ART. III.—On Hermaphroditism; with an Account of two remarkable Cases. By Geo. C. Blackman, M. D., Fellow of the Royal Medical and Chirurgical Society of London. [With a wood-cut.]

THE subject of hermaphroditism is one of interest and importance viewed in connection with canonical and civil law, as well as with physiology and surgery. In canonical law, we need but allude to its bearings upon the ordinance of baptism; whilst, in civil law, it may affect the rights of property, the question of impotence or sterility, and the avocation of the individual in whom it exists. The time has been when the hermaphrodite, that feedum ac turpe prodigium of the AURIS PICES of HETRURIA (vide, Tit. Liv. ii. 1. 27), or the supposed hermaphrodite, was condemned by inhuman and arbitrary laws to the gallows or the flames. Even to this day, such an individual, when known, is exposed to public derision and ignominy; and, if possessed of ordinary sensibility, their lot among mortals is least to be coveted. The deformity in many of these SUPPOSED cases, as, for example, those which are nothing more than instances of hypospadias with a cleft in the scrotum, are doubtless capable of being remedied by surgical operation, as was, indeed, proposed by Langenbeck, in the famous case of Göttlich. In view also of the sufferings to be apprehended from ungratified sexual desires, in persons with organs so imperfectly formed, and for the timely prevention of such sufferings, has the extirpation of the testicles been recommended and executed by one of our own most prominent surgeons. (Vide Amer. Journ. Med. Sci. Oct. 1852.)

But it is especially in relation to the morphology of the genital organs that the study of hermaphroditism is at the present time possessed of peculiar interest, and it is admitted that, in this respect, the subject requires a fundamental revision. The analogy existing between the male and female organs of generation was recognized both by the Greek and Arabian physicians, as is shown in the writings of Galen, l. 14; Rhazeus, de re Med. l. i. c. 26; Paulus Ægineta and of Avicenna, l. iii. f. xxi.; de Memb. Gen. in Mulier, &c.; and it is maintained, even by the most distinguished modern authors, that of these analogous organs, no two were ever found in the same individual. Adelon declared, before the Academy of Medicine in Paris, that there never was a coexistence of the parts belonging to, or characteristic of either sex, in one being. In the Ed. Med. Surg. Journ. vol. iii. 206, a reviewer of Ackermann's Infant. Androg. Hist. et Iconog. (Jena, 1805), boldly asserts: "No monster has been described, having both a penis and a clitoris, nor with a testis and ovarium of the same side, we may venture to say with testes and ovaria, nor one having a prostate and uterus."

Leuckardt observes: "The numerous instances of androgyni for the most part depend upon an excessive development of this structure [the vesicula prostatica] in the male individual—associated with some other abnormal occurrences in the development of the uro-genital canal and the penis, which appear (the italics are our own) at the same time, according to the law of coexistence." (Todd's Cyclopedia of Anatomy and Physiology, Part XLII. p. 1425.) The presence of Fallopian tubes in the so called androgyni, he believes to be very rare; and thinks that, perhaps, it has hitherto been observed with certainty only in the bull, as reported by Mascagni. (Atti di Siena, vol. vii. p. 201.) What are usually thus called, he remarks, are but the prolonged horns of the uterus, which, as we have seen, he regards only as an excessive development of the prostate or rather vesicula prostatica.

Beck, in the last edition (1850) of his Medical Jurisprudence, vol. i. p. 15, alluding to the supposed coexistence of the uterus and the prostate, states as his belief, that, in repeated instances, the part deemed a uterus is a malformed prostate, and that the opinions expressed by the reviewer of Ackermann, already quoted, are calculated to lead to more correct views upon the nature of supposed hermaphrodites. At page 142, he thus still more strongly expresses himself: "All the cases of supposed hermaphrodites are either males with some unusual organization or position of the urinary or generative organs; or females with an enlarged clitoris, or prolapsus uteri, or individuals in whom the generative organs have not produced their usual effect in influencing the development of the body."

The views entertained by Leuckardt with respect to the nature of hermaphrodites, and which we have already cited, seem to be those most generally received among modern anatomists and physiologists, and, in the opinion of many, they afford a new and secure basis in determining the analogy—the common plan of structure—of the male and female organs. The morphological import of the vesicula prostatica, for the discovery of which organ we are indebted to Morgagni, was first recognized by E. H. Weber, and the opinions of the latter have received the assent of Huschke, Theile, Hausmann, Bergmann, Leydig, Leuckardt, in Germany, Duvernoy, in France, and Adams, in England. Before we present the facts in our possession, which we think are sufficient to subvert the views promulgated by Prof. Weber, and adopted by so many eminent authorities, we will present a few others which we have been able to find, and which bear directly upon the point in question.

Petit has declared that he was once consulted by a man who passed blood by the penis every month, without pain or troublesome symptoms, and he suggests that this man might have had a concealed uterus. (*Hist. de l'Acad. Roy. des Sciences*, 1720, p. 38.)

An individual by the name of Durge, died at Bonn, in 1835. This person, during life, was pronounced by Osiander, Kopp, Sæmmering, Sir Astley Cooper, Messrs. Lawrence and Green, as well as by the medical faculty of Paris, to be a male; yet, when twenty years of age, there was, on three different occasions, discharges of blood from the genital organs.

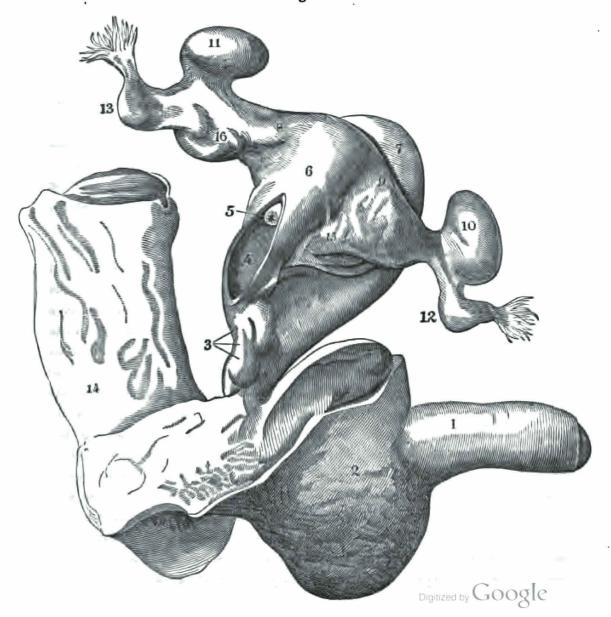
In examining the body, a withered testicle was found on the right side, with a penis and prostate gland; on the left, an ovarium, with a uterus, vagina, and Fallepian tube.

A case is reported by Dr. Harris, of Clarksville, Virginia (Amer. Journ. Med. Sci. July, 1847), in which a person menstruated through a short but naturally-formed penis; and Taylor, in his Medical Jurisprudence (2d Amer. from 3d Lond. ed. p. 495), alluding to this case, remarks, that the fact that the being menstruated, was here sufficient to assign it to the female sex. For the same reason, he would refer to the female sex the famous case of Suydam, of Salisbury, Conn., in which the person was pronounced by Dr. Ticknor and Dr. Barry to be a male, as he had a penis and one testicle, though he had also regular catamenia! The insufficiency of this reason we think will be obvious after the examination of Prof. Ackley's extraordinary case, which we shall presently detail.

Prof. Simpson, of Edinburgh, in his very comprehensive article on hermaphroditism, in the Cyclopedia of Anatomy and Physiology, states that he has been informed, on credible authority, of two instances where in males the menstrual discharge was perfectly regular in its occurrence, and considerable in quantity. One of these persons was seventeen years of age, the other had been married for several years, and his wife had no children. inquires whether the discharge in these cases consisted in a periodical hemorrhage from the urinary bladder, or passages only; or was it, as supposed by Petit, in the instance which came under his observation, of a true menstrual character, and produced by the reproductive organs of the female existing internally, and communicating with the bladder or urethra? The solution of these questions, we think, we shall be able to furnish; previous to which, however, we will briefly relate a case which came under our own notice some four years since, at the Northern Hospital, Liverpool. The individual to whom we allude, served as a sailor on board the American merchantman Rappahannock. This person was about thirty years of age, and with the exception of the breasts, which were large, had the general appearance of a male. The penis, however, was short, and the scrotum somewhat cleft, so as to resemble in some respects the external labia of the female. At the time of my examination menstrual blood was passing through the penis, and we believe this was a regular monthly occurrence. This individual preferred the society of females, and always in the month of March felt strong desires for sexual intercourse with them! This had been once effected, but having then contracted the venereal disease, the act had not been again repeated! There was a mystery about this case which until recently we could never solve. Circumstances, however, have lately placed us in possession of facts of a somewhat similar nature; but in the latter instance an autopsy, made by one of our most eminent surgeons and anatomists, revealed a state of things, the existence of which has hitherto been deemed impossible, and which alone, in my opinion, can explain the extraordinary menstruation in the sailor just Digitized by GOOGIC

mentioned, together with the instances referred to by Petit, Prof. Simpson, Dr. Harris, and Dr. Barry. To Dr. Horace A. Ackley, the distinguished Professor of Surgery in the Cleveland Medical College, Ohio, are we indebted for the cast from which the engraving accompanying this article is taken. The parts from which the cast was made we have ourselves most carefully examined. They were removed from a person about twenty-six years of age, who for some years had acted in the capacity of a servant to Dr. Mills, of Cleveland, now deceased. The history of this individual, as kindly furnished us by Prof. Ackley, is briefly as follows: Stature large; external conformation, with the exception of the hips, male; beard moderate; penis large; scrotum of natural appearance, but empty; habits solitary, and had a dislike to women; menstruation per penis monthly; this was always attended with much suffering, and during one of these menstrual periods he died, from cerebral congestion. After death, the body found its way to the Cleveland

Fig. 1.



Medical College, and when Prof. Ackley commenced its examination, he had no suspicion of the wonderful disclosures about to be made, as the above history was to him then unknown, and only subsequently obtained from the physician to whom we have above alluded, and who, as already stated, is now The accompanying figure will give a better idea than any mere verbal description of the parts found on opening the body; and we shall only add that they have been turned over and the vagina opened from behind. 1, penis; 2, empty scrotum; 3, prostate gland; 4, vagina; 5, os tincæ; 6, uterus; 7, bladder; 8 and 9, right and left Fallopian tubes; 10 and 11, right and left testicles; 12 and 13, right and left ovaries; 14, rectum; 15 and 16, right and left vas deferens. The vagina, it will be observed, opens into the neck of the bladder, and thus communicates with the urethra; its inner surface was reddened, and its cavity contained menstrual blood. The Fallopian tubes were pervious. Excretory ducts of the testes were perfect. From the natural size and appearance of the prostate gland it is quite apparent that the excessive development of the vesicula prostatica, or Weberian corpuscle, has had but very little to do in the formation of this male uterus.

Here, then, we have an example of a monster with a testicle and ovary on each side, and with a prostate gland and uterus, the coexistence of which in the same being has been so flatly denied by the writers whose names we have mentioned. We have also the presence of real Fallopian tubes, which Leuckhardt believes to have been observed only in the bull, as reported by Mascagni. (Atti di Siena, vol. vii. p. 201.) What have been supposed to be such, he thinks were merely the prolonged horns of the uterus, which again, as we have seen, he considers but an unusual development of the vesicula prostatica. In Prof. Ackley's case no such mistake as this can possibly be made.

Petit has given the particulars of the case of a soldier who died from his wounds, and in whose body, on dissection, was found the same duplicity of organs as was found in that examined by Prof. Ackley. In this instance, however, the uterus was attached to the neck of the bladder, into which it opened between the neck and the prostate. Here, the uterus was formed independently of any excessive development of the prostate gland; both organs, indeed, well formed, coexisting in the same individual.

Harvey too examined an embryo in which a two-horned uterus existed, with two testicles of very small size, and a diminutive penis, near which were some traces of a prostate gland.

In the Journ. Hebdom. de Méd. tom. x. p. 466, Bouillaud has detailed a case examined by himself and Manec. The scrotum was empty. A well-formed prostate gland surrounded the origin of the urethra. A uterus occupied the usual situation of that organ in the female, and opened inferiorly into a kind of vagina, two inches long, and which entered by a narrow orifice into the membranous portion of the urethra. In this case, with the exception of opening under the glans, the urethra externally was natural.

Prof. Eschricht, of Copenhagen (Miller's Archiv. für Anat. a Phys. Heft ii.), has reported a case in which the penis and scrotum were well developed, though the latter, as usual in many of these cases, was empty. Internally, there was a uterus, with Fallopian tubes and ovaries. The uterus was firmly attached by its imperforate neck to the posterior walls of the urinary bladder.

Prof. Vrolik has represented, in plates 94, 95 of his magnificent Tabulæ ad Illustrandam Embryogenesin Hominis et Mammalium, &c. &c., an hermaphrodite in whom this duplicity of sexual organs existed internally. On turning aside the bladder "est uterus in vaginam transiens ad ejusque latera ligamentis latis præditus. Ex ejus angulis proveniunt fasciculi cylindrici qui tubas Fallopianas referre videntur." On the right side were both testicle and ovary; on the left side they were indistinct. Penis of middling size, but glans imperforate. There was no trace of the prestate or vesiculæ seminales. From the absence of the prostate in this case, as well as that when a male uterus was found by Columbus (De Re Anat. lib. xv. Venet, 1559), and, if we mistake not, in that reported by Ackermann (op. cit.), those who believe, with Weber and Leuckardt, in the morphological import of this gland, may discover an argument in support of their views, but how will they dispose of the cases of Petit, of Bouillaud and Manec, of Harvey, and, lastly, of the well-attested example of Prof. Ackley? Leuckardt remarks that it was in view of the situation and connections of the vesicula prostatica, together with its form—as in the beaver—that Weber was induced to form his opinions of the morphological equivalent of this gland. The fact noticed also by Creve (Bruchstuecke sur Vergl. Anat. und Phys. p. 41), that after castration in the boar, the prostate gland, as well as the vesiculæ seminales become augmented one-third in volume, has likewise been deemed an argument in favour of the homology of the prostate and uterus. With such facts before us, however, as those offered by Petit, Harvey, Bouillaud and Manec, and especially by Prof. Ackley, we find it impossible to embrace a theory which has found so many able supporters as has that first promulgated by Prof. Weber. Indeed, when we glance at the various opinions respecting the laws of formation of the sexual organs which have been entertained from the time of Aristotle to St. Hiliaire-be it Geoffroy or Isidore-or even down to Dr. Knox, with Vrolik, in view of his extraordinary case, we are tempted to exclaim: Lubenter fateor in re meas non sufficire vires!

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