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PHYSIOLOGY

AND

MEDICAL JURISPRUDENCE:

A CONTRIBUTION TO

THE PROSPECTIVE REFORMATION OF SEVERAL ERRONEOUS DOCTRINES IN RELATION TO HUMAN REPRODUCTION.

BY

JOHN N. CASANOVA, C.M.D.,

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LONDON:

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We are bound to forsake the errors of the past when anything, asserted to be true, can stand the test of experimentation.—John N. Casanova.

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TO MY BOOK.

Go, my little book, go forth into the world, into which thou art born at last; though, if thy author had not come to thy rescue, thou hadst been strangled by the ruthless hands of the man-midwives, who ought to have introduced thee ere this. Go and find thy way to the notice of the medical and legal professions, for whose use I have written thee, and abide thy trial—not for personal attacks, which thou containest not; nor for medical heresies, for thou propoundest no doctrine which is not essentially professional and in perfect harmony with sound physiology and medical jurisprudence; but for the assertions thou advancest as practical facts.

Go forth, then, little book, and appeal to those to whom I have addressed thee, viz., the progressive, liberal, and unprejudiced truth-seekers. Show to such men that I have written, not for gain, which I care not for, and do not need or desire; but for truth's sake, and for the purpose of endeavouring to dispel Errors hitherto accepted as Truths.

Go forth, I repeat, and combat these errors; and if thy author be spared to see the result, he hopefully anticipates that thou wilt have performed the object of thy mission, and have achieved a victory.

20, Dorset Street, Baker Street, Portman Square, London, W. May, 1865.

DEDICATION.

"EXTINCTUS AMABITUR IDEM."

The present lucubration is most respectfully dedicated, by the Author, to the manes of the learned colleagues, Drs. Bartley and Farr, the first medical men in England who wrote on "Medical Jurisprudence," and "Forensic Medicine;" and who, in their initiative works, of which several editions have been published since 1787, maintained a physiological and therefore a medico-legal truth, since forgotten, or treated with contempt by the successive writers on the same subjects* (see the last part of the legal aspect of conception), not that they have controverted and opposed the assertions of the primitive British legists by adducing logical and authentic practical facts to prove

^{* &}quot;A man dies, his writings are neglected by those who come after him, his ideas bear no fruit, and his very name may be effaced from or become disfigured in the memory of mankind; until a long time, perhaps some centuries, after him a man is born who, by some accident, touches the works of one gone long

their supposed error, but because it is the tendency of human nature to be adverse to truth:

> "L'homme est de glace aux verités; Il est de feu aux mensonges."

But truth is mighty and will prevail.

It is dedicated to them, not to recommend it to their protection or favour, for they are no longer of this world of sin; but to testify and to confirm, by logical reasoning, by comparative scientific investigation, by practical experiments, and finally, by common sense, the truth which they so long ago advocated. It is, pro tanto, to be hoped that the day is not far distant, when that, and every other truth contained in the following pages, will be universally acknowledged and adopted, thus supplying a want (notwith-

ago into a better world, is startled by their originality, dives into them, and feels called upon to present them or their substance to his generation in a modern and attractive form."

Dr. Ryan's "Paracelsus Redivivus," in the 'Monthly Review,' May 1st, 1864, vol. viii, p. 257.

The dedicator does not claim to be the man born to accomplish such a design as the one above referred to; but having had hundreds of opportunities for practically testing the hitherto controverted opinions of those gone long ago into a better world (opinions or theories on the different points treated in the present little work), and having found them to be true, he feels called upon to present the fruits of his investigations and experience to the medical, and to the juridical professions in a simple and concise form.

standing the existing works of the kind) generally felt by magistrates, members of the bar, and jurors, in their investigation of several questions of civil and criminal import, connected with the subjects brought before courts of justice for the right administration of the laws.

It is also addressed to the medical and juridical professions, as a contribution to the prospective reformation of several erroneous doctrines hitherto entertained in relation to physiology and medical jurisprudence.

The physiologico-medico-legal point maintained by the departed British legists, being contrary to what is generally taught in schools, suggested to the author of this little work, the idea of investigating the subject by every possible means, from the day he became acquainted with their book—now more than forty years ago; during which time he has collected a considerable number of practical facts, so as to enable him to draw the following outlines, which embrace:

1st. All the physiological occurrences which take place in the human female, from puberty to motherhood, respecting the initiative and complementary process of reproduction; and

2nd. Every possible condition, or state, associated with those occurrences, capable of being placed before

courts of justice for juridical investigation; among which there are several facts never before brought to light by any writer on physiology, or medical jurisprudence.

Although opposed to the teachings of the Schools, and to the established doctrines on physiology and medical jurisprudence, the author does not deal with idle hypothesis, nor with conjectural opinions on any of the subjects which may come under the immediate province of those sciences; but he deals with wellobserved facts, which are worth more than the metaphysical reasoning of all the professors at home and abroad. FACTS essentially physiological and juridical, which have remained in the dark up to the present day, and which are brought to light for the sake of science in particular, and for the sake of humanity at large; facts not treated popularly, but based upon scientific investigation, according to the present advances in medical science, and practically demonstrated, or shown to be capable of being so.

Finally, the work is the result of more than forty years of personal experience in private and official practice in different parts of the world—written, not for medical men exclusively, but also for magistrates, barristers, and jurors, as the administrators of the civil and criminal laws.

It neither treats of novel inventions nor new truths, for there is not such a thing as a new truth. Properly speaking, all truths are as old as creation itself; the newness consists in their discovery, and in the manner and matter of elucidation. Truths, though hidden from those to whom it is forbidden to know more than what is sufficient for their day, have, nevertheless, existed from the beginning, and will exist for ever. Men can only revive and discover, but not invent, a truth.

And be it remembered, that the multitude is always inclined to slight and to stone the man who first makes the truth to be known.

Such is, indeed, the fate which discoverers and reformers encounter in their attempts to fix the public mind with respect to the subjects of their lucubrations. But, "never mind," says Mr. Paxton Hood, in his biography of Swedenborg; "to-morrow they will pick up the stones, gather them together, and elevate your chair of state and inauguration upon them."

During his professional career, the author has always been, and still is, ready to strive earnestly for what he deemed to be *Truth*, and has endeavoured to follow it whithersoever it might lead, no matter what interests it opposes; what loss or persecution the pursuit might expose him to; what party it might

ally him with, or sever him from. He has been, and still is, disposed to contend with facts, and not with persons, however much his positions may be controverted; and he feels sure that many of the statements made in these pages will be disputed. But facts are mighty arguments; nay more, they are positive proofs.

The author cannot close the present address without stating, that whatever is asserted to be true in the following pages, has stood the test of *Experientia*, as the "fountain of all our knowledge of nature and its laws."

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PROEM.

"To collect facts, and to philosophise upon them, are different processes, equally necessary to the establishment of truth."

Dr. HOLCOMBE.

There are, in the departments of civil and criminal jurisprudence, some points intimately connected with the physiology of human reproduction, which for some time past have been, and still are, admitted as positive facts, by the generality of medical legists; and have passed current in courts of justice, to the detriment of the promotion of science, and of the welfare of society at large, both in a material and moral point of view. But it is not too late to mend. Let us examine those points, one by one, according to the physiological manifestations of the vitalising principle on the organized being, and by practical examination, as far as it is possible, and then we shall see whether those reputed facts are positive or negative.

In attempting to prove that they are negative, i. e.

positive errors, "my mind misgives me upon two points; first, as to whether I shall be able to set down my conceptions in a clear and intelligible manner; and, secondly, if enabled to do so, whether my statements will receive the credence to which they are entitled, or be passed over with that indifference which too frequently characterises minds immured in their own self-sufficiency." Nevertheless, I shall endeavour to express myself, if not in the high language of rhetoric or eloquence, at least, in the plain language of logic and truth-Veritas simplex oratio est;—and will corroborate my assertions, not only with facts drawn from the physiology of the animal and vegetable kingdoms, but also from the practical knowledge obtained during forty years of experience in different regions of the globe. Pro tanto, I can confidently say: " Non hypotheses condo, non opiniones vendito, quod vidies scripsi."

During that period of time I have had hundreds of opportunities of investigating, practically, the subjects under consideration, in more than as many individuals of different races and conditions in life; and I am, therefore, fully authorised to aver, that the results of my researches are true, though they may be opposed to the teachings of professors, whose information, respecting their pretended facts, could not have been

obtained from reliable sources, but only at second or third hand, from the copying of each other's erroneous assertions.

A blind obedience to the ipse dixit of the master, without investigation, and the foolish attempt to prove supposed facts, by mere quotations, are reasons why false conceptions have been propagated from generation to generation, notwithstanding the progressive advancement of all branches of medical science, during the last half century. "Hominis errare, insipientis vero in errore perseverare." And could it be otherwise when men, in general, feel a difficulty in adjusting themselves to a new point of view, and in throwing off old established convictions, no matter how erroneous they may be? It has well been said that "education, habit, and custom, begetting as they do, a reprehensible confidence in, and slothful dependence upon, the sayings, doings, doctrines, and practices of former ages, form a sad bar to the progress of all sciences, medicine particularly."

On the other hand, materialism has been, in medicine, as well as in philosophy, the dogmatic teaching of bygone days; but the discoveries of positive facts have, of late, raised the former to the dignity of a science of life, and the latter to the rank of spiritual science. Vital dynamism shews that the mechanical,

physical, chemical, and mental operations of the human body, are not the fundamental principles of animal life, as it was supposed; but that they are its proper effects. The invisible, impalpable, and immaterial principle of life, capable of producing all the phenomena of moral, physical, and chemical actions, as well as of exercising mechanical powers, is the fundamental base of physiology, by whose laws this science must be regulated. It is, therefore, to be hoped that the existing physiological absurdities, transmitted to us by a host of successive conservative writers, who dared not, could not, or would not judge for themselves, will soon disappear, to make room for the expositors of the positive, and the more comprehensive law of nature, vital dynamism.

The points, then, to be amended, according to the dictates of present medical knowledge, are such as embrace, if not all, at least, the greater part of the physiological occurrences which take place in the female sex, from puberty to motherhood; and every possible condition, or state, associated with those occurrences capable of being placed before courts of justice for juridical investigation. These I shall arrange (the leading ones) as follows:

1st. Puberty.

2nd. Virginity and defloration.

3rd. Conception.

4th. Gestation.

5th. Miscarriage and abortion.

6th. Exoncration.

7th. Sterility.

Besides the above, there are other points associated with the same subjects, such as the comparison of the vegetable with the animal kingdom; induction; conception effected without the junction or concurrence of the male; the prophylaxis of conception; the abnormous reproduction; the sex of progeny, &c., some of which are rejected by modern physiologists and medical jurists, but which will be embodied in their respective places, for the sake of elucidation.

In dealing with such topics, I shall endeavour to illustrate them with as many practical observations as the limits of this little work will allow, in order that each individual case may be, in future, fairly and justly appreciated.

Having, from my earliest knowledge of medical science, entertained doubts on some of those points, particularly the third, in which the possibility of conception taking place in the state of absolute insensi-

bility, from a profound unnatural sleep, or from the effects of moral and physical causes, is generally admitted to be possible, I determined to judge for myself, no matter what the opinions of my teachers were; and resolved to ascertain the truth by every possible mode of investigation, i. e., by questioning the book of nature, and by following Lord Bacon's maxim, namely: "He that questions much, shall learn In such proceedings, I have availed myself much."* of the most favorable opportunities to interrogate women of every class and condition in life, both, privately and officially; and thus, have come to the conclusion, that the vital theory of those functions, peculiar to the propagation of our species, is in perfect harmony with the practice. Hence follows the difference of my opinions from those generally

^{*} There can be no doubt that the greater number of facts brought to light in the following pages have been kept in the dark by the mistaken modesty of many members of the profession, and thus retarded the progress of medical science; but "it is time," as a learned writer in the 'Quarterly Review' for 1855, said, "to burst through that artificial bashfulness of genuine purity, which has injured the growth, while it has affected the features of genuine purity. Society has suffered enough from that spurious modesty, which lets fearful forms of vice swell to a rank luxuriance, rather than point at their existence; which coyly turns away its head from the wounds and putrefying sores that are eating into our system, because it would have to blush at the exposure."

admitted by the most modern teachers of physiology and medical jurisprudence. But let it be borne in mind that this deviation of sentiment is not brought forward merely for the sake of opposition to the established dogmas; for it is the natural consequence of the cardinal point—vital dynamism. Nor is it the capricious invention of an incredulous, or apostatised professor of the healing art, as it may be supposed. It is the result of my own personal experience during the best part of my life, and the conviction of my professional creed, founded on the general laws of CREATION, and on those of the living organism, in particular; confirmed by many hundreds of wellauthenticated practical observations, and faithful concessions of females, placed in different circumstances, who have had courage enough to overcome that modest reluctance, so natural in their sex, to state their cases when brought before courts of justice, and when privately consulting me for advice.

Beside the amendments which physiology and medical jurisprudence call for, in the present state of our profession, there are others, also, to be made in the pure inductive mode of expression.

There are many words, generally used to express the same thing, but, if examined one by one, it will be found that each of them has a signification peculiar to itself. It is therefore necessary to distinguish their proper derivations in order to render their meaning more intelligible, and their definitions more logical than they appear in many modern medical works. In this, I am far from wishing to make a display of learning, or an ostentatious shew of knowledge, in a language which is not my own; on the contrary, my only object, in the endeavour to fix the proper meaning of a word, according to the spirit of the science in which it is used, is to impress on every one's mind the importance of a definition, particularly in medicine, where it is less observed. "The excellence of a word is its definition; and definition is the rule for the scholar, in the use of words."

There may be some who will object to accept some of the technical terms used in the following pages, because they are not English; but it is not a sufficient reason for rejecting them, nor for condemning them because they are new to them.* Old authority, and old tradition, frequently serve to propagate errors in science. We are living in an age of progress, where all departments of knowledge go onward in their course; but, if medicine has advanced in its theory and practice, since the last half century, why

^{*} See a foot-note at the end of the Eleventh Point, under the head "Exoneration per viam non naturalem."

should it not improve, also, in the pure inductive mode of reasoning, and in the use of words proper to express their signification? The question would be whether such words express, or not, the idea which is meant to be conveyed in a more logical and scientific manner, than has been done hitherto—whether they be Greek, Latin, Spanish or French, from which languages all European nations have reciprocally borrowed more or less.

So much for my Proem. Let us now enter into the elucidation of the points in view, bearing in mind, that the task of opposing the doctrines hitherto established by the schools of every European nation, as universal facts, is a bold undertaking for a foreigner, writing for the good of society at large; and for the progress of science—a task which, at the same time, requires the full conviction of an independent mind to venture on its performance, and a conviction founded, not on private opinion, but on personal experience, and on TRUTH.

I may be permitted to observe, in conclusion, that it is impossible, in a work of this kind, to avoid such technicalities as are generally used to name certain organs, and functions of the human body, which might be thought indelicate by the chaste and over-timorous lay reader, however wishful one may be to

speak modestly. But the propriety of treating on private matters, and of using their proper appellations, so as not to sacrifice sense to delicacy, is, non obstante, justified, 1st, by the character and nature of the subject, which, in the present case, is essentially professional; and 2nd, by the well-known adage of old, which says: "To the pure all things are pure."*

Should the explanation of some words or things be considered too exuberant, or superfluous for a medical reader, to whom such an information is needless, it must be borne in mind, that it is not for the learned colleagues alone, that the present work is written, but also for all who are engaged in the legal profession either as magistrates, barristers, or jurors.

^{*} The apostolic declaration that "there is nothing unclean of itself, but to him that esteemeth any thing to be unclean, to him it is unclean," is applicable to the present case.

THE

PHYSIOLOGY OF REPRODUCTION,

AND ITS

MEDICO-LEGAL ASPECT.

FIRST POINT.

PUBERTY.

The object of the investigation of this state is to define physical and civil puberty, and to ascertain the period at which either of the two sexes is apt to procreate, with the conditions necessary to that effect.

Generally speaking, puberty is the age at which the period of childhood ends, and that of adolescence begins. The time at which this state is manifested varies according to climate, race, education, class, and individual constitution. In southern latitudes it takes place at the age of from ten to fourteen years; whereas in the north it seldom begins before the fourteenth or eighteenth year. These are general

rules not free from exception. With regard to particulars, I will divide puberty into physical and civil.

The former is developed, without regard to age, when a female is capable of conceiving, and bearing a child. The latter is limited to a fixed period according to the laws of different nations, and has reference only to the qualifications of individuals or to the actions which they may do during the different periods of their age. When I say without regard to age, I mean from the eighth year upwards, for it has been frequently observed in several parts of Asia, Africa, and South America, that females at that early age, or soon after, have become mothers. I myself attended a Bengalee girl in Calcutta, in 1833, the daughter of my coachman, who became pregnant shortly after she completed her eighth year, and brought safely to light a robust male child, just at the ninth year of her age. This girl had had menstrual discharges two months previous to copulation, and hers is the earliest case of pregnancy yet known, or mentioned by anyone, that I am aware of. (Authentic proofs have been obtained to ascertain the true age of this girl.)

There is another class of puberty recorded in several works of physiology and medical literature, which I need not mention here, and the subject of which may or may not be regarded as capable of procreating. The class I mean is precocious puberty, properly speaking—puberty physically developed in

every respect before the age of eight years. Of this description of physiological phenomena, I saw a very interesting example in the Isle of Cuba, of which, indeed, there is not another such on record.* I will digress for a moment in order to relate this extraordinary phenomenon.

In the month of March, 1824, while assistant in the yellow-fever hospital established in the convent of San Juan de Dios, at the Havana, I was invited by Dr. Bellot, then chief physician of that establishment, to see Isabella, a negro child not yet three years of age, who was at that time in a perfect state of physical puberty—puberty in miniature, if I am allowed to use this figurative expression. She was born in that city on the 6th day of July, 1821, of black parents, slaves to Don M. Pedroso, of that capital. From the moment of her birth, Isabella assumed an uncommon development in her body, particularly at the breasts, head, and loins. Three months after birth she had slight bloody discharge from the vagina, which was attributed to some disease of that organ; but it stopped naturally in a few days, and nothing more was thought of it. In the following month, the same phenomenon was observed, and

^{*} Since the above was written, I perceived another case similar to it published in the 'North Jur. Med.,' July, 1845, quoted by Dr. Taylor in his 'Medical Jurisprudence' p. 680, respecting premature or precocious puberty; and others of early menstruation and early pregnancy, also quoted by the same author from different periodicals, *ibid.*, p. 681, 6th edition.

no particular treatment was employed. The discharge continued more or less till the age of one year, when it became regularly established every month; and continued without interruption till 1827, when I saw her for the last time.

On my first visit to this child, I was quite surprised to see her organic construction in such a perfect condition respectively. She was as perfect as any female of that climate at the age of fifteen, except in height, for she only measured three feet ten inches. Her breasts, her head and physiognomy, her genital organs and loins were more than proportionate to the rest of the body; even the pudenda and axilla were covered with woolly hair; but her intellectual faculties did not seem to correspond with her physical exhibition. She enjoyed excellent health in every respect.

My esteemed friend, Dⁿ. Ramon de la Sagra, then professor of Botany at the Botanical Garden of Havana, wrote a very interesting account of this girl, with some philosophical observations on the subject of precocious puberty, which were published in the 'Anales de Ciencias Agricultura, Commercio y Artes,' for August, 1827, of which periodical he was the editor. This gentleman had many opportunities of seeing Isabella, and of studying her propensities and development. I am sorry to say that having left the island three years after I became acquainted with this extraordinary case, I cannot tell what was the ultimate result of the miniature pubert child.

Dr. Mata, in his 'Tratado de Medicina y Cirugia legal,' 2nd edition, Madrid, 1846. Vol. i, pages 31, 32, reports another case which he saw in the Spanish metropolis, of a girl four years of age, who had regular menstruation since she was three years and three months old. She measured at that time four feet in height, and her physical organization was developed, as in Isabella. Her intellectual faculties were also much more unfolded than those generally observed in children at that age. Her sexual organs were covered with fine hair, and le tout ensemble formed a "type of anatomical virginity." Her muscular powers were so great that she could raise herself whilst sitting on the ground with heavy weights on her arms, without using her hands. She was born in Andalucia; her name was Maria del Rosario Perez; and she was exhibited for money at Madrid.

Another case has been lately published in the 'Chicago Investigator,' America, and reprinted in the 'Manchester Observer,' England, May, 1864, under the head "Precocious Menstruation," where the subject described to be seven years of age, began to menstruate the fourteenth day after she was born, and continued regularly ever since, except two short interruptions. But her organic development was nothing like that of the two preceding girls. "Her body was quite slim and delicate, and the mammæ were not developed in the least."

Besides examples of female precocious puberty, there are many cases of males, reported in several works at different epochs and written in different languages, with which medical men are acquainted generally, and which I will not mention here for the sake of exemplification. But I will call the reader's attention to a particular case, seen by Craterus,* the subject of which was an infant, a youth, an adult, a father, an old man, and a corpse within seven years.

The physiological question—whether a precocious pubert *female* can conceive, or whether a precocious pubert *male* can engender, before either of the two have attained the age of eight years, which is the age at which such phenomena can positively take place, is of a doubtful nature, notwithstanding the case seen by Craterus, above mentioned.

With respect to the lease of life, it has been observed that precocious puberts do not attain great longevity. "Early life," says a Spanish proverb, "early death;" probably from the Latin maxim, "Quod cito fit, cito perit," that which is quickly formed quickly perishes; vulgarly, soon ripe, soon rotten.

^{*} Alexander the III, brother to Antigonus, king of Macedonia.—Phlegon, 'De Mirab.,' cap. 3.

LEGAL ASPECTS.

"Medici proprie non sunt testes.

Sed est magis judicium quam testimonium.—Digestus.

Courts of justice depend on medical jurists for the elucidation of the preceding and the following points, when connected with civil or criminal cases brought before them for judicial investigation, that persons may be acquitted or condemned on the charges produced against them. This evidence, therefore, being of the greatest importance, and the most difficult duty that a medical man can perform, should be conscientiously given; for it is not only conjoined with his professional dignity and reputation, but it is essentially connected with the honour, property, liberty, and life of all classes of society. Perarduum et admodium difficile, medencium in foro officium est.

—Boerner.

I have alluded to *civil* puberty before, and will return again to this subject, in order to illustrate the legislative point regarding it.

Civil puberty is that state, in which, by the laws of some nations, a female at the age of twelve years is considered to be mature, and, therefore, may consent to or dissent from marriage. By the English laws, a female at seven may be betrothed or given in marriage; at nine, she is entitled to dower; at twelve,

to marry; at fourteen she is at the years of legal discretion, and may choose a guardian; at seventeen, she may be executrix; and at twenty-one, she may dispose of herself and property.

The civil part of those laws, as to the age of puberty being fixed at the twelfth year, does not convey the idea that females at that age are generally in a physical state of puberty, as the literal meaning of the term implies; so that the meaning of the law cannot be applied but to the civil qualifications of the individuals, as before stated, or to the actions which they may do during the different periods of their age, from seven to twenty-one years; and as the physical qualification of puberty cannot be acknowledged before the menstrual discharge is periodically and fully established, the question, in medicolegal investigation, would be the age at which females are capable of conceiving and bearing a child; which question is to be determined by the conditions connected with menstruation and other phenomena proper to reproduction, such as the organic and mental development, &c., &c.

Ancient legislators have paid very little attention to the mental and physiological conditions of either sex, in determining the qualifications proper to marry. In Sparta, a man could not take a wife before the thirty-seventh year of age; whilst a woman was allowed to take a husband at seventeen, because they thought that no vigorous subjects could be obtained from younger fathers. The Athenians and Romans

of the latter period of that republic, allowed both sexes to marry at their early state of puberty, because they wished to increase their population; and in Russia, the masters marry their serfs even before puberty, because the registration for the collection of tributes—taxes—is made according to families, and not according to single individuals.

The civil laws of the more enlightened nations, pay, perhaps, too much respect to individual liberty, and therefore they do not claim other conditions than physical puberty, to allow matrimony in both sexes. Neither do they acknowledge other impediments than those which emanate from freewill and from consanguinity, except in England, whose laws forbid union with a deceased wife's sister, with whom no consanguine relationship of any kind exists. The Manx laws, in the Isle of Man, are much wiser in this respect, for they allow a man to marry his sister-in-law, to whom he is not related by blood, but they forbid marriages between cousins, because of their consanguineous relationship.

As the question of puberty is often connected with marriage, particularly in some countries where the union is not allowed to take place previous to the appearance of menstruation, it has been stated by some authors that menstruation is a condition absolutely necessary to physical puberty; whilst others assert that, on the contrary, menstruation is not essentially indispensable to that state, and to prove their assertions they bring forward several cases in which

this function being absent at the time of wedlock, the women have conceived notwithstanding. this question, which leads to the inquiry whether conception can or cannot be effected without menstruation, is foreign to the present subject, and therefore will be considered in another place (legal aspect of conception). For the present, suffice it to say, that if proper attention had been paid by the adherents of the latter doctrine, i.e., that menstruation is not necessary to physical puberty, with regard to the socalled non-menstrual individuals, they would have found that sexual desire with a sort of bloody discharge almost always takes place in them regularly at the period in which propia catamenia is expected. Such discharge I have often observed to have manifested itself from some other surface than that of the vagina, e.g., from the rectum, nose, mouth, or urethra, and even through the skin, in a form of cutaneous eruption, which nature employs in some abnormal conditions as a temporary substitute for the vaginal discharge.*

^{*} Dr. Pulte calls this menstrual aberration a "Deviation of the menses, a term signifying the appearance of a monthly discharge of blood from other places of the system, such as the lungs, bowels, nose, stomach, &c." (See 'Woman's Medical Guide, &c.,' Cincinnati, 1853, p. 196. See also—The Legal Aspect of Conception.

SECOND POINT.

VIRGINITY AND DEFLORATION.

The object of examining these states is—1st, to ascertain the presence or absence of the virginal sign; and 2nd, to declare whether defloration is real or apparent, and whether effected by natural, artificial, voluntary, or involuntary means.

Pure virginity is to be found nowhere but in the heart. Morally speaking, virginity is the integrity of the heart—the crown of chastity. Speaking physically, it is the unimpaired state of the sexual organs, whose wholeness has not been broken by copulation, or by any other voluntary or involuntary act of any kind.

That state of moral innocence cannot be destroyed except by moral causes; whereas anatomical integrity can be impaired by physical causes. In the first place, by the unavoidable effects of lascivious or voluptuous dreams; by sensual excitement, produced by obscene reading, polluting exhibitions, and by female concubinage—tribadism (see the 6th and 13th points). In the second place by voluntary copulation; by violence, when in the state of absolute insen-

sibility only; by the introduction of foreign bodies into the vagina; by a gradual and constant abuse of self-gratification in different ways, either alone or conjoined with other persons of the same sex, particularly hermaphrodites; by bestiality; finally, by an operation performed for imperforated vagina; by contusions; or by any other disease manifested in the organs of generation.

The physical appearances of the sexual parts are often equivocal, consequently no positive conclusion can be deduced from the presence or absence of the anatomical signs or constituents which are considered essential to physical virginity. The hymen may be present, and yet virginity may not exist, and vice versa; for the elasticity of that membrane may, sometimes, allow dilatation, to a certain extent, by coition without being materially or organically impaired. It may be destroyed by morbid affections or other unavoidable causes. Hence it follows that positive signs of defloration are extremely uncertain in pubert women, unless under some peculiar circumstances such as very recent laceration of the hymen, tumefaction of the labia, or the existence of semen in or about the vagina.

There are some, however, which may be depended upon, generally, to prove, not physical but moral virginity, although very difficult to discriminate, even by those who have much experience and fine tact. Such signs consist in a peculiar organic rigidity of the nipples, and in the peculiar rosaceous colour of the areolæ in their circular extent, which cannot be described or understood, except by personal examination. These symptomatic phenomena disappear, not only by natural copulation, but by any other kind of sexual gratification capable of producing friction on the genital organs and thrill.

The sympathetic relation which exists between the mammæ and the organs of reproduction is so well known to well-informed physiologists, that it need not be described for the sake of exemplification.

Defloration may be real or apparent, either voluntarily or involuntarily effected; real, when considerable dilatation of the vagina, laceration of the hymen, and a flabby condition of the labia are evident; apparent, when there are no positive signs that we may rely upon; voluntary, when there has been no resistance made; involuntary, when no resistance can be made, or when caused by the effects of contusions and other diseases of the genital organs. It cannot by any means be effected by force or violence, unless when the female is in the state of absolute insensibility caused by affections of the mind, or by the effects of substances having the power of producing it. (See the point under the head "Induction.")

LEGAL ASPECT.

Forced defloration, i. e., the act of taking away a pubert female's virginity, and forced copulation on a

non-virgin woman, are admitted by law to be identical offences; but I believe that they ought not to be so; for in the former case, the perpetrator takes away the seal of physical chastity, i.e., the fortuna virginalis; whereas, in the latter case, he does not, for it does not exist. Defloration of pubert women, "without a view to marriage as an end, is the villany of a robber," whether effected by consent or force; forced copulation on a woman accustomed to sexual intercourse, is a crime of a lesser magnitude, and therefore subject to different punishment. Both acts are known, in common law, by the term RAPE, derived from the Latin rapio, rapere, which is meant to express "the offence of having unlawful and carnal knowledge of a woman, by force, and against her will."

Rape in its literal sense signifies the act of seizing and carrying away anything clandestinely. A female may be seized and be carried away by force and against her will, with the intention of stealing or robbing her virginal zone, and notwithstanding this the consummation of the act may possibly not be effected, for she, in self-defence, may resist and prevent her ravisher from having any degree of penetration, however strong his efforts might be to accomplish the crime. Hence rape with and rape without carnal knowledge.

On the other hand, a man may have unlawful carnal knowledge of a woman otherwise than by rape in its literal sense, that is, by *stuprum*, *i. e.*, carnal

knowledge without rape, effected, not by physical but by moral force, e.g., by seduction, by enticing her from the path of duty, by flattery, by persuasion, or deception, he may induce her to surrender her chastity; for such are means that moral force can employ to obtain the object in view. But those modes of conquering women and the one expressed by the law are offences, I believe, of different character, and which cannot be brought before judicial investigation under the generic term rape, except when rape, properly speaking, is complicated with the subsequent act of effective copulation, "by force and against her will,"—rape with carnal knowledge.

No term, I think, can better convey the idea or express the act of carnal knowledge on a woman by physical force and against her will, whether preceded or not by the attempted or real act of rape, than that of violence, which is the highest degree of force; both implying an exertion of strength, but the latter in a much less degree than the former. Force is ordinarily employed to supply the want of proper will; whereas violence is used to counteract an opposing will. It is always something hurtful, and performed by physical strength only.

The penal laws of different countries vary with respect to the above-mentioned crimes. They are punished in the Isle of Man by offering a wedding-ring, a sword, and a rope, to the ravisher, that he may choose one of the three. According to my views and to common sense, they ought to vary in all

countries according to the nature, or on which the crime has been or is committed, viz., whether on a virgin or on one who is not so, and whether on a married woman or a widow.

Vulgar tradition, supported by religious authority, asserts that the most evident proof of virginity, and therefore of defloration, is to be found in the bloody linen of the woman stained in the first sexual intercourse with man. But this is not absolutely true, for the bloody discharge, sub coitu, depends, in great measure, on the degree of excitability of the female, and on the proportional dimensions of the membrum virile.

A virgin woman of an excitable temperament, and well disposed to copulation, will not bleed in the first act, however large the penis may be; whereas a woman of a cold temperament, not excited by lust to sexual intercourse, will bleed, even with a small membrum, except when subject to profuse gonorrheal discharges.

On the other hand, non-virgin women accustomed to copulation, are subject to bleed if the act is perpetrated by force, and by an extraordinarily large man, as I have seen it more than once in different countries, where such kind of females had been stuprated by malefactors, whilst in a state of unconsciousness produced by fright and by the exertion employed in self-defence. Hence the bloody appearance brought on by voluntary, or involuntary copulation, is not always a positive proof of deflo-

ration, and therefore not an evident sign of virginity.

The reason why lascivious virgins do not bleed in the first act of copulation is, because of the great quantity of mucous secretion discharged from the vagina when in the state of sexual heat, which facilitates penetration without lacerating the hymen, or its appendages.

Females of the lower animals never bleed in the first conjunction with the male, because they never allow to be covered except in the rutting season, when their genital organs are in a favorable condition to effect penetration without their virginal seal being violently torn.

The facility with which penetration takes place in very luxurious virgins, has caused much disappointment to several gentlemen of my acquaintance, who were inclined to call in question the physical integrity of their wives, from the first sexual intercourse they had with them. They consulted me professionally on the subject, and their doubts were perfectly removed when they knew my opinion, which was founded on the description those gentlemen gave me of the lascivious disposition of their partners.

There were three among those cases where legal proceedings were instituted to clear the honour of those unfortunate females, in which I had to give my opinion officially, namely:

The first was where the husband repudiated his

wife the next day of their marriage, on the ground of non-virginity.

The second was where the bridegroom left the bride the very same night to return no more.

The third was where the unfortunate consort drowned himself the next morning of his union, leaving a letter addressed to his friends, stating the cause which led him to commit suicide.

By professionally examining the above cases, I found that physical defloration had taken place previous to their union; and in questioning those females on the subject, they were candid enough to relate to me the circumstances connected with their condition, which were as follows:

The first one confessed that she had been in the habit of masturbating herself with foreign bodies of different kinds.

The second stated that she received a contusion by the fall of a horse, whilst riding, and had the pubis and labiæ much injured with the pommel of the saddle, against which the body was thrown and entangled. She had a protracted treatment, and required the use of different medicines injected into the vagina: and finally—

The third was in the habit of stopping the menstrual discharge by introducing cotton-wool, and pieces of linen cloth into the vagina, as a plug, in order to attend parties and balls during the monthly period.

In my official report to the court, I stated that

the circumstances related by the parties themselves, as to the physical condition of their genital organs, were sufficient causes to produce physical defloration; and therefore declared the first and third cases as the result of, not recent, but old self-defloration; and the second as accidental defloration of long standing.

Defloration of female children under ten years of age, with or without their consent, is admitted by law to be an offence equal to that committed by violence, "for the consent or non-consent is immaterial, as by reason of her tender years she is considered incapable of judgment and discretion."

Should the investigation be to decide if violence or deceitful copulation has been practised on a female child under twelve years of age—a still greater crime than that perpetrated on pubert women, and which the law punishes with death-it must be borne in mind that some affections of the genital organs have been brought as a proof thereof. But we know perfectly well that girls, from one year old up to the state of puberty, are frequently subject to diseases of their private parts, producing local symptoms, among which may be mentioned purulent discharge from the vagina, which may be mistaken for gonorrhea; and that charges have been brought against innocent men on this subject. It is of great importance in such cases to determine whether the morbid discharges may not have been produced by other causes than by syphilitic virus, communicated by copulation or otherwise. The presence and real

nature of such virus, with laceration and tumefaction of the genitals, and other circumstances to be mentioned hereafter, may throw suspicion on the accused. The same is the case with regard to pubert women.

As the above is an accusation easy to be made and hard to be refuted by the party accused, the following circumstances are required by law to give credibility to the testimony of the party injured: "that she be of good fame; that she presently discover the offence and made search for the offender; that the party accused fled for it." These and the like are concurring circumstances which give greater probability to her evidence. But, on the other side, "if she be of evil fame and stand unsupported by others; if she concealed the injury for any considerable time after she had opportunity to complain; if the place where the fact was alleged to be committed was where it was possible she might have been heard, and she made no outcry; these and the like circumstances carry a strong presumption that her testimony is feigned."

Cases of defloration (and copulation on non-virgin women) prepetrated on females whilst under the effects of chloroform, administered by unworthy professors of the dental art and by other seducers, have been recorded in the annals of medical science, and brought before courts of justice by the offended parties, for the vindication of their own characters and the punishment of the perpetrators of such criminal outrages, where the question has arisen—" is the patient or the offended party a competent witness as to what transpires during such an action? or has she any knowledge of the occurrence whereby she may be acquainted with or suspect the outrage perpetrated upon her?" That question has generally been answered in the negative by medical jurists, and quite right that it should be so.

THIRD POINT.

CONCEPTION.

The object proposed in the investigation of this point, is to lay down its physiological principles in order to ascertain whether a woman can or cannot conceive when in the state of absolute insensibility, produced by physical or moral causes, and to state the conditions essentially necessary to that effect.

Conception being a generic term expressing the two previous acts or functions, which take place in the female to reproduce her own species, namely—copulation and fecundation—is effected by means of a number of organs, whose form, constitution, and activity, correspond to their destination. (See the anatomical description in the appendix.)

Copulation is effected by union of both sexes at the time of puberty; but, conception may, or may not take place by this act, according to the moral and physical conditions, sine qua non, which will be hereafter explained. The principal organ destined to it is the vagina; though it has been performed through the anus successfully, according to some examples which we shall see further on.

Fecundation.—There can be no doubt that fecundation is effected by the immediate contact of what I would call Aura seminalis with the ovum; or, as modern physiologists say, "by the contact of the spermatic cells or filaments, called spermatozoa, with the germ cells, or germinal vesicle," by which contact the latter (the ovum) is impregnated with the lifepossessing and life-giving principle of the former (the aura seminalis); but with respect to the nature of

* Microscopical observers have given the name of spermatozoa to the filamentous bodies contained in the spermatic fluid, as exhibited under that instrument, because those filaments resemble animals, and move like them—animalcules. But they cannot properly be so called, though they apparently possess that optical illusion—a sort of, but not an independent, animal life; that is, a life of motion only, caused by the effects of light.

I use the term aura in the sense of fine particles flowing from a body, such as odour, effluvia, or exhalation, to designate a life of action in its proper generic sense, for "nothing is absolutely lifeless, though many things are relatively so."

The term of spermatozoa is given to those filaments for no other reason but because they "move" like little animals; a magnetic needle also moves at the approach of a particle of iron, and for all that no one would dare to call it a magnetozoon—animal. The spermatic aura, like all odourous particles emanating from different bodies, is possessed of life, be it animal or otherwise, a life of action if not of feeling—an electro-magnetic life, similar to the life of the world and to that of other planetary bodies. The so-called spermatozoa, Dr. Carpenter writes, "have no more claim to a distinct animal character than have the ciliated epithelia of mucous membrane, which likewise continue in movement when separated from the body. They appear to be nothing else than cell-germs, furnished with a peculiar power of movement, by means of which they are enabled to

such contact, or the manner in which fecundation takes place, it is a question which has caused much discussion, and still is controverted in the present day, because there are no means of proving it experimentally.

The most recent writers upon the subject assert that the stated nature is penetrant, i. e., that the spermatic cells or filaments, having the property or power of penetrating or piercing the vitelline membrane, come directly in contact with the germinal vesicles; and that they penetrate, it is said, because there is no special foramen for their admission. But such theory cannot be admitted without reserve, so long as it attributes to the so-called spermatical filaments a power which exclusively belongs to the

make their way into the situation where they may be received, cherished, and developed." 'Manual of Physiology and Physiological Anatomy.' The same kind of spermatozoal appearance I have also observed myself in the blood of some females, discharged during the menstrual period, particularly of females of an excitable temperament. But the animalcule-like movement seen in the blood of such kind of women, under the microscope, is not to be attributed to an integrant constituent of the blood itself, but to the vaginal and uterine secretions, which are mixed up with it during that function.

Such secretions have also been observed and recognised as foreign bodies to the menstrual or any other blood by Robin ('Annales d'Hygiene publique,' 1858, p. 421), who asserts that menstrual blood, besides the usual elements common to other blood, also contains a mixture of uterine and vaginal epithelial cells and mucous globules which are not to be found in the blood flowing from any other vessel of the human body.

ovarium, or to the organism of the female—attractive power; and therefore the nature of the fecundating contact is not what is represented to be.

I believe that the phenomenon under consideration takes place by another, by a far more physiological action than the supposed mechanical penetration alluded to above, namely, by the peculiar polarity of the two sexes, in which case, the vito-electro galvanic attractive power effected from within (which is inherent to the female as the positive pole of reproduction) draws or attracts the aura seminalis to the ovarium; but not by penetrating from without an organized tissue of any kind, as has been supposed, for there is no such thing as a self-acting power in the so-called spermatic filaments capable of penetration. Wherever the seminal substance is deposited, sub coitu, there it will remain until its aura is drawn towards the ovum or ovarium (as the case may be), by the attractive power of the organism. power be inactive, or otherwise inert, for want of the stimulus characteristic to the sex whilst in health; or from any organic defect or pathological state, the aura, however prolific it may be, will not be called to the contact; there it will gradually vanish, and ultimately die away. In such a case, it is obvious that fecundation cannot possibly take place. But on the other hand, if the attrahent subject be physically and morally sound, and all the physiological functions, to be explained in the course of this work, duly fulfilled, then, the aura spermatica will positively be

attracted; the contact effected; and fecundation completed.

It is in the female that the physical and moral power of attracting and repelling the male exists, according to the peculiar state of her polarity; because she is the representative of the positive pole of reproduction, and because she is possessed of a "system of absorbents whose special function consists in bringing the fecundating fluid into contact with the ova;" whereas the male, representing the negative pole has no power of its own to act, unless acted upon. The proof of this is to be found in the fact that fecundation will always take place when the female is sympathetic to the male, although the latter be antipathic to the former, and vice versa, it will not be effectual when the female is antipathic to the male, however sympathetic he may be to her. neither be produced when the two sexes are too sympathetic nor too antipathic to each other. shows the pre-eminent power of the female, or positive pole, over the negative power of the male; just the opposite of the teachings of the past and present writers on the subject, namely, that "conception does not depend on the consciousness or volition of the The repulsive power of the positive pole is always as effective in rendering fecundation null, as the attractive power is in rendering it effectual, particularly when there is an harmonious opposition between the two individuals. It is to the existing antagonism already mentioned, that the two opposite powers attract each other; and to their similarity that they repulse each other also. (See the Twelfth Point, Sterility.)

The above is the most reasonable, the most logical, and probably the right way of accounting for the mode of action of that mysterious phenomenon, which has been from the beginning the subject of much time and labour lost; and as to the time and locality when and where fecundation takes place, some think that it occurs while the ovum is attached to the ovisac, whilst others assert that it does so after it has been discharged from that place. Both opinions may be right and both may be wrong, relatively. The most probable supposition is, that the phenomenon is effected unconditionally as to time and place, according to the degree of sexual excitability of the female.

From the confidential information obtained from women of different temperaments, I am authorised to draw the following conclusions, no matter how hypothetical they may appear:

1st. That the ovum is always discharged from the ovarium in the act of thrill, whether this act occurs sub coitu or not.

2nd. That in very excitable women who thrill once or twice, and even three times, preliminary to the man, the ova being already discharged are ready to be fecundated immediately by the actual contact, at any place wherever the meeting with spermatic aura takes place; whereas

3rd. Women less excitable, or of cold temperament, who thrill only in, or during the copulating act (generally subsequent to the man), very seldom, if ever, discharge the ova from the ovarium but in that very act (thrill); consequently the ova are fecundated in that place, and nowhere else. I am at liberty to propound this as my opinion founded on the peculiar sensation which most women feel during the sexual excitement and sexual intercourse, besides the sensation of thrill; that is, the sensation of the actual contact, or attraction, by which fecundation is effected; for, the former (thrill) may occur without the latter, whereas the latter (fecundation) can never take place without the former.* It is beyond human research to penetrate any further in that mysterious living, and life-giving, laboratory, without falling into the abyss of medical conjectures.

With regard to the technicalities used to express the nature of the fecundating power of the seminal substance, such as sperm-cells or filaments, and aura seminalis or spermatica, it is a matter of some consideration which deserves to be explained, not that I wish to enter into a controversy upon words, but, as it is my intention to be plain and intelligible in their use, I shall do so by stating (besides what has been said in the foot-note under fecundation) that the noun aura, adopted by myself, and prefixed to the

^{*} See the paragraph 5th, on the peculiar circumstances in the functions of reproduction of the human and irrational beings—Fourth Point.

adjectives which follow it, expresses more than vesicles or filaments; it means spiritual, not inanimated effluvium, odour, or exhalation, but a vito-dynamic force or power, similar in nature, but dissimilar in name, and capable of initiating a duality of matter and spirit, or of body and soul.

The ovum being fecundated, it descends into the cavity of the uterus (in such cases where it has not been discharged from the ovarium previous to copulation) through the tubæ Fallopianæ, which are known by experiment to be destined to effect that part of the process (conception). When entered into, and grasped by, that organ, it is with propriety said that the woman has conceived the rudimental elements of her offspring. There the new individual is gradually nourished, developed, and its organical structure consolidated and matured, that in the appointed hour it may be brought to the extrauterine life.

Fecundation may take place without the semen being materially propelled *into* the uterus. This circumstance never occurs. It is an error to suppose that it does so, entertained by those who mistake the uterus for the vagina. This mechanical introduction of semen never takes place. It is the aura that, being attracted from within, produces the fecundating effect, in the manner already explained. It suffices that very small quantity of that substance be deposited and placed in contact with, or near to, the vaginal canal, to produce that effect; provided the

conditions to be stated hereafter, are physically and morally fulfilled.

The proof of the above assertion is to be found in the following facts:

1st. That some females, who have had an almost imperforated vagina, have been fecundated without any portion of material semen being absolutely propelled into it, and therefore much less into the uterus. I have known several females in whom the passage was so very narrow, that it could hardly allow the introduction of a common quill; they could not, of course, allow any degree of penetration on account of the membrane thus partially closing the vagina, being impenetrable, sub coitu. In such cases I had to dilate the passage by dividing it with an instrument to facilitate copulation and exoneration.

2nd. That women have been impregnated by men who could not ejaculate the semen into the vagina, because their deficient, and organical malformation of the penis—such as where that organ had been amputated (see the last page of the Seventh Point); and where men who were affected with hypospadias (a congenital malformation of the urethra) could not ejaculate the semen into the vagina.

3rd. That women, who copulated by the anus, being deficient of the sexual organs externally have been fecundated notwithstanding (see the Eleventh Point, under the head exoneration per viam non naturalem); and others who also conceived through the same viam on account of the total occlusion of the

vagina, according to the following case recorded by Devergie in his legal medicine.

Dr. Rossi attended a woman in child-birth, in the Hospital of Turin, who had the vagina perfectly closed. The presentation of the child corresponded to the natural part of the cavity; its head could be felt externally at the pudendum, and as there was no passage at all, whereby the woman could be exonerated, he made a longitudinal incision through the tissue which closed the vagina, and the child was born alive free from any injury. On a close investigation the doctor inquired of the husband how his wife became pregnant, to which he answered, that as there was no means to copulate by the natural via, he used the unnatural one, the anus. A few days after this occurrence, Dr. Rossi examined the woman closely, and found that there was a direct communication between the rectum and the vagina, inwardly, through which the aura seminis must have been attracted to effect fecundation, as happens in all kinds of birds, who copulate and lay the rudiments of their offspring through the anus, the oviduct being placed behind the rectum.

Conception takes place, in utero, by that organ receiving and holding the fecundated ovum for its fætisation and general growth, as has already been said.

Superfætation is the successive fecundation of one or more ovula, at different periods of time from each other, in a woman already pregnant. It may take place at any time after the fecundation of the first

up to several weeks. This is a practical fact, not only observed by myself, but by many others, although the possibility of such occurrences, after the tenth or twelfth day, has been absolutely denied by physiologists and medical jurists of different countries on the ground that they have not met with a similar case in the course of their lives. But this is not a sufficient reason for rejecting absolutely the authorities of others, and for not believing that, with the Almighty all things are possible.

I have attended three cases of the kind myself, one in the Havana in 1825, on a negro woman, who had a second child (both boys and of the same race) sixty days after the first. I was very much surprised to see the unusual volume of the abdomen soon after the first was born, and suspecting the existence of another, I cut the umbilical cord as near to the vagina as possible, made a strong ligature, and warned her mistress to watch her as there were symptoms of another child. The negress reassumed the domestic work of the house six days after, and nothing more occurred till the sixtieth day after the first parturition when she was taken with labour pains and was delivered of the second perfectly mature child.

On examining the placenta I found that the two umbilical cords emanated from one and the same point in the figure of an inverted Y thus A, showing that it was common to both children.

The peculiar formation of this placenta, and its being common to both children, proves that fecun-

dation took place by one single act of copulation; that is, that two ova were impregnated at the same time; and that the development of the last born, must have been retarded by some unknown cause. Although the phenomena of two successive births occurring at different parturitions of weeks or months from each other, have been generally considered as real cases of superfætation, attended with, or without an independent placenta, yet, the one I have described seems to deviate from that rule, and therefore can no longer be legally nor scientifically considered as a case of superfectation, but as one of twins properly so called. Hippocrates said (and all his most experienced successors have followed his maxim) that "Qua gemellos, eadem die parit velut concipit." Were they children of two different races, the last born would have been taken for the superfecundated one, notwithstanding the circumstance of the placenta being common to both. Such are the caprices of nature which sets science to discordia.

The second case I attended on a lady in Chili, in 1837. She gave birth first to a boy, and next to a girl with an interval of twenty-three days from each other. There were two distinct placentas: the one belonging to the first child remained in the uterus till the exoneration of the second. In this case there was a real superfectation.

The third I attended in Peru, 1845, on a very young primipara girl, who was delivered of two female children, the second fourteen days after the first.

Being absent from town when the last exoneration took place, I was unable to ascertain the nature of the placenta in this case. (The one belonging to the first having remained in, was expelled with the second, as I was informed.)

Gestation, the state of being with child—being pregnant—is supported by those functions which are essential to the organical development and increase of the fœtus and its constituent parts. It begins after conception, and terminates with exoneration.

Labour is the exertion of muscular power actuated by the vital force of the organism to exonerate the mother from her offspring. It precedes exoneration and indicates its approach. During labour, there is a peculiar vital action of the uterus, which excites, in its muscular walls the power of contraction; it thereby narrows the space within, and pushes out the child and its dependencies, by which exoneration is accomplished.

Exoneration.—The act of disburdening or discharging—freeing the mother from her burden and its dependencies. In this act the vagina, by its contracting and extending powers, is unfolded to a considerable extent to give passage to the child and to the placenta.

In the act of copulation by mutual consent, when the parties are at the age of puberty, and in a healthy state of body and mind; and when there is reciprocal conjugal love, sympathy, and confidence, particularly in the female, the vagina and its dependencies are in a full state of reproductive life—mature—and therefore disposed to receive the impressions proper to their destination. They secrete a considerable quantity of mucous-like fluid; they become larger in volume and higher in temperature; and the friction operating on the nymphæ and clitoris by the other sex, or by the simultaneous action of both, causes thrill* with emission of semen in men. Women emit a particular kind of mucous fluid which cannot properly be called semen, though it has been thought so.

Nature has established that, in certain conditions individual subjects are capable of receiving impressions, or being impressed by influences, which, in other conditions, have no influence at all upon them; to which conditions the appropriate name, "Receptivity" has been given. Then, if receptivity in the female is fully established, she (the ovum) cannot but be impregnated to effect fecundation; whereas in condition (nonreceptivity) another the will have no effect at all on her. In other words, when copulation is forced on a woman against her will, or performed when in an absolute state of insensibility, produced by either a profound unnatural sleep, affections of the mind, effects of asphyxiating, narcotic, or intoxicating substances, no reproductive

^{*} Thrill, a kind of vito-electro stroke with pleasurable enjoyment, which takes place in the act of copulation in both sexes. As this word has different significations in the English language, I give this definition to express its real meaning in medicine, and to distinguish it from other meanings. It is, therefore, meant for sexual thrill, i. e., sexual participation, sub coitu.

life is to be found in the said organs, for want of the above-mentioned condition; and, therefore, they cannot act, nor can they perform their physiological duties to create a new being.

Nevertheless, there are several cases recorded by different authors on physiology and medical jurisprudence, in which copulation is said to have been effected on women when in the state of absolute insensibility, produced by either of the above-stated physical or moral causes, and followed by conception, notwithstanding. But, my experience and investigations on the subject authorise me to call in question the validity of those assertions. There are particular circumstances in which the physical and moral phenomena alluded to, may be partially affected for a while, and copulation may be performed on a certain class of women during that state, and followed by conception; but, there is in such cases a well-founded suspicion that they have pretended to be less sensitive than they really were; that they have concealed and dissimulated the sexual excitement; and finally that they have affected to be unconscious of such an act, as I have had more than one opportunity of ascertaining by the candid confessions of females placed in circumstances in which they were bound to tell the truth, for their own sake.

Among those cases, there is one brought as a positive proof thereof, though it differs from those to which I have alluded, where there was an intentional and voluntary concealment of the act, and of its par-

there was participation, but without concealment; for although the woman was incapable of resisting the act, she could not counteract nature in other respects. Such case was originally recorded in the CAUSAS CÉLEBRES, (a Spanish register of historical events) and quoted by Dr. Mata, of Madrid, already named, Loc. cit, vol. i, p. 172, to prove that conception can be effected without consciousness, and re-quoted by others since, who advocate the same erroneous doctrines. The case is as follows:

A young priest, travelling in Spain, called at a house to beg hospitality for the night. The family received him willingly, and he was shown into a room where there was a coffin, in which was placed the body of a young female, supposed to have died that day. He offered to sit up all night with it (velar la difunta), as is the custom in that country to do. His kind offer was accepted, and the family retired to bed, leaving the Rev. Padre alone with the supposed corpse. About midnight, curiosity tempted him to take a peep at the contents of the coffin, to which effect he uncovered it, and saw, with surprise, a beautiful face, with all the expression of life on it. His concupiscence became inflamed at the sight, and he could not resist the weakness of the flesh. Copulation was performed ad libitum, and the reverend guest left the house early on the following morning full of gratitude, and thanking the family for the hospitality and kindness received.

The apparent dead girl came to life the same day (soon after the Padre left), to the great astonishment of her friends and the people of the town, who thought it was a miracle performed through the prayers of her night companion; and about four or five months after her resurrection she showed symptoms of pregnancy, which were confirmed in due time, and terminated in the safe delivery of a healthy child.

The same priest happened to pass through the same town some time after his first visit, and called again at the same house for lodgings, where he was informed of what had occurred during his absence. He felt as if thunderstruck when he saw the young person, and the child, and immediately acknowledged the latter to be his own. He made all sorts of apologies to her parents, and promised them to employ every possible means to obtain the release of his ecclesiastical vows, from the Pope, and permission to marry the girl. These he obtained, and soon after was united to her in holy matrimony.

The above is a literal version of Dr. Mata's account, published in his already mentioned work on 'Medical Jurisprudence,' from which several translations and commentaries have been made to support a fallacious doctrine, and to mislead the inexperienced reader; but the best part of that account is omitted, whether intentionally or ignorantly, I cannot say. The fact is that the girl acknowledged, after her marriage, to have had knowledge of the outrage perpenting.

trated on her by the priest; and that she was sensible of it. She also stated that, though she had the will to resist it, she was unable to carry it out into execution, and gave way to nature's imperative commands at the impulse of the moment; that she was conscious, and remembered everything said and done to her from the time she was taken in that state of apparent death till she recovered from it; and though incapable of moving or showing in any possible way that she was not dead, her consciousness never failed her;* that she had made up her mind, after her resurrection, to keep the secret to herself, rather than to expose the dignity and character of a minister of the Church.

It was also ascertained, by the statement made by the priest himself some time after the occurrence, that the body of the girl was, at that time, warm and flexible; that her eyes were shut, and her face florid; that though he could not perceive her breath nor pulse, yet he was sure she was not dead. Strange state of being! "For 'tis still to be; senseless to feel and with sealed eyes to see. . ."

This information I have obtained personally in Spain, after many inquiries made from different medical men, who took the pains to investigate the matter professionally, and from persons nearly related to the subjects of this historical and extraordinary occur-

^{* &}quot;The slumber of the body seems to be but the waking of the soul."—Grindon, on 'Life.'

rence, who had no interest in concealing what they had heard from the parties themselves while alive.

Now, what kind of evidence, may I be allowed to ask, is to be found from the quotations of those who assert that conception can take place in a state of absolute insensibility? A very fallacious one, indeed. The spirit in which the evidence on the present case is related proves dogmatic adherence to false doctrines, applied to other similar cases without having taken the trouble of personally investigating them. proves not that there was a state of absolute insensibility, but an embargo laid on the powers of volition. There evidently was a will, but there was at the same time an incapability to execute it, the voluntary motion being in a state of quiescence.* There must also have been a certain degree of physical excitability to produce the necessary amount of receptivity to effect fecundation, otherwise it could not have taken place.

Be that state what it may, it evidently differs from a feigned state, or from other states producing opposite effects. In anæsthesia, for instance, from chloroform, the mental and physical sensibility is suspended, generally; whereas in the case of the Spanish girl, the mental powers were perfect, but the voluntary muscular action was not, for it did not

^{* &}quot;While the avenues of the body are close, the soul is still endowed with sense and perception, and the impressions are often stranger, and the images more lively, when we are asleep than awake."—Grindon, loc. cit.

obey the dictates of the will. When copulation is performed, as has been the case more than once, on a woman fully narcotized, she is not sensible of the act, and she would not know that such an outrage has been perpetrated on her, but from its effects. Were it not for the physical excitement produced in the sexual organs of the apparent dead girl, she would, in all probability, have been buried alive, because that kind of excitement generally awakens women labouring under similar affections, when properly conducted. I have aroused the dormant faculties of many females labouring under the effects of a particular form of hysteria, called libidinosa, by performing a gentle titillation on the nymphæ and clitoris during the attack, and brought them thus to their normal state, when other means had failed. Such is the sympathetic relation which exists between the sexual organs and the brain of the female, and the brain with the same organs respectively.*

I have known women who, being awake, but pre-

^{*} In cases where titillation could not have been performed on the nymphæ and clitoris, it was effected on the nipples of the mammæ. The sympathy which exists between these and the genital organs is well known. It produces a sexual heat and a mucous secretion in the vagina: In the like manner, titillation on the vagina produces erection of the nipples and secretion of milk in nurses, and even in some girls who have never been impregnated. It was on account of this reciprocal sympathy of those two organs, that Herodotus said that the Scythians were in the habit of irritating or titillating the vagina of mares to increase the flow of milk.

tending to be in a profound sleep, have allowed copulation to be performed on them (women accustomed to it), and who have confidentially acknowledged that they had enjoyed the act perfectly, though in a concealed manner, and thereby became pregnant.

Similar cases have come to my knowledge of others; some being partially intoxicated, while others, under the influence of a pretended fit of coma and lethargy, have consented to copulation with an apparent unconsciousness of the act, which they acknowledged afterwards to have enjoyed, and thus become pregnant.

I have also known several who have been forced to copulate by sailors and soldiers, entering towns in different parts of South America in time of civil war, who have confessed that, being somewhat frightened, they have consented, in order to avoid personal injury, and that, though unwilling and insensible of any erotic feeling at first, they were not so at last; that they concealed participation, and thus conceived. Whilst others who have suffered the same violation of their chastity, by similar malefactors, have not conceived by the copulation performed on them, because they had horror and aversion to the perpetrators of that act, and because they had no participation at all, no feeling of any kind, no receptivity to impressions; and therefore no conception has ever taken place in them.

Authors on sterility acknowledge that a sufficient degree of "vitality, excitability, and productivity, free

will," &c. &c., are conditions essentially necessary to conceive, of course when there are no organic defects in the sexual parts. Now, if they maintain that the above physical and moral conditions are necessary to a woman to become a mother, what amount of vitality, excitability, or irritability, may I be permitted to ask, can be expected to exist in an insensible being labouring under the influence of the moral and physical agents already mentioned? We know that grief, distress, and many other mental emotions, as well as physical agents, have the power of preventing perception, and of annihilating sexual reproductive life to such a degree as to render conception impossible. But let us comment more on the subject.

In the first place, to maintain that the stated conditions in sterility are requisite to effect conception, and, in the second place, to maintain that conception can take place when copulation is performed during a profound unnatural sleep, or during the insensible state produced by mental emotions, or by intoxicating, asphyxiating, narcotic, or other substances, is to maintain two opposite assertions, namely—one that is possible, and the other that it is not possible, to conceive in similar circumstances, and in identical conditions. Are these assertions logical, reasonable, scientific, or have they any common sense?

On the other hand, it is generally understood by females of all ranks in society, who have had some experience of matrimonial life and of the world at large, that indifference during intercourse, or suppression of the orgasm, salacity, &c., will prevent impregnation. That these and other similar circumstances should be ignored or disputed by medical men-men of science and teachers in universities—is a professional reproach, a shame. Many married women have I attended who have had no progeny by their husbands, and proved to be fruitful by a second marriage. On a close investigation I found that the cause of such anomalies depended, not on the part of the engendering faculties of the male, nor on the then organical structure or pathological condition of the female's sexual organs, but on the absence of that condition (receptivity) necessary to receive impressions, or being impressed upon, caused by indifference in some and by mental emotions in others, which invariably operate on the brain for good or for evil. Whatever shall alter the cerebral functions must alter the actions of every other part of the living organism-melancholy, spite, fear, grief, distress, hate, rage, aversion, terror, and disgust-are passions which a forcible, an unhappy or unsuccessful marriage—a marriage without the free choice of the heart-often produces, with all their evil effects. And what are the features of all these passions? Disharmony, irregularity of the vital powers of reproduction.*

^{*} Dr. Casper (see the last part of the Sixth Point, under head "Conceptio sine Coitu"), in the third volume of his 'Forensic Medicine,' p. 262, writes—" In the married life of the lowest

Women who have been placed in similar circumstances have sincerely confessed that they had no feeling, no erotic sentiment or pleasurable enjoyment whatever, during their conjugal embraces; no sympathy, nor love; no affection for their husbands (repulsive power); and such women have had children by other men when they have been separated from their husbands by death or otherwise. In similar cases we are bound to acknowledge that the passions joy, love, affection, sympathy, hope, and confidence, operating for good, have awakened in such women the dormant life of reproduction (attractive power), and they have consequently become pregnant. history of several nations gives us many examples of this kind, which have occurred at different epochs, and in different families of high social position.

Different circumstances in life often produce similar effects, but such effects are sometimes the result of dissimilar causes. Many excellent women, placed in the most favorable conditions of conjugal happi-

classes much cruelty, arising from unnatural hate, is often observed most charmingly combined with numerous impregnations." But he does not tell us which of the two parties is the hated one; I should say it is the poor and weak wife, for that class of women, in most countries, are generally treated by their husbands with "cruelty" and contempt. The very circumstance of their fertility does not prove that they are the haters or cruel against their husbands. On the contrary. What it proves is the sympathy and love for them, for otherwise they could not be as prolific as Dr. Casper has observed them to be. (See the paragraph under the head "Fecundation.")

ness, and free from every disorder of their reproductive organs, who have been barren for a long time, have called on me for advice, and I am happy to say that the wishes of some have been realised by a proper medical treatment. Such kind of women are called of cold temperament—lacking susceptibility; women having no sexual feeling-no erotic sentiment. This is a peculiar state, which constitutes temporary sterility—anaphrodisia, i.e. an abnormal condition of the female system in itself, that cannot be called disease, notwithstanding Cullen's classification; but its presence is "frequently disturbing the pleasure and happiness of those who anticipated both in the matrimonial life." Being informed of every particular on the subject, I have found in some that nothing but a temporary deficiency of erotic sentiment and salacity made them unproductive; while in others, in whose cases I have not been equally successful, there was a well-founded suspicion of the absence of some of the organs proper to reproduction, which in the course of time I have been able to confirm by post-mortem examination. In fact, productiveness can be established in the majority of cases when the generative organs are free from anatomical or pathological defects, and progeny rendered attainable, if women would be candid enough with their medical advisers, and would overcome the natural reluctance which some feel to tell the truth.

There is another kind of women equally unproductive for want of catamenia only. These are called

viragines—manly women. Menstruation, then, seems to be another essential condition for reproduction. Finally—

Prostitutes are seldom fertile, because they generally are indifferent to the already mentioned emotions operating for good, and because too frequent abuse of copulation extinguishes sexual feeling, *i. e.* the vital powers of reproduction, as every well-informed physiologist well knows. But if those unfortunate creatures, who have been sterile for many years during their depraved life, would marry and relinquish promiscuous intercourse, they would conceive, as I have observed more than once.

From the preceding considerations we may come to the conclusion that a participation of some kind or other on the part of the female in the act of copulation is absolutely necessary to effect conception; for the physiological functions that a woman has to perform in that act are much greater than those of a man, and of a more complicated nature. Consequently those cases which have been brought under medicolegal investigation, and declared by the profession to be contrary to the facts already mentioned, were, with very few exceptions, if any, dissimulated cases; the parties affecting unconsciousness of the act to conceal the shame and opprobrium that human frailty has brought upon them through transgressing the moral law, "thou shalt not commit adultery"-fornication.

Since the preceding pages were written I have

been kindly favoured by a friend with a copy of an interesting work written by Dr. T. A. Wise, published in Calcutta, 1845, entitled 'Commentary on the Hindu System of Medicine,' from which I have taken the liberty of making some extracts, regarding the physiology of reproduction according to the Hindu doctrines, which will be an additional proof to my observations expressed ere this on the subject, and I hope they will be acceptable and instructive to the reader.

Among the sacred records of the Hindus there is a system of medicine for which the learned natives of that country claim an antiquity far beyond the period to which the history of the heroic age is supposed to extend, which treats on the different branches of medical science, both practically and theoretically, called Shastras—commentaries—though it is asserted by two eminent authors on the history of India (Sir W. Jones and Mr. Mill) that "there is no evidence that in any language of Asia there exists one original treatise on medicine considered as a science." (Sir W. Jones. "Even medicine and surgery," says Mr. Mill, "to the cultivation of which so obvious and powerful interest invites, have scarcely, beyond the degree of most uncultivated tribes, attracted the rude understanding of the Hindus." But these assertions, though from such respectable authorities, are ably refuted by the scholar in oriental languages and professor of medicine, Dr. Wise, in his commentary on the Hindu system of medicine already named. In

that excellent translation from the Sanskrit language, Dr. Wise traces the history and progress of medical science in that country from the remote epoch of nine hundred years B.C. to the present time, and he describes every Shastra, with their different technicalities regarding their distinct adaptation to different diseases of adults, males, females, and children, as well as to some specialities of both sexes, including anatomy, physiology, therapeutics, materia medica, and pharmacy, which description exposes the ignorance of those historians above named, regarding the scientific condition of a people who had distinguished themselves at a very early age by their power and riches as well as by their successful cultivation of different sciences and arts.

In some of those so-called sacred records, to which the Hindus assign a divine origin, we find, not only the fact involving the principle of Similars expressed in the sentence that "poison is the remedy for poison," but that diseases are to be classed according to symptoms, and not according to arbitrary names. We also see several aphorisms regarding the physiology of reproduction in connection with medical jurisprudence, which I will give here in extenso, viz.—

1st. "That conception cannot take place in temporary sterility or impotence."

2nd. "That either of these conditions" (sterility or impotence) "may be produced by, among other causes, dejection of the mind, or by connection with a distasteful person."

3rd. "That it will also be the result of excessive venery." (Excessive potentiality.—J. N. C.)

4th. "When a woman has no pleasure in the embraces of her husband, she cannot conceive."

5th. "When the menses are not discharged, no conception can possibly be effected." And finally :-

6th. "When a large man has connection with a small woman,* she cannot become pregnant." These and other sentences of the kind, evidently corroborate my assertions, and at the same time prove that the Hindus, from a very remote period, were better acquainted with the physiology of reproduction than what the modern European writers profess to be now.

* By the expression "a large man" with a "small woman," no doubt is meant the exorbitant dimensions of the penis itself, which, besides physical and mental pain, causes the repulsive power of the female to be set into action, and prevents fecundation. It is well known that the same phenomenon was regarded among the ancients as the cause of the incapability of impregnation, and therefore as a reason for divorce.—J. N. C.

FOURTH POINT.

VEGETABLE KINGDOM.

The object of this point is to prove the identity of the physiological functions in both kingdoms, with regard to their respective receptivity for the reproduction of their species, by comparing the vegetable with the animal creation; and to show the peculiarities of the human differing from those of irrational beings.

In the preceding considerations I have confined my arguments within the laws of the living organism in its moral and physical point of view, i. e. animal life. Now, for the sake of illustration, I will make a comparison of the laws of vegetable reproduction with those of the human species, in order to give a greater weight to my assertions, and to prove that receptivity in a woman is as essentially necessary to ensure the fecundating influence of the aura seminalis to fecundate the ova, as receptivity is indispensable in a flower to receive the influence of the pollen to fecundate the seed; and that without such a receptivity no effect is produced, no ovum is fecundated or vivified. In so doing I shall reproduce Dr. John Epps' description of the conditions necessary in plants

to propagate their species, though such a description was not intended to illustrate the point under consideration, but to show the receptivity required in all individuals with reference to the action of medicines in infinitesimal quantities.*

"In the vegetable kingdom," Dr. Epps writes, "the preservation of various individuals is secured through the medium of seeds. It has been found by the experiments and observation of Linnæus that a seed, in order to produce a plant like that on which it was produced, must have imparted to it a peculiar life power or vital principle. It has been established that the agent which imparts this peculiar life power, this vital principle, is a peculiar dust formed on a part of the flower distinct from that in which the seeds are formed. Thus a flower presents in the centre little thread-like bodies, at the end of each one of which is a little body like a chest, called the anther. In this anther is a fine dust, named pollen, which dust is the vivifying agent in reference to the seeds. In the centre of the flower is another body, called the pistil, at the inferior part of which is a little chest, called the germ, containing the seeds; above this germ, and as it were growing out of it, is a stalk, called the style, and at the top of this style is a body generally divided or cleft, called the stigma. Now, in order that the seeds in the germ may become capable of producing, when placed in the earth, ano-

^{*} See his work on 'Homoopathy and its Principles Explained.'

ther plant, it is essential that the influence of the pollen should be conveyed to the seeds. The phrase 'influence' is used because, though in some plants the passage from the stigma down to the style into the germ is recognisable, in many plants the passage is not detectable, and therefore the particles of pollen, though exceedingly small, can hardly be supposed to penetrate the seeds in the germ. The influence, however, must; and this influence is such, that the seeds, which without this would not produce perfect plants, will, if thus influenced, be capable of producing perfect plants.

"The pollen already described is the fecundating, the life-giving, principle to the seed. Now, suppose some pollen produced by placing a plant in a hothouse, and making it come to perfection a week before the natural period of its perfection, and to another plant of the same kind growing in the garden, which has just opened its flower, when the one in the hothouse has advanced so far as to have perfected its pollen, some of the perfect pollen is applied to the stigma, no effect is produced, no seed is vivified; but if the pollen is preserved for a week or so, until the flower in the garden is perfected, the stigma, being susceptible to impression, would then influence and communicate to the seed, and the seed would be perfect. In other words, till the flower has attained a certain susceptibility to be impressed, the pollen is not, though perfectly effective in itself, effective on the seed; but directly the amount of receptivity necessary to render the impression effectual is brought about in the progress of the plant towards its perfection, the pollen becomes effective."

The fact that the stigma undergoes changes in its form at this period is an illustrative evidence of its development of this receptivity. Similar changes in form or volume, temperature and secretions, will be found to take place in the female's sexual organs at the time of sympathetic and pleasurable copulation, when receptivity is fully developed. Are those changes manifested in a woman when in a state of absolute insensibility? No; no one can answer this question affirmatively and be honest at the same time, unless from ignorance.*

As receptivity is manifested in the vegetable kingdom in connection with reproductiveness, so it is in like manner exhibited in the animal kingdom, in relation to the curative properties of drugs as well as in mental matters. But to the question—what does the above illustration amount to with reference to the subject in view? or what do these analogies teach us?

In the first place, they teach that the influence of the pollen is conveyed to the seed by a vital attractive power or force—a physiological operation which the Creator has established to that effect, i. e. for the reproduction of the species. A well-developed

^{*} See the description of the favorable state of the internal organs to impregnation, immediately after the third argument against Dr. Taylor's assertion, in the next point.

receptivity in the flower must previously exist to attract and receive the pollen, i. e. its fecundating life-giving principle, and thereby vivifying its seeds, as it is a well-known fact that without this receptivity no effect is produced, no seed is vivified. In other words, till the flower has attained perfection and certain susceptibility to be impressed, the pollen is not, though perfectly effective in itself, effective on the seed.

In the second place, it teaches that if the female has attained the conditions of the flower, i.e. a welldeveloped receptivity, from the moral and physical conditions already explained, and is free from every organic defect, she must necessarily attract and receive the influence of the semen, as the flower does that of the pollen to vivify the ova, as the pollen vivifies the seeds, and thus she will conceive. will produce the fruit of her species, as the seed produces that of its own kind, whereas without such a receptivity no ova are vivified and no conception can possibly take place. For the very same changes that the stigma undergoes in its form at the period of vivification are manifested or take place in the ovaria for the development of proper receptivity to receive impressions.

Another illustration:—Why cannot a vivified seedling become a plant in the frost of winter? Because there is no heat and no moisture in the earth. Unless a favorable change of temperature in the atmosphere takes place to produce these conditions,

the seed will not become a plant. In like manner a woman cannot conceive when in the state of absolute insensibility. She is then in a similar state to that of the frozen earth, i. e., temporarily dead, and therefore she cannot create the animal life of her kind for want of reproductive life in herself. In fact, there must be a certain physiological change in the living organism as well as a physical change in the material earth before any occurrence in either can take place. ATTRACTION and REPULSION are the laws by which the world itself, as well as its organic and inorganic constituents, is governed. This being a positive fact, I leave the subject to the consideration of those who may wish to investigate it, and to judge for themselves, that so science may derive benefits for the good of mankind.

There are several peculiar circumstances in the functions of the human reproduction, some of which have escaped the notice of physiologists, which differ from those observable in irrational beings, thus:

1st. Females of the latter kind have a fixed period for copulation as soon as they become apt to propagate their species, i.e. sexual excitement, or the breeding season, which terminates as soon as they become pregnant; and they repel the male during the whole time of gestation, whereas the former are at all times ready to copulate, though not always apt to conceive. In fact, they are, generally speaking, more disposed to join the other sex during that period than before they become enceinte.

2nd. Females of all species of animals who reproduce their species by a periodical conjunction will generally allow several males to cover them (in tempore coitús, sexual heat) during the day, until the excitement passes away;* and that those multiplied acts of copulation with different individuals will not in the least interfere with successive conception in multiparients; whilst females of our race will positively not conceive as long as they have daily connection with two or more different men alternately, no matter how great their receptivity may be to that effect, as I have observed in prostitutes; not only on account of their absence of thrill or indifference to the act in the greater number of them, but even with those who fully participate in it. Conception will not take place in them, because the act of the last copulating male being foreign, as it were, to the preceding one, destroys the former fecundating process; in other words, because two powers or forces of the same nature and of similar name repel each other, as I have stated in another place, i.e. two negative or two positive poles. But if such a female leaves off copulation altogether for a few days, and resumes it again with one and the same man, she will in this case conceive and retain the product of conception, taking for granted that the necessary conditions, already spoken of, exist to that effect.

^{*} Except such kinds of birds who have "the admirable instinct of pairing, and whose conjugal fidelity is unexampled in the animal creation," both rational and brute.

3rd. Masturbation, which is unknown to females of the irrational species, except certain kinds of monkeys or apes, will destroy the fecundating power in those of the human race, as I have observed in a great number of women addicted to that lustful practice, and causes sterility in them.

4th. That menstruation in women and the periodical sexual heat of the lower animals resemble each other very much in many respects cannot be doubted. The analogy is so great, indeed, that we may consider them identical in their physiological aspect, i. e. in being the forerunners or precursors of the favorable condition to impregnation. They, non obstante, differ in the following points:

- a. That the discharge of the former, though mucous at first, generally consists of pure blood; whereas that of animals is a mucus-like fluid, slightly mixed with a little blood at times.
- b. That the periodicity occurs at different intervals of time, varying from three to twenty-two months (as is the case with the bulky elephant), except in the puny guinea-pig and rabbit, that, like the human female, have the same monthly return twelve times in the year. (I am not speaking of parturition, but of the sexual excitement which precedes conception.)
- c. That conception never takes place in women during menstruation, whereas in lower animals it does. In fact, they (the latter) are apt to conceive at no other time but in and during the progress of

that function; whilst in the former it happens just the reverse; they cannot conceive but in the intervals of each return, although it has been asserted that "impregnation very rarely, if ever, takes place after the fifth day after the menses have ceased." This is a mistake; for it may occur at "any part of the period which elapses between the occurrences of catamenial discharge," according to the greater or lesser degree of physical excitability. The more excitable the woman is, the greater the aptitude to be impregnated during the intermission of menstrual discharge, except a few days immediately before its return; whereas a less excitable one will not conceive at any time but immediately after the discharge has ceased.

The common tradition that "impregnation very rarely, if ever, takes place after the fifth day after the menses have ceased," is subject to the preceding exceptions, dependent on the degree of sexual excitability of the female. The other assertion, that "conception may occur immediately before the periodical return," is absolutely false—a thing which never takes place in either of the two differently constituted individuals, especially in the less excitable. I have observed that such phenomenon never occurs immediately before, but at least in one week's time before, the discharge commences. Certainly the aptitude for conceiving is much greater during "the few days which follow catamenia than at any intervening time," but not when they precede it; on the contrary, the nearer the period or approach of the occurrence, the

more distant is the aptitude to conceive, no matter what the physical disposition of the woman may be.

On searching for the reasons why such occurrences have taken place at such diversity of times, when all physiologists have accepted the vulgar tradition and passed it current as a physiological fact, without ever having taken the trouble of investigating the subject practically, I found that these investigations must have been made on women who had copulated several times and at different intervals during the menstrual intermission, in which case it is very difficult, if not impossible, to ascertain the truth, for no one but the women themselves can tell by which of those successive acts they became pregnant. I have also found that the peculiar circumstances of diversity of temperaments, or degree of sexual heat, have been overlooked by physiologists generally; otherwise they would have found out that such is really the case. My observations were made on such kinds of women, and on women who copulated only once, with respect to whom, therefore, there is no risk of the least mistake if they tell, as they have told me, the exact part of the period at which they have had connection with man.

Among the women placed under my observation were wives of seamen and military men. Some of these had become pregnant the same night of their marriage, and had no further intercourse with their husbands, as they had to leave home the next day, and did not return until gestation was far advanced

in some, and after parturition had taken place in others; and by inquiring of them on the subject of the menstrual period, I discovered that pregnancy took place at different periods, according to the stated individual physical dispositions of each one—voluptuousness.

I also knew young girls, some of whom were accustomed to copulation, whilst others were not, who had intercourse only once and became pregnant by that single act. On comparing their temperaments and the time elapsed from the cessation of menstrual discharge, I found the circumstances to agree in every respect with the facts already expressed.

bare attended in childbirth, there were some whose experience on the subject of sexual intercourse was so very great, that they could positively tell the very instant in which fecundation was effected with them. They ascribed this knowledge to the peculiar sensation (besides that of thrill) which they asserted they felt in the act,* and were candid enough to name the precise period during menstrual intermission at which the phenomenon took place.† That period varied so very much in the aggregate as to call in

^{*} See the first, second, and third paragraphs, under the head "Fecundation," in the Third Point (the numbered paragraphs).

[†] And what else could that sensation be but the *vital stimuli* elicited in the *contact* or *crisis*, to call into action the attractive power of the fecundating process, without which no conception can possibly take place?

question the opinion of physiologists regarding the common tradition already alluded to, because of the indiscrimination of the physical temperament of the individuals on whom that difference has been observed.

Besides the sort of sensation already alluded to, felt in the process of fecundation, where every particle of the semen is retained and absorbed by the physiological attractive power peculiar to the female, women also feel another sort of sensation, whose effect is quite in an opposite direction. When fecundation cannot possibly take place, however voluntary the act of copulation may be; or even when the female is already pregnant; such a feeling or sensation is accompanied by the discharge of the semen from the vagina, immediately after coition (repulsive power), showing, in the first place, that nature is not disposed to receive the fecundating influence of the male; and therefore the semen is not retained, but absolutely rejected: in the second place, that she is engaged in the process of fertilising the already fecundated ovum, and therefore not inclined to receive another. But, as an exception to the rule, a second fecundation may occur some time after the first, and thus produce a superfectation, of which I have already treated in the Third Point.

The opinion that conception is more liable to follow immediately after the disappearance of the menses is no longer a common tradition; it is a scientific investigation, founded on the hypothesis that an egg is discharged from the ovary each time that menstruation takes place, "to meet the spermatic fluid in some part of the female's generative passages" at the time of copulation; "but if coitus is not effected, the egg passes down to the uterus unimpregnated, loses its vitality after a short time, and is finally carried away with the uterine secretions." (See Dalton's 'Human Physiology,' Philadelphia, 1863, second edition.)

But this doctrine is not in harmony with my practical observations absolutely, for, were the egg (admitting it to be a positive fact that it is always and in every circumstance discharged at the appointed time) to lose its vitality after a short time, and to be carried away with the uterine secretions, there would be no possibility of fecundation taking place at the late periods (from fifteen to twenty days) after the menses had ceased, at which it has undoubtedly occurred according to the statements made by the females already referred to. There must be a limit to the "short time" alluded to above, which, in my humble opinion, expires about one week before the return of the menstrual discharge, when the aptitude to conceive entirely ceases for the time being. Besides, the egg is never discharged without thrill, as I have stated elsewhere, particularly in very excitable women, who thrill during or in the menstrual period spontaneously. Consequently, that discharge very seldom, if ever, takes place in women of cold temperament at the menstrual time, for they generally do not thrill except sub coitu.

6th. Generally speaking, menstruation never appears in women while nursing, but lactation very seldom, if ever, interferes with fecundation. The rule is, that the menses generally appear once before they become enceinte, and their absolute absence during three or four successive parturitions, as I have noticed in many, is the exception. "It is by no means uncommon, however, for them to appear once or twice subsequently to conception;" whereas, in the lower animals, neither of these occurrences takes place whilst suckling their young.

7th. There is another remarkable peculiarity in the human female, viz., that superfectation may occur some weeks or months after the first feetus has been conceived, thus producing twins or triplets at different births;* whereas, in the brute creation, superfectation occurs only during the few days of sexual heat successively, and their young are born within a short space of time from each other.

8th. Again: a peculiar circumstance, common to both species, is, that pregnancy takes place at no other time but when their receptivity is in a favorable condition as to impression (see the Fifth Point, third comment on Dr. Taylor's contradictory assertion, for the description of that favorable condition), as I have endeavoured to prove in the preceding

^{*} I have attended several women with twins, where the birth of the second infant took place at the intervals of from fifteen to sixty days after the first (see the paragraph "Superfxation" in the Third Point).

pages, with regard to women, both physically and mentally. In the like manner, and with equal confidence, justified by experiment, I may assert that no irrational female can receive the fecundating power of the male unless when physically and instinctively predisposed to that effect; or, in other words, unless they are suffering from the physiological phenomena manifested in them periodically, called rut, which is an identical state with that which in rational beings is called lust. While in that state the male is sought after, copulation enjoyed, and is followed by the reproduction of their respective species.

That the lower animals, like human beings, cannot reproduce themselves except during and in that state, I am perfectly convinced, from practical experiments tried on some of the canine species, while in their tranquil state; whereas the same operation performed during, and in, the breeding season, has invariably been crowned with success.

Were experiments of this kind as readily performed on women as they are on some of the lower animals, the disputed questions as to whether pregnancy can possibly be produced by an act of violence—when in a state of utmost antipathy or aversion—or even when a woman is in the state of absolute moral or physical insensibility—would have been satisfactorily settled long ago. But it is not too late: medical men should institute provings of this sort, however difficult or inaccessible they may appear, that they may convince themselves of the truth, and not

depend on the assertions of those who have not experimented practically. However difficult this mode of investigation may be, nevertheless it is not impossible to those who are not afraid of progress and wish to judge for themselves.

9th. It has been said (see Dr. Henle's 'General Pathology,' translated from the German, by Dr. Preston, Philadelphia, 1853), that the rutting season for animals, under some circumstances, may be called forth at an unusual time, or oftener than is normal, or may be suppressed. I know the circumstances under which the yearly rhythm of plants may be altered into a semi-annual one, and how to suppress it ad libitum; but I was not aware that the periodicity of reproduction in animals could arbitrarily be changed, inverted, suppressed, or confined to definite epochs. Nor have I the least idea as to what these circumstances can be.

The phenomenon of confining the reproductive process in females of the human species to a fixed period of time, may be easily effected, because, as it has already been said, they are not subjected to a particular or fixed rhythm in that respect, except that of menstruation; and their reproductive powers may be called forth at pleasure, by means which I think are not practicable with all animals, whether domesticated or not. Had Dr. Henle told us what are the circumstances under which those phenomena can possibly be effected, we might have tried the experiment for the sake of conviction, as the great teacher of knowledge.

In conclusion, sexual feeling and the desire to gratify it, which is absolutely wanting in animals before they reach puberty, manifests itself in some girls long before they become pubert. Hence the habit of masturbation, contracted at a very early age and continued until they become victims to that practice. I have known some married women also, addicted to it when young, who were not satisfied with, and had no pleasure at all, in natural copulation, and who continued nevertheless to masturbate themselves, until the practice destroyed their health, and ultimately carried them to the grave.* (See the last part of the Legal Aspect of Puberty for the symptomatic group of menstruation, compared with the sexual heat of animals.)

^{*} It is a positive fact that many young persons, suffering from consumption, are the victims of the repeated adultery of the mind, i. e., self-gratification. I have examined such persons, carefully, and I generally found them to be of an excitable temperament, and the organs of amativeness—physical love, and philoprogenitiveness—love of children, very much developed in them.

FIFTH POINT.

INDUCTION, AND THE LEGAL ASPECT OF CONCEPTION.

Conclusions drawn from the antecedent propositions; contradictory assertions confuted; the exceptions respecting the absence of sexual sensibility rendered clear; correspondence of views; an apology. Legal aspect of conception.

There is no need to reproduce the opinions of the numerous writers on medical jurisprudence who have asserted and maintained as a positive fact, that conception can take place when a woman is labouring under an absolute insensibility produced by the effects of moral or physical causes, or has suffered violence. No; there is no necessity to bring forward those opinions to show that they all agree to negative a truth which I have ventured to confirm and prove, not by quoting other authorities, which I could do if thought necessary, except Drs. Bartley and Farr (see the Legal Aspect of Conception, further on), but by irrevocable facts, comparisons, and arguments, founded on the theory and practice of the functions of human reproduction. I must, nevertheless, name

among the opponents Dr. Alfred S. Taylor, Professor of Medical Jurisprudence and Chemistry, &c. &c., as the classical medical jurist of Great Britain, at the present day, and the most modern British writer on that science, in whose text-book is concentrated all the European information we possess on the subject.* There we see the negative of Drs. Bartley and Farr's assertion, as well as mine, proclaimed and taught as an infallible dogma of physiology and legal medicine. There, I repeat (page 712, sixth edition) unless he has changed his mind in the seventh, which I have not seen, under the head "Pregnancy following Rape," Dr. Taylor writes-"It was formerly a debated question, whether in a case of real rape pregnancy could possibly follow, and this was even proposed as a rude test of the truth of a charge made by a female? Such a question requires no discussion in the present

* I refrain from impugning the Continental notabilities, such as Dr. Casper, Professor of Forensic Medicine in the University of Berlin; Drs. Orfila and Devergie, of Paris; and Dr. Mata, of Madrid, because they all advocate the same erroneous doctrines on this and on other points.

It is to be lamented, however, that the life of my esteemed friend and teacher, Dr. Orfila, has not been spared to publish another edition of his 'Médecine Légale,' for he would have corrected many of the old-established errors, from the conviction he felt on perusing my notes, originally written in the Spanish language, upon which the present work has been constructed. He read them in 1852, a few months before he was removed to a better world, and agreed with my views in many respects, promising me at the same time that he would bring the results of my experience into notice in a future edition of his work.

day" (March 31st, 1858.—J. N. C.). "Conception, it is well known, does not depend on the consciousness or volition of the female. If the state of the uterine organs be in a condition favorable to impregnation, this may take place as readily as if the intercourse was voluntary." Let us examine each of these points separately, in order to confute the doctor's assertions (scientific absurdities), and to prove their fallacy with arguments founded on reason, on logic, on experiments, common sense, and truth.

1st. "It was formerly a debated question, whether in a case of rape pregnancy could possibly follow, and this was even proposed as a rude test of the truth of a charge made by a female." If by this ill-expressed passage is meant that conception can positively be effected by rape (rape in the adopted legasense of the term), we must first of all ascertain whether the act of real rape (copulation) which must precede pregnancy, can possibly be effected or not on a woman against her will; for rules of logic command that we ought to prove the truth of one position before we assert the falsehood of its opposite.

To prove, then, that such an act of copulation is impossible by violence, nothing could be more appropriate to the subject than to refer the reader to the judicial and philosophical sentence pronounced in the case of a female who brought a charge against a man for rape, by the well-known Sancho Panza, ex-Governor of the Island of Barataria. (See Cervantes' Don Quixote de la Mancha,' second part,

chap. xlv.) In that allegorical narration (for allegory is in words what hieroglyphics are in painting) will be seen the physical impossibility which attends a man in an attempt to force a woman to the act of carnal knowledge against her will, whilst in a sound state of body and mind. Then, if such an act of copulation is utterly impracticable, how can the act of conception be feasible? Dr. Taylor should first prove that copulation is possible by violence, before he can assert that the "question of conception" by that act "requires no discussion in the present day."

2nd. "Conception, it is well known, does not depend on the consciousness or volition of a female."

This is a physiological error of a gross magnitude, for the absence of the will presupposes the absence of orgasm and the vital powers, which are indispensable to that effect. I repeat that without will there is no participation, except during natural sleep or in dreaming, when sexual thrill is produced by the effects of the imagination, or by a morbid state of the body or mind; and that without healthy participation no conception can possibly take place. I mean participation of the body and participation of the soul, though the latter is more essential than the former. I also maintain that the negative state of consciousness and volition, in the majority of cases during health, is a state similar to that of the frozen earth upon which seeds are sown ineffectually whilst it continues in that state. In the like manner, the woman is in a state of temporary cessation of internal motion,

incapable of perception and deaf to the calls of the other sex. Consciousness, then, and volition are indispensable conditions to the participation on which conception essentially depends.

3rd. "If the state of the uterine organs be favorable to impregnation, this may take place as readily as if the intercourse was voluntary."

This is a contradictory proposition set down on a conditional base, for it is quite logical, that if not favorable, impregnation cannot take place. How, may I ask the learned professor, can those organs be in a favorable condition for impregnation when intercourse is performed involuntarily, by force, or performed on a female during the state of absolute moral and physical insensibility? Is there not then, in such a state, a temporary cessation of internal motion of the nerves by which we maintain a consciousness of existence, and perceive our relationship to the world around us? Are the organs of sight in a favorable condition to see, or the pupils to contract by the approach of light, when in the state of perfect and profound sleep? Are the organs of hearing in the same condition, or has the skin any feeling, the mouth taste, or the nose smell, in similar circumstances? No. They are all dormant temporarily. In the like manner the organs of reproduction are all dormant in those states, and they can only be in favorable condition to be impregnated when wide awake, when there is a will, and when this will is

accompanied by participation, and other sine qua non conditions already stated.

Dr. Taylor does not describe the "favorable" state of the uterine organs to impregnation. In this point he leaves his readers to guess. Nevertheless I shall describe them myself in this place, though I have done it elsewhere. I said, that in the act of copulation by mutual consent, &c., &c., the vagina and its dependencies are in a full state of reproductive lifethey are mature, and therefore disposed to receive the impressions proper to their destination—that in that state they secrete a considerable quantity of mucus-like fluid; that they become larger in volume and higher in temperature; and that thrill is produced by the sexual excitement, and by the friction exerted on those organs to a greater or less extent; to which may be added the greater or less enlargement of the breasts and a certain degree of erection of the nipples, according to the degree of excitability of the female. Moreover, the breathing is also somewhat affected; the heart beats quickly, the face is more or less florid, and there is a sort of faintness with cold sensation of the lips and skin after thrill.

Now are not these the symptoms which constitute the "favorable state of the uterine organs to impregnation?" Do they really exist, or has Dr. Taylor ever observed them in subjects operated upon by violence, when unconscious, or when morally or physically insensible, in any shape, form, or degree? No. Neither he nor anybody else has. I leave the

professor of Guy's Hospital to try the experiment, practically, as I have done it myself, and then we shall hear what he has to say on the subject. will find no doubt that if such symptoms exist, the state of the uterine organs will be favorable to impregnation; they will be indicative of the mature state of those organs, and therefore of their readiness to create a new being, and, on the contrary, if they do not exist, the state of those organs will be one of inaptitude. Consequently there will be no attraction, no absorption of the living prolific aura spermatica, whether the act of copulation is voluntary or not. But in making experiments Dr. Taylor should be on his guard against deception, and against pretended unconsciousness and want of volition, of the persons experimented upon, as they can when there is a will, to dissimulate those symptoms (as many have done during my experiments), in order to deceive and to frustrate my views, and to avoid opprobrium and shame—Experto crede.

Examples of conception having taken place in married women who have never experienced sexual excitement—thrill, or have had physical participation in the act of copulation with their husbands—as I know such an extraordinary event to have occurred in some—may be brought forward to oppose the views expressed in the preceding pages; but it must be borne in mind—

1st. That a few isolated cases of the kind do not constitute a rule—they are the exception. Even

gravitation which is generally admitted to be a universal law, is not exempted from it—capillary attraction.

2nd. That conjugal copulation effected between husband and wife, who love each other, and whose reciprocal affections and sympathies are rooted in their hearts and souls, is a different thing from copulation between two persons, strangers to each other; or copulation effected during the state of absolute physical and moral insensibility, which ought not to be confounded or misunderstood. Copulation, in the former instance, is, no doubt, consented to, to fulfil a conjugal duty, rather than to enjoy pleasure of any kind; and thus it is followed by conception, notwithstanding the total absence of sexual feeling; a duty imposed, not on the material body, but on the spiritual soul; whereas in the latter case, the body must submit, but the soul will not, for the reasons already alluded to elsewhere.

If there was no feeling, organically, by actual contact, there must have been a feeling of a superior nature, which cannot but render impregnation effectual, namely: the consciousness of what transpires between the two, however painful or insensible the contact; or in the words of the talented Swedenborg in his excellent work on the 'Generative Organs,'* there must have been "an innermost excitement

^{*} Which I had not seen until the preceding pages were written, August 6th, 1863.

which has its seat in the soul and mind, where our nature is prone to the propagation of offspring."

The absence of material sexual sensibility in such cases, must have been caused by the absence, or defective organization of some parts of the generative organs, such as the clitoris, and nymphæ, which are the principal seat of thrill and pleasurable enjoyment; as I have observed it in some women imperfectly constituted in that respect; and in whom the greater part of the outmost signs which constitute the phenomena of the favorable condition to impregnation above described, were also wanting; similarly to those females already alluded to, who being abnormally constituted in their sexual organs, copulated, per anum, fruitfully, notwithstanding.

Swedenborg, in his work already mentioned, indicates three different series of excitement, or conditions and allurements essentially necessary to impregnation, namely: innermost, middle, and outermost. Although, he says that "all require to concur simultaneously with the act, and in the act," yet the third is subject nevertheless, to the exceptions above stated. "The excitements" he writes, pages 159-60, loc. cit., "are divisible into innermost, middle, and outermost; or into primary, posterior, and ultimate; and they require to concur simultaneously with the act." (Taking for granted that there exists a normal state of the parts, J. N. C.) "The innermost, or intimate excitements, are those which have their seat in the soul, and mind; whence our nature is prone to the

propagation of offspring; this proclivity is called forth by its own peculiar cause. The middle incentives are those which kindle the animal mind, and produce the blaze of passion; they arise from the allurements of the senses, from sight, hearing, touch; and consequently from the imaginative power, which derives its existence from sensation. The last incentive is the actual contact in the crisis (thrill, J. N. C.); and occurs when the sensitive papillæ that are seated upon the labiæ, alæ, nymphæ, and vagina, are roused and stimulated by the continued touch and attrition both of the soft smooth penis and of the sharp and salty humour which flows between the two. Upon comparing these excitements with the corresponding ones in the male sex, it is plain that females are more prone and vehement in the paroxysms of love, and have less command of themselves, than men.

"Sexual love, therefore, springs from the same causes indeed, in both sexes, (pages 162, 3, loc. cit.); but, nevertheless, in its principles it is not exactly of the same nature in each. In the man, the first cause of this love is the propagation of offspring, for the sake of society on earth; and, more remotely, for the sake of society in heaven; in the woman, however, though it is for the same causes, yet it is for these, not as in the principal cause, but as in the instrumental cause, to wit, in order that the woman may receive that cause, not as native in her, but as to be planted in her by her husband; and thus may perfect that which is begun by, and flows immediately from

her husband. These ends, then in the two sexes, correspond to each other, just as active forces correspond to passive, which, when they are united, produce one cause. Of this nature also is the love of the one towards the other, which love requires to be stronger in the female sex, because it is not excited by active, but by passive principles. And in order to its suitable excitation, and that the woman may be subject to the active force, and to the will of the husband, it is necessary that her nature be such that her will be subject to the affections of her disposition; but the affections to the will, and the will to the reason of her partner. To bring this result about, excitements more numerous, and of more exquisite sense, are bestowed on women; which leave them less at their own disposal, but dependent on the right of another as their governor. From these facts we may conclude, as to the laws of the conjugal compact as it has been instituted by nature; and we may see that it implies, that the wife shall obey, and the husband command, so that when they are of one mind, she shall suffer while he shall act: otherwise order is perverted and nature changed."

I have italicised some of the great Swedenborg's words to show the correspondence which exists between his views and mine, as expressed in the text of this work; which views I had entertained long before I became acquainted with the writings of that genius on this and on other subjects. It is, therefore,

They have been mentally working in the same direction for many years back, so that my assertions cannot be considered as the fruit of the enthusiasm generally produced by the delight of novelty in this department of science, transmitted by others; but as the result of a pure inductive mode of reasoning upon facts previously observed and verified, per experientiam.

Such is the unity in the variety of my ideas and those of Swedenborg, in this respect, that were his work on the generative organs posterior to mine, I would have been inclined to suspect that he had borrowed from it. But the Swedish Philosopher wrote more than one hundred years ago, and besides, the rich seldom borrow.

From the preceding considerations we may come to the conclusion, that Dr. Taylor has, in his textbook of medical jurisprudence, done nothing more nor less, than copy, ad verbum, the preposterous assertions given in works of the kind by his predecessors, without ever having taken the trouble of verifying them. Had he done so, he would not have committed the errors I confute.

I will observe, in conclusion, that it is not my intention to use discourtesy towards any professional gentlemen whose opinions on the subject are diametrically opposed to the *facts* I have advanced, unless indeed, argument be thought discourteous; but so long as they assert that "conception does not depend

on the consciousness, or volition of the female," I cannot acquit them of all blame.

A similar observation was made to Dr. Taylor, individually, in an article published by myself in the 6th volume of the 'Monthly Hom. Review,' page 298, under the head of "Medical Jurisprudence" in which I proposed a new method for detecting poisons, not discoverable by chemical analysis, q. v., and I hope that he, and every other person or persons, whose teachings I may impugn directly, or indirectly, will exonerate me from the charge of a personal attack. It is not the Man, but the arena of his opinions that I invade.

The legal aspect of conception involves the following decisions: Whether conception can or cannot be effected without defloration, followed by violence, or take place by unconscious copulation;—whether it can be possible before or after menstruation, i. e. Whether menstruation must precede conception, or, whether conception ceases with the function of menstruation; and finally, whether conception of more than one fœtus is possible; whether a woman can or cannot become pregnant without the agency, or carnal knowledge, of a man; and whether conception can or cannot be rendered impossible, or ineffectual, by any artificial means.

Should the question be to decide whether conception can or cannot be effected, without defloration, the answer will be given in the affirmative, provided

the act of copulation has been executed with the consent and free will of the female. But care should be taken in the examination of the sexual organs of both parties, as a peculiar organization of the female's may allow penetration without forcing, or even affecting in any degree such organs. On the other hand, the discharge of semen may be effected, near the vagina, without a complete introduction, or complete erection. In such cases, the aura is absorbed, fecundation effected, and conception accomplished. Bear in mind, that copulation must be voluntary on the part of the female, and with pleasurable enjoyment, otherwise conception cannot take place. "Participation is essential to the end in view, and to each (man and woman) are allotted respective duties: duties which cannot be exchanged, or even varied, for they are immutable."

Should it be inquired, whether conception can be effected by violence? Take this term in its strict sense (see the Second Point on Virginity and Defloration); ascertain what takes place in the performance of functional copulation, and the answer will be in the negative. Moreover, conception cannot take place by unconscious copulation, this being effected by violence, for the functions of reproduction, and many other physiological actions, are, figuratively speaking, half dead; speaking truly, there is a temporary cessation of internal motion of the nerves, by which we maintain a consciousness of existence, and perceive our relationship to the world around us. In

the state of perfect sleep, the pupil of the eye will not contract on the approach of light; the skin has no feeling; the ear no sense of hearing; the taste and smell are dormant. In the like manner, in the organs of reproduction, there is a temporary cessation of internal motion, except when dreaming on the subject, when a portion of the brain thinks, and therefore acts or moves, producing erotic feeling. It is only in this case that conception might be possible.

Drs. Bartley and Farr, already quoted, are two of the several medical jurists of old, who agree with me in this respect. Not having a copy of their work at hand, I cannot refer the reader to the page or edition, published by those gentlemen, either conjointly or separately, where the following passage is to be found. I have retained it in my memory, ad verbum, from the first day I read it, which is many years ago, it reads thus:

"In the controverted point whether a woman, on whom a rape hath been committed, can become pregnant or not, it may be necessary to inquire how far her lust was excited, or if she experienced any enjoyment. For without an excitation of lust, or enjoyment of pleasure in the venereal act, no conception can possibly take place."* Nothing can be more

^{*} This fact, which, no doubt was based upon an hypothesis in olden times, is now restored and brought to light in the present outlines, not by theoretical speculations of the mind, but by practical experimentation on the body. Modern physiologists and medical jurists who have endeavoured to dispossess the

reasonable, more physiological, and true, than this; and yet it has been overlooked, and the grossest error substituted in its place.

Nor is it possible for a woman to conceive and to be ignorant of her state after the first half period of ordinary gestation. Finally, conception is not possible before or after menstruation, in some form or other; either from the vagina, or from other secretory surfaces. (See the Legal Aspect of Puberty.)

Such persons as do not menstruate per vaginam, at the regular periods, generally feel the greater part of the symptoms which accompany that function—symptoms which have been overlooked by those who assert the contrary of my theme, e. g. swelling of the pudenda and breast; colic-like pains in the lower abdomen; headache; toothache, &c., &c. These are the precursors of vaginal flux, which cannot, in some women, be realized on account of some organic obstacles, among which are, the occlusion of the vagina, or the uterus; but if these obstacles are removed by the ordinary means, the patient will have the free periodical discharge in due time, secundum

truth which, from time immemorial, that hypothesis has claimed, have not proved their antagonistic assertions by a similar process, that is, by instituting experiments on the living body itself. Consequently, not the slightest confidence can be placed in their erroneous doctrines in that respect.

As to the hypothesis of old, we must acknowledge that it deserves a monument of gratitude, because it has been "the instrument in first bringing to light that truth by which it is annihilated" now.

naturam, as I have seen in patients operated on for that purpose by myself. (See the last part of the Legal Aspect of Puberty.)

Besides the above symptoms there is, generally speaking, a sort of discharge from other sources than that of the vagina (where there are no vaginal obstructions), as I have described in the Legal Aspect of Puberty (q. v.). In fine, menstruation is in women what the sexual heat is in the lower animals: both may be considered as identical in point of puberty and reproduction; and it is a positive fact that the latter is always present in women, even when the former is absent (that is, the real bloody discharge) in a sufficient form and degree to render them apt to conceive notwithstanding. (See the last part of the Fourth Point, 5th paragraph, for the peculiarities of those functions in the females of the rational and irrational beings.)

With respect to the question whether a woman can or cannot become pregnant without the agency or carnal knowledge of a man, I refer the reader to the next point, where he will find the possibility or impossibility of such an occurrence described in a practical case, supposed to be authentic in every respect; and with regard to the possibility of conception being prevented, intercepted, or checked by any artificial means, either mechanical, medicinal, or otherwise, so as to render a woman barren, sterile, or unproductive of her natural offspring, see the Prophylaxis of Conception in the Seventh Point, where the question

is physiologically, therapeutically, and legally considered.

Multiple-conceptions are generally called superfactation. The former occurs when fecundation of two or more ova is the result of a single act of copulation, or of different acts of the kind, within a short space of time from each other, as we frequently see twins, triplets, &c., born within some hours of interval; and sometimes within days, weeks, and even months. The latter is, when a second or a third is conceived during the gestation of the first, and born some hours, days, weeks, or months, after the first, or the second.

As this question has an important bearing upon legitimacy, in cases of protracted gestation, and in cases of adultery, when two infants are born of different colours, it demands a careful examination. (See the Point on Gestation.)

If a woman brings forth two or more children of different colours, and is charged with infidelity, it must be remembered, that the moral part of the question has nothing to do with the medical jurist. It belongs to the magistrates and jurors; but the professional evidence, if required, would be to establish the fact, that these are children of different races; and that the possibility of such occurrences is proved by the practical facts which have, at different times, happened. (See the Point on Exoneration, in which the principal question was to decide paternity,

and the paragraph on Superfectation in the Third Point.)

The questions of—Whether a woman can, or cannot become pregnant without the agency, or carnal knowledge of a man; and whether conception can, or cannot be rendered impossible, or ineffectual, by any artificial means, will be physiologically and legally considered in the two next points, under the heads of Conceptio sine coitu, and Prophylaxis of conception.

SIXTH POINT.

CONCEPTIO SINE COITU.

The object of this point is to ascertain whether conception can be effected without the junction or concurrence of the male, and to render the paradox clear.

Can conception take place in a woman, and can she become pregnant without the agency, or carnal knowledge of a man? However strange or absurd this question may appear, it has, nevertheless, had advocates in favour of its affirmation, e.g. impostors who have had the impudence to employ certain means to render sterility prolific: means which are inconsistent with sound reason, with common sense, and even opposed to the dictates of nature.

I am not aware that any writer on physiology or medical jurisprudence has ever touched this intrinsic point pro or con. Perhaps their silence is due to its seemingly negative character. But I know of a case which took place in the city of Lima, Peru, many years before 1845, when I became acquainted

with it; which case was declared possible by the medical evidence given to an ecclesiastical court. Whether the medical men who answered the above question affirmatively, did so to save the victim from an additional opprobrium to the charge for which she was accused and convicted, or whether they acted independently from any other motive, has not been decided. Nevertheless, the fact remains the same.

Such a case was related to me by several persons, among whom were medical men, who had heard it from reliable authorities to be true. It is as follows: A young lady of respectable parents, living in the said city, had a young mulatto girl as her maid, whom she discovered to possess such an excessively developed clitoris, that it could be used to substitute the organ of the other sex, perfectly. Upon this discovery, the mistress made the girl her bedfellow, and they carried on the practice of Tribadism *-female concubinage-for some time, unknown to any one in the family; in the course of which the young lady became pregnant, and was much concerned as to the means by which she could have become so, for she solemnly declared that she had had no carnal connection whatever with any man.

As soon as gestation was thoroughly advanced and confirmed, she disclosed the whole affair to her confessor; and the Reverend Padre thought it consistent

^{*} From TRIBAD, a French term given to a woman who has sexual commerce of some kind or other with another woman.

with his duty* to denounce the case to the Archbishop of the place, who, upon such an information, ordered them—mistress and servant—to be taken into the then existing tribunal of the Inquisition, where they were tried, and perhaps burnt alive. No living being can tell what has become of the unfortunate prisoners. All the records of that abominable tribunal having been destroyed, there is an impossibility of verifying this case.

Several medical men were consulted for the purpose of ascertaining, the report says, whether such a practice could possibly have produced that effect. After the girl was examined and found to be an hermaphrodite, whose predominant characteristics were those of a female, they agreed in the negative, at first; but, on further investigations, they changed their minds, and gave their evidence, affirmatively. conviction being founded on the revelation made to them by the girl, who declared that she had a lover, with whom she was in the habit of having illicit relations at home; and that she had, several times, gratified her mistress immediately after she had had intercourse with him. These circumstances seem to have induced the consulting physicians to examine the case anew, and they came to the conclusion that some semen from the man which had been retained

^{*} A mistaken duty, for "every ghostly father is bound in conscience to conceal, and no way disclose his spiritual child's failings, and to think better and not worse of him (or her) for confessing his (or her) sins."—ROMAN RITUAL.

in the vagina of the girl, must have, during the act with her mistress, been ejected and deposited in or about the vagina, and absorbed in sufficient quantity to produce fecundation.

To admit the supposition of our colleagues as probable, it would be necessary to ascertain whether the semen thus conveyed from the servant girl to her mistress had retained its life-giving principle, for without it, inanimate semen alone would have been ineffectual. But such an investigation is beyond practical proof, unless the experiments which have been made on animals with success were made upon several persons to that effect.* The difficulty of rendering the paradox clear, leaves the question perplexed.

* It has been asserted by microscopical observers, that the lifepossessing and life-giving principle of the human semen retains its vitality for many days in the mucous lining of the generative organs of the female after copulation, and that it is in the "interior of those organs that the movements of the spermatozoa continue for a longer period than in any other situation" (See Todd and Bowman's 'Physiological Anatomy'). It is very natural to suppose that it is so, for vitality cannot be preserved in a much higher or much lower than the ordinary temperature of the body, and when free from the contact of the air or other unnatural fluids. (See also Dalton's 'Human Physiology.') Nor can the lease of that kind of life be extended beyond a few hours in any other situation different from the "interior of those organs;" that is, from the mucous lining of the vaginal canal, notwithstanding Dr. Casper's assertions that he found "very many well preserved zoosperms after the lapse of seven weeks"!!! in the stains of a shift belonging to a woman violated by a man; and in other cases which he mentions in pages 320 and 342, of his work already mentioned.

On the whole, it is my firm conviction that the so-called sperma-

Notwithstanding the young lady's denial of illicit communication with the other sex, which, if sincere, as it was supposed to be, would be a sufficient proof that the semen transmitted to her, by her maid, had not lost its fecundating power or force, absolutely. By giving credit to her assurance, we are bound to believe the *paradox* to be true, however absurd or strange it may, at first sight, appear; for we have no motive to doubt it, inasmuch as she could have had none for concealing a lesser, rather than a greater, moral offence, comparatively, in the solemn act of confession, made to an unworthy minister of the Roman Catholic church.

She was, moreover, placed in such a condition at the time when the semen was conveyed to her, that there were all the probabilities in favour of its being attracted, and in conception having taken place; e.g. sexual excitement, receptivity, participation, and thrill; conditions sine qua non to that effect.

But supposing the above historical account was tozoa, as seen under the microscope, are no organized animals of any kind, nor animals of an independent life, to remain alive for such length of time in spite of the process of dessication and other atmospheric vicissitudes stated by Dr. Casper. They are nothing else but optical illusions effected by the radiation and vibration of light upon that animal substance called vesicles, or sperm cells, when fresh, as it is observed in the ciliated epithelia of mucous membranes, and also in the germ vesicles of vegetable matter, when placed in favorable conditions, and under certain circumstances to exhibit their peculiar sort of life. (See the Third Point, a foot-note under the head "Fecundation.")

invented for the purpose of throwing a veil of innocence over the consummated transgression, is there any probability of such a thing being possible, were it to be tested on the human female as it has been tested on animals successfully for that intent? Physiology answers, YES, it is possible: try the experiment, and you will be perfectly convinced, provided the same physiological conditions which existed in the young lady be present in the person experimented upon.*

Those of the opposite side of the question, were of opinion at that time, that the young lady became pregnant by a person of high position in that city, who was legally incapacitated to marry her, and who devised that plan to escape from ignominy, and from the severity of the law. But it is not probable that such a scheme could have been made by design, unless with a previous knowledge of the fact, that a similar case had previously taken place.

On the other hand, the young lady's solemn confession is worth more than her commentators would have us to believe, because founded on the candid acknowledgment of a greater from a lesser offence. For it is a greater moral wrong to use artificial, rather than natural means, in supplying the lust of the flesh in its imperative commands.

* Dr. Mata relates a case where Hunter succeeded in impregnating a woman by injecting her husband's semen into the vagina, he being unable to ejaculate into that cavity on account of a congenital malformation of his urethra, called hypospadia. (Loc. cit., vol. i, p. 49.)

As to those who profess to render sterility prolific, by the immoral and absurd means of injecting viril semen into the vagina, dissolved in water, or in any other vehicle of the kind, the case is different, and the answer to the question absolutely negative; for we know the peculiarity of such semen is its insolubility, except in acids, on account of its specific gravity; but, even supposing it were soluble, would not such a mixture destroy and kill the vital element of the semen? undoubtedly it would.* I believe that human semen, for the process of propagation, is similar to some mineral waters for the process of cure. They more or less lose their specific properties in a more or less space of time, by exposure to the atmospheric air, from the moment they leave or are taken away from the place where they are formed, or elaborated; and also as soon as they are mixed with other substances disimilar in temperature, nature, or kind.

Since the preceding case was written, I saw the third vol. of Dr. Casper's 'Forensic Medicine,' tranlated from the German and published by the New Sydenham Society of London, January, 1864, in which book (page 248, footnote) there is an account of a pamphlet published in London, 1750, entitled,

^{*} It is said that Spallanzani proved by a great number of experiments that semen from frogs, dissolved in water, retains the faculty of impregnating; but the fecundating process of the ova of those amphibious animals is quite a different process from that of the ovum of the human race. It is, therefore, in that difference that the phenomenon on each species consists. Rossi and Rusconi have obtained similar results.

'Lucina sine Concubitû,' "A letter addressed to the Royal Society of London, in which it is plainly proved, both from reason and experience, that a woman may become pregnant and produce a child without any assistance from a man." The author calls himself Abraham Johnson.

Dr. Casper calls in question the possibility of such occurrence taking place, and has not "the slightest confidence in the statements of the parties concerned," notwithstanding the facts known in regard to the artificial impregnation of animals, according to Dr. Valentin ('Grundr. d. Physiol.,' iv, Auff., 1855), quoted by Casper himself (loc. cit., page 249), "which teaches us that copulation (coitus) is not a necessary condition for impregnation."

I have delayed the publication of this work intentionally, hoping to see something new in the long expected volume that I may profit by; but I am sorry to say that I have been disappointed. There is nothing in the handbook of the professor in the University of Berlin, that can be properly called progress in that science. Like all his contemporaries, Dr. Casper advocates the same erroneous doctrines in medical jurisprudence and in physiology. Not that he discourses the controverted points logically, or reasonably; but he at once rejects them on the ground that the subjective cases recorded as positive facts by others, have not come within the learned professor's "personal experience," i.e. that he believes not what he sees not—a very expeditious

method, indeed, of bringing a question to a close;—
and at the same time to be consistent with the title
of his hand-book, which is said to be "based upon
personal experience." And how many things are
there may I be permitted to ask our colleague, which
he has never seen, that he is strictly bound to believe? Very many, I dare say, not only in professional, but in lay matters as well, unless he is an absolute incredulous in every respect.

Note:—While writing the above criticism, March, 1864, I was sorry to learn that Dr. Casper is no more among the living in this world. Let him rest in peace! He is not dead, but has removed to a better world.

SEVENTH POINT.

PROPHYLAXIS OF CONCEPTION.

To investigate the possibility of rendering fecundation ineffectual by art, and to decide the propriety of using such means for the rapeutical purposes is the object of this point.

The prophylaxis of conception is a tributary to the physiology of reproduction in a negative aspect, and a remedial agent in therapeutics in a positive sense. It is as closely allied to medical jurisprudence as any of the points contained in this work, though it has been vulgarly, but not physiologically, therapeutically, or legally treated by any writer on those branches of medical knowledge that I am aware of. It, therefore, deserves a few words of comparison on each one, respectively, that it may be largely investigated by those who are not afraid of ascertaining the truth, practically, and of being convinced thereby.

The possibility of rendering fecundation ineffectual by artificial means, is founded in the fact that if an appropriate foreign body be interposed between the sexual organs of the male and those of the female that body will stand as a bar, or impediment to the absorption of the aura spermatica emitted against it in the act of copulation, and will interfere with the vital affinity called forth in the contact. To illustrate this physiologico-negative phenomenon, I shall call the attention of the reader to the extraordinary chemico-negative result observed in Sir H. Davy's safety lamp: namely, the prophylaxis of the explosion of inflammable gases in mines, vulgarly called firedamp.

The illustrious baronet found, that if a piece of wire gauze was held over the flame of a lamp, or of coal-gas, it prevented the flame from passing; and he ascertained that a flame confined in a cylinder of very fine wire gauze, did not explode even a mixture of oxygen and hydrogen, but the gases burnt in it with great vivacity. This discovery led him to the construction of the lamp which bears his name, as a safe means to carry light with impunity underground, where carburetted hydrogen gas exists; and he, thus saved hundreds, nay, thousands of lives, and property to a vast amount. The wire gauze acting as an interrupting body between the flame within, and the inflammable gas without, renders explosion impossible; and allows men to go on with their work without risk, throughout the interior of the mine.

In the like manner, if a small piece of sponge, or any analogous substance, be placed within the vaginal canal, *sub coitu*, it will produce the same effect as the wire gauze; i. e. it will represent the intermediary agent which will interrupt the aura seminalis from being absorbed from within, thus rendering fecundation impossible. So that the piece of sponge is to the aura seminalis, in preventing fecundation, what the wire gauze is to the carburetted hydrogen gas, in preventing explosion, respectively. The phenomenon may be better illustrated, or better explained in different ways, but the fact will always remain the same.

If I have chosen the above comparison, it is not for the similarity it bears to the point under consideration, for each one is governed by different laws, *i.e.* vital affinity, and chemical affinity, but because I have not a better one to offer.*

I have tried the experiment therapeutically more than once, and found the phenomena to correspond, and to be in perfect harmony with truth. Moreover, there are other means, besides the one above described, to render conception impossible, some of which I know to have been employed by Indian females in Peru. But I have not been able to discover any of them on account of the secrecy in which they are kept by those who profess and practice that speciality in the country. All I can say on the sub-

^{*} Dr. Casper (loc. cit., p. 261), among other causes, admits the inaptitude to conceive "when the spermatic fluid is prevented from reaching the ovum," &c. There can be no doubt that the means I advocate, is one of the most effective preventives that can be used in such cases.

ject is, that they use certain kinds of plants for the purpose. And why should not some plants be possessed of that prophylactic power, when other plants are endowed with the property of producing opposite effects? *i.e.* of rendering some forms of sterility prolific, if certain conditions are favorable to that effect. The difficulty lies in finding out the true characteristic to the given case.

Continental writers on chalybeate waters have observed, that the abuse of drinking or bathing, and the inhalation of the mineral emanations (aura mineralis) from the atmosphere and the springs, by healthy and prolific females, residing for a long time in the neighbourhood of those places, has, in many instances produced sterility. For my part I can say as much, having noticed the same phenomena with similar waters and their mineral aura, among the Indian women, in several localities of South America, whilst there. This peculiarity of Ferrum alone, or of its elementary combinations with other substances in the waters of a much celebrated place called Salvador, near Caruaz, in Peru,* has induced me to recommend the sojourn in that locality, to excessively prolific women suffering from the effects of too often and repeated parturition, as a prophylactic means of conception, which has proved to be efficacious in more than one of those unfortunate beings.

Similar effects, i. e. the prophylactic disturbing

^{*} See an article on the "Turkish Bath," published in the fifth vol. of the 'Monthly Review,' p. 370, by myself.

power of the mineral waters of Bath, in England, are said to have been observed in females living near the springs of that place. If this be true, sterile women will find the remedy there.*

To copulate during the period of menstruation, only, is another prophylactic means against conception, as it has been proved that no woman can conceive while in that state. (See the last part of the Fourth Point, the fourth peculiarity of the functions which differ from those observable in irrational beings.)

The prophylaxis of conception, in a therapeutic point of view, may be employed by medical men only, in some cases, with as much propriety as abortion is provoked in others. (See the medical evidence of the Tenth Point, Miscarriage and Abortion.) It is a necessary evil justified by the results obtained from it, namely: the restoration of health, and the preservation of life of mothers labouring under certain ailments, or organic malformations of the pelvis, etc., where parturition would be rendered impossible, unless aided by dangerous mechanical means; and in cases where a prolific mother suffers from too repeated pregnancies, and when her physical condition requires a total discontinuance of future misfortunes of the kind. I have advised the above process in

* Since the above lines were written, I have confirmed this information by personal investigation in my visit to Bath for the purpose of proving the mineral waters of that place, in August and September, 1863, which provings I am preparing for press.

such circumstances as described, with great comfort and safety to the patients, and the possibility of future conception became null, copulation non obstante.

With respect to the medico-legal aspect, it may happen sometimes that a person, or persons interested in preventing succession in a family, may for his, hers, or their profit, induce, advise, or undertake to use such means as they know would interfere with the operations of nature in that respect, in order to obstruct progeny, or descent; and to appropriate to themselves the family titles, property, or honours, which, by right of inheritance, would have been the patrimony of the thus maliciously suppressed offspring, as lawful heirs.

The object proposed by families in the above case, is diametrically opposed to that which takes place in producing a supposititious heir to one state (see Simulated Exoneration, Ninth Point), by which a foreign being is introduced to supply the place of a legitimate one, in respect of inheritance; but the moral effect in both cases is the same. The law does not provide for the former, but it grants a writ called "De Ventre Inspiciendo" for the latter, in order to keep the woman under proper restraint till exoneration takes place, and to admit the presumptive heir to the inheritance of whatsoever nature it may be.

Should the question be raised to decide whether conception can or cannot be prevented, intercepted,

or checked by any artificial means, whether mechanical, medicinal, or otherwise, so as to render a woman barren, or unproductive of the fruit of her kind, it would be answered in the affirmative; for, as it has already been said, that if a foreign body of an appropriate kind be placed, or interposed between the genital organs of the male and those of the female, sub coitu, fecundation will not take place: or, if a remedial agent of any kind, proved and known to be capable of producing sterility, be administered with the same intent. I have heard of such a practice having been carried on in some countries for the same purposes among actresses, dancers, singers, and other female performers in public places, who cannot afford to be interrupted by gestation and its concomitants in the pursuit of their artistic careers; but I am not aware that any case of the kind has ever been brought before a court of justice, in a civil or a criminal point of view.

With respect to the brute creation, there is one species of animal—the mare—who may be rendered barren by allowing, or compelling, her to copulate with a hybrid, i. e. the male of the species mule, called mulo or macho, in spanish. This being incapable of propagating inter se, or with any other species of horse, he is, at the same time (by a mysterious process which is, and will remain unknown to us until it is revealed from above), capable of destroying the power of reproduction in the mare, by copulating with her during the breeding season—sexual excite-

ment—as has been observed by cattle breeders in South America, and by myself.

Such an intercourse has been practised, de industriá as a prophylactic against coneption in some peculiar races of mares, kept, or reserved for different domestic uses, or for the purpose of training them in the performance of public exhibitions.

Other kind of prophylactic agents are also said to be used in the same species of animal, namely: plants which have accidentally been found to possess the power of producing sterility in mares, who eat them unconsciously, and thus become barren; among which is the juicy stock of the Zea mais, when perfectly ripe. Perhaps this vegetable is one of those which are said to have been used with success, among the natives of Peru, in females of their race, with the object of effecting abortion,* and rendering them unproductive of a future being, at the same time. So much for the female sex of different species. Let us now inquire what has been said or known with respect to the male of our race.

It is reported by Dr. Hempel in his 'Materia Medica,' under the article Agnus Castus, that this

^{*} The criminal practice of provoking abortion in that country, constitutes "une industrie libre autant que coupable," like in many other parts of the world, Paris especially, where "l'on désigne publiquement des maisons où les femmes sont assurées de trouver la funeste complicité qu'elles réclament, et dont la notorièté est repandue jusqu'à l'étranger!" 'Annales d'Hygiène,' pub. ii, v, p. 125. (See the last part of Miscarriage and Abortion, Legal Aspect.)

plant has the property of rendering men impotent, and incapable of engendering; that is to say, that by taking Agnus Castus in large doses, and for a sufficient period of time, a man may become weakened to such a degree as to render erections difficult, or impossible; and to cause the quality of the semen to be incapable of fecundating. I have no personal experience on this subject, myself. All I can say is, that the faculty of engendering consists in a great measure in the quality of the spermatic fluid. A healthy sperm will always fecundate, whether the subject is capable of viril erection or not. The difficulty of this power does not constitute what is generally, but improperly, called impotence in men. A man may be incapable of erection and yet apt to fecundate. Nor the material introduction of the penis, or of the semen into the vagina, is absolutely necessary to procreate; it suffices that a small portion of that substance, in a healthy state, be deposited near that place to produce the desired effect. The proof of this is to be found in the fact, that a married man whose penis had been totally amputated by myself, in Lima, Peru, was capable of impregnating his wife, whom I attended in her parturitions (three) during my residence there. Her husband told me, that the friction operated with his body (the pubis) against the genital organs of his wife, was sufficient to produce thrill, and seminal discharge on those parts.

EIGHTH POINT.

SEX OF PROGENY.

To explain the opinions entertained on the subject of this physiological phenomenou, and to examine it legally, in respect to succession and inheritance, is the object of the present point.

THERE is in the reproduction of the human species, a very interesting circumstance, which has been hitherto observed by no one except myself; and which deserves the close investigation of others; not so much for the interest or intrinsic value that it has in itself, in reference to the succession of titles, and property of ancestors, but for the physiological function of that vital occurrence which takes place in the act of copulation. I allude to the ultimate results of that act, in determining what would be the sex of the progeny. By numerous observations and personal experience in different countries, I have discovered that the sex of the new-born infant has always been identical with that of the copulating party who has thrilled the last in the act; which observations were confirmed by the declarations made to me by females,

who had no motive to deceive, and were rectified by their husbands, on whose part I had every reason to believe these statements to be true.

I have also ascertained that women who have had two, four, six, and even twelve girls in succession, were less excitable than their husbands; being, therefore, the last of the two that have thrilled sub coitu, they have conceived infants identical in sex to theirs, and vice versa. When they were the first, and their husbands the last, boys have been the result of the different degree of excitability in them. I am this very day attending a lady in this town, who has had twelve girls in succession, and I attend another who has had eight boys, also successively. Both patients confirmed my views on the subject with their kind information, which they unhesitatingly gave for the sake of the promotion of science (November, 1863). These investigations prove the veracity of the assertion above stated, namely; that the sex of the progeny depends on the more or less degree of excitability of its parents, and that the infant will always be identical in sex with the one who thrills the last in the act of copulation.

Should this assertion be considered hypothetical, or the production of a fantastic imagination, I leave it to those who may call it in question, to find out a better mode of explaining why two, four, six, or twelve male or female conceptions occur to a woman successively? That there is a good reason for it as there ought to be, is unquestionable, for every occurrence in the creation of organic and inorganic beings, is founded on a previous and sufficient cause; that our intellectual faculties are not sufficiently developed, or that they have been too much neglected to ascertain, or to know these reasons, is proved by the silence of every physiologist up to the present day. "To no man is permitted to know more than what is sufficient for his day."

An attempt has been made to explain this phenomenon dissimilarly from the above, namely; by the length of the pregnant state, i. e. that the period of gestation is longer with male than with female children, but it has failed. Accurate tables of protracted cases of pregnancy have been published by different authors which contradict the above supposition (length of pregnancy). The reader is referred to the 'Reports of the Obstetric practice of the University College Hospital of London,' for 1844.

Similar observations were made by myself with hundreds of cases in order to verify those reports, and I found that the length of gestation was greater in the case of girls, than in that of boys, and vice versa; and that no positive uniformity has ever been obtained on the subject.

The late Dr. McGilchrist, of Edinburgh, in his article on "Cerebral Dynamics," published in the October number, 1863, of the 'British Journal,' page 558, alluding to the "frequency with which we sometimes see the one parent more fully represented, and sometimes the other," said, in a foot-note; "Although it

seems probable that the sex, at least, of the child depends, far more than has been yet suspected, on the intermonthly period at which conception occurs." By this statement, it is no doubt supposed that there is a fixed period in the month for the production of girls, and another for boys; but which are those supposed periods we are left to guess.

Vulgar credulity, in some countries, attributes the causes of sexuality to the different phases or quarters of the moon in which conception occurs; e. g. if in the crescent, males; if in the decrescent, females. Either of these may be the intermonthly period alluded to by Dr. McGilchrist, which he has not told us.

I have myself entertained an opinion, for many years, favorable to the traditional belief of the common people, because it agreed in many instances with the observations made on the subject, notwithstanding the difficulty of ascertaining the right, or true lunar period in which conception took place; and thought, at that time, that such vulgar authority was true. But on examining the one I have adopted, which came to my mind intuitively, I found there was not one single exception in several hundreds of cases which I have noticed and verified up to this day. I may say in conclusion, that of all the theories hitherto known or that can be brought forward to explain the circumstance under consideration, there is not one that offers greater probability of truth than the one I propose, because founded on facts observed, and confirmed by the evidence of parents in whose veracity there cannot be the least doubt.

The suppression of offspring by any of the means spoken of in the Prophylaxis of Conception, has not, to my knowledge, ever been legally considered. As it may be effected with the mutual consent of both copulating parties, and also unknown to one of the two, when there is an object in so doing for the purpose of preventing titles of family, or property of any kind passing from the possessor's hands, while alive, it is a point which legislators ought to investigate for the good of society at large, because of its moral and civil effects upon succeeding generations. Except in those cases of organic malformation of the pelvis, &c., spoken of in treating of provoked abortion (justified by medical men), where we are equally justified in suppressing progeny.

NINTH POINT.

GESTATION.

The object of this point is to define gestation and to ascertain whether natural, spurious, simulated, or dissimulated, and its duration; the circumstances by which a jurist ought to be governed in cases of adultery or seduction; or when the question arises whether a woman condemned to die, civilly, may be exempted from the enforcement of the sentence of death while pregnant. Also to determine the influence of gestation on the powers of the imagination (the mind) of the mother.

A MORBID state of the stomach, with nausea and vomiting, suppression of the menstrual discharge, in most cases; cephalalgia, odontalgia, epistaxis; cedema of the lower extremities, and tumidity of the breasts with darkness of the areolæ, are generally presumptive symptoms of gestation.* But the most evident and positive signs, are those obtained by the following modes of investigation.

External appearance.—The gradual augmentation

^{*} See the signs of virginity and defloration, which are generally found in the mammary glands—Second Point.

of the abdomen, the motion of the fœtus, and the existence of some of its parts, are felt from the first half period of common gestation.

Auscultation.—The placental pulsations, the active and passive movements of the fœtus; the palpitation of the heart and the motion of the lungs, are audible from a very early state.

Percussion.—The left index being introduced into the vagina (the woman being laid on her back), in contact with the uterus, place your right hand above the pubis, perform a gradual percussion with it, and the fœtus will be made to strike your finger.

Tactus.—By introducing the right index into the vagina, in contact with the os uteri (the woman standing upright), it will be found that this projects forwards; that its cervix is thicker, and its body larger than in the natural state; that the pyriform shape is changed into that of a globular; that the cellular substance is felt softer, and that the blood-vessels are much enlarged.

Chemical Test.—To ascertain gestation by the diminished quantity of calcareous salt in the urine of pregnant women, is a modern discovery. The ossification of the fœtus commencing from the fifteenth to the thirtieth day after conception, can only take place at the expense of the mother. During this formation of bone, the urine has been found to be deficient of that salt in the proportion of from one fifth to two fifths less, or one third to one half less than the ordinary constituting quantity. By this.

test, gestation can be diagnosed when other means are uncertain.

Spurious.—The following diseases may be mistaken for real gestation: dropsy, tympanitis, hydrometra, hydatids, moles, polypi, accumulation of blood in the cavity of the uterus, caused by an abnormal occlusion of the os uteri, and tape-worm.* But the changes of the uterus already mentioned, will enable the medical jurist to distinguish the one from the other.

Simulated and Dissimulated.—Different motives may induce a woman to pretend to be pregnant in some cases, and to conceal pregnancy in others. (See the Point on Exoneration.) But it is sufficiently established, that when the placental souffle, or fœtal heart and lungs are heard, this constitutes infallible evidence of gestation; evidence upon which a medical examiner may conscientiously affirm the fact. The

* I have treated some of these diseases successfully to the great astonishment and surprise of those who had mistaken and pronounced them to be real pregnancy. Some were manifested in married, others in single women, who were puzzled at the diagnosis given by accoucheurs of established reputation in the places where they have occurred, particularly a case of tape-worm of twenty-eight yards long in a respectable unmarried person, of Chili, South America, who had been declared pregnant by two midwives and the family surgeon; and another of a married French lady, in transitu from Peru to Bolivia, who had an abnormal occlusion of the os uteri which prevented her from discharging the blood in the monthly periods, and was also pronounced pregnant by two surgeons and two professed nurses, out of three who had examined the patient professionally.

absence of such signs will prove the contrary. (See next Point, Simulated Exoneration.)

Duration.—Nine calendar months, or two hundred and eighty days, is the ordinary term fixed by the generality of accoucheurs of all countries. But it cannot be invariably limited to that time, with exclusion of all exceptions. Nature, although generally uniform in her operations, is not always so in the present case. Exoneration may take place before or after that time. Any aberration on this subject must be considered as an exception to the rule. Sometimes there may be an error in reckoning, as it is not uncommon for a woman to have her periodical discharges for some months after conception, and thus she may be ignorant of her state until the fœtus is felt to move, and the abdomen is enlarged.

I have seen many well authenticated cases of much longer duration than the ordinary time, and am convinced of its possibility. I have met with several of the kind in different places of the Republic of Peru, where I have practised many years, which have been lengthened to an almost incredible period, and yet they were true cases of pregnancy. I attended a lady, Mrs. Osorio, in Callao, near Lima, in three successive parturitions, who was in the habit of being pregnant thirty-six months with each child. She was recommended to me, in 1844, by my esteemed friend, Dr. Passaman, of the latter place, who knew her to be subject to protracted gestations, previous to my attending her. After my first attendance, I took the

pains of examining her, carefully, every time she was about two or three months gone with child, in order to keep proper time; and to convince myself of that extraordinary peculiarity, I have followed up the examination every two or three months until the thirty-sixth, when she generally was exonerated of a healthy and robust infant. I have also invited several medical men to see her at different periods of gestation, who were perfectly satisfied of the real duration of pregnancy during that protracted period of time. Some of those gentlemen who saw her when she was about nine months gone, saw her again when she was about thirty months, and they could hardly believe it was the same state they saw some months before; for she assumed the same abdominal development on the eighth or ninth month after conception, as she had when she was twenty or thirty months gone.

Another peculiarity was, that she menstruated all the time, regularly, till a few weeks before parturition. This was a guiding symptom for her to know that she was to be exonerated soon.*

Other cases of still longer time than the above have been authenticated by several of the most respectable physicians of that country, and published in the 'Correo Peruano,' of Lima, in 1845, with the names and addresses of the persons, given in full, for the

* See Petit, 'Recueil des pièces relatives à la question des naissances tardives,' Amsterdam, 1766. Where he relates a case similar to the above, among many others of the kind "which the Parisian Academy of Science were not ashamed to admit into their Memoirs."—Caspar, loc. cit., p. 366, Syd. edit.

conviction of those who would like to examine and to investigate the subjects personally.

Those who are acquainted with the medical literature must know, that there are many similar occurrences recorded in standard works and periodicals, both at home and abroad, the veracity of which is too well established to be doubted. Among those works there are some which shew examples of other kinds of protracted pregnancy—not extra-, but intra-uterine pregnancy, where the fœtus became ossified with the enclosing membranes, and continued in that state many years without any other inconvenience to the mother than what depended on the size or volume and weight of the body within the abdomen.

I have witnessed one of the kind above described, that is to say, an ossified fœtus, conceived, and retained in the uterus more than twenty-five years. The subject of this case was a lady of rank in Lima, who became pregnant soon after her marriage (being then about twenty-five years of age), and went through the ordinary period of gestation without any difficulty whatever. But soon after the ninth month, when she was expecting to be exonerated, sine die, she began to feel her abdomen growing low, and gradually losing the feeling of the child's motion, till both sensations disappeared in Thus she remained more than twenty-five years as before stated, without any inconvenience of any kind. I examined her after death, in 1845, and found the fœtus, not only in a cartilaginous state, but

reduced to one fourth or one sixth part of the ordinary dimensions.

With regard to the shorter duration of gestation than the ordinary time limited by the laws of different countries to nine calendar months, it is a well known fact that nature has been, and can be, as capricious in one way, as she can in another. There are many facts of this kind on record, not of premature, for this term implies non-capability of extra-uterine life, but of ripe births of a full growth, if not of time, at least, of perfect organic development; and of course capable of living, as they have lived and grown up, to the adult age. (Rare exceptions to the general rule.)

Hence it follows that the duration of gestation, though legally limited to the above-stated period of time, can possibly be diminished or increased according to nature's will. The laws of one of the German states, whose name I do not remember now. are favorable to the early as well as to the late births. because founded on the logical reasoning that if nature is prodigal in one way, she may also be parsimonious in another. Are, then, legislators justified in legislating against the laws of creation? Are they competent judges to reject the mysterious operations of human reproduction (as it has been done many a time), on the ground that they are mysterious? Hippocrates led them into this error. Hippocrates was the first medical jurist who has given such an erroneous evidence on the subject. But the authority or testimony, of the oracle of Cos, has been revoked

by the majority of his successors, who have observed those facts in every civilized country; facts that cannot be repealed without causing offence to nature, i.e. to the divine power of the Almighty, which prove that the law not always arises out of the fact, as it has been generally understood, Ex facto jus Oritor.

The father of ancient medicine, knowing the fragility of human kind, might have thus given his opinion upon which the laws of succession of several nations are founded. But his opinion might have been, at the same time, contrary to his sentiments and convictions, though he gave it with the best intentions, e.g. to prevent the increase of corruption and abuses introduced in those times among families of rank, with regard to morality. the moral point of a judicial question is not within the province of a medical jurist. If a woman transgresses the law let her be tried by proper evidence, and condemned if guilty. On the other hand, is a virtuous woman to be branded with ignominy, with adultery, and opprobrium, because she has had the misfortune to bear a child, in her tender closet, longer than the time fixed by human law? and because she has brought it to light one or two years after her husband's death ?* Is an innocent child to

* The husband of that lady already alluded to, who was in the habit of being pregnant about three years with each child, was a captain of a ship, and was often away from home more than one year at the time. Knowing the peculiarity of his wife in her protracted gestations, he made a legal declaration, stating that, if his wife should have a child from one to three years

be bastardised and deprived of his rights, his family titles and his fortune, because he is the subject of the caprices, nay, the anomalies of nature?* i.e., the incomprehensible and therefore inexplicable operations of her concealed laboratory? such laws, I say, are retrogradent; they are inhuman, unjust, and barbarous, in the present progressive state of knowledge in science and in general intelligence. They are barbarous, because the offspring of the dark and uncivilized ages of more than two thousand years past; and it is to be hoped, that an amendment will take place in the present generation of progressive intellectual development in all branches of human undertakings, that may be compatible with modern civilization and justice.

Influence of the powers of the mind.—That gestation is capable of altering the intellectual and moral faculties of some women, for good or for evil, to such a degree as to make virtuous or vicious actions the subject of their happy or unhappy condition, is a physiological fact that no well-informed medical man, has, as yet, dared to deny.

A moral woman may become vicious, even criminal,

after his absence from home, or after his death, it was his wish that such a child should be legally recognised as his own legitimate child.

* See Blackstone's commentary on the writ called "De ventre inspiciendo" quoted in the Eleventh Point under the head Simulated Exoneration, where forty weeks are only allowed to a child, after the death of its father, to recover or to lose inheritance of any kind.

while pregnant, and vice versa. A woman inclined to evil propensities may become moral during the same state, for the influence that the growth of the fœtus has over the mother's brain and nervous system, sometimes in one way, and sometimes in another, is evidently proved by physiology, theoretically, and by those who had opportunities to witness

it, practically.

If the object of the judicial investigation be to determine whether the state of gestation is, or is not, capable of producing the said moral or intellectual derangements, as to lead, or to incite women to any offence contrary to law, such an evidence should be given affirmatively, provided it can be proved that they have not been guilty, or addicted to vice, or to ill propensities in their non-pregnant state; for it is a positive fact that the uterus, during pregnancy and for a short time after exoneration, is the origin of all passions; or, in the language of a learned physiologist, it is the mirror where every physical and moral impression is reflected.

TENTH POINT.

MISCARRIAGE AND ABORTION.

This point has for its object to ascertain whether the expulsion of the fœtus is natural, accidental, unconscious, or involuntary; and to distinguish an innocent from a wilful and premeditated act—child murder.

Miscarriage is the expulsion of the fœtus before it has attained its full growth, by means of physical or moral causes operating on the mother during gestation. It differs from abortion in this, that miscarriage is a physico-pathological phenomenon which may come on accidentally, or unconsciously; whereas abortion is the result of a criminal act, effected or provoked by violent artificial means, of a physical or mechanical nature; and conveys the idea of a voluntary crime. These two terms have been, and still are, used synonymously to express the same thing; but I think it is proper to adopt the distinction I venture to offer, in order to separate the one from the other, and to discriminate between an innocent occurrence, and a criminal act.

A miscarriage may take place at any time during gestation; if it occurs after the seventh month, it is

no longer so called, but is termed premature birth; as at this period the child can be saved. But if it leaves the womb before that time it cannot live, generally speaking; hence the term miscarriage.

The more advanced the state of gestation, the less is the danger which might result from a miscarriage; and the oftener a woman has miscarried, the more her constitution inclines to new misfortunes of the kind. Miscarriages are more liable to occur again at the same time of gestation, at which the former or last one happened; if once past the period, the danger to miscarry diminishes. It can become a habit. If a woman approaches the time when formerly she had miscarried, she must be careful to prevent a return.

Chilliness followed by fever, and a pressing down sensation, which afterward increases to labour pains; cutting, drawing, mostly in the loins and abdomen; discharge of bright red, or coagulated dark blood, are evident symptoms of miscarriage. Much more alarming are those symptoms when abortion is provoked by any substance internally taken, or externally applied; or by whatsoever mechanical means may be used to that intent.

Miscarriage may be produced by natural or accidental causes, e.g., by the death of the fœtus in utero, from diseases proper to its organization; from physical, pathological, moral, or hygienic causes operating on the mother. "She may, without assistance, have the fœtus so suddenly expelled on the floor, in

the street, or in the water-closet, as not to be able to prevent the miscarriage."

It may take place unconsciously when labouring under the effects of narcotic, intoxicating, asphyxiating, anæsthetic, or other similar agents, capable of producing absolute insensibility; or, when in this state through affections of the mind. Also by the toxical effects of drugs administered for particular diseases, contusions by casualties, or otherwise; whereas abortion is a criminal act wilfully provoked and effected by the administration of vegetable, mineral, animal or other substances, in sufficient quantity to produce that effect. Also by external or internal mechanical means of a violent nature, which should be ascertained, proved, and declared by the medical jurist, that the commission of such a criminal act may be fully established, and verified.

Evidence.—On delivering it, in either of the two above-mentioned cases, careful examination must be made of the mother and fœtus as early as circumstances will permit; for, if putrefaction has taken place, in the latter, it will be difficult, if not impossible, to form a judicious opinion.

Spurious.—A mole, false conception, a sanguineous body, or any other affection may be mistaken for a fœtus. But every well-informed jurist is aware that from the second to the third month after conception, the embryo will be found in an organized condition so as to be distinguished from either of the stated anomalies.

How long death has taken place?—In this case the examiner must consider the state of putrefaction, if any, and every circumstance that can hasten, or impede it. Warmth and humidity promote decomposition of animal substances, which putrefy more rapidly in running than in stagnant water; and in alluvial than in argillaceous, sandy, or chalky soil.

Justified abortion.—Medical men are justified in provoking abortion, in cases where the life of the mother is to be saved; though the legislative enactments of some countries differ in this respect.

Conclusion.—It has been said, that a woman who destroys her offspring not likely to live, is less criminal than the one who destroys it during or after birth; that the first commits a fæticide, i.e. an act upon an imperfect, non-mature, non-viable beingan attempt to murder. While the second acts upon a perfect being, capable of extra-uterine life—a child murder. The penal codes of nations vary in this But the laws of England consider, not only respect. both acts as one, and both punishable alike; but even the "attempt by administering drugs to destroy a living infant, in ventre sa mere, though it may in no degree be injured," was, at one time, punishable with death (43 Geo., C. 58). But capital punishment has since been abolished by the recent statute (1 Vict., C. LXXXV, §. 6), whose words are as follows:

"Whosoever, with the intent to procure the miscarriage of any woman, shall unlawfully administer to her, or cause to be taken by her, any poison or noxious thing, or shall unlawfully use any instrument or other means whatever, with the like intent, shall be guilty of felony, and being convicted thereof, to be transported beyond the seas for the term of his or her natural life, or for any term, not less than fifteen years, or to be imprisoned for any term not exceeding three years."

It will be observed that by either of the two statutes no exception is made with regard to medical men being, or not, justified, in provoking abortion in particular cases, e.g. when the mother's life is to be saved in preference to that of the child. This, I repeat is justifiable; for there may be cases of organic malformation, or other diseases of the mother, in which a Casarean operation would be attended with much more danger to her life, than to provoke abortion; and therefore, the preference of the latter over the former operation is obvious in practice, and vindicable on principles of humanity and reason, if not on principles of civil or criminal law.

Neither does the present statute comprehend the woman that attempts or executes abortion on herself intentionally; and it is, therefore, open to question whether she could be tried for that crime under such statute, which differs from the one first mentioned in the following words, "administer to, or caused to be administered to, or taken by any woman, etc. The words "taken by any woman," convey the idea of self-execution without the impulse of a foreign cause; whereas the meaning of "or cause to be

taken by her," in Victoria's statute, implies the agency of another person who causes her to take "any poison or noxious thing." Such a sentence as "taken by," expressed in George the Third's statute, is omitted in that of Victoria, and renders the point under consideration subject to question. But common sense will tell us that a woman who destroys her offspring by either of the clauses stipulated in both statutes, commits a crime of Prolecide (from progeny or descent), by which generic term is meant Fæticide and Infanticide; the former is the destruction of the fœtus not of term, and the latter is the death of a mature infant of full term, before or after birth. In the first place, the subject is not capable of extrauterine life; in the second it is. It is not the province of a medical jurist to decide this point. I only mention it in order that magistrates and jurors will bear it in mind for its elucidation.

It seems that the English law is, with regard to miscarriage as a crime, founded on the generic term Prolecide, for either of the two divisions, which I venture to offer, are considered as one, and punishable alike. (See the last part of the Prophylaxis of Conception, a foot-note.)

ELEVENTH POINT.

EXONERATION.

In examining cases of exoneration we have for our object to ascertain whether it is real, simulated, or dissimulated; and the period at which it has taken place, with every incident that might occur with regard to the mother, and her offspring.

The approach of exoneration is indicated by slight discharge of mucus from the vagina, febrile excitement, sickness, and shivering; followed by grinding pains about the loins and back, shewing the os uteri to be dilating. This progress being accomplished, there supervene stronger and more frequent recurrence of pains, followed by the rupture of the membrane, and the action of the progressive vital mechanism for the expulsion of the child.

After the child is expelled, and the mother free from its dependencies, there remain positive signs of exoneration, which will be found, when recent, in the sexual parts, abdomen, and breasts, from the first day to the first two or three weeks; after which time they gradually disappear. Lochial discharge and milk in the breasts, remain for a longer time. These alone are not always real, but presumptive signs.

The labia majora and minora will be found dilated, tumefied and red; the hymen, if primiparæ, will be found much dilated, and very often torn; discharge from the vagina of a lochial fluid, sometimes with bloody appearance; os uteri dilated, and its body enlarged. The abdomen flaccid and somewhat wrinkled. The breasts with a serous secretion in the first three or four days, hard, voluminous, and replete with milk after that time.

Legal aspect.—If decision be required regarding the fact of an exoneration having taken place or not, the above signs will be a sufficient guide for the resolution. The presence or absence of the same, will also decide the question with respect to simulated or dissimulated exoneration.

On the other hand, if it be to determine the period of time which has elapsed since the occurrence took place, the medical jurist should be guided by the above signs which are proper to that state; to which may be added the peculiar expression of the eyes and face characteristic of most women after exoneration has taken place; much more so if they be primiparæ; an expression difficult to describe, but easy to observe, or to notice when familiar with the practice of attending women in childbirth.

Dissimulated.—There have been cases where women, wishing to conceal their state, have artificially procured the means to extinguish, or to modify the real

signs of exoneration; but this temporary deception can last but a short time. A close observer will soon find out the truth by proper examination.

Instances have occurred of concealed exoneration, connected with prolecide, in which women of inferior ranks, sleeping in the same room with other persons, have risen in the middle of the night pretending to go to the privy, have been exonerated, and have returned to bed without any of their companions being aware of what had occurred. (The child being dropped into that place.) And even women engaged in washing out-doors, or working in the fields, have been known to leave their occupations, retire to a secluded place, effect their exoneration, return to their fellow labourers and go on with their work during the remainder part of the day, without any change in their appearance than looking a little paler and thin. I have known cases of this kind, when the women have placed the baby in their basket among the clothes, and have walked home, a distance of more than two miles. These occurrences prove the strength and capability evinced by women, in peculiar circumstances, of suffering and concealing pain to the utmost degree.

Simulated.—Cases have occurred in which women, pretending to have been exonerated, have excited some of the real signs artificially, and produced a foreign child to prove their false pretensions. But an experienced examiner will soon detect those impositions. In such a case, the law of this country provides a writ called "De ventre inspiciendo" in

favour of the heir presumptive: "When a woman is suspected to feign herself with child, in order to produce a supposititious heir to the estate, the heir presumptive may have a writ de ventre inspiciendo, to examine whether she be with child or not; and if she be, to keep her under proper restraint till delivered, which is entirely conformable to the practice of the civil law; but if the widow be, upon due examination, found not to be pregnant, the presumptive heir shall be admitted to the inheritance, though he had to lose it again on the birth of a child within forty weeks from the death of a husband."* Blackstone, comm., 1, 456. See also the Roman practice explained in the Title of the digest, 25, tit. 4. De inspiciendo ventre custodiendoque partu.

The views of juridicial investigation in the two above-mentioned cases, are obvious. In the first place is to ascertain and to declare a positive fact: in the second place is to discover a negative truth, i. e. a positive delusion and false representation, in which the medical jurist is the only competent authority for the magistrate to go by.

Multiplus exoneration is the result of the impregnation of more than one ovum in a woman already

^{*} Should a case similar to that of Mrs. Osorio (see the Ninth Point, on Gestation) occur, the law, according to the above commentary, which limitates the time of gestation to forty weeks, would deprive a legitimate heir of its inheritance if it happens to be born after that time from the death of its father.

pregnant, or effected at once by a single act of copulation, the solution of either of these two propositions can only be answered after the birth of each successive infant; and as to the possibility of two or more successive conceptions co-existing during gestation, the answer must be given affirmatively. The same will be the case with regard to the possibility of these conceptions being the result of connection with one, or with several men. Hence multiple exonerations of two or more different races.

Difference in birth.—Multiple births are mostly produced within a few minutes or hours, days, or weeks of interval from each other; but owing to the accidental death of one of them, while the others continue alive, or owing to the later conception of the second, third, &c., over the first conceived, there may be a material difference in the time of exoneration, and consequently in their bulk or degree of maturity, giving us the following varieties:

Congruens, when nearly of equal growth, and produced by a common birth.

Incongruens when there is an unequal growth and produced at different births, and different times or intervals from each other; which intervals, as it has already been observed, may be extended or prolonged to days, weeks or months, as I have witnessed several times. (See the Third Point, the paragraph under the head Superfectation.)

To determine priority of birth is not difficult. The medical jurist should declare it, if he has attended

parturition, as the disposal of family titles and property depend on his decision.

Such a decision should be, which of the two children was born first, not which was conceived first. But in cases where twins are connected in some particular way, as the well known Hungarian sisters, where separation is impossible, such cases are then considered as uni-births, and the law of inheritance ought to grant equal right to each of them; even in cases where separation could be effected, as in the Siamese boys, they ought to be considered, also, as uni-births, and entitled to equal shares of inheritance, be that what it may.

The prevailing laws of most nations render primogenitus the heir of family titles and fortune, except in Republican countries, where there is no aristocracy of blood, nor categories in families, not only because he was born first, but because he was the first conceived, though conception of twins may take place, as it has been observed, by one single act of copulation, in which case, the intervals between the births seldom exceeds a few hours, and is often only a few minutes; whereas when a longer period expires, e.g. days, weeks, or months, it is reasonable, not to suppose, but to affirm, that the conception of the last born, has occurred after that of the first; which occurrence is called superfectation. (See an exception to this rule in the paragraph Superfectation, Third Point.)

To decide paternity is not very easy, perhaps impossible, unless one child be black and the other white,

as it has happened in cases of adultery; both white and black women producing a white and black infant from having copulated with a white and a black man.

I have known black women in America and Africa, who have had twins of two different races (one black and the other mulatto), the product of two successive copulations with two different coloured men—one white and the other black—acknowledged by themselves, as they had no motive for concealing those occurrences; and I have also known white women, in the West Indian Islands and in Peru, to have a white and a mulatto child at the same time, the result of concubinage with white and black men. In one of such cases the woman was accused of adultery before an ecclesiastical court, where she acknowledged and confessed the transgression; and her husband obtained a divorce a mensa et thoro.

Cases of the kind have been attributed by medical men to the influence of the mind, and not to the sexual conjunction between a woman of one colour and a man of another. Such cases have occurred in countries where the black population is generally greater than the white; but not to my knowledge have been noticed in Europe, where no black population exists. I do not intend to call in question the doctrine of the influence of the mind, which ought to be as strong in white, as it is in black inhabited countries, or that of the imagination; on the contrary, I am willing to admit it as far as the limits of my intellectual faculties will allow; but I should like to

penetrate into the interior of those women's hearts who have been the subject of judicial investigation, and whose defence was based on the ground of mental influence, before I could conscientiously give my evidence in their favour.

Exoneration per viam non naturalem, is not a novelty, though of rare occurrence. There are many cases of the kind recorded in medical works; particularly on "Tocology,"* whose authenticity cannot

* From the Greek τοκος, parturition, and λογος, study, or the science of parturition. This conveys the idea of a previous knowledge of the theory and practice of all the collateral branches of that science, not the study of the isolated act of mechanical parturition, but the science of reproduction in the full signification of the term; whereas the English word midwifery, from mid and wife; and the term obstetricy, from the latin obstetricia, i.e., a woman who attends another woman in childbirth, do not convey any other idea but that of a practical act. term obstetricia has been adopted by most nations to express the act of attending, or of assisting women in childbirth; but obstetricia in those days was nothing but an empirical art, founded on common experience-routine-and void of established tenets. Now that accumulated experience is reasoned upon and brought under general principles, it assumes the character of a scientific ART, and therefore it must be scientifically denominated Tocology, the science of parturition.

Some years ago, when I ventured to introduce the above technicality into the British medical literature, I received an anonymous letter from a medical man (posted, Leicester, Jan. 28, 1857), condemning it, not only on the ground of its being of a foreign importation, but for the reason that it is a "word I never saw before, and the meaning of which I do not know." This does not prove that the word is wrong; what it proves is the ignorance of the rejector in the continental medical literature, and in the language from which it is derived.

be disputed. I shall, however, relate the two following ones as having taken place by the two opposite viæ. According to the 'Philosophical Transactions of London,' No. 416, page 435, Salmutts, obs. 94, a fœtus was discharged from the mouth, and another from the anus. A case similar to the latter is mentioned in the 'Mercurio Peruano,' published in Lima, Peru, 1792, vol. v, page 67, of a negro woman who was deficient of the ordinary sexual organs, externally; and on whom the functions of copulation and menstruation were performed through the anus. There was nothing visible in the corresponding locality of the genital organs, but the urethra. She was an unmarried woman, and had several children, all conceived and exonerated through the anus.

TWELFTH POINT.

STERILITY.

The object of examination in this case is to determine barrenness and its correlative conditions in questions connected with matrimony, and divorce.

STERILITY, in any creature, is the quality of not producing its kind, want of power of conception, unfruitfulness, barrenness, defect of emotion, sensibility, or fervency. It may be absolute, relative, or temporary, viz.:

Absolute, as in Viragines, i. e. manly women — women who never menstruate: as

In women affected with mental indisposition, or derangement; and as

In women labouring under some incurable disease, or defective organization of the organs of reproduction.

Relative, when there exists too much or too little sexual excitement, as in women of too ardent temperament, and excessive excitability, causing the act of copulation to degenerate into spasms and convul-

sions; as where there is too little excitement or none at all, as in prostitutes, where too frequent copulation with different men, alternately, extinguishes the vital powers of reproduction.

Temporary.—When in perfect health of body, there is a mental disposition that prevents the erotic sentiment, and allows the feeling of sexual enjoyment to be developed with some men, but not with others; while with other women, apparently free from either bodily or mental affections, no efficient cause can be ascertained. I have known several women of this kind to be sterile for six, and even ten years, and then became fruitful. Some of my professional friends have known cases of fifteen years of matrimonial life, during which time the women did not conceive; but, in the sixteenth year conceived and bore children who lived and enjoyed good health. Anne of Austria, wife of Louis XIII, was sterile for twenty-two years. Catalina de Medicis, wife of Henry the Second, was unfruitful during the first ten years of her marriage, after which time she became so prolific that she had ten successive children, five of which were males and five females. MAURICEAU. I could reproduce many other cases of the kind, but the limits of this work do not allow room to mention them now.

Other kinds of women, having had progeny once or twice in their matrimonial life, have remained unproductive afterwards for the rest of their days. In these no cause could be found out to ac-

count for the absolute cessation of their reproductiveness.

Causes of sterility.—The assertion that a sufficient degree of "vitality, excitability, and irritability," of the organs of reproduction, is requisite to conception, has been too frequently advanced by physiologists to make any comment on the subject, and yet those very gentleman will sustain, that conception can take place in a state of absolute insensibility. (See the Third Point, on Conception, under the head "Authors on Sterility.") Besides the absence of those physiological conditions, there are other causes which make a woman unproductive, viz.: pathological affections and anatomical derangements, either in excess or in defect of the construction, or organical development.

I have examined the bodies of several women who were known to be sterile during life, and found the total absence of uterus in some, of the Fallopian tubes and ovaria in others. Scrofulous, syphilitic, or psoric virus, may be also the cause of barrenness.

We frequently see trials of divorce reported in newspapers, brought on by husbands against their wives for adultery, where the latter had been unfruitful during a number of years of matrimonial life, and became pregnant by other men. Infidelity in such cases was generally found to be the result of ill treatment from their cruel husbands. Consequently their wives could not possibly have had the least degree of love or affection, and therefore no power of reproduction during such a behaviour. Hence

temporary sterility caused by the previous grief, melancholy, aversion, &c.

Long residence near chalybeate springs, and the abuse of drinking or bathing in their waters, have been observed, on the continent, to produce sterility in prolific women. It appears that this phenomenon is due to the active and constant action of the iron contained, not only in the water used, but also in the atmosphere; iron, not in its material, but in a dynamic state, which for the sake of precision, I shall call aura mineralis.* This, floating in the air, is inhaled during a long sojourn there, and produces the same, if not a greater, effect, than the waters themselves, when internally or externally used. Hence the administration of Ferrum in some sort or other by practitioners of all schools, to sterile women suffering from anæmia, hydræmia, or any other affection of the kind, which renders them temporarily barren. (See the Prophylaxis of Conception.) Again:

Antipathy, or sexual repulsion, is often the cause of sterility. There can be no doubt that sympathy, or sexual attraction, consists in the harmony of opposition of the physical and moral susceptibilities and predispositions of the parties. If the female is excessively, and the male defectively predisposed, the

^{*} See the provings of the hydrosulphuretted waters of Harrogate, published in the July number of the 'British Quarterly Journal,' 1863, p. 361. Where the above technicality is given by myself to the dynamic or spiritual principle which emanates from the elements constituting those waters.

existing antagonism between the two will generally be the means of effectual procreation, as when two opposite electricities attract each other. But, on the other hand, if both individuals are alike susceptible, the similarity will be converted into antipathy, and render procreation impossible, as when two electricities of the same denomination repulse each other. No pair can be prolific so long as there is likeness of disposition, either physical or moral; as no pair can be more sympathetic, more apt, or better qualified for reproduction, than that in which the contrast is most perfect. The excess of the one is, in such case, counterbalanced by the defect of the other; whereas in the other case, two excesses, or two defects alike, constitute antipathy. Nothing but a change, or separation, in similar circumstances, will render the pair fruitful.

Change of climate will also produce sterility, as it has been observed in women born in that region of South America which lies between the Rivers Amazones and Nepo. When such women leave their native home, to reside in some of the limiting states, they will surely (like many plants when transplanted from one climate to another) become, if not absolutely barren, at any rate, less prolific than in their own native land. Finally:

There are other causes of sterility which have been overlooked, and even questioned by some physiologists, viz.: the first is that when twins of different sexes occur, the female has in general proved to be so; but

not when the twins are both females: the second is the abuse of self-gratification, as stated elsewhere;* and the third is one not dependent on the woman's part, but on that of the man, e.g. when he himself is not impotent, but barren for want of the life-giving principle in the semen, produced by some particular disease; and when impotence, and deteriorated, semen is the result of the abuse of Agnus Castus. (See the last part of the Seventh Point.)

Conclusions.—If it be true that the power of conception ceases with the function of menstruation, it must also be true that menstruation must be essential to conception. Writers on the subject have reported cases in which women have had progeny at a very advanced age, e.g. at fifty and at sixty years old; but this does not prove that they had it after menstruation had left them, for it is not uncommon to see women menstruate as late as that age, and even above it, when they would have been considered beyond productiveness, i.e. in their critical age, or turn of life.

It also has been said that girls have conceived as early as the tenth year of age. This is true, but mention is not made whether menstruation

* See pp. 54 and 67. It is lamentable to state, that women who become *sterile* by the illegitimate modes of satisfying the sexual appetite (already spoken of in different places of this work), are, at the same time, subject to diseases of the heart, and of the respiratory organs, as the immediate effects of that disordered propensity—vicious amativeness.

had, or had not preceded conception; while others assert that menstruation was wanting in both cases, and that conception took place notwithstanding. For my part, I can positively affirm that neither of those anomalies, i.e. conception without previous menstruation, in some form or other, (as already stated in the First Point under the head Puberty, and in the Legal Aspect of Conception, q. v.) has ever come to my knowledge during an extensive practice of more than forty years in different countries. On the contrary, I have known women as old as the already mentioned ages to have children, but not without the usual monthly discharge; and also girls, in India, Africa, and South America, to become pregnant at, and before, the tenth year, who have invariably menstruated before that time.

The medico-legal question regarding sterility, is connected with that of matrimony and divorce. Before Claudius Cæsar, it was enacted, that no man after sixty, and no woman after fifty years of age, could contract matrimony, because it was considered that they were not capable of procreating at that advanced age. But Cæsar abolished that law on the ground that marriage was not exclusively instituted for procreation; and a woman, though acknowledged sterile, and a man impotent, were allowed to enjoy the union of that state at any age whatsoever. This is the law, in the present day, of all civilised nations.

With respect to divorce, the conjugal bond cannot be broken merely because the woman is unfruitful; nor because the man is impotent, either in a physical, or in a pathological point of view; though some nations allow the separation, in either case. Some allow it a mensa et thoro, only; and some a Vinculo matrimonii. In the first case the marriage is suspended, not destroyed or dissolved; in the second it is declared null and void, as in that of Napoleon the first and other notabilities, who repudiated their wives because they were sterile. Perhaps they were of similar temperaments and dispositions, which caused repulsion in them.

When the cause of divorce is founded on Adultery, the union bond is legally broken and annulled by human and divine laws (see the British legislation on the subject, and Math. v, 32, and xix, 9); but not when founded on the fruitlessness of the wife, as in the case of Napoleon and others, who appropriated to themselves the right of dictating arbitrary laws, contrary to the will of God. Nor when based on any other cause whatsoever, either on the part of the husband or wife.

THIRTEENTH POINT.

ABNORMOUS REPRODUCTION.

To describe the sports of nature in the reproduction of our species, known by the terms Lusus Naturæ, and Hermaphroditism; and to exhibit the spurious productions partaking of the irrational organization, resulting from the unnatural gratification of the sexual appetite, such as Monstrosities from Bestiality, is the object of the present point.

Lusus naturæ are those sports or freaks of nature which show a deformed, or an unnatural conformation of any part of the body not partaking of any other kind or species of animals, but the human. Such a deficiency, or supernumary organs, and ambiguity of sex called hermaphroditism, are distinguished from those spurious productions called monsters in this: that the latter partake of some kind or other of the irrational being, whereas the former do not.

Hermaphrodites are those individuals of our species whose genital organs appear to be a mixture of those of both sexes. There are many histories of cases of the kind recorded in works of medical litera-

ture, and many preserved specimens and models in various anatomical museums of Europe and America, which confirm the existence of this kind of *lusus* natura, the medico-legal part regarding which, in reference to matrimony or inheritance, ought to be resolved by the examination of the parties, thus constituted, as follows:

1st. Masculine hermaphrodism, when the man shews signs of feminine sex, his characteristics being those of a male:

2nd. Feminine hermaphrodism, when the woman presents appearances, or parts resembling those of the masculine sex, her characteristics being those of a female, and—

3rd. Neutral hermaphrodism, when the man or the woman possess such a kind of conformation in their genital organs as to render the true characteristics or positive sex difficult to determine. This kind of hermaphrodites are called *Epicene*, because they are common to both sexes; and they are the kind which offer the greatest difficulty as to the predominant character, or property of sex.

While residing in Cuba, I became acquainted with a person of the latter class, whose history I shall relate in a few words, being of an extraordinary nature. Madame Henriquette Faber, born in Switzerland, widow of Monsieur Faber, surgeon in the French army during the time of Napoleon the first, dressed herself in man's apparel soon after she had lost her husband, and went to the Island of Cuba,

passed her examinations as surgeon by the medical board at the Havana, and settled in the town of Baracoa, as a general practitioner, where she soon entered into a very extensive practice, showing great skill in the profession, and liberality with the poor. After a few years' residence there, she undertook to marry another woman (she being known and appearing always as a man). The matrimonial union took place, and she made a confidential communication to her companion regarding her real sex, to which a solemn pledge of secrecy was made, and they lived happily together for some time, when Madame Faber was compelled to leave her home on business, for a short time. During her absence, her companion was taken severely ill, and, according to the precepts of her religion (being a Roman Catholic) she was obliged to confess, in which act she revealed the secret to the priest. That unworthy minister of the church, contrary to the sacred duties of his ecclesiastical vows, denounced the case to a magistrate, who immediately sent a warrant to secure the pseudo-husband, Madame She was soon taken and tried; the marriage was, of course, annulled; her property confiscated; and she condemned to live in a convent for the rest of her life.

While she was in prison, I attended the medical examination made by the physicians appointed for that purpose, by which it was ascertained that she partook of two sexes, in every respect; but the decision of the examiners was that she appertained to

the female sex. This celebrated case took place in the year, 1822-3.*

From medical reports and newspapers, I have been acquainted with many cases of concealed sex in men and women, which have been discovered during life and after death, but none similar to that of Madame Faber, except the one related in the 'Manchester Guardian,' whose number, or date, I do not remember. It runs thus:

"Curious case of prolonged concealment of sex.—On Saturday, an inquest was held at Pendleton, before Mr. W. S. Rutter, county coroner, on the body of a person, dressed as a labouring man, and apparently about fifty years of age. The body had been found in the river on Friday, and according to the evidence of the landlady of a beer-house, the deceased had called at her house and had drunk two or three glasses of beer. The witness remarked something strange about the manner of her customer, who made some inquiries as to the hour at which the

* A penis-like clitoris was only seen three times among many thousand public prostitutes examined by Duchatelet. 'Prostitut. dans la Ville de Paris,' quoted by Dr. Casper, l. c., page 252, foot-note.

I have seen three myself in different countries, besides that of Madame Faber. One very recently (June, 1863) in a girl fourteen years of age, at a boarding-school in England, who was in the nabit of using it, in concubinage with other girls of the same establishment, and was discharged from it on that account.

I proposed to amputate that organ, but could not obtain the consent of her parents, although she was willing to submit to the operation herself. gates of the adjoining workshops were usually closed. The deceased was not afterwards seen alive. It transpired that the deceased was known as Henry Stokes, but who was in reality a woman and named Harriet Stokes, had for thirty or forty years worked as a brick-setter. She had taken contracts for work, and had been engaged in building some of the tall chimneys in the neighbourhood. She had actually married a woman, and they lived together in this city as man and wife. The jury returned a verdict of 'Found drowned.'"

Whether such a woman partook of one or more sexes, the coroner leaves us to guess. Perhaps there was no post-mortem examination made to that effect. If there was, the sexual parts must have been overlooked.

The peculiarity of men being possessed of such genital organization as to resemble a woman, and to be fitted to receive another man, as a female receives another female when organically constituted to penetrate into her, as in the case of the Peruvian girl (see the Sixth Point), is of a rare occcurrence. I never saw one, but I have been informed that such a thing has existed.

"Marie Rosine Göttlich, decidedly a man, but with truly hermaphrodite external genitals, which I have repeatedly examined, permitted himself to be constantly used as a woman." This case is described in Casper's 'Wochenschrift,' 1833, I, No. 3.

Monster.—This term has different significations in

the English, as well as in the language from which it is derived. In medicine it has often been confounded with the terms deformity, anomaly, sport, prodigy, malformation, &c., which have no relation at all with its real meaning in that science. It has, therefore, been misapplied and misunderstood. If taken in a scientific point of view, it should be confined to express the difference between the one and the other term, as I have distinctly explained under the head lusus naturæ, q. v. Consequently I shall apply the term monster to those individual beings produced with a shape, in whole or in part, foreign to the species to which they belong. Monsters of this kind have been produced by both rational and irrational creatures, suspected of having had connection with the species of animal which they resemble.

Sometimes they were found to participate of the human organical construction, and at other times they were exclusively irrational beings. They have been born alive, and have continued so for hours or days. Others have been born dead prior to maturity.

The efficient cause of these occurrences has been attributed, by some authors, to the criminal and unnatural act of bestiality; while others consider them as the result of the powers of the imagination, acted upon at the time of copulation. And the third opinion on the same subject asserts, that they can also take place after conception, when women, in their early state of gestation, have been mentally affected by the

sight of subjects of the kind in public, or in private exhibitions; and thus, it has been said, they have produced monsters.

The first two opinions may be right respectively, as each of those occurrences has been noticed to be possible. The former by the corrupted and depraved wickedness of the human kind, and the second by the powers of the imagination, at the time of copulation only—not after conception; for the influence of the mother's brain over the child in utero, cannot, in any possible way, alter the already established organical structure, or constituting parts of the fœtus, either in number, place, colour, or nature, after its rudimental formation has undergone the ordinary course of feetal growth, as those of the third opinion assert, which is contrary to the laws established by the Creator. Monsters, therefore, are considered as irrational beings, whether produced by rational or irrational mothers, and excluded from the action of civil and criminal laws.

Bestiality.—" Whosoever lieth with a beast shall surely be put to death." Exod. xxii, 19.

The terms bestiality and sodomy have hitherto been considered, by most writers, as synonyms, and have been defined as "the unnatural connection of a man with mankind, or with an animal." (Dr. Taylor, l. c. page 718.)* But if we take the proper derivations

^{*} Dr. Casper also confounds the terms Sodomy with Bestiality (l. c., p. 335), and substitutes that of Pæderastia for Sodomy, page 330. Both these terms may be called or used as synonyms,

and etymology of these words, we shall find that the former has a different signification from the latter; viz., Bestiality from bestia, bestialis, a beast, or whatever relates to beasts, i.e. what is foreign to human reason and human understanding, means the concubitus between a rational and an irrational being of different sexes, performed per viam naturalem; whereas the word sodomy derives from sodomum, sodom, and sodomitæ, sodomites, the people of one of the five cities of the plain of Palestine, four of which were, according to sacred history, destroyed by fire from the heavens for the wickedness and vices of their inhabitants in the time of Abraham (Gen. xix). Hence the appellation of sodomy to the vice common to the people of the city of Sodom, i.e. to the concubitus of two rational beings of the same sex, performed per viam non naturalem, as when a man pene-

but not the former ones. I quote these two authorities as being the most modern writers on medical jurisprudence, from whom a more correct use of words was expected.

Leviticus xx, 13, speaks of Sodomy, which is the concubitus of man with a man, thus: "If a man also lie with mankind, as he lieth with a woman, both of them have committed an abomination; they shall surely be put to death; their blood shall be upon them."

And with respect to the term BESTIALITY, the verses 15th and 16th of the same chapter are explicit enough to shew the difference—e.g.:

15th. "And if a man lie with a beast, he shall surely be put to death: and ye shall slay the beast."

16th. "And if a woman approach unto any beast," and lie down thereto, thou shalt kill the woman and the beast."

trates into another man; or that of two different sexes performed through the same means, i. e. as when a man penetrates into a woman per anum. The active party, in either act, is known by the name of Sodomite; and the passive one, by that of Catamite, from Catamitus. The terms Pederastry and Exfornicor have also been used to express the same unnatural vice; and the concubitus performed by two females, extra or intra viam naturalem, whether one of the two partake, or not, of such characteristic organization as to supply the natural organ of the other sex, is called Tribadism, as stated in page 88, which is meant to express the act of reciprocal sexual gratification between two females, whether hermaphrodites or not. A woman in the habit of carrying on such a practice with another woman, that is to say, the active party in the act, is called a Tribad. The Romans called them both Fricatrices.

I know three cases of bestiality having occurred in three young women, near the city of Manilla in the Phillipine Islands, in 1830, two of which resulted in a premature exoneration of several animals resembling pups of the canine species (two from each girl), some of which were much mutilated.* The third case was that of an Indian girl who had been carried away from her home to the forest by a semi-domesticated Orang-outang. This

^{*} It is a duty of every medical man to warn mothers not to allow their daughters pets of the canine kind, by any means, males particularly.

quadrumanous beast took the girl to a secluded place, and kept her always within sight. In the course of time she became pregnant, and when about four or five months gone, the beast disappeared from the place, when the girl availed herself of that opportunity to leave her rustic abode, and to make her way towards her own home. Between three and four months after her return, she gave birth to a hybrid being, who partook more of the father than of the mother's nature. Her friends were so horrified at the birth of such a relative (a real monster), that they thought proper to make it disappear, and to keep the history of such an occurrence to themselves. But the girl had to confess, and she could not conceal from the priest what had taken place.

It was through the Rev. Padre that I became acquainted with this, not unique, case of bestial rape. I ascertained, from the girl herself, that she consented to copulate to save herself from being injured by her ravisher, who, according to her account, treated her with kindness, and provided all the necessaries of life; and that he never used any violence, except in the act of taking her away from home. She also stated that she partook of the sexual connection after she became more familiar with the beast. Hence her pregnant state.

Similar to the above, there are many cases recorded in the medical literature of past times, which prove the fragility of human nature in supplying her lust by unnatural means, as in the first two cases; and

the possibility of reproduction taking place in a female of one particular species with a male of a distinct one. Of these occurences there are incontrovertible proofs in the irrational animal, as well as in the vegetable creation, e.g.: in the first place, the different kinds of dogs intermixing one with another; in mares with asses; in goats with ewes; in rabbits with hares. Also in different kinds of birds and domestic poultry. And in the second place the different kinds of flowers, plants, and fruit-trees when grafted, or inserted one into another, to obtain flowers, plants and fruits of different kinds from one single Hybrids thus produced, either in the animal or vegetable kingdoms, though very nearly allied to each other, are, in some instances, incapable of being reproduced inter se.

Now, kind reader, be thou a professional man or not, a dissenter, or an orthodox believer in the doctrines and tenets of the established medical school—I leave thee to draw inferences from the preceding pages, and to sum up the amendments which the present state of progressive medical knowledge calls for, and which thou mayest think proper to be made in those points placed before thy consideration, according to acknowledged advances in all departments of science, legislation, and morality; more particularly in the physiology of reproduction, in relation to medical jurisprudence. In doing so, thou shalt compare the doctrines of every school with the facts and observations adduced by thy humble friend,

the writer, to confirm his assertions; and then thou shalt judge for thyself.

Should such assertions be considered and condemned as medical heresies, brought forward merely to oppose old established beliefs, which have received the sanction of ages gone by, I shall, contrite, recede from them as soon as the opposing colleagues shall bring forward irrefragable proofs to the contrary—proofs based, not on à priori reasoning, quotations, or theoretical argumentation, but upon practical experience, as the foundation of all our knowledge of nature and its laws. And I, then, shall penitently exclaim, "Alas!! alas!! forty years' practice of 'love's labour lost'!!!

VALE MI LECTOR, AMICE, VALE.

APPENDIX.

A brief anatomical description of the organs of reproduction, when in the pubert and integral state.

The organs of reproduction, in the female, are contained in the external and internal parts of that region of the body, below the abdomen, called the *pelvis*, or the basin, which is formed by the os sacrum, os coccyx, and ossa innominata. Their names and

organic composition are as follows:

EXTERNALLY is the mons veneris, which is a triangular eminence immediately over the pubis, covered with hair; its composition consists of an adipose, or fatty substance, fibrous filaments, and cellular texture. The Vulva, composed of the Labia majora and minora: the former are two prolongations extending from the pubis to the perineum, one at the right and the other at the left, covered with hair, forming the entrance of the vaginal canal, and having two smaller ones internally, called the labia minora. They are both of a rosaceous colour, and their composition is the same as that of the mons veneris, more or less developed in different women; the cellular being rather loose, generally, and having a greater quantity of sebaceous follicle: the

Nymphæ consist of a small carnosity or mem-

branous fold, formed of the innermost parts of the labia minora; and is situated on the upper part of the vagina, below the urethra. It is so-called, not because it resembles the white water-lily, from which flower it derives its name, but because it stands in the water course, similarly to that aquatic plant, which grows in watery places. The nymphæ, which have also been called *Alæ internæ minores clitorides*, and the clitoris itself, are the principal organs and seat of sexual thrill, in the act of copulation: the

Clitoris is a glandular body situated above the nymphæ, and before the meatus urinarius, from half an inch to one in length. Its composition is cavernous; its internal texture extremely tense, furnished with a considerable quantity of nerves, and blood-vessels. It is subject to great sensibility, and capable of considerable enlargement, awing to its creative faculty, the

enlargement, owing to its erective faculty: the

Meatus urinarius — urinary passage—is situated immediately below the symphysis of the pubis, and behind the nymphæ. It extends from one to two inches in an almost straight line to the urinary bladder, and is composed of membranous, mucous, and cellular

texture. It is also called the urethra: the

Hymen is a thin membrane of a semicircular form, situated at the entrance of the vagina, which it partly closes below; its composition is membranous, capable of being dilated, and contracted to a great extent according to the individual organization. This is the symbol, or emblematic representation, of physical virginity. But very easily effaced in some persons; whereas in others it is not so.

Internally are the Vagina, a somewhat conical canal, with the apex downwards, capable of being extended to great dimensions, in every direction, during parturition. It extends from the labia to the cervix of the uterus, interiorly. Its composition is

of two coats: the innermost is villous, interspersed with many excretory ducts; the other is of a cellular and muscular texture; two glands, nerves, and many blood-vessels: the

Uterus is an oblong-pyriform receptacle, situated in the cavity of the pelvis, above the vagina, and between the urinary bladder and the rectum. It is divided into fundus, cervix, and body; the whole being from two to three inches in length, and from two to three in diameter. It is composed of a firm spongy substance, and contains arteries, nerves, and veins; lymphatic vessels, muscular fibre, and cellular texture; and is capable of extending several times more than its natural dimensions during gestation.

"The uterus is the central point of pleasure and pain: if not the origin of all passions, at least, the mirror where every physical and moral impression is reflected," particularly during gestation, and for a short time after exoneration.

The Tuba Fallopiana, or oviducts, are two cylindrical canals, included in two laminæ of the peritoneum, which arise at each side of the fundus uteri; passing transversely, and ending with their extremities turned downwards at the ovaria. They are from three to four inches long, and have a diameter of a common quill. Their composition is membranous, and cellular: the

Ovaria are two oval bodies suspended in the broad ligaments of the uterus, below the tuba fallopiana, about one inch in length, and half in breadth, whose composition is Ovaria, in the literal acceptation of the term. These are the initiative rudiments of human offspring, one or more of which may be fecundated by one or by different successive acts of copulation, either with one and the same, or with different men.

Also without the immediate act of copulation or conjunction with the other sex. (See the Point on "Conceptio Sine Coitu.")

DEATH OF INFANTS, AND THE SURVIVORSHIP OF MOTHER AND CHILD.

Death may occur from different causes, anterior or

posterior to birth.

When an investigation is being made to decide on the cause of death, the following possible and not uncommon occurrences, should be borne in mind.

1st. That the mature infant may die from convulsions; from the improper administration of drugs to the mother; or from her sufferings in disease of the body or mind. It may also die suffocated by protracted or difficult travail; by malformation of its, or the mother's organical construction, and thus produce a natural still-born death.

2nd. That a new-born infant may die after exoneration for want of assistance, when the mother has been alone, labouring under insensibility from physical or moral causes; or that it may die torrefied by fire having taken hold of its bed, or linen, and thus produce an accidental death.

3rd. That it may die from umbilical hæmorrhage, because the cord has remained untied, through neglect; or by the ligature being loose; or by want of nourishment, thus producing death by omission.

4th. That it may die from external suffocation, asphyxiation, submersion, wounds, luxations, fractures, contusions, or torrefication wilfully inflicted upon it; and thus produce death by commission—infanticide; and in delivering the evidence on the subject, the medical jurist shall be guided by circumstances,

incidents of time, and space; by situation, and character; by the moral condition of the mother; by external and internal appearance of the infant; and, in fine, by everything that may contribute to the welfare of society; for, hydrostatic, pulmonary, dokimastic, and other tests have proved, in many instances, insufficient. Consequently, much confidence cannot be placed in them. To determine how long the child has been dead, the examiner must consider the state of putrefaction, if any, and all the circumstances which hasten, or impede it. Humidity and warmth promote decomposition. Animal substances putrefy more rapidly in running than in still water; also in humid earth than in dry argillaceous, sandy, or chalky soil.

The disappearance of an infant, or fœtus, in dissimulated, concealed parturition, or abortion, may convict the mother of infanticide, or of fœticide; though the laws of some countries require that either of the two should be produced to admit the charge. But if either of the two is not present, or not to be found, and there are evident proofs of the mother having been exonerated, the medical jurist should give his evidence accordingly, and leave the moral part to the inquiring magistrates and jurors, the only competent judges to decide the criminal or non-criminal act, according to the law of the land, legally; or according to their convictions, morally.

Survivorship.—If the mother and child are both found dead, an early examination is indispensable, for if putrefaction has taken place, the decision as to which of the two died first will be difficult. The following signs will, however, aid the resolution:

1st. When a pregnant woman is found dead in an advanced state of gestation (death being the result of other causes than parturition), and there are presump-

tive signs of the child being alive, gastro-hysterotomy should immediately be performed: if the infant evinces the slightest voluntary motion, signs of maturity, and is free from organical malformation, or other affection of the body, it would be sufficient evidence to decide that it survived the mother. The reverse of these signs, will prove the contrary.

2nd. When a child born asphyxiated, either spontaneously, or by being extracted by manual or instrumental operations, and the mother dies in consequence thereof, the examiner should, particularly, notice whether there is, or not, action in the lungs or heart, for it has frequently been observed, that apparent death may last beyond twenty-four hours, after which

time resurrection (reaction) takes place.

In this question the survivor is the *subject* of inquiry; and inheritance the *object* in view. The former is decided by the medical jurist; the latter by the magistrates and jurors, according to the civil laws of the country where such an investigation takes place, that the property, or family titles may be appropriated to the party to whom it may concern.









