delivery can be safely effected, or after the liquor amnii has flowed away spontaneously of itself and prematurely, or has been too soon artificially let off, and when the os uteri is not much dilated, and is not very soon dilatable, the head not advancing in proportion to the length of time the parturient woman has been in labour; and more especially if, after the administration of ergot, the labour be not terminated within a reasonable time afterwards, or if it be allowed to linger on too long, instead of artificial assistance being employed as soon as the case is favourable for or demands this.

When the aforementioned signs are found in the maternal passages of the hindrance of the fœtal head during labour from coiling or twisting of the umbilical cord round the neck or other parts of the body of the fœtus, the labour is generally longer in its duration, as well as being accompanied oftentimes with sharp pains of unusual severity; and to my mind it has seemed to be both safer and better practice to omit ergot and the forceps in such cases until towards the close of the labour, if needed, on account of the occasional subsiding of the maternal pains. At this stage, its administration in the usual form and doses will tend less to endanger fœtal life, and also shorten or expedite the labour. In reference to the latter cases alluded to, my usual practice for years past has been and still is, to let Nature for a reasonable time do her own work, and to render extra aid only if necessary for the safety of both mother and child.

I shall merely at present add a few of the causes in the maternal passages, etc., that have conduced more or less to put into hazard, from "dangerous pressure", the life of the fœtus in cases to which I was called to render aid.

The fœtal head may be found resting too long on an unyielding perinæum, or combined with rigidity of parts, especially early and late in life (first pregnancies at full term).

In presentation of the head, it only may be expelled, and delay in expulsion may arise from want of sufficient uterine pains to expel the shoulders when large.

In footling and breech cases, the head may be large, and not cautiously and speedily delivered.

Unusual projection of the promontory of the sacrum may prevent the head from descending, in consequence of too little space.

The fœtal head may be too long delayed in the pelvis or outlet of it during labour, from inefficient uterine action or unusual rigidity of parts.

There may be prolapse of the cord, internal and external; or it may be coiled round the neck and other parts of the body of the fœtus, producing liability to pressure of a dangerous kind.

The fœtal head (male) may be firmly ossified, and rather larger than ordinary, and may be much and long pressed into the pelvis during labour, before its expulsion or delivery.

The child may be born in its membranes.

Maternal mental impressions may have an influence on the labour by retarding it.

The fœtal head may be delayed too long in the outlet of the pelvis, from exhaustion occurring during protracted labour.

A large fœtal umbilical hernia may produce delay.

Accidental hæmorrhage may occur.

With such causes and conditions, certainly we have a wide field for highly important and valuable investigations, as well as for interesting questions, obstetrical and physiological, and more especially in a medico-legal point of view, and which may not be deemed unworthy of being recorded.

[*To be continued.*]

CASE OF HERMAPHRODISM.

By JOHN H. WEBSTER, M.D., Northampton.

THE following case of hermaphrodism, which has recently come under my observation, is worthy of being placed on record.

C. D., aged 19, in service as kitchen-maid, 5 feet 6 inches in height, weighing 8 stone 11 lbs., fairly nourished, up to the age of 16 possessed of remarkable muscular power and activity. At that period, carrying heavy weights brought on uneasiness in the right iliac region, amounting at times to pain. A swelling shortly appeared, which slowly increased in size, occasioning more and more suffering upon exertion, and ultimately incapacitating her for work and holding her situation. In consequence of this and disturbance of her general health, her mother sought my opinion; stating that there was "something wrong" with her, and "matters were not with her as usual in females". The mother also mentioned that she had given birth to another child not properly formed; that, though baptised as a female, the late Mr. Charles Dodd, of this town, gave his opinion that it should have been christened as a male. This infant died at the age of three months; it was apparently a case of extroversion of the bladder.

C. D., has a hoarse gruff voice, which changed to its present tone at the age of 13 years. There is downy hair on the upper lip. The thyroid body is more prominent and developed than is usual in the female. The sternum is somewhat projecting, and the chest rounded. The breast and nipples are quite flat and small, as in the male. There is more than usual axillary hair. The surface of the body and extremities is of feminine whiteness, and free from hair.

In the right inguinal region is a hernia as large as an orange, which, in the recumbent position, is easily reducible; but, when down, occasions a desire of frequent micturition and inability to pass motions. Within this swelling, the fingers readily detect a small flattened ellipsoidal body, well defined in its margins, somewhat larger than an almond. Pressure upon this body, or the act of coughing driving it upon the fingers, produces a sharp short pain in the left mamma. The left inguinal ring is also patulous; but there is no present hernia. A similar body is felt striking the fingers upon coughing forcibly, somewhat tender on pressure; but no complaint is made of pain radiating to either mamma. Whether these bodies are ovaria or testes, it is not an easy question to decide.

The mons veneris is flat, sparsely covered with hair; the labia externa are softer, longer, and thinner than usual; the labia interna are merely rudimentary.

In the interval between the labial commissures, and consequently in normal position, appears the clitoris; when unexcited, sessile in aspect from a front view; when drawn forward, or in an excited condition, it is of two and a half to three inches in length, with a circumference of nearly two inches. At the latter times, it is more sensitive, firmer to the touch, more rigid in flexing, dependent between the labia, with no automatic power of, and resisting, erection. At such times, the temperature is increased, though there is no rubescence; and to the question whether frication produced sensual gratification, a feeble negative was returned; but it was thought that it was followed by an escape of fluid or some increase of moisture in the subjacent parts. This clitoris has a well defined circular prepuce, frænum, and corona glandis. Upon the lower half of the extremity of the

glans is a linear depression, marking the usual situation of the urethral opening; but there is no aperture. Extending along the under aspect is a sulcus, marking the outline of the course which the urethra takes (showing the early fœtal division into halves), and probably invested by a corpus spongiosum. There is no indication of any channel in this clitoris.

On separating the labia externa, about three lines from the base of the clitoris in the direction of its under sulcus or furrow, there appears a triangular slit of about two lines in width at its upper border, and of about three lines in length to its apex pointing downwards and backwards. Through this an elastic catheter passed readily to the bladder. The patient states that the urine flows uniformly and easily through this channel. There is no circular meatus urinarius, nor sphincter, and no discoverable channel to the groove on the under surface of the clitoris.

From this *quasi* meatus urinarius a septum of about three lines leads to another break in the continuity of membrane, of about seven-eighths of an inch in linear length. Through this break the index-finger passes with difficulty to its extreme length of three and a half inches, discovering an antrum of apparently uniform calibre throughout its course, and terminating as a mere *cul-de-sac*. The finger discovers no os, cervix, or corpus uteri; and, on directing it to the iliac aspects, no ovarian bodies are felt. A subsequent examination with a trivalve parallel bladed screw speculum confirms the digital examination.

The catheter being still in the bladder, the integrity of the urinary channel was ascertained; and pronating the finger, the index of the left hand being passed into the rectum, shewed there was no communication with that canal.

The separation of the labia externa displayed surfaces very different in appearance from the normal condition of those parts.

There is no pale-coloured mucous membrane continuous with the outer integument of the labia, no rugæ or elastic tissue, no circular sphincter of the meatus urinarius, no vestibule, and, when distended, no nymphæ or labia interna, no hymen or caruncule myrtiformes; the surfaces being lined by a red highly vascular epithelial membrane, with well defined margins to the external labial skin.

Beneath this antrum is a normal perinæum, with a firm and natural spincter ani.

The catamenia have never appeared, nor has there been any vicarious shew. For several months previously to her giving up work, the mistress and fellow-servant noticed the absence of the usual menstrual periods; and had observed that she was periodically more ailing and more unfit for active exertion. At such times, the patient admits to have much more distress and pain in the right inguinal tumour.

Upon close and repeated inquiries by myself and another professional friend, we find that the sexual and sensual indications of this individual are for a female, and not for a male; that a longing for connexion with a girl has been experienced, though never indulged. These animal feelings are apparently much less intense, much milder than is usual, in an ephebus of undoubted sex.

The mental capacity, the language used in answering questions and expressing feelings, is evidently much superior to what is ordinarily met with in the class from which this epicene has sprung, and in the social position in which she has been placed. The modesty and propriety of demeanour displayed in replying to the many painfully delicate questions I have had to put, and in the examinations I have made, have been in the highest degree commendable; and it has required more than ordinary persuasion on my part to induce a submission to the inspection of a few professional gentlemen.

Those who have perused the elaborate article on Hermaphrodism by Professor Simpson, in the *Cyclopædia of Anatomy and Physiology*, will appreciate the difficulty of assigning during lifetime to which class of *true* hermaphrodites this case belongs; and, without entering on the discussion of the *pros* and *cons* for the preponderance of this or that sexual organisation, I must leave those interested in this subject to draw their own inferences from the description I have given.

Progress of Medical Science.

MIDWIFERY AND DISEASES OF WOMEN.

MORTALITY OF CHILDBIRTH AS AFFECTED BY THE AGE OF THE MOTHER. The following are the chief conclusions on the subject, arrived at by Dr. Matthews Duncan. 1. Youthfulness has less influence in producing mortality from parturition than elderliness. 2. From the earliest age of child-bearing there is a climax of diminishing puerperal mortality, succeeded by an anticlimax of puerperal mortality increasing till the end of child-bearing life. 3. The age of least mortality is near 25 years, and on each side of this age mortality gradually increases with the diminution or increase of age. 4. Above 25 years puerperal mortality increases at a much higher rate than it increases at corresponding periods below 25 years. 5. Though it is not deducible from anything in this paper, it is too interesting to omit noticing that the age of greatest safety in parturition coincides with the age of greatest fecundity, and that during the whole of child-bearing life, safety in parturition appears to be directly as fecundity, and *vice versâ*. (*Edinburgh Medical Journal*, October, 1865.)

DOUBLE UTERUS. At a meeting of the Medical Society in Vienna, Dr. Späth related the following case which had recently come under his notice. A girl aged 18, primipara, was admitted into hospital. On examination, there was found to be a double os uteri, and the existence of a bilocular uterus was therefore suspected. After the first labour-pains had set in, the patient was seized with convulsions, which recurred, and ended fatally, in spite of the hypodermic injection of acetate of morphia. During life, it was found that both orifices were dilated, and gave the sensation of an os uteri divided by a band: this was divided by scissors, and the child was discovered presenting transversely. After death, the uterus was found to consist of two cavities, of which the right was somewhat larger than the left. In the septum was an opening, which, Drs. Rokitansky and Späth believed, had been formed during pregnancy. A corpus luteum was found in the left ovary. (*Wiener Medizin. Wochenschr.*, December 9, 1865.)

TRAUMATIC RUPTURE OF THE UTERUS: GASTROTOMY. Dr. John Moir relates a case of rupture of the uterus, in which gastrotomy was performed thirty hours after the accident. The patient being placed under the influence of chloroform, he proceeded to open the parietes of the abdomen in the mesial line, commencing some inches above the umbilicus. So soon as the opening was made, as much fluid escaped as more than filled a very large-sized tin basin, consisting partly of clots and bloody serum, and also, most probably, the liquor amnii.