $\frac{6}{7}$ ths. of the blood of the placenta is returned by the umbelical vein to the child, and $\frac{1}{7}$ th goes to the mother.

It has been supposed, that the vessels of the placenta and those of the uterus, anastomose, or

unite; but by every trial that has been made, with injections and otherwise, the reverse opinion is confirmed, otherwise it would be perceived, by the terminations of the vessels. If the arteries of the string are injected, the fœtal portion of the placenta only will be filled: the maternal portion, can be injected only from the uterine vessels. Neither in the case of twins or triplets, where there are more placentas than one, are there any communications between them, though they are found to adhere together; injections thrown in by the vessels of one funis, will be found to fill the fœtal portion of their own placenta only; hence arises the futility of the idea, of a second child bleeding to death, by the funis of the first, if it be not secured by a ligature, since no communications, that can be discovered, exist between it and the mother; as the child then is nourished in utero by the string, it may be urged, that it is derived from absorption from the mother; but if so, what does it absorb? a fluid finer than blood; this then, don't militate against this doctrine, for if so, it cannot be blood: the hen does not emit red blood into the chick, who is possessed of the rudiments of life in itself: those in favor of this doctrine, say "if the woman has a local disorder, the child will not be affected with it."

That the fœtus is nourished in utero, there remains not the shadow of a doubt; but by what means? Some say by the mouth, and others by the funis, and others by both: Hippocrates says, "as soon as the child is born it sucks, and how should it, if it had not been used to it?" Why?

we cannot suppose any thing but instinct for teets, or nipples. As the ancients dissected only brute animals, where in many there are cotilydous or nipples, therefore they are to be excused. Heister says, he found the naval string putrid, therefore its nourishment must have been received by the mouth, as no absorption could take place.— Another says, he found a knot upon the string, and therefore concluded the child must be nourished by the mouth; this is but a vague argument, as we cannot suppose the child can recede so far, as to make the knot tight enough, to stop the circulation through it: the similitude between the liquor amnios or waters and the contents of the child's stomach are found to be very dissimilar. There are sometimes found children, or rather monsters, without heads, consequently, sine oribus, or without mouths, therefore it must be concluded their nourishment must have been by the navel string, as their growth in other respects has been often found to be perfect.

After respiration a few times, the circulation of the blood becomes complete, as in the adult, and the child is enabled to cry: after it has done this forcibly a few times, the navel string should be tied, and generally not till then, at which period its pulsations will be found to have ceased or nearly so, which should be waited awhile for, as this important change in the system of the child, cannot reasonably, immediately take place: it must be obvious, that too great a hurry in tying the funis, before the circumstances above mentioned have occurred, must tend, not only to impede, but perhaps totally prevent their

completion, when the death of the infant must be the inevitable consequence: the first respiring life of an infant, is like the glimmering of a feeble taper, which the least rudeness or assault may extinguish never to be restored.

On suspended animation.—Causes: long protracted and laborious labors, where the head has suffered much and long compression in the passage; from a small or distorted pelvis: the naval string compressed from any accidental cause, as presenting with the head, or passing with the head in a footling case (as before described,) or its being winded once, twice or sometimes, even three times round the neck, extremities or body: phlegm or mucus formed in the windpipe, &c. these, and other causes will sometimes produce the child apparently dead, or its animation suspended, and sometimes actually dead: however endeavors must be used, as I will proceed to describe, even for one or more hours, as long as there exists the least probability of the animal spark remaining; in short we should not cease from our endeavors, for re-suscitation or returning life, till we are abundantly confirmed, the child is absolutely dead, and not be too easy, merely to save a little labor and exertions to come too soon into this determination: for I have known instances, where the women by their continued and indefatigable exertions, have restored an infant to life, when I have felt in my own mind, well satisfied to leave it to its fate: this truth now so firmly established in my view, makes me much more solicitous and persevering; and what a reflection would it be, if

after we have left the patients (which sometimes is done much too soon) the child should be restored! how justly are we censured and rebuked for our unfeeling and insensibility: how severely ought we to feel the remorse of conscience, for our remissness and inattention: trust me but a man not alive to the most exquisite sensibility, under the curb of prudence, and a sympathy that can enter into all the mother's hopes and anxieties, ought never to intrude into the practice of midwifery, where all these emotions are so frequently and variously called into action: think of the fond mother just relieved from all the agonizing tortures of death, raising her languid and anxious eyes, to behold for the first time, the lovely fruit of her sufferings; and then to behold it, apparently in death! hear her heart rending shriek, see her head fall back upon her pillow and her hands clasped together, saying, as it were, "O! my God, am I not worthy to enjoy the dear fruit of my suffering, what have I done that my fond hopes are not allowed me, to sooth me in this trying hour?" can'st thou witness this and not feel for her? and is it possible these feelings will not stimulate thy best endeavors for her relief in the restoration of the lovely image of hers? If thy feelings are not awakened, even in reading this imperfect picture, (for I acknowledge words fail me to describe it as I feel it, much less, as I have done to witness it) I pray thee shut my book, my labor is in vain for thee, thou art not fit for the profession; go take the spade and break the stubborn earth, it is in vegetative productions, where the mother earth, suf-

fers neither pains nor anxieties, and where fond cheering hope is not felt, that thou should'st practice. But by thy endeavors, to restore to her the prize of her heart, see how her countenance brightens. her hopes (blended with maternal fears) return, her every attitude and feature, (even if thy endeavors fail) bespeak a blessing for thee: thou wished me blessed in my child, thy anxious endeavors for its restoration proved it to me, (tacitly at least,) declares the suffering mother, to the amiable practitioner, "may'st thou be blest and it shall afford me joy." Is not this exquisite delight to the sympathising breast? it is a beatitude I would not part with for a diadem: but if thy endeavors are crowned with success! the child gasps, the little heart begins to throb, O! how my own beats in unison, it cries, and its little life is in action; see then the gladdened mother's eyes, glisten with delight, her every nerve is strong to the joyous passion, and she is ready to spring (forgetful of herself) to clasp the object of her love to her enamoured bosom; she receives as it were, new life with her infant, she recovers, and presses the fond charge to her heart, where it draws from her own breast of innocence and health, a support of that life she gave it; pardon this digression, but the subject appears so inexhaustible, I know not where to stop. I shall proceed to the mode of treatment. While there remains any pulsation in the string, let not the communication be destroyed by tying, &c. let the mouth of the operator be applied to the mouth of the child, and blow with some force, closing at the same time, the nostrils with the

thumb and fingers of the left hand, while the right hand, wet with brandy or spirits of some kind, the breast of the child should be well rubbed with it, that if the lungs should be in any degree inflated by blowing in at the mouth, the compression and friction may assist to bring on re-action; a large wash bowl of warm water, of the temperature of blood, in which the child should be immersed, and the frictions continued under the water, leaving the face of the child out for the advantage of respiration. The fauces may be tickled with a feather, the child, after a while, may be taken out of the water and received into warm flannels, where the frictions may be continued by the fire, the temples rubbed with vinegar or hartshorn, and snuff or hartshorn applied to the nose, the feet and hands may be rubbed with flour of mustard, steeped in spirit: if these means fail, some of the more active, as recommended by the humane society in London, for the recovery of persons drowned or otherwise suffocated. I shall quote it in their own words, as it may be expedient, the public should be in possession of such directions and I will not suppose the practitioner (whether male or female) cannot accommodate them to the application of a still born infant.—viz.

“As soon as the person is taken out of the water, a great-coat or two of the bystanders should be wrapped round the body, which is to be carefully conveyed to the nearest receiving house. In cold or moist weather, the body is to be laid on a matress or bed near the fire, but in summer on a bed only; it is then to be tho-

roughly dried with warm flannels, and as pure air is essential to the return of life, not more than six persons are to be present.

“Apply a pipe of the common size to the nostril and blow with some force, closing the other nostril and mouth, whilst a third person presses the chest with his hands, as soon as the lungs are inflated, other assistants are to rub the body gently with salt, warm flannels sprinkled with rum or geneva, and foment the breast, &c. with hot brandy; a heated warming-pan (the body being surrounded with a blanket) may be lightly moved up and down the back; bottles of hot water, heated tiles or bricks (covered with flannels) are to be applied to the soles of the feet, palms of the hands, &c. The temples may be rubbed with hartshorn, the nostrils tickled with a feather, and snuff, or eau de luce often applied. The fumes of tobacco should be often thrown up, as its good effects have been frequently experienced, if a fumigator be not at hand, the common clay pipe may be employed; but if it should be inconvenient to employ the tobacco, then glysters of this herb, or other acrid infusions with salt, &c. may be thrown up advantageously.”

“Agitation is to be employed, as it has proved a powerful auxiliary to the other means of recovery; therefore, the assistants are to take hold of the legs and arms, particularly of boys, and well shake their bodies for a considerable time, and if a child has been drowned, it should be wiped dry and placed in a bed between two healthy persons.”

“When these various means have been employed for a considerable time, without success, the warm bath should be used, or the bodies should be surrounded with warm ashes or grains, for three or four hours.”

“If there be convulsions, sighings, gasping, or other signs of returning life, a small quantity of brandy or wine may be given and frequently repeated. Electricity may be early employed, as it will not prevent or obstruct the various means of re-suscitation, but on the contrary will render the plan of recovery more expeditiously and certainly efficacious. Bleeding is never to be employed in such cases, unless by the direction of one of the medical assistants who has paid due attention to the subject of suspended animation.”

“The above methods are to be employed with vigor for three hours, for it is a vulgar and dangerous opinion to suppose, that persons are irrecoverably, because life does not soon make its appearance; an opinion that has consigned to the grave, an immense number of the seemingly dead, who might have been restored to life by resolution and perseverance.”

Dr. Herbolt of Copenhagen, says, “The cause of suspended animation in new born infants, is frequently from a fluid being collected in the trachea or air tube, which he has discovered by dissection,” and adds, “If the child is fixed in a reclining position, that this fluid may escape; it will restore nine out of ten:” this he confirms by his own experience.

I would suggest also, as a dernier resort, when every other means have proved ineffectual, the operation of trachiotomy or opening the windpipe, then applying the fore finger of the operator's left hand to the mouth of the child to close the epiglottis or valve of the windpipe and apply the mouth to the incision and blow with some force to infate the lungs, when compression be made upon the chest outwardly and so on alternately; a sort of mechanical respiration be produced, by which the blood is put into action, and perhaps life may yet be restored; Vessalius, an ancient and celebrated experimental anatomist "found by blowing with a pipe in the windpipe, that the heart again performed its actions," (see my history of anatomy page 19, in the account of Vessalius.)

I mention this operation as a mere suggestion, when every endeavor has failed, and the child given up as irrecoverable; having never dared myself to perform it in this case, on account of the opposition of prejudice, but as I am led to expect, as a last resource, life may sometimes be saved by it: I should be glad to see the opinion of any medical gentleman on this subject.

The child having cried firmly, and the navel string securely tied and divided; the nurse is to have prepared, a warm soft flannel to receive it: she will proceed with soap and warm water of about the temperature of new milk, and some sweet oil or fresh grease, and a piece of flannel to clean off the scurf which is sometimes formed over a great part of the body: especially the head, armpits, and groins: however I would

not be over solicitious, to remove more than what will come off with ease; as the friction required in some cases, would be very liable to excoriate the tender surface of a new born infant. I will not suppose but every well informed woman, used to children, knows sufficiently how to manage this part of the service, being more immediately their province than mine. I shall therefore not insist upon it, only observing they should carefully examine if the string be securely tied, that the child is in no danger from its bleeding: if it is not, to have a fresh ligature properly and firmly applied before they proceed. I prefer narrow tape for this purpose, to the wax'd thread, for the operators hands being at the time of tying the string, generally wet with a slimy mucus, it is very apt to slip, in spite of his best endeavors, which I have found not to be the case with the tape: the string is next to be wrapt round several times with a piece of old singed linen rag, greased sufficient to prevent its coldness (it being now a dead useless extraneous body) from affecting the child's bowels; it is then to be laid along the breast towards the chin and secured with a belly band or body roller, which should be rather loose than otherwise, and care should be taken that the string should not be put upon the stretch, at the part where it adheres to the body of the child: I would only observe it is best to dress the head first, and go on to the feet till the whole is done, when the child may be laid in an easy reclining posture covered over light and warm, leaving a small opening only for it to breathe freely: it is pre-

supposed the accoucheur has examined and determined that the child has suffered no injury in the birth, as fractured or dislocated limbs, indentations of the skull, excoriations of the scalp, &c. which are first to be attended, and if found, managed according to art, as will be in some measure explained hereafter; but as I am not writing a system on surgery, fractures, dislocations, &c. come not within my present plan, I would therefore refer the curious enquirer to such authors as have written more immediately upon these subjects, as Benjamin and John Ball, Desault, and others.

It is usual to give the child something of an opening nature before it is laid down, as salt and water, molasses and water, a little sweet oil or such like, this I approve, as the meconium or black excrementitious matter collected and contained in the child's bowels, soon becomes acid, producing gripes, flatulency, or perhaps convulsions; it is therefore a desirable event that it should be early evacuated; but as the first milk of the mother possesses a purgative quality, which it generally soon loses, if it comes soon enough it answers every purpose of food and medicine, and certainly is the most proper that can be given: in all things see the wisdom and mercy of the first great cause! but if the woman be very delicate and reduced by her pregnancy and labor, it may be several days before the child can procure any milk; in this case, it will be highly necessary nature should be medicinally assisted, by giving a tea spoonful of castor or sweet oil, manna dissolved in warm water, or a

simple injection: however I generally approve of the child being applied a few minutes to the breast after the mother has had a good refreshing sleep and repeated three or four times in the twenty four hours after; though the breasts may be flaccid, and bear no appearance of having milk: the child's breath and moderately sucking will solicit and bring the milk forward, as the mother will soon experience by a sense of trickling along under the armpits, leading to the body of the breast: here I would wish to caution the mother to steer clear of the opposite extreme, for a child (especially the first) lying long drawing upon an empty breast, will be very apt to excoriate the nipple and bring on a train of painful sufferings, of sore nipples, &c. as before explained: therefore all the attempts of the child to suck, that I should recommend or permit, would be more with a view to solicit, than force the coming of the milk. I dare say, I am now understood, and shall therefore leave the subject, with recommending the nipple to be bathed with sweet oil and brandy after every such application of the child, merely to sheathe and lubricate its tender surface, after the friction of the mouth and tongue.

The breasts of the infant about the nipples will frequently appear indurated and swelled and a sort of serous discharge will sometimes be pressed out: it is not unusually, though improperly called milk, and is generally recommended to be squeezed out, which is sometimes done with too much violence and is productive of tumefaction, suppuration, &c. and is therefore an improper

mode of treatment: The parts embrocated lightly with camphorated oil: or brown paper, dipt in brandy, laid on, will generally be all that may be needful: if with these means it does not disperse, a soft bread and milk poultice may be advantageously substituted.

The child's head (after a long and severe birth) will be often found elongated and of a conical figure, approaching somewhat of the sugar loaf form; the loose attachment of the bones of the skull, overlapping each other, like the scales of a fish: in this case it may be lightly embrocated with sweet oil or brandy, camphorated spirits, or such like, leaving the restoration to nature, who will generally reduce the form of the head to its true shape in a few days.

The scalp will sometimes, in these cases, be much swelled and tumified; the same applications may be made as above, or a cloth wet with Goulard water, or vinegar and spirits: but the applications of hot fomentations and poultices would be dangerous in favoring a disposition to mortification, and therefore ought to be avoided. In the breech presentations, the private parts may suffer in the same way; the same applications, of about the temperature of the blood, will be all that will be necessary in this case.

The blunt hook will also sometimes cause in these cases, excoriation, inflammation and supuration, in the groin, apply any mild liniment, as wax and oil, sweet cream and such like.

Indentations of the skull, by pressure in the birth, should be endeavored to be elevated by

the application of sticking plasters or cupping glasses.

Children are sometimes born with a tumor upon the head, as large as a hen's egg, with a deficiency of the skull bone, called hernia cerebrum, it is best to leave it to be removed by absorption, we may apply camphorated oil, opodeldoc, soap suds, &c. the deficiency in the bone generally soon becomes filled up.

In large heads—apply assarum and turpeths mineral in the form of snuff to the nose, which will bring on a discharge of a prodigious quantity of glairy mucus, and generally gives relief: we may also foment the head, and give mercurial cathartics, which will be found very serviceable in this disease, at a more advanced period.—Children sometimes at birth have the eye-lids or labia pudenda grown together, which should be put upon the stretch and carefully cut through. The frenum or bridle of the tongue, is sometimes too long and extended to the apex or point which it draws down when the child attempts to suck or put it out, and therefore requires to be divided, which should be very carefully done, as a fatal hemorrhage may ensue by the division of the sublingual artery, a considerable blood vessel very nearly situated.

I have often wondered this accident has not more frequently happened, by this simple operation, (as it is erroneously thought to be) being attempted by the most ignorant old women, to which the dangerous disadvantages of imperfect sight and unsteady hand are attached, the best sight, the most steady hand, with a correct

knowledge of the parts are required in this operation, I should therefore refuse the most correct anatomist if he wore spectacles. I generally consider it like the self-edge of a piece of linen which if divided, is sufficient; the child will tear the remainder completely itself in the action of sucking. Van Sweithen, mentions some children possessing too great a facility in the motion of the tongue who had the power of swallowing it and producing suffocation: this may be discovered by the blackness of the face, and is removed by introducing a probe or a skewer to bring it out: he therefore adds, "we should be careful in giving too great a facility to the motion of the tongue, in dividing the frænum.

Of the Harelip.—Sometimes this defect in the upper lip is single or confined to one side, and sometimes complete (like the animal whose name it bears) on both sides; it is also sometimes accompanied with a defect in the palatine arch, which prevents the child receiving its due nourishment, in being incapable to suck, which act is upon the principal of the airpump, which in this case is destroyed by the admission of air through the nostrils: it is remedied by the application of a mechanical artificial palate, which conveys its nourishment beyond the defect, when the fauces carry it to the gullet and deglutition is effected.

The operation should be early performed, which will cause the bone to become complete by an ossific or bony deposit, which will take place at an early period only.

This operation is performed by removing the skin and unequal surfaces at an acute angle, un-

der the nostril, observing to make no waste of muscular substance, bringing the raw surfaces in exact contact, and securing them in their situations by silver pins with steel points, which are to be taken off, being so purposely prepared; a waxed thread or silk winded over the heads and points like the figure S, or as the boys wind the string of the paper kite upon the stick, over which a bandage is to be applied: in a young infant the pins may be dispensed with in this operation, the sticking plaster and bandage being alone sufficient. See Bell's operations in surgery, &c.

The urethra, or water passage may be imperforate or imperfect, which should be examined for, in case the child does not soon pass water; when an orifice must be made by art, by puncturing, passing a probe or otherwise.

The anus—or intestinal outlet is sometimes imperforate, or has a membrane which passes over it, and shuts up and obstructs the passages which should be carefully punctured with the point of a lancet or small trocar: but we should be careful to distinguish this case from a protrusion of the intestine, which puts on a similar appearance: sometimes this membrane is high up and therefore difficult to be operated upon.

The rectum or last intestine, is sometimes wanting and sometimes unnaturally situated, as in the vagina, &c. which should be examined for.

The intestine sometimes protrudes through the navel, and also sometimes, portions of the liver, stomach, &c. which we should endeavor to return, and secure by adhesive plasters, bandages, &c. but be very careful in using the knife, from a

supposition of an abscess, these children very seldom live. To the umbelical herniæ, or rupture at the navel, may be applied a piece of cork, cut round and dipt into melted wax, and confined with sticking plaster, or bandage.

Spinabifida—Is an excrescence, of the spinal marrow of the backbone, with a deficiency of bone in some of the vertebræ: this tumor generally soon bursts and carries off the child.

Ictericæ, or the jaundice of infants, is a yellowness over the whole skin originating from some viscid matter obstructing the gall ducts and passages: an occasional emetic of antimonial wine and afterwards purged with rhubarb and repeated every second or third day till the disease disappears. This disease appears to be different from the jaundice of grown persons, except it be received from the milk of the nurse laboring under the disease, when it is to be considered as such and treated accordingly: the nurse at the same time being put upon the method of cure, or otherwise the infant alone may be treated in vain.

Lues venerea, or venereal disease. Children are sometimes affected with this disease, in the most confirmed state, from infected parents: it generally makes it appearance a few days after the birth. Give internally calomel, and wash away any lodged mucus which may be formed on the affected parts with a weak solution of white vitriol and mucilage of gum arabic, which will generally be found to effect a cure. The mother or nurse must also be put under the mercurial plan, as well as the child, for the other alone will avail nothing.

Ophthalmia, or sore eyes, with inflammation; this disease is sometimes prevalent to a violent degree in young children: and deposits a large quantity of acrid mucus, which if not removed or attenuated may soon destroy the tunics of the eyes and produce blindness.

The cure consists in mild astringent injections and leeches applied to the eyelids or temples, the ears set a running with fly ointment, setons or issues applied to the back of the neck, mild cooling purgative medicines, &c. All strong light which acts as a stimulus and increases inflammation should be shut out.

The ears, are also subject to inflammation, excoriation and suppuration; the cure consists in saturnine applications, as lead water, Goulards cerate, &c. with cooling purgatives as above.

Fever.—In children is always much sooner and more accurately understood by attending to the respiration, which becomes quick and laborious, the tongue and fauces dry and covered with a foul coate, skin hot and dry, than to any leading mark upon the pulse, which in health are too numerous, to be numbered at an early period, being commonly from 120 to 160 in a minute: this circumstance has led some, even eminent medical characters, to pronounce an infant in a fever, when in fact it was in perfect health, this then therefore should always be kept in mind, when treating the diseases of very early infancy.

The causes of fevers in early infancy, are various, as costiveness, obstructed perspiration, acrid matter in the stomach and bowels which causes irritation, and increase of febrile action:

this is accumulated in infancy more abundantly than at mature age, from the well known superabundance of glands and glandular secretions which they possess, continually pouring out their glairy contents into the fauces, stomach and the whole intestinal canal, their extreme irritability, becoming loaded and excited by these accumulations, are soon productive of febrile action and a train of the most painful diseases to which infancy is subjected.

The cure consists in first cleansing the first passages, by a gentle puke of antimonial or ipecacuanha wine, if this does not act upon the bowels, a dose of rhubarb and magnesia, manna or castor oil may be administered, to which a simple injection may be enjoined, as a little broth or gruel with a teaspoonful of salt in it or molasses and warm water, with castor oil or such like. Next, bathe them well in luke warm water for fifteen minutes, wipe them dry and wrap them in a warm blanket or flannels, occasionally giving them four or five drops of antimonial wine to keep up perspiration, this will alone in most cases of febrile action be sufficient: if not, recourse must be had to mustard poultices to the feet, blistering plasters, or even a small quantity of blood may be drawn, from wherever it can be procured, if no vessel can be found to be operated upon with the lancet we are to employ cupping glasses, leeches, &c.

Acidity—is generally much abounding in infancy and is productive of many of their complaints, as gripes or dry belly ache, inward fits as they are called, flatulency, convulsions, &c.

it is the cause of much acrimony and pain, and should be treated by evacuents and absorbents, as magnesia, rhubarb and chalk, and all the opening medicines of absorbing quality, with the antacids, as alkaline salt or salt of tartar, &c.

The flatulency, or wind pent up in the first passages, if not removed by the evacuent plan, a little mint, pepper-mint or aniseed water may be given somewhat sweetened: The nurse should always well rub the child every time it is undressed with the warm hand down the back upon the body and limbs: this helps the circulation of the blood, assists digestion, and enervates the actions of the whole viscera, it is of such general importance to the health of an infant, that mothers and nurses are always reprehensible to omit it: Also, the child in feeding or sucking necessarily takes in a great portion of wind with the nourishment, for it feeds with a kind of suction, and should never be laid immediately down to sleep, but should be dandled awhile up and down, patted on the back, rubbed down the stomach and bowels, when it will invariably discharge wind upward or downward, after it has done this, two or three times, it may be laid to sleep, when it will be found to breathe, sweet, free, and regular, and its sleep will be refreshing: but if this be omitted, the breathing is interrupted and irregular, it frequently starts, the eyelids not perfectly closed, and the eyes themselves have tremulous convulsive motions, turned up under the upper eyelids, exposing only the whites of them. There is a sort of simper or smile on the face, these symptoms are in-

creased as the pain becomes more acute, till the features become distorted, the breathing stops for a while, or much oppressed, thus it struggles with its pain, frequently starting, especially if touched or disturbed, till a sudden discharge of wind upward or downward, or a loud cry affords it relief and plainly shews the incautious nurse, how nature has been struggling to discharge the offensive cause, which she should have accelerated by the timely and effectual precautions above recited.

The aptha, or thrush or sprue—is ushered in by drowsiness and inaction, a continuance of the symptoms before described from flatulency, and acidity, when they ought to decrease, or be medicinally removed; a feverish action succeeds and the mouth and fauces become excoriated, and after a while covered with a buff colored matter terminating in sour, green, watery stools, much curdled in their consistence and of very griping quality, frequently called the watery gripes, which are sometimes so severe as to produce convulsions and death. These ulcers increase in size and number, and are sometimes continued through the whole alimentary canal, making the same appearance upon the anus, as they did first in the mouth: if these ulcers assume a brown or dark colored cast it is unfavorable, as it bespeaks mortification and approaching dissolution.

Mode of treatment.—If the bowels are costive, let them be opened, with rhubarb and magnesia, castor oil, or such like, puke the child with small and repeated doses of antimonial or ipecacuanha wine, I should prefer the first as it gen^{erally}

erally operates upon the bowels afterwards. A small quantity of molasses frequently put into the child's mouth, or borax finely powdered mixed with honey or molasses, these things possessing an adhesive or sticking quality, the child cannot get immediately down, but rolls it about the mouth with its tongue, and thereby rubs it over the whole of the ulcers which are by these means much better cleansed, than any mode with a mop or severe rubbing can effect, which serves only to put the child to extreme and unnecessary pain, remove the encrustations and make a way for a second and more severe crop; after these means the fever generally subsides, the ulcers become clean and heal, and the child is restored.

The red gum—Is an eruption of small red pimples sometimes all over the body, like the first eruption of the measles, or a nettle rash. The cure consists in keeping up the temperature of the body, and occasionally steeping the feet in warm water, to give the eruption a disposition to the extremities, and divert it more from the vitals, keep the bowels moderately soluble, by mild aperients, and in a few days, if not exposed to cold, it totally disappears: the grand secret in most eruptive diseases, is to keep them upon the surface, by a regular and moderate temperature of the body, there is little to be feared from them, unless they are suddenly suppressed or drove back upon the system, by exposure to cold, wet, moist atmosphere, or some imprudent conduct in management and care.

Having now nearly completed my design I may have closed, but by my wish to be more extensively useful, I am led somewhat into infancy more advanced, and as I cannot conceive my little work so complete without, I propose to close my labor with some, though imperfect illustrations, of the cholera morbus infantum, or summer complaint of children, as it is called, the measles, the croup, chicken pox, worms, &c.

Of the cholera morbus infantum,—the lax and vomiting, or the summer complaint of children. This is a complaint peculiar to warm climates and seasons.

Symptoms. The child loses its appetite and playfulness, becomes fretful, a feverish diathesis prevails, a foul tongue and a dry parched skin, a sallow or livid countenance or sometimes bloated, having the appearance of dough; the eyes become sunk, with a dark livid circle or disk round them, a puking or purging and sometimes both, attacks the patient instantaneously, and continues almost incessant of a green watery acrid matter, sometimes curdled; this attack is frequently in the night season, and its violence and continuance so great, that the child in the morning from lassitude and the great privation of strength seems ready to expire: it refuses the breast or other nourishment, and putting the nipple into the mouth nauseates and brings on a disposition to vomit; the flesh of a fine firm child, in this short period, is reduced to flaccidness, and so weakened it is incapable to support itself, in short, it becomes every way passive, the articulations of the limbs pliant as a jointed doll and

like it remain in any situation they may be placed; the exertions of the nervous energy is prostrated, and if something very shortly does not transpire for its relief, its situation is the most critical and its dissolution may be expected.

Causes. A moist, heated and impure atmosphere, particularly the foul confined air of large cities: acidities abounding in the primæ viæ, or first passages, acrid bilious matter and other juices with which infancy so abounds; unripe, hard and indigestible fruits, drinking stagnant and otherwise bad waters, cold and wet extremities, imprudent washing, or standing the feet in cold water, while the upper parts of the body are in a state of perspiration, and the circulation of the blood (laboring under the action of increased excitement) from the high temperature of the atmosphere and other causes, teething, Worms, &c.

Treatment. If possibly practicable remove instantly some distance into the country, twenty miles from the city is better, I presume than a less distance. I should advise a mountainous situation, well wooded and where there is good light water; the diet for the most part of milk and prepared fruit, in pyes, tarts, &c. the less animal food the better, as all these have a tendency to putrescency, which is a peculiar characteristic of the disease; this is the first of all modes of treatment, the only one to be depended upon, or that promises a permanent restoration, all else are mere palliatives, and who ever attempts to delude parental solicitude and affection into a security and dependence on medical powers, from

sinister or other motives, (in the majority of cases) my experience warrants me to declare, only robs their purses and leaves them in return (for what but a few days before, was a promising bud of sweetness and health) a tenant for the silent grave. An omission then of these advantages in the affluent especially, and all others who can possibly procure the means and opportunity to obtain them, become criminal; remember! then all, into whose hands this may fall, I have this day set my seal of testimony honestly to this truth: I have candidly and unequivocally warned you of the danger, plead then therefore no longer ignorance, nor lay any future charges to professional deceptions, but fly with all speed to the change of pure air: to this class, I have cleared myself on this subject: to the necessitous poor, whose indigent circumstances shuts them out from the possibility of these benefits, it is requisite they should be put in possession of such assistance as we can afford them, which though feeble, may sometimes be blessed with success.

Medicine. It is one invariable axiom in the practice of physic, "remove the cause, (in due time, i. e. while the system retains energy sufficient to obviate or contend with the consequences) and the effects must necessarily, though perhaps gradually give way." The principal cause of this affection appears to be a heated atmosphere contaminated or saturated with miasma or impure exhalations, from the large body of people concentrated in a confined space, as a city; together with the various collections of animal and vegetable bodies of matter, which are continually

throwing off putrid affluvia, incorporating with the common mass of air, and rendering it unfit for the support of animal life, especially in infancy; this cause medicine cannot remove, must be obvious to common sense, we are not in the situation of a besieged city that we cannot escape out of it, it then necessarily follows, as we cannot remove the cause from us, that we leave it, and fly into the mountains of health and safety; but for those with their tender offspring whom dire necessity rivets to the spot and must remain and abide the consequences, I would recommend a gentle purge of rhubarb and magnesia, senna and manna, castor oil or such like, to cleanse the first passages, the bowels embrocated with sweet oil and brandy, the feet steeped in warm water and a poultice of bitter herbs sprinkled with brandy applied to the belly, after which a mixture of prepared chalk, gum arabic and colombo root, mixed with mint or aniseed water to which a little cinnamon may be added with small repeated doses of laudanum, the slippery elm bark, isinglass, mallows, or flaxseed, in the form of tea, sweetened, and with milk may be given as common drink which may be varied occasionally for brier leaf, mint or parsley teas, any of the above slimy ingredients with laudanum may be frequently given, new milk warm as injections; if the principal cause should be worms, treat them for worms (which see) the patient should be kept clean and frequently changed with fresh linen: The cold or shower bath may be used the first thing in the morning by placing the child in a tub and pour a pint of pure spring water through

a cullender or basket upon the head, afterwards to be wiped dry with a warm towel and put to bed between blankets: if not disposed to sleep, a portion of the chalk mixture with laudanum as before directed may be given: If a sweet uninterrupted sleep and a warm glow or moisture supervene, we are assured the bathing will have a good effect, and may be repeated in the same way every morning: but if the child remains restless, fretful and chilly, we are apprised of its being injurious and it must be discontinued.

After the complaint has given way, the watery green griping, fœtid stools, are become less offensive and less frequent and the passages assume their natural appearance, i. e. yellow and uncurdled; the patient may be restored by a continuance of the chalk mixture, to which bark, steel, &c. may be added, fresh air, exercise on horse-back, &c. If the disease should be unfavorably disposed, the vis vitæ or vital energy sinking, the belly swelled, the extremities cold, mustard poultices with garlick may be applied to the soles of the feet, palms of the hands, and the body rubbed with turpentine in which mustard has been infused, electricity, &c.

Worms.—Symptoms of, fever of the hectic type, heat in the palms of the hands and soles of the feet, circumscribed red spots on the cheeks, the countenance sallow and pinched, breath fœtid, a picking of the nose, the eyes sunk and dark underneath, moaning and starting in sleep, grinding the teeth, gnawing pains in the stomach and bowels, nausea, irregular appetite, sometimes voracious, at other times refuses all

nourishment, swelled tense belly, the body otherwise emaciated, especially the lower extremities which appear insufficient to support the body, sometimes, faintings and convulsions are the effects; sometimes erysipelas or St. Anthony's fire, dropsy, in short a variety of diseases may be produced by worms.

Treatment Worm seed, in oil or substance, tin filings with calomel, Æthiop's mineral or other mercurials at bed time, followed by a brisk purge in the morning, cowitch, the down of one pod given in molasses, syrup or honey for a dose.

Carolina pink root, in infusion or substance, bears foot leaves, cabbage tree bark, a poultice of bitter herbs, as rue, wormwood, chamomile, &c. with garlick and wet with spirits applied to the region of the stomach and belly, or what may answer as well, a beef's gall, hung in the smoke of the chimney a few days when it will become thick as a soft ointment, to which garlick may be mixed and applied in a plaster as above. The above remedies may also be advantageously given in injections, to which tobacco has been sometimes advantageously combined, and also in the external applications of bitter herbs to the stomach. On which the late ingenious Dr. Barton, professor of botany in Philadelphia has the following observations.

"Tobacco. There is a particular mode of employing the leaves of common tobacco in case of worms, which I cannot avoid mentioning, especially as it has in many instances produced very happy effects:

"The leaves are pounded with vinegar and applied in the shape of a poultice to the region of the stomach and other parts of the abdomen: In consequence of this application worms are often discharged, after powerful anthelmintics, (worm medicines) have been administered internally in vain.

"We ought not to be surprised at this effect of the tobacco, since we know, that the same vegetable applied externally is often efficacious in inducing vomiting: accordingly, I have, for several years, been in the habit of applying tobacco leaves to the region of the stomach of persons who have swallowed opium or other similar substances, with the view to destroy themselves.

"It is well known that in these cases the stomach is often extremely torped, insomuch, that the most powerful emetics have little effect in rousing the organ into action.

"Here is an auxiliary at least, the tobacco used in the manner I have mentioned, is certainly very useful and in many instances ought not to be neglected."

Cynanche Trachealis,—or croup, is a disease much more common in this country, than any other I was ever in, in short, I never witnessed a case of it till I arrived in Baltimore, and necessarily, in the commencement of my practice here I have been more than once unsuccessful.

The symptoms characterising this disease, I shall not attempt to describe, words, I consider inadequate to convey a correct knowledge of it, it is only to be obtained by visiting patients la-

boring under it, it is, I believe, unlike every thing else, it is of a nature so peculiarly distressing, that a nice observer need only witness a case, never to forget it: I would therefore advise every one, more especially parents, to visit the little sufferers, if it be only for information; for the fatal mistake of ignorance, supposing it to be only an unusual hoarseness, from which it essentially differs, has consigned numbers to a premature grave, that might have been restored by a timely assistance.

It is, I think evidently, of an inflammatory kind, from the efflorescence or redness observed on the amygdala and fauces of the throat, and also a continuation of this appearance discovered by dissection, on the internal surface of the trachea or windpipe, from which is given out, by small glandular bodies, a viscous, clammy mucus which forms a follicular membranous coating and constitutes the disease.

I remember some time since, a physician in Virginia recommended, in the most confident manner, the use of the lancet or bloodletting, even unto syncope or fainting: In two cases lately, one of which was in my own house, I have pursued this plan and to my astonishment and gratification, I found the effects to exceed my warmest expectations: The laborious breathing and the disease itself evidently gave way, previous to the evacuation being stopt, and in my opinion, from observation, the system is prepared for a more favorable acceleration of the effects of the medicines afterwards administered, which with me, invariably are tartar emetic and

calomel conjointly, in large and frequently repeated doses, till the stomach is brought into action: an effect hitherto with me difficult to be obtained, from the universally allowed torpor, that organ suffers in all these cases: to this, I add as auxiliaries, the warm bath, blisters and the oxymel of seneka or squills: The seneka is deserving in a great measure the praise the "Archers" have bestowed upon it, but I never should venture to depend upon it alone; and as an improvement upon experiment, I am induced to prefer the oxymel to the syrup of this drug, i. e. to be boiled in *vinegar* instead of *water* and sweetened with honey or molasses.

In a former case, nearly two years since of my own child, I preserved a quantity of this membranous mucus, and took a portion, to which I added a solution of alkaline salt, viz. salt of tartar, but found it no way changed in its texture: to another portion I added some vitriolic acid and the consequence was, a complete decomposition, I could drop it with as much ease and accuracy as clear water; and this suggested the idea of combining the seneka root with an acid in the form of an oxymel, and have since found it to be an essential improvement to the medicine.

The above account was published more than two years ago in the Federal Gazette of this city. I have since had every reason to be confirmed in my observations.

Some practitioners use the sweet oil with ipecacuanha.

Rubeola or measles.—This eruption like most other, is preceded with chills, febrile action, sickness and pain in the head, tension, inflammation and pain in the eyes, with a discharge of watery or acrid humour, and also from the nostrils, sneezing, pain and soreness in the breast, attended with cough and difficult respiration. About the third day the eruption appears, in small eminences not unlike flea bites, upon the head, breast and superior extremities, and continues progressing till it is found over the body and lower extremities, which however no way relieves the fever and peripneumonic affections of the breast.

Treatment. Bleed plentifully, if nothing forbid, and repeat till the breast and breathing are relieved, give cooling febrifuges combined with mild purgatives, as senna and manna, with sweet spirit of nitre, pectorals and expectorants for the cough, as syrup of squills, garlick or onions, if it does not give way, blistering plasters may be applied to the breast and between the shoulders, and mustard poultices, with garlick combined to the soles of the feet, palms of the hands, &c. occasionally a little antimony wine and syrup of squills in sufficient doses to produce vomiting, and throw off the phlegm, and mucus, and afterwards a gentle opiate, at night to allay the irritation of the cough, of paregoric elixer, Godfrey's cordial, syrup of poppies, &c. if these means fail, and there remain a danger of the lungs being affected, a gentle spitting or salivation excited by a mild mercurial course, and kept up till the symptoms disappear will have

the most happy effect, the system is afterwards to be restored by bark, steel, &c. combined with restorative pectorals, as spermaceti, almond emulsion, &c.

It is requisite to continue the warm clothing for some time, and very cautiously indulge exposure, as every fresh cold strikes immediately at the lungs and brings on the whole train of peripneumonic affections, which are much more dangerous than in the beginning, inasmuch as the system has suffered and become debilitated, being thereby further reduced to an incapability to withstand the attack, or the means requisite to be employed for its removal.

Varicella—or chicken pox, have most of the precursory symptoms of fever, as mentioned in the last, and about the third day the eruption comes forth, like the small pox, but the pustles are found to contain a mere turbid fluid, like dirty water, and not puss or matter, and turn about the fifth or sixth day.

Treatment. Cooling febrifuges, as cream of tartar, nitre, or saline draughts, in a state of effervescence of ferment, steep the feet at night in warm water, and purge after the eruptions disappears, with jalap and calomel.

An excellent method to physic children, with their own consent and gratification, is by keeping jalap ginger bread in buttons, of which one or two may be at any time given, when needful, alone or with others. To make them, mix one ounce of jalap powdered, with a pound of flour, and make it into gingerbread buttons, with molasses, &c. according to art, only observing not to

overbake them, lest the fire should destroy the action of the jalap.

The swine pox is nothing more than a larger or more gross kind of chicken pox, and requires the same mode of treatment.

Conclusion.—It may be presumed by some that I am an enemy to the practice of midwifery, being so generally established in the hands of females: but I am led to hope my endeavor to simplify the science and render it more easy of access to every well informed woman, (and surely no others ought to be admitted) will acquit me of this charge: if we wished to hold ourselves lords of this practice, the only effectual way would be to keep it locked up in the mysteries of technical science, where none but the scientific could possibly gain admittance, but I think in addition to my feeble attempt, the erudite labors of Hamilton, Bard and others, sufficiently demonstrate the liberality of the profession in this way.

We wish the females to be raised equal to the important charge, and while, by our labors we endeavor to accelerate this laudable advance in female practitioners, it is a duty we owe to ourselves and to the world, strenuously and firmly, to oppose the presumptions of *murdering ignorance*: let a scientific board be established, let them give proofs of their ability, and receive its licence, and their practice will then be an honor to themselves and to the profession at large, and an incomparable utility to the public, in that true and greatest source of public wealth, viz. increasing population, which by the murdering hands of ignorance in the practice, is checked to

an amount, sensibility would not bear accurately to investigate.

Dr. Bard, of New-York, having published a work of this kind, though not exactly upon the same plan, may have superceded the necessity of the present, had it come timely to hand, it is excellent and elegant, learned and correct, and much superior to any thing I have any pretention to, it is in but a few hands, and those principally physicians, and not likely to become generally sought for in this city; and also, as each contains it author's own particular practice, they may serve for the elucidation of each other.

He has my thanks, doubtless accompanied by hundreds, for his philanthropic endeavors to correct the errors of ignorance, and benefit mankind.

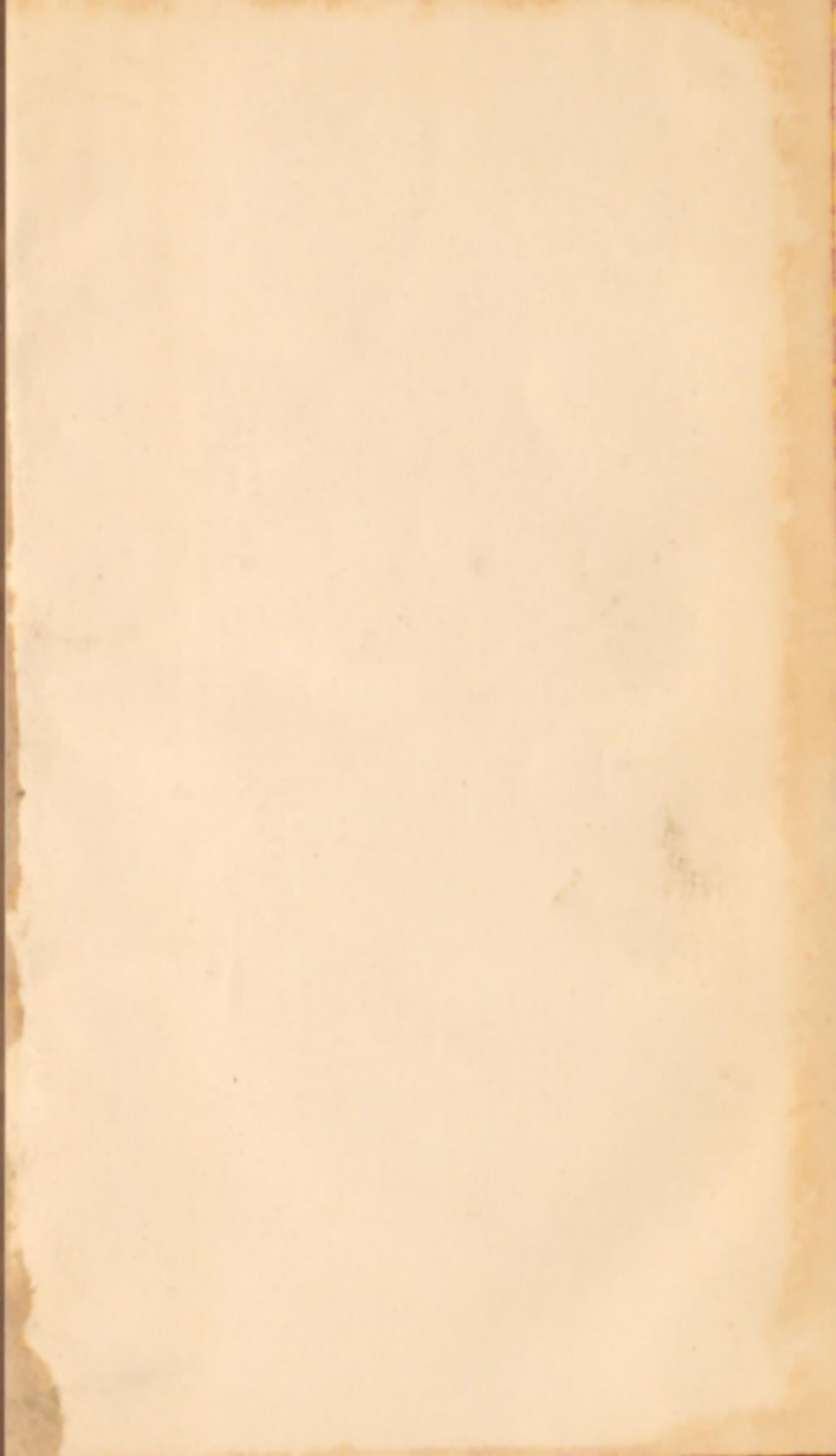
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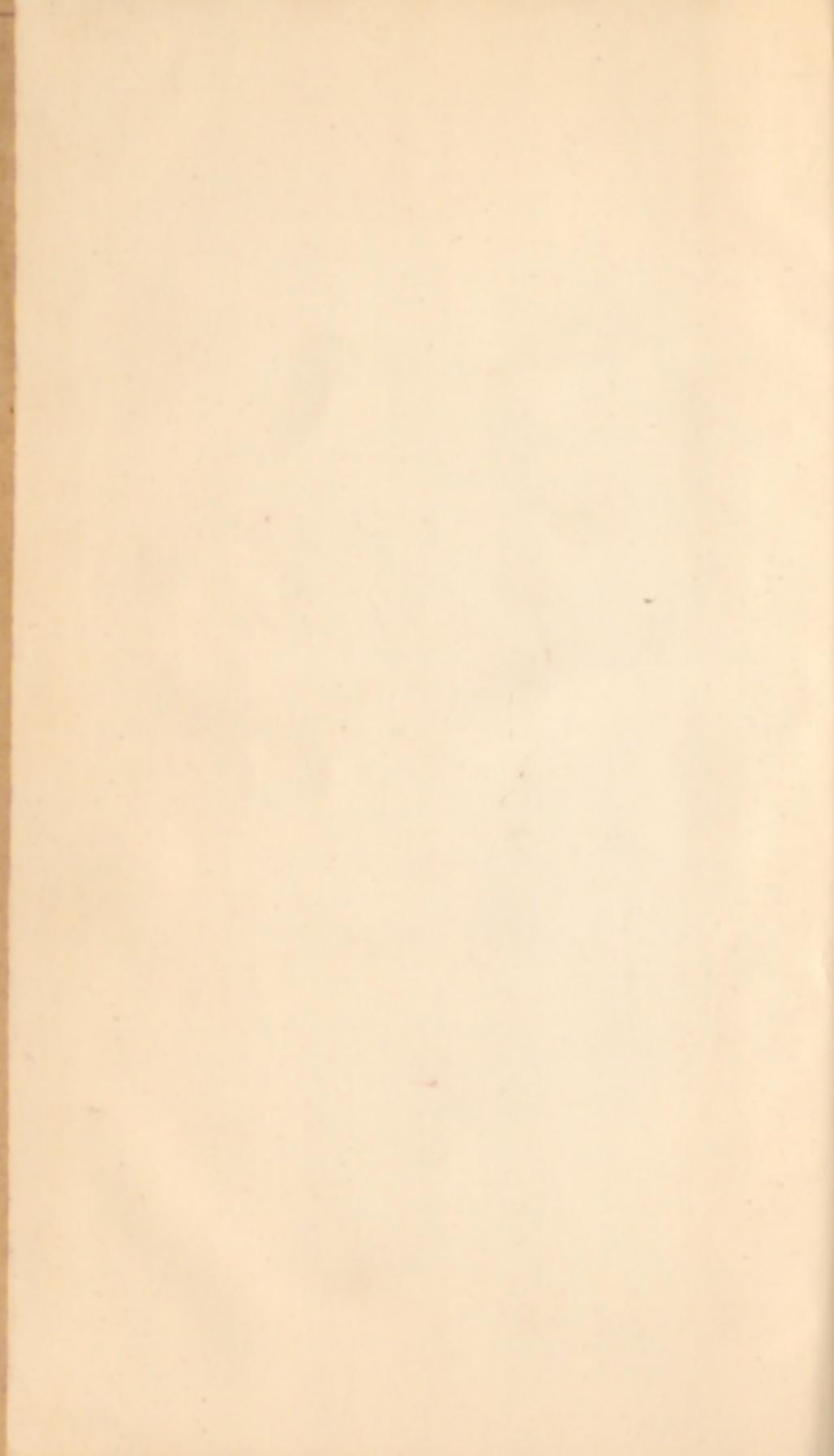
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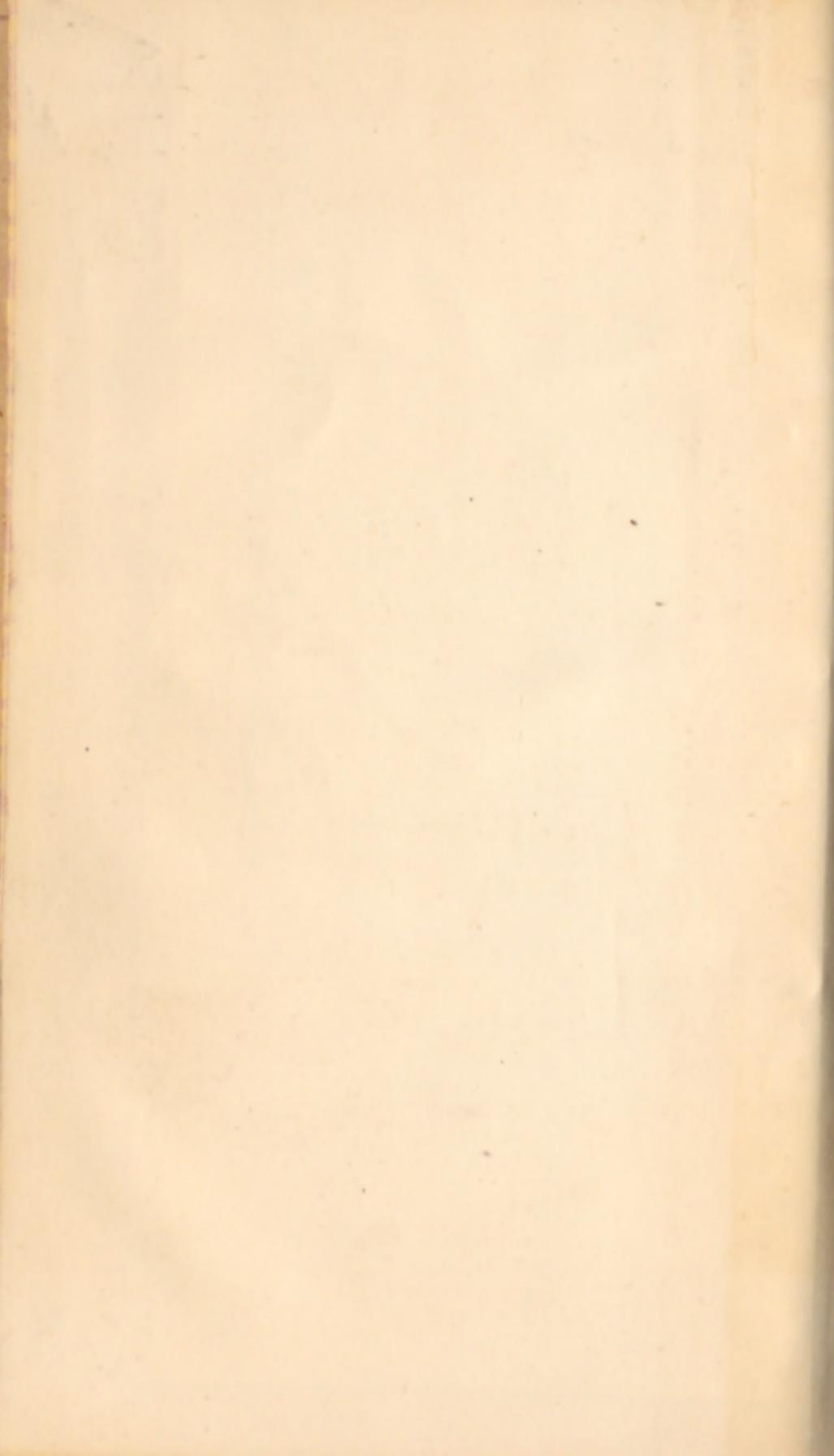
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