DR. DENMAN'S
PLATES
OF
MIDWIFERY.

Price, Coloured, 1l. 11s. 6d. boards.

66. d.

R.R.g

618

SIR ARTHUR DENMAN.

L. C.

542.

Mewburn.

(c) D1/42-a-17

618

ENGRAVINGS,
REPRESENTING
THE GENERATION OF SOME ANIMALS;
SOME CIRCUMSTANCES ATTENDING
PARTURITION IN THE HUMAN SPECIES;
AND
A FEW OF THE DISEASES TO WHICH THE SEX IS LIABLE.

By THOMAS DENMAN, M.D.

LONDON:
PRINTED BY T. BENSLEY,
Bolt Court, Fleet Street;
FOR E. COX AND SON, ST. THOMAS'S STREET, BOROUGH.
1815.

P R E F A C E.

WHEN I first entertained the design of having drawings taken, and plates engraved, it was my intention to make such a collection as would have enabled me to have given specimens of the generation of all the animals I could procure, or favourable accidents might afford; together with representations of the chief circumstances which accompany or follow human parturition, and the diseases to which the female sex is peculiarly liable. But too many avocations have intervened, and these have obliged me to suspend my intention, or rather to give it up in despair; but should I ever resume the pursuit, it would be conducted on the same plan.

Those plates which were executed, were, I believe, well done, and they were placed in the quarto edition of the Introduction to the Practice of Midwifery. But the present Publishers, persuaded that they would be more acceptable if they were edited in a distinct publication, I can make no objection to their proposal, and I hope they may be of some use to Students, and answer their expectations.

THO. DENMAN.

Mount Street, Oct. 12, 1815.

JUST PUBLISHED,
DR. WILLIAM HUNTER'S
ANATOMY
OF THE
HUMAN GRAVID UTERUS:
WITH
A RECOMMENDATORY PREFACE
By THOMAS DENMAN, M.D.

ATLAS FOLIO.—*Price Five Guineas, boards.*

R. G. W. del.

London Published by L. G. W. Son, St. Thomas's Street, Borough.

Heller, sculp.

PLATE I.

The *Funis* of a Nut.—The *Chrysalis* of the *Phalæna Atlas*.—The Eggs of the Cuttle Fish.

I HAVE joined these three subjects in one plate on account of their resemblance, though they are taken from such different parts of the creation.

In the representation of the Nut attention is chiefly paid to the *Funis*, which is mentioned by *Linnæus*, and probably by many other writers. As the apex of the kernel is by this *Funis* bound to the broad end of the shell, the shell to the husk, or foliaceous cup, and this again by a twig to the tree, the whole manner in which nourishment is conveyed to the kernel appears. The coats of the kernel likewise resemble the membranes of the *ovum* in viviparous animals; and the flocculent lining of the shell, the membrane formed, after conception, over the internal surface of the *uterus*. Mr. *Miller*, who made this drawing, thinks that many seeds have a similar apparatus.

In some shells, the Apricot for instance, there is no lining to the shell, or connection between it and the kernel. In such, the shells being covered with fruit, or a husk, are more porous, and the nourishment, penetrating the cavity in the form of a dew, is absorbed by the kernel.—See *Amœnitat. Academ.* vol. iv.

THE *Chrysalis* of this moth was plucked from the tree upon which it hung, on an island in the Straits of *Malacca*, by my worthy friend *Thomas Liell*, Esq. and on the following day a large and beautiful Moth escaped.

I do not know that there is any thing peculiar in this *Chrysalis*; but the largeness of the size serves to shew distinctly the beautiful arrangement of that substance, which is spread like net-work over the surface of the *chrysalis*, and which, being concentrated at the upper end into one cord, is fixed to the twig of a tree as a place of security.—See *Merian's Surinam Insects*, pl. lii.—*Amœnitat. Academ.* vol. iv. *Bombyx*.

THE Eggs of the Cuttle Fish, which in their form and size resemble a small grape, are fastened in clusters by an animal substance to sea-weed, in a place suited to the state of the Fish when it escapes from the egg.—*Gesner*, in his account of the *sepia*, has quoted the reason assigned by *Aristotle* for these eggs being collected into clusters, "That they may be conveniently imbued with that viscous fluid ejected by the male, by which they are to be nourished and increased." *Gesner* also speaks of their exclusion from the egg in these terms—"Mox ova edita crassitudinem acinorum uvæ minorum intra diem decimum quintum capiunt, quibus abruptis sepiolæ excluduntur; quæ, (si quis prius, prole jam perfectâ, absciderint ovi membranam) stercusculum mittunt, suumque præ metu colorem immutant ex candicante in rubiusculum."—See *Amœnitat. Academ.* vol. i. See also *Aldrovandus*, *Charlton*, and *Gesner*.

PLATE II.

A Display of the Internal Parts of a Frog, with the *Ovaria*.

BEFORE the contents of the *ovaria* are deposited, those in a Frog are so large, and so much expanded, that they hide the *uterus* and origin of the *ovaria*, and almost all the *viscera* of the *abdomen*. For this reason *Roesel* thought it necessary to give two drawings for the explanation of this subject; the first, to represent the *ovaria*, and the second, the parts of generation. But, by turning aside the left *ovarium*, every thing is brought to view without any derangement, and as clear a representation is made of the whole, as the nature of the subject allows, or seems to require.

J. P. Ryndyk del.

C. Knight sculp.

London Published by E. Cox & Son St. Thomas's Street, Berough.

PLATE III.

A Section of a Hen, shewing the *Ovarium*, with an Egg perfected in the *Infundibulum*.

IN the *ovarium* of a Hen are contained the *primordia* of an infinite number of Eggs, differing in size, and rising towards perfection in regular succession. While these abide in the *ovarium*, they consist of the Yelk only, impregnated with the fecundating principle conveyed in the act of copulation; but in their passage through the *Infundibulum*, which has a membranous expanded orifice fitted for their convenient reception, they collect the White, and other subordinate parts. In the lower part of the *Infundibulum*, which by some writers has been distinguished as the *uterus*, they become invested with the membranes and shell; soon after which they are expelled.

Harvey has given as good a description of these parts, as words can convey; but a representation to the eye was wanting, and this plate, by the exertion of the artists, is rendered worthy of supplying that deficiency. *Dr. Graaff* has indeed given a delineation of the *Ovarium* and *Infundibulum*; but they are taken out of the body, by which means their original position, relation, and genuine appearances are lost.

There is yet wanting a delineation of the daily changes made in the Egg during incubation. These might be reduced into one view, and then the subject would be nearly complete.

PLATE IV.

The *Uterus*, with the Bladder of an Ewe.

THIS very beautiful drawing represents the form of the *uteri* of the *Pecora*, or sixth class of animals, according to the system of *Linnæus*; in which the *fundus* of the *uterus* is divided into branches or horns, convoluted and terminated in a point.

In the succeeding plate there is given a specimen of one of the cotyledons of a cow, which is an animal of the same class. Occasion will be taken in the course of this work, to give an example of the form of the *uteri* of the different classes of animals, both in the common and impregnated state, and of the manner in which the *uterus* and *ovum* are connected together.

J. P. Rymsdyk delin.

W. Skelton sculp.

London Published by E. Cox & Son, St. Thomas's Street, Borough.

J. L. B. 1804

H. Shelton sculp

London Published by E. Cox & Son S^t. Thomas's Street, Borough.

PLATE V.

A Part of the *Uterus* of a Cow, with one of the *Cotyledons*, and a Portion of the Membranes.

THE changes which take place in the *uterus* of a Doe, *after conception*, as the softness and tumefaction of its substance, the formation of its membranous lining, and the origin and progress of the caruncles or glandular eminences in its *cornua*, to which the *cotyledons* are afterwards fixed, are all particularly described by *Harvey*.

The drawing now before us is from these parts in a Cow, an animal of the same class, which therefore are probably in all respects, except the size both of the caruncles and *cotyledons*, similar to those of the Doe. This *cotyledon* is in part separated and turned from the caruncle, by which means the texture of both is more clearly seen, and additional beauty given to the plate.

PLATE VI.

Three Human Abortions, one of which contains Twins.

IF delineations were to be made of every variety observed in abortions, there would be no bounds to the work. Yet in every collection there must be some examples, that we may be able to distinguish the different parts of which an *ovum* is composed, the proportions which they bear to each other at different periods of pregnancy, and sometimes the part of the process of utero-gestation which failed. It must however be allowed, that the generality of these things are preserved for their beauty, or as matters of curiosity, rather than of use. I suspect nevertheless that there are some appearances, besides the *vesicula umbilicalis*, not yet perfectly understood, and therefore recommend the whole subject as worthy of being reviewed by some anatomist, who has time and opportunities of examining it with accuracy. The figure which contains Twins is in itself of rather more value, as it is the first of the kind which has been delineated.

L. gymnotus deten.

G. Knight sculp.

London Published by E. Cox & Son 51 Thomas's Street Berrough.

R. Brown sculp.

J. Walland del.

P L A T E VII.

The *Uterus*, with the *Ovum* contained in it, of a Woman who died about the seventh week of her Pregnancy.

THIS drawing was taken, under the inspection of the late Dr. *William Hunter* and Dr. *Underwood*, from a woman who died in consequence of an uterine hemorrhage, which came on about the seventh week of her pregnancy, and proved fatal before the *ovum* could be expelled. The *os uteri* was sufficiently opened, and all the parts of the *ovum* loosened from the *uterus*, except a small portion at the *fundus*, the attachment of which remained very firm, and had a schirrous feel and appearance. The common means had been used to abate the hemorrhage, and to favour the exclusion of the *ovum*, but without effect; for the patient died on the third day from the first symptoms of abortion; the prognostic, founded on the general event of such cases, not giving reason to apprehend danger.

The short lines, which pass from the *uterus* to the *ovum*, shew very distinctly the manner of their connection, and the part which was found adhering when the body was opened.

PLATE VIII.

An Human *Ovum*, about the third month of Pregnancy.

THIS *Ovum* is rather larger than might be expected from the date, and more perfect than those usually are which are expelled in consequence of the common causes of abortion. No other art was used in preparing it than by soaking it in water, to cleanse it from the adhering blood. The artist who made the drawing was a *German*, whose name was *Nall*: He was so struck with the beauty of the preparation, that he never was satisfied with his work, and took uncommon pains to finish it.

Besides the two proper membranes of the *Ovum*, there is preserved a large portion of that membranous production of the *uterus*, the formation of which *Harvey* has so well described; which many writers have denominated the false or spongy *Chorion*; *Ruysch*, from its appearance, the *Membrana Villosa*, *illam placentæ partem obducens, quæ uterum respicit*; *Bianchi*, the *Placento-vascularis cortex ad totum ovi ambitum*; *Hunter*, suspecting it to be a *lamella* cast off from the *Uterus* after every conception, *decidua*; and from its duplicature, or *transit* over the *ovum*, which he discovered, *decidua reflexa*; and which, from its office, I have ventured to call the connecting membrane of the *Ovum*.

— — del.

London Published by E. Cox & Son, 5, Thomas's Street, Borough.

C. Knight sculp.

R. Levesey pinx.

London Published by E. Cox & son, St. Thomas's Street Borough

C. Knight sculp.

PLATE IX.

A Morbid Human Ovum.

THE circumstances chiefly deserving attention in this Plate are, the small size of the *embryo* compared with that of the *placenta*, the dropsical state of the *funis umbilicalis* and the change which has taken place on the internal surface of the *placenta*, which is rising into eminences, and has assumed such an appearance as if it would have been formed into tubercles or hydatids, in the manner suggested by *Ruysch*, and of which he has given several drawings.

It appears that this *embryo* must have been blighted in the very early part of pregnancy, though it has no marks of decay. But the *placenta* adhered, increased in its size, and remained in the *uterus* to the end of the ninth month, and was then expelled without much pain or difficulty: When brought to me it was supposed to be a mole, and seemed like a mass of flesh without any particular organization; but when carefully examined, was found to be an *Ovum*, with the appearances so well represented in this plate.

PLATE X.

The *Uterus*, containing the Child of a Woman, who died in the Act of Parturition.

THE preparation, from which this drawing was taken, has not been disturbed in any other way than was absolutely necessary to free it from the parts to which it was connected; but as it has been preserved in spirits, the outline of the limb and body of the child is rendered somewhat hard. It may however be considered as a just and perfect view of the situation of the *fœtus in utero* at the time of birth; and though, perhaps, no two children were ever found exactly in the same position, there is one which may be called the most natural, because its general habitudes are most frequent. This now exhibited corresponds so punctually with that described with such unrivalled elegance by *Harvey*, that his description might be almost suspected to have been taken from the same preparation.

John Van Rymsdyk ad vivam delinavit 1781

London Published by E. Cox & Son, St Thomas's Street, Borough.

R. Atkinson ad vicum pinxit.

W. Thelton sculp.

London Published by E. Cur & Son, St. Thomas's Street, Berrough.

PLATE XI.

Rupture of the *Uterus*.

THE person, from whom this drawing was taken, died suddenly in the act of parturition. I saw her a very short time before her death; and, no attempts having been made to extract the child, all the parts are exhibited precisely in the undisturbed state in which they appeared on making a crucial incision through the integuments of the *abdomen*.

The case was an example of the spontaneous rupture of the *uterus* at the posterior part, opposite the projection of the *sacrum*. The body of the child escaped into the cavity of the *abdomen*, the head remaining locked in the *pelvis*. The *fundus* and anterior part of the *uterus*, not being diseased or injured, had contracted properly after the exclusion of the child. The casual expansion of the right *Fallopian* tube with its *fimbriæ* upon the body of the child explains the relative situation of the parts, and gives additional beauty to the plate.

Many cases of the rupture of the *uterus* are recorded by different writers, especially by *Bonetus* in his *Sepulchretum*, and by *La Motte*; but I believe no just engraving of the subject hath been published. There is yet wanting a representation of a rupture at the anterior part of the *uterus*; which sometimes happens, though far less frequently than at the posterior part. For the completion of the subject it would also be necessary to delineate some of the varieties, to determine the precise part which is most commonly ruptured, together with the state of the *uterus* at the ruptured part. But of the rupture of the *uterus* the instances are so rare, that what remains to be done must be finished by the labours of different anatomists and practitioners.

PLATE XII.

Inversion of the *Uterus*.

OF the inversion of the *uterus* many accounts have been published, particularly by *Ruysch*, who has also given a drawing of it soon after the accident; but this is not sufficiently exact to convey much information. There is likewise in that very correct and splendid work of the late Dr. *William Hunter*, the *Anatomia Uteri Humani Gravidi*, a plate, which represents the state of the surface of the *uterus* immediately after its inversion.

I was called to the patient, from whom this drawing was afterwards taken, soon after her delivery, when she was supposed to be in extreme danger from an hemorrhage. I very imprudently neglected to take an examination *per vaginam*, so that the inversion was not discovered till near twenty-four hours after the accident; when the repeated attempts I made, with all the address of which I was master, and all the force I dared to exert, failed to reduce it. The *uterus* continued inverted, but the patient survived, and lived several months; though she was, for the remainder of her life, subject to profuse uterine discharges, by which she was at length exhausted. I have however seen several instances of women, with the *uterus* inverted, living for many years in tolerable health. In this plate the posterior part of the *vagina* is laid open: The *uterus* seems to be diminished in its size, and the *ovaria* to be somewhat enlarged. The altered position and direction of the *Fallopian* tubes is well represented, and by these all the other parts are explained. The inverted surfaces of the *uterus*, though lying in contact, had not adhered.

.h₂. Burmā ad verum delinquit.

London Published by F. and S. n. Thomas, Street Borough

W. Wilson, sculpt.

PLATE XIII.

An Extra-uterine *Fœtus* contained in its Sack, the anterior Part of which is removed.

OF this case, which was communicated to me by Professor *Hamilton* of *Glasgow*, the account is imperfect; but the fact is indisputable, and the drawing a faithful representation of the position and state of the child when the sack was opened, after the death of the patient.

The woman after several miscarriages became pregnant; the motion of the child was distinctly felt; at the end of nine months she had the symptoms of labour, which after a certain time ceased; there was no evacuation of any kind from the *uterus*, but the *abdomen* gradually lessened, though it did not return to its natural size. Her husband dying, she married again; but though she menstruated regularly, she was never afterwards with child. From the conception of the extra-uterine *fœtus*, she lived thirty-two years in good health, nor was her death occasioned, directly or indirectly, by that circumstance.

The *fœtus*, slightly covered with calcareous matter, was included in a globular sack, which adhered by a small part of its surface to the left side of the *abdomen*. Whether the sack was formed by the gradual distension of an original part, or was a new substance; whether the extra-uterine state happened from a defect of the *ovarium*, or from a rupture of the *Fallopian* tube, or of the *uterus*; or at what period of pregnancy the circumstance occurred, I am not able to give any account.

The plate shews the position of the child, and the degree of change it had undergone, so plainly as to require no farther explanation. The child weighed seven pounds. There were no remains of the *placenta*, and only about six inches of the *funis*.

In a very old painting in my possession there is a view of the rupture of the *Fallopian* tube about the sixth month of pregnancy. This, with many observations found in different authors, might be considered as a presumptive proof of a general opinion, that the *fœtus* commonly escaped from that part into the cavity of the *abdomen*.

The late Dr. *William Hunter*, I believe, first observed, though the *fœtus* be extra-uterine, that the *uterus* undergoes those peculiar changes which render it fit for the reception of the *ovum*.

PLATE XIV.

An Excrescence from the *Fundus* of the *Uterus*, with an Inversion of the *Uterus*.

My very much esteemed friend Mr. *Hamilton*, professor of anatomy at *Glasgow*, inspected the body from which this drawing was taken. The woman had laboured under the disease about three years; but she had concealed it. The tumour became so large in the *vagina*, as to occasion pains like those of labour, but was at length excluded through the external parts. Mr. *Hamilton* then saw her for the first time, but she was so exhausted, that she died in the course of a few hours.

On the examination of the parts after death, the excrescence was found to spring from the *fundus* of the *uterus*, which was completely inverted, and dragged through the *os uteri* into the *vagina*. The excrescence is seen adhering; and the part where the *uterus* terminates and the excrescence begins, may be readily distinguished. The texture of the excrescence was soft and spongy; it measured nine inches in length, twelve in circumference, and weighed one pound and four ounces.

*G. Porter delinavit:
sub aere J. Hamilton.*

London Published by E. Cox & Son, St Thomas's, Street Borough.

W. J. Knight sculp.

J. P. Nodder del.

W. Thelton scul.

London. Published by E. Cox & Son, St. Thomas's Street, Borough.

PLATE XV.

A Twin *Placenta* with the Membranes.

AFTER a slight injection of this *Placenta*, the membranes were distended with horse-hair, and when dried, the subject was placed before the artist. The drawing is therefore somewhat formal, not admitting of so much elegance, either in the design or execution, as is observable in some of the foregoing prints. But the partition of the membranes into chambers for the accommodation of the two children is preserved distinctly, and that is the great object of the plate.

I do not know, or recollect, that any engravings have hitherto been made or published of *Ova*, in which there were two, three, or more children, either in early pregnancy, or at the full period of utero-gestation. I therefore recommend this whole subject, in which there may be some peculiarities and certainly are many varieties, to those who may meet with opportunities of investigating it, as entirely new, and as affording them room for acquiring reputation by attending to a very useful and curious part of natural history.

PLATE XVI.

A *Polypus* of the *Uterus*.

THIS plate is engraved from a painting of a preparation in the *Museum* of the late Dr. *Hunter*. It represents "the *uterus* and *vagina* slit open to nearly their whole length, shewing a *polypus* larger than a child's head at the time of birth. This hangs from the *fundus* of the *uterus*, by a peduncle as thick as one's finger and more than an inch in length."

Several attempts were made to pass a ligature round the stem of this *polypus*, but without success, chiefly on account of its size. Had an attempt been sooner made, there would probably have been less difficulty.

A. The peduncle.

B. The *Polypus*.

PLATE XVII.

A *Polypus* with an Inversion of the *Uterus*.

THIS plate is also engraved from a painting of another preparation in the same *Museum*. In this "the *uterus* is shewn inverted by a large *polypus*, growing without any stem, from the *fundus* of the *uterus*, which is dragged low down in the *vagina*. The ligature (which remains) was passed and fixed, as it almost necessarily must, upon the inverted part of the *uterus*. The patient died on the fourth or fifth day after the operation." It is remarkable that the *uterus* was cut to a considerable depth by the ligature, before her death.

A. The Ligature as it was fixed.

B. The origin of the *Polypus*.

C. The lower part of the *Polypus*.

12/5/87

20/2/88