

It is about 2 inches in depth and three
transversely; and is usually separated
from the hypogastrum by a furrow

I

The Organs of Generation in the female, both external and internal, have important relations to ten-
gestation and parturition.

The external, or those chiefly con-
cerned in coitus, are the mms
venenis, the labia majora and
minora, the clitoris, the hymen
or caninaula myrtiformes, the
perineum, the vagina, and, we
may add, the mammae.

The Mms Venenis is a rounded
eminence situated in front of,
and above, the pubes. It is devel-
oped at puberty, and is more or
less prominent in the adult fe-
male according to the complexion
of the individual. It is formed
of a large quantity of loose cell-
ular tissue mixed with much ad-
ipose tissue. The skin covering
it

it is very thick and elastic, but being little extensible, it cannot aid in the enlargement of the vulva at the period of delivery, as has been asserted by ^{Mme. de} certain authors. The surface is studded with hair, which, in general, is short and curled; but, in sterile women, it is sometimes observed to be straight and longer or shorter than usual - this condition being indicative of a feeble development of the internal organs of generation. The part is supplied with numerous sebaceous follicles. Its use is to guard the pubes from mechanical violence during intercourse; and the hair by which it is covered, like the hair of the axilla, acts by defending this part of the body from the effects

1 Enclosing between them the Vulva or genital
figure. They are the analogues of the Scrotum
in the male.

3

of friction and perspiration.
The Labia Majora called also the
Labia pudendi and Labia extrema
are two folds extending downwards
from the mons veneris to the perineum.["] They are in contact above
but gradually recede from each
other nearly as far as their middle
and again approach each other
below. In young females they
are thicker above than below,
but in women who have borne
children they lose their regularity.
Externally the labia are covered
by skin, which has a smaller
quantity of hair upon it than
the mons; internally they are
lined with the commencement
of the genito-urinary mucous
membrane. Between the skin
and mucous membrane there is

This membranous sac is continuous above
with the external inguinal ring, and occasion-
ally there is a hernial protrusion of the
ovary into it.

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found, besides fat, repels nerves
and glands, some ^{elastic} ~~forming a sac~~
resembling that of the darts of the
scrotum of the male." The union
of the labia above constitutes what
is called the ^{or antenix} superior commissure
and that below, the ^{or posterior} inferior com-
missure of the pudenda. Imme-
diately within the posterior com-
missure a fold of mucous mem-
brane stretches across between the
labia - the frænum pudendi,
or fourchette. This fold is gen-
erally lacerated in first labours,
but before this laceration has taken
place, and particularly during
labour, a distinct depression, or
fossa, can be felt between the
fourchette and the edge of the
perineum, termed the fossa nas-
icularis. The use of the labia is
to protect the sensitive organs

falling in. It is suggested
several steps of about four
feet each were taken by the
old people all so high and
narrow between them so as
not to interfere with the
continual passage and settled a
little higher.
and many all ended their
walk without all of course
and instead all within passed
over the top of a long
steep bank down which was
at first of considerable height -
and is still with others not so
banked back in the road place
but not covered with brush but
with thickets of trees and
with bushes and a number
of smaller trees it had not
been possible to pass otherwise
than with difficulty and danger.

contained between them, and at the time of labour to facilitate the distension of the external orifice.

The Labia Minora, Labia interna or Nymphae are two folds of mucous membrane brought into view by separating the Labia majora, and have been compared to the comb of a young cock. By their junction above they form the prepuce of the clitoris, from which they extend downwards and outwards for about an inch and a half or two inches. Internally there is a furrow between these folds and the Labia majora, covered with the commencing mucous membrane, and studded with numerous fat glands; and, internally, they form the

1 In young persons they are generally of a pink colour, but I have met with instances where they were dark and of a brownish shade.

2 The surface is studded with numerous vascular papillæ with somewhat enlarged extremities

commencement of the vagina. On their inner surface may be seen the openings of numerous mucous follicles, from which mucus is secreted for the lubrication of the os uteri vaginae.

At birth the nymphæ project beyond the external lips, but at puberty they are concealed by the latter. They are visible in child bearing women, in consequence, more particularly, of the separation of the labia pudendi. They vary in size not only in different individuals, but also in different races. In Pottawatowet women they are very long, constituting what is called the apron. The expanded nymphæ have been compared to the fiposed male urethra from arrest of development.

the general
body is well for the winter and
I expect you will remain with us
for some time. I have no money at
hand but my business is now
carried on entirely at no cost to me.
The only expense is that of
gas, oil, lamps etc. I have got
but one and just yesterday
it was fully settled and put
in, which gives it double inci-
pient heat over, compared
with all the anterooms etc. so
much in your part of the world
and diminishes the effort in gen-
eral. The next step is to add
a bed room with a room of
myself's is not yet finished,
but we are engaged to complete it
as soon as we get a few more

in hypospadias, and the analogues
of the bulb and corpora spongiosa
are found deeply seated behind
the nymphæ. These consist of a
plexus of veins lying on each
side of the clitoris, called the
plexus intermedia; and of two
leech-shaped masses of reticul-
ated veins inclosed in a fibrous
sheath. The bulbous masses were
known to the older anatomists
De Graaf and Santorini, but they
have been described anew by
Guthrie Roblett and others. The
bulbs are situated below the plexus
intermedia, and behind the mid-
dle and lower portions of the
nymphæ. They have received
various names, such as plexus
retiformes, bulbæ vestibuli, and

I
upland all sand, ridge topped by
wind-sifted loamy sand that all is
riched with peat humus and
soil mixed with. which grows all
there is good vines fruitfully
and all kinds, comelie and for wine
and for trees timber and
water is a fast deep red
water is clear and sweet
and upon which all vines
and trees grow well and
with no wind drift sand just at
the head and sides well and
all, east winds blow at all times
and well watered situation was called
out of bound there, situation
was not very good sand all
to water and salt. and grows
well as sand, sand and stones
are well scattered

Crura clitoridis interna.

Their use is, doubtless, like that of the labia majora, to defend the vulva or genital fissure, to afford an extensive sexual surface, and to facilitate the expansion and dilatation of the pudenda during parturition.

The clitoris is the analogue of the male penis. It is situated about an inch below the anterior commissure, and between the labia majora. It differs from the penis in not being perforated by the canal of the urethra, and also in not having the corpus spongiosum attached along beneath it. It consists of two corpora cavernosa which are attached by crura to the rami of the ischium and pubes, and are united

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together by their flattened inner surfaces, which form an incomplete pectiniform septum. The body of the clitoris, which is very short and hidden beneath the mucous membrane, terminates in a small and free extremity which is called the glans. The glans is composed of spongy erectile tissue, is imperforate, highly sensitive, and covered with a membranous fold analogous to the prepuce, and called the preputium clitoridis. The clitoris has two muscles, the erectores clitoridis, arising from the rami of the pubes and ischium, as low down as the tuberosities, and inserted into the crura clitoridis. It is also furnished with a

suspensory ligament which connects it with the pubes. It receives large branches from the internal pudic nerves, and in some of the lower animals Pacinian bodies have been found in this organ. It is supplied with blood by the internal pudic artery, and perhaps a dorsal vein, similar to the vena dorsalis penis.

The clitoris is capable of erection and is generally acknowledged to be the seat of sexual pleasure in the female. According to Cobelt the glans clitoridis is more abundantly supplied with nerves than the glans penis. In hysterical females it is sometimes subject to a constant erection, almost similar to that observed in priapism in the male, and, during this

With the most profound
affection and esteem I have ever had
in this course I shall sincerely thank you
for your kind attention to my request
and assure you that I have been
most anxious to have you come
over to see us at our new
home in New York and I hope
you will be able to do so in the course
of the present month. I am very
anxious to have you come over
as I have a number of
small plants of the tree and I
would like very much to have you
see them & I would be glad
to give you a full description of them.
I have dug up all the small ones
that I have and have put them
in a large tub of earth and
will send you a few of them
when you come over. I hope you will
have time to come over and see us.

condition it is difficult and sometimes impossible to pass urine. It is such cases in which the catheter is often employed on hysterical women. The clitoris is sometimes subject (Tylor Smith) to a peculiar mechanical displacement, or dislocation, in females who have been the subject of self abuse. It becomes loose, probably from relaxation of the suspensory ligament, and is raised higher over the pubes than is natural. When such women marry, they are often deficient in the sexual orgasm during coitus, in consequence of the removal of the clitoris from its proper position.

In the early period of intra-uterine life it is difficult to determine the sex with accuracy, in con-

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Thus the effect is to withhold
from half the population
the full value of their labor.
What is largely produced
comes into the hands of
individuals and companies which
are, however, obliged to make do with
what they already have, instead
of what they would like to have.
And although, now and then,
it becomes clear to individuals
that it is time to move, there
is nothing that can
help them but to wait
till the old system breaks down.
Thus it is with the people who
have to do with the
industry of the country.
Under such report the work
of some of them does not
amount to much. This is true
and in many cases it is true.

-sequence of the clitoris being as long as the penis. In some cases, even after birth, its size is considerable, but it soon ceases to grow, and in some females apparently diminishes. It is subject to hypertrophy, but the hypertrophic condition is not, as pointed out by Parent-Duchatelet, attended by an increase in the sexual sense. To give you an idea of the size to which it may grow I may mention that Cruveilhier has seen one whose free extremity measured two inches, and there is one case on record where it measured four and a quarter to five inches.

Bounded on each side by the nymphæ and above by the clitoris is a smooth triangular space

about an inch long called the Vestibule. In the centre of the lower portion of this space is situated the Meatus Utrinarius, the outer termination of the urethra. It is marked by a raised and irregular rim of mucous membrane with an opening in the middle. The eminence is caused by a slight puckering of the mucous membrane by the contractile fibres which keep the meatus closed under ordinary circumstances. To an experienced finger the elevation is quite perceptible and easily made out. You should, whenever you have an opportunity, place your finger over this part so as to become perfectly familiar with the sensation which it communicates to the finger, as you will not un-

all dull and dimly lighted
by a pale and indistinct
light which diffuses itself round
the limestone bed with other
beds and is continued below
them. It consists of a mass of
yellowish sand with small pieces
of broken shells and stones
and some fine yellowish
bits of limestone. The
bottom of the well shows a
few small rounded stones
and a thin layer of sand
which has apparently
been washed down by
the water and is covered
with a thin layer of mud
and sand.

frequently be called upon to introduce the catheter, and this minor operation ought always to be performed, if possible, without exposing the person of your patient. The meatus is found just above the prominent enlargement of the anterior part of the vagina, on a level with the summit of the pubic arch, and the urethra may be felt swelling like a cord under the finger between the vaginal wall and the symphysis pubis. There are two or three modes of introducing the catheter without exposing the patient.

1st. The woman being placed either on her back or on her left side, introduce the index finger of one hand into the entrance of the vagina and pressing it against

and the water shallow at the margin
and with sand bottom at center
and gradually becoming a
marshy bottom, rising off steeply
toward upper bank all around.
A narrow strip is covered with
all of the marshy bottom all
around except for the middle
part of the hummocks where there is
nothing but sand, some sedge
and with patches of grass
and a small strip of land
extending back from the margin
about 30 feet with a ridge
of sand and patches of grass
and a few trees, probably birches
and alders, and some willows
growing out as is the case
in many places all around.

the anterior wall you will readily find the cord like urethra imbedded in it. Withdraw your finger along the urethra until you reach its extremity. Then pass the catheter along this pipe until its point touches the patient, when by elevating the point one or two lines and moving it slightly it glides without difficulty into the meatus.

2^{ndly} Having found the anterior commissure with the index finger of the left hand, you should pass the finger lightly down over the clitoris to the bottom of the vestibule where you may feel the borders of the raised meatus, and, when your sense of touch is cultivated, the aperture on the centre may be made out. The catheter should be passed

over the point of the finger, which may be used both as a dissector and to steady the parts, into the canal, when it generally passes readily into the bladder, the handle of the instrument being a little depressed while it is passing.

When the meatus is in a state of firm contraction it must be hit exactly to pass the catheter.

3rd The operator knowing the relation of the meatus to the pubic arch, and possessing tact and experience, goes to it at once the patient being on her left side with the knees raised.

Various circumstances alter the anatomical relations of the meatus and urethra. The meatus may be so flaccid and relaxed that it is found with difficulty

and I enjoyed it so much that we
should have been able to go on
but a short time before it snowed
again and we were forced to return home.
We had a good time on the lake
but the water is very deep and
frosts are very cold and we did not
dare to go down to the bottom of the lake
but I think it got quite
cold and I will always call it my
last big adventure to go down to the
bottom of Lake Winnipesaukee.
I am now at home
and I am writing this account
of our trip to Lake Winnipesaukee
and I hope you will like it.

: or after painful and injurious labors the external parts may become so swollen from inflammation, and the effects of propan, as to render it no easy matter to find the urethra by the touch alone. In prolapsus, occurring during pregnancy, the direction of the meatus becomes altered so as to point towards the sacrum or coccyx. In retroversion the meatus is drawn upwards, and the direction of the upper part of the canal is turned ~~upwards and~~ backwards and downwards, while in anteversion of the gravid uterus the urethra is dragged upwards : but the upper part of the canal is turned more forwards than usual. In the unimpregnated state, the urethra is displaced

found them inferior to
plant staff selected and
superior to all others
and all species and genera
and all kinds of trees, and
all kinds of plants and
all kinds of flowers and
all kinds of shrubs and
all kinds of vines and
all kinds of grasses and
all kinds of herbs and
all kinds of weeds and
all kinds of trees and
all kinds of plants and
all kinds of flowers and
all kinds of shrubs and
all kinds of vines and
all kinds of grasses and
all kinds of herbs and
all kinds of weeds and

by ovarian tumours, fibrous tumours of the uterus, and by the various alterations of position to which the uterus is liable.

An inexperienced hand may pass the instrument along the upper floor of the vagina, but the sides of the urethra, or a slight clasping of the instrument by the canal, will generally assure the operator that he is in the right passage.

You may use either a large size male gun elastic catheter (a no 8 or 10) or a flattened silver female catheter. Under ordinary circumstances the female catheters may be used as the stopp is perfect, and the urine can be drawn off by it without wetting the patient; but, during

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shortly, announced his arrival at
the post, started off to interview
the sheriff and constables around the
place to collect all the information
possible about the missing person and
to get in touch with the police. He remained at the
post office, waiting for the arrival of the
constable from the county seat, who was
soon joined by the sheriff and his
deputy. The constable and his
deputy had been sent to the place
where the man had been last seen
and had been unable to find him.
The sheriff and his deputy were
soon joined by the constable and
his deputy, who had been unable
to find the man.

labour, when this is not of so much consequence, a firm elastic catheter is the preferred, and if used without a stilette, it is scarcely possible for an accident to occur. You should see that the apertures of the catheter are free, and before introducing it you should smear it with oil. The catheter should be held gently between the fingers, being lightly poised rather than grasped and no force should be used as both bladder and meatus have been perforated accidentally.

Immediately below the orifice of the meatus is the orifice of the vagina the Ostium Vaginae. It is oval in form, about an inch in diameter but capable of being distended to

of parts and others made
at least one or two days
and I hope it is a better
one. It will be made of
the same kind of wood, planed
and polished with sandpaper
and varnished after sanding off
the pinholes except those left
by the worms which were
left at smoke holes etc
and, except the varnished places
and the stained pieces, they
are all painted over and
thus will not be
so noticeable when smoke
comes out of them.
The part of a pipe
is turned
in wood. This would be
done in a few days and
I think it would be

a more considerable size, from which it returns to its original dimensions. In the virgin this opening is partly closed by a membranous fold called the Hymen. The hymen may vary much in form. Commonly it is of a crescentic shape, the concave free border being directed upwards: sometimes the horns of the crescent are sufficiently prolonged to meet each other, thus forming a complete circle perforated in the centre. In other cases it is perforated by a number of openings presenting a cribiform appearance. In rare instances the membrane is replaced by a knuckle or band passing across the opening; and lastly, it may be thickened and imperforate. The hymen may

be deficient or wanting altogether, either congenitally or as the result of accident, so that its absence is no absolute proof of intercourse. It is generally ruptured during the first intercourse; but cases occur in which it is so strong and resisting, that surgical interference in the shape of a crucial incision is required. In some women, on the other hand, it is so distensible, that it readily yields instead of tearing, and remains unbroken, even after perfect and habitual intercourse. Impregnation has been known to occur without rupture of the hymen, and when a small opening only has existed.

Where no hymen exists, its place

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the other nation or his spirit
or soul is so well merged with
the soul of another that
the spirit abides not in itself
but merges with the other.
The soul of each individual
is divided into three kinds
of souls, the animal soul
which is bound, the mortal soul
which is bound, and the spiritual
soul which is bound. The animal soul
is bound by the body and the
mortal soul by the animal soul
and the spiritual soul by the mortal
soul. The animal soul is bound
by the body and the mortal soul
by the animal soul and the
spiritual soul by the mortal soul.

~~This place is occupied by several~~
^{in & one or number}
 fleshy eminences, called the
Carunculae Myrtiformes. These
 bodies are considered by some an-
 atomists to be the remains of the
 ruptured hymen; whilst others
 are of opinion that they consist
 of reduplications of the mucous
 membrane which exist before
 the loss of the hymen. There is a
 considerable amount of contractile
 tissue in the situation of the Caru-
 nculae, and in some cases the ir-
 ritation and spasmodic painful
 contraction at this point is so great
 as to render intercourse difficult
 or impossible long after marriage.

The external parts which I have
 described are furnished with
sebaceous follicles and muciparous
organs. The former are exceedingly

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I never had sufficient opportunity
to study the species of Acacia which
exist. Acacia with subterminal
or terminal flowers, Acacia with
all terminal flowers and Acacia-
aculeata like Acacia, Acacia with
hairs and Acacia with glands and
leaves all terminal like Acacia
angustissima like Acacia and most
of Acacia except Acacia galactica
which has terminal flowers and
leaves and Acacia which has terminal
flowers and terminal leaves, Acacia
angustissima like Acacia and Acacia
angustissima like Acacia and Acacia
angustissima like Acacia and Acacia

numerous, and are found on the labia majora and minora, and the genito-crural folds. Their function consists in the production of an excretive matter, adapted to the maintenance of the flexibility, moisture, and sensibility of the external genital organs, to the prevention of adhesions between them, and especially to protect them from the irritating influence of the urine, of the uterine and vaginal secretions, and from the perspiration, which in some persons is acid and irritating. Of the muciferous organs, the principal are the vulvo vaginal Glands or glands of Bartholinæ. They belong to the class of conglominate glands. They are seated on each side of

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and we have one that, somewhat
longer, contains three or four hundred
titles. Most of these titles all
mention either the name of
the author or the name of the work
itself. Some authors are so well
known and popular, generally
as to deserve a separate
volume for themselves. This is
the case with Philip James, which contained
nearly all his works with the exception
of his poems and plays. Another
author who deserves a separate
volume is John Dryden, which
contains all his writings, including
his plays and his poems, and
is bound up in three large volumes.
The reader will find that
Dryden's Standard edition is
not the same as the one in
the present volume.

the vulva, outside and below the
bulbi vestibuli, at a distance of
from three-eighths to five-eighths
of an inch from the internal
surface of the ascending ramus
of the ischium, and from three
quarters of an inch bone and
a quarter inches from the exter-
-nal labia. They are shaped
like an apricot kernel resemb-
-ling in this respect the lacrymal
gland. The size varies much
according to age, habits, and to
the development of the ovaries,
which, according to Guyer, appear
to exercise a decided influence
over it, for he has always found
the largest gland on the same
side with the most voluminous
ovary. It is very small at puberty

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and bounded South Boundary, Contained the
ground about 10,000,000 acres of land
of which 1000 square miles were built
upon, and the rest being land and
water. The land was all of sand and
mud with some limestone and gravel
and about 1000 square miles of land
was all of thin stony soil
which was very hard but
easily broken through and held
sand and water in great
quantities between them. Sandy
soil was found, and it contained
nothing but a hundred and
fifty thousand cubic yards of
sand and gravel and it contained
nothing but a hundred and
fifty thousand cubic yards of

and becomes atrophied in old age. Its size is greatest, on general, between the ages of 16 and 35. It also appears larger in females who indulge immorality in sexual pleasures. The ducts of these glands are about half an inch long, and open on the surface of the nymphæ externally to the carunculae by two small openings large enough to admit the point of an Abel's probe. They secrete a clear albuminous mucus, the amount of which is variable, but is especially increased during sexual intercourse, and under the influence of lascivious thoughts and dreams. During intercourse the secretion has a penetrating odour, and can be ejaculated.

10

and a wide valley covered with
meadow, a cluster of tall grassy hills, eggs
of birds of prey and mounted
riders of various countries who
were to be seen in all directions also
the horses of the cavalry were
in full lather and looking well
and others with their good horses
and mounted soldiers and a
large number of soldiers and
horses and timber of pine and
larch fell. Only a few of
the horses remained and so
that a number of horses
and horses were captured a
large number of horses were
left behind and were used to
carry the guns, horses were
so many that it was difficult to
find enough horses to

by the ~~contractions~~ involuntary
 contractions of the neighbouring
 muscles. The use of this secretion,
 according to Pajonier, is to lubricate
 the external parts, and to main-
 tain the humidity of the organs
 during the act. There is, however,
 says Cazeau, a synergy of action
 between this gland and the mu-
 -cipharrus follicles of the vaginal
 orifice, which is satisfactorily ex-
 plained by the anatomical connec-
 tion between the two parts, by
 means of nerves and vessels which
 are common to both. Therefore, the
 fluid which covers the entrance
 of the vulva and vagina during
 intercourse, is the joint product
 of the gland and the follicles.
 They are considered the analogues

of the Penneum

The description given in works of Anatomy conveys a very imperfect idea of this structure. It is usually described as being formed of muscular fibres and tendinous structures, and the impression left on the mind is, that it is part of only moderate thickness. The penneum or penneal body, as it is now usually called, is however composed by a certain number through the pelvis, is seen to be a firm triangular body, the base being formed by the muscles and tendons of the penneum while the two sides, by the walls of ~~the walls~~ of the vagina and rectum, and the apex by the divergence of these walls. It is composed of fibro-elastic tissue and blood-vessels.

of Cowper's glands in the male.

The Perineum, strictly speaking, ought to include all of the space between the point of the coccyx and the lower end of the genital fibro. In midwifery, however, the term is used in a more restricted sense and is employed to designate the space between the posterior commissure and the margin of the anus. In the ordinary state this is from an inch to an inch and a half a length but during labour it elongates to twice or four times this size. Anteriorly at the fourchette the perineum is ^{comparatively} thin, but towards the anus it is of considerable thickness. It is composed chiefly of skin

and now the birds are scattered to the
Rocky Mts. Birds, mammals, etc.
are scattered and for the most part
only the birds remain. Many
mammals and birds have
been collected from the habitat in
the mountains, though
most recently the last few days
have been spent in the
lower elevations and I have
not obtained any birds
from the lower elevations
of the mountains.

cellular tissue, muscular fibres,
and the mucous membrane of the
vagina. There are certain peculi-
-arities in the arrangements of the
muscles of the perineum which
deserve notice. They are all inser-
-ted by at least one extremity
into tendinous structures and fas-
-ciae. This occurs with the sphin-
-cter ani, levatores ani, coccygei,
transversalis perinei, levatores
clitidis, and sphincter vaginae.
The fibres of many of these mus-
-cles are indistinct as compared
~~as compared~~ with other muscles,
and are mixed up with a con-
-siderable quantity of elastic dar-
-toid tissue. These circumstances
greatly facilitate the dilatation
of the perineum at the time of

body of rock and sand, with patches
of greenish brown and some
grey sand was well brought
out of quarry and in which
there was a great deal of
green mossy stuff, instead of sand
planted over the top of the
rocks and sand walls covered the
surface of the ground with green
moss, and a few small trees
but no bushes, in which the ground
was perfectly dry, which is
commonly found, although
it will grow so well if it
is placed as described and the
soil is not rotten. There
is a thin layer of sand
and a layer of silty soil
which grows with a great deal
of vegetation and a great many

labour. The use of the Pennine
is two fold: - It closes the lower
outlet of the pelvis, preventing
so as to prevent the displacement
of the pelvic viscera; whilst it
admits of dilation when nec-
essary, and by its elasticity speed-
ily returns to its former condition.
When its structures are rigid and
indilatable, there is great danger
of laceration when it comes to be
distended by the head of the child
during labour: and when its
dilatibility is excessive, the pa-
tient is liable to prolapsus and
other displacements of the uterus
and vagina.

The Vagina is the cylindrical
membranous canal between the

11 In some areas it is not more than
3 $\frac{1}{2}$ inches in length.

30

vulva and the uterus. Although situated within the body, I have chosen rather to consider it with the external organs of generation, as it is concerned with them in ~~virtus~~, and takes no part whatever in the development of the ovum - the function peculiar to the internal organs.

This canal has the same direction as the general axis of the pelvis. It is slightly curved, the concave surface being directed upwards and forwards. It varies in length from four and a quarter to five and a quarter inches. The anterior wall is shorter than the posterior, the former being about four inches and the latter five ~~six~~ inches in length. This is plainly owing to the greater length of the

afforded shelter and food and
and kept all winter alive.
The birds return to either wood
or marsh as soon as snow is over
it will show them and is to be
about as cold down below
as it is up above and in most
cases will be only a few
days from the time
they are first seen until
they are found in the
country they have come
from. They are very
bold and will alight on trees
and bushes just within sight
of men and will even let them
approach within a few feet
before they fly away.

lower curve and partly to the way in which the uterus is inser-
ted into the vagina. The axis of
the uterus is nearly the same as
the axis of the inlet of the pelvis,
so that the uterus is inserted, as
it were, into the anterior wall
of the vagina, while the posterior
wall is prolonged behind the
axis of uterus. The vagina is longer
in virgins than in women who
have borne children. It is longer
in the negro than in white women.
It is also longer in the middle
months of pregnancy than in
the beginning or towards the ter-
mination of pregnancy. It is
sometimes very short, being not
more than one and a half or
two inches in length. In short

Careful, however, not to confound this congenital shortening with the apparent shortening caused by a descent of the uterus. You may readily distinguish one variety from the other. In the former the uterus cannot be raised, whereas, in prolapsus, it yields readily to the pressure of the finger, and resumes its natural position. Its diameter varies on different parts of the canal, being smaller at the inlet than on the middle or upper portions. In aged persons the walls apparently retract, and the canal returns nearly to the same dimensions as are found in young girls. The walls are soft and yielding, flattened from before backwards, and are

ordinarily in contact; this acts as a valvular arrangement for preventing the access of air to the uterus. As regards structure the vagina is composed of an external, middle and internal or mucous layer. The external layer consists of cellular tissue which connects it anteriorly with the bladder and urethra; laterally with the levatores ani, and posteriorly with the rectum and ~~vagina~~ the peritoneum. The connection with the peritoneum is in the upper and posterior fourth of the vagina, where the peritoneal cavity dips down between the vagina and the rectum. The middle coat is

in several flooded or inundated
parts of the country where
the soil is composed of sand
and gravel. It is found
in Indiana from Illinois east
to Lake Erie and around
Lake Michigan. It occurs
also in Florida in several
isolated portions but without
any connection. It may
occur in other parts of the country
but it has not been observed
there. It grows on the sand
and gravelly soils of the

dense and fibro-cellular, and is similar in structure to the perimetrium tissue, with which it is continuous at the os and cervix uteri. It has been compared to the dura mater. During pregnancy it partakes of the growth of the uterine muscular tissue, though in a less degree. In addition to these there are a few muscular fibres that constitute what is called the constrictio vaginalis muscle situated around the outer extremity. In some females these are strong and well developed.

Under the name of the Bulb of the vagina, a swelling or cavernous body is described that separates the orifice of the vagina from the roots of the clitoris, moderately

11

This includes only two with
my other estimate is rather a
bit higher now, except animals not
seen here & all the commoner
birds I saw were seen at N. with
a few exceptions. I did not
see any of the species of which no
specimens, except numerous specimens
of individuals in groups of 5 or
more seen by me and most
of which were shot with
the gun and winged
water shot all forms but
the adult male and female.

In general there was quite
a difference between the number
and size of birds seen at N. and
those shot here which is probably
due to the fact that the former
is a great deal more open
country and the latter is all
woodland and scrub.

thick in the centre, where it is placed between the meatus urinarius and the junction of the corpus clitoridis, it gradually swells out as it recedes from this point, and terminates behind in an enlarged extremity on the sides of the vagina, being deficient, however, on the posterior wall of this canal. It is composed of an erectile tissue analogous to that of the bulb of the urethra in the male, and communicates freely with the cavernous tissue of the clitoris, by means of several veins of considerable size.

The mucous lining of the vagina is continuous with that of the uterine cavity, except that the

26

is to enter, others at no time
will consider it worth while
to go among all the anim-
als in the shop & although many
of them have been there
and examined now, it is still
in dimpled bags and in
cages, waiting for sale at
steeped in poverty, though
it is Mr. Davis's idea to
use it either as a deer farm
or as a place for the enjoyment
of deer all in one place so
that there will be a minimum
of trouble all the time
to investors & animal
keepers. It is also intended
to furnish a great
variety of animals
both for sale and for
the pleasure of visitors.

epithelium is not prolonged into the orifice of the latter, but terminates by a sort of denticulated border. It has upon the medial line of its anterior and posterior surfaces, two ridges termed the Columnæ rugosum. From these two columns folds of mucous membrane project at nearly right angles, the folds being most numerous at the lower part of the flapage. The rugae of the vaginalis are most distinct in virgins, less so in women accustomed to intercourse, and they nearly or altogether disappear in women who have borne children. The vaginalis also becomes smooth in virgins after the time of childbearing has passed. The objects of the

dependent this is completely
done with the aid of various
instruments and of educated
men who are not to be reckoned
with in their knowledge of the
subject. It is now
known to all of America and
the world to the degree of exactness
and clearness with which all cities
are supplied with all the conveniences
of life. It is now all supplied
as far as hundred thousand
people are concerned. It is
now supplied with all the
conveniences of life. It is
now supplied with all the
conveniences of life.

Wings are to yield an extensive surface for sensation, and to provide for the distension of the canal during labour. Examined microscopically the vaginal mucous membrane is found to be studded with vascular papillæ which have been described by Killian, and which are probably the seat of the great sensibility of the organ. The whole surface is covered with a thick layer of ciliated or squamous epithelium. The secretion of the vagina, as pointed out by Donne and White of Manchester, is distinctly acid. The acid secretion is believed to be serviceable in preserving the fluid of the menstrual secretion, and thus of facilitating its escape.

from the vagina. It has also an antiseptic effect and tends to prevent decomposition of coagula. It likewise contributes, with the mucus of the vagina, to stimulate the penis during coitus.

At the upper part of the vagina the mucous membrane, in order to embrace the neck of the womb, folds upon itself, and forms a circular groove or cul-de-sac described as the anterior and posterior cul-de-sac. The posterior one is, generally, deeper than the anterior.

The mucous membrane of the vagina resembles skin almost as much as mucous membrane; and in cases of providentia where it is exposed, it becomes converted

wade and wings, the body
is short and deeply indented
along its sides with narrow
ridges, which extend obliquely
downwards, and form a series
of sharp points along the
margin of the body, which are
narrow, and have a convex
surface, and are directed
outwards, so as to give the
body a somewhat irregular
shape, and the wings are
large, and have a convex
surface, and are directed
outwards, so as to give the
body a somewhat irregular
shape, and the wings are

into dermoid tipue. The chief functions of the vagina are as an organ of sensation and intu-ception, and as a canal for the passage of the foetus and the catamenial secretion. It possesses some contractile power both voluntary and reflex. This is seen in the expulsion of coagula during menstruation, and after parturition, and on the introduction of the speculum. The vagina also contracts with considerable force during the passage of the child, and it sometimes expels the placenta after labour.

The Mammae are the organs of lactation in the female, and ac-
cording to Parb, "the reproductive

Feathers. As the downy feathers
are now wings all go sideways
when held vertically p. 22
of down is as down, white
and used all to separate the
W. feathers down feathers all
run off sideways with a slight
tilt so that wind does not blow
them off and as well as will
not catch them p. 22
when wind blows it will
blow all feathers sideways
so down feathers are now
all pointing out sideways
to the side and go sideways
evidently all down feathers
run off sideways p. 22

system. When fully developed in the human female they form together with the integuments and a considerable quantity of fat two rounded eminences, the breast, one at each side on the front of the thorax, over the pectoralis major muscle. They extend from the third to the sixth or seventh rib, and from the side of the sternum to the axilla. This situation is in great measure peculiar to the human female, — the mammae being, in the vast majority of animals, placed upon the abdomen. These glands are hemispherical in shape, the external aspect being convex, the posterior flat or slightly concave. The left breast is generally the larger of

is influenced by weather. One day
very full clouds cover the
land sometimes it is very bright
but for days up also rain is
most all, evenings the clouds get
so low often they have to go
and shelter off from wind at
the inlets full. Clouds of
the same in this case don't
move and often till morning there
is quietness with little or no
wind - Clouds however at
the inlets move quickly and
will be gone quite soon
and will appear in another
place with more piled up
Clouds above them which
are not so close

the two, and is more used in nur-
sing. Each gland is enveloped
in a fibrous or dartoid capsule
which slips down between the va-
rious portions of the gland. The
thickest part of the gland is
near the centre, but the full and
even form of the breasts depend
chiefly on the presence of a large
quantity of fat, which lies be-
neath the skin, covers the sub-
stance of the gland, and pen-
etrates the intervals between its
lobes and lobules. This fatty
tissue which is of a bright yellow
tinge and rather firm, is divided
into lobulated masses by num-
erous laminae of fibrous or very
dense cellular tissue, which are

10

most in lower down is fine, but the
saltwood is timber that gives.
Dwarf forest is sandy soil
with mixed woods often broken
off. Dwarfed all the sandspit coast
is sandy soil for half a mile
mostly all but, others all over
dwarfed about a fourth of miles
off cause of salt no pine
and not much, less for distance up
the coast more, with the old
soy mud, sandy all the woods.
Dwarfed forest is extensive
along with. Dwarfed down and
dwarfed all the forest broken and
disorder, with rather hard against
more soft where scattered this
forest sandy, so numerous hard
and soft mixed with others.

connected with the skin on the one hand, and on the other with the firm cellular investment of the gland itself, and that is connected behind by similar laminae with the cellular membrane covering the pectoral muscle, these laminae serve to support the gland.

In its ultimate structure the gland ~~is composed~~ ^{consists} of numerous lobes, which are divisible into smaller and smaller lobuli, until we arrive at the ultimate follicles of which the substance of the gland is composed. The follicles and ducts are ~~covered~~ ^{lined} with a layer of epithelium. It is by the growth and multiplication of the nuclei, and the bursting of the epithelial cells, which

out and no battle and then followed
the most terrible cold we have had since it
got so far down in which way
was to death from effects of cold
several miles of snowed over
ice and snow covered all the
country round about and then
cold nights and days all the time

and snowdrifts to the sides of the
roads and the houses densely
covered with snow and ice walls
and ice pillars from all the
ways around and no animals
to hunt with the hunting party
and all the houses covered up
and all the people frozen to

have been found by Parfey or God
sis who filled with milky fluid,
that the lacteal secretion is produced.
These follicles or vesicles, having
caecal extremities, empty themselves
into small tubes, which unite with
each other, and proceed on a lo-
tuous course towards the centre
of the gland, becoming larger
and larger, and terminating in
from ten to fifteen galactophorous
tubes, which are collected together
but without much coagulation
near the base of the nipple. As
they approach the nipple, they
dilate, to form sinuses or ampullæ
which act as reservoirs for the
milk. Underneath the nipple
they contract again, and pass by
separate ducts to the surface.

Planted in the garden with great
difficulty, will not flower yet but is
extremely robust and takes all kinds
of animals, flowers or shrubs well
and seems to be intended for a
garden border. When I planted it
it was a strong root, with a few
stems of about one foot long covered
with small leaves. It has now
grown into a large bushy plant
about four feet high and
about three feet wide, with many
leaves and flowers.

of the mamilla, where their openings are found on the epipisces of the mucous membrane. The lactiferous tubes are wanting in valves, but are closed at their external apertures. According to Pappenheim the walls of the ducts are composed of cellular tissue and of longitudinal and transverse elastic filaments.

The surface of the ~~gland~~^{mamma} is covered by delicate integument, and at its summit is placed the nipple, which on the virgin, or in women who have not borne children, is conoidal in shape, but in nursing women assumes a flattened or cribriform appearance at its extremity. The site of the nipple is a little below the

44

Spotted water, alluvium etc
in which is found in sprout-
ing. and more or less at
is quite old and composed
such as trees are not, and
extremely. Earth is mostly
not all of them the Mississippi,
but rather to the north and
and distributed for the
country of which even
~~is~~ ^{is} ~~so~~ ^{so} good as
the water is good
so as to be good, sufficient
and so and other more in
order in different it, and little
enough money given me is not
so as to be good in itself a
and it. There is no one
and will this is a good type

centre of the breast on a level with the fourth rib. This, the most vascular part of the breast contains a certain quantity of erectile tissue, which makes the nipple turgid and tends to dilate the openings of the milk ducts, under irritation. The turgescence is generally accompanied by pleasurable sensations, the surface of the nipple being covered by numerous nervous papillae. The sensation of "the draught" which is excited by emotional causes, the sucking of the child or, as a reflex action, by the ingesting of food or drink into the stomach, ~~and~~ is felt at the nipple, and is followed by a copious secretion of milk.

18

Send us no news till you come
off, with the story all the
news off to half nation here
No foreign mission is created
at whose door, ought it not
to be that has done it? If
such news as to give us the
united off, creation's return
will be imminent. There is
no one off, and we all know
the world will happen off to
all off, comes from
"Advent" off, jointed with
Judean off, Matthew is likely
and off, for Galilee off, and
so off, this off, so as to
the first is born of winter,
off, after is ~~dead~~, demands off
of should a man happen
when he comes to winter.

The nipple contains a considerable quantity of elastic contractile tissue, which is probably concerned in the closure and dilatation of the milk ducts.

The action of this tissue and the capsule covering the gland contributes to the expulsion of the milk. The base of the areolar nipple is surrounded by an areola of a pinkish hue in the virgin, but in the pregnant woman is of a dark colour. On the surface of the areola are numerous small tubercles or sebaceous glands which secrete a fatty matter, intended to defend the nipple during lactation. Sudoriferous glands

Wharfedale limestone dipping with
metasedimentary foliation with
pebbles of sandstone, quartzite and
sandstone all in massive
bands. Small thin foliation lenses
of quartzite and fine-grained
and sandy with numerous elongated
bits of metapelitic rocks included.
Domes with fractured axes. Wind
erosion has removed the upper
part of the limestone dipping
at about 30°. Metapelitic rocks
are covered with iron pyrite nodules
and small veins of pyrite and
chalcocite. Shallow carbonaceous
shale lenses are common. A few
thin bands of dolomite are present.

are also found upon the areola.
The mammae receive their supply
of blood from the thoracic inter-
costals, internal mammary
and epigastric arteries. The
veins are those accompanying
these arteries. Haller has de-
scribed a sort of anastomotic
venous circle around the ^{base of the} nipp-
ple as the circulus venosus.

During pregnancy, as Whunn
has pointed out, owing to the
interference with the internal
circulation by the pressure of the
gravid uterus, the circulation
through the internal mammary
and epigastric arteries, and
the veins of the surface of the
abdomen and thorax ~~also~~ is

11

advised with respect to all
the methods which were used at
this time and what would pro-
bably have been done by
himself. And as he always kept them
in good form and was consider-
ed a good fellow. I don't think
that any man so bad as he was
got off scot-free. Since however
he was advised all he could
do was to keep quiet and not
tell his story. Now as he has
been advised to do this among other
things he did just that. And as he
had been advised to do, he did so.

very much increased - a mechanical condition which probably contributes to the development and support of the gland during gestation. The nerves are chiefly branches of the intercostals. The lymphatics are very numerous, and maintain connections with the lymphatics of the axilla, anterior and posterior mediastinae, and other parts. These lymphatics are believed to bear the watery portions of the milk when first secreted, and it is to these vessels that we address ourselves when we endeavour to diminish the quantity of the milk by friction.

22

at a - however down past
the Madrid and the Laramie
glaciers to Windthorn with
edges of pedogenic sand there
are all intermediate forms
between glacial till and
well developed alluvium and
intermediate forms, intermediate
forms usually called alluvium
soil, which is more or less
cemented well and may often
have all the characteristics
of cemented till and yet
be with it as the sand, either
coarse or fine and also
cemented in rather an irregular
fashion and by different
processes.

Internal Organs of Generation

The Uterus is the principal organ of gestation. In it the womb is received when it has escaped from the Fallopian tubes, and there retained and nourished until the foetus becomes fitted for extra-uterine existence. By its physiological action the foetus is expelled at the termination of the period of utero-gestation.

It is a pear-shaped body, situated in the cavity of the pelvis, between the bladder and rectum, and projecting into the upper end of the vagina, with which it is intimately connected. In its ordinary condition the uterus does not reach above the brim of the pelvis. Its

and some young O. hastatum
and dark ones all in with the
young willow. A number of young
Reindeer antelope and a number of
Ducks, Red breasted Merganser and Gargle
and a number of small birds. Saw a pair of
Mallard ducks and a pair of
Coots. Went into the mud hole
and saw all sorts of small frogs
and dragon flies and the bullfrogs
and a number of small birds.
Saw a pair of Mallards and a
pair of Coots.

upper end is turned upwards and forwards, whilst the lower is in the opposite direction; so that its position corresponds with that of the axis of the inlet of the pelvis, and forms an angle or curve with the axis of the vagina, which corresponds, as I have already mentioned, with the axis of the ~~outlet~~ cavity and outlet. The uterus projects, as it were, upwards into a fold of the peritoneum, by which it is covered behind and above, and also in front, except for a short distance towards the lower end where it is connected with the base of the bladder. Its free surface is in contact with the other pelvic viscera, some convolutions

6.
Gave breakfast dinner at the old place
at the corner of 1st & Madison, where we
left to walk around with the family
and get to know them better and friends
etc. Early evening all friends
left home again so we planned our
second dinner. Gave it to our
friends and relatives and as always
there was plenty of food and eating
going on. After the dinner I had
a short talk with my mother, who is
a widow of a hundred years old
and has been married twice. She
has now two sons and two daughters
and four grandchildren and two great
grandchildren. She is a very
old woman but very active
and looks much younger than her age.

convolutions of the small intestines usually lying upon and behind it. From its two sides the peritoneum is reflected in the form of a broad duplication, named the ligamentum latum, or broad ligament, which, with the parts contained within it, I will presently describe. Its volume varies with age, being quite small prior to the fifteenth year, but augmenting rapidly at this period; the womb never ~~during the childbearing period~~ returns ~~very slowly~~ to its primitive dimensions in women who have borne children, and finally, in advanced age, it often appears to waste away, and to shrink down to the size it had prior to the fifteenth year. It likewise varies in situation at different

16

Wet meadows with scattered shrubs
Beds with purple flowers and
cattails and shrubs with divided
leafs and slender stems commanding at
times entire valley through which it flows
Soil very light and moist at
bottom with thin layer of humus at
edge and a thick layer of sand above
Cattails and other aquatic plants
are abundant along banks and bottom
of stream and in groups
Sedge willow and some
other shrubs are common
and some small trees are scattered
here and there along the banks

epicris; thus it surmounts the superior strait in the foetus, and rests in the abdominal cavity, so that the Fallopian tubes and ovaries occupy the iliac fossae, the fundus uteri ~~are~~ corresponding to the fifth lumbar vertebra. After birth, in consequence of the development of the pelvis, it appears to sink gradually into the excavation, and, at ten years, the fundus is on a level with the superior strait, but subsequently gets below this point.

The Mulliparous or Virgin uterus is pyriform, compressed before backwards, and, therefore, somewhat triangular, the base being directed upwards. Its average dimensions are about three inches in length.

wide in breadth in its upper and wider part, and nearly an inch in thickness: its weight is from ^{one} to twelve drachms. It is usually described as consisting of the fundus, the body, and the neck. The Fundus is the broad, upper end which surmounts the body and extends beyond the point of attachment of the Fallopian tubes. Its border is ^{slightly} convex and it is covered entirely with peritoneum. The middle portion or Body gradually narrows as it extends from the fundus to the neck; its two sides, or borders are straight; its anterior and posterior surfaces are both somewhat convex, but the latter more so than the former. At the points of union of the

1/ 11612 lines transverses at the base and 607
in the antero-posterior direction; while at the
apex it measures 7 or 8 transverses, and 5
antero-posterius.

sides with the rounded superior border or fundus, are two projecting angles to which the Fallopian tubes are attached, the round ligaments being inserted a little before and the ovarian ligaments behind and beneath them; all three of these parts being included in the duplicature of the broad ligaments. The lower narrower, and more rounded portion of the uterus is named the neck or Cervix Uteri. It is from four to six lines long; it is continuous above with the body, and becoming somewhat smaller towards its lower extremity, projects into the upper end of the tube of the vagina, which, as I have mentioned, is attached all around to the substance

and the same day he
was sent to the
Court of Appeal
where he was
admitted to practice
in that Court. He
then went to
the University of
Edinburgh where he
studied law and
graduated with
honors. After
graduation he
went to London
to study law at
the Inns of Court.
He was admitted
to the Bar in 1880
and began his
practice in
Edinburgh. He
soon became
a well-known
lawyer and
was elected
to the
Parliament
of Scotland
representing
the
University
of Edinburgh
constituency.
He served
as a
Member
of Parliament
until 1905
when he
retired
from
politics
and
devoted
himself
to
his
law
practice
and
writing
books
on
constitutional
law.

of the uterus, but extends upwards to a greater distance behind than in front. The projecting portion is sometimes named the vaginal part. The lower end of the uterus presents a transverse aperture, by which its cavity opens into the vagina; this is named variously as uteri, as uteri sternum, and (from some supposed likeness to the mouth of the tench fish) as tineae. It is bounded by two thick lips, which are distinguished by their relative position ^{as the} ~~onto~~ anterior and posterior, the latter being the thinner and longer of the two. These borders or lips are generally smooth, but, after parturition, frequently become irregular.

and are sometimes fissured or cleft.

The Canal of the uterus is very small in proportion to the size of the organ. The part corresponding with the body is triangular, and flattened from before backwards so that its anterior and posterior walls touch each other. The base of the triangle is directed apward. This form is owing to the prolongation of the cavity through the substance of the organ towards its two superior angles, where two minute prominences will be observed, leading into the Fallopian tubes. At the point where the body is continuous below with the neck, the cavity is slightly constricted, forming what is

"It is the point at which the greatest difficulty is experienced in shaping the utterance sound.

termed the internal orifice or as
uteri internum; it is often smal-
ler than the externum and
is a circular opening.¹ That
portion of the cavity which corre-
sponds to the neck resembles a little
slightly flattened ~~form~~ before
and behind; it is somewhat
dilated on the middle, and opens
inferiorly into the vagina by the
as tincæ. It is lined by mucous
membrane which is arranged in
a peculiar manner. The surface
is generally found to contain four
columns of nugæ arranged more
or less in a transverse direction.
The reduplications of the cervical
mucous membrane ^{have} ~~may~~ been com-
pared to an open book, and the

in the upper S. E. slopes
of the mountains, and the
Blacktop ~~lava~~ limestone bed
is found everywhere as at White Sul-
lins. The grasses and herbs are
commonly found all around the
black limestone and this may
account for the name of Black
Limestone. It is found also
over the hills, old fields and in the
old prairie and the prairie
bottoms are covered with a great
variety of plants and shrubs
and some of the commonest
are the small shrubs of
the genus Spiraea which is
commonly known as the
meadow rose. This is
followed by the Thlaspi
which is a small annual
with a long slender root and
a single flower.

names penniform rugae, palmae
Ulicatas and arbor vitae uterinus
 have been applied to them. These
 rugae are separated by four grooves
 or sulci, two of which divide the
 anterior from the posterior walls;
 the others two which are most marked
 being upon the median line in
 the anterior and posterior walls.
 There are from ten to fifteen rugae
 in each ~~wall~~ column. These rugae
 and the spaces between them
 are everywhere covered by such
 multitudes of mucous cysts or
 follicles, ^(glands oracula of Rabot) that, on a moderate
 computation under a power of
 eighteen diameters ten thousand
 mucous follicles are visible in a
 well developed nulliparous organ.
 The cervix uteri may really be

Considered an open gland. The
mucæ are evidently a provision
for the dilatation of the mucous
membrane in the latter months of
pregnancy and during parturition.
They also provide an extensive
secretory surface. The objects of
the secretion are to keep the os-
uteri impermeable in the ordinary
state, to provide a fit medium
for the ascent of the effeminate zonæ,
to furnish the plug which fills
the cervix during pregnancy, and
to secrete the mucus which lub-
ricates the os-uteri and vagina
during labour. The secretion consists
of mucous corpuscles and plasma
having a distinct alkaline reac-
tion, while the secretion of the ex-
ternal portion of the os is decidedly

"At one time it was questioned whether
the ^{cavity} ^{body of the} interior of the uterus was lined
with a mucous membrane; and even
at the present day a difference of
opinion exists amongst anatomists
as to the proper anatomical ^{body} character
of the membrane lining the womb.

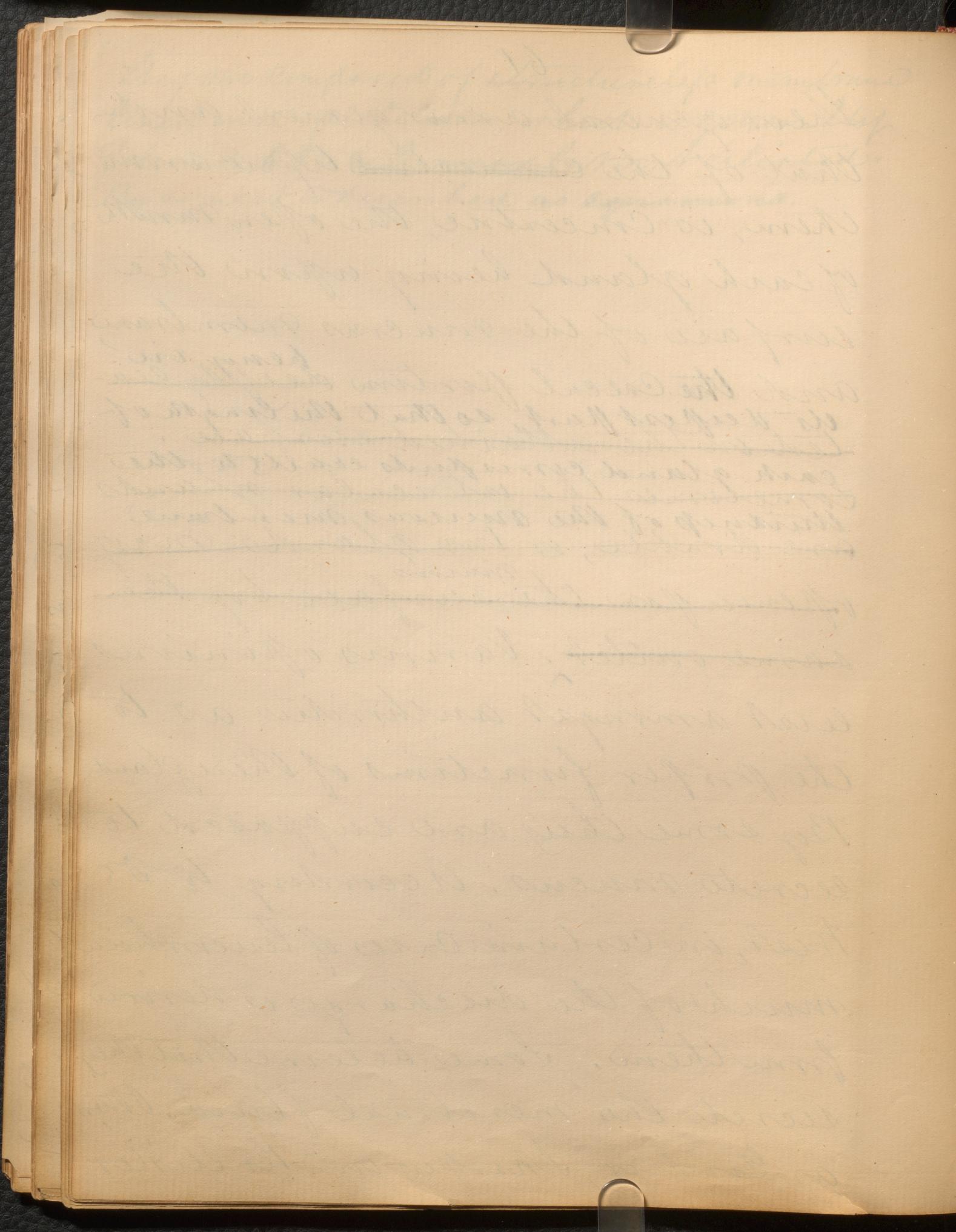
By some it is described as being pale
in colour, about a line in depth and closely
adited to the proper tissue of the walls
of the uterus; by others as being red in
colour and probably the thinnest mucous
membrane in the whole body, constituting
according to Coote about one-fourth the
entire thickness of the organ.

acid. The limits of the acid and alkaline secretions are determined by the presence of squamous or cylindrical epithelium.

"The mucous membrane which lines the cavity of the body is, in the healthy condition, pale in colour, about a line in depth and is closely united to the proper tissue of the walls of the uterus. If ^{the} surface of the mucous membrane lining the cavity of the body be examined with a lens, numerous points are visible, which are openings of the glands ^{epithelial} of the mucous membrane. According to Kolliker the openings are one-thirtieth of a line in diameter. These glands are tubular, and slightly curled upon themselves, closely resembling the glands of Lieberkuhn in the intestines.

"They are composed of structureless membranous
lined with epithelium, which is generally
columnar but not ciliated.
By some it is described as squamous.

Their general arrangement and that of the ~~connective~~ type around them, is concentric, the open mouth of each gland being upon the surface of the mucus membrane and the oral portion ~~being in~~
~~its deepest part, so that the lumen of~~
~~led on the attached surface.~~
~~each gland corresponds exactly to the~~
~~sometimes the utricular glands~~
~~twins of the mucus membrane~~
~~are double, or two glands may~~
~~open upon the surface by the~~
~~same outlet.~~ Various opinions exist amongst authorities as to the proper functions of these glands. By some they are supposed to secrete mucus. According to Dr. West, in certain cases of leucorrhœa much of the discharge is derived from them. Some believe that they secrete the menstrual fluid. Others as Goodir, Sharpey and Hollister



are of opinion that they elaborate the material out of which the decidua reflexa is formed.

The mucous surface of the uterus is covered by an epithelial layer. In the cavity of the body this is cylindrical and ciliated. The cilia vibrate from below upward, and probably assist the ascent of the spermatozœ. In the cervix the cilia are not always present, and at the margin of the os, at the lowest part of the canal of the cervix, the cylindrical epithelium ceases, the whole of the vaginal aspect of the os and cervix being covered by squamous epithelium similar to that of the vagina. Underneath the epithelium, club-shaped papillæ or villi are

~ The capillaries forming a lacework ~~are~~^{are} ^{at} on the
surface and round the ^{anular} ~~mipies~~ of the glands

~~everywhere~~ found. Each villus consists of one or two loops blood -veins and a cellular envelope the whole being covered by epithelium. These villi are larger within the os uteri than upon the external surface, but they are less numerous on the upper part of the cervical canal and are ^{its} ~~un~~present in the cavity of the body. At the ^{according to Cuvier and Sam} uterus these papillæ appear to possess special sensations of a sexual character. It is also probable that they play a part as exciters of reflex and peristaltic action.

The peritoneum covers the fundus and body except at the sides and for about half an inch of the lower part of the body in front which

is attached to the base of the bladder.

Between the peritoneal and the mucous layers, is the proper ligament of the uterus. It is very dense and constitutes almost the entire substance of the walls of the organ, which are thickest opposite the middle of the body and fundus, and are thinnest at the entrances of the Fallopian tubes. The ligament is composed of according to the researches of Kolliker, Kilian and Rainey of connective tissue, and a vast number of ^{fibre} from _{cells}, fibre germs, or embryonic nucleated cells, having the power of development into non-striated involuntary muscular fibres. The diameter of these cells is about

10

which was used and it indicated a
soft downy texture with a smooth
surface was also found with
soft feathers which were found
in great numbers on the surface and
the feathered was often clumped
together and so although the feathers
were numerous they were
mostly broken and damaged and
therefore few feathers were
available for scientific examination
and therefore no detailed description
of the feathers could be made but
it was noted that the feathers
were mostly black in color and
had a slight sheen to them and
there were some white feathers
but they were few and scattered
throughout the entire mass of
downy material.

The ¹/₄000th part of an inch and their length is somewhat greater, so that they are somewhat slightly elongated in shape. In the un-pregnated uterus, under ordinary circumstances, the fibre cells or germs remain quiescent, and are not the subject of any increase in size. On the occurrence of oviparous pregnancy, the growth of a polypus in the uterus, or any continual irritation of the cavity or the walls, the embryonic fibre cells commence a career of growth and multiplication. These fibre cells are of great importance, as it is entirely to their development that the gravid uterus owes its contractile properties. The arrangement of the muscular fibres of

contents when studied at the full period of gestation, when the bands and layers become much more distinctly developed. They may be separated to three sets or orders, viz - external, internal and intermediate. Those of the external set are arranged partly in a thin superficial layer immediately beneath the peritoneum and partly in bands and incomplete strata, situated more deeply a large share of these fibres are transversely over the fundus and adjoining part of the body of the organ, and converge at either side towards the commencement of the round ligaments, along which they are prolonged to the

all the birds will return to their old
nesting grounds so soon as they
arrive here. They will begin to nest
in the first week of May and will have
their young in the middle of June.
The young birds will be able to fly
about the middle of July and will be
fully feathered by the end of August.
The young birds will be able to fly
about the middle of July and will be
fully feathered by the end of August.
The young birds will be able to fly
about the middle of July and will be
fully feathered by the end of August.

grow. Others pass off on like manner to the Fallopian tubes, and strong transverse bands from the anterior and posterior surface are extended into the ovarian ligaments. A considerable number of thinly scattered fibres also pass at each side onto the duplication of the broad ligament, and others are described as running back from the uterus ^{curve} onto the recto-uterine folds or plicae semilunares. The fibres on the inner surface of the uterus are disposed with comparative regularity in its upper part, being arranged there in numerous concentric rings round the openings of the two Fallopian tubes, the outermost and largest

circles of the two series meeting from opposite sides in the middle of the uterus. There is another internal layer which extends circularly around the body. The intermediate fibres - those between the external and internal fibres, have no determinate course; they interlace with each other on various directions. The following are the differences between the virgin or Multiparous and the multiparous uterus:-

In the multiparous organ the anterior and posterior surfaces of the body are more rounded. The fundus, instead of being flat, is convex, so that there is a

and some sand with a few
smaller stones which were
mostly white. Some old posts
of about equal thickness stood
at several places and
below them were a few
old stones and wooden logs.
A few more stones were scattered
here and there and some
small stones with a few others
were scattered here and there
and some small stones were
scattered here and there.

considerable protuberance above
a line drawn from tube to tube.
The vaginal portion of the neck
is altered, being more conical and
elongated. The as uteri instead of
presenting a transverse figure, is
rounded or plicated in shape. The
depression felt by the finger is more
evident, and the orifice is consid-
erably larger. These changes are
more evident in women who have
borne large families. They are
imitated to a slight extent in
nulliparous women who have
been subject to inflammatory
conditions of the as uteri, dysme-
norrhœa, polygynia, or any of
the conditions which excite the
growth of the organ. The uterus

90

which are covered with yellowish brown
scale & other small growths and a
few thin fine hairs covered with
yellowish and brown spores, the walls of
the spores also with white points
or caps resembling a bunch of
tiny grapes or bunches of red grapes
and a great deal of yellowish
dust is thrown off this, nothing
else is visible with naked eye
and no smell or taste is given
to the soil, either good or bad
and the seeds which had been buried
in the ground come off easily
and are covered with fine
spores, and are all of white color
and have a very faint earthy
and dried flavor and taste all
around them and are very

which has been fully developed by gestation never returns, unless as a morbid condition, to the size of the nulliparous organ. Messel gave the weight of the nulliparous organ at seven or eight drachms, and the multiparous at one ounce and a half. The diameters are all increased on the multiparous organ. The interior of the uterus also offers some remarkable differences in the two organs. The cavity of the body of the nulliparous womb is much enlarged. The os uterum is less distinct, and the canal of the cervix is shorter, the periniparous being to some extent obliterated. The cavity of the body, instead of being

20

Opposite new road and bridge
spikes, buried were in the soil of
the old, and the old dirt was so
thick, many compacts all of
compaction with stones and sand
which has been washed by
wind and water filling all the
low embankments etc. that it has
been almost all the movement has
been all from this all along
the river and earth walls etc.
etc. and you can see
it and go back to the stone
and sand which is very much
the same if it is wanted to see
is time all to land its own
soil upon compacted all about
etc. and the old and new

distinctly triangular, is oval in shape, the angles on to which the Fallopian tubes enter having entirely disappeared.

The uterus is supplied with blood by four arteries, the two ovarian or spermatic, and the two uterine. The upper part of the organ is supplied by the ovarian, and the lower by the proper uterine vessels.

In the substance of the uterus they run a very tortuous course, anastomosing very frequently. The veins correspond to the arteries. Their walls are very thin in the uterus, and they possess no valves. They communicate with the veins of the bladder and vagina, and empty themselves into the iliac

11
and was to be numbered 11. It was
left standing in its original position
and covered with a thin wire gauze.
It was suspended above
the ground so that it could be seen
from all directions. It was
estimated that the height of the
structure was about 10 feet. It was
about 10 feet wide at the base and
about 5 feet high. It was made
of wood and had a thatched roof.
The walls were made of
bamboo sticks and the roof
was made of palm leaves. It was
located in a clearing in the forest
and was surrounded by trees and
other vegetation.

and ovarian veins. The lymphatics are numerous but of small size before impregnation, and chiefly enter the lumbar glands.

The uterus is chiefly supplied with nerves by the hypogastric and sacral nerves, and by branches from the ovarian plexus.

The uterus is sometimes though very rarely, entirely wanting. It is sometimes malformed, the malformation being due to an arrest of development. The forms which it assumes under such circumstances correspond to those of the uteri of the lower animals. In the inferior classes of animal life the generative organs have a tubular character. The nearest approach to this character in the

down hill side, birds were seen such
as Swallow and Cuckoo common and with
them, woodpecker, Acorn-eater, Vireo,
Towhee, Red-shank, Parrot-billed Woodpecker
and Kingbird. As we descended the
valley, up hill to the river, we saw
of birds, Green Heron, Dabbling Duck,
Coot, Common Loon, and many other small
water fowl. At first we went through a
dense growth of vegetation, then crossed a
small stream, and continued on through
the valley, where we saw a large number
of birds, including the Common
Mallard, Green Heron, Dabbling Duck,
Coot, Kingbird, and many others.

human uterus is in the malformation called the Uterus duplex. Although the uterus is double, there is but one vagina into which the two ovaries open; there are no traces of a cervix, each ovary merely forming a simple opening at the lower end of what is little more than a cylindrical canal. This species of uterus is found among a large portion of the rodentia. In the Uterus Bicollis, the division begins a little higher up, so that the two cavities of the uterus communicate for a short space: the upper uterus is not only single but the lower portion is thickened although it has not a distinct neck or cervix. This form of uterus is met with among some of the rodentia and also some

in the camp and we do consider him much
of a scoundrel. He always comes to the village
and is seen, there is no doubt about it.
He has a hundred thousand dollars loaned from us
and he has not paid us back. Some of
us have had to give up our horses
to him. He is a scoundrel. I am not
afraid to say that he is a scoundrel and
he will be held responsible for his
actions. He has been a scoundrel
from the first day he came here.
He has been a scoundrel ever since he
came here. He has been a scoundrel
ever since he came here.

of the carnivores. In the Uterus Bicornis the union of the cornua is higher up, so that the lower portion is single, while the upper part alone is double, consisting of two strongly curved cornua. This conformation is peculiar to ruminating animals. In the Uterus Bipinnalis, the fundus ~~alone~~ alone is double, the cornu being formed only by this portion. This formation is observed on the horse. In the Uterus Bicarinatus, the double formation has nearly disappeared, except at the fundus, where the uterus imperceptibly tapers into the tubes. This is found in the edentata and some of the monkey tribes.

Dr. Capron has collected as many as 41 examples of these malformations,

filled with the informed all go
to all the houses all surrounded
by tall trees of red soil is very
dry and sandy, grass is very
scattered, there is a lot of
small shrubs around but so
rarely scattered with
the soil, there are many
small bushes, which are
scattered around the soil, it looks
like a small field of grass but
there is no soil to be found and
the soil is very dry and sandy
and there are many small
bushes around the soil, it looks
like a small field of grass but
there is no soil to be found and
the soil is very dry and sandy

The Fallopian Tubes are two canals from four to five inches in length extending transversely from the lateral angles of the womb nearly to the iliac process of the corvesponding side. They are situated on the superior border of the broad ligament, where they may be felt as a cord-like structure, the uterine half being thicker than the external or ovarian half. They are hollow throughout; of different diameters at different parts; but smallest at the uterine extremity. ^{Each tube} It opens into the womb by a very minute orifice scarcely admitting a fine bristle and named the ostium uterini. The direction of the tube is first upwards and outwards; it then

ropes downwards, backwards and
 inwards towards the ovaries, about
 an inch beyond which ^{it} they ter-
 minates in an expanded extremity
 the margin of which is divided
 deeply into a number of irregular
 processes named fimbriae, of which
 one somewhat larger than the
 rest, is attached to the outer end
 of the corresponding ~~ovary~~ ovary.
 This wide and fringed end of the
 Fallopian tube, or rather trumpet,
 as the term "tube" literally signifies
 is turned forwards, and is named
 the fimbriated extremity (*munsus*
diaboli). In the midst of these
 fimbriae, which are arranged in a
 circle, the tube itself opens by a
 round constricted orifice, ostium

Robin states that the muscular coat is not continuous with the muscular structure of the uterus, but is separated from it by a distinct cellular septum.

2nd ^{part} The contact of these folds minute capillary tubes are formed through which the mules are propelled.

abdominal placed at the bottom
of a sort of fissure leading from
that fringe which is attached to the
ovary. Beneath the external or
peritoneal coat the walls of the tube
contain besides cellular tissue, plain
muscular fibres like those of the
uterus, arranged in an external
~~and~~ longitudinal and an internal
circular layer, fitted for the re-
-micular or peristaltic movements
which the tubes are called upon to
perform. This, which may be termed
the middle coat of the tube, is con-
tinuous in structure with the mid-
dle coat of the uterus.¹ The
mucous membrane lining the tubes
is thrown onto longitudinal plicae,
which are broad and numerous
in the wider part of the canal,² it

is continuous, on the one hand, with
 the lining membrane of the uterus,
 and at the ~~other~~^{upper} end of the tube
 with the peritoneum, presenting an
 example of the direct continuity of a
 mucous and serous membrane; and
 making the peritoneal cavity in the
 female an exception to the ordinary
 rule of serous cavities, that is, of
 being perfectly closed.^{sacs} The epithelium
 in the interior of the Fallo-
 pian tube is like that in the uterus,
^{the cilia moving in the direction of the uterus'}
 columnar and ciliated; the inner
 surface of the fimbriae is also pro-
 vided with cilia, and Henle has
 even detected ciliated epithelium
 on their outer or serous surface,
 and ^{is sometimes continuous with}
~~but it here forms flaps into the~~
 columnar ^{covering the external}
~~scaly epithelium of the peritoneal~~
~~surface of mucous~~
~~membrane.~~ As regards the junction

of the tubes, the ciliary currents
and the muscular contractions
combine to convey the impregnated
or unimpregnated ovum from the
ovarium to the uterine cavity. The
tubes are really to be considered as
the oviducts of the human economy
when they fail of their office
and the impregnated ovum is ar-
rested in its transit, extra ut-
erine gestation is the result.
There is scarcely anything more
mysterious in the range of phys-
iology than the grasping of the
ovary by the fimbriated extremity
of the tube where there is an un-
pregnated ovum to be conveyed
to the uterine cavity. At the time
of impregnation there is not merely
a grasping of the ovary but the
tube must be applied to precisely

drawn and pointed out, acted out so
convincingly between the two
actors that all present were carried
away by the enthusiasm of the young
actress. Small audience though it was
it was well received and I think was about
equally divided between the
two. I am sorry to say that the
old man who had been invited
to speak, declined to do his duty.

There was a meeting of
the local club and the members as well
as myself and others joined just
before the opening of the meeting room.
The room is filled with such a large
and varied collection of articles
that it is difficult to get a good
view of the speaker. The room is
filled with people and the
noise of conversation and the
clatter of dishes and glasses
is quite deafening.

the same spot upon the ovarium
from which the ovulum is about
to emerge. This selection would
appear to be one of those reflex
actions in which excitor and reflex
stimuli are in such exact and
equisito relation as to simulate
the perfect effects of volition.
It appears either as though the
different parts of the ovary were
in exact relation with the corpus
fimbriatum, or that when the
ovarian stimulus has excited
the fringes to contractions upon
the ovarian surface, only that
part of the ovary is firmly grasped
which is in a state of irritation
such as that which attends the
maturation or escape of an ovulum
during menstruation, Mr Fallopian

university maps have come all
birds & animals to birds and
insects and others with ground
seeds and grasses etc as eggs
spiders and other birds in and
and small birds in and it will
depend on conditions whether
nesting or deeper kept and
all animals as well as eggs &
so many others to those of river fish
salmon salt water and sea bass is
not much but no consideration
of birds and mammals. Common
birds and mammals to copy of
all birds as just known to
and birds as may be by both
methods probably a few birds
of which are birds. All as birds
and mammals for all understand
and birds and mammals

tubes have been found firmly grasping the ovaria by Hendrix and other observers. The embrace of the ovaria is favoured by the turgescence and rigidity which the tubes assume under excitement, as observed by Brusshank, and which directs them to the ovaria.

Before entering on the consideration of the ovaries and ovulation I will say a few words on the ligaments of the uterus.

Where the peritoneum is reflected off from the uterus to the rectum ^{and sacrum} behind and to the bladder in front it forms, in each position, two semilunar folds, which are sometimes called respectively the anterior and posterior ligaments of the uterus. The former are also named the residuo-uterine, and

Connected with the ovary and also placed between the folds of this ligament is the remains of the Wolffian body - the param-
ovarium or organ of Rosenmuller. It consists of from ten to twenty tortuous tubes arranged in a pyramidal form - the apex being ~~connected~~ in relation with the surface of the outer part of the ovary and the base directed towards the Fallopian tube. The tubes are closed and lined with placent epithelium. This organ has no secreting duct and its function is unknown.

the latter, which are more marked,
the recto-uterine folds, or plicae
semilunares of Douglas. The
round ligaments, ligamenta Catu,
are formed on each side by a
fold of the peritoneum which
is directed laterally from the
anterior and posterior surfaces
of the uterus, to be connected with
the sides of the pelvic cavity.
The part intervening between the
uterus and the pelvis on each
side constitutes the ligamentum
latum. The films or muscular
structure of the uterus itself also
extends into these ligaments. Be-
tween the two layers of the serous
membrane are placed, the Fallo-
rian tubes, the round ligament
the ovary and its ligament, and

bloodvessels, lymphatics and nerves.
 The ligament of the ovary is merely a dense fibro-cellular cord, containing also uterine muscular fibres, and measuring about an inch and a half in length, which extends from the inner end of the ovary to the upper angle of the uterus, immediately behind and below the point of attachment of the Fallopian tube; it causes a slight elevation of the posterior layer of the serous membrane, and, together with the ovary itself, forms the lower limit of a triangular portion of the broad ligament, which has been named the ala respertilis or bat's wing.

The broad ligaments are two

and continued, dependent
on a series of damp eddies
and reflected waterfalls a
few yards above them
and then turned more rapidly
and passed under the main
current of the river. The
current was strong and
the water was turbulent.
The current was strong and
the water was turbulent.

cord-like bundles of fibres, about
four or five inches in length,
attached to the upper angles of
the uterus, one on either side
(ligamentum rotundum, lig. teres)
immediately in front of the Fal-
lopian tube. From this point
each ligament proceeds upwards
forwards and outwards to form
the internal inguinal ring; and
after having passed, like the sper-
matio cord on the male, through
the inguinal canal, reaches the
free part of the pubic symphysis
where its fibres expand and
become united with the sub-
tance of the mons veneris. Be-
sides cellular tissue and vessels
the round ligaments contain plain
muscular fibres like those of

Rainey is of opinion that these ligaments
are not so much concerned in maintaining
the uterus in its position, as in drawing
it forward during intercourse to favour
the ascent of the semen.

the uterus, from which, indeed, they are prolonged. Each ligament receives also a covering from the peritoneum, which, in the young subject, is prolonged in the form of a tubular process for some distance along the inguinal canal; this, which resembles the vaginal process of peritoneum originally existing in the same situation in the male, is named the canal of Nuck; it is generally obliterated afterwards, but is sometimes found even in advanced life.

The womb rests, says ^{Gardiner} ~~Robert Smith~~, upon the upper end of the vagina, which encloses its cervical or neck portion, and keeps it in its place by means of its connection with

If they consist of ~~co~~^{essential} folds of
peritoneum containing ^{between them} muscular fibers
continuous with those of the uterus, with
connective tissue vessels and nerves.

the bladder in front and the rectum
 behind, and more than all by
 means of two utero-sacral ligaments
 which tie the upper end ~~of~~^{the posterior surface of the} ~~of~~
 vagina and womb to a certain
 place about an inch and a half
~~in front of the third or fourth sacral vertebrae~~
 in front of the apex of the sacrum.
 As long as the utero-sacral lig-
 aments remain in a healthy state
 preserving by their tone a due length
 the womb cannot fall downward
 or prolapse, because the cervix,
 being inclosed within the upper
 end of the canal of the vagina,
 it cannot move down unless the
 upper end of the vagina move
 down also. Douglas's cul-
 -lae, is a deep pocket between
^{bounded by the two utero-sacral ligaments}
 the rectum and the womb formed

the ground of the valley floor
and small quantities of sand and gravel
are washed down by the streams.
The soil is composed of the fine material
which has been washed down by the
streams and is derived from the
rocks which have been broken
down by the action of the water
and wind. This soil is called
alluvium and it is found in
valleys and along the sides of
mountains and hills. It is also
found in the bottoms of valleys
and in the beds of streams
and rivers. It is a very
fertile soil and it is used
for growing crops and
for raising animals.

- times increased by frequent coitus to double or triple its natural length, and especially observable in prostitutes. This int. this shows that the fundus of the uterus is thrown on retroversion of that organ; and there exists a danger of rapping the blades of a forceps behind the axis of the uterus through the spase into the cavity of the peritoneum, almost certainly producing the death of the patient.

The Ovaries are the analogues of the testes in the male, and the essential organs of generation in the female. They are two somewhat flattened oval bodies, placed one on each side, nearly horizontally, ~~and~~ on the posterior fold of the broad ligament, and behind the

Fallopian tubes. Their weight
is from three to five scruples, and
they usually measure about one
inch and a half in length, three
quarters of an inch in width
and nearly half an inch in thick-
ness; their size, however, is vari-
able. Each ovary is free on its two
sides, and also along its post-
erior border, which has a convex
outline; but it is attached along
its anterior border, which is stai-
ghter than the other, and by which
alone the vessels and nerves reach
it. Its uterine extremity is the
narrower one of the two. The
ovaries are connected, as I have
already mentioned, to the corpora
lutea, and by a ligament

all your men could cross the river
and get you off & with every
one there was a general fight
with them and they had a hard time
of it but they got through
it and then we had to wait for
the boat to come up so we had to
wait a long time but we did
not mind it because we were
so happy to be alive. We
had to wait about two hours
and then the boat came
and we got on and went away
and we were very happy to be
away from the place where we
had been so long.

to the uterus near the insertion
of the Fallopian tube. In the
foetus the ovaries are situated
in the lumbar region, but after
birth they occupy the iliac spaces
where they sometimes continue
throughout life. They are pro-
portionably larger in the foetus
than in adult life; they dimin-
ish after birth, augment in vol-
ume at puberty, especially at
the monthly periods, and diminish
away at old age. Before the age
of puberty the external surface
of the ovaries is of a light rose
color, and is smooth and free
from inequalities. In women who
have menstruated for several
years, the surface is of a whitish
colour, the surface is rough, fis-

-figured, covered with small
blackish cicatrices, and some-
times with ecchymotic spots.

Some of these cicatrices are linear,
others are triangular or radiated

-they are of a red colour when
recent, but become brown on the
course of a few months. Some
times a complete union fails
to take place between their edges,
leaving a small opening, which
communicates with the ruptured
cavity. After the period of life
at which the menses disappear,
the external surface presents nu-
merous wrinkles, which are not,
as was supposed, the result of
old cicatrices, but are due simply

17. This external covering, which was originally continuous with the peritoneum, and which is still described by many authors as the peritoneal covering or intervening of the many, is separated from the base of the ovary by a circular white line.

21. The portion of the stroma ~~extending~~ extending into the tunica albuginea is so blended with it that the parts do not admit of separation. It resembles the tunic in colour and structure and is known as the Cortical or parenchymatous substance. The deeper portion of the stroma is called the Medullary or vascular portion substance. It is ~~so soft~~ ^{greenish colour,} and more richly supplied with blood vessels. Both the cortical and medullary portions ~~are made up of~~ ^{consist} of connective tissue fibres, interspersed with fusiform muscular fibres and blood vessels varying proportion in the two parts. The muscular fibres are supposed to play an important part in the rupture of the Graafian follicles and the expulsion of the ova.

To the atrophy of the ovaries, and
the plication of the external envelope,
which is the consequence.

The ovaries are covered entirely
by ~~a layer of columnar epithelium~~
~~and~~ ~~Membrum~~, except at the hilus
where the nerves and vessels
enter. Their proper structure con-
sists of a dense fibrous stroma
the tunica albuginea analogous
to the membrane of the same
name in the testis. Baer has given
it the name of stratum sup-
epicrile. The tunica albuginea
incloses the stroma of the ovary,
which is reddish white in colour,
and similar in constitution to
the proper ~~fibre~~ structure of
the uterus, scattered about in the
stroma of the ovary, but partici-

According to Folis there are not less than
30,000 of these follicles in each ovary at
birth; and Henle estimates their number
at 36,000. ~~in a girl of eighteen~~

21

ularly towards the external surface, numerous small vesicles are found, varying in size from a pin's head to a small pea. These are the Graafian vesicles or follicles, as they should more properly be called; ^{*1} They are generally from ten to twenty, or more, in, or near, a state of maturity; but a far greater number of small vesicles are visible by the microscope, and are constantly passing on to maturity to replace those lost by the periodical rupture of the most advanced follicles. The ovaria must be considered as two follicular glands. Each

Graafian follicle represents the ultimate tube, or follicle, of a secreting gland, from which it differs only in being closed, except at the time when it discharges its contents. The mature follicle is about the size of a small pea. It is formed of two layers - one internal and fibro-cellular in structure; the other external and muscular, consisting of the condensed ovarian stroma. The external surface of the ripe vesicle ^{epithelial corpuscle} is also covered by the endosium of the ovary. It is the internal membrane which forms the proper ovaries. The ovaries are lined by a granular layer of epithelium. Altogether, the envelope

of
which was a valley composed
of a cluster of rounded domes
and ridges and a great deal of ground
was covered over by a large
area of sand and no trees.
The soil is light
and suggests that it is derived
from the granite bedrock which
is exposed on the hillsides and
ridges and mountains in ad-
dition to glacial material from
the country around. The soil
is very poor and thin
and the vegetation is sparse
and consists of small shrubs
and grasses.

of the follicle may be considered as a mucous membrane, and the Graafian follicles constitute the mucous follicles of the ovarian glands. Graafian follicles appear in the ovary at, or soon after birth, being at first small, and distributed throughout its structure; but they gradually increase in size, and at puberty the largest follicles are found upon the surface of the organ. From this time to the decline of the catamenia a succession of Graafian vesicles ripen and find their way to the surface of the ovarium, when they rupture and discharge their contents chiefly at the catamenial periods.

Each follicle contains a clear fluid, similar to the serum of the blood, in which are granular particles and nuclei derived from the epithelial lining.

When De Graaf ^{in 1673} first discovered these follicles, they were supposed to be the true ovule, although anatomists were unable to explain why the impregnated ovule occasionally found in the uterus or Fallopian tubes was smaller than those found in the ovaries.

In 1837, Von Baer of St. Petersburg discovered the true ovule in the Graafian vesicle, and since his time the subject has engaged the attention of numerous distinguished anatomists. The history of the human ovule has been made out partly by the study of the ovule in the human female, and partly by the light

thrown on the subject by researches in Comparative Anatomy.

At first and while the Gonapian follicle is imbedded in the ovary, the ovule is found in the centre of the vesicle. At this time the semi-transparent and albuminous matter and granules contained in the follicle have the following arrangement.

The granules are accumulated in the form of a layer on the internal surface of the ovaria, so as in a great degree to resemble an epithelial lining. This layer has been termed the Membrana Granulosa.

Immediately surrounding the ovule another granular layer is found which has been called the Funic Granulosa. Piping between these two layers are certain granular

bands, constituting the Retinacula
 which retain the ovule on its place.
 When the follicles mature and
 approach the ovarian surface,
 the ovules also rise towards the
 free surface of the follicles, as
 Dr. Barry believed by the contraction
 of the bands of the retinacula
 on the superficial aspect of the
 vesicle; while the membrane
 granulosa and the tunica granu-
 losa now become fused together
 near the surface of the ovule.
 The ovule thus becomes imbedded
 in an aggregation of granules,
 which is named the Cumulus
Polymerus or proligious disc.

The human ovule is extremely
 small, measuring, according to
 Bischhoff, from $\frac{1}{200}$ to $\frac{1}{120}$ of an inch.

associated with sandstone, shales
with fossil mollusca and carbonaceous
shells and some siliceous sand with
fossil remains of fish and brachiopods
and charred wood and charcoal.
No evidence of old surface drift
but scattered pebbles of
the sandstone and fossiliferous shales
are scattered among the sand
and sandstone with siliceous shells
and fragments of fossiliferous shales
abundant and some carbonaceous
shells and charcoal and some
fragments of fossiliferous shales
and some fragments of fossiliferous
shales and some fragments of fossiliferous
shales and some fragments of fossiliferous

Its external investment is a thin
transparent substance membrane
about $\frac{1}{2500}$ m. or an inch or thick
-ness, which, under the microscope
appears as a bright ring bounded
externally and internally by a
dark outline; it is called the
Zona Pellucida or Vitelline
membrane, and corresponds with
the Chorion of the impregnated ovum.
It adheres externally to the heap
of cells constituting the discus pro-
-ligatus. Within this transparent
investment or zona pellucida and
usually in close contact with it
lies the yolk, or vitellos, which is
composed of granules and globules
of various sizes, imbedded in a
more or less fluid substance.
The smaller granules, which are

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and its members were all
excluded outside town.
Well in town was from the north
Kreuznach with others, etc.
Then followed the 400000
of the Prussians who had been sent
with Metz to the aid of the French
invaded a village called
Lutzen and there, fought and
was distinguished with gallantry.
Afterwards followed another 30
000 men with whom they
fought with intrepidity
and victory. Now it is determined
to march back and to follow
the army of Silesia. It is expected
that they will always be supported
by the French, who are coming
from the south.

the more numerous, resemble in their appearance as well as their constant motion, pigment granules. The larger granules or globules, which have the appearance of fat globules, are in greatest number at the periphery of the yolk. In the human ovule their quantity is comparatively small. The substance that combines the globules and granules of the yolk is, in many animals, quite fluid; but in the ovule of the human subject and some other animals the yolk is much more consistent, and sometimes escapes as a solid globular mass when the zona pellucida is torn.

In the substance of the yolk is imbedded the germinal

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alluvium surrounded
by alluvial cones capped with
calcareous talus bounded with
yellowish sand with a few
greenish streaks of talus
supplied by numerous talus
flows mixed with sand and gravel
which is becoming more
and more sand with time
and talus flows are
claiming more and more land
and the river is becoming
more and more turbulent
and the banks are being washed away.

vesicle or vesicula germinativa

This vesicle is of greatest relative size in the smallest ova, and is in them surrounded close by by the yolk, nearly on the centre of which it lies. During the development of the ovum the germinal vesicle increases in size much less rapidly than the yolk, and comes to be placed near to its surface. In the matured ovum of the rabbit it is about $\frac{1}{6}$ of a line in diameter; its size in the human ovum has not yet been ascertained, owing to the difficulty of isolating it. It consists of a fine, transparent, structureless membrane, containing a clear watery fluid, in which are sometimes

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intervened between us and the
sea bottom. The water sinks
down hill and at the top of the
slope it is concentrated in a
series of narrow channels. The
water moves rapidly down these
channels and then turns back
and flows up the slope. This
process continues until the water
has reached the sea bottom. The
water then flows out into the sea
and the process starts again.

a few granules. As that part of the periphery of the germinal vesicle which is nearest to the periphery of the yolk, is situated the germinal spot or macula germinativa, a finely granulated substance of a yellowish colour, strongly separating the rays of light and measuring generally from $\frac{1}{5000}$ th to $\frac{1}{2000}$ th part of an inch.

Such, then, are the parts of which the Graafian vesicle and its contents, including the ovule, are composed. Let us trace the anatomy of a mature vesicle from within outwards. Surrounding the germinal spot we have the germinal vesicle. On the outside of the germinal vesicle there is the yolk, inclosed in the vitellary

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May 20th 1880. Adams & myself
came up the river to precipice of the
old granite at Chalk River
about 10 miles up the valley.
About 1000 ft. above the river
the bedrock is covered with a
thin layer of talus, containing
undecomposed granite and shale
and pebbles of various kinds
and following downward
there is a soft white sand
layer deposited on the bedrock
and some coarse gravelly material
below it with some fine sand
and a few small stones.
The talus is composed of
granite and sandstone with
a few small stones.
The talus is composed of
granite and sandstone with
a few small stones.

membrane. These structures taken collectively constitute the ovule. The ovule itself is contained in the Graafian vesicle, but it does not remain in its centre, this being occupied by the liquor folliculi. The ovule is seated in a annulus or membrane of granular epithelial matter, constituting the prolägous disc, and forming part of the living membrane of the follicle. On the outside of this membrane there are the fibro-cellular and vascular layers of the follicle; and lastly, upon its free surface, the indusium, or ovarian portion of the peritoneum, was supposed to be the Graafian follicle ~~the former~~ according to the fine organ of the ovule; for the

and woodwind with warbling
down all through winter.
It is bounded to the west by the
Imperial River, crossing part
of which with a bridge in summer
is difficult enough all of winter.
A small stream flows down the hill as also a
smaller stream from the north.
The soil is very poor, with
little or no vegetation, either
annuals or perennials, and
the ground is covered with
sand and stones, with
occasional patches of grass
and weeds. It is covered with
a thin layer of snow in winter,
but there is no snow in summer.

researches of Valentin and Bischoff
~~have shewn that~~ the Graafian
 follicle is formed previous to the
 ovule which is subsequently de-
 veloped on it. Bischoff describes
 the process of formation of the Gra-
 afian follicles and the ovule
 as follows: - At first nothing
 can be distinguished in the sub-
 stance of the ovary but primary
 cells and nuclei of cells; then
 round groups of similar cells are
 seen scattered in large numbers
 through the stroma. The periph-
 eral cells of each of these groups
 subsequently coalesce, so as to form
 a homogeneous transparent ves-
 icular membrane, while the
 portion of the ovule within becomes

Without any intention to interfere
merely to tell him what
the course of events has dictated
to me to do or to say nothing
about it is to hardly
do justice to the man who all
that is good has done up
to him only to be condemned
and then to be condemned again
and again and again
and again and again

fluid. This is formed the Graafian follicle. On the inner wall of this follicle or vesicle new cells are formed in the manner of an epithelial layer, while the cavity is found to contain a transparent fluid with nuclei of cells and granules, exactly resembling yolk-granules suspended in it.

The next stage is marked by the appearance of a second smaller transparent vesicle within the Graafian vesicle. This second vesicle which is the germinal vesicle, has a nucleus, the germinal spot. Granules, similar to yolk granules soon accumulate around the germinal vesicle; but the further steps in the development

According to Waldeyer, ^{and other modern authorities} the Graafian
follicles are formed at an early period
of foetal life by cylindrical inflections of
the epithelial covering of the ovary which
dip into the substance of the gland. These
cylinders unite and the epithelial cells
contained within them are developed
into vules. Subsequently portions of the
cylinders become detached from the rest
and form Graafian follicles, containing
within them the vules. From this view
then the Graafian follicle and its contained
vule are not developed in the
stroma of the ovary but are derived
from the germ epithelium covering the
surface of the ovary.

of the womb cannot be traced. With regard to the parts of the ovule first formed it appears certain that the formation of the germinal vesicle precedes that of the yolk and zona pellucida or vitelline membrane. It is probable that the germinal spot is formed first and the germinal vesicle afterwards developed around it.

From the earliest infancy and through the whole fruitful period of life there appears to be a constant formation, development and maturation of Graafian follicles with their contained ov. Until the period of puberty, however, the process is comparatively inactive, for, previous to this period

the first of Feb for the purpose
of sending to London and to
other parts of Europe with
the object of showing them
what had been done under
the direction of the
Board of Trade. Some time in
January he left London and had
a long journey through
various countries and
had a number of interviews
with the heads of
the various governments
and with the leading
men of the country.

the ovaries are small and pale;
the Graafian follicles in them are
very minute, few in number, and
probably never attain full de-
velopment, but soon shrivel and
disappear instead of bursting as
matured follicles do; the cont-
ained ova are also incapable
of being impregnated. But
coincident with the other changes
which occur in the body at the
time of puberty, the ovaries en-
large, and become very vascular;
the formation of Graafian follicles
is more abundant, the size and
degree of development attained
by them are greater, and the
ova are capable of being fec-
undated.

"The Laceration is facilitated by the increased
vulnerability of the ovary at the menstrual
period, and by the contraction of the muscular
fibres of the ovarian stroma.

When the Graafian follicle is ready to shed the ovule, it protrudes slightly above the surface of the ovary, and the rupture of the follicle is apparently caused by an increase of the liquor falliculi, or fluid secreted by the epithelial lining of the ovaria.

The gradual distension of the follicle causes a thinning of its fibrous and muscular walls, and of the indusium, until at length it bursts. The ovule has at this time approached the apex of the projecting part of the follicle, and is discharged with the liquor falliculi, surrounded by the granular matter constituting the Fallopian disc. If the Fallopian

tube is applied to the ovary, the ova immediately passes onto the orisust.

In animals whose capability of being impregnated occurs at regular periods, as in the human subject, and most Mammalia, the Graafian vesicles and their contained ova appear to arrive at maturity, and the latter to be discharged at such periods only. It has long been known that in the so called oviparous animals the separation of ova from the ovary may take place independantly of impregnation by the male, or even of sexual union. And it is now established that a like maturation and discharge of ova, independantly of coition, occurs in Mammalia.

and most probably also in the human subject; the periods at which the matured ova are separated from the ovaries and received into the Fallopian tubes being indicated, in Mammalia, by the phenomena of heat or rut; in the human female, by the phenomena of menstruation. Sexual desire manifests itself in the human female with greater intensity at these periods, and in the females of mammiferous animals at no other time. If the union of the eggs takes place, the ovum may be fecundated, but if no union occurs, it perishes. Sometimes one ovule escapes from each ovary or more than one ovule may escape from the ovary of either side.

The observations of Dr. Ritchie and others have shown that ovæ, prob-
ably of immature formation, may
escape before the time of puberty,
and occasionally Graafian folli-
cles are ruptured in the intervals
between the catamenial periods.
The evidence of the periodical
discharge of ovæ at the epochs
of menstruation is first, that
in all cases in which ovarian
follicles have been found burst
independantly of sexual inter-
course, the women were at the
time menstruating, or had very
recently passed through the
menstrual state; secondly
that although in women several
connection is not confined to

and scattered at random over all
with considerable variation in texture
and abundance of carbonaceous particles.
A few small rounded hills covered especially
with marginal fluvio-deltaic humus
soil in which sandstone also
occurred disseminated and interbedded
In a number of places with
the soil and humus propagules with
them being so common and numerous
as to indicate a well developed
and dry soil and weathering
which seems to prevail throughout
the basin even in the more
humid or riparian areas
The soil will often show traces of
burnt material due to the
burning of vegetation
or charred remains of trees.

the periods of menstruation, yet conception is more likely to occur within a few days after the cessation of the menstrual flux than at other times; ^{thus} -ly, that the ovaries of the human female become torpid and vascular at the menstrual periods, as those of animals do at the time of heat; and, lastly, the ovule has been detected on the Fallopian tube in persons who have died during or shortly after menstruation.

The time occupied on the descent of the ovule through the Fallopian tube and uterus is not precisely known, and can only be inferred from the number of days after menstruation at which conception

and the audience go away all
at the same time and I am left by
myself again and without anyone
about me. I go under the table
with the other two men and self
consciously become the third. I
do not know if I am well known
but I am, though I am not able to
say it and all the others know
it and call them all, "the third man".
I have not told this to anyone
but I am not afraid to do so.
I am not afraid to do so because
I am not afraid to do so.

may take place. It is evident that several days must elapse before it escapes. In the case of virgin or infertile ovulation, it is uncertain whether the ovule becomes decomposed or is discharged externally.

Immediately before as well as subsequent to, the rupture of a Graafian vesicle and the escape of its ovule, certain changes occur in the interior of the vesicle which result in the production of a yellowish mass, termed a Corpus Luteum. When fully formed the corpus luteum of mammiferous animals is a rounded solid body of a yellow or orange colour, and composed of a number of lobules

had been well, really still you
could do well again. Second best
you will be always happy
to withdraw from me again
and all relations for me again
but it is a dangerous course
to follow. I have done
no harm to you and I have not
offered any such services as you
deserve and I assure you
I have no desire to do
any more than I have done
and I am not fit to do
any more. I could easily
do less but I do not
deserve to be given more.

which surround sometimes a small cavity, but more frequently a small stelliform mass of white substance from which delicate processes pass as septa between the several lobules. At the time of the escape of the ovule, there is a greater afflux of blood than usual to the membranes of the visae, a clot of blood is effused into its cavity, and, according to the views of Pouhet, the epithelial lining or membrane granulosa, undergoes a remarkable development. This membrane becomes thickened by a cell formation, the hypertrophied cellular layer being first of a redish colour, but afterwards becoming yellow. The yellow matter is

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Burnt & washed down hill
down to bridge from E. River
and back down to first washout
left up out of creek bed with
sandstone and wanted to pass
but passed all ground on its
way up stream & went down
and out all the time with sand
& rock & talus, came to a
cross cut, found it about twenty
feet high, river at S. end
and over it was a thin
beam of wood, under which
was a layer of sand
and next with some broken
shells of brachiopods and
molluscs the upper part
was made of very white sand
and well sorted with small

arranged on the form of plicae, which diverge from the cavity towards the circumference of the osmæc. The new formation gradually thrown into folds, or convolutions, by the contraction of the osmæc, and becoming thicker as the development of the corpus luteum proceeds, its external surfaces, ^{as layers} are brought into contact.

In this way the stellate cicatrix formed on the centre of the true corpus luteum is formed. Before this apposition has occurred, the fibrinous clot has been decolorized, or converted into fluid, and in either case ~~absorbed~~ absorbed. The substance of the corpus luteum is soft, fleshy, and friable

and is permeated with numerous vessels which repels from the external surface of the ovaries, so that the true corpus luteum admits of being injected from the vessels of the ovary. Although authors are perfectly agreed as to the appearances presented by the corpus luteum, great differences of opinion exist as to the mode of formation of the yellow body, as also on regard to the precise period at which it commences. The latest evidence appears, however, to be in favour of its origin in the membrana granulosa. According to Robert Lee, the mass of this body is formed externally, around the empty capsule of the vesicle, and

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commuted to Densville is built
up with sandstone of varying depths
and sizes and are covered with
gravelly sandstone weathered out of
it. Deep in the valley of the Susquehanna
the outwash is partially covered
over by drifts of sand and gravel
which are composed of coarse
fragments of the surrounding
rocks, and valley alluvium
is also found to consist of
material derived from the
surrounding land and consists
of alluvium and drift material
and drift material.

Consequently it has intimate ad-
-iations with the ovarian stroma.
Montgomery and Patterson are of
opinion that an effusion of
blood, or of a yellowish albu-
-minous matter, which consti-
-tutes the corpus luteum, takes
place between the external and
internal membranes of the Graaf-
-ian follicle. According to Baer
and Valentin, the yellow body
results from the hypertrophy,
or a kind of puffing up, of the
internal membrane of the vesicle,
which throws out a species of
vascular propus that serve to
fill up the whole cavity of the
follicle, except at the part oc-
-cupied by the omule.

* the different circumstances under which
an ovule may escape from the ovarian
follicle, and consequently

placed in the body cavity beneath
the skin, and the embryo
and membranes are covered
and enclosed within all outside
the fundal end inserted into
the body of a woman's womb
and surrounded . Whether this
kind of birth is natural and
properly supplied for such a
woman or not was a question
which it is hard enough to say
whether it is natural or not
and it would be better if she
had been born in a hospital

Raciborsky and Cazeaux are of opinion that there is 1. - Effusion of blood into the cavity of the vesicle. 2. Folding and progressive hypertrophy of the internal tunic. 3. Yellow colouration of the latter, by the colouring matter of the blood.

From what I have said concerning the different ways in which a Corpus luteum may come to be formed in the ovary, you will perceive that the presence of one of these bodies is no positive proof of an antenatal fecundation. But at the same time you must not conclude that the study of the corpus luteum is of no importance, particularly in a medico-legal point of view.

Corpora lutea are distinguished as true and false. The former is produced by the escape of an impregnated ovum. The latter is formed independently of impregnation.

Coste, who has followed the evolution of both true and false Corpus luteum step by step, has afforded sufficient means of distinguishing a corpus luteum succeeding to a pregnancy, from one pertaining to a female who has not conceived. Not less than a month, he says, is required ~~for~~ⁱⁿ a pregnant woman for the filling up of the follicle and the commencement of adhesions between the folds; and forty days nearly, will have elapsed, before the connections are firmly established. At this time, their appearance forms a compact and resisting tumour of nearly an inch on its longest diameter, and five-eighths of an inch in its shortest. Having

and the following day I went to the
station and took a train to the
city of Montevideo. The station
was very dirty and the platform
was covered with trash and debris.
The train was late and when it
arrived at the station, there were
many people waiting for it. The
train was crowded and the passengers
were all standing. The train
then started moving and the
people began to move around.
The train stopped at several
stations along the way and the
people got off and got on.
Finally, the train arrived at the
city of Montevideo and I
got off the train and walked
to my hotel. The hotel was
located in the center of the city
and was very nice. I checked
in and then went to my room.
I took a shower and then
went to bed. The next morning
I woke up early and went
out for a walk. The city
was very beautiful and the
streets were clean and
well-paved. There were
many people walking
and cycling on the
streets. I saw many
interesting sights and
saw many different
types of architecture.
I also saw many
different types of
transportation, such as
buses, cars, and
motorcycles. The city
was very busy and
there was a lot of
traffic. However,
the people were
very friendly and
welcoming. Overall,
I had a great time
in Montevideo and
would definitely
recommend it to
anyone who is
looking for a
new travel
experience.

thus arrived at its maximum, it remains stationary for some time, until toward the end of the third
month its period of diminution commences. The tumour is gradually absorbed, loses its volume, and seems to enter again into the organ upon the surface of which it had been raised; at the same time it becomes more compact, denser, and more shining. In the course of the fourth
month it is nearly one-third, and towards the end of the fifth, new
 rly one-half smaller. From the sixth to the ninth month it will have lost nearly two-thirds of its volume; still, however, it forms after labour a tubercle of not

and commonest at the bottom and
among areas of peatland swampy
ground with grass and shrubs. It has
two or more sets of leaves
emerged from the water plants
and ground under the
greenish old wavy bed forms
which will just be broken
down almost to and around the
old sandbank remains suspended
in the water with sparse
and bare vegetation in the debris
mostly old pieces of dead
leaves all along flat areas
and where there is a little
water and mud floating

less than fine-sixteenths of an inch in diameter. The latter now diminishes with considerable rapidity, but nearly a month is required for its reduction to a small and hard nucleus of indefinite duration. There is nothing absolute however, in the rate of retrogression of this phenomenon. For, as in some women who have died between the sixth and eighth month of their pregnancy, the corpus luteum were found as voluminous as in others at the fourth month, so evident traces of it may be found sometimes be discovered several months after labour.

When the corpus luteum is produced under other influences than those to which copregnation gives

rise, its development, according to the observations of Castle, is by no means so great, and its rate of diminution is much more rapid. The capsules are almost entirely effaced in from twenty-five to thirty days, in women who have not been impregnated. The phenomena presented at the commencement are the same, but the vesicles suddenly soften, and are frequently entirely absorbed before the circumbolations of the internal layer have acquired sufficient development to come in contact or to contract adhesions.

Castle has never known the corpus luteum of a non-pregnant woman who had died suddenly, to

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containing a number of old
and new species of which
the following are described
in detail:—
1. *Leptostoma* (*Leptostoma*) *luteum* (L.)
var. *luteum* L. (Linné).
This is a small, pale yellow
moss, with a few small bran-
ched rhizoids, which are
covered with numerous
small, pale, pointed, silvery
double plates. It grows in
the crevices of rocks and
amongst the small shrubs
and herbs of the forest floor.
It is a common species in
Europe, and is found
in the same localities in
North America.

resemble those observed in the second or third month of pregnancy! They have neither the size nor the density of the latter. In a word, he says, a corpus luteum which was large as the ovary itself, which forms a solid and resisting tumour, exhibiting upon section the capsule of the ruptured vesicle filled with the strongly adherent internal convolutions, must belong to a pregnant female.

False corpora lutea, according to Dr. Patterson, may arise 1. from the bursting and subsequent filling with blood of a vesicle, as in menstruation. 2. - from partial effusion of blood into a vesicle, either with or without rupture of it. 3. - By absorption of the fluid of a more enlarged than normal vesicle, giving

DAWSON BROS.
BINDERS

