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PASTORAL MEDICINE,

BY

DR. CARL CAPELLMANN,

PRACTISING PHYSICIAN AT AIX-LA-CHAPELLE.

TRANSLATED,

WITH THE AUTHOR'S SANCTION,

BY

REV. WM. DASSEL,

PASTOR OF ST. MARY MAGDALENE'S CHURCH, HONESDALE, PA.

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PREFACE.

THE favorable notices of the work I have attempted to translate which have appeared in the German reviews, its intrinsic value, and its eminent practical usefulness, inspired me with the desire to open for it a wider sphere of usefulness, by clothing it in an English dress.

The author is Dr. Carl Capellmann, an eminent German physician practising in Aix-la-Chapelle. His treatise, "De occisione foctus," brought him a great reputation among theologians and physicians, and he was strongly urged to publish a book on "Pastoral Medicine." In deference to this request, this present work appeared in Easter, 1877. A second edition was called for, in August of the same year, and a third in the spring of this year.

The task of translation has been, for obvious reasons, a most unwelcome A large, and, perhaps, the most important, portion of Dr. Capellmann's work treats of subjects connected with the faithful observance or criminal breach of the sixth commandment. The calamitous consequences of the latter to soul and body alike cannot be exaggerated. The moral and physical ills it brings in its train are so complicated with one another, that it is impossible to treat them apart; and this compels both the moralist and the physician to enter into details of the most repulsive description. But neither the one nor the other should be deterred from his duty of treating subjects of so painfully unpleasant a nature, when it is a question of alleviating, still more of curing, the moral and physical miseries of his fellow-creatures. If the exigencies of our work force us, at the bidding of hely charity, to lay bare some of the hideous vices which degrade humanity. and afflict it with its most frightful sufferings, we shall receive the sympathy of all, save those conspirators against God and the dignity of the human being who have neither loathing for vice, nor sympathy for suffering.

It may be doubted whether or not it would be advisable to conceal the treatment of such subjects under the disguise of a dead language. On the whole, I subscribe to the opinion of the author, pages 69 and 70, who is in favor of the vernacular, following thereby the example of the Rev. J. C. Debreyne, a distinguished physician, who, in obscurity at La Trappe,

made a happy use of his vast stores of medical knowledge.* A perfect familiarity with the dead languages is a less common accomplishment nowadays than formerly; and in a treatise of so essentially practical a nature, requiring the utmost precision of expression, and wherein the slightest misunderstanding might have the most serious results, there would appear to be almost a necessity for choosing the vernacular language as the vehicle of information.

As the work is addressed *exclusively* to prieses and physicians, I have endeavored, with the author, to lessen the disgust necessarily provoked by unavoidable details, by putting them into a Latin disguise, when that could be done without any risk of misunderstanding.

Nevertheless, I reiterate, most earnestly and solemnly, that the work is intended wholly, exclusively, and entirely, for the professional use of whether priest or physician, and that it is altogether unfit for the perusal of the lay or general reader; as indeed must all works be, treating of similar subjects.

With regard to the translation itself, I have endeavored to make it a faithful rendering of the original. At first, indeed, I had contemplated making sundry alterations and additions, such, for example, as would naturally be suggested by a difference of country, customs, climate, etc., But since the work is likely to find readers wherever the English language is spoken, I thought it best to leave Dr. Capellmann's work unaltered, trusting to the good-sense and judgment of individual readers to make any indispensable modifications suggested by the conditions we have referred to.

If this work should prove of some practical service to my clerical brethren, and to Christian physicians who make a ministry of their art, the somewhat difficult, and sometimes disagreeable, task of its translation will not have been undertaken in vain.

WM. DASSEL.

Honesdale, Pa., December, 1878.

^{*} De begune, P. J. C., "Essai sur la théologie morale, considérée dans ses rapports avec la physiologie et la médecine," V. édition. Paris, librairie Poussielque frères, rue Carselle 27, 1868.

In whatever is written in this work, it has been my intention to be in complete accord with the doctrines of the Holy Roman Catholic Church. Should anything have been inadvertently advanced ever so little at variance with them, I recall and disavow it, by anticipation, unconditionally.

THE AUTHOR.



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The following editions of hand-books of Moral Theology are quoted:

Gury, Compendium Theologia Moralis, Antonii Ballerini adnotationibus locupletatum. Editio tertia. Romæ: 1874-76.

S. Alphonsi de Ligorio, Theologia Moralis, curavit P. Mich. Heilig. Mechlimae: 1852.

Scavini, Petr., Theologia Moralis Universa. Editio tertia Parisiensis Parisiis: 1759.

CAPELLMANN'S PASTORAL MEDICINE.

INTRODUCTION.

A HAND-BOOK of "pastoral medicine" is a want that has long been felt by the clergy in the care of souls. The appearance of such a work, therefore, needs no apology, but opinions may be divided as to what it should contain.

In my view, pastoral medicine is the sum of those explanations anatomical-physiological, as well as pathological-therapeutical, a knowledge of which is necessary to the priest in the exercise of his pastoral functions.

I prefer to extend the scope of pastoral medicine so as to meet likewise the exigencies of physicians. Consequently, it will be my aim, in this work, to communicate to physicians those dogmatical and moral principles, a sufficient knowledge of which is indispensable to render their professional acts always safe and consistent with Christian morals.

To all appearances, physicians nowadays do not feel the need of becoming acquainted with those principles and teachings of theology which have a bearing on their profession; at least not so much as priests feel, on their part, the necessity of obtaining that amount of medical knowledge. The need, nevertheless, exists, and it would be manifested but for the materialism now prevalent in medical science. Priests are often at a loss to decide some moral questions, because they have no knowledge, or an insufficient one, of physiological and pathological details. Physicians, likewise, are apt to do violence more or less to their own conscience, or that of their patients, through a lack of knowledge of certain positive teachings and principles of moral, and even dogmatic, theology. Students of medicine have little time to add the study of theology to that of their own science, and still less opportunity of doing so at our universities, even if they were so inclined. It must be also deeply regretted that the theoretical, and, not unseldom, the practical instructions given at our universities are often at variance with good morals.

Lectures upon medical jurisprudence are delivered both to law-students and students of medicine, and the books thereon are arranged to enable both lawyer and physician to gain all necessary information about a science which is, otherwise, foreign to each respectively. In the same manner, pastoral medicine should, in my opinion, meet the exigencies of both priest and physician, the more so as the questions at issue cannot be clearly determined, unless theology and medicine mutually complete each other. It is, of course, unavoidable in such a work to treat on matters that were well known before, either to the priest or to the physician.

The nature of my subject does not, however, require me to treat systematically all, or nearly all, the branches of medical science in a popular form, any more than to write a systematic treatise on the whole of Dogma and Morals. If it were otherwise—if a work on pastoral nedicine demanded an elaborate treatment of both the sciences on which it touches, a multitude of quartos would scarcely suffice for it, instead of a volume of the modest pretensions of the present. No one would think it within

the scope of a book on medical jurisprudence to give, in a chapter on infanticide, a systematic treatise on obstetrics, or a detailed discussion of the laws and juridical views on murder and manslaughter. It is enough to convey just so much information as is indispensable for the immediate object in view; anything more is supererogatory. This fault of overloading the work with scientific detail mars nearly all books on pastoral medicine that have hitherto appeared. Systematic treatises on anatomy, physiology, dietetics of body and soul, semiotics, pathology and therapeutics, even whole sections of pastoral theology, were jumbled together. Of these branches some have no fitting place in pastoral medicine, because physician and priest ought to have a thorough acquaintance with them. Psychology, for instance. This science in our "philosophical century" is much sinned against, and does not receive proper attention from many a physician, nor even from many a priest; but it is beyond the limits of pastoral medicine to correct this defect. In the same category with psychology may be placed dieteties of the body and soul. Every intelligent, educated man is expected, in his own interest, to inform himself on the method of living best suited for health of body and health of soul. the obligation is still more binding on priests and physicians who have not their own welfare only to consider, but who are intrusted also with the care of the souls and bodies respectively of their fellow-men. To be a physician whether for body or soul, something more is required than mere prescriptions or attempts at conversion. To preserve the health of both is of far greater importance than to restore it. The science of dietetics, consequently,-a knowledge of which is demanded by the very offices of both priest and physician, -does not come within the legitimate sphere of pastoral medicine. The same cannot be said of dietary nursing of the sick; regarding which the information necessary for a priest must be given, as he may do a great deal of good, especially in the country, by removing prejudice, reforming abuses, or by keeping off noxious agents. For he generally visits the sick as often as the physician, sometimes oftener, and may be of service at times, in controlling somewhat the injudicious nursing of relatives.

In regard to anatomy and physiology, it would be very useful for every intelligent man to have some knowledge of his body and his functions, in order to have a clearer idea how to live according to the laws of health. For priests such a knowledge is almost a necessity. But it is not the province of a work on pastoral medicine to impart that knowledge. There are, within easy reach of all, numbers of popular medical treatises on this and other kindred subjects, which contain all that is necessary to be known of them. To treat such matters in the somewhat aphoristic way that would be required to restrain them within the limits of pastoral medicine, would be likely to leave them unintelligible and obscure. Pastoral medicine has to confine itself to matters absolutely necessary for a priest in his vocation. Some of the facts and results have of course to be accepted without an erudite scientific investigation, as the saying is, "in verba magistri." This must always be the case, if one cannot make a study one's self of a science. Were it otherwise, the different branches of science would be of comparatively little value; since no one can for himself study and master all science.

The same may be said of pathology and therapeutics. All that is necessary to be known of them by the priest is how to recognize, in general, danger of death; what diseases and sudden seizures, more or less known to him,

are dangerous, and how to act in sudden emergencies. He will then be able to judge of the proper moment for administering the last sacraments, so as not to be under the necessity of remaining inactive and unadvised before the physician's arrival. Having urged the desirableness of a wider dissemination of a knowledge of dietetics, and even of anatomy and physiology, I am compelled to discourage the study of pathology and therapeutics on the part of the clergy. I am well aware that I touch a sore

point here, but I do so unshrinkingly.

That educated as well as uneducated persons should be fond of speaking and thinking of medical subjects, is only natural. Health is the greatest of all possessions next to life, and it is only to be expected that every man should take a deep interest in whatever concerns health and its recovery. But to judge dogmatically of medical matters without any previous study is quite another thing, and is quite unpardonable, especially in men of education, who do this nowadays with an audacity and obstinacy almost inexplicable. If their shoes are to be mended, they go to the shoemaker, because they know very well that they cannot do it themselves, not having learned the trade. But a bodily disorder! "My dear friend, that's quite a different thing. A living body is not a shoe!" Any rent in a shoe is plainly visible and is only material; but the disorder in a living body cannot always be seen or felt; there may be no material change; it may be produced by functional perturbations, the primitive cause of which lies somewhere else than in that organ or member whose functions appear to be disturbed. The organization of a living body is the most complicated work of the whole creation; and this is why even men of known ability and recognized competence, of sound judgment, employing

the best methods of investigating disease, and taking the greatest care, are sometimes not able to find out in the living body the real cause of perturbations that threaten life. This, however, does not hinder men who may chance to have had ever so little education, from giving their opinion on the subject. If they have only glanced over some popular medical treatises of the trash-literature of the day, then they imagine themselves competent to judge of the cause and nature of a disease, to prescribe the proper remedies, and to speak of the treatment employed by the physician in the most contemptuous manner. Even "experiences" are quoted by non-professional men, without any pretension to education, in support of wrong views, and in opposition to the authority of learned practitioners.

Such a remark as this, "I have seen a case the same as yours get well directly by a very different treatment;" or, "That disease passed off without the use of medicine," is often heard. A disease may be cured, of course, by the operation of nature without the interposition of medical remedies; but that very same disease may just as well lead to death or to chronic sickness, by a complication of functional derangements not visible to unprofessional eyes. Firmly believing in "post hoc, ergo propter hoc," they overlook the healing power of nature, which may, in many organisms, in spite of erroneous diagnosis and wrong treatment, be strong enough to overcome the disturbance caused by the disease and by the use of wrong medicines. their "experiences," as they eall them, are to them sufficient proof of the correctness of their idea of the malady and its proper treatment. Quacks, medical humbugs, patent medicines included, are fostered and encouraged by such people. Apart from the money thus foolishly squandered, the lamentable fact remains that thousands

are rendered chronic invalids through such folly, less perhaps from using remedies improper in themselves, than for want of proper treatment.

For this reason alone, persons outside of the profession had better leave medical books alone; the more, as, through such studies, the condition of their own body is foreibly impressed upon them. Often has experience proved that even members of the medical profession, men of known ability, and of many years, practice, lose all sound judgment with regard to the state of their own health. Beginners in medical science are, of course, the most amenable to this weakness. When I studied at Würzburg, Professor Bamberger related that, in each term, after the lectures on a certain class of diseases, especially heart diseases, a great many students applied to him to be thoroughly examined. They imagined that they had discovered in themselves many of the symptoms enumerated in the lectures and text-books. The morbid conditions and dispositions they thought themselves subject to, proved, of course, on a slight examination, to exist only in a morbid imagination. Naturally, men outside of the profession, would-be-doctors, who gain their pseudo-wisdom from incomplete and ill-understood treatises, are still more apt to be deceived and misled by such symptoms as every one of them fancies himself to have found in his own constitution. Experience proves this fact. The study of medical books is arraigned as one of the principal eauses leading to the widespread malady of hypochondriasis by nearly all writers thereon. When medical books, popular or not popular, are found in the possession of hypochondriaes, as is generally the case, the physician will order, as a first step toward the attempted cure, a holocaust to be made of all of them. Essays on pathology and therapeutics, therefore, necessarily only half understood, cannot but be of harm to the general reader; and, for this reason, dissertations thereon should not be contained in a work on pastoral medicine. Such a work should confine itself to giving the necessary information how to render immediate ussistance in sudden emergencies; the more so, as priests, specially in rural districts, are rather tempted, by urgent entreaties, to play a little the part of a doctor, mostly in a harmless manner. Nowadays the services of a physician can almost everywhere be secured without any difficulty Such attempts, therefore, on the part of priests, are not to be encouraged. They should reject all requests of this kind, because their vocation is to instruct the people; and it is their duty to oppose all prejudices, quackeries, and superstitions. He, the priest, should rather convince the people how they are bound in conscience to apply to a competent physician. Of course, when asked to recommend a physician, he must be guided by pastoral prudence.

The objection will be made to me, and has been made to many physicians, that such reasoning smacks too much of egotism. I will answer with a commonplace. Physicians are bound to give that counsel which is best suited to preserve to their patients health and life. Supposing a man has a sore leg,—if an amputation is performed, the patient, according to the conviction of the doctor, may recover; if not, he will die after a few days. For performing that amputation the physician will receive a large fee; but none, or a much smaller one, if he does not perform it. To advise the amputation conscientiously, lays him open to the charge of acting in his own interest, just as much as to counsel a patient to employ a competent physician, and not a quack, on the honest conviction that he will fare

better with the first

It may be objected that there is no necessity to touch this question. I am, however, of the opinion that such points should not be left undecided. I have purposely entered into this discussion to make it clear why I have not, as some other writers on pastoral medicine have done, supplied any information which could enable the priest to act the part of a physician. The physician, on the other hand, should, for still more cogent reasons, avoid assuming the place of the priest. For this reason, he will find in this book remarks and hints only on such matters of moral theology as he ought to have before his mind, in order not to neglect the spiritual welfare of his patients, and always to act for himself in conformity with the dictates of Christian morals.

A.—THE FIFTH COMMANDMENT.

I.—ARTIFICIAL ABORTION AND PERFORATION OF THE LIVING FŒTUS IN ORDER TO SAVE THE LIFE OF THE MOTHER.*

1.—ABORTION.

To Christian civilization belongs the merit of having first prohibited artificial abortion as a remedy, and of having nearly eradicated its employment. At the close of the last century, the English earned the doubtful merit of having introduced it again among obstetric operations. The French followed, as did, after some reluctance, the German accoucheurs. Jaquemier writes, 1867: † "Aujourd'hui qu'on n'hésite plus à interromper dès ses premières phases une grossesse, qui n'eût pu arriver à son terme sans mettre en danger la vie de la femme enceinte, il n'est pas un médecin digne de ce nom qui consentirait à rester voluntairement un temoin inactif." In Germany, Mende, Kiwiseh and Scanzoni reintroduced the operation, to whose in. fluence it is due that nowadays nearly all lecturers and writers on obstetrics treat at least of one or the other mode of performing it.

Abortion is the expulsion of the impregnated ovum from the uterus, at any time during pregnancy, before the

1:67. Tom. 7, pag. 575.

^{*} Compare my pamphlet, "De occisione foctus," quam abortu provocato, perforatione, cephalotripsia medici audent. Aachen: R. Barth. 1875.

† Jaquemier en Dictionaire encyclopédique des sciences médicales. Paris,

fœtus has attained such development as to be capable of life. By abortion the fœtus is doomed to a sure death. Artificial abortion, therefore, causes, as its direct effect, the death of the expelled fœtus: artificial abortion is fœticide.

In order to be in a position to pass a competent judgment on the question, whether the provocation of abortion may be allowed as an interposition of art to accomplish delivery, the precise subject on which the operation acts must first be defined. This subject is the impregnated, developing, living ovum of the human female. This ovum must be presumed to be living, as long as there is no conviction of its death.

There is, of course, no objection to expel a decayed fœtus. But, as nothing can be conclusively presumed during pregnancy respecting the life of the fœtus, it must be presumed to be living; if living, it has a human soul. The one human soul is also the vital principle of the animal life of man. There is no reason to claim for the human embryo, either until its delivery, or before a certain period of pregnancy, any other principle of life, or another soul; qua cedente, as St. Thomas thinks,* the rational human soul occupies its place. Why ask for a repeated activity of the Creator, where one act is sufficient?

The absence, relatively speaking, the inactivity, of the higher functions of the soul during intra-uterine life, cannot be regarded as an evidence against the presence of a rational soul. For, on the one hand, this is explained by the fact that the organs of perception and action are not

^{*} Quaestiones disputatae, quaest, unica de anima, art 9: "Et sie, quum in embryone, primo sit anima regetativa tentum, quum perventum fuerit (se. embryo) ad majorem perfectionem, tollitur forma imperfecta et succedit forma perfectior, quae est anima regetativa et sensitiva simul, et utlima cedente succedit ultima forma completissima, quae est anima rationalis.

developed, or are obstructed in their functions. On the other hand, similar phenomena are of no rare occurrence. During sleep, swoons, catalepsy, etc., the functions of animal life are progressing, whilst the higher functions of the soul are suspended, or at least appear to be suspended. The soul need not be always acting in all directions: at least no conclusion can be drawn from the absence of some functions of the soul respecting the absence of the conditions of these functions. The absence, therefore, of the higher functions of the soul does not justify the conclusion as to the absence of the rational soul. We must maintain that the human embryo is endowed with the rational soul at the very instant of conception, and that the impregnated human fœtus is an individual human being.

Each individual human being, and, consequently, the impregnated human fœtus, has the right to live. This right cannot be disputed, unless,

- 1. The individual is deprived of it by acting against divine and human laws, or by trespassing on all natural and social order; or unless,
- 2. By any unlawful attack on the body or life of another, this other is justified, in self-defence, to harm the unlawful assailant, even to the depriving him of his life in order to preserve his own.
- Ad 1. The child, during its fætal life, cannot forfeit its right to live by acting against the law, or by trespassing on lawful order, being in total passivity by constraint. Nobody can deserve punishment remaining passive or not acting, when he is deprived of the possibility of acting, without any fault of his own.
- Ad~2. Neither can it be maintained that the fœtus acts as unjust assailant on the well-being and life of the mother. The embryo might eventually become a source of danger

to the life of the mother, but it becomes so involuntarily, without any action of its own, without any act of its will. Thus "unjust aggression" is completely absent. Yet, this element of "unjust" aggression is essentially necessary to justify a defence that may extend to taking away the life of the assailant. But it is exceedingly doubtful whether a child, which cannot be delivered without risk of death to the mother, can be considered an assailant at all. In most eases the hindrance to safe delivery lies with the mother, the cavity of the pelvis being too narrow, etc. The act of parturition also does not originate in the child, but in the mother. Through the movements of the uterus, which, although they are not under the control of the mother's will, yet originate in her, the danger arises for mother and child. Consequently, if, through a wilful act of the mother (conception), the embryo has been placed in its uterine position; if its expulsion from the uterus is aimed at by an action originating in the mother; if (generally at least) obstacles to this expulsion are seated in the mother:if, by these circumstances, all originating in the mother, the lives of mother and child are endangered, how can the child be called an aggressor, still less an "unjust aggressor"?

The mother, therefore, or the physician acting for the mother, cannot appeal to the principle of self-defence.

Consequently, artificial abortion must be regarded as wrongful killing, as murder.

Murder is prohibited by divine and human law; therefore artificial abortion is prohibited.*

But are there no cases in which artificial abortion may become allowable? We have to distinguish.

^{*} Physicians are sometimes asked, by persons pregnant from illegitimate intercourse, to procure for them an abortion, in order to save them from shame. That the physician can absolutely have nothing to do with such a request is clear; but some physicians advise the avoidance of a blank

- 1. Is it allowed to induce artificial abortion directly, in order to avert a risk of the mother's life?
- 2. Is it allowed to induce it indirectly, in order to avert that danger?
- Ad 1. The moralists answer: Nunquam licet directe provocare abortum. Even in order to avert danger of life, artificial abortion cannot be allowed. The objection, that the well-being of the mother is directly, the abortion indirectly only, intended, does not hold good. Except in one single case (see farther down), the danger to the mother is removed, only when and because abortion ensues. The salvation of the mother's life is not the direct and immediate result of the remedy, which in itself may have no effect in that direction one way or the other, but is employed to induce abortion; but it is the result only of the abortion procured. Any good effect directly intended should not result from any forbidden effect which is the cause of the former, for then this forbidden effect is necessarily directly intended.
- Ad 2. Abortion would be indirectly induced, if means are employed which appear necessary or useful to avert danger to the mother's life, but may, besides, produce the not directly intended abortion. One is allowed to employ means which are, in themselves, good or indifferent, in order to attain a good effect, although they may be supposed to procure at the same time a forbidden effect not intended, under these conditions:—

The intended good effect must be of the same value as the damage caused by that forbidden.

refusal, lest the person might go to another less scrupulous adviser. They recommend, rather, a feigned acceding to the proposal, by prescribing some indifferent medicine in order to detain the person. This artifice will, in most cases, fail. But, were it not so, even such feigned acceding to so criminal a proposal seems to me to be morally wrong, and certainly most unworthy.

The means employed must be fit to procure directly and immediately the good effect, this latter not resulting from the contemporary forbidden one.

Any other means to attain the good effect must not exist, or be unknown.

Lastly, every precaution must be taken to avoid the forbidden effect.

Thus it is allowable for a physician (cfr. Gury, l. e., tract. de V. 402) who treats a sick pregnant weman, even when there is no imminent risk of life, to use remedies which, according to the experience of medical science, are directly necessary or useful to cure the mother, even although such remedies may cause abortion. They should not, however, do so necessarily, but, in reality, very seldom. A possible danger to the fœtus is counterbalanced by the probable or sure cure effected by the remedies. Thus the directly intended good effect is of equal value with the perhaps ensuing bad one. To this category belong all pharmaceutical preparations for internal use in such doses as are requisite to cure other diseases; also, baths, bloodletting, injections into the genital organs, and the like. Of course, in using these, or such like external or internal remedies, we must not go beyond what is necessary to save the mother. The physician is bound, in using such remedies as those above alluded to, to hinder, as much as may be, the possible effect of abortion. Furthermore, a direct and immediate danger to the mother's life existing, it is allowable to use means which, while apt to save the mother directly and immediately, may yet, probably, at the same time, cause abortion, if there be no other means of saving the mother, and all care be taken to avoid the abortion. I have proved, in my dissertation above quoted, (pag. 73 ff.) that in all cases, with the exception of one,

where accoucheurs nowadays believe an artificial abortion indicated, the one or the other of these conditions is wanting. Especially this condition, that the saving of the mother is to result immediately from the remedy employed, is never found in the premises. In all such cases, then, the saving of the mother would result only from the removal of the fœtus, from the interruption of pregnancy; wherefore an indirect inducement of abortion cannot be allowed. Abortion itself would be the means of saving the mother, and it is not allowed to employ it directly as such.

This, and all the other conditions, are found, I think, only in the single case where the uterus, with the foetus, is locked in the upper strait, as may happen through retroversion, sinking and prolapsus of the pregnant womb. If all other known means of turning or replacing the uterus fail, I believe it to be allowable * to induce abortion indirectly, by procuring the discharge of the waters, or by the perforation of the fætal membranes; for:

- 1. The mother's life is in an immediate danger and will perish with the fœtus, unless the womb is replaced.
 - 2. There is no other means of saving the mother.
- 3. To let the bag of waters escape has an immediate tendency to avert danger to the life of the mother. In this case, the danger to the mother is not caused by pregnancy, physiologically speaking, but simply by the mechanical enlargement of the womb. The discharge of the water removes this mechanical obstacle, contracts the womb, and this contraction has, for its immediate result, the possibility of replacing the womb, and thus averting the danger to

^{*} I have learned that some theologians do not approve of indirect abortion even in this case. I see no reason to recede from my opinion, until my reasonings are refuted and until I am convinced that there is wanting one of the conditions which would make, according to the above, the operation allowable.

the mother, before the abortion, that is certain to follow, may ensue, and without making abortion,—that is, expulsion of the fœtus from the womb,—necessary.

Fortunately, it is of rare occurrence that the womb is locked in this manner; and the impossibility of replacing it so seldom occurs, that Martin,* among fifty-seven cases, only once had to perforate the fœtal membranes. In fifty of these fifty-seven cases the uterus was replaced, spontaneous abortion ensued five times, followed of course by replacing of the womb; one woman was put into the hospital, in a dying condition, in consequence of vain attempts to empty the bladder: this one died, the uterus not having been replaced. The female operated on by perforation of the membranes died also.

2.—PERFORATION OF THE LIVING FŒTUS.

The operations of lessening the size of the child in order to accomplish delivery (perforation, cephalotripsia, embryotomy, embryothlasy) were partly known to the ancients. But, until the beginning of this century, proof of the child's death was considered as a condition, sine qua non, of performing them. But, later on, the custom of performing them grew more and more common; and it is nowadays regarded as indicated, when the alternative lies between the Cæsarean operation and perforation, in order to bring about the delivery, and the mother is unwilling to consent to the former.

Is perforation of the living fœtus allowed as a means of saving the mother? Certainly not, because it is a direct killing of the fœtus, which is always forbidden.

^{*} Martin. Die Neigungen und Beugungen der Gebürmutter; Berlin. 1866; und Zeitschrift fuer Geburtshilfe und Frauenkrankheiten von Martin und Fassbender. 1874, I. 1.

Moreover, in most cases it is not the only means, because the Casarean operation can almost always be resorted to.

Lastly, it is not a sure means of saving the mother,

although certain death to the child.

People have accustomed themselves to look upon the Cæsarean operation as nearly always fatal. Some moralists therefore are inclined to think it a means not well suited to avert danger from mother and child. Formerly the Cæsarean operation may have very often proved fatal, but nowadays it is comparatively safe.

Statistics* show that, of 100 mothers on whom this operation was performed, 38 were saved according to Kayser, 46 according to Michaëlis, 57 according to Hermann, according to Indes-Lacomb 60, and, according to Villeneuve, 69. As an average, 54 mothers were saved out of 100.

These statistics establish the fact that the death-rate ensuing from the Casarean operation is certainly decreasing, owing to improved surgery and treatment. This is made very clear from a table arranged by Garimond.† According to this, of 100 mothers operated on by Casarean section:

32 were saved 1750–1800. 37 "" 1801–1832. 51 "" 1832–1839. 60 " " 1839–1861.

Garimond followed the tables of Keyser, Lauth, Guéniot and Joulain. Besides, if we consider that, through this operation, 65 (Scanzoni), 67 (Michaëlis and Hermann), 70 (Kayser), even 72 (Villeneuve) per cent of children have been saved, not only can we not call the Cæsarean operation

^{*} Compare Capellmann, de occisione foctus, page 36.

[†] Trailé théorique et practique de l'avortement, considéré au point de rue médicat chieurgical et médico-leyal, par Emile Gari oud. Paris, 1873; Adrien Delahaye (quoted after Schmidt's Jahrbuecher, 1874. Bd. 161, No. 3).

with any truth a "réritable opération de sauvage (Ferdut*), especially when we take into consideration the gravity of the circumstances which demand its performance, but we must praise it as a most benign operation, and as a beneficent means of sparing human life.

The operations of perforation, etc., praised so much by comparison with the Casarean operation, result far otherwise from what we should have expected after so many laudations. The table of R. Lee (quoted after Kilian), although relatively the most favorable, shows that, of 127 mothers operated on in this way, 23 died; according to Professor Halbertsma,† of 100, 39–39.5 died; and of course all the children perished.

At an average, according to the above, of 200 lives, 122.5-123.0 are saved under the Cæsarean operation, 72.5 under perforation, etc. Surplus in favor of Cæsarean operations, 50 lives.

These calculations cannot claim absolute accuracy. Nevertheless, they render it sufficiently clear that the Cæsarean operation saves a great many children, and is not so fatal to the mother as perforation, etc.; that, on the other hand, the operations of perforation, etc., while certainly fatal to the child, afford but very slender chances of saving the mother, and are nearly as great a risk to her as the Cæsarean operation itself. This should suffice to make us reject any such operations, even from a simply utilitarian standpoint.

But even let us take the case wherein all accoucheurs would regard perforation as indicated: for instance, let it be an alternative between perforation and the Cæsarean

t T. Halbertsma, Prof. in Utrecht. (Cfr. Schmidt's Jahrbuecher, 1874, Bd. 161, No. 3, pag. 269.)

^{*} Ferdut, E., de l'avortement au point de vue médical, etc. Paris, 1865: page 103.

operation, between the necessity to terminate delivery in order to save the mother, and the mother's unwillingness to have the latter operation performed,—even in this case it can never be lawful for the physician to kill the child. There is absolutely no other way open to him than to await the death of mother or child,—either of whose deaths he cannot avert by lawful means,—and then to render to the surviving one every assistance his art may have taught him.

II. - OPERATIONS ATTENDED WITH RISK TO LIFE.

These are performed, in order to avert either a mediate or immediate danger to life; sometimes to correct deformities that either disfigure or discommode the body.

To perform such operations in order to avert danger to life is allowed, because, instead of probable death, the saving of life is rendered probable, or, at least, possible. They are allowed, should there be even mediate or remote danger to life. For the danger may increase by waiting longer, whilst the strength of the constitution to bear up against the operation and its consequences may be gradually impaired, and so the success of the operation endangered.

Dangerous operations, performed in order to correct evils that only disfigure or discommode, must be regarded in a different light. They cannot at once be pronounced allowable. We have to make a distinction: Is it allowable for a patient to desire an operation of the kind, and is the physician, when urged, allowed to perform it? To the latter question, I would answer in the affirmative. If the patient is sufficiently aware of the risk incurred in the operation, and still persists in urging it, the physician may

perform it. But whether the patient is allowed to demand an operation with risk to life for the end aforesaid, provided he has reasonable grounds to hope for a successful issue, in general I do not take on myself to decide. deformities, either very disfiguring, or eausing grave inconvenience, may under certain circumstances affect this or that individual so seriously, and may become so insufferable, that the patient would have a right of choice whether to hazard his life thus embittered, in the hope, in case of success, of enjoying a life free from the deformity under which he had been laboring, or of surrendering his insufferable life, should the operation result unfavorably. not been able to find a decision of this question ex analogia in the moralists. In illustration, I will give here the following:-Suppose a man confined to unjust and hard captivity, with no other avenue to freedom open to him than one involving risk to life, -would he not be allowed to run this risk, in order to enjoy, if successful, his freedom, and, if not, rather to surrender a life made unendurable to him? In my opinion he is allowed to do so, provided there be a reasonable hope of success.

In each single instance, therefore, the peculiar individual case of the patient in question, the inconveniences occurring from his state of health, and the prospect of success, should be weighed, and decision be given accordingly. Happily such cases are very rare.

Whether one is bound to have an operation performed which endangers life, be it in order to avert an imminent risk of life, or be it only to remove an evil which is a deformity and is a source of annoyance to others, is quite another question. In the latter case, certainly not. Even in order to save imperilled life, the best moralists decide that no one is obliged to undergo a severe operation

involving risk of life, although affording, at the same time, a hope of its preservation. "Non teneris vitae servandae eausa pati amputationem cruris sive brachii, aut incisionem ventris ad extrahendum calculum." (Liguori.*) But in my opinion this decision does not consist with the present development of medical science and surgery, difficult operations being now performed under greatly changed circumstances, and with better success. "Non tenetur quis," says Gury (l. c.), "servare vitam remediis extraordinariis, quaeque maximum dolorem afferant; non datur enim obligatio servandae vitae, nisi mediis ordinariis, quae magna non adducunt incommoda . . . neque dolores vulde acerbos causant." " Cum servare vitam operatione dolores nimis atroces afferente extra communes vires positum sit." (Scavini.†) The sufferings of the patient, and the difficulty of operations, are here the prominent conditions on which the decisions rest. how is it now, when chloroform renders patients almost unconscious of pain throughout severe surgical operations? Does the determination to attempt to escape certain death, with a probability of life by a painless operation, overtax the ordinary powers of man? The use of chloroform as an agent for the relief of pain during surgical operations is now well known, even to those outside of the profession; and this fact has done a great deal to lessen the fear of the surgeon's knife. This has to be well weighed in the solution of our question. Of course, the wound caused by the operation will give pain afterward; but such pain will not be greater than, and generally not so great as, that caused by the disease which necessitated the operation. Besides the pain, consideration is due to the fact that, sometimes, a permanent disfigurement is the consequence of an operation

^{*} Cfr. Gury, tract. de v, praec. 391. 3. † Scavini, tract. vii, disp. ii, cap. 1, art. i, § 2, qu. 3.

by which life has been saved—by the loss of a limb, for example. But, even in this case, the remarkable mechanical contrivances of our days afford much relief. Artificial teeth, limbs, etc., almost, and sometimes altogether, remove the disfigurement, and even supply the missing activity. The decision, therefore, given hitherto by moralists must be modified. I do not take it on myself to make that decision.

In regard to one operation, the Cæsarean, I am able to speak in a more positive manner. In cases wherein the natural delivery is only possible after perforation, or wherein, even then, the child cannot be delivered per vias naturales, the Cæsarean operation is indicated according to the laws of both science and morals. In the former case, if the operation be not performed, the child may be delivered after its death; but even then only by a painful operation, and one always hazardous to the mother. In the latter case, both mother and child must inevitably die unless the Cæsarean operation be performed. The mother, therefore, in considering the question whether she will consent to have the operation performed, must not only take thought for her own welfare, but for that of her child as well, which would inevitably die without this operation. We have stated, above, that it is not allowed to sacrifice the life of the child in order to save that of the mother: here we ask, Is the mother allowed to leave her child to die when, by the Cæsarean operation, a chance is afforded of saving it?

If the child could, after its death, be delivered in the natural way, the mother would have to run the risk of a lessening operation, should the Cæsarean operation not be performed. The dangers of the former are not much less than those of the operation, especially since the strength

of the mother is impaired during the period of waiting for the child's death. Consequently, the former would have to be performed under unfavorable circumstances. The dread of the operation, on which the moralists (cfr. Gury-Ballerini, pag. 385, note vi) lay particular stress, may be done away with by the application of chloroform. The peritia medici asked for is just as much required to perform perforation as the Cæsarean operation, and cannot therefore be of great weight in deciding which operation should be selected. If the physical strength of mother and child give a reasonable hope to save the life of both, I hold the mother bound to undergo the latter.

What has been said here applies with still greater force to the case wherein the child, even after the lessening, cannot be delivered per vias naturales, and both mother and child, could no remedy be found, would inevitably have to die. As a chance of saving the life of both is offered by the Cæsarean operation, the mother is certainly bound to undergo it. This operation, of course, is, as the moralists have it, "remedium extraordinarium ad servandam vitam;" but it is not so much to be dreaded as non-professionals imagine it to be, especially when the patient is placed under the influence of an anæsthetie. Sometimes, even now, this operation is performed without an anæschetic. I had several times occasion to observe that an average amount of moral courage does enable the patient to endure its pain even without chloroform. The dread is worse than the operation itself, because, in the eyes of men outside of the profession, an incisio ventris is a most terrible thing. Perforation, etc., and the subsequent extraction, are, as far as came under my observation, more painful than the Casarean operation; but they are not feared so much, because the extraction can be accomplished per vius naturales,

and the wounds and lesions are made directly on the child's, and not on the mother's, body.

The questions, what other obstetric operations are lawful, and when they are binding, are easily answered, if the supposed operations are conducted in a proper manner. Such operations as are required in cases of dangerous labor,—the use of the forceps, turning the child, induction of premature labor, -when used according to the rules of medical art, in the proper time and manner, only tend to expedite delivery, and thus to save mother and child. To induce premature labor, -namely, to induce delivery at a period of incomplete pregnancy, but when the fœtus has attained sufficient development to be capable of living separate from the mother, -is the most likely of all these operations to put the child's life in jeopardy, since its organs are as yet not perfectly developed, and therefore not fully capable of sustaining external influences and the changed mode of nutrition. This operation may be required, first, in cases wherein the delivery, at the full period of pregnancy, can only be accomplished either by a difficult operation, hazardous to both mother and childeven by perforation itself; and wherein there is a reasonable hope of having the child delivered, at an earlier than the natural period, living, and capable of living, without particular danger to the mother. In this case the mother cannot be bound to await the natural term of parturition, thereby hazarding her life. It is therefore allowable to induce premature labor by artificial means, and the mother may even be bound to select such means, especially as there will be no intense pain, nor insurmountable fear.

The same applies, probably with still greater force, to the second class of indications to induce premature labor: dangerous diseases of, and accidents to, the mother during pregnancy, when the mother might, and probably would, be saved by this operation. If the mother should die before delivery, the child would also be in extreme peril. The induction of premature labor would therefore be in this case beneficial to both mother and child.

Finally, mention may here be made of the Cæsarean operation performed after death. Should a woman die after the twenty-eighth week of her pregnancy, the Cæsarean operation is commanded by law, the latter not regarding whether the fœtus be alive or not. Whether it is the right policy to limit the time of this legal obligation to the completion of the twenty-eighth week of pregnancy, is, at least, doubtful, especially if we consider the possibility of the chird's baptism. Of course, during the first months of pregnancy, there is no hope of extracting the fætus living, by means of the Casarean operation. But I would always perform this operation after the completion of the fourth month, in order that the child might receive baptism; so often, at least, as no very grave reason led me to believe that the child died before the mother, or with her; especially after a sudden or quick death of a pregnant woman.

Of course, this operation should be performed as soon as possible after the death of the mother. There may be, at times, no little difficulty in this, as it is not always easy to ascertain conclusive signs of death, especially after sudden and quick deaths. But to ascertain these signs belongs to the province of the physician, who may show in these very cases what promptness and decision can do. He will, as far as possible, perform the operation with as much caution as if he were performing it on a living woman. Thus nothing would be lost, even in a case of catalepsy not previously ascertained. But what shall

be done in the event of a physician not being at hand? Should not the priest, who, in cases of serious illness, is almost invariably summoned, perform the operation? has been done sometimes by energetic, zealous priests, but indiscreetly, in my opinion. I cannot agree with the worthy Vering,* who believes it necessary for every priest to know how to perform this operation, and even imposes it as a duty upon them rather to perform it themselves, in cases of extreme necessity, than to suffer the child to die without baptism. Neither the exclamations of Debreyne, † nor the strong language of Macher, t who calls those "imbeciles" who hold it to be indecorous for a priest to perform the Cæsarean operation, can convert me to this opinion. decorous it is: that needs no explanation. With the same right, priests should go through a course of midwifery, to perform, in cases of necessity, the duties of accoucheurs. In rural districts, children, even sometimes both mothers and children, might thus be saved. For a priest, it would not be more indecorous to save both mother and child in case of a placenta praevia (which places mother and child in extreme peril), by speedy termination of delivery, than to save, probably, the child by the Cæsarean operation. The only difference would be this, that, in the first case, everybody would think it absurd to impose such a duty upon a priest, whilst, in the second, one writer asserts after the other: "It shall be so-because it has been so, and thus appears to be possible." Such an aberration is easily explained. To persons outside of the profession it is an heroic deed to perform this operation, and the indecorous is easily overlooked on account of the heroic.

^{*} L. c., pag. 257. Vering and others follow the doctrine of Cangliamilla, who treats at large this obligation of the priest to perform the Cæsarean operation, post mortem. (Embryologia Sacra, lib. ii, cap xiv.)
† L. c., pag. 247.
‡ L. c., pag. 338.

perform this operation is not only indecorous, but even dangerous, on the part of non-professionals. Apart from the difficulty of proving death certain, the operation requires a detailed knowledge of the parts and great technical ability, which non-professionals cannot have, even should they know by heart an exact description of the operation. To perform the Cæsarean operation on the warm, new corpse is exciting even to professionals; especially as there is generally no assistance from a brother-physician, and no time to be lost in procuring such. The alarm caused by the occurrence, the anxious apprehension lest the supposed corpse should move, the copious gushing of the warm blood, -all these circumstances allow only professionals to maintain a mental equilibrium, because they are well informed, and accustomed to bloody operations. Now, will you bind the priest to such an operation, of which he can have only an imperfect knowledge? Would he not, with the little knowledge he possesses, be almost paralyzed by his well-grounded fears, and thus hazard the success? I will not point out other inconveniences. Who shall secure the priest against ill-speaking?

There exists no prohibition by the Church against a priest performing the incisio, provided there is no doubt as to its necessity. I, for my part, concede that, in such a case, a priest who feels himself able is not prohibited from performing the operation. But there can be no obligation, for I am not bound to preserve my own life per media extraordinaria; and I am certainly much less bound to preserve the life of others by means too exacting for me "cum id extra vires communes positum sit."

III .- ON THE USE OF MEDICINES.

When the health is seriously impaired, and not to be restored by simple means, a physician should be consulted, if possible; and the patient must follow the directions of his physician, unless the remedies prescribed bring on molestiam extraordinariam.* The Holy Scripture says: "Honora medicum propter necessitatem, etenim illum creavit Altissimus. Altissimus creavit de terra medicamenta, et vir prudens non abhorrebit illa." †

The patient is placed, to a great extent, in the power of the physician, because he has no knowledge of the means prescribed, but he must use them in good faith. The Most High created medicines for this end only, that they should be used for the welfare of body and soul. Hence it follows that the physician is restrained in the application of remedies:—

- 1. The physician should always make use of such remedies as are regarded *safe* in the existing state of medical science. If no specifics be known, he should use that remedy which will probably be the most efficacious.
- 2. The physician should not experiment upon the human body, using remedies the effect of which he does not know, i. e., whether they are beneficial or hurtful.‡

 ^{*} Seavini, l. e., tract. iii, disp. ii, cap. i, art. iii, qu. 5.
 † Ecclus. xxxviii.

Experiments, for instance, have been made by inoculating secretions of syphilitic ulcers for different purposes, c, g, to make a diagnosis. In the doubt whether an individual is syphilitic or not, he is inoculated with fresh chancre-secretion: if syphilitic, the inoculation will have no effect; if not syphilitic, then syphilitic nleer will be formed in the spot of inoculation. In the former case, the individual will probably not be hart by this experiment; in the latter, the damage will be considerable, as the individual is then infected with syphilis by the inoculation. Therefore, inoculation with secretions of syphilitic affections (ulcers, etc.) cannot be admitted as a means of diagnosis.

He may, of course, try remedies which he knows for certain will be harmless, without knowing for certain whether they will prove beneficial in the ease in question.

To a patient whose case is hopeless, the physician may administer remedies without knowing whether they will prove beneficial or injurious "ad infirmi salutem curandam." (But they cannot, even in this case, be given ad experimentum faciendum pro aliis infirmis; est enim illicitum quaerere experimentum in alterius vita.) "Nam conformius est prudentiae et voluntati ipsius infirmi applicare illi remedium dubium, quam illud omittere cum certitudine mortis,"*

These restrictions, especially the one prohibiting experiments, bind sub gravi. They are generally respected; physicians, as a rule, being careful not to infringe them. But two classes of remedies, much in use nowadays, must be treated more particularly, namely, anodynes and anæsthetics.

Pain exists in nearly all diseases, and it is very often one of the first signs of failing health. "In this regard," says Albers, † "pain proves a very beneficial phenomenon, because it always urges the removal of the offensive causes from the diseased part. Hence Haller ealls pain, nature's remedy." The nature of the pain is important, inasmuch as it marks the way to a proper diagnosis and prognosis. Nevertheless, pain, next to death, is most dreaded by the sick; and to be relieved of it is their supreme anxiety. Hence, medical men, in all ages, have sought the most effectual means of assuaging the pains of the siek. own age, medical, perhaps we should rather say chemical, science has accomplished wonders in this direction. But are there no restraints to be put upon the application of

^{*} Scavini, l. c., ibid., quæst. 3, R. 2. † Albers, Prof., Dr. I. F. H., Lehrbuch der Semiotik. Leipzig: Karl Cuobloch, 1861, page 129.

these remedies, and are not these restraints too often transgressed?

To assuage pain by the use of medicines is no doubt allowed, as long as the anodynes employed do not retard recovery, or do not directly injure or endanger health and life. For the relief of pain is not of so much importance as the restoration or preservation of health itself. I speak here purely from a physician's point of view and am not at all treating of pain with regard to its place in morals and ascetics.

The use of anodynes becomes detrimental, if they are given in doses so large as to be hurtful to health, or if they are administered so often that the organism becomes accustomed to them, and the nervous system thereby impaired.

The new method of injecting medicines subcutaneously has done away with many evils attending the use of narcotics when taken into the stomach; but its excessive simplicity of administration has led to a deplorable abuse in its employment. An anodyne much in use is morphia, which is generally administered by injection. The little pain caused by the needle, and the sure and prompt action of the drug thus applied, have made many a physician too fond of using the syringe whenever severe pain is complained of. This would not be very objectionable, but for the evil consequences attending it. In the anxiety to remove the pain, its cause is often not attacked, much less removed. As soon, therefore, as the drug ceases to have its effect, the pain returns, often in an aggravated form, because the after-effects of morphia on the nervous system often weaken the power of the nerves to withstand pain. Then the patient beseeches, with continually increasing importunity, to have the injections repeated. If not

humored, he is only the more intractable, and his demands are attended with insults. Finally, the physician yields, and the play is soon acted over again. In acute diseases, which do not last very long, physicians of sufficient firmness will not repeat the injection too often; and then any harm done will be soon repaired. But how to act in chronic painful diseases? Whether of his own accord, or forced by the incessant clamors of his patient, who now knows how his pain may be relieved, the physician makes the lamentable injection, time after time; the patient's power of resisting becomes rapidly enfeebled, and the injection repeated becomes, every time of its administration, more and more of a necessity. At length, whether for convenience' sake, or to escape the tiresome importunities of his patient, the physician, especially in incurable chronic affections, takes the fatal step, and hands over the syringe to the patient himself or to his relatives, and then the descent is rapid. The injection is administered more and more frequently, the doses are gradually increased, the power of resistance diminishes, until, finally, the terrible remedy has become a habit. The patient is now pallid, now apathetic, now excited; disagreeable feelings of heat and cold alternate; he trembles like a drunkard as long as no morphia is administered to him. Gradually his constitution gives way under the effects of sleeplessness, loss of appetite, impaired digestion. An attempt to deprive him of morphia is followed by chills, general pains, severe diarrheas; by uneasiness and anxiety, accompanied with unceasing wakefulness, leading at length to a state of raving madness. The effort to deprive the patient of his solace is soon abandoned, and the terrible "remedy" is again resorted to. Mental debility, approaching complete apathy, soon takes possession of him; illusions and hallucinations gradually increase, and the "treatment" ends, often, in the insane asylum.

Can this be tolerated? Or am I exaggerating? Who is the physician who has not met with such unfortunate cases, and do we not find them constantly described in the medical journals of the day?

The maximum dose of morphia per diem is 0.12 gramm, according to the German pharmacopæia; and this dose is intended to be used only during a short period. But those who have become victims of the opium-habit soon take 0.2-0.5; others take more than 1.0 per diem, and as much as 3.0 gramms: a ratio of increase which may be understood by non-professionals, when we tell them it is as if a man, who can drink two bottles of wine without becoming intoxicated, should accustom himself gradually to be able to drink twenty to fifty bottles. This is not permissible. Of course the patient himself is to blame somewhat, but the physician more. There can be no excuse for employing remedies so hazardous, in a manner so reckless and unconscientious. In places unfortunate enough to harbor these "morphia-doctors"—sit venia verbo!—the injection is almost looked upon as a hygienic necessity. Instrumentmakers drive a thriving trade in selling syringes, not to physicians, but to non-professionals: as I have been assured by persons worthy of all trust. Physicians have so absolutely discretionary a power in their prescription of medicines, that they cannot be reached by law. I know the risk I run of incurring the displeasure of some of my fellow-physicians when I assert that this most useful remedy, the beneficence of whose effects cannot be overestimated, is too often used in a manner which renders it rather a curse than a blessing. It is for this reason I have given the subject prominence here, in the hope that the clergy may veto such abuses as are contrary to divine law, since the civil law is powerless to reach them.

I cannot refrain from making a few observations, here, on the cure of opinm-eating. Having been a physician for many years in an insane asylum, and having watched such cases in my private practice, I am led to assent to the views of Professor Leidesdorf* of Vienna. I believe him to be quite correct in stating that the first condition toward effecting the cure of an opium-eater is to place the patient absolutely under the power of the physician. Burkart,† too, is of the opinion that the restraint of liberty, in a closed establishment, affords hope for the best results, although he has made some cures without such restrictions (in the water-cure institute, Marienberg, near Boppard), but then, only by gradually diminishing the dose. Incredible is the persistence with which the victims plead for fresh doses of the fatal poison; the bitter complaints and threats they give utterance to, when they are withheld; the ingenuity of cunning they display in order to procure them. circumstances, together with the serious symptoms which result from the withdrawal of morphia, impose upon nurses and relatives, who yield to the patient's importunities without the doctor's knowledge: and thus a cure becomes impossible. I once knew a physician who had firmly resolved to be cured of this habit, and, for this purpose, had placed himself under the care and treatment of a brotherphysician. Yet, so irresistible was the propensity, that he took morphia without his fellow-physician's knowledge, as

^{*} Leidesdorf über Morphiumsucht in der Wiener Med. Zeitschrift, 1876, No. 26.

[†] Barkart, Dr. R., Die chronische Morphiumvergiftung in Folge subeutauer Morphium Injectionen und deren Behandlung. Mittheilungen aus der Wasserheilanstalt Marienberg bei Boppard a. R. Bonn, bei Cohen und Sohn: 1877.

he confessed to him afterward. A similar case is related by Leidesdorf of a young physician, who had become an opium-cater experimenti causa, and had come to Leidesdorf's institute, because he knew he could not be cured without restraint of his liberty. All persons addicted to opiumeating should be placed, or should place themselves, in a well-governed institute which has thoroughly trained aurses. A better course, however, would be to place them in an insane asylum, because restraint is there allowed, and can easily be put into practice: and restraint is, in such cases, not only justifiable, but indispensable; for, so feeble is the will of patients afflicted with the malady, that they must be considered to a certain extent irresponsible. Moreover, not unseldom, the unfortunate sufferers are prevailed upon to enter institutions voluntarily, and to consent to the short season of necessary restraint.

Priests can render great service in such cases by prevailing on the patient to place himself in an institution of the kind, when a cure at home has been attempted in vain. It is in their power to impress upon him the impossibility of being cured at home, and the probability of a speedy cure under judicious management in such an institution. The cure of persons who have not taken too great doses (not over 0.2-0.3 per diem) must be effected by the immediate total abandonment of morphia.

When the patient has become accustomed to the largest doses (1.0-3.0), the abandonment must be effected gradually but rapidly. In the latter case, the quantity should be reduced to 0.05-0.1 per drem; and this dose should be diminished so quickly, that the abandonment may become a total one at the end of the second week.* Serious

^{*} Leidesdorf, l. c.

symptoms are subdued by other calming remedies: such as, baths, bromide of potassium, hydrochlorate. The strength is sustained with nourishing food and wine. This treatment will effect a cure according to Leidesdorf in two to three weeks, and will seldom be protracted longer; never, at all events, above eight weeks.

I will not make any mention here of certain other anodynes which are less employed, and are less active and dangerous, but will proceed to offer a few suggestions on the application of anæsthetic agents; of "which, ether and chloroform are the most used.

The discovery of chloroform, and its employment as a surgical anæsthetie, must be hailed as an incalculable benefit to the suffering human race. Every living organism has a horror of pain, especially of the pain caused by surgical operations. The premonitory dread of suffering, its real severity under many surgical operations, the serious tendency of pain to depress the nervous system and to produce death, the struggles and writhings of the patient,all these were serious obstacles to a successful practice of surgery. What a different spectacle now! The patient in tranquil narcosis, without pain, without will, without struggles; the surgeon operating with ease, with care, and a firm hand; the patient returning to consciousness with comparatively little pain beyond the seldom very disagreeable after-effects of the narcotization! All this certainly is a great benefit to the afflicted.

It is true that death from the inhaling of chloroform has occurred, through causes sometimes known, sometimes unknown. The number of deaths so produced bears a very small proportion to the total number of administrations (only 1 to 10,000 according to some). Nevertheless, its use requires all possible precaution. But to outlaw

chloroform from the materia medica on this account, is absurd; and Clarus* is entirely wrong when he says, because of the possibility of death ensuing from its employment: "Chloroform can not be reckoned among the fortunate acquisitions of modern times." The possibly fatal result of its administration requires only:

- 1. A careful investigation, before employing it, in order to ascertain whether the constitution of the patient is such that, according to experience, death may be easily produced by chloroform.
- 2. Carefulness not to employ it unnecessarily, viz.: only then when the nature of the operation, its severity, or its long duration, renders the use of chloroform very useful, or even necessary.

Both these precautions are often neglected; and such negligence, even although it may not always have a fatal result, is, nevertheless, always objectionable, and reckless even to criminality. There is no need of naming here the operations in which chloroform may or may not be used. Indeed, its prudent use depends so much upon the peculiar conditions and on the specific nature of the patient's case, that it would not be easy to do so. It may be broadly stated, however, that neither patient nor physician can be allowed to use chloroform except for urgent reasons.

I add some remarks on the use of chloroform in obstetric practice. The English physicians use it extensively. Of late years, there has also been in Germany a tendency to the use of it during the more painful and tedious obstetric operations, just in the same manner as in surgery. There would seem to be no objection to this at first sight: but who will deny that obstetric operations (the Caesarean

^{*} Clarus, D. I., Handbuch der Arzneimittellehre, Leipzig, 1856, pag. 966.

operation included), even when attended with great pain, and of long duration, are, on the whole, more easily endured, and with less apprehension and fear, than other less important, but bloody operations? I have performed all the obstetric operations that are generally in use (laparotomy included), and some of them quite often, but I never made use of chloroform; and I always observed that the pain attending these operations affected the nervous system very little more than the severe pains peculiar to parturition. Again, there might be great inconvenience when the patient has lost control of muscular action. Nevertheless, I agree with Schreder,* who says that, in general, narcotization during obstetric operations is a great boon to the patient, and an aid to the acconcheur. The use of chloroform is certainly here allowable, if free from danger to the child. But may we also use it during conditions of normal labor? I do not speak here of laborpain which is abnormal, nor of labor accompanied by convulsions, but only of that pain which is physiologically incidental to parturition. Such relief of normal labor-pain by chloroform would be allowable, provided it be not injurious to mother or child. But certainty on this very point has not yet been reached. Setting aside the possibility of the mother's sudden death during narcotization, it cannot be denied, so far as present experience goes, that there is danger to the child when the mother is put under the influence of chloroform. Experience, as well as investigation, shows that the effects of the drug are communicated to the fœtus.† Of course the child's organism must be expected to have less power of resisting such a

^{*} Schroder, Prof. Dr. Karl, Lehrbuch der Geburtshilfe, IV Auflage: Bonn, 1874, pag. 200.
† Zweifel (Berliner Klinische Wochenschrift, 1874, No. 21) has shown,

poison, and to be unable to secrete it so quickly, because there is no direct respiration; and thus the feetus will the more easily succumb to it. Not to mention the usual evil after-effects of chloroform: narcosis, vomiting, etc., there is also positive danger to the mother from the use of chloroform, as the contracting powers of the muscles of the womb become less energetic, and parturition becomes thereby retarded; whilst, after parturition, there ensues danger of severe hemorrhage by reason of defective uterine contraction. Schreder himself, who advocates the use of chloroform during the normal condition of labor attended with intense pain, does not deny this, and advises the use of chloroform only so far as is necessary for the relief of pain, but not for inducing a condition of unconsciousness (l. c., pag. 201). At the same time he says, only two sentences before, that "absolute narcosis" (with unconsciousness) of women in labor "ensues often after a few inhalations" (viz., of chloroform). What security, then, have we here against the chances of evils to follow?

I think these considerations suffice to show that chloroform should not be made use of in a normal state of labor.
The pains during labor are sometimes intense, but they
are never intolerable; and in most eases they are endured
with a courage that seems to beget a forgetfulness on the
part of the patient surprising to others. If the generation
of our days is really so effeminate and delicate as to require
artificial relief from the hardships incidental to a natural
process, it certainly is not a step in the right direction.
Nay, our women should rather be educated, body and soul,
to have the courage and power of endurance which nature

from five cases, that there is chloroform present in the placenta or in the urine of the child, when the mother is put under the influence of chloroform during parturition.

has bestowed on their sex; and they should be taught to view correctly their high vocation, and the duties belonging to it. They would not then, I am sure, cry for chloroform during the pains of labor; but would cling rather with a redoubled love and devotion to the being whose birth had cost them such intense suffering.

Mention must here be made of one more remedial agent, which, for some time, was much in favor. I would forbear to mention it but for the circumstance that spiritualism, in our days, is making the greatest efforts to obtain an influence, and that matters relating to it may again become subjects of controversy. I speak of animal magnetism as a remedy. This animal magnetism is, at the present moment, a phenomenon as little understood as somnambulism and clairvoyance. No satisfactory scientific explanation is forthcoming of these latter manifestations, physiological or psychological. Still less, hitherto, can science account for the pretended facts of artificial somnambulism, superinduced by the process of magnetism; or again for the cures attributed to this treatment.

Scientific physicians, so far, do not recognize animal magnetism as a trustworthy agent, but are disposed rather to consider it charlatanism and swindling.

Theologians, on the other hand, are inclined to regard animal magnetism, in its effects, as principally demoniacal,* because persons thrown into magnetic sleep, or while in a state of clairvoyance, perform actions † which cannot result from natural causes, viz.: reading with closed eyes books

† See Gury, I. c., 10m. i, pag. 218 : Postulatum Episcopi Lausanensis circa magnetismum.



^{*} See the notes of Ballevini in Gary, l. c. tom. i. pag 238 ff., and Perrone S. J., Practectiones theologicae de riviate religionis deque vitiis oppositis, nominatim vero de Mesmerismi. Somnambalismi ac Spiritismi recentiori superstitione. Ratisbonae et Neo Eboraci. 1866: Pustet.

open or shut, in languages to them otherwise unknown; giving information of their own diseases, or of those of others, in technical terms at other times to them entirely unknown; describing interior organs, as if they were open before their eyes, although they have otherwise no knowledge of them; foretelling precisely how long a disease will last; specifying simple and certain means against diseases, although they are wholly uneducated and ignorant in such matters, and do not remember anything about the knowledge they have communicated when awake, etc., etc.

As it must be regarded as blasphemous to think that God would act every time directly at the bidding of men who are often anything but pious, or that he would alter the laws of nature as often as it may please them, such preternatural manifestation must be ascribed to demoniacal influences. Physicians and theologians are, in my opinion, right, each from his own standpoint. If some persons, while thrown into a magnetic condition, have really performed such acts as those above related, then Debreyne* goes too far when he says; "All those alleged phenomena must be ascribed to human artifice, viz.: to jugglery, to imposture, coincidence, or mistake, and not to the intervention of a supernatural agent or a demon."

The using of animal magnetism as a means of curing disease is forbidden, because:

- 1. Its effect must, at least probably, be ascribed to demoniacal influence; and we are strictly forbidden to have any communication with demons.
- 2. The phenomena produced by magnetism are dangerous to faith and morals.
 - 3. That is per se forbidden which is done by persons

thrown into magnetic condition, namely: the placing one's reason and will entirely under control of another person (the magnetizer), so that this person can govern, use and abuse mind and body (of the individual magnetized) according to the magnetizer's will.

4. To make use of animal magnetism is not compatible with the duties each one owes to his own life and health; as the adherents of magnetical treatment * themselves say that, if not death itself, other grave disorders of mind and

body will result from its application.

The same applies, of course, to questioning persons who have apparently been thrown into the clairvoyant or somnambulistic condition, of their own accord, about proper cures or remedies, because their statements also are due either to imposture or to demoniacal influence.

It will be as well, here, to make a few remarks on two subjects, which, although not properly remedial agents, may yet fitly be treated here, viz.: vaccination and wet-nurses.

VACCINATION.

Ever since, by the laws of the Empire, the vaccination of every body has become compulsory, there has been a somewhat violent agitation against it, although the agitation has

^{*}Ennemoser, Dr. Joseph, Der Magnetismus im Verhaeltniss zu Natur und Religion, in Augl. 1853, savs, page 12, ff.: "Not seldom we have the direct contrary (of success). A sensation of laugnor is experienced, sensations of weight in the limbs, inactivity of the muscles, straining and pulling in the same, weakness and exhaustion, vawning, labored breathing, and shortness of breath, accompanied by all kinds of disorders, especially of the abdomen ... febrile affections, local congestions of the blood, cramps in the stomuch and breast, epilepsy. Especially cramp affections appear often after the first and short reagnetizing, also hysterical and epileptical attacks and convulsions of the limbs (page 224). Even apparently healthy people, when being magnetized, become affected by various sensations, and hioden dispositions to disease are manifested, often immediately."

been incited by only a few. Aside from personal rancorous attacks and mean insinuations, the following three reasons are paraded by the opponents of vaccination:—

- 1. Vaccination affords no protection against small-pox.
- 2. By vaccination from one human subject to the other, diseases are communicated from person to person.
- 3. Compulsory vaccination is an unwarrantable attack upon the personal liberty of a citizen.
- Ad 1. Vaccination, properly performed, protects during a certain period (from five to ten years) against contagion; and, even in case of contagion, the disease is developed in a much milder and less dangerous form than in persons who have not been vaccinated.

The truth of this assertion receives strong confirmation from the fact that, since vaccination was introduced, epidemic small-pox has not committed such fearful ravages as it did before vaccination came into general use.

- Ad 2. In a few cases, syphilis has been communicated from one child to the other. This alone has been proved. But the damage done to a few individuals is more than counterbalanced by the immense profit that accrues to the whole of mankind from the protection vaccination affords against the malignant disease of small-pox. Moreover, it is a proved fact that this communication of diseases can be avoided when proper care and precaution are taken in selecting and taking off the virus. A good thing should not be condemned, because it may be abased. "Vaccination," says Reelam, "may be best compared to a lightning-rod, which, when improperly affixed, may damage the house; just as vaccination may be of detriment to the individual, when improperly applied. But who will wage war on lightning-rods on this account?"
 - Ad 3. Personal liberty, in human society, cannot be

unlimited. Limitations thereof in the interest of society, which, in the end, even benefit the individual, cannot be If important interests of society are at stake, which are promoted by an unimportant restraint of personal liberty, the individual must bear the restraint. Obviously, the reduction of the rate of deaths from the destructive disease of small-pox is an object of the utmost importance to society at large; and that this reduction of the death-rate is effected by vaccination, has been demonstrated by the testimony of an overwhelming majority of experts, who have drawn their conclusions from experience and from statistical returns. It is proved, moreover, that the diminution of the small-pox death-rate proceeds pari passu with the use of vaccination. It is, consequently, not only desirable, but even necessary, for the general welfare, that every one should be subjected to its protective influence. The operation of vaccination is so exceedingly simple, that the trouble of its administration is not worth considering in comparison with the immense benefit it confers upon the individual as well as upon the community. Society, therefore, has the right to demand that every individual should undergo the trifling inconvenience to which vaccination subjects him-to make this demand in the form of law, and to impose fines upon those who are not willing to submit to a little sacrifice of their personal liberty for their own private welfare, as well as that of the community.

England, a country that, more than any other, has the most jealous care of personal liberty, has been the first to introduce compulsory vaccination. I do not hesitate to say that we are Jiving in the golden age of liberty, if there be no worse compulsion, in our modern states, than compulsory vaccination.

In regard to this, as well as other sanitary measures, especially in times of epidemics and contagious diseases, priests can render great service by aiding them both by word and example. Thus the epidemic itself, and, what is worse, the dread of it, as well as the excitement it occasions, may be restrained within narrower limits.

ON WET-NURSES.

I approach this subject with the full consciousness that I am about to bring a horner's nest about my ears, and that I shall encounter much contradiction. Be it so.

Mother's milk is the most natural nourishment, nay, the only proper one, for the child. No other food can be a perfect substitute for it. Science, in spite of her utmost efforts, has not succeeded in finding one. It is proved, beyond a doubt, that the rate of mortality amongst infants raised in any artificial manner is far larger than amongst children raised by nursing. This fact alone establishes the positive obligation of the mother to nourish her infant with her own milk, and not to withhold from it the food given her by God for this purpose.

Are there, however, any reasons which may excuse a mother from the duty that nature exacts?

Gury says: "Mater filiolos proprio lacte nutrire debet (sententia communis), quia hoc jus naturale postulare videtur. Attamen haec obligatio non urget sub gravi, quia non apparet secus gravis deordinatio. Ab omni autem culpa excusat necessitas, notabilis utilitas, aut consuetudo apud familias nobiles vigens, etc.; sed tune sub gravi mater bonam quoad mores et valetudinem nutricem sibi substituere debet."

^{*} Gury, l. c., tom. i, pag. 361.

I cannot admit that this obligation does not bind sub gravi, because it is a proved fact that many infants pine and die in consequence of having been denied the nourishment of their mother. The child's death, which of course does not follow as a necessary result, but which may, and does too often, happen in consequence, is most certainly a grave deordinatio. Were the death of the infant which had been deprived of its mother's milk a certain and necessary result, then the withholding of the natural nourishment without sufficient reason would be more than a deordinatio: it would be murder. The law of nature is that every new-born infant shall be fed with the milk of its own mother; and for this purpose is the mother provided with it. The child has, thus, a natural claim to the milk of its own mother; and to the mother belongs the natural duty of giving to her offspring the milk afforded by nature for precisely this child. To abandon this duty is to thwart a fundamental law of nature, and is, in my opinion, a grave deordinatio. I believe that too much stress has been laid upon the circumstance that it is possible for a wet-nurse to fill the place of the mother. But whether it diminishes the gravity of an obligation, that it is possible to transfer the duty to a third person, notwithstanding the fact that nature has clearly defined the way of fulfilling it, is a question I leave to the moralists.

We must now consider the reasons which may excuse a mother from the duty of nursing her child, "without any fault on her part." Of those quoted by Gury, the one, "necessity,"—for instance, on account of sickness and debility of the mother,—is of course sufficient; likewise pregnancy supervening during the period of nursing, because the organism generally is not able to meet both of these duties, without injury to the mother or the children.

"Notabilis utilitas," given by Gury as a second reason, may also pass as valid. If, for instance, a woman cannot pursue some vocation that is nessary for her decent support, then she may be excused from nursing propter notabilem utilitatem. The same will apply to the mother whose health, although not strictly forbidding the nursing of her infant, may yet derive a notabilem utilitatem from not nursing it.

The third reason given is consultudo apud familias nobiles vigens. Scavini * does not give this reason in the text, but he simply mentions it in a note: "Excusant cliam feminam nobilem ob consultudinem Salmanticenses, Navarrus," etc. Is, then, a mere consultudo to be accepted as a sufficient dispensation from so grave an obligation? Is custom to excuse from sin one who neglects a positive duty imposed upon him by the laws of nature?

It is said: "We admit that this custom is an abuse, and that they were guilty who introduced it. But the custom has obtained for generations: we find the customprevailing, and we follow it bona fide." Let it be granted that a person is excused from sin who follows a bad custom bona fule. Yet, I cannot admit the validity of the excuse here. In the first place, bonu fides cannot, in this case, be so easily proved; for the voice of nature makes itself heard in the heart of every mother, urging her to give to her infant its mother's nourishment, through so many physical and psychical phenomena. In the second place, it is generally not custom which induces a mother to refuse its natural nourishment to her child, but the very reasons which originated the evil custom itself; which still support it, and exert their influence on every mother who follows the custom: such as, vanity, love of pleasure, excessive delicateness, etc.

^{*} L. c., tom. i, pag. 456.

How is it that only a femina nobilis is excused by custom? Are the duties which Nature calls for, in the noble, different from those she demands from the unennobled? Besides, nowadays, this custom is by no means restricted to nobility. Are noble mothers who follow this custom excused from all sin; and are those of ignoble descent only excused from grave guilt? In my opinion, the requirements of nature allow no distinction between homines nobiles and non nobiles. Man is man; and all owe the same obligation to the divine law, as well as to that of nature. Perhaps it was thought that noble mothers have means to pay for wetnurses, and others have not. As I said before, there is too much stress laid on this circumstance.

Unfortunately, however, the custom of mothers abandoning the duty of nursing their children, without sufficient reason, obtains more and more. To preserve physical beauty, to avoid inconvenience, -for, of course, ladies who are nursing children cannot attend, without inconvenience, concerts, balls, gossipings, tea-parties, etc., -even for reasons still more frivolous, too many mothers try to avoid this first and noblest duty of the mother, and place a wet-nurse in their stead. This is the hornet's nest to which I alluded above. A mother is obliged, and sub gravi, to have her place taken by a nutrix bona quoad mores et valetudinem. This is an admirable obligation, because no one can deny that not only the child's body, but its soul also, is influenced from the wet-nurse. Is there attention paid to this injunction? Certainly, we are answered, our family physician has examined the person thoroughly, and has pronounced her healthy and a good wet-nurse But as to morals? It would seem to be generally taken as sufficient if the person is questioned and found to be of placid temperament, intelligent, active, truthful, honest,

etc., etc. One point, however, and that the most important, is not attended to, viz.: the moral condition of the nurses quoud sextum praeceptum. A woman that has fallen, even more than once, is accepted as wet-nurse, with an ease and levity that must cause wonder and horror. Such a person to nourish the child, to be always with it, to give it its earliest training! Can such as she be a nutrix bona quoad mores? We shall be told: "I should prefer a moral woman, but they are not to be had. Besides, it cannot matter so much: all do it." Yes, for shame! It also has become a custom! If a mother, who was really unable, for good reasons, to nurse her child herself, should see the child suffering for want of milk; if she observed that it did not thrive, but grew sickly, and would probably die if no wetnurse were procured; if, in such a case, she reluctantly consented to have a fallen woman as nurse for her child, because a virtuous woman could not be had, we should not blame her. But our modern ladies, who do not nurse their children on account of custom, scarcely inquire into this point, provided the wet-nurse is healthy, that is, bodily. Is it not horrible that the physician who is called upon to judge of the fitness of the wet-nurse, must first and foremost examine whether she suffers from lues venerea? Every physician can testify to this. Even the muchsought "nurses from the country" fare no better. Nowadays immorality infects rural districts to such an extent. that the wet-nurses from the country, whose number has increased a thousand-fold, are not above suspicion of suphilis. I loudly aver, and clergymen and country physicians corroborate my statement,-that the employment of wetnurses has had a deteriorating influence upon the morality of rural districts. Formerly, a fallen girl in a small commanity came to shame and grief, and had often to endure

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poverty and misery for her lifetime. Nowadays, the fallen woman leaves the place after or before confinement, puts her child out to board, and is sure to find very soon a good place as wet nurse. As such, she leads an easy life, gets good pay, and is able, not only to pay easily the expenses of boarding her child, but even of setting something aside. There are persons who like this way of living so well, that they try to regain the faculty of nursing, when they have lost it. I myself know of such cases. It is said to occur even that girls, hitherto not fallen, try to acquire this faculty, either only half or entirely conscious of the crime they commit for that purpose. This is one of the many evil Who knows how consequences of this unnatural custom. many children perish, because their mothers do a mother's duty for strange children? The "Aerztliche Vereinsblatt" (1876, No. 55) says that, "owing to this circumstance" (namely, mothers of illegitimate children boarding out their offspring), "thousands of children perish yearly in the state of Prussia." Is there not a responsibility resting on mothers who, without sufficient cause, but simply in deference to custom, procure wet-nurses and pay them high wages? Must not a great share of guilt of the above evil consequences rest on such mothers? Do not the misfortunes of those negleeted children, who pine and die for want of attendance and mother's milk, cry to heaven against those women who, without necessity, have deprived them of their mothers?

It would seem that the older moralists could not estimate at their proper value the evil consequences and damaging effects of mother-substitutes on body and soul, because, in former times, when wet-nurses were seldom employed, those consequences either did not exist, or did not come to light. They must, however, most certainly be considered with reference to the question at issue: whether, viz., a

mother may abstain from nursing her child merely out of respect for custom, without any sin on her part, or may, without any reason, neglect this duty of a mother, sub levi. As matters stand at present, when the custom of employing wet-nurses has become so general, I do not know whether the moralists, even those who do not rank as rigidiores, can admit any longer the custom, in general, * as a sufficient reason to abstain from nursing; and whether they will not regard mothers as bound sub gravi to nurse their own children, so long as they are not justified by sufficient reasons in abstaining from fufilling this law of nature.

To physicians belongs no small proportion of responsibility for the existence of this nuisance; because they neglect to impress upon mothers their duty of nursing, and fail to convince them not only that the fulfilment of this duty by mothers is a source of the highest pleasures, but also that it increases their real beauty, and is subservient even to their health. For a forcible suppression of a natural function is always injurious. A mother nursing her child, if she is otherwise healthy, is a picture of fulness of health, and is apparently elevated to the acme of human growth and human beauty. Ask a true, good mother whether there is a happiness which she would exchange for the pleasures and enjoyment the nursing affords her; ask only those to whom nature has denied this happiness, how they long for it. It would be vain to ask those devotees of fashion, ball and party-goers, for they will of course complain, and will worry and beseech the "dear doctor" till he is weak enough to order a wetnurse. And here arises a second point wherein the doctor is often at fault. Doctors, better than others, understand the evils resulting from the employment of wet-nurses;

^{*} There will be, of course, always exceptions.

but it seems as if it were not in their power to say no. This is unworthy of a man. Should there be no sufficient reason for excusing the mother, nothing should induce the doctor to wink at wrong-doing; nor should he act at variance with his honest conviction, even at the peril of moping fits and displeasure of his patients. If such a course were pursued, the use of wet-nurses would soon be reduced to its proper limits, and would cease to be the abuse it has become.

In connection with the fifth commandment, I propose to offer a few suggestions on the vice, or, as others call it, the "moral disease," of intemperance, especially drunkenness; and I will, at the same time, treat shortly of other physical infirmities often met with, and which require considerate treatment on the part of the priest, viz.: hysteria, hypochondriasis, and the mental diseases.

INTEMPERANCE, DRUNKENNESS.

"Gula, id est, inordinatus appetitus cibi vel potus, est peccatum veniale ex genere suo. Fit autem grave, si graviter noceat sanitati, aut si quem ad officium ineptum reddat." (Gury, l. c., tom. i, pag. 156.) Is habitual intemperance in eating or drinking,—which, when continued, is always hurtful to health,—a mortal sin?

Gluttony is the vice of the upper classes of society chiefly, amongst whom meat and drink are often taken, not to satisfy the hunger or strengthen the body, but only to please the appetite. "Such men eat," says Hartmann,*

^{*} Hartmann, Ph. Carl, Prof., Dr., Glucckseligkeitslehre fuer das physische Leben des Menschen. Umgearbeitet von Moritz Schreber: X Aufl. Leipzig: Carl Geibel: 1876.

"as long as their palate is sensible of enjoyment; and because they eat one richly-flavored food after another, their relish for food is kept up longer than needed. consequence is that they eat to excess at nearly every meal." The results soon show themselves. At first, the overloading of the stomach leads to imperfect digestion, accompanied by flatulency, cramps in the stomach, colics, want of appetite, congestion of the brain. Next, headaches render the glutton dull, and disinclined to any kind of work. By and by, deeper disorders make themselves felt in the digestive organs of his body: frequent vomitings, constipation and diarrhea alternating, stoppages in the abdomen, hemorrhoids, impairing more and more the powers of digestion and assimilation. Nutrition of the body languishes; the general discomfort sometimes increases to hypochondriacal lowness of spirits; the mental faculties suffer in a more or less pronounced manner. In addition to these temporary disorders, a great number of acute and chronic diseases are bred and nourished by the abuse of the digestive organs in the use of food.

A beneficial effect may possibly be produced by merely pointing out these distressing consequences, besides exposing the sinfulness of gluttony.

Oftener met with, however, is habitual intemperance in the use of spirituous liquors: an excess which may end in the horrible vice of drunkenness.

Upon this vice or disease, I will make only a few remarks, refraining from anything that may pertain to the pastoral treatment of the drunkard. The consequences of drunkenness are but too well known. In addition to a complete disarrangment of the whole digestive system, and generally of the urinary organs, symptoms of disease of the nervous system are prominent in the victim of drink.

His mental faculties become void of any activity they may have been possessed of; the patient is seized for a time with giddiness, the power of vision is clouded, the tongue tremulous, sleep broken. In every movement is perceived an irrepressible tremulousness of hand and fingers; before sleep he experiences sensations as of ants crawling over him, and a dragging in the calves of the leg, finally reaching the arms. The mind is timid, irresolute, discontented, hypochondriacal, querulous, desperate. (Hartmann.) The strength of the limbs diminishes more and more; the knees of the patient give under him; all firmness of grasp is relaxed; and often there supervene suspension of sensation and anæsthesia in the extremities. At last, attacks of vertigo become frequent, hallucinations trouble the patient, the sense of sight and the other senses are impaired-leading in the end to real delirium. If the progress is not checked here, the mental faculties become gradually weaker, and the patient falls into a dull stupor, from which he is roused only, and that only occasionally, by hallucinations, delirium, and attacks of mania. As the impairment of the senses increases, there is progressive palsy of the limbs. Amidst chronic catarrh of the lungs and diarrhea, the marasmus reaches its lowest point, the legs become dropsical, and the death of the patient takes place, either during quiet delirium, or in consequence of total collapse, unless a stroke of apoplexy should sooner end the sad spectacle. Our hospitals, and still more our lunatic asylums, are filled with the miserable victims of drunkenness and their offspring. Weak and decrepit, their faces pale, their intellect deficiently developed, exposed to an early death, or to the fearful ravages of scrofula and tubercles, those children of bestialized parents drag, by thousands, their weary load of life. We know all this;

cartloads of books have been written on this subject, the best laws proclaimed against the vice; but nothing avails to stop or check it.

The cure of the drunkard demands the utmost ingenuity of science. The use of moral influence becomes nearly impossible, when the evil has reached a certain stage, because there is then no moral strength left on which to act. Physical remedies, and among them the oddest, have been all tried in vain.

The only thing left is a recourse to prophylactic procedure. Laws and enacted checks, sermons and private remonstrance, mildness and severity, must work together, to hinder this vice at its commencement, and to prevent its spreading. For this end, it will do good service to impress vividly, upon those who display an inclination to it, the physical consequences of this vice, besides insisting on its moral depravity.

To cure an advanced drunkard, there is, I believe, only one means: force. The drunkard cannot control himself, so others must do that for him. He must be deprived of spirituous liquors, he must be cut off entirely from every occasion of obtaining them, and his shattered organization must be treated according to the rules of medical art. An experience of twelve years as physician for the poor, and in the lunatic asylum, enables me to assert, positively, that there exists no other cure. As this cure can only be employed by the restriction of personal freedom, as a general rule, only those come under this proper treatment in whom mania a potu is developed; and these, after having been cured of the mania, should remain in the asylum, or in some other such institution, wherein they may be cured also of intemperance. But the law, jealous of personal liberty, does not allow a longer restriction of personal freedom; so that the patient is sent out, cured, indeed, of delirium, but not of drunkenness, its cause. Often a few days only are sufficient for the restored maniac to plunge again into the depths of his damnable habit; either conducting him to an early grave, or subjecting him, time after time, to the same delirium, until at last he helps to swell the number of incurable idiots.

HYSTERIA.

Let me state, at the outset, that hysteria is, unequivocally, a disease, and that those afflicted with it deserve as much consideration as do other patients; but, at the same time, it is both desirable and necessary to caution priests to beware of hysterical persons. The reasons for thus cautioning them will make themselves known from what follows.

Hysteria is deservedly called the most protean of diseases. Its symptoms throughout every portion of the nervous system are so numerous, that, to describe them all in such a manner that persons outside of the medical profession will be able to easily recognize them, is absolutely impossible. Of hysteria, generally, it may be stated that it is "an affection whereby, in consequence of a particular excitability of the sensory nerves, the whole psychical personality undergoes a change; an affection that modifies the perceptive faculties, fetters the will, hinders personal self-activity in all directions, and throws wide open the door to everything whimsical and involuntary." * There is manifested in most hysterical cases a morbid desire of exciting pity and sympathy, of becoming objects of interest and attention. The slightest impressions on the sensory nerves may make these persons complain of intense suffering; subjective

^{*}Hasse, Krankheiten des Nervensystems, pag. 207. (In Virchow, Handbuch der speciellen Pathologie und Therapie.)

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disordered sensations are taken for realities, and bring on conditions that are similar to a state of ecstasy or clairvoyance. Under the outer garb of religious enthusiasm, there is frequently developed a sexual excitement reaching nymphomania, through which persons around her, and young physicians and priests alike, are deceived to a pitiable degree. The patients pass, without apparent cause, from extravagant gaiety to deep melancholy; are irritable. apprehensive, having unaccountable likings and dislikings, thus becoming for those around them a perfect torment. Paralytical affections, even complete palsy of all the muscles, develop, sometimes slowly, sometimes suddenly; their duration is variable, disappearing often after years, either gradually or suddenly, with perfect restoration of liberty of motion. Many so-called miraculous cures of persons palsied for long years may be thus explained. The emotion whilst at the shrine of pilgrimage, the touching of the relics, have often been enough to suddenly take away the palsy; but in the same manner as hysterical persons who, after having been long afflicted with paralytical affections, have sometimes been able to run out quickly, when their room was on fire, or even when they had unexpectedly received boxes on the ear from friends to whom they had previously been the objects of pity and of sympathy.*

The so-called hysterical paroxysms are the most alarming features of this disease. "Unexpected touches of the skin, feeling of the pulse by the physician, and the like, even mere imaginations and psychical impressions, etc.,

^{*}I do not, of course, intend to deny that persons afflicted with bysterical palsy, like persons afflicted with other diseases, have been cured neiraculously. But, as the cure may have worked in a natural way, and as it is very difficult, and generally impossible, to decide, in a single case, whether the cure has been miraculous or otherwise, precaution in judging such cases cannot be too much recommended.

bring on these symptoms. Automatic movements of the head and of the outer limbs, squinting, compression of the jaws, as far as grinding the teeth, rolling of the tongue, constant swallowing, hurried breathing, shrieking, constantly pronouncing the same words, uttering all sorts of sounds, as, for instance, barking (even really bellowing and howling), drawing backward the head, elevating the pelvis, struggling with the hands and feet, extending the limbs, opisthotonos, pleurosthotonos and so on, cataleptical rigidity of the whole body,—all these symptoms may be observed during attacks, either alone, or combined in a diversified manner." * Thus epilepsy and catalepsy may be feigned: such attacks may even bear a resemblance to demoniacal possessions by one or more demons.

These few remarks will suffice to justify my warning to priests to use caution in treating hysterical persons. They must take care not to become deceived by sometimes surprising symptoms, or to be cheated by these deceitful, versatile, and persistent persons. "Such patients, in order to satisfy their passion to pretend, will go through every pain, exertion, and privation; anything will be borne and tried willingly rather than give up the pretence." † As the wrong ideas, the deceptions practised by the patient, either intentionally or otherwise, are often in the line of religious enthusiasm, of "piety," priests, and especially young ones, are apt to have trouble with hysterical persons, and find, at last, often too late, that it had been better for them never to have had anything to do with them.

The cure of hysterical persons, even should their wrong ideas be in the sphere of religious enthusiasm, is in no way the priest's business. It can only concern him to

Hasse, l. c., pag. 212.

know that there is no better means to stop the alarming symptoms than to treat them with absolute indifference. In order to shorten or end paroxysms with or without convulsions, cold water dashed upon the face of the patient is generally very useful. It may not be polite; but it has stood the test, and can do no harm.

To calm any apprehensions, I may add that it is very seldom that any one dies of hysteria, even during a hysterical paroxysm. For which reason, priests should be very careful in administering the last sacraments to persons whom they know to be hysterical.

HYPOCHONDRIASIS,

The crux medicorum, is treated by some writers on pastoral medicine, under Etiology and Therapeuties, at great length. I do not see any reason for so doing. frequent pretence of piety, visions, sham miracles, sham eestasies, etc., of hysterical persons, may bring them often in contact with priests. And it has been to put priests on their guard against this morbid condition of the nervous system of women, and for that alone, that I have treated hysteria at some length. But it is far different with hypochondriacs. There are no symptoms of the kind in their case, and thus there is no particular intercourse with the priest. A hypochondriac is so much occupied in observing and explaining all normal and abnormal, real and imaginary symptoms, occurrences and feelings of his body, that all his thoughts are fixed upon his sufferings and their consequences, and they are the sole subjects of his con-Moral treatment is of no use with these fainthearted, morose, and egotistical patients. On the other hand, they are not very likely to seek consolation from a priest, unless the priest dabbles a little in medicine, or is, in plain English, a quack. In such men, priests or laymen, the hypochondriae places confidence.

I am very far from saying that all the feelings of the hypochondriac should be ridicaled, or treated as "imaginary." Although his ailments depend upon his sensibility, which is active in a wrong direction, psychical alteration coexisting to a greater or less degree, they are nevertheless severe. "His sensations," says Romberg, "are fancied; but from the mind they possess the body." The patient deserves the more pity, because his condition is nearly always incurable. But, like hysteria, hypochondriasis without complication is seldom fatal.

In some natures hypochondriasis degenerates into real insanity; the patients become also, sometimes, victims of suicide. To prevent this is nearly always impossible, because the resolution is quickly made, and is immediately followed by the deed. Hypochondriaes express, often enough, complete disgust with life, and the intention of ending their insufferable existence; but, generally, this talk does not amount to much, because nearly all of them show an exaggerated anxiety for life and health. Yet the possibility of such a catastrophe must be kept in view; and here is a point which is of practical interest to the priest, and on which pastoral medicine must give him information, that is:

As to the right of the suicide to ecclesiastical sepulture.

A suicide cannot be denied ecclesiastical interment, when his insanity has been clearly developed and known as such, unless, of course, the refusal is based on other reasons existing before the beginning of insanity.

But how about the opinion which pronounces every suicide to be insane at the moment of his deed, and which claims ecclesiastical interment for all of them on this ground? Is there no suicide without insanity?

The doctrine of monomania asserted the existence of a suicidal monomania without insane delusion; and taught that such lunatics committed this deed under the influence of impulses over which they had no control. But science has thrown more light on this and other monomanias, and has shaken the belief in uncontrollable impulse. The most important point, when judging the responsibility for a deed, is always the motive for committing it. Therefore we have to ask in what the uncontrollable impulse had its foundation in each case.

In practice, the following may be maintained. Can a probable cause be found for the mental depression leading to suicide, such as defamation, loss of fortune, of relatives; local lesions, disappointment, an excited state of any passion, fast living, excessive extravagance, or vices, and the like? The priest, in such cases, would be justified in refusing ecclesiastical burial, unless a morbid psychical condition could be proved besides. Without the morbid condition, an emotion or psychical depression, produced by such causes, cannot be regarded as the source of an irresistible impulse. By the help of religion, of faith in God, of belief in the immortality of the soul and of an eternal retribution, such impulses can, and must, be overcome. If any morbid condition exists, this emotion or depression may have such an intense influence that a derangement of the mind becomes real. During this sudden, and, perhaps only momentary, derangement, the impulse encounters no resistance and is acted upon. Such morbid conditions (besides the mental diseases properly so called) are: epilepsy.

hypochondriasis and hysteria, lunacy and clairvoyance; further, a melancholic, gloomy temperament; enthusiasm, especially of a religious sort, accompanied perhaps by visions and hallucinations; excessive susceptibility and nervous feebleness, great mental weakness, and clearly developed eccentricity of character:—this circumstance may be very important, if cases of mental derangement can be pointed out as having occurred in the family of the deceased. Other causes are the following: severe injuries to the nervous system, particularly from injuries to the head; pregnancy and the puerperal state; some severe acute and chronic diseases of the body, such as: malarial fevers, smallpox, erysipelas, pneumonia, acute rheumatism; syphilis, tuberculosis, diseases of the heart, diseases (not venereal) of the genital organs, particularly in the female sex.

For all these affections are such, that real derangement of the mind may be slowly developed, or suddenly make itself felt, after a profound emotional excitement. When any one of these affections has shown itself, the axiom, "in dubio pro reo," should be fellowed, and mental derangement, clouding of the intellect at the moment of the act, may be assumed, and ecclesiastical burial granted.

The eases that now remain are those wherein, after careful inquiry and examination, neither one of the rational causes, before enumerated, of an excessive emotion or depression can be discovered, nor one of the morbid conditions,—cases wherein men sound in body and mind, who have not the least rational cause to be tired of life, suddenly become suicides. There remain, then, two things possible. Either there existed one of the rational causes of psychical alteration; or the deed was nevertheless done in consequence of a morbid condition which was not recognized, and thus in a state of momentary irresponsibility. A third possi-

bility * does not exist; for, a man who, without a motive of weighty import, commits an act that is of so momentous a character, and so contrary to human nature and to reason, must be presumed to have been clouded in his intellect at the moment of the act. It must be kept in view that it is always a possible thing that derangements of the organism may speedily, nay, on a sudden, take place, and among them such as cause mental derangement. It is clear that a man laboring under such a defect of his reason may be tempted to do things which, up to the time, he had not so much as dreamed of doing, and even abominated. marked cases of sudden and unexpected developments of insanity (without suicide) have positively come under observation, although it cannot be denied that their occurrence has been rare. But just as rare are the cases of suicide that have not sprung from motives of the one or the other The question is, whether ecclesiastical burial may be granted in these cases. Scavini (l. c., tom. iii, pag. 90) says no: "Nam opus externum semper praesumitur voluntarie positum, nisi certo oppositum constet." I, for my part, am inclined to answer in the affirmative. The axiom, in dubio pro reo, should be applied here; the more so, as the punishment of an act which may not have been guilty, and the shame, if the burial is refused, strike, not the suicide alone, but his surviving relatives. Such a catastrophe coming unexpectedly, and from no apparent motive, proves to them a source of terror and pain, that may increase to horror. Why expose them to this shame, when there is no certainty that it is merited? The reason quoted by Scavini may contain an axiom that is correct in general,

^{*} As a third possible thing, one could quote tentatio diabolica as a direct cause of suicide. But this is not to the point here, because it cannot be proved, and must therefore be regarded in the same light as an unrecognized cause of psychical alteration.

but, with regard to the point in question, I had rather not accept it for the reasons given.

In the event of a case of the kind occurring, the best course for the priest to pursue would be to demand the opinion of the physician, with the reasons stated which admit of a presumption of mental derangement at the moment of suicide. In the event of his believing, according to the principles sketched above, that the presumption of mental derangement is not sufficiently founded, pastoral theology must instruct him what he has to do.

MENTAL DISEASES.

Priests are quite often asked to assist in the treatment of insane persons, because non-medical men do not believe in treating mental diseases from a purely somatological standpoint; but are disposed to prefer a psychological or religious treatment. For the same reason, the advice of a priest is often invoked before the physician is sent for, especially in the first stages of mental derangement. In the latter case, it would be the priest's duty to insist on sending for a physician, because there is no reasonable doubt that each disorder of the mind is caused by, or at least connected with, disorders of the body. The physician is alone, of course, competent to discover and judge correctly of them, and to trace their connection with the mental derangement.

How may the priest render good service in treating insane persons?

He can and should, at all times and places, oppose the popular prejudice of mental derangements being disgraceful in themselves, or anything else than diseases. Although,

among the causes of the mental derangement, there may be such as render men despicable, yet the insane are nothing else than sufferers from disease, and deserve as much pity as, yea, a hundred-fold more than, those suffering from mere bodily disorders. Mental disease is a sad affliction to the patient and to his family and to all around him; but much more sad is the prejudice against these unfortunate sufferers. The family of which these poor unfortunates are members, will, with a painful earnestness, hide their condition, and often deprive them unnecessarily of the freedom they should have. Up to this very day, the insa re are locked up, mocked, laughed at and derided, even illtreated. Very many people within our own "enlightened" century act as though the sufferer from disease and derangement of the mind were an outeast from human society. The very family of the patient, every member of which would be eager to nurse any of its members suffering from bodily disease with tenderest care, and to give every attention to alleviate the pains and sufferings, and to provide for the necessities and wishes, of the sick, turns away its very sympathies from any one of its members who may become afflicted with mental disease. The irrational doings of the diseased person are considered as mere vagaries, or as wilful, mischievous perversions; mockery and punishment are made use of. Any melancholy distempers are looked upon as unnecessary moodings, and unfounded, self-torturing discontent. The already over-sensitive patient is driven to amusements, is forced into society, to travel, to go to watering-places; no heed is taken of the fact that his condition requires, above all, rest. In short, to misunderstand the condition of the insane patient is the order of the day. In this respect, the priest, when called in, can render good service, by recognizing

the patient as really "sick," and by requiring that a physician be sent for. From this time forward the treatment of the case must be left exclusively in his hands. His directions must be implicitly obeyed alike by priest and family. For, in mental diseases, the slightest neglect may render a cure impossible. The application of fitting remedies, at the first appearance of symptoms of mental derangement, is of an importance not to be overestimated.

Many unfortunate creatures at present suffering from aberration of intellect, without hope of cure, might now be in possession of their reason, if they had been treated correctly at the period named. It is the experience of all asylums that the patients are commonly brought in too late; and that, during the interval between the commencement of the disorder and the admittance of the patients, they had received neither help nor consolation, but injurious treatment. For these reasons, I advise that insane people be taken to asylums as soon as possible.

As to the necessity or policy of placing a patient in an asylum immediately after the commencement of his disease, the question cannot be discussed here. In every case the physician will have to be the judge. Should the physician, however, decide that the restraint of an asylum is necessary, then a second prejudice manifests itself, to wit, an aversion on the part of the public mind, educated as well as uneducated, to institutions of this kind. This aversion has its origin, for the most part, in a mistaken estimate of mental diseases, and a morbid dread of public opinion. It is increased by natural love, which now asserts itself with renewed energy. The unfortunate relative may have been derided, abused, and even ill-treated, by his own family, but to the asylum he must not go. And why? Because, we are answered, these

asylums are worse than jails; because diet and lodging, attendance and treatment, are bad; because the attendants use force toward the patient, maltreat him, and so Whether it be egotism or love which causes this aversion to placing the patient in an asylum, he is the sufferer from this way of acting. Here, again, the priest, whose counsel is often asked in such matters, may render good service, by explaining to the relatives how they may best show their affection for the unfortunate one; by urging them not to stand in the way of the cure of this terrible affliction by delay or through want of common-sense; and by informing them that they are bound in conscience, if the physician declares the placing of the patient in an asylum to be necessary, to act according to his directions, even against the will of the patient. The patient himself cannot say what is baneful or beneficial in his case; and his family are compelled to act for him, even against his own wrong judgment, and against his morbidly perverted will.

Direct psychical treatment of the patient by the priest must be regulated according to the directions of the physician. It may be remarked that such treatment is generally of no use, and is often hurtful. Priests will, of course, naturally betake themselves to the use of religious reasoning; but the patient will, very probably, regard with suspicion this "religious influence." In general, the priest is not in such eases the proper person for psychical treatment. Even in the case of the patient wishing to consult him,—it may be about insane scruples,—the utmost care and discretion will be needed. If you reason a melancholy, scrupulous patient out of one of his scruples, a dozen others will present themselves to torture him. All possible arguments of reason, religion, and philosophy, may be brought forward: as well try to fill a sieve with

water. The patient must have recovered the healthy exercise of his reason before religious treatment can be of any service to him.

It may be remarked, in general, that, in treating the delusions of an insane patient, two extremes must be alike avoided—that, namely, of assenting to them unreservedly, and that of contradicting them with persistent harshness. Assent confirms the false ground the patient has taken; contradiction angers, nay, exasperates lnm. Such delusions, and whatever may lead to them, should rather be avoided; the patient's attention should be drawn to something else; other objects should be placed before his mind, which is perverted in one direction. But, in doing this, every possible eare should be taken to avoid dishonesty in dealing with the patient, as well as every kind of deception or trickery. For, distrust and exasperation against individuals or the world at large, arising from such wrong practice, are often the greatest hindrance to a successful cure, even when the patient has been placed in an asylum. For the same reason, the patient should not be inveigled into an asylum, under any pretext or deceit. Excitement, lasting for days and weeks, of patients that have been quiet enough before, is the consequence of such practices, as every physician of the insane knows.

B.—THE SIXTH COMMANDMENT.

The sins against this commandment, peccata luxuriae, surpass in our times, and probably always have surpassed, both in number and in kind, sins committed against all the other commandments put together. This lamentable fact has its explanation in the fall of human nature. Upon this subject, consequently, the priest feels, in an especial manner, the necessity of being possessed of every possible information which may guide him in the discharge of his duties in regard to it. For, not only are these sins of lamentably frequent occurrence, and of the greatest annoyance to him in exercising his duties as confessor, but, also, they, more than others, affect the human body, and stand in close relationship with the most important function of the human organism.

The question has often been agitated whether or not such dangerous, as well obscene, matter should not rather be treated of in the Latin language. I agree with those who prefer the vernacular. As to the danger of unprofessional persons reading such matter for the gratification of a prurient nastiness, it is certain they need not have recourse to a work on pastoral medicine, or to any other scientific work, for such an object, inasmuch as they may find abundant occasion of gratifying their lust in the bad literature of the day. As to obscenity, I say with Debreyne,* that the use of the vernacular "loin d'avoir de l'inconvénient, n'oblige qu'à une plus grande circonspection

[·] L. c., preface.

dans le langage et à une plus grande décence dans l'expression, tandis qu'ordinairement, à la faveur d'un plat latin, on se croit en droit de tout dire, et de dire ce que souvent on devrait taire."

Besides, I should have found great difficulty in expressing myself in Latin, not only to the point and with accuracy, but, likewise, in finding always the right word in which to convey my meaning; because many terms that are used by the medical men of science of our days can scarcely be expressed in the Latinity common and in vogue amongst us, and new-coined words would have derogated from the clear meaning of the text. Nevertheless, I have tried to respect both opinions by using many terms only in Latin.

I.—MASTURBATION.

This murderous vice is to-day fearfully common, according to the testimony of both priests and physicians. It leads to consequences most injurious, and its cure is extremely difficult.

Besides the contagion of bad example, in the school, during gymnastic exercises, bathing, sleeping together in the same bed, the following causes of self-abuse must be particularly named: evil-minded domestics; servant-girls who tickle the sexual parts of little children in order to quiet them; effeminate education; sedentary studies which do not really occupy the mind, and are not accompanied by proper bodily exercise; the enervating sentimental, and indeed licentious, literature of the day, together with its manifold immoral art-representations; the want of modesty, nay, the downright immorality, existing at

theatres and balls, to which young people gain a sadly early admittance. Sometimes pathological affections of the genital organs, such as pustules, itching caused by small worms or by uncleanliness, may directly lead to this vice; and such cases, which generally affect younger children, become less known to priests than to parents. They should invariably be referred to the physician.

The vice is most common with boys and youths, but it cannot be denied that it is prevalent even amongst young people of the other sex. These unfortunate creatures of both sexes, with languishing, confused, and timid glances; sunken and blue-encircled eyes, their faces pale, puffed, and wan; their hands perspiring, and flabbily hanging down; their knees weak and easily bending; with such wretched earriage and constant inclination to sit or lean against some support,—these stupid beings of thoughtless, absent, morose disposition, we meet, alas! too often. They hide away in any retirement, become timid, full of apprehension, dislike the joyous pleasures of youth, and anything like serious mental activity, lie in bed of a morning, and become emaciated and stunted in their development. Later on, they are affected with involuntary passive pollutions,* with frequent swoonings, tremblings, and palpitations of the heart. Finally, the vice is attended with incurable conditions of general decline, of dropsy, epilepsy, and, in some cases, with spinal consumption. In the female sex, it becomes the occasion of various disorders of the womb, and of hysteria. Add to the above, the tortures of remorse, and fear of the consequences, physical as well as moral, of these practices which they cannot leave off. Thus these unfortunates become, not

^{*} See farther on, under "Pollutions."

unfrequently, melancholy, and, at last, mad. Their depression of spirits becomes intolerable, and often their lives end in suicide.

Such, in general, is a picture of these unfortunates, who are by habit addicted to this nefarious practice. But not all these symptoms, or at least not in so pronounced a manner, characterize every case. Some persons have their nervous system shattered in a less degree, although they may have practised self-abuse for many years. on this account, it is not wise to depict the consequences of this vice in too vivid colors, lest the sinner may give the lie to his monitor. There is another reason which renders it desirable to exercise great care in cautioning young people against this evil. It is, that many an unfortunate to whom our cautions are addressed may be already a prey to depression of spirits, partly in consequence of the weakening of the nervous system, partly in consequence of remorse and shame; and again the genital organs become, from frequent and unnatural excitement, morbidly sensitive, -so much so, that the depressed mind and enervated will are not equal to the subduing of the bodily desires. The corrupted imagination, filled with voluptuous pictures, scarcely admits of any other interest, and it requires, if the evil has made any progress, very severe struggles to abandon this vicious habit; indeed, without higher religious motives, such men are seldom converted. It is obvious that the utmost discretion should be used in endeavoring to dissuade men in such a condition from this pernicious vice. Earnest, but, at the same time, kind and consoling words, calculated to sustain the moral strength, will best answer the purpose. Due consideration must be given both to the existing cause and to the circumstances exciting to this sin, and a rule must

be laid down in accordance with them. Medical treatment is not within the sphere of the priest. If there are signs of failing health, then the penitent should by all means be referred to a physician; indeed, he should be always counselled to take medical advice about the manner of living best suited for his personal condition, in order to reduce excitability, and to support his moral endeavors to overcome this vice.

Marriage is, of course, the best remedy. This is one of the chief reasons why so comparatively small a number of those addicted to this vice perish from the evil effects above mentioned. In the greater number of cases, marriage will effect a cure. It may happen that the vice of self-abuse may continue even after marriage; but it is the exception, and, in most cases, there are special reasons to account for it. The natural and normal conjugal relations are best suited to arouse disgust and aversion against this unnatural abuse. The priest, as well as the physician, should therefore urge those persons to enter as soon as possible into the marriage state, if circumstances allow it. A fear, generally unfounded, of impotence has then to be overcome. Through fear of impotence and the depression of spirits arising from it, the genital organs having been weakened, a temporary impotence ad copulam may exist. which fact, of course, increases the depression. This fear of impotence must be combated as soon as it appears, generally by the physician, for he is better fitted than the priest to give counsel and to encourage in such situations. But terribly vicious, and, thank God! of rare occurrence is the expedient adopted by the physician of sending his timid and apprehensive patient to the prostitute in order to test his potency. A like abuse of trust and insult to morality is it to counsel a man to have illicit sexual intercourse in

order to be cured of self-abuse, when he cannot at the time contract a marriage. This is to drive out Satan through Beelzebub: and the physician, in both cases, is accessory to grave sins. Yet it is done, although rarely.

As I remarked before, the long-continued practice of self-abuse leads in some persons to very alarming nervous affections, while others experience the evil consequences in a less degree. It is necessary, therefore, to be on one's guard against hasty judgments, when connecting cause and effect in this regard. For, from the above-described morbid appearances, the presence of the vice of self-abuse can neither always be inferred, nor, when this vice and those nervous affections are really present at the same time, can we always regard the latter as resulting from the former. The contrary is often the case, especially with insane and hysterical persons, where it can be sometimes proved, when connecting cause and effect, that the disease is the primary, and self-abuse the secondary, evil. This fact will be of little practical interest to the priest as regards insane people; but, in cases of hysteria, its interest is apparent. Religious enthusiasm and excessive sexual excitability often accompany one another in such cases, and then they become very troublesome to the priest. Such patients often assert, amongst other things, that they experience relief from pain' through practising self-abuse in a more or less complete way (pressing or rubbing of the clitoris, etc.). It may, indeed, appear so to the patient, for pain and lust meet each other, and may alternate in hysterical persons, whose nervous system is so much perverted: but this can never make self-abuse allowable to these patients. These practices, as resulting from a morbid

On tactus impudicus, which is allowed ad sedandum pruritum seu dolorem,—see farther on.

condition of the body, may not appear sinful to them, but they are, nevertheless, materially, an unnatural and illicit gratification of the sexual instinct; and the danger of consent is immediate, for frequent repetitions cannot be avoided. The priest cannot allow it; but, should be think the psychical conditions of the patient changed to such a degree that the sin cannot be imputed to her, then she is only so far responsible as she may have been originally guilty of eausing or encouraging her abnormal condition; and her case no longer has its place in foro conscientiae, but must be subjected to the treatment of the physician of the insane, and must invariably be referred to him. If the patient, being anywise aware of the sinfulness of this practice, or expressing doubts about it, says she could not refrain on account of the pain or itching, etc., then she must be instructed with regard to the material sinfulness of her actions, and forbidden to repeat them, because of the proximate danger of consent; and she must be told to seek medical help in her morbid condition. The pretext of repugnance to medical examination and consultation should not be easily credited. A really chaste woman will be made so unhappy through the condition above described, and will detest the desires and practices of self-abuse arising therefrom to such a degree, that she certainly will not refuse a decent medical consultation, if she is told that she may entertain a well-grounded hope of being in this way freed from her physical affliction and moral danger.

It is impossible to enumerate here all the different kinds of self-deceit, and, still more so, to follow all the windings and twistings of hysterical persons. One example may serve to illustrate my view of the matter.

A hysterical person, of good morals in all other respects,

confesses that she touches her person at certain times. She relates how she has to suffer severe pains for three long days at the beginning of her periods, staying in bed during that time; how the pain is severe at night-time, but during the day is very much milder; how she has consulted many, and, among them, famous physicians, but to no purpose; that she has found (how did she find that?) great relief from pains through a pressing and manipulating (of the clitoris?) accompanied by *voluptuous sensations*, and that she has therefore made a practice of thus handling herself.

Can the father confessor allow such manipulations, or must be prohibit them as self-abuse?

My opinion is that they must be forbidden; for there is no reason why this hysterical person may do anything in itself forbidden, in order to relieve her pains. That she is well aware of the material sinfulness of her practice, is evident from the fact that she accuses herself. Besides, her story is rendered very improbable with regard to physiological facts, at least to men of sound judgment. The pains of menstruation are caused for the most part, and probably exclusively, by a greater determination of blood to the internal sexual organs, which can be only increased momentarily by the irritation of the external parts. Now, we may easily believe that such increased rush of blood will make menstruation set in, and thus take away the pains: but why do they cease during the daytime and return at night, to be rendered less severe through these self-abusing practices? As far as I can see, there is only one probable explanation of this. A greater determination of blood toward the genital organs at the monthly periods eauses, in addition to the pain (?) that may result from it, an exalted sexual excitement, the nerves of the person being in so irritable a condition. These feelings become mixed up, and cause her to gratify that impulse. May be, under the influence of the subsequent relaxation, the feeling of pain becomes less intense, and thus the patient persuades herself that she is acting, not in order to gratify any sexual excitement, but to relieve her pain. During the daytime she has less opportunity of doing so unnoticed, or perhaps other affairs draw her attention from her abnormal feelings: her cure is effected, therefore, only at night.

Responsibility supposed, and all by-intentions excluded, does this intention of relieving pain, even excruciating pain, justify the practice of masturbation, which in itself is forbidden? A distinction must certainly be made between that tactus impudieus that causes per accidens a pollution, and between masturbation, i. e., that tactus impudieus which is apt to induce pollution directly. In the case of men, there is scarcely any doubt in this matter. The tactus impudicus ad dolorem seu pruritum sedandum is certainly allowed to them, even should pollution follow as an accident. But to cause pollution is forbidden in itself, and those tactus impudici cannot therefore be allowed which directly bring it on. Thus, e. q., scratching on the parts, rubbing of the skin of the scrotum or its adjoining parts, is not forbidden, because this causes pollution only per accidens. But by rubbing, ad pruritum sedandum, the penis, or the glans penis, the individual would stir the immediate cause of an erectio et pollutio, would directly excite the voluptas carnea, and put himself in danger, which is in its nature nearly unconquerable, of consenting to pollution. Besides, in this case, sedatio pruritus would be effected only after the nervous excitation had been lessened, and the irritability assuaged, through solution of the material voluptas venerea and of pollution. Therefore moralists forbid to men, without condition, that is, absolutely, any such touches as lead to masturbation—declaring that *pollution* is a forbidden thing.

In the case of females, there is no pollution, as the moralists have it, "quia verum semen in mulieribus non datur." * Masturbation in females is placed by the moralists under the head of "tactus impudicus."† Regarding its sinfulness, they say: "Non peccant per se qui se tangunt (sc. impudice) ad pruritum sedandum." † But tactus impudici are forbidden, "ctiam secluso affectu venereo, ob gravem indecentiam et imminens libidinis periculum." Do these words apply to the matter we have here under consideration? The danger more or less proximate, or more or less remote, of libido, of delectatio carnea, eaused by tactus ad pruritum sedandum, can by no means be placed side by side with the effects of those self-touchings above alluded to. Those latter are directly, and in themselves, inclined, not only to the causing of a delectation not at first intended, but to the effecting certainly the gratification of a real and complete sexual feeling, because they affect that part of the genitals, which is, in fact, the principal seat of sexual sensation, physiologically speaking. The like may be said of manipulations made in order to reach and excite the vagina and the uterus (ope digitorum vel aliorum instrumentorum), because they are likewise directly adapted, though in a less degree, to bring on a sexual feeling.

^{*}The distinction made by Debreyne, l. c., pag. 149 ff., in females, between a masturbation accompanied by an effusion external or internal, and a "simple orgasme out des mouvements qu'on apelle déréglés, lesquels. s'ils no sont suiris de pollution, s'epaisent peu à peu sans sensation extraordinaire," is in itself wrong, and in the end to no purpose, for there is never effusion of somen verum, and therefore no pollution in the sense of the moralists. But v-lupéas venerea may exist even to self-gratification, without any effusion. †Gury, l. c., tom. i, pag. 418—note.

‡ Bidem, pag. 409.

[§] Debreyne (l. c.) would have the uterine masturbation, as he terms selfabuse, practised by irritation of the uterus, to be regarded as a more grave

I find what is of the essence of masturbation in this voluntas venerea caused by manipulations of the cliteris, vagina, uterus, or of all these parts together. In an article of the Nouvelle Revue Théologique "de pollutione feminea," A. Eschbach, Supérieur du séminaire français de Rome, also very positively points out "illicita delectatio venerea," and not "frustratio seminis," as of the essence of masturbation (pollution according to the moralists). Both circumstances make up the malice of pollution, primario vero et principaliter pollutio fit peccatum ex delectatione illicita, "ita ut si Creator Deus generationis organa ita disposuisset, ut perinde ae in sexu sequiori (ovula, sc.), ita etiam anud virum superfluum semen vel nocivum absque libidine efflueret, liceret utique procurare hujusmodi fluxum ad servandam vitam vel sanitatem . . . quare etiamsi in pollutione nulla haberetur seminis frustratio, uti apud senes obtinet, idem specie peccatum forct."

From this standpoint, a distinction between masturbation in men and in women cannot be sustained any more; and self-abusing touches (that is, manipulations that are directly and in themselves adapted to cause the sexual feeling) are forbidden in the same degree to both sexes. But the difference in species between what is commonly termed tactus impulicus and masturbation in females is striking, and renders it clear that masturbation cannot be allowable in females ad praritum seu dolorem sedandum.

Of other forms of unnatural lust, I will not here speak. Their consequences are similar to those resulting from

form of masturbation, for the reason that the frequent violent irritation of the uterus is in itself adapted to produce sterility. It cannot be denied that inflammations, ulcers, even cancer, and, through these, sterility, may, and often do, arise from such injurious irritations of the uterus. But whether this circumstance alters the species peccati seems to me doubtful. The masturbation clitoridicane (Debreyne) also shatters the whole organism, genitals included, and is thus often the cause of bringing on sterility.

ordinary self-abuse. I will only mention that pederasty is of more frequent practice than some are willing to admit. Although in the days of paganism even philosophers were guilty of this vice, yet it has been reserved to our century to make an attempt at justifying it from a moralscientific standpoint, and to insult society with the claim that it is entirely allowable, right, proper and lawful. certain Karl H. Ulrich has dared to maintain such a proposition in his writings, the last of which was published 1868. This man asserts, in the introduction to one of his works, that about twenty-five thousand pederasts live in the German, and twenty five to twenty-eight thousand, in the Austrio-Hungarian, Empire: the numbers, he asserts. he can show from the correspondence of these unfortunate people. If this be correct, then it is horrible indeed: for how many victims of their beastly lust will be ruined by these vampires!

During the last year a book was published in Berlin which attempts to found a system of absolute sexual liberty, from the standpoint of the now prevalent philosophy of materialistic infidelity. There should be only such restrictions of sexual intercourse as: that, outside of marriage, no generating of children should be allowed, and sexual intercourse between brothers and sisters should not be of too frequent occurrence, lest too many marriages between brothers and sisters be contracted, and the population be thereby increased too much. In other respects, as to selection of persons, and as to time, and place, and manner (even masturbation and sodomy), sexual intercourse should be absolutely without restrictions. Finally, the author of the filthy production urges his readers to clear the road for this "commonwealth of free sexual commerce" by the propagation of writings which advocate it, and by the practice (at first, in small circles) of his horrible maxims.

H.—POLLUTIONS.

Pollution (effusio seminis) is a physiological phenomenon in all male persons, occurring with or without cause, internal or external, proximate or remote, occasioned by . the individual. It finds its cause apart from internal or external sexual excitement in the irritation of the seminal The more irritable the vesicles through the semen. seminal vesicles are, the more frequent and the more easy is the accident of pollution. Persons of a sanguine temperament, possessing a very strong plethoric constitution, are most likely to suffer pollutions, especially if they lead a life of luxury. Again persons, whose nervous system suffers from excessive sensibility, or whose genital system has been weakened by previous excesses, and left in a state of morbid irritation. With the former, pollution occurs generally only during sleep; with irritable persons it also occurs when awake; with those whose organs have been weakened by excesses, especially in the form of longcontinued self-abuse, it generally occurs when awake.

Physiologically, pollution in healthy men occurs at regular intervals, and always during sleep. The intervals are different, extending from eight days to several months, according to the constitution and habit of life. These pollutions are not hurtful to health, and certainly are without sin, because occurring during sleep.*

^{*}Of course we here place the condition that no sensual imaginings, readings or conversations, or other wilful causes before going to sleep, incite to pollution.

But how act in case one awakes and becomes aware that an emission is either imminent or is in progress? Is he obliged to hinder the emission? Most moralists say no, for they say it is very difficult or impossible to hinder it, and, secondly, semen retentum corrumpitur; and nobody is obliged to expose himself to the risk of becoming diseased through the corrupt semen by hindering its emission.

The above reasoning is incorrect. In answer to the first reason, I remark that a greater or less difficulty should not be taken into consideration. I admit the difficulty in question unhesitatingly. If the emission has begun, then that part of the semen which left the seminal vesicles must certainly escape, either immediately or later on, with the urine. That part of the semen remaining in the vesicles will be affected as if emission had not actually begun, but was imminent. Whether a person would succeed in hindering its spending itself depends on circumstances. But it does not follow that no reasonable attempt at prevention should be made. The complete sexual feeling accompanies the emission; if, therefore, the latter is successfully hindered, then, of course, the danger of assenting is very much lessened. Even if no success is attained, the energetic act of will necessary as a preventive means renders at least the service of removing the danger of assent. Nobody is obliged to do things impossible, but every one is bound in this case to do his best; the more, because the second reason, deduced from the risk of disease which is said to follow from the corruption of the semen, is entirely without foundation. There is no corrupted semen, that is, such semen as could in any way be hurtful to the organism. If a part of the semen did pass from the seminal vesicles into the urethra, it will escape in this or that way, but always without detriment to health. The other part will remain as it was, and where it was. This is just as certain as the other fact that the suppression of the pollution, even if there is a surplus amount of it, can only cause a passing uneasiness, but can never do serious or lasting hurt.

I answer therefore affirmatively, that a person is obliged to use reasonable means, on awaking, in order to prevent a pollution imminent or happening. These means are: to try to become fully awake as soon as possible; to make an energetic act of the will, accompanied by an elevation of the heart to God, or any other such religious act. will usually be found very good to select a cooler place in bed, or to rise immediately. Finally, the orgasm subsiding a little (before, it is generally impossible), I would counsel to urinate immediately, for the filled bladder presses and irritates the seminal vesicles that lie close to it; the irritation, therefore, will considerably decrease as soon as the bladder is emptied. I deem this so important that I always counsel those who suffer from rather frequent pollutions not only to empty the bladder thoroughly before going to bed, but also never to neglect this, when awaking during the night.

The objection is made, that it will not do to make such attempts at prevention obligatory, as it may lead to a great many scruples and anxieties: whether, for instance, the attempt has been energetic enough or not. I do not share this fear; indeed I believe that this act of the will is very likely to calm an anxious conscience. The question is asked, whether one who knows from experience that there is no danger of his assenting, is, nevertheless, obliged to attempt the suppression? I answer, that people are only too readily deceived with regard to any such safety derived from experience. Besides, why not make the

attempt? It is not a burdensome one, and can never do harm. Is not this act of the will in reality necessary in order to place one's self on the safe side, in the matter of consent? And to neglect such attempt at suppression,—does it not involve in itself a serious danger of assenting?

As very frequent pollutions, even in persons of general good health, produce not only a more or less marked lassitude, but, as they may also tend to become still more frequent, it is not amiss to give here some precautionary measures. Above all, feather-beds should be avoided, as also too warm coverings. Lying on the back disposes to dreams, and especially erotic ones; the position, therefore, should be on one of the sides, never on the back. The supper should be light, not too rich or stimulating. regard to drinks, all strong alcoholic liquors, as heavy wines, punch, strong beer, should be avoided at night, or should at least be taken in very small quantities by those who are disposed to often-repeated pollutions. Finally, it is necessary to abstain, not only at night, but in general, from all stimulants, to take plenty of exercise in the open air, and to use, if possible, cold baths. If medical treatment is necessary, -which is not, however, generally the case,—it must be reserved for the physician.

All that has been said about awaking when a pollution is imminent, must also, of course, be applied to pollutions occurring during the daytime, at least for persons either in good health, or of nervous irritability, where this latter does not go much beyond the line that divides health and disease. An energetic act of the will can do a great deal, the more so as the person is then entirely awake, and has more control over himself. The matter, too, has a different aspect, in so far as there is generally an external exciting cause of these pollutions occurring in the daytime.

Some erotic impression made upon the senses (theatre, ball, confession, readings of physicians) or a vivid thought of an erotic character, even should it be involuntary, sometimes a purely local irritation of the genitals, may lead to the danger of pollution, or even to the quick consummation thereof. If one can withdraw himself from the influence of causes like these, he must do so; as, without it, the action of the will does not amount to anything. He who wills an effect must will the means. If the withdrawal is impossible, as, for instance, inter confessionem, or during medical examinations and operations, then a pollution is free from sin secluso consensu, as all moralists state. Among the local irritations of the genitals, that one arising from accumulation of the smeqma praeputiale (secretion under the prepuce) occurs quite frequently, especially so with celibates, who generally have the glans penis covered by the prepuce, unless it is prevented by habits of cleanliness. A plentiful and weekly use of washes, during which the prepuce is drawn back, will prevent this trouble and its consequences. * In general, irritable persons should be always counselled to seek the advice of a physician, as this irritability may to a great extent be relieved by proper dietetic regimen and medical treatment.

Finally, we have to speak of the *pollutio diurna passiva* (Debreyne). Pollutions of this kind, very happily termed passive, take place also during night, but then seldom; generally they occur while the person is awake, and also without any *crotic* external or internal cause whatever, and

^{*} Such washes may sometimes bring on a provocation to sin. Unnecessary occasion of temptations should, of course, be avoided. But this sucgrate, when accumulating, produces an irritation more dangerous and lasting and it should therefore be removed as soon as noticed (especially in the summer).

without sexual feeling. This pollution is often unaccompanied by any sensation, and often occurs with disagreeable, even painful, sensations of the genitals and the neighboring parts. Simple mechanical irritations, as worms in the rectum, an obstinate constipation, piles, abrasions of skin on the anus, the above-named accumulations of smegma, even in smaller quantities, and most frequently the irritation during the movement of the bowels or while urinating, directly cause these passive pollutions. Probably, with the exception of a very few cases, where other morbid affections can be proved, this excessive weakness of the parts has always been brought on by previous long-continued excesses, especially in the form of masturbation. Such unfortunate people exhibit a remarkable feebleness of will, and, even should they for once be firmly resolved, they cannot prevent the evil. There is, of course, no new sin in these pollutions.* All the priest can do is to guard them against another and irreparable sin: despair and suicide. They are not only utterly wretched in body, but, as Debrevne remarks, life becomes to them an object of loathing, and they are haunted by an incontrollable impulse to put an end to their miserable existence. Soothing, encouraging, kindly, consoling words may yet save these souls. The patient can hope, if he only becomes emancipated from the practice of masturbation: and this consolation is more to him than mere moral preaching. The only proper and necessary advice is, to tell him to confide candidly and honestly in his physician; and the consoling assurance should be given him that there is then a prospect of his recovery. In proportion as the recovery of the body advances, his mind and feelings also will be

The responsibility resting upon them on account of those former excesses which indirectly cause the present pollutions, does not concern us here.

rehabilitated: and only thus may his will regain control over his thoughts and actions.

Under the head "pollutio" the moralists very properly speak also of the so-called "distillatio." This distillation is the flow of a mucous fluid from the urethra. The fluid is secreted by the prostate gland and by the mucous follicles of the membrane of the urethra, and has nothing in common with the semen except the outlet. Distillation may occur in males that have arrived at the age of puberty, as well as in those that have not (also in eastrated persons). It may be provoked by self-abusive acts, or it may take place spontaneously, and it may finally occur with or without voluptuous sensations.

Gury (l. c., tom. i, page 421) is right in saying: "Distillatio voluntaria, etiam tantum indirecte, si notabilis sit, seu cum notabili spirituum genitalium commotione fiat, peccatum mortale esse potest, quia est gravis deordinatio et proximum pollutionis periculum inducit." I am not, however, myself disposed to lav much stress on whether or not the quantity of the mucus voided is notable, but, rather, upon whether the commotion is notable and voluntary. "Si vero parva sit," proceeds Gury, "et absque notabili commotione, distinquendum est: 1°. Si directe voluntaria sit, nec a mortali potest excusari; quia quaccunque distillatio semper, vel ut plurimum, secum fert commotionem et aliquam seminis effusionem. 2°. Si indirecte tantum sit voluntaria, facile etiam ab omni peccato excusabitur, quia de tuli fluxu non est magis curandum quam de emissione enjuscunque alterius excrementi quo natura se exonerare solet."

In 1° there seems to occur a little contradiction. It is said, if a notable commotion does not exist; and, later, each distillation is accompanied by commotion. But this concerns me not. Then the second reason, that each distillation

is accompanied by the effusion of some semen, is incorrect, because it is at variance with the definition of distillatio. Practically, it may be good to adhere to it, because the penitent cannot know whether semen may not have escaped at the same time; theoretically, it is incorrect.

To 2° I remark that I would not make the sin depend n the quantity of distillation. I cannot regard it as sinful, when there is no notable excitement, and this only an indirectly voluntary one, even if the quantity be great.

As far as distillation may be sinful, the same remarks apply to its prevention that have been made regarding prevention of pollution.

That a frequent "passive" distillation without any commotion, and without any voluptuous sensations, is entirely free from sin, and must be referred to a physician, because showing a feeble condition of bodily health, follows from what has been above said.

To provoke distillation by wilful self-abusive acts is, in my opinion, real and actual masturbation, which I would place in the same category with masturbation of females, but for the proximate danger of real pollution. With persons that have not yet arrived at the age of puberty, or who have been castrated, the matter stands exactly as with females, because in both cases there is no effusion of semen. Independently of the quantity of the fluid, the sexual pleasure is directly consummated by this kind of masturbation; and this "masturbatio sine pollutione" differs, in my view as above given, essentially from that tactus impudicus that is allowed "ad sordes abstergendas, ad pruritum seu dolorem sedandum aut ad infirmitates curandas."

III.—USUS MATRIMONII.

1.—Onanism: Peccatum Onan.

Gury (l. c., tom. ii, pag. 915) defines: "Onanismus in co consistit, quod vir, post inceptam copulam, ante seminationem se retrahat, et semen extra vas effundat ut generationem impediat." This is the definition of onanism, in the strict sense of the word. That it cannot be allowed needs no demonstration.

The same applies to that kind of onanism where the semen non effanditur extra vas, but where a second vas is contained intra vas, which is removed post copulam together with the semen, generation being thus absolutely prevented. This latter kind of onanism is, alas! so common, that the trade in such articles (condoms, preservatives, etc.) has become quite extensive, and is displayed with barefaced impudence in the advertisements of journals political and of polite literature, as well as medical and technical.

In some other cases a doubt may arise. In France especially, a certain mode of marital intercourse is said to be of frequent practice, in order to prevent or limit the procreation of children. Assuming that there is a certain time when intercourse is not likely to cause pregnancy, the married people refrain at periods wherein they believe that pregnancy will follow, and they have intercourse only at times when they believe they may do so without possibly, or probably, causing impregnation. I can bear testimony that this mode is used not unfrequently in Germany also, as a means of limiting the number of children. Some there are that see herein a species of onanism. I do not agree with them. Ballerini,* before

^{*} Gury-Ballerini, l. c., tom. ii, pag. 919, note.

us, does not take this view of the matter from a speculative standpoint. Indeed, he does not even mention the thing as occurring in reality; but he seems to recommend it, if incontinence may lead to an abuse of marriage-life, should there be, for some good reason, a wish of limiting the number of children. His reasons are: "Caeterum, si conjugibus licet perpetuam ex communi utriusque consensu servare continentiam, si conjugibus licet continentiam scrvare ac matrimonii consummationem differre ad annos viginti aut triginta, scu ad cam usque actatem, qua nulla prolis spes jam supersit; iterum vero, si in alium matrimonii legitimum finem, etsi omnis spes prolis adsit, licet tamen justa de causa et servato naturae ordine conjugalibus juribus uti, tum quando uxor certa sterilitate laborat, tum quando ob aetatem provectam ad conciniendum facta est prorsus inhabilis; quid demum prohibezt, quominus conjuges in finem superius dictum continentiam secundum normam ac limites praedictos servent? Aut qua demum lege ad congrediendum alio tempore adstringi dicemus?" I accede to these reasons of Ballerini, though herein, of course, I have no voice.

But, with regard to the physiological condition, I must contradict Ballerini. He says (ibidem): "Post accurationa physiologiae studia jam constat, sua stata esse tempora quibus e conjugali congressu sperari aut non sperari effectus generationis possit; et tanquam exploratum jam habetur sperari illum effectum non posse a quarto decimo die post incepta menstrua usque ad subsequentis epochae finem, id est ad sequentem usque menstruorum recursum."

It is by no means certain that between two monthly periods there is a time ever so short wherein impregnation cannot occur. Only this is certain that impregnation will most easily follow the copula, if the latter takes place

either shortly before, or (surer) shortly after, menstruation, because at that time all the most favorable conditions for it are present. The ovum that has passed from the ovary, as well as the effunded semen, retain quite certainly for some time their vitality within the female organ. How long this power of living, and consequently of impregnation, lasts, is by no means certain. Hence comes it that the semen, when passing into the womb and the Fallopian tube, may find there an ovum capable of living that had been expelled for some time, and this ovum may be impregnated; on the other hand, an ovum arriving in the tube * may find living semen of a previous copula, and may thereby be impregnated. Although, therefore, in proportion to the remoteness (of time) of copula from menstruation and ovulation the likelihood of impregnation decreases, vet it is by no means certain whether there exists a period during which intercourse will to a certainty not be followed by impregnation.

Even if the speculative reasonings on my side cannot be maintained, I have at least shown that the opposite opinion, viz., that this practice is a kind of onanism, has no foundation. I think the question may be discussed whether this mode of marital life should not be recommended in cases wherein important reasons render pregnancy undesirable, or not advisable.

The moralists further say: "Nunquam licet (sc. uxori) directe semen effundere... unde peccat mortaliter mulier, quae statim post copulam mingit, surgit, vel quid aliud facit animo semen expellendi." (Scavini, l. c., tom. iv, pag. 575.) I think it best to do away with this sin, by informing a penitent who accuses herself of such practice, that her

^{*} It is probable that impregnation is effected mostly in the Fallopian tube, not in the uterus.

culpable end will not be attained. Scavini emphasizes 'statim;" but it is certain that the semen, having once passed into the female organs, will not so very easily flow out. The walls of the vagina are drawn closely together immediately post viri retractionem, and, owing to the capillary power of the adjacent walls, the semen cannot flow out. Even if a part of the semen should escape, sufficient will always be retained. The best proof of this is the fact, that impregnation is entirely possible even stantibus intercopulam conjugibus. But a washing, or a removing of the semen by injections into the vagina shortly after copula, must, of course, be considered as true onanism.

As in onanism the fault lies generally with the man, it is important in praxi:—

1. An uxor debitum a viro onanista petere possit, seu tali viro reddere possit aut reddere teneatur?

The answer to this question belongs to the moralists, and their decisions are clear and sure. This one circumstance has its weight, from a physiological standpoint, in favor of the affirmative answer, viz.: that it is by no means certain that the vicious end is always attained by the onanist, as, against his will, the effusion of the semen will sometimes take place in vas, either partly or entirely. Debreyne (l. c., pag. 162) relates two cases, in one of which seven of eight children, and, in the other, all the children (seven), were generated "pro surprise," where copula had been had with onanistic intention. This circumstance may be used with some profit in causing the onanist to abandon his practice, as we may tell him that it is ineffective of his purpose.

2. An peccet uxor consensum internum voluptati praebendo quando actum conjugalem viro onanistae permittere potest?

The moralists answer: "Non peccut, modo assensum peccuto viri non pracheut." To the reasons given in sup-

port of this answer, another may be added: that it is asking too much to forbid consent to the inevitable consequences of an act that is not only not forbidden to the wife, but is one which she cannot refuse, and is not allowed to refuse. For the very reason mentioned before, namely, that generation may take place "par surprise," she should do nothing to hinder the act, but she must rather do all in her power to attain the legitimate end. But to resist, at the same time, the consensus internus in delectationem is far beyond ordinary human strength.

2.—Abruptio Copulae ante Seminationem.

a) "Quid dicis, si femina ante seminationem viri (viz., without consent of the husband) se retrahat?" "Non licet."

b) "Quid dicis, si vir post seminis effusionem se retrahat, quin adhue mulier seminaverit?" "Commune est," says Seavini (l. e., tom. iv, pag. 576), "posse se tactibus mulierem statim ad seminandum excitare, quia hoc pertinet ad complementum actus conjugalis. Esto quod seminatio muliaris non sit necessaria, sed summopere confert, cum natura nihil moliatur frustra. Atque ex hoc deducere est, peccare mulieres, quae in actu copulae animum in alia divertunt, ne concitentur ad seminationem: sicut vir peccat, qui mulieris seminationem non expectat."

Although the seminatio feminae aliquid confert, it is, absolutely speaking, not necessary for impregnation: her diversion, therefore, to other matters will be of no practical effect, either the one way or the other. Thus this sin, which exists only in the intention, may be done away with. To impose upon the man under sin expectare mulicris seminationem is to exact what is not possible, under penalty of

sin. After effusio seminis there follows nearly always, and almost immediately, a relaxatio partium virilium, which makes a continuation of copula ad producendam feminae seminationem impossible. Debreyne (l. c., pag. 184) says: "Je ne vois que la prolongation de l'acte conjugal, ou un nouvel act, qui soit complet et normal." How a physician can sustain this opinion, I cannot understand. Generally neither the one nor the other will be possible, at least not immediately, nor shortly after the copula. If a longer interval is interposed, the object of such practice is lost, be this object either the seminatio feminae—which appertains, as is pretended, to the completion of the act-or be it the levamen necessarium of the wife. Hence, because such a demand cannot be complied with in general, according to physiological laws, and further, because the seminatio feminae is not necessary to obtain the real end of copula, there seems to be no sin on the part of the man. The other question is: "Utrum feminae licitum sit, post retractionem et seminationem viri, sese tactibus excitare ad propriam seminationem, ut sibi levarien necessarium procuret?" hoe permitteretur uxoribus," says St. Alphonse (lib. vi, n. 919), "deberet permitti etiam viris, casu quo mulier post suam seminationem se retraheret, et vir maneret irritatus." Here Debreyne, who quotes this passage in order to support his own views, is rather unfair. Liguori (l. c.) remarks, first, that some authors answer negatively (dicentes, id non cece licitum, si mulier posset se continere). "Ratio est, quia semen mulieris non est necessarium ad generationem; item quia effusio ita mulieris, utpote separata, non fit una caro eum viro." He proceeds: "Communius vero affirmant. Ratio, tum quia seminatio mulieris pertinet ad complendum actum conjugalem, qui consistit in seminatione utriusque conjugis; unde sicut potest uxor tactibus se praeparare ad

copulam, ita etiam potest actum copulae perficere: tum quia, si mulieres post talem irritationem tenerentur naturam compescere, essent insae ingiter magno periculo expositae mortaliter peccandi, cum frequentius viri, qui s calidiores, prius seminent (sed haec ratio non suadet, nam, si hoc permitteretur uxoribus, deberet permitti etiam viris, casu quo mulier post suam seminationem se retraheret, et vir maneret irritatus: at DD. communiter dicunt, id vetitum esse viris, ut Sanch., p. 10, Wiegand et Bon., l. e.); tum quia, ut plures sentiunt, seminatio mulieris est necessaria, vel saltem multum confert ad generationem, nihil enim a natura frustraneum agitur. Omnes autem concedunt uxoribus, quae frigidioris sunt naturae, posse tactibus se excitare ante conulam ut seminent in congressu maritali statim habendo." The sentence quoted by Debreyne is only between brackets, and is directed only against that argument, that the wife should be allowed statim se exciture post copulam, on account of the difficulty of "compescere irritationem." Liquori rejects, as it seems, this reason, whilst he seems to accept the two others. The first of these two is expressed by Gury (l. c., tom. ii, pag. 914) with still greater terseness: "Quia seminatio mulieris pertinet ad complendum actum conjugalem, ut proprie conjuges sint una caro." This is directly the opposite of the term which is used, according to Lignori, by the opponents of this opinion: "Quia effusio illa mulieris, utpote separata, non fit una caro cum viro." Without intermeddling in this controversy of the theologians, I incline to the view of Gury. The marriage gives to both parties the right of gratification of the voluptas *(propter periculum incontinentiae): now, if the legitimate act ordained for this end, and properly executed, as far as possible, does not give this gratification to the wife without any fault on her part, it seems to me that she is allowed to

procure it by tactus, in immediate continuation of the aet, whether these tactus be made by herself or by her husband. This opinion of mine gains strength by the very reason rejected by Liguori. There will be great difficulty in subduing the irritation that is nearly always present under these circumstances. Now, this irritation is caused by an act that is allowed. Can, therefore, the wife be obliged, under such a difficulty, to avoid a thing, the effect of which she has a right to by marriage? This cannot be held; and the less so, as very often, as Liguori correctly remarks, the seminatio viri ensues ante seminationem feminae. A great many wives would thus be placed in very grave periculum peccandi which they could not avoid; and not to succumb to it, on frequent repetition, would seem to be beyond the power of human nature.

Indeed, I would rather ask whether a wife is not allowed statim post viri retractionem sese tactibus excitare ad propriam seminationem, even when the vir onanista ante seminationem se retrahit, and the wife is placed in tali irritatione. The circumstances on the part of the wife are similar as post seminationem viri. The moralists declare it to be allowed that the wife, at the copula cum viro onanista, may give her consensus in delectationem ex copula illa,—modo assensum viri peccato non praebeat: hence, even in such a case, the delectatio is not a thing forbidden in itself to the wife. Why, then, not grant to the wife, in the supposed case, as her due, what is kept from her only by the sin of the husband? If she can abstain, so much the better; but this is a very difficult thing for natural reasons.

I have, here, purposely abstained from the use of the term seminatio as regarding the wife, and I have mentioned with emphasis only the voluptas. This leads us to the third reason given by Liguori: Necessaria ad generationem

omnino non est seminatio feminae. This has been demonstrated by well-proved facts, and is nowadays considered certain. Besides, it seems very doubtful whether a copula, complete on the part of the wife, is always accompanied by an effusio, or so-called seminatio. That the irritation of the genitals during copula, and especially when voluptas completa is experienced, causes a secretion of the mucous membranes of these organs,-that is, in quantity greater than, but in quality the same as, the ordinary secretions,is correct, at least as far as the vagina is concerned. far the uterus is thus affected, is not surely known. there is an increased secretion from the uterus, -that is to say, especially from its vaginal part (cervix), -then this might promote impregnation, in so far as the same, being alkaline, may change the quality of the acrid vaginal secretion, and may thus be apt to preserve a longer power of living to the semen; further, perhaps, by freeing, through and during its flow, the mouth of the womb from the rather clammy secretion usually adhering to it, and by rendering the womb thus more accessible to the semen. This would be useful, especially in the case of women who have not vet given birth to children.

On the other hand, it can be correctly maintained that the voluptas completa is probably more conducive to conception than the hypothetical seminatio. The intense local excitement, the turgidity of the internal sexual organs, which accompanies, physiologically, the solution of this voluptas, must be of great influence on the organs that are lined all over with muscular fibres. But the matter is too complicated to be explained here. Besides, there have not been, or searcely any, beservations made on a

^{*}Observations of this and of a similar kind, even to experiments of artificial impregnation of the human female, made by the American Dr. J.

living person, for reasons easily understood. I may only say that the turgidity caused by the excitement, the contraction of the muscular fibres, and also the stronger action of the fimbria,—all probably help to bring ovum and semen in more sure and ready contact.

A necessitas ad generationem cannot be conceded to the feeling, as it cannot to the seminatio feminae. Yet it must be admitted that it is possibly, and, perhaps, probably, very useful. This circumstance in my eyes has some weight for the opinion, quod, si vir se retrahat post seminis effusionem, mulier statim tactibus se excitare possit, ut "seminet."

In connection with the above-quoted dictum of Lignori: "Si hoc permitteretur uxoribus, deberet permitti etiam viris, casu quo mulier post suam seminationem se retraheret et vir maneret irritatus," I may add, in order to avoid any misunderstanding, that this conclusion does not seem to me corectly drawn. The conditions are entirely unequal. There, post viri seminationem, that part of the copula which is essentially necessary for generation, namely, seminatio viri intra vas feminale, is completed, and the wife is allowed, for the reasons given, to add the levamen necessarium ad complementum actus perfecti, which is not essential for generation. Here only the seminatio feminae has taken place, which is not essentially necessary for generation, and is allowed only in connection with the actus ad generationem aptus; but the essentially necessary part, namely, the seminatio viri intra vas, is hindered by the action of the wife. Thereby the act ceases to be an allowed one, and every thing that is done from this moment ad procreandam seminationem (except an-

Marion Sims (who stands almost alone herein) will scarcely ever be continued to such an extent as to allow a certain judgment of these matters, which are so far withdrawn from human knowledge.

other introductio in vas) cannot be considered as complementum actus, because the act is neither complete, nor is it intended to complete it. The excitatio viri ad seminationem would be a real pollution. This much is here certain, feminam peccare, si viri seminationem non expectat. She acts either with an onanistic intention, or it is a very culpable egotism on her part, which places the man in a grave danger of sin.

e) The third form under which abruptio copulae ante seminationem can be practised, is the interruption of the act, on the part of the man, after the seminatio * feminae has taken place, but before the emission seminis virilis

ensued. Is this allowed?

Liguori (lib. vi, 918 alinea 2) says: "Si vero femina jam seminaverit, vel sit in probabili periculo seminandi, non potest quidem vir data opera a seminatione se retrahere sine gravi culpa; quia tunc ipse est causa, ut semen uxoris prodigatur, communiter dicunt (auctores nonnulli). Hoc tamen non erit ita intrinsece malum, ut aliquo casu permitti non possit: puta si vir desisteret a copula ob periculum mortis, vel scandali aliorum." I would add that great fatigue on the part of the man is also sufficient excuse, if no danger of pollution exists. With the same limitation, an over-exhaustion of the wife must be regarded as sufficient excuse for the man. Lastly, it may happen that the act, begun petente uxore, is followed by seminatio on her part, whilst the man is convinced that, even by longer continuation of the act, an effusio seminis on his part cannot probably be expected. In this case, nothing can oblige the man, not even sub levi, to continue the act. In order to show how little circumstances may otherwise

^{*}I retain this term, although I understand by it, less an emissio seminis mulicbris, than the solution of the voluptas on her part.

justify such a proceeding, I ask: If, post feminae seminationem, the husband is seized by a cramp, say of the leg or foot (as happens often enough, even independently of copula), is he obliged to continue the act?

d) Finally the question arises: An peccant mortaliter conjuges, si, incepta copula, cohibcant seminationem; that is, if they interrupt the act without semination having taken place in either of them? It is undisputed: Si alter se retrahit sine alterius consensu, certe graviter peccat.

"Si vero," says Lignori (lib. vi, 918) "conjuges ambo in hoc consentiunt, nec adsit periculum seminandi extra vas, id per se loquendo non est mortale; illa enim penetratio vasis feminei tune reputatur instar tactus verendorum, qui inter conjuges permittitur, vel saltem non est mortalis, secluso periculo pollutionis; ita communiter... Dixi, 1, si ambo consentiunt, nam... Dixi, 2, per se loquendo, nam sapienter advertit Sanch., 1. c., cum Veracrus, id ordinarie esse mortale, quia ordinarie adest periculum ex tali retractione effundendi semen, nisi conjuges experti sunt oppositum: quo casu tamen puto nullo modo posse cos excusari saltem a veniali, quidquid dicat Sanch., ibid., cum aliis."

Ballerini, who says for himself (Gury, l. c., tom. ii, pag. 911, note 6) that he does not see a grievous sin in it, also detends an opinion of Diana (ibidem): "Communiter, cessaute in utroque conjuge pollutionis periculo, non peccare maritum mortaliter, si corptam copulam ante seminationem abrumpat, ne proles generetur, modo id faciat uxore consentiente aut non rationabiliter invita. Immo si justa causa adsit impediendi seminationem, v. g., ob paupertatem ac multitudinem prolis, et nihilominus concubandi ad sedandam concupiscentiam, omnem culpam abesse, si mutuus consensus accedat. . . . Unde non erunt damnandi etiam de culpa veniali conjuges infirmi, qui ad sedandam concupiscentiam

inciperent copulam, et voluntarie illam minime perficerent: et hie easus frequenter potest accidere." He further quotes Liguori's (lib. vi, 934) opinion that is said to be sat communis, "quae (opinio) hos actus exensut ab omni culpa etiam in petente, si pollutio non intendatur; nec adsit periculum consensus in eam et modo . . . adsit gravis aliqua causa, v. g., ad focendum mutuum amorem aut ad avertendam alterius zelotypiam."

I state here that Ballerini is not accurate in his quotation; and that, besides, he left out, amongst other lesser points, one determining sentence of the last quotation from Liguori. In the space of the dots between the words modo and adsit, we have in Liguori: "(Et modo), tactus non sit adeo turpis, ut judicetur inchoata pollutio, prout esset, digitum morose admovere intra vas femineum; ac practerea" (adsit, etc., as above). If here morosa introductio digiti judicatur inchoata pollutio, is it not much more inchoata pollutio, when, instead of the introductio digiti, introductio penis is substituted? In such a case, the excitement in both parties is greatly increased, and periculum pollutionis post retractionem is rendered more imminent. This quotation, therefore, cannot be used to show that a discontinuance of coenta conulu is allowable.

I can by no means approve of the opinion that such a discontinuance of copula is allowed under the conditions and reasons above stated. He who does not desire the generatio prolis should, in my opinion, abstain from copula. What is to be attained by such an incomplete copula? The proper and immediate end of the act is made void; it can, therefore, take place only ad forendum mutuum amorem, ad avertendum alterius zelotypiam (!), ad sedundam concupiscentiam. There are other means to promote the mutual love of man and wife, such as oscula,

amplexiones, tactus minus turpes, that are suited to, quite sufficient for, and are also allowable between married people, even should a not intended pollution follow. The reason, ad avertendam alterius zelotypiam, falls under the same category, and is only the negative side of the former. The last-named reason, namely, ad sedandam concupiscentiam, will always remain the principal one. But, even for this end, tactus impudici between married people can be regarded as allowable, only so far as they do not in themselves, of their own nature, bring on proximum periculum pollutionis; or, to use the words of Liguori, are not instar inchoatae pollutionis. And how can an act serve ad sedandam concupiscentiam, which, by its very nature, tends to increase concupiscence? This is sheer contradiction. Even on the supposition that there is no consensus in pollutionem, there is certainly always proximum periculum pollutionis. But Liguori, as well as Diana, requires explicitly that there exist no such danger on either side. If the concupiscentia urges on to copula, then the act begun is surely accompanied by a proximate danger. Otherwise, if the concupiscentia is so little increased, and the delectation so slightly excited by the copula coepta, that even then there is no periculum pollutionis, then, most assuredly, the concupiscence was not so strong but that it could have been very easily overcome. I do not see how such a proceeding can be allowed even for conjuges infirmi; for, if they are feeble and sick to such a degree as to fear considerable harm from the copula, they must simply abstain from it. If from their feebleness they fear inability to complete the copula, they must be considered like old people. (See below under "Matrimony.")

Besides, it is certain that the copula propter solam voluptatem is not allowed; that is to say, that the complete

copula practised only for the purpose of voluptas (ad sedandam concupiscentiam) with the explicit exclusion of the purpose of generation, is at least a venial sin, according to the common sentence of all moralists. Now, how can there be no sin in this case, where only voluptas is sought for, and where the purpose of generation is excluded explicitly? Is there not therein a grave sin, at least in general, on account of the very imminent danger of pollution? I cannot imagine any reason which could justify such a proceeding. The case which would seem to afford the strongest grounds of justification is, when the wife runs, to a certainty, a great risk of life through gestation. even in this case I adhere to the opinion I have already Such a case would be indeed distressing, but it must be borne by Christian persons.* Even in order to avoid danger of life, nobody is allowed to commit a venial sin; much less, to expose himself to such a direct and proximate danger of mortal sin.

But the aspect may be changed by a circumstance which I do not find mentioned explicitly. It is certainly not the same, whether, 1, before beginning the copula, the intention is to begin it for any reason, and then to break it off ante seminationem utriusque conjugis, ne proles generetur; or whether, 2, the act is begun without such an intention of interruption, and is for some reason interrupted, both consenting, ante seminationem.

The first case has been supposed in the former argument, and can never, in my opinion, be allowed.

In the second case, the matter presents itself under a different aspect. Here the act is *rite* begun; generation is, perhaps, not thought of as the ultimate end, but most

^{*} This is one of the cases where I should think the mode of marital life, referred to on page 91, ought to be recommended.

moralists do not require such an intention, if it is only not explicitly excluded. Under these circumstances generation is implicitly the ultimate object, and the copula is undoubtedly allowed, even should the voluptas be the end that is just then thought of. Now, suppose both consent to interrupt the act for some good reason, ante seminationem utriusque (or also ante seminationem viri), it is only necessary that one condition be fulfilled, namely, that there be no periculum pollutionis. In the case first named, this condition can exist only with the greatest difficulty, or may be not at all, because no one can know, at the beginning of the copula, whether, or, if so, how soon, periculum pollutionis will occur. But here this condition can very well be fulfilled. For, at the moment when the conjuges agree to interrupt the copula, they can know whether or not there is periculum pollutionis. If the danger exists, the interruption would be a grave sin according to all; if not, I do not see any sin at all, not even a venial one. Those authors who do not find any sin, or only a venial one, in the discontinuance of the act ante seminationem, perhaps had it so in their minds; but they did not express it explicitly, as, I think, they should have done. Practically, the first, that is, the unpermitted act, will certainly happen oftener than the second.

To make this matter complete, I may mention:-

3.—Situs Conjugum in Copula.

Omnis situs etiamsi innaturalis in copula (vel stando vel sedendo, vel more pecudum vel a latere, vel viro succumbente) per se non excedit culpam venialem, dummodo actus conjugalis satis perfici possit:—"Mutatio situs generationem non impedit, cum semen viri non recipiatur in matricem

mulieris per infusionem, seu descensum, sed per attractionem, dum matrix ex se naturaliter vivile semen attrahat." (Lig., lib. vi, 917.) 'Et ideo nullum ctiam erat peccatum, si modus naturalis muletur ob aliquam justam causam, v. g., aegritudinis, periculi abortus, scandali, difficultatis, etc., ut ait Concinna." (Seavini, tom. iv, 574.) Gury (l. e., ii, pag. 902) sums up: "1° Minime peccant conjuges, qui situm invertunt ob periculum abortus tempore praegnationis, ob viri pinguitudinem vel curvitatem, ob nimiam mulieris defatigationem, aut etiam ob frigiditatem, quando invaturali situ magis excitentur, etc. 2° Situs, qui solus possibilis est, qualiscunque demum sit, nullatenus damnatur, licet non modica seminis perditio sequutur; quia pars ista non est generationi necessaria, et per accidens, invitis conjugibus, deperditur."

Dummodo actus conjugalis satis perfici possit, that is to say, if the introductio in vas is possible, and if the emissio seminis in vus can be effected. The infusio in vaginam is quite sufficient. For anatomical reasons, a directa infusio in uterum does very seldom take place, and never the descensus (by gravity). The semen is taken into the womb, partly by the movements of the muscles and of the cilia of the mucous membranes; partly, by the spontaneous movements of the spermatozoa (seminal animalcules). Thus the situs in copula is entirely indifferent as regards reception of the semen in uterum. some situs there may be a partial perditio seminis post infusionem in vas, but not to such an extent as to prevent conception. Experience proves that a very small quantity of the semen suffices for generation. I have nothing to add with regard to the just causes enumerated by Gury.

4. Finally, we have to speak of copula in certain conditions, such as menstruation, gestation, lying-in period, lactation, disease, etc.

a.—Tempus Menstruationis.

Most moralists regard the act during menstruation as peccatum veniale in se ob indecentiam, quam prae se ferre videtur; but as allowable, si accedit aliqua causa cohonestans, e. g., ad vitanda dissidia, ad incontinentiam praecavendam, etc. The indecentia is no doubt great enough, and one should think that concupiscence could be overcome during this period; but de gustibus non est disputandum. Besides, I do not believe the act to be invariably innocuous.

Indeed, the injury possibly arising to the man is unimportant, and will generally amount to nothing. The consequences of leprosy or monstrosity with which the eventual fætus was supposed, in former times, to be visited, are entirely fabulous, and never happen. Even the debility of a child generated at this time cannot certainly be predicted. But it is not at all certain that the female organs are not liable to suffer from the irritation accompanying the copula, as they are already at this period in a state of congestion. Injury in this manner is possible a priori. Congestive affections of longer duration may be caused, which, on their part, may be followed by a sure danger of miscarriage. Besides, such affections may lead to serious long-continued disorders of the generative organs. To point out the possibility of serious damage on the part of the wife is, therefore, of weight to restrain married people from this certainly most indecent use of marriage relations.

The moralists distinguish here between menstruation proper and a *fluxus extraordinarius*, which lasts, sometimes, for a very long time. In the latter case, copula is allowable, according to the more common opinion, "tum propter

infirmitatem, quia mulier in tali statu concipere non potest, tum quia talis fluxus est perpetuus et diuturnus, unde oportet, quod vir perpetuo abstineret." *

The first reason has no force, from a medical point of view, as appeared in my remarks made on regular menstruction. Direct injury to the child that may be generated is not to be feared from the act, but, perhaps, an indirect one through disease of the womb setting in. The second reason would be valid but for the circumstance, that the generative organs of the wife are injured by the act under such conditions. It cannot be hoped for, much less taken for granted, that there will be no harm done. For, a fluxus extraordinarius takes place only in consequence of a diseased condition of the generative organs. The presumption, therefore, is, that this diseased condition will be rendered worse, or, at least, may, possibly, be rendered worse per irritationem ex copula. In many disorders of this kind, the fact is really so: details are not necessary here. such eases, the physician should be consulted as to whether the copula is allowable. If practised against his counsel, there would be at least a venial sin, and, in certain contingencies, perhaps a mortal one.

b.--Tempus Purgationis: Lochial Discharge.

Similar to what has been said of fluxus extraordinarius applies here. The greater number of moralists hold that copula at this time is allowable, nisi ex concubitu gravis morbus vel notabilis aggravatio morbi immineat, ut si accessus haberetur ipso die partus, vel die subsequente. Injury to the man is not to be feared; nor can it be supposed

^{*} Liguori, lib. vi, 925.

to arise for the child, for there is no conception at this period. Not to speak, however, of the indecency, which is still greater here than during menstruation, the copula appears to me, at least if it takes place during the first few weeks after parturition, as a sheer act of rudeness to the lying-in The wife has just passed through the most important period of her life; her pains, although physiological, have been very severe, and these same in the generative organs; so much so, that even the healthy lying-in woman feels herself very much weakened and distressed; and there must be, indeed, a rather bestial concupiscence in the man to ask the marital debt at such a time. Certainly, the wife will not ask for it during the first few weeks, unless incited by a morbid affection (nymphomania puerperalis). If, in all this, there is not enough to satisfy a healthy conscience that the thing in question is forbidden, then more emphasis must be given to the fact that the act, at this period, is in the highest degree injurious to the wife. The danger is the greater in proportion to the smallness of the interval that separates the act from the delivery. The lving-in period leads to a great many affections which are then, indeed, simply physiological, but which would be considered morbid at any other time. The reconstruction of the enlarged uterus requires a greatly heightened activity of the organism; nav, according to more recent investigations, a total absorption and renovation of the same takes place. The processes in the generative organs directed toward this end, and the changes and lesions caused by gestation and parturition, of themselves afford a predisposition to various disorders: such as floodings, inflammations, changes of position. That the direct local irritation incident to the act, and even the general excitement caused by it, cannot but be injurious, is indisputable. The danger is the greater,

as the time is nearer to delivery. The processes mentioned above are of greatest energy during the first two weeks. At this time, also, the prostration of the female's strength is greatest. After this, the danger becomes less; but experience proves sufficiently that the slightest injury may have the worst consequences, so long as the generative organs have not returned to their normal condition. Now, the uterus does not return to its normal state before the expiration of six weeks.* At this time, again, the menses reappear, if the woman does not suckle (in women giving suck they delay longer), and the organism gives the signal that it is prepared for a new generation.

For the reasons stated, I regard the copula as absolutely forbidden during the first two weeks after delivery, as it then may be very injurious to the wife. Even during the following four weeks, I do not regard it as allowable generally. But the moralists must decide what reasons will suffice to counterbalance the danger of serious injury to the wife, which, although lessened, remains still imminent.

c.—Tempus Lactationis.

"Tempore lactationis conjugio uti licere communissime (auctores) affirmant; tum quia periculum inficiendi lae, et sic nocendi proli, rarum est; tum quia lex nulla id vetat." (Scavini, l. c., tom. iv, 573.) The opinion that there is danger of infection to the milk is no longer held, at least in so far as any deterioration of the milk can be affirmed to result directly from cohabitatio. But it is a different

^{* &}quot;The womb," says Schroeder (l. c., pag. 208), "weighs, immediately after delivery, two pounds: one week later, only one pound; after two weeks, only \$\frac{4}{8}\$ lb.; and it returns to its normal size, so far it does so at all, only after some six weeks."

thing whether the copula might not be rendered apparently forbidden at this period by the fact, that the milk grows thinner and deteriorates as soon as pregnancy supervenes, whereby the suckling child may be seriously injured. Generally the milk will even totally disappear. artificial nutrition becomes necessary, which is always less safe than nutrition by the mother's milk. Some moralists forbid the copula in this case: "Quia non licet sibi consulere cum damno innocentis." (Lig., lib. vi, 911.) They must, at least, take for granted that the wife knows from experience that she does conceive during lactation, wherein generally conception does not take place. I accede to the opinion of Sanchez, who holds the copula allowable, according to Lignori (ibidem): " Quod tunc vel alia via ipse (pater seu mater) poterit proli consulere, vel erit justa causa, ipsam (prolem) periculo exponendi, ne tamdiu conjuges cogantur abstinere cum tanta difficultate."

d.—Tempus Praegnationis.

Copula during pregnancy, according to the common view of the moralists, is at least not a mortal sin so long as there is no danger of abortion, and, according to a great many authors, not even a venial one. Liguori (l. c., 924) says: "Caeterum mihi arridet sententia, quod coitus cum praegnante non possit excusari a culpa veniali, nisi adsit periculum incontinentiae, vel alia honesta causa;" but Gury adds, and I think correctly: "Quae (honesta causa) vix alioquin unquam abesse potest" (l. c., tom ii, pag. 906).

The point in question, therefore, is the danger of abortion. It must be said, in general, that copula may indirectly cause abortion, through irritation and hyperæmia

of the uterus, only when occurring with excessive frequency or violence. But even then the danger is only greater during the first months of pregnancy. If the generative organs are otherwise healthy, such a hypersemia may cause the escape of the ovum most easily in the first few days after conception. It may be that, during this period of pregnancy, very many ova perish, perhaps, in consequence of copula. Very often they are not noticed, because generally they then escape easily, and without unusual flooding. But, during this very period, the copula cannot be forbidden, for no one can teil, at least with certainty, when pregnancy has taken place. The more remote from the day of conception, the less is the danger of an abortion in consequence of copula, if the organs are healthy. The, alas! too frequent aecident of abortion takes place in a far less degree from any direct external cause * than spontaneously, in consequence of morbid affections of the feetns and its decaying, or of morbid conditions of the womb or of the whole organism of the pregnant woman. A full, plethoric habit, anæmia and chlorosis, acute febrile affections of various kinds, inflammations and chronic congestion of blood in the womb,

^{*}Unless the pregnant woman acts without any consideration of her condition.' All movements and actions, that either cause violent shaking of the body, or bring on stronger contraction of the abdominal muscles, should be avoided by her. Of the first class (in my opinion entirely forbidden to the pregnant woman) are: leaping, dancing, viz., round dances (for the figure-dances, quadrilles, are nowadays walked, and are not injurious), riding on horseback. Also riding over rough roads should be avoided as innch as possible. Even riding in railroad cars does not seldom cause abortion, in consequence of the continuous shaking movement; and, therefore, a long railroad ride should not be undertaken without necessity. According to my experience, the concussion communicated from the sewing-machine, through the legs, directly and principally to the abdomen, does often produce abortion. If not absolutely necessary for support, the use of sewing-machines should be avoided. A hand-sewing-machine is to be preferred. Although not so efficient as the other, its use has neither of those evil consequences named, nor others.

caused either by local or general disorder,-all of these seem to predispose a female to miscarriage. It is certain that there is predisposition to miscarriage for which no cause is apparent, when it must be ascribed to a morbidly exalted irritability of the woman otherwise in health. If such predisposition exist, a trivial cause may bring on abortion. Circumstances, which otherwise would have no evil influences over pregnant women, precipitate the catastrophe under such circumstances; for instance, any vivid emotions, fear, joy, sensual excitement, spirituous liquors in small quantities, warm foot-baths, a slip of the foot, a perhaps slight fall, riding in a carriage or railroad ear, lifting of small weights, and finally copula, -any one of these is capable of bringing on abortion. The prevalence of miscarriage † shows that such a predisposition is very common, especially in the cities. When such a predisposition exists, the copula is not a necessary cause of abortion; but the danger thereof cannot be set aside, especially if the copula occurs with excessive frequency and violence. But it must not be overlooked that such predisposition is not known, unless either such a morbid affection of the wife as is generally conducive to it has been proved by medical

The abdominal muscles are strongly exercised by the lifting of heavy weights, and by high-reaching for things. A pregnant woman doing such things with att necessity is very blamable, and grievously sins, in my opinion, if she is well enough instructed about the probable consequences, and nevertheless persists in that way of acting. Even wi fully straining the abdominal muscles at constipation, which often occurs during pregnancy, may have evil consequences, and should be avoided as much as possible. Simple clysters of water, dietetic means, and mild purgatives, such as compotes, fresh fruit, buttermilk, or castor oil, breast-powder (pulvis liquiritiae compositus), magnesia, etc., should be used: but drastic purgatives, which generally contain aloes, must be forbidden.

Excesses in the use of spirituous liquors are always hurtful; but to the feetus, during the first months, they may even bring death. Bleeding can be also a cause of abortion, and should not be used unless by special order of the physician.

t Hegar says, Schroeder assenting (l. c., pag. 427), that there is one miscarriage during the first months to 8-10 deliveries at the full term.

examination, or the wife has repeatedly miscarried without any known external, vehemently exciting cause. If the predisposition is proved in the one or the other way, copula, I should think, is not allowable; for there exists an increased possibility, or rather a certain probability, of the danger of abortion. Nevertheless. I would look upon it as a venual sin, because the danger is not so very great as that it may not be counterbalanced by grave reasons, as, for instance, danger of incontinence. Such married people should by all means be counselled to be moderate ad numerum et ad modum.

e.—Tempus Morbi.

Here, of course, diseases, contagious and not contagious, must be separately considered.

Among contagious diseases I single out syphilis (morbus gallicus of the moralists), because, in its baneful consequences, it stands alone amongst diseases.

Syphilis is a disease of so grave and frightful a nature, and at the same time of so ignominious a character, that I regard the copula during its presence as always forbidden, even although only one of the married people suffer from it. The danger of the infection of the healthy person through copula is so imminent as to leave scarcely a chance of escape. The demand for the copula, on the part of the diseased, becomes a horrid outrage upon the healthy partner; and it is more than charitas, it is even insanity, in my opinion, on the part of the healthy party, to undergo the almost certainty of becoming infected with such a disease. I cannot even admit the danger of incontinence as a right cause. This may seem too severe; but every one who has

had experience of the terrible consequences of this formidable disease will agree with me. I believe on this point there exists an unanimous accord amongst physicians.

Moreover, even the offspring of such a copula is tainted, inasmuch as the parents almost invariably transmit this complaint to their children; frequently abortion sets in, and even the children who reach their full term often perish in a terrible manner during their first months of life. Thousands of children,—and, alas! how often without baptism!—have thus to bear the penalty of the sins of their fathers.

With other contagious diseases it may be otherwise. The moralists distinguish between diseases of long duration (chronic diseases, among which they also class syphilis!) and such as may soon terminate fatally. Regarding the first class, they say that copula asked for with good reason cannot be refused. I agree, as far as the sick party is concerned; but, on the part of the healthy person, I think it holds good only in cases where the disease is not very troublesome, and not of a tendency to shorten life considerably. This latter case is of rare occurrence. I may here mention that phthisis, which the moralists class among contagious diseases, is not contagious. To the objection that phthisis is hereditary, and that the progeny of parents, tainted with this complaint, are at least exposed to a proximate danger, St. Thomas answers: "Quanvis proles gigneretur infirma, tamen melius est ei sic esse, quam penitus non esse." (Lig., lib. vi, 915.)

In contagious diseases such as may soon and easily lead to death, the moralists regard the copula as forbidden; at least, that there is no obligation on the part of the healthy party to grant it. This opinion is certainly supported by every physician. The healthy party cannot even be

allowed to ask for the marital act, "cum nemo sit dominus suae vitue aut salutis."

In diseases not contagious, two distinctions should be kept in view. For here, indeed, it is a question of no mean significance whether the disease be of a slight character, and one which does not seriously impair the strength; or whether the disorder be very weakening and painful, and accompanied with strong fever. Furthermore, there may arise the danger of abortion to the impregnated ovum, or, again, the injury may be limited to the parents.

With regard to the danger of abortion, in consequence of copula with a diseased mother, I refer to what is said under the head tempus praegnationis. I may add that also many acute diseases, especially those accompanied by violent fevers, easily lead to miscarriage: consequently, whilst such diseases last, there exists a predisposition to abortion. A not contagious disease of the father has no influence at all through copula as causing misearriage. With regard to the injury that may arise to the parents, it is clear that diseases of a mild and undepressing nature do not suffer considerable aggravation from copula. Since here any serious aggravation is not to be feared, the copula, it seems, is allowed in such cases, and cannot be refused rightly. Exception must be made in diseases of the generative organs, which are always of importance, although they may often appear trivial to men outside the profession; for, especially in females, they may be prolonged and made worse by the copula. These chronic disorders of the female organs are very frequent, and rather difficult to cure. If trifling in the beginning, and easy of cure, they may be made worse by the continued practice of copula. A physician should therefore be always consulted, and the patient should be strictly enjoined to obey his directions to the letter.

With regard to more serious diseases, there are some in which no serious injury is to be feared from a moderate use of cohabitation. Among such I place phthisis. Phthisical people may always suffer somewhat from copula, but not to any great extent, unless they are predisposed to discharges of blood by coughing and hemorrhage, or that they are troubled with great difficulty of breathing. Such people generally have the sexual instinct unusually strong, and they should be counselled to be moderate. Again, within this same category are included external surgical affections, unless there be fear of bleeding from a wound in consequence of the irritation. But copula must be regarded as always injurious, and perhaps as leading to serious damage, even to sudden death, in febrile diseases, especially in acute inflammatory affections of the organs within the abdominal cavity (peritonitis); or within the chest (pneumonia, pleuritis, pericarditis); or within the skull (meningitis, hyperæmia, or cerebral congestion); likewise among chronic disorders, in diseases of the heart, in dropsy, when there is considerable shortness of breath. In such cases, I think, the copula should neither be asked for nor granted, before the physician has been consulted. Whether the copula here be a venial or a mortal sin depends upon the answer of the physician and the circumstances of the case. If, for instance, the doctor says there is danger of sudden death inter aut statim post copulam, I think it is surely a mortal sin. The moralists, of course, must decide this point.

f.-Tempus Statim post Balneum, vel Sectionem Venae, vel Prandium aut Coenam.

I make particular mention of these circumstances, because the moralists say that the copula after taking a bath or after venesection is not allowed, as then involving considerable danger. For the time after the bath, the existence of any danger must be entirely denied, at least for persons otherwise healthy; and, after bloodletting by venesection, it exists only in so far as either the bandage might be slackened, and, consequently, violent bleeding ensue, or as the withdrawing of blood were so great that the irritation of the copula might cause a dangerous fainting-fit. Generally the danger will not be great; and, again, these cases are very rare. After dinner no serious injury is to be feared for persons otherwise healthy.

After the use of spirituous liquors to a considerable degree, it is different. There is scarcely a doubt that children generated in drunkenness are exposed to the danger of becoming mentally weak, or even idiotic, or deaf and dumb. Hence the decision is correct, that the sober party is not obliged to admit of, or to render, the marital duty. The moralists, as their ground for this decision, place drunken persons in the same list with the insane. Certainly, the injury that may result to the child,—which injury, u. happily must be also feared for the offspring of the insane,—goes far to support the argument of the moralists.

IV.—TACTUS ET ASPECTUS IMPUDICI.

Although, according to the moralists, the female is not bound, "nee etiam ad vitam sibi servandam nudam se oculis et manibus chirurgi subjicere, "yet it is certain, on

[&]quot;This sententia certa of the moralists cannot be disputed with regard to women, married or single, who need have no care for others. But it may be a different thing with women who have duties toward third persons, for instance: in the care of their tamilies, the education of their children, the support and tending of aged parents. Apart from the circumstance that

the other hand, that neither tactus et aspectus nor sermones et lectiones impudicae are sinful, if there exists for them causa necessaria, vel utilis, vel conveniens animae aut corpori. This is also sure that the pollution that may follow, even if foreseen, is not sinful as long as no consent is given. In this all moralists agree unanimously, and it would be sad, indeed, for priests and physicians as well, if it were otherwise; for, they could not otherwise exercise their duties in many cases with safe consciences. The advice on the part of the priest inter confessionem, and the aspectus and tactus in medical practice, are, unhappily, often such, that reflective, as I would style them, carnal emotions are sure to follow; or, otherwise, the priest and the physician must be made of wood or stone.

"Prae oculis tamen habenda est limitatio," says Ballerini, (Gury, l. c., tom. i, pag. 398, note), "quam ex communi sententia St. Alphonsus apponit; dummodo absit periculum consensus, in pravos scilicet motus subortamque delectationem."

There is, nowadays, in medical practice an entirely new and very special objective method of examination employed, which necessitates oftener than formerly the direct application of the senses of sight, hearing, and touch, to the naked body. Such a very special objective examination of the body must be said not only to be beneficial, but also necessary, at least in general. Denudations and touches cannot be avoided thereby. But it may be questioned whether there has not grown up a rather lax practice on the part of physicians, by making unnecessary examinations requiring indecent denudations, and by

the repugnance will be more easily overcome in such cases, the duty of preserving health and life will be the more apparent from those duties toward others, so much so that tactus et aspectus impudici of absolute necessity cannot be refused without sin.

making necessary ones with rather more than necessary indecency. This is a matter of conscience with the physician, as is likewise the prevention of consent to inordinate emotions. Besides, he should consider that it is his duty to spare the modesty and conscience of his patients, in whom his manipulations may arouse earnal emotions, as well as in himself.

The rule, therefore, must be, that touches, as well as denudations of the partes minus honestae (pectus, brachia, crura) and of the partes turpes (partes genitales iisque proximae) should be made only when they appear of benefit or of necessity to find out and cure a disorder. In this matter I am by no means inclined to think that physicians are alone guilty of such unnecessary examinations; but I will mention the fact that females themselves often try, either directly or indirectly, to induce such examinations. Not only are hysterical females guilty of this indecency, but other female patients also try to have these unnecessary examinations made, incited by culpable concupiscence, just as often as, and even oftener than, physicians make them from erotic motives. Through custom, physicians become hardened against irritatio ex tactu et aspectu. Thus they do not seek them, ceteris paribus, to the same extent as others would under similar circumstances; nor will they experience carnal emotions at times at which men outside of the profession would be exposed to great danger. is especially the ease when such examinations and manipulations are really necessary. Apart from the grace of vocation, it is certain and easy of comprehension that the attention paid to the disease and its symptoms, the exertion of the senses and of the whole activity of the mind required for scientific examination and treatment, are in themselves apt to diminish the danger of inordinate emotions, and still

more the danger of consenting. The best safeguard of the physician, therefore, against sins of this kind is to make such manipulations and denudations only when they are really of necessity. At the same time, his good name will be better protected, if he is rather too cautious than too lax. Finally, the modesty and conscience of his patients are then best respected. For, necessary examinations and denudations are almost always submitted to by the patient, and then with safe conscience. A female who possesses decency and modesty will become indignant if she sees that her body is unnecessarily subjected to touches and looks; but perhaps sensations and a delectation are brought on, the sinfulness of which must be imputed to the unprincipled physician.

In case a female tries, from an erotic concupiscence, to induce such manipulations on her body, then his own good sense must tell the physician whether he should seem not to notice this inclination, or whether he should refuse it with outspoken authority.

Perhaps the best means to save the good name and conscience of the physician, as well as of the patient, is, if possible, to make manipulations of the partes turpes or minus honestae only before witnesses. Either husband, mother, sister, or a relative, or a nurse, should be present. It will be easy for the physician to find a pretext that will cover the real object of having some one present, rather than be left alone with the patient. The presence of a witness is a protection against bad tongues, against unnecessary acts, and, even in necessary ones, against the rise of inordinate emotions, and the consent to them. A decent woman will feel grateful for such precautions, and a lewd one will be thus restrained.

Here I would especially warn physicians against chloro-

forming without witnesses; for just here the danger of illrepute and of delectation increases of the latter, at least for the physician. The danger which accompanies narcosis gives him a good pretext for not inducing it without assistance. I know of a case wherein a person illegitimately pregnant asserted herself to have been the victim of the physician during a narcotization. Counter-proof being impossible, the good name of an imprudent and, perhaps, innocent physician may be lost.

Here I may mention an experiment of our own days, in order to lay it before the moralists for decision, viz.: attempts to impregnate human females artificially. Such experiments have been made by some physicians,* in cases where, the copula and semen being normal, impregnation would not take place, because the semen could not reach the uterus, or could not be retained in the vagina. semen, in such cases, was drawn by the physician into a fine syringe from the ragina statim post copulam, and was then directly injected into the womb. Sims asserts that he effected impregnation in this manner once. From a medical standpoint, much could be said regarding this assertion. It is the only success that has been claimed for such experiments on human subjects; although they have been successful on animals, especially on frogs and dogs. From a moral standpoint, I am not yet prepared to give an opinion on this matter.

In view of the tactus et aspectus necnon sermones impudici, which are unavoidable in the practice of medicine, it has often been a matter of dispute whether female physicians should not rather be employed. There is something attractive in this; but, at the same time, there result so many

^{*} Among others, by Dr. J. Marion Sims, in New York, and Dr. George Harley, in London.

inconveniences when females act as physicians, that they have been admitted to the whole medical practice only in a few exceptional cases. Even midwives, during whose functions the necessity for such confidences mostly occur, are more and more refused by women themselves, and physicians are called in, in preference. There may be reasons for this of convenience and confidence, etc.; but the fact proves, at least, that less repugnance to necessary examinations and manipulations by the physician is felt even by decent women than would be a priori expected. I by no means approve of the fact that, nowadays, even in normal labors, the assistance of a physician is often demanded, where the help of a midwife is sufficient. But I can very well understand how a woman, who approaches a very critical period of her life, should desire that help which inspires her with the most confidence. If we had women of the higher classes of society to assist at childbirth in an always decent manner, after having thoroughly acquired the necessary scientific information, I have no doubt but that they would be preferred. But as midwives, in Germany at least, are little more than nurses, we cannot expect that women, at least of the cultivated classes, will place full confidence in them in such difficult situations.

C.—THE COMMANDMENTS OF THE CHURCH.

Of these, only two, viz., that of hearing Mass on Sundays and holidays, and that of fasting and abstaining, need be commented on.

I.—OBLIGATION OF HEARING MASS.

The moralists are, indeed, not rigorous as to what reasons may excuse from the obligation of hearing Mass. Their maxim is, "Excusat a Missa audienda quaevis causa mediocriter gravis, seu quae involvit notabile incommodum vel damnum in bonis animae vel corporis proprii vel proximi." Thus encouraged, I want to make some remarks on the excuse, "I cannot stand the church-air." I speak, of course, only of such as derive this excuse from considerations of health: such as cannot endure "church-air" for other reasons,—and nowadays their name is legion,—do not concern us.

But what makes church-air different from the air of other places? The frequent concourse of many people, burning of tapers, incense, and so on, no doubt contaminate the air in churches. As ventilation, unhappily, is generally defective, the church-air undergoes, from these causes, a peculiar change, which sometimes unpleasantly affects the olfactory organs. Besides, during service, one is surrounded by many persons with whom close contact frequently causes disgust and nausea. The position of kneeling or standing is a tiresome one; the dress is worn as

on the street, although one is in a close room, etc. During winter, people become stiff and cold, especially if there is a stone floor; during summer, the difference from the temperature outside is often great, which of course gives rise to unpleasant affections from the sudden change. There are, therefore, facts enough to render a prolonged stay in church somewhat unpleasant, and at times pernicious to the bodily welfare. Anxiety, shortness of breath, faintings and nervous affections, result directly—colds and inflammations, especially of the respiratory organs, sometimes indirectly, from the above-named conditions. One need not be really sick, nevertheless, some physiological affections tend to render church-going often injurious to health.

Persons suffering from acute diseases are, of course, excused; and the obligation also clearly ceases in many chronic disorders. It is doubtful in the case of those who otherwise live like healthy people, but who cannot, as they say, stand church-air. To this class belong, besides persons suffering from general debility, all those whose nervous system is enfeebled or over-irritated. Hypochondriacal and hysterical persons, especially, often assert their inability to go to church; and I think they should be believed as long as there is no foundation to suspect that their inability arises simply from religious indifference, for their afflictions are not merely imaginary, but they are real diseases. Such persons may feel very well: a hypochondriae, for instance, in a crowded club-room full of tobacco-smoke; a hysterical woman in the heated and packed theatre, -but as soon as they enter the church, they feel oppressed and have a fainting-fit. If this is oftener experienced by such persons, and by nervous people in general, church-going cannot be regarded obligatory for them, but must be left to their discretion. They should

be counselled, however, to try again from time to time, and then rather on a week-day than on a day when the church is crowded with people.

Physiological affections wherein similar conditions prevail, occur in women, especially during the period of fecundity. Tempus menstruationis et lactationis sometimes, tempus gestationis very often, predisposes females to the above-named attacks while in church, particularly so during the first and last months. The higher classes of society are certainly too lenient in this point; but too great severity, on the other hand, is to be avoided on account of the child. If a pregnant woman, of otherwise rational behavior, has for several times experienced ill consequences from church-going, I would forbid her going, for some time at least, although I am fully aware how much women in this interesting situation need the consolations of religion and prayer. By rational behavior, I mean a reasonable way of dressing, without pressure or overloading, but with due protection, especially of the feet, against wet and cold. She should avoid the early morning hours as well as the latest Mass, when the church-air is most impure; she should not go with an empty stomach, nor with an overloaded one, nor stand, much less kneel, for any length of time; she should rather sit down, it possible, and occasionally change her position, etc. If all this is of no avail, if attacks of anxiety or faintings continue, the pregnant woman must leave off church-going for a time: a new trial may be made after some weeks. It is very seldom that a woman is exposed to such affections during the whole period of her pregnancy.

I may mention here that, in some places, people think that a woman, after childbearing, should make her first walk to church; and, also, that an invalid or convalescent,

when first allowed to leave the house, is under the obligation of going immediately to church. Gury (l. c., tom. i, pag. 346) says, with Lignori: "Excusantur aegroti, infirmi, convalescentes, quibus nocet foras prodire." From this the conclusion should not be made that all those quibus non nocet foras prodire are under obligation of hearing Mass. It is clear from my remarks that it is not at all the same thing to send one from the room into the fresh air, and to send her or him to church. My practice was always not to allow women after delivery, or convalescents, to go first to church; but to order them to take, first, a few walks in the fresh air. Many infirm persons may likewise be ordered to take some exercise in the fresh air, but forbidden to go to church. Such persons, of course, should not take their walk at the time of divine service, lest they give scandal; or, if local conditions require it, they should stay entirely in the house on days on which it would be of obligation for them to hear Mass, if not hindered by a sufficient cause.

I thought it desirable to mention these particulars, in order to enable priests to pass judgment on the abovenamed affections and circumstances, although the moralists say all such people should follow the advice of the physician.

IL—FASTING.

With regard to fasting, likewise, medical advice should be followed; but, as the moralists say, medici religiosi et timorati consulendi sunt, si facile fieri potest. In the case of persons who are actually sick, this is all well enough; but, in the case of those who are not exactly sick, and who cannot claim any other excuse from the obligation of fasting, the physician may be at a loss how to advise FASTING. 127

quite as much as the priest. Healthy people must know themselves whether they can fast or not. If such people ask the physician, as they sometimes do, only for the purpose of shifting responsibility upon other shoulders, whether they are bound to fast, he should conscientionsly answer, You are the best judge of that yourself. But it is unnecessary to speak here of the necessity of physicians acting conscientiously in this matter; for those who are concerned, do not read this book, and those who read it. know themselves what they have to do. This much is certain, the preacher was right who said: "I am convinced that, during the three days of the Carnival, there are many more of those who become sick from too much food, than there are of those who suffer prejudice to strength or health from too little nourishment throughout the whole time of Lent."

The following are the causae excusantes a jejunio as stated by the moralists:—

- 1. Dispensatio superioris, of the pope, the bishop of the diocese; by custom, also, of the parish-priest and the confessor. The physician cannot grant dispensation, but he decides only whether one cannot, or should not, fast for medical reasons. "Ad ipsos (sc. medicos) non pertinet, nisi declarare (conscientiose tamen, ne aliorum peccatis graventur), quaenam sit causa vere sufficiens." (Seavini, l. c., tom. i, pag. 285.)
- 2. Impotentia physica. Sick persons and convalescents, women with child or giving suck, the poor who have no regular sufficient meals, are exempted from the law of fasting.
- 3. Impotentia moralis. Such as suffer through fasting, violent headache, vertigo, etc.; soldiers in the camp or in barracks; women who are forbidden to fast by their

husbands, and who might suffer very grave inconveniences by disobedience; mariti, qui jejunantes omnino nequeunt debitum uxoribus solvere; young people under the age of twenty-one; feeble old people, the age being fixed by most of the moralists at the sixtieth year of life for men, und by many at the fiftieth year for women:—all these can consider themselves exempt from the obligation of fasting.

4. Labor tune liberat, cum sit talis, ut sine notabili corporis defatigatione exerceri non possit. People whose state of life subjects them to hard bodily labor; also those who make difficult journeys on foot, or on horseback, or by carriage, are excused; servants are nearly always

exempted.

5. Pietas. Troublesome and exacting works of charity (spiritual or bodily), assisting the sick in hospitals, continued hearing of confessions, the offices of preachers, even of judges, physicians, lawyers, teachers, may, under certain circumstances, excuse from fasting.

I have very little to add from a physician's standpoint to these excusing causes. I would include women, not only during the period of gestation and lactation, but also of menstruation. For, during this time, the female organism is so much affected by the phenomena occurring in the genital apparatus, the nervous system often suffering at the same time, that there is sufficient reason not only to deprecate any deprivation of food, but to forbid such directly. This one included, all reasonable demands are met. Such as cannot appeal to any of these excusing causes stated above, should not importune the physician or the priest in order to be exempted; for they will not fast, and they, and they alone, must bear the responsibility.

There are some cases, oftener met with in praxis, where

some doubts occur to me as to the decisions of the moralists. Limidum non frangit jojunium, is an axiom of the moralists. Drinks, therefore, are allowed during the fast, but those only that are used ut simplices potiones. Of these are, as all agree: sugar-water, lemonade, coffee, tea, provided that the addition of sugar is not so great as to make the thing rather a pulmentum than a drink. Beer and wine are also allowable. "Aliter esset de sumptione lactis, jusculi, succi pomorum (vulgo melons), et aliorum fructuum, item uvarum confectarum aut tunc dentibus pressarum, licet postea exspuantur. Nam hace omnia censentur habere rationem cibi, et potius ad nutritionem, quam ad cibi vehiculum referentur." (Scavini, tom. i, pag. 279.) Gury, following Liguori, says (l. e., tom. i, pag. 454): "Per liquidum autem id solum intelligitur, quod ex communi usu sumitur per modum potus, non vero per modum cibi, ut luc. etc." I have doubts about milk, as opposed to chocolate, which all moralists allow (of course when prepared with water, not with milk): "Uncia cum dimidia chocolati in cyathis ordinariis," is put down as the allowed measure. One ounce and a half, that is about forty-five grammes to a cup, makes a beverage which is about equal to a cup of milk in nutritive value, and surpasses milk in satisfying the feeling of hunger.* Does custom suffice to render, of two things that have the same effect, one allowed and the other forbidden? Besides, chocolate is oftener than milk taken per modun cibi (in the dry state, namely); milk is a real, although nutritive, drink, and is often used as a means of quenching thirst, or of preparing food (as vehiculum cibi).† City and country in this case would

^{*} Of checolate, the whole solid substance is taken: of coffee, the infusion only: chocolate and coffee, therefore, cannot be put into the same category.

† As drink, for instance, instead of coffee; as vehiculum for preparing chocolate.

receive unequal treatment; for, in the country, milk is a very handy drink, and more in use than chocolate; so much so, that the latter is certainly not regarded as simple drink, while the former is looked upon as such. The only real difference in favor of chocolate is the circumstance that milk comes from flesh. This, perhaps, was the primitive cause of forbidding milk; but it is now no longer forbidden on that score, so far as I can ascertain. Since the ancient rule of fasting has been relaxed, in many countries, with regard to things that come from flesh (such as eggs, butter, etc.), I do not see, for the reasons given, why one should not be allowed just as well to take a cup of milk as a cup of chocolate (prepared of 45 grammes of dry chocolate). The bull of Clement XIII (1759), quoted by Scavini (l. c., tom. i, pag. 280), forbids all drinks mixed with milk. The prohibition of milk therefore was absolute in former times, but nowadays nobody doubts that the adding of milk to coffee or tea, as is commonly done, is not forbidden on fast-days.

I may mention another view of the moralists. Eight ounces of bread are pronounced to be allowed for the collation at night. "Liect sumere in coenula panem cum aqua et oleo decoctum... Attamen juxta S. Lig. non liect sumere octo uncias panis decocti cum aqua, hac praecisa. Ratio est, quia panis per decoctionem et fermentationem cum aqua aliam naturam acquirit, ita ut ex eis quid unum fiat, et evadat una substantia major. Concedi autem potest, ait S. Liguorius, ut inter ipsam refectionem quis panem aqua aut vino intingat et sic etium octo uncias panis vino madefacti sumat, quippe nulla hic intervenit fermentutio; et liquor, cum inserviat tantum ad vehiculum, non computatur." (Gury, l. e., tom. i, pag. 460.) Seavini (l. 9., i, pag. 283) likewise declares the boiling of the bread in

water not allowed: "Nam ita consubstantiatur cum aqua ut non amplius possit separari, unde esset quid et magis nutriens et excedens quantitatem." A certain chemical change of bread, when boiled in water (independent of the addition of any fatty matters), need not be entirely denied; but this change must be considered as the beginning of digestion, for it is the same as that effected by the beginning of digestion. The nutritive value is not increased thereby. The quantity of such a bread-soup may perhaps cause a fuller sensation of satiety than the relative quantity of bread in the dry state. But even this difference will not be very great. Apart from the addition of fatty matters, I do not see any difference whether the bread is boiled in water or wine, or whether those fluids only serve to soften and soak the bread.

This is a matter of little importance (in Germany or in America); for, as to the quality of articles of food allowed at collation, the ancient rule of fasting has been greatly relaxed.*

III.—ABSTINENCE.

The rule of abstinence, in ancient practice, was to abstain from flesh and all white-meats, that come from flesh (lacticinia et ova). At present, the rule is to abstain from the flesh of animals that live on land, and have respiration (animalium in terra nascentium et respirantium).

^{*} The objection is made to me that the material nutritive value is not alone to be considered. For, it is said that food added, to drank in a relatively small quantity, in order to temper the drink partakes of the nature of drink, and becomes a part of the drink. Five revsa, a drink, for instance even water, used to temper food, assumes the character of food, becomes itself food. According to this view, my remarks on milk (which is, indeed, a food under the form of drink) and on chocolate, would have to be modified. But as I have not yet made up my mind on this point, I have left the text of former editions as it stood.

Besides fish, "according to the common acceptation of the faithful and of the learned, and by legitimate custom" as well, it is considered allowable to take: locustae (grasshoppers. Celsius and Pliny knew of a locusta which is certainly a sea-animal, a crustacean or a crab: which is meant? Both will do.)—limacae (snails), testudines (tortoise), cammari (lobster), cancri (crabs), ranae (frogs), conchae (crustaceans). "Idem dicendum est (Scavini, l. c., tom. i, pag. 271) de lutris (otter), castoribus, fibris (castor, beaver), et aliis quae piscibus comparantur." This remark on otters and beavers I cannot approve of, for their whole "similarity to fish" consists in this, that they live partly in water, in order to obtain food: they are true mammals, and have red, warm blood. If these external criteria are worth consideration, then those of the above-named animals that do not live in water, and do not even hunt for their food in it (such as land-tortoises,* land-snails),—these, I say, should fall under the rule of abstinence, to be consistent. Also all water-fowl should be counted as animals similar to fish; but these are explicitly excluded by Scavini (l. c., pag. 272).†

Amongst causes for dispensation, I, from a medical standpoint, think only one well founded, namely: if the body cannot obtain its necessary nourishment without fleshmeat.

Those alimentary substances that are principally contained in flesh-meat can be replaced by other articles of food, apart from fish and the other animals named above. I will not enter here into any discussion as to what other nourishing materials may become substitutes for the

large fish (fish-eggs). When eggs are allowed, it is not forbidden.

^{*}Turtles (those on land, also) are, scientifically, true amplibia, with red, cold blood. The abode, water or land, does not give a scientific criterion.

†Caviare is neither flesh nor fish; it is a food prepared from the roes of

albuminoid materials that are principally in question; nor will I name any articles of food containing these albuminoid substances in so small a proportion that they can only replace flesh-meat when taken in large quantities. I omit even milk, although it is the sovereign food of all young mammals and of infants; for herein, and to the end, many objections of greater or less weight could be made. may mention only one substitute that contains these albuminoid substances (and fatty matters) in a small bulk, and in an easily digestible form, but in a large proportion, -eggs. One hen-egg of medium size and of 50 grammes (without shell) contains, the water deducted, about as much albumen as 50 grammes of good beef. Two eggs may therefore be considered as equal in nutritive power to 100 grammes of good beef (without sinews and fibres). Moreover, the fat of the volk is not reckoned in this calculation, although it is present in an easily digestible form, and is of no small It is evident that eggs are a first-class nutritive value. substitute for flesh-meat. They were probably for this reason forbidden by the ancient rules of abstinence.

Besides, it is a well-known fact that those with whose stomach fish, and such kinds of food, do not agree, in general easily digest eggs and food prepared therefrom, if the latter be not impaired in digestibility by the mode of preparation.

Hence cases will seldom occur wherein abstinence from flesh-meat will do harm (apart from the eases of really sick persons, and of those who are convalescent after grave diseases). I think, then, that strictness in this one point of abstinence is to be recommended, while, in regard to fasting, the discipline should be of a milder character. Gury, following Liguori, says (l. c., tom. i, page 452): "Proper caution should be observed in granting dispensation

to those who importune the priest for dispensation from the law of abstinence, and who pretend that they cannot digest the foods allowed." Scavini, after stating that women with child or giving suck are allowed to eat meat on days of abstinence, adds correctly: "Si proles aegrotet aut mater sit valde debilis." I want to make all reasonable exceptions for women; but gestation and lactation are in themselves no sufficient cause for granting dispensation. Unless the conditions required by Scavini exist, abstinence can be observed without any harm to either mother or child The so-called "longings" of pregnant women deserve no attention. Other people also frequently take a fancy to meat on days of abstinence-sometimes even people who regard fish a delicacy on other days. Nitimur in vetitum. If a pregnant woman really has a disgust and an insurmountable dislike for the substitutes of flesh-meat, it is different; and in such cases the physician should be consulted. But I protest against the view that makes those above-named conditions current and generally valid causes for dispensation from abstinence for otherwise healthy women.

In addition to fasting and abstinence, there are other mortifications, which are not obligatory, but are of practice among some. The most common are: penitential cinctures (cilicium, eatenellae), discipline, protracted vigils, etc. The penitential cinctures are made of twisted horsehair, of coarse, bristly wool, or of fine wire. The sharp points of the material irritate and scratch the skin; besides, knots are made in these cinctures. Other cinctures are more like chains, and are of thicker wire, brass or iron: the latter kind is considered by Liguori ("Vera sposa di Gesù Cristo") less hurtful than the former. An unreasonable using of the above may do serious harm in two directions.

Either the pressure of the cincture, if continually worn too tight, may lead to injuries to that part of the body around which they are tied; as, for instance, cinctures around the waist may lead to stoppages in the abdomen; or belts around the limbs (arms, thighs, shoulders), to swellings and lameness; or, again, these cinetures may become injurious, inasmuch as through their friction and local pressure on the skin they cause inflammations, and even deep ulcers. Such inflammations may become chronic and of a malignant character (cancerous). I think, therefore, that penitential cinctures should not be allowed to be worn continually, but only for a time-say for some hours during the day, or for one or two days during the week. The points and edges must be coarse, but should not be too sharp. Cinctures, therefore, of fine twisted wire with sharp ends should not be tolerated; finally, einctures must not be bound too tight.

The use of the discipline may prove injurious by causing wounds which may become chronic ulcers, if flagellation is persisted in before the wounds are healed. Also, violent flagellation with a heavy discipline on soft parts may cause lesion to the inner organs. The discipline, therefore, should not have sharp edges, and it should be applied only on the back (the soft parts near the loins excluded), and, perhaps, on the shoulders and arms; especially the discipline must never reach the region of the private parts, any part of the abdomen, or the breast of females.

Long vigils are not practised so much for mortification's sake as formerly, because in our times there is a general inclination to shorten as much as possible the time of rest, in order to gain time for abor. Staying awake, if beyond bounds, may prove very injurious, for sleep is a period

of necessary repose in the system. During sleep there is a suspension of mental and of muscular voluntary activity, whilst the vegetative activity of the organism continues, and thus replaces the material wasted by mental or bodily exertion. Through want of sleep the whole organism suffers; general debility, emaciation, hectic fever, are the consequences; but most generally the nervous system is affected. A habitual deficiency of sleep produces headache, numbness, dulness, dislike particularly for mental work, and, if the warning be not seasonably heeded, a general over-irritation of the nervous system: illusions and hallucinations, even complete insanity, may follow such a perversion of the natural order of things. I think therefore that, in general, excessive wakefulness should not be allowed. Most men require about seven hours of sleep, and this amount cannot be materially diminished without injury to health. One may, from time to time, take off a little from this allowance, but it should not be done habitually. I do not know why St. Alphonse (l. c.) thinks less sleep is required for women than for men, and that "five, or at most six, hours are sufficient for women." My opinion is that they require just as much sleep as men do. Whether the amount of sleep be taken in one continuous sleep, or at separate times, may in itself be indifferent; but I may remark, here, that taking off from the necessary time of repose is less injurious in the morning than at night; and that late night-hours are the more likely to result in evil consequences.

D.—THE SACRAMENTS.

I.—OF BAPTISM.

Not unfrequently does the occasion present itself when the physician must be the minister of the sacrament of baptism: as, for instance, when a new-born infant is in danger of death, or when the case is one of premature delivery. Sometimes this duty may become obligatory, at least, ex charitate. What is needful to be known in such cases of necessity will be given here; and also such matters will be treated of as in themselves are subjects of doubt to theologians, and must have their explanation in physiology and pathology.

For the validity of baptism are required the proper matter (materia romota necnon proxima), the proper form, intention of the minister, and the proper subject of the sacrament.

The only valid matter is natural water (materia remota est aqua naturalis seu elementaris, apta ad abluendum). If possible, the water should be blessed. Materia valida is, according to the moralists:* aqua fontium, fluminis, maris, stagnorum, paludum, lacuum, eisternarum; aqua resoluta ex glacie, nive vel grandine; aqua sulphurea vel mineralis; aqua collecta ex vapore, rore, vel effuens tempore nimboso ex pariete, foliis, etc.; aqua turbida, mixta

^{*} Gury, tom. ii, pag. 155.

cum alia substantia, modo aqua sit materia vere et certe praedominans, ita ut juxta usum aut aestimationem hominum adhuc aqua dici possit.

Doubtful matter: jusculum valde tenue, lixivium, cerevisia tenuis (also tea and coffee ?), aqua ex sale soluto (?); humor fluens e vite, aliisque plantis.

Not valida materia: lac, sanguis, lacrimae, sudor, saliva, sputum, urina (and fœtal water); vinum, oleum, eerevisia, jus densum ex adipe, etc.; lutum, atramentum, nix, glacies, pruina et alia nondum soluta.

Certo autem peccat graviter peccato sacrilegii, qui absque gravi necessitate utitur aqua impura, turbida et faeculenta, licet haec materia sit valida.

Therefore, if physician or midwife must administer baptism, they are obliged sub gravi either to clean their hands as much as possible from blood, mucus, fæces, etc.,—because, otherwise, they may easily soil the water,—or they must pour the pure water by means of a vessel.

If valid matter be not at hand, it is allowed in danger of death to use a doubtful one, adding the condition: Si hace materia sit sufficiens.

The proximate matter is the ablution or washing, either by dipping the subject, or by pouring the water on it, or by sprinkling it with the water. One ablution suffices, but generally it is done three times, as prescribed at the solemn administration of baptism. If there is time enough, lay persons, in cases of necessity, should go through the triple infusion, and, if possible, make the same in the sign of the cross. Reverence for this important act requires this much. Sprinkling is sufficient for ablution. But it is advisable, especially for lay people, to administer the sacrament always per modum infusionis, with a real flowing of the water, if time and circumstances allow. The

infusio should be on the head, if possible, and on a place where there is no hair; for the hair might prevent the water from really touching the skin, although it is generally not very strong in the newly-born. The water should, therefore, either be poured on the forehead, or may be rubbed on the head during the infusion, either with the hand that is pouring, or with the other. But if the water cannot be poured on the head, and if baptism cannot be postponed on account of proximate danger of death, then it is sufficient to pour it on the breast, shoulders, arms, legs. For the reason that this baptism is not of sure validity, it must be afterward repeated conditionally. If the child after delivery is capable of life, and can be brought to the church, the priest will baptize conditionally; otherwise, if proximate danger of death still exists, it should be again baptized conditionally without delay, the form being: Si non es baptizatus, ego, etc. Can a child validly be baptized in the womb, if there is certainty, or very great danger, of its death before delivery? "Affirmandum probabilius," says Gury (tom. i, pag. 155), "si puer in utero attingatur aqua aliquo mediante instrumento; quia cum infans existat jam homo viator, valude potest baptizari. Nec obstat, quod puer adhuc involutus sit in secundina, quia hace censentur veluti pars infantis. Sub conditione tumen bantizandus est, quia non constat certo, utrum baptismus hac ratione collatus sit validus."

I cannot admit, according to the progress of science in the knowledge of the development of the fœtus, that the child "involutus in secundina" may be baptized validly, although only probabilius so. For, the fœtal membrane, taken as a whole, is by no means a part of the child. It is composed of three coats, which can be plainly distinguished, and even separated. The two inner membranes (the

amnion and the chorion) might be looked upon as a part of the child's body, inasmuch as they are formed by the ovum itself; but the outer membrane (termed decidua), being a product of the uterus alone, is certainly a part of the mother, and cannot be regarded as pars infantis.

If any part of the child can be reached at all, it will be generally possible to administer the sacrament by sprinkling. A small rupture of the fatal membranes, made artificially, if necessary, will allow the water to be injected on the child by means of a syringe. If this be done, one hand should lead the syringe, to make sure of actual contact of the water with the child's body. To the objection that, in danger of abortus, or premature delivery, the introduction of the syringe with the hand or with a finger might not be possible, the mouth of the womb being too narrow,-I may answer that, in such cases, we have very seldom sure indications of the child's life. At such an early period of delivery, where the mouth of the womb cannot be penetrated by the finger and syringe, there will be scarcely ever necessity of baptism. Moreover, if, in such a case, the membranes are broken too soon, and the water allowed to flow out too early, the delivery might be much delayed, thus increasing the danger to the child, and, perhaps, involving the life of the mother. I remark this, because Gury says: "Recentius autem medicorum peritia aliam methodum invexit, qua ecrtius puer nondum in lucem editus baptizari potest. Inventum nimirum est instrumentum, quo secundina discinditur; et sic aqua, alio instrumento adhibito, ad ipsum foetus corpus immediate tangendum pervenire potest." This seems to have reference to the above-named cases, where the bag of water is fixed, and the mouth of the womb undilated, danger of abortus, or miscarriage, existing. I would earnestly

protest against any such steps being taken in order to baptize, for the above reasons. It is very seldom possible, before the fifth month, to be certain whether the fœtus is alive or not. Therefore, if abortus ensues before this time, I would not try to administer baptism by the use of the syringe. I would proceed in the manner Gury mentions, only when it can be conclusively assumed that the fætus is alive, and that its vital power is declining. In such a case I would proceed as Gury suggests, even if the too early escape of the water might probably retard delivery. The disadvantage to be feared for the mother, and the hastening of the child's death, cannot here be taken into consideration in comparison with the necessary care for the eternal salvation of the child. Such a baptism is always doubtful, because there is very little security that the water does actually touch any part of the child, as the syringe cannot be directed.

If a svringe cannot be had, it will suffice, in case of necessity, to wet the finger with water, and to wash a part of the child's body with this wet finger. "Dicunt autem communiter, materiam tunc esse certam, si baptizans motu digiti madefacti partem corporis ablueret." (Gury, tom. i, pag. 157.) Such extreme cases will be very seldom met with; but they may happen, if the natural passages are so narrow that the presented part of the child cannot enter the lower strait, and that the child cannot be delivered alive. Likewise, if in consequence of procidentia of the umbilical cord replacement is impossible, and if the pulsation in the cord grows weaker, so that an early death of the fœtus must be feared, the presented part of the child is so high up that it can be reached only by the finger or by the syringe. To baptize on the umbilical cord I would not regard allowable in such cases, nor as valid, because this is only a

quasi-part of the child, and another part can always be reached.

In the majority of cases where private baptism must be administered, one or or more parts of the child have descended farther down, and are within easier reach; for instance, when there is a presentation of the smaller extremities as the feet, after turning the child, before it is fully extracted.

Every baptism in utero must be repeated sub conditione, because its validity is only probable. The same applies if baptism be administered on a part already born, with the rest of the body not yet delivered, except in the case wherein the fully delivered head is baptized, the other parts being still in the passage. "Nam ut habet Rituale, si infans caput emiserit, et periculum mortis immineat, baptizetur in capite; nec postea si vivus evaserit, iterum est baptizandus." (Scavini, l. c., tom. iii, pag. 477.)

The form of baptism is: "Ego te baptizo in nomine Patris et Filii et Spiritus Sancti."*

The words of the form must not be changed, and nothing must be added. The words must be pronounced at the same time that the water is poured on the subject baptized, and this likewise by the same person. If different persons pronounce the words and pour the water, there is no baptism; or, again, if both things are not done at the same time, there is no baptism.

The minister of baptism may be any man or woman who has attained the use of reason, even an infidel or a heretic. In a case of private baptism it must be remembered that man has the preference over woman; in other words, if a man is present who can administer baptism, he should be the one to do it, with this exception: "Si

^{*} Without Amen. (S. C. R., June 9, 1853.)

pudoris gratia deceat feminam potius quam virum baptizare infantem non omnino editum; vel si melius femina sciret formam et modum baptizandi." (Gury, tom. i, pag. 159.) If physician and midwife are present, the physician should administer baptism, caeteris paribus; if he is not present, the midwife; and always the latter, if the physician himself be the father of the child. For the Rituale Rom. says: "Pater aut mater propriam prolem baptizare non debent, praeterquam in mortis articulo, quando alius non reperitur, qui baptizet."

The minister of baptism must also have the intention of conferring the sacrament, or at least of doing what the Church does at baptism.

If baptism is administered conditionally, the condition must be pronounced explicitly: "Apponi tamen ore debet, ubi hoc praescribit linbrica, ut in baptismo conditionato, praescrim si publice conferatur, ne scilicet adstantes credant baptismum absolute iterari." (Gury, tom. i, pag. 135.) Therefore: Si non es baptizatus, si etiam vivis, ego, etc.

We proceed now to treat some matters in connection with our subject as find their explanation in physiology and pathology, for instance, monsters and double formations.

When an infant is in danger of death, any one may, nay, even is bound to, baptize immediately, and even against

[&]quot;It is to be regretted that very often no competent person is to be hal when the case is most urgent. The abortive ova, for instance, in a considerable number of cases, either do not come at all, or else they come too late into the hands of competent persons. It would be, certainly, a very good thing if all young married people could have the necessary instruction in this matter. But who will give it? The priest? He can very seldom do so. The physician or the midwife? They generally do not come in such early contact with young married people as to give the necessary information with profit. It can, therefore, be only said that the parish priest, as well as the physician and midwife, should make use of every fit occasion to instruct married people as much as possible concerning this matter. It must confess that I have met with midwives who possessed, even on this

the will of the parents,* whose consent otherwise would be required for the baptism of their children who have not attained the use of reason.

Whether a lay person commits a mortal sin by conferring private baptism whilst in a state of sin (viz., mortal sin) is answered in the affirmative by some moralists; in the negative, by others. St. Alphonse thinks both opinions probable, although inclining to the former. (Gury, tom. i, pag. 136.) A lay person, therefore, is not obliged to make an act of contrition before conferring baptism. The baptism, however, is certainly valid.

Subjectum baptismi est omnis et solus homo vivus nondum baptizatus. For our purpose, we have to ask in regard to a substance expelled from the womb:-

- 1. Is the substance we have before us a human being?
- 2. Is it alive?

Ad 1. Doubts as to whether the thing brought to light be a human being might have had place in former times with regard to abortive ova, and they may now arise in cases of monsters. Whether abortive ova must be considered human beings depends solely upon the circumstance whether the existence of a fætus, be it ever so small, can be ascertained in them. If the fœtus is found, it is a human being; for we consider it a matter of fact nowadays that the ovum is possessed of the soul at the very moment of

tom. ii, pag. 473.

point, only a confused and deficient knowledge, because they had received no special instruction. The parish priest is indeed obliged to instruct mid-wives about this point. But as the latter consider themselves as competent persons, which they are, in a greater or less degree, such instruction, I think, on the part of the parish priest cannot always be given with the necessary authority. For this reason it would be a desirable thing if Christian physicians generally would take on themselves, when occasion offers, the duty of conferring with the midwives of their districts about these questions, and of explaining and instructing them, if necessary:

* Compare Benger, "Pastoral Theologie." Regensburg: G. I. anz, 1862,

conception. If no fœtus is discovered in the expelled ovum, as is not unfrequently the ease, it has escaped either with the blood, or else it has decayed and has been absorbed by the contents of the ovum: a thing that may happen during the first weeks of pregnancy. After the third week, a fœtus may be known as such, and it can be very easily distinguished at the end of the first month. At this time the embryo is one centimeter in length, that is, stretched out (it is found always bent together), and can be easily recognized.

In cases of monsters, the axiom of the moralists is certainly correct, to wit: that a substance which has the form of a human head and of a human chest is a human being, and must be baptized. For a fætus that has head and chest possesses separate and independent life, is an individual being. It is still more accurate to say that what has the form not only of a human head, but of a head generally and chest, must be characterized as a human being. Where there is a head, it is always a human head, although it may be deformed by defects in its development. For generation between man and beast is never effected; and St. Alphonse, indeed, does not believe in it, though he nevertheless speaks of this kind of monstrosities in relation to baptism. There occur malformations of the head which impair in a high degree its appearance as a human head; as, for instance, the so-called hemicephalous and anencephalous feetuses, where either the facial region is strongly developed, or the cranial part and its contents are more or less deficient. Although these beings are not capable of extra-uterine life and nourishment, they are most certainly human, because, absolutely, they can be nothing else. Also, very noticeable cleft-deformities (such as hare-lips, or deficient velum palati, or palatine vault)

may to a very considerable degree impair the human appearance, but, nevertheless, they cannot create any doubt as to humanity. Therefore, a human generation which has a head and chest is a human being. Head without chest, or chest without head, is not met with; * head and chest (and abdomen) without extremities occur. There is another form of monstrosity which cannot be regarded as a separate being, although it has, in part, rather a human form, the so-called Acardiacus. This rare monster consists only of abdomen and legs. "It is formedt when, anastomosis (junction) taking place between twins lying in one chorion, the pressure of blood in one of them prevails so much, that the circulation (viz., of the blood) becomes inverted in the other, in consequence of which heart and lungs, together with a part of the trunk, become atrophied, and the deformed fætus is nourished from that which is normally formed." Such a fœtus, therefore, does not take its nourishment from the mother through its own organs, but it is nourished by the system of blood-vessels of the normal fœtus, whose system, as it were, extends itself into it. Thus it is nourished as an appendix to the normal fœtus, and we have therefore no separate life, no individual, no human being.

Besides what are called monsters, there occur a great variety of double-formations, wherein doubts may arise whether there are one or two individual beings. Supernumerary parts, of course, cannot cause these doubts, nor can such be the case in two wholly developed bodies which have grown together in some way, for they are really two

^{*}Sometimes rudiments of head are met with, as also lumps of flesh with some bones: these must be considered as totally deformed trunks. Such wholesale deformities and malformations need no consideration with regard to baptism.

[†] Schroeder, C., Lehrbuch der Geburtshilfe. Bonn, at Cohen & Sohn, iv, Aufl., 1874, pag. 594.

separate individual beings, each having its own existence, though accidentally connected. But how, if we have one head and two trunks? If the separation exists only in the lower part of the trunk, there being only one heart and one pair of lungs, I would consider such a monster by all means as only one individual. But if there are two hearts and two sets of lungs, or at least two hearts (for, to ascertain the lungs during life may be very difficult, even impossible), I should think that then there exist two individual beings; for the two bodies have, indeed, a common central nervous system, yet each one possesses a separate vegetative system, and may consequently live independent of the other, or at least live by separate nourishing.

Again, monsters present themselves that have the head double, and only one trunk. Even if the trunk be only one to the neck, heart and lungs included, I should nevertheless be inclined to suppose two individual beings present. This might seem contradictory, because, above, I laid stress on the separate vegetative life. But I did so only in contrast to one head. Here we have a double central nervous system, one which, if not directly regarded as the seat of the soul, must certainly be considered the principal organ of its activity. It is a hard thing to believe that only one soul exists in the body wherein the organ of the soul's activity is twofold. Besides, it has been proved by observation that, of two heads, one may sleep, while the other is awake; that the expression of one face may be cheerful, whilst that of the other may show languor and uneasiness. These phenomena, of themselves, only prove a separate sensitive life; yet they support and strengthen the opinion, that we have to suppose two souls where there exist two heads

If the twofold formation is not limited to the head, but should extend itself to a part of the trunk, the matter would be the same so long as there is no double formation of the heart and lungs, or at least of the heart. But if the organs within the cavity of the chest are also twofold, there can be no reasonable doubt that we have before us two human beings. Head, heart, and lungs are the most important central organs of life,—of separate life. If nutrition of both bodies intra uterum and extra uterum takes place through one organ (one placenta and one stomach), it is only like two eating out of one vessel: appropriation of aliment takes place separately in each body.

Finally, substances are expelled from the uterus of the pregnant human female which contain no fœtus, and which cannot be considered as fœtuses: the so-called moles. Moles are really products of fruitful association; they are impregnated ova, in which the fœtus has decayed, generally very early, and has been absorbed or dissolved, the membranes then deforming to various kinds of moles. They may be small or large, they are found thickly or thinly covered, they are sometimes a shapeless mass of flesh, sometimes more solid, or they may consist of a number of bags full of fluid. With the exception of these latter,—bag-moles which attain often a very large size,—there is generally found a small cavity filled with amniotic liquor. but no trace of a fœtus.

Ad 2. Does the human being live? The fœtus while in the womb must be presumed living, unless we have certain signs of its death. During the first months of pregnancy we have no other sign for this than the putrid quality of the flow. From this decomposition of the fluids contained in the uterus, which flow out if abortion sets in (amniotic liquor, blood), we may conclusively presume

that the child is dead. The same is correct as regards the later period of pregnancy, after the fifth month. There are other signs besides, which are, however, only to be recognized by physicians.*

In the expelled fætus the presence of life can be more easily ascertained in the majority of eases. Three periods should be distinguished, the first extending to the end of the third month. Until then the ovum is expelled generally whole and entire, and it must be carefully cut open in order to see, etc., the fœtus. Signs of life are most generally very difficult to ascertain, because the muscles are not developed enough to make movements easily. Only the palpitation of the heart can be seen, and, under favorable circumstances, very early. It should be remembered, however, that the heart (or the heart-tube) lies immediately after its formation altogether in the neighborhood of the head, and makes its descent only by degrees. Pulsation, or a movement resembling pulsation, when noticed in embryos perhaps only five to six weeks old, must be considered as a certain sign of life. After the close of the third, that is, lunar month, the development of the muscles makes gradual progress; but motions of the trunk and the extremities will seldom be noticed before the end of the fifth month, when the muscles will have attained a comparatively complete development. At that time motions of the limbs, of the thorax, or of the epigastrium and of the mouth, can be perceived more easily. Palpitation of the heart may, also, now often be felt, other signs of life being absent.

The Acardiacus excepted, every human embryo or fœtus must be considered a human being, and must be baptized if living. If life is doubtful, it should be baptized conditionally: "Si vivis, ego," etc.

[&]quot; Compare my pamphlet, De occisione foctus, pag. 69.

Embryos of a few months' existence must of course be baptized, if any sign of life is noticeable.* If, after a sudden expulsion, the ovum is still fresh, it should be baptized conditionally, because there is in this case a reasonable doubt as to life's presence. Here the question arises, whether a fœtus that has been expelled within the closed ovum should be baptized after the ovum has been opened, or whether conditional baptism on the membranes enveloping the fœtus should take place first, and be repeated on the fœtus itself after the opening of the ovum?

For the reason above stated, namely, that the outer coat of the fætal membranes is not a product of the ovum, and does therefore not at all belong to the fœtus, I cannot approve of the practice of administering baptism on the closed ovum. Debreyne (l. c., page 209) holds the opposite opinion, but I think he did not know or did not consider my reason for differing from him; and, moreover, I cannot attach to his reason (namely: "La crainte, que l'impression de l'air ne fasse mourir le foetus avant d'avoir reçu le baptême") the same weight that he does. † The exposure to the air will not on the instant destroy life in the fœtus, if the ovum is opened cautiously, and if the liquor amnii (fruit-water) is let out slowly. No time should be lost in looking for signs of life. If the ovum is fresh, not discolored or putrid, and if the fætus looks white, not of a yellowish or brownish hue, baptism should be administered, immediately after the opening, sub conditione vitae.

† Debrevne seems to have simply borrowed his view from the *Embryologia sacra* of Cangliamilla. Compare this, lib. iv, cap. vi, § 4, vi.

^{*}Abortive ova form, very often, a so-called massa carnea. In such cases the ovum became degenerate in consequence of effusions of blood, and the fœtus is certainly dead, and often already absorbed. Here even conditional baptism cannot be conferred. In a dilacerated ovum of the first few months the fœtus is always dead.

Debreyne wants baptism to be given to these small embryos by immersion of the whole opened ovum. This may be very good, if the embryos are yet very small, so that they merely float loosely in the amniotic liquor, and are not reached with certainty by the baptismal water. But I do not see the necessity of doing so, after they are six weeks old. At this time the fætus is large enough (17–25 millimeters or 8–12 lines) to be capable of baptism by infusion.*

Also, if the embryos are of somewhat larger size,—say, after the end of the sixth lunar month,—no time should be lost in searching for signs of life. If the delivery was rather a hurried one, and if the fœtus looks fresh (that is, if no discoloring spots or discoloring of the whole skin is found), baptism should be given conditionally. For, the signs of life are difficult of proof in such fœtuses, and we are therefore right in regarding them as of doubtful life, if certain signs of death are wanting.

The same applies in the case of fœtuses of later months in a state of asphyxy (trance). Some few moments might here be taken up in seeking for signs of life. But in this case, also, the fœtuses should be baptized conditionally as soon as possible, if all sure signs of death are wanting, and if there exist no other good reasons for presuming death, such as discharge of the amniotic liquor some days before delivery, or excessive floodings several hours before delivery (as in case of placenta praevia).

Persons that are not well versed in this matter will, indeed, in practice, take the safest method, by conferring baptism per immersionem, thus; the membranous envelope is ruptured in the water and under the water; and immediately after the rupturing the words are spoken. Si rivis, ego, etc. The thumb and index finger of each hand take hold of one of the folds of the envelope, and the latter is ruptured so that the whole contents of the ovum flow out and become thoroughly washed by the baptismal water. In this manner the exposure of the focus to the air, which is feared so much by some, is also avoided.

How monsters and double formations, if living, must be baptized, is sufficiently clear from the above. Hemicephalous fœtuses, should the heads be ever so much deformed, are certainly human beings, and must be baptized, if living, unconditionally. A feetus with one head and one chest (heart) is only one being, and must be baptized once unconditionally.—If there are one head and two chests, two individuals are to be presumed, and baptism is to be given on the head unconditionally, and afterward conditionally on each single chest. (On each, because, in this doubt, we cannot know which chest was baptized with the head.) If head and chest are double with one trunk, each head must be baptized unconditionally.—If the head alone is double, and the whole trunk, the chest (heart) included, is single, there is only a probability of two individuals; one head therefore is baptized unconditionally, the other sub conditione. "Si vero periculum mortis immineat, tempusque non suppetat, ut singuli separatim baptizentur, poterit minister, singularum capitibus (aut pectoribus, if there be one head and two hearts) aquam infundens, omnes simul baptizare dicendo: Ego vos baptizo," etc. (Gury, i, pag. 162, note Rituale Romanum.)*

How to act with such maltermations in regard to baptism, may be derived ex analogia from the text. With regard to characterizing double formations as two individuals, it may be urged that they should, perhaps, not be regarded as two feetness grown together, but possibly as the product of a more

^{*} Of monsters and double formations I have mentioned only those which occur the most frequently, and which are the most remarkable and offer the principal difficulties in the matter of baptism. Like the cranium, the face, too, may be wanting; indeed, there may be only a rudiment of a head without trunk (Acormus). Again, there is sometimes only one eye (Cyclopia), and at times there occurs a confusion of the lower extremities (Monopodia), etc., etc. Double formations of lesser degree are: two taces on one head, two skulls with one head and one face, etc. Here the focus in foctu (Epignathus) may be mentioned, that is, an imperfect fætus implanted directly with its blood-vessels on a place (generally the palate) of the perfect fætus, etc., etc. (Compare Dr. H. von Fabrice, Die Lehre von der Kindesabtreibung und vom Kindesmord. Erlangen, 1868.)

It may seem to some of my readers that I have treated the subject of baptism at too great, and even unnecessary, length. I must excuse myself by the immeasurable importance of the sacrament of baptism, and the great danger that really exists of many a human creature—"cujus anima, si baptismate non fraudaretur, Deum in acternum videret" (Roncaglia)—being deprived of it, through a deficient knowledge of these matters on the part of those who are present at times of childbirth.

Whilst on the subject of baptism, I must not omit to say a few words on a matter as to which some of the writers on pastoral medicine (Macher, Schreger, Bluff and others, even the good Vering) have worked themselves into a great state of unnecessary indignation. With not a little sentimentality, they have waged war against the ecclesiastical precept, that baptism should be administered in the church; * those grievously sinning who aet against this precept without necessity. It is clear that children in a trance, or those whose death may be reasonably feared to soon occur, can be baptized at home ex necessitate, either immediately or at least soon, ne periculum subcat sine baptismo moriendi. Seavini says (l. c., tom. iii, pag. 485, note 5): "Huec autem sunt hujusce periculi signa praecima; 1. Si puer oriatur sine vagitu et lacrimis. 2. Si modice resniret. 3. Si appareat lividus praesertim in facic aut capite. 4. Si nascatur post multum laboris obstetricis. 5. Si enascatur ante septimum mensem. 6. Si cranium habeat valde molle, aut suturas nimis apertas, aut alias

* And not in the sacristy, unless there is good reason, on the strength of which permission is granted by the ecclesiastical authority.

or less complete splitting of one generative germ. The history of development does not throw any light open this subject. I think we have to deal with what we see before us, and must act according to probable reasons, in case of doubt; so that no human being may run the risk of dying without baptism.

partes disjunctas." Scavini certainly intends to include within the last category all malformations of the important organs of life, because all such malformations involve the danger of an early death. "Sine necessitate" means, therefore, that the child should be brought to church, unless there is a reasonable fear of serious danger arising therefrom to the child. Also, any acute disease would be a reasonable cause for baptizing the child in the house, if an early recovery cannot be expected. Many synods have prescribed that baptism should not be postponed, without special permission of the ecclesiastical authorities, beyond the third day. Scavini adds (l. c., pag. 484) that it is communius et probabilius that a delay not going beyond the tenth or eleventh day is not of a grave character. Thus there is ample room to select favorable weather, if the child be otherwise healthy. Objections made on account of mad drives through snow and rain; dissolute eating and drinking feasts at the parish-place, and careless treatment of the poor child when returning (in country districts), are not well taken, as these are things that can be avoided. Likewise the child can be guarded against suffering from cold air, or from too cold baptismal water, if only proper care is taken. If the holy act is performed soon after the arrival of the child in church, without a long delay caused by waiting for the minister; if the baptismal water is warmed a little; if, in ease of very severe cold, baptism is administered in the sacristy, -in short, if all obnoxious agencies are as much as possible set aside, there will arise, only in very rare cases, a serious injury to the child from baptism being administered in the church. Baptism in the house is a Protestant invention; and it is probably on this account that it is defended with such show of indignation and sentimentality.

II.—COMMUNION.

The subject, and the bodily disposition, are all with which we have to do in this treatise.

The Church has declared that every Christian is bound to communicate on two occasions, viz., at Easter, and in danger of death.

This commandment is, however, dispensed with, in the case of children not yet arrived at years of discretion, of those who since birth, or since any time before the age of reason, have been *amentes*, idiotic, or mentally disturbed, and of those who are deaf and dumb and blind at the same time, "cum in illis nulla discretio inveniri possit."

Communion can, and must, be administered to lunaties, idiots, and mentally diseased persons in articulo mortis, if they were not always mentally disordered, and had at any time previously enjoyed the use of reason, "nisi forte timeatur periculum vomitus vel expuitionis." But with regard to such persons, I should think it always necessary to take into consideration their former life: for instance, is there an obligation to administer the viaticum in articulo mortis to a man who has destroyed his reason by habitual drunkenness continued through years, and who arrives at the point of death without a lucid interval? St. Thomas says: "Si prius, quando erant compotes suae mentis, apparuit in eis devotio hujus sacramenti." The previous life of many a mentally diseased person had been, it may be, before his reason gave way, but a connected chain of mortal sins, which led him to the very threshold of mental disturbance. Can it be presumed that such a one had a desire of receiving holy communion before he lost his reason?

Persons who are in the delirium of fever, or in an unconsciousness probably ending in death, belong to the same category as to holy communion. If they are able to swallow, which must be tried beforehand, they may receive under the same conditions as the insane. It will be of use to let such persons drink a little water or wine immediately after the taking of the species, because they often swallow fluids easily enough, but retain the dry species in their mouth, as the latter does not excite them to swallowing. The fluid excites the throat to the act of swallowing. It does not matter if a part of the water should reach the stomach sooner than the species, because jejunium is not required in danger of death, which then exists. (Compare further down.)

Imbeciles (semifatui) can receive, if they are able to discern the body of the Lord. I do not understand why some of the moralists (cf. Gury, tom. ii, 218) make the restriction that communion should be administered to such semifatui only in articulo mortis et ubi urget strictum communicandi praeceptum. If a man is capable of discerning, there is certainly no irreverence in more frequent communion; if not, the same applies as in the case of totally deranged persons.

Communion can be administered to the insane who have lucid intervals, during these lucid intervals, if they show a desire for it. But in this case, it is best to be properly informed by the persons around the patient, but especially by the physician, about the nature of those lucid intervals, and their duration as known from experience.

Deaf and dumb people that have sufficient discretion can, of course, receive oftener; also, blind persons. Epileptics cannot communicate during fits. During the intervals, there can only be the hindrance that the seizures occur so frequently that there is scarcely ever sufficient hope of safety from them. In such cases, the psychical derangement

makes such rapid progress that these patients must be treated like idiots or imbeciles. If the patient knows from experience that he is attacked by a fit very often, or almost always, whilst in church, then I think he is entitled to receive his Easter communion in the house, in the same way as other sick persons.

Regarding the bodily disposition, the moralists say that natural diseases, even those of a disfiguring or nauseating character, have no influence on the disposition, because in themselves they neither hinder the devotion nor "pertinent ad moralem bonitatem." Of pollution and the marital act, which are referred to by some (for instance, by Scavini in the chapter, Dispositiones ex parte corporis), we take no notice here, because they affect more the disposition of the soul than of the body. If there be absolutely nothing sinful in them, they have no influence on the disposition. But it is certainly very desirable that the marital act be avoided at least shortly before holy-communion, because, although licit, it always is accompanied by a certain perturbation.

The principal points regarding the bodily disposition are: proneness to vomiting, and *jejunium naturale*.

Holy communion should not be administered, according to the moralists, to those sick persons who are afflicted with vomiting, at least not before some six hours have elapsed since the last spell of vomiting. Coughing, however frequent, and with much expectoration, is no hindrance to communion, because the sputa expelled by the cough do not come from the stomach and esophagus, but from the lungs and windpipe; only, in momentarily violent coughing-fits, the host might be expelled by the force of the cough, or through vomiting caused by reflex nervous action. In this case, either communion must not be given, or at least the subsiding of the fit must be

waited for. By real vomiting the species is expelled from the stomach. Therefore, if there is a presumption of vomiting soon after communion, or if there is a doubt whether vomiting might ensue, communion cannot be given. If not certainty, at least probability that vomiting will not take place shortly after communion, is required. Here the question arises: Does it suffice to constitute this probability, or is it necessary for it, that at least six hours have clapsed since the last spell of vomiting? If vomiting before took place oftener, and at short intervals, then there is the presumption that now a longer interval, even one less than six hours, gives hope in dubio that the little irritation caused by the species will not excite the somewhat calmed stomach to a new vomiting-fit. But if vomiting took place before, at irregular intervals of longer or shorter duration, and if no change was effected in the general state of health, I think even an interval of six hours may not offer a sufficient security. In cholera, for instance, vomiting takes place very frequently; and an interval of two to four hours, but certainly one of six hours, shows a change which gives hope for an intermission of vomiting; but in diseases and lesions of the brain, in diseases of the kidneys, in inflammation of the bowels, vomiting ensues at shorter and more regular intervals. During those affections, I should require a non-recurrence of vomiting for, at least, twelve hours, before I would allow communion to be given. The same applies to vomiting in cases of strangulated hernia, and to the so-called irrepressible vomiting of pregnant women. In each single case, the best way is to consult the physician, whether he thinks that communion may be given without danger of vomiting. Besides, I would counsel not to give communion to the patient, even in case of a sufficient interval elapsing between the vomiting-fits, before he has partaken of a small quantity of solid or liquid food, be it only water, after the last fit. For, if the patient has taken no food at all since the last fit, it may be expected, or at least feared, that even the slight irritation of the species may produce a new one. But, if he can bear this, the species will probably not excite vomiting. The same applies to affections where the vomiting does not come directly from the stomach, but originates from the brain, or ensues through sympathetic action, for instance, from the kidneys or from the peritoneum; for here, too, by the irritation of the mucous membrane of the stomach, vomiting may be produced through reflex action.

After communion, the patient should keep very quiet, and should not take any drink; or, if this is necessary in order to swallow the species, only a very small quantity. The best drink is cool fresh water; if it can be had, icewater. Ice is a very good means to lessen the inclination to vomiting, and at the same time it is so harmless that the physician need not be consulted. Swallowing bits of ice affords the best relief in such cases.

The so-called *vomitus matutinus* needs special mention, because other conditions are present. It occurs generally in persons who have been addicted to the abuse of alcoholic drinks for a long time. Chronic gastritis, or chronic bronchitis, or only one of these affections, is its cause. Thus it may occur also, in lependently of the abuse of alcoholic drinks, if these affections arise from other causes. But hard drinkers are chiefly attacked. In the morning after rising, either before anything has been eaten, or as soon as something reaches the stomach, a very distressing retching sets in. Without real sense of nausea, but under violent exertions (because the stomach is quite, or nearly,

empty), a certain quantity of mucus is expelled, together with residues of food. Persons afflicted with vomitus matutinus are certainly very much in danger of expelling the species. They are not allowed to take ice or any other anti-emetic before communion, as the obligation of fasting cannot be suspended in their favor. The best thing for them is to rise early on communion-days, and to go to the church only after the vomiting has subsided. If the disorder has had its origin in drinking, total abstinence must be practised, and medical counsel sought for their gastritis or bronchitis.

Of frequent occurrence is another vomitus matutinus, namely, that during the first months of pregnancy. It also takes place either before anything has been eaten, or after the first food has been partaken of. It is chiefly of occurrence during the first months of pregnancy, and often ceases after the third or fourth month. Women thus afflicted have to refrain from going to communion, until they know by the experience of some days that a recurrence of the vomiting is not to be feared.

But if, nevertheless, vomiting takes place after communion, what is to be done regarding the expelled matter? At what time after receiving can we regard the corruption of the species as completed? The digestive process is not always completed in the same period, because it is dependent on the greater or lesser quantity of fluid contained in the stomach, on the more or less active secretion of the gastric juice, on the peristaltic movements of the stomach, etc.; yet it is to be presumed that the species is completely digested, and can be regarded as not any more existing, in half-an-hour after communion. A mechanical dissolution and division takes place sooner, but this is not the same in my opinion as corruption of the species panis: corruption, I

think, is accomplished only when, through the action of the gastric juice, the nature of the species is changed in the process of chemical solution, so that it is not any longer bread. * Cardinal de Lugo † is of the opinion that the small morsel of species given to lay people becomes corrupted in one minute, and the large host and the species vini in a quarter of an hour. Collet t says that vomiting must be guarded against for lay-people during a quarterfor the celebrating priest, during half—an hour. I believe that half-an-hour is the minimum I can allow of, before a real and complete corruption of the species takes place. The difference between the smaller and larger size of species I deem of no great importance; for even the larger host is comparatively small, and can be easily affected and chemically altered by the gastric juice in the same time as the smaller one. I believe that half-an-hour is likewise amply sufficient to effect a corruption of the species vini. If vomiting occurs before half-an-hour has elapsed after receiving, the expelled matter must be treated in the same manner as the Church prescribes in the case of vomiting of incorrupted species, if visible particles be not existing, or not found. As is well known, visible and recognized particles of the species must be taken and preserved in loco sacro, tuto et bene clauso, and left to be corrupted, before it is allowed to cast them into the sacrarium.

And now it remains to speak of the jejunium naturale before communion, that is: abstinentia totalis post mediam noctem a re qualibet, quantumvis minima, quae sumitur per modum cibi et potus.

^{*} That means, of course, so that the species has lost the physical and chemical qualities of bread, of the accidents of bread. To the accidents of bread belong certainly also the chemical qualities. † Disput. 10, de Euchar., n. 54.

t Traité des ss. Myst., ch. xiv. n. 14. (Quoted after P. J. B. de Herdt, Sacrae Liturgiae praxis. Lovanii, 1863, tom. ii, pag. 224.)

There is scarcely any precept which is treated by the moralists with more scrupulosity and precision than this command of fasting from midnight before holy communion. They say:—

Particles of food that remain between the teeth do not break the fast, if swallowed involuntarily, "quia non habent rationem cibi." Some hold that a voluntary swallowing is not allowed, and require that such particles at least as are felt on the tongue be spit out. Others again do not find in this a breaking of the fast; because, if it were, it might be the occasion of innumerable scruples and anxieties.

A drop or so of water, or of other fluids, swallowed unintentionally, as for instance, when washing the teeth, does not break the fast, "modo non sint in magna quantitate." If swallowed intentionally, the fast is broken, "quia tunc nihil deest, ut rationem cibi aut potus habeant."

Snuff does not break the fast, even though some dust may reach the stomach, "quia non sumitur per modum comestionis."

Tobacco-smoke, camphor-vapor, vapors from cooked foods in the kitchen, do not break the fast, according to the accepted opinion.

Chewing tobacco is in the highest degree unbecoming before communion, and therefore it is forbidden sub veniali, if done without grave reason; but it does not break the fast, even if a little of the tobacco-juice mixed with the saliva is swallowed unintentionally; for the juice is then swallowed per modum salivae. Men do not intentionally swallow tobacco-juice. Should this occur, however, the fast is certainly broken.

In regard to this fast, the moralists do not allow any infringement as being trivial, whether there be question

of the time at which the food is taken, or of the quantity of it. As soon as that clock from which we are ordinarily in the habit of taking our time, whether from choice or necessity (it is here allowed to follow the slower of two varying clocks, unless the variation should be extravagant), strikes the first stroke of twelve P. M., the obligation of fasting begins: "Qui aliquid sumit post primum ictum (licet ante ultimum) non amplius potest communicare." (Scavini, l. c., tom. iii, pag. 565.)

These detailed observations tend to show how much importance is attached to this precept. The same can be inferred from the strictness of the moralists in stating exceptions. In consideration of this manimous agreement of the moralists as to the importance of fasting, and because of the stress laid by all of them upon the necessity of strict and precise observation of the precept, I will not extend my observations upon the subject.

Waiving all scruples that may be suggested, looking at the matter from a medical standpoint, and any wishes I may entertain in that connection, I restrict myself to merely enumerating those exceptions to this rule which I find enumerated by the moralists as being alone admissible. These are: Periculum profanationis; periculum scandali vel gravis infamiae (on the part of the priest); necessitas perficiendi sacrificium; finally, one which particularly interests us here: periculum mortis, ex quacunque causa proveniat. Persons, therefore, in danger of death are permitted to receive the blessed sacrament by way of viaticum, although they may not be fasting. It is not necessary that death be directly imminent, or be sure to follow from the existing disease. Communion may be given to patients not fasting, if the disease be of a fatal nature and directly endangering life. Such patients may

receive repeatedly, though not fasting; as long, namely, as the danger lasts, or if the danger, which seemed to have disappeared, should return or increase. This applies especially to all sudden emergencies endangering life, as well as to acute diseases from which death may be apprehended. In chronic diseases, the rule of fasting cannot be neglected before the disease has entered the stage wherein death commonly ensues, or unless special danger arises from particular complications. Neither is there, in these contingencies, an absolute, or, so-called, moral, certainty of immediate danger to life required: it suffices that there is a reasonable doubt, or a probability of such danger. Of course, the patients must observe the rule of fasting, if they are able to do so without notable injury or prejudice to their state of health, which in chronic diseases is generally possible, even in the last stage. But in this matter no place must be given to over-scrupulousness.

Patients, who, although bed-ridden, are not suffering from a disease dangerous to life, cannot receive, even at Eastertime, according to the common opinion, if they are not fasting. The same applies to those who are not exactly sick, and yet cannot fast. Some moralists, indeed, allow such people to receive a few times during the year, although they may not be fasting. But these constitute a very small minority. The general opinion of theologians is against them. Only the pope can grant dispensation in such cases, which he does very seldom, and only for very grave reasons. "Videtur vero," says Gury (tom. ii, page 227), "tune adesse ratio sufficiens cur interdum Eucharistia post mediam noctem infirmo administrari possit."

We ought, perhaps, here say something about the circumstances which make it impossible for a patient to keep the fast. These cases are mostly those in which

only medicines and drinks come into question. As to the former, the prescription of the physician must be attended to. As to drinks, there is no doubt that very many seriously sick persons cannot abstain from drinking for a few hours, without serious annoyance. They need not undergo this annoyance when in danger of death. depends therefore on the patient himself whether or not he can abstain without inconvenience. To point out the diseases and affections wherein drink must be frequently given, would be out of place here; and to do so might only lead to confusion and anxiety. If the fasting be not protracted too long, that is, if communion be administered as early as possible, the patient himself, in most cases, will insist upon keeping the fast, provided it is not otherwise ordered by the physician.

III.—EXTREME UNCTION.

Extreme unction is a sacrament in which the Christian who is grievously ill receives graces for his soul, and through which, also, he may recover bodily health, if the recovery be necessary or conducive to his spiritual welfare. Although this sacrament, like all others, is directly administered for the health of the soul, it is de fide that it may also restore the health of the body, if it be expedient for the good of the soul. Hence it follows that it is wrong to postpone this sacrament until death is already beginning to take possession of the patient.

To justify the administration of this sacrament, it suffices that the sickness be grievous. The same person cannot receive extreme unction more than once in the same illness, unless, the dangerous crisis having passed away, the sick person should again fall into the same critical condition.

To children under the age of reason, or to those who have never had the use of reason since their birth (congenital idioey), the sacrament of extreme unction cannot be administered. But it can be given to other insane folk and to idiots, to delirious and unconscious persons, to the deaf and dumb, and even to those who have been both deaf and dumb from their birth.

"Mulieri vero laboranti in partu, si laboret doloribus communibus et ordinariis, non debet dari Unctio Extrema, etiamsi prima vice pariat aut alias fuerit in vitae periculo; tunc etiam non laborat infirmitate periculosa. Sic in Concilio Mediolanensi II præscriptum est; neque enim illa dolorum acerbitas est infirmitas, sed effectus naturalis partus. (Benedictus XIV, De Syn. Diœc. 1, viii, c. vi.) Secus esset, si laboret doloribus extraordinariis; tunc debet inungi, cum jam infirmitas periculosa sit, et adsit mortis periculum." (Scavini, 1 c., tom. iv., pag. 207.)

To women in childbirth extreme unction can be given only if there is danger of approaching death, if they are in articulo mortis for instance, if a condition dangerous to life supervenes from a violent flooding, through an inward laceration, or through eclamptic cramps, etc.

Before an operation dangerous to life, extreme unction can be administered only in cases wherein the morbid affection that necessitates the operation is in itself dangerous to life; for instance, when the Cæsarean operation is performed because delivery is impossible in any other way. But it cannot be given before performing any dangerous operation, if the disease itself does not directly threaten life: take, for instance, the case of a malignant ulcer from which there is no immediate danger to life. Here, a hazardous operation having become unavoidable, the danger to life is not directly arising from the disease itself,

but is brought about proximately by the operation. Extreme unction, therefore, cannot be administered in this case.

Regarding the act of anointing, the moralists allow it to be performed in contagious diseases, not directly with the finger, but mediante penicillo. Of course, I do not deny that such a proceeding is allowable, but I strongly advise its not being adopted; first, because the precaution is not necessary, as the danger of infection is always very slight. Even in such diseases as are communicated by contact, the oil itself protects from the transmission of the virus.* Moreover, those parts of the body may be selected for anointing which are the least visited with the ulcers, poxes, etc. In the majority of diseases of this class, no actual contact is required for their communication, but the contagious matter appears transmissible by the air. Avoidance of contact, therefore, is useless.

Another reason which inclines me to discourage such a method of anointing, is the scandal given thereby. The persons around the patient wonder and are scandalized, if they see the priest anxious and fainthearted, when they observe the physician repeatedly touching and handling the sick person without any such timidity. What would become of the sick, if physicians were possessed of a similar fear of contagion? And what would become of physicians themselves, if the danger of infection were really so great as to render desirable such a precaution on the part of the priest? Such is the question people will certainly ask themselves, and will judge accordingly.

^{*} The holy oil may possibly become infected through the repeated dipping of the finger. In order to avoid this, a piece of cotton may be dipped into the holy oil, in such a manner that all the unctions may be performed with it as instrument without another dipping. The smallest apprehension of becoming infected is hereby avoided.

Here is the place in which to speak of the duty which is incumbent on the physician of taking care that a patient who is in danger of death provides in time for the welfare of his soul.

"Gravissime peccat medicus; si non praemoneat de gravi periculo aegri, ut ipsi sacramenta conferantur." (Gury, Tract. de oblig. medicorum, III, ii.) "Caveat autem medicus, ne diutius monitionem differri patiatur. Non enim protrahere debet usque dum certum sit mortis periculum; sed ad hoc officium tenetur, quando advertit periculum graviter imminere. Si hunc morem servarent medici, non adeo aegroti admonitionem reformidarent nec ad confessionis mentionem terrore corriperentur." (Id., Quaest. 1.)

This obligation is clear, and recommends itself to common sense. There is really little to be added. Unhappily, at least in our country, the bad custom prevails of sending for the priest only, quando certum sit mortis periculum. Hence comes the terror of the patient and of the persons surrounding him, when the physician speaks of the priest; hence the reserve of physicians in recommending the calling in of the priest. Nobody can effect a change in this regard but the physicians alone. Would that all of them would but avowedly recognize this fact! The Lateran Council (1215) commanded expressly that no physician should undertake the treatment of a case, even although not of a dangerous character, before the patient had confessed, or had been reminded by him of confession. the scatentia communis maintains (Scavini, i, pag. 452) that this is necessary only in diseases really dangerous to life, or in such as may become so afterward. It is consequently prescribed to remind a patient of receiving the holy sacraments at the beginning of a disease which, there is good reason for prognosticating, may, during its progress, become dangerous to life. This precept binds sub gravi. However, Pope Benedict XIV says (Scavini, ibid.) that the physician is not bound, according to the common opinion of theologians, to leave the patient, if he is not willing to confess, and if the physician cannot leave him without danger.

To physicians who feel themselves to be strictly bound by the Church's precept to remind patients, in time, of the duty of confessing, it is certainly most painful to see their desire to have the priest called in often regarded as the death-sentence. They should therefore exert themselves for the restoration, little by little, of a more reasonable and Christian way of looking at things. It would soon have the effect of eradicating all dread of receiving the last sacraments, were physicians never to neglect their duty of having the priest called in at an early stage of every disease dangerous to life. This, of course, would also be necessary before serious operations, even if there were no clear danger of death during their performance. For, after a serious operation, especially if the wound should take a bad turn, the patient is often not able to receive the sacraments with full consciousness; and there is thus a possibility of his dving without them. Moreover, the quieting effect which experience shows to result invariably from receiving the sacraments, will make the patient look on the operation with more confidence and with more moral strength. success of the operation will thus be materially promoted. It is an acknowledged fact that the patients possessed of moral strength endure surgical operations and their consequences more easily, and with a better prospect of surmounting them, than those who are of depressed spirits and feeble will.

It is not necessary that the physician himself should

make the patient aware of his dangerous condition. This might have a painful and injurious effect. Generally, it will be most prudent to impose the duty on the relatives, or on those in the house, unless there should be a knowledge or a suspicion of their hindering, rather than recommending, the administration of the sacraments to the patient.

Gury says that a physician likewise fulfils his duty, by making the father-confessor (or the parish-priest?) acquainted with the danger of the penitent, in order that he may visit the patient, et efficacius movere possit ad saluti animae suae providendum. Here it must not be overlooked that the physician not unseldom succeeds better in making a reluctant patient confess than the priest himself. For the patient is apt to think that the priest is always intent on making a sick person confess, even when there is no real danger to life. The physician's warning on this head he believes much more easily. A sick person is thus often led to long for the services of a priest, which, a short time before, he would not so much as hear of.

This obligation is also binding on the physician, even in the case of the patient who is in danger of death not being a Catholic. The danger must be pointed out to the sick man and to those around him, in order that he may provide for time and eternity according to his faith and his convictions.

But how, if the Catholic patient is attended to by a physician who is an infidel and rationalist? Such a patient, and those around him, are obliged to ask the physician whether there is danger, and to call in the priest for precaution's sake, if they get no definite and satisfactory answer. In such cases, which are not of rare occurrence in populations of mixed denominations, the priest must visit the sick as soon as he becomes aware of the case.

It is the province of Pastoral Theology to treat of this subject more at length. One more suggestion may, however, be mentioned here. It is certainly the wish of every priest that the sick of his parish should be attended by physicians of the Catholic faith. Nevertheless, he should not undertake to recommend or select one particular physician out of a number; for the least imprudence herein may be of evil consequences. If the population is mixed, this point should not be talked of in public, but it should be left to private conversation. The best policy for the priest is not to meddle with this, unless he is directly consulted. His recommendations or selections must never be done so as to discredit special particular physicians. A prudent man can easily give an evasive answer which will hurt no one's feelings, nor injure any one, if a direct answer should be inopportune. He can, of course, should it appear to him desirable, direct the choice to one person, without preferring him to others. He may say, for instance, "I myself am treated by such or such a physician, and I am well satisfied," etc., etc. But if a priest knows that a physician of loose morals practises among his parishioners, by whom their virtue is endangered, not only has he the right to warn his people against this danger privatim, but, also, it is his duty to do so; for a thief within is more dangerous than one from without. An immoral physician is a thief inside our doors as regards morals.

The personal relations between priest and physician need not be commented on. That each should observe toward the other what social etiquette requires in well-bred gentlemen, is all that can be expected. If both priest and physician would work hand in hand for the welfare of the congregation, all would go well enough. It would, I fear, however, be utopian to expect such a

state of things; since physicians are not all believers, and priests not all free from prejudices. One thing, however, I would earnestly recommend to the clergy, namely: to work harmoniously, if possible, with the physician for the poor. By this, the pastor's care for the poor, their education, domestic peace, and whole well-being, may be advanced in a high degree. I speak from an experience of twelve years as physician for the poor, in a district of twelve thousand souls. If the physician, when appointed, does not visit the elergyman, the latter will find it eminently beneficial to make his acquaintance in a friendly way, after a certain period of time has elapsed. Thus both parties, and especially the poor patients, will fare the better. Besides, such a cooperation would be of service to the physician, by increasing the confidence reposed in him, and thus lightening the burden of his duties.

Sometimes poor people think that they are not as well treated by the physician appointed for them as are those that are able to pay; that he is restricted from prescribing for them expensive, and therefore, in their eyes, better, medicines, etc., etc. The distrust resulting from this prejudice is very painful to the doctor. If, moreover, the most arrogant and even impudent demands are made on him, with the remark that he is paid for what he does, all love for his practice as physician of the poor will soon disappear, and he will try to get rid of a practice so exacting in its demands, with sure ingratitude for its reward, to make room again for the next young doctor.

IV.—MATRIMONY.

Here we have only to speak of impotency.*

Impotency is an impediment which renders marriage null and void (impedimentum dirimens), "si sit perpetua et antecedat, quia matrimonium consistit in mutua traditione potestatis corporis ad copulum conjugalem; hanc autem potestatem impotens non potest tradere, cum cam non habeat.

"Porro impotentia in viro esse censetur, quando est eunuchus, vel saltem non potest seminare in vas feminae; in femina vero, quando vel seminare non potest (si verum est, semen feminale requiri ad generationem), vel propter arctitudinem non potest virum pati aut ejus semen recipere." (Liguori, lib. vi. 1095.)

"Non est confundenda eum sterilitate, steriles enim non sunt ad actum conjugulem impotentes: hinc valide eentrahunt (se. matrimonium) senes, qui matrimonium consummare valent; item mulieres, quae possunt semen excipere, etsi illud non retineant." (Gury, l. c., tom. ii, pag. 831.)

1.—On the part of the husband impotency exists:—

- a) If both testicles are absent. This is the case with castrated persons and cryptorchists. In the latter, the testes have not descended into the scrotum, but have remained in the abdomen, or in the groin. With this there is generally connected a total wasting away of the non-descended testicles, and therefore absolute impotency.
- b) If he have testiculi contusi, as they are termed by the moralists. Hereby certainly is meant a derangement of the testicles by which they become inactive (atrophy of the cellular tissue). This atrophy may arise from inflammation in consequence of a contusion, also through

^{*} De abusu matrimonii, vide paginam 89 et seqq.

hydrocele (dropsy), scrotal hernia, or through the pressure of tumors on the scrotum or on the testicles themselves. Sexual excesses likewise may cause the testicles to waste away. Whether the testicles are inactive or not, persons outside of the profession cannot easily know, and it must be ascertained by the physician.

- c) Absence of the penis. Besides being liable to be lost by accidents, tumors, and by necessary operations, it may also be deficient from birth; and such deficiency is generally connected with other malformations of the genitals.
- d) Want of development. A merely abnormal smallness of size is sometimes congenital, sometimes it is the consequence of diseases, ulcers. Generally this deficiency exists together with deficient formation of the urethra, where the end of the urethra does not come to the end of the penis, but opens underneath (hypospadiasis), or on the top of the penis (epispadiasis), somewhere in its structure, or even just at the base of it, close to the body. In the worst instances of this malformation injectio in vas feminale is impossible. But still such men have been fathers; even hereditary hypospadiasis has been observed for several generations. In such cases effusio seminis in introitum vaginae was sufficient to effect impregnation. The old idea, that it is only the odor, or aura seminalis, that effects impregnation, or that the latter takes place through effusio seminis, say on the abdominal walls, is, of course, entirely fabulous. Such fables have been invented in order to cover the real matter of fact, and have been believed, partly from a certain love of the miraculous, partly from want of correct physiological knowledge. much is certain, even at this day, that impregnation may take place, if the semen is deposited on any part of the mucous membrane of the vagina, even on that part which

may be reached by the semen without any real penetratio in vaginam. And even then, if the hymen virginale is unbroken, impregnation is not impossible in this manner. Inasmuch as ejaculatio seminis in os seu introitum vaginae is yet possible, even when there is want of development, or perhaps even total deficiency of the penis, such persons cannot be considered as impotent. Under these circumstances the case may occur that the husband is able ad cjaculandum semen, impregnation following, although real copula is impossible. The first and primary end of marriage and of copula is then fulfilled, but the other end, gratificatio voluptatis, remains unaccomplished on the part of the wife. As the marriage cannot perhaps be dissolved, the possibility of impregnation having been proved through an impregnation effected, I think this to be one of the cases where the wife may be allowed propter periculum incontinentiac, statim post copulam resp. post viri seminationem seipsam ad seminationem excitare.

e) Impotentia ex frigiditate, "quando conjuges ob hanc causam omnino perficere nequeunt copulam aptam ad generationem," is, according to canon law, a reason for dissolving marriage, after an experience of three years has elapsed. This affection may occur in marriages contracted for the sake of convenience and speculation; likewise, from the first discovering after marriage some disagreeable deformity or loathsome disease. Abomination viri erga mulierem may be so great that he never experiences necessariam excitationem ad copulam. If the morbus vel deformitas is incurable, and if the frigiditas caused thereby cannot be overcome, the Church certainly acts kindly and justly in separating such unfortunates. In case of caliditas superflua, ob quam vir semper seminet extra vas, antequam possit penetrare, the moralists also

require experientiam trienii. This period will generally be sufficient to overcome this affection. In most of these cases seminationis ante penetrationem, the cause is more a state of infirmity than caliditas superflua. This was probably the reason of requiring triennial experience. Caliditas superflua proper decreases generally very soon. It cannot, I think, be considered an impediment to marriage, because instances of this affection are by no means rare, and are overcome just as quickly as they are frequent. In affections of debility, which cause seminationem ante penetrationem, the demand of triennial experience is eminently proper. They arise partly from depression of spirits, partly from a local over-irritability of the parts, caused perhaps by previous excesses; and they are relieved generally through the calming influence of marriage-life and by proper treatment.

2.—Impotentia on the part of the wife exists, if there is total absence of the vagina, or complete or partial (specialiter in introitu) narrowness of the same, so that penetratio in vas is impossible. Here marriage cannot be consummated, unless an operation be performed which is dangerous to life, or brings at least danger of grave sickness.

Absence of the vagina is sometimes congenital; sometimes it is connected with other malformations of the parts; sometimes the latter are normal in all other respects. In the latter case, the individual generally does not survive the age of puberty very long; in the former case, there exists, of course, absolute impotency.

Narrowness, and partial or total closure of the vagina, is often found at birth, though it may be produced by various causes afterward, such as tumors, inflammations, etc.

A complete closure, while the functions of the parts are

in other respects normal, must be remedied, or dangerous affections will arise. As long as the closure exists, it prevents consummationem matrimonii, unless it is at the other end, near the uterus, when penetratio usque ad impedimentum is possible. (Compare below on absence of the uterus.)

Narrowness may exist in the whole length, or only in a particular part, of the vagina. Copula becomes impossible, if there is considerable stricture of the whole vagina or of the introitus. Nevertheless, impregnation is then possible, as is proved by cases recorded in which the stricture had to be operated on, before delivery could be accomplished; for, seminatio viri may take place sine penetratione. Nearly all such cases of stricture, especially if only particular parts (introitus included) are concerned, can be corrected by a slight operation. Many such cases are rectified by continued attempts ad copulam. Before marriage could be dissolved, it would be necessary, therefore, to have the testimony of competent authority as to whether the stricture is capable of being rectified without danger or not. A certain stricture which renders the copula impossible, called vaginismus, that is, a spasmodic constriction of the sphineter-muscle of the vagina at each attempt of copula, and even at every touching, is quite frequent. This affection can be corrected without danger.

Here the question arises, whether there is an obligation on the part of the wife to undergo an operation which is troublesome and painful, but not dangerous to life, in order to become apta ad copulam. St. Alphonse (lib. vi, 1099) answers in the affirmative: "Quia ad id videtur mulier obligari vi contractus, cum id necessarium sit ad servandum jus copulae, quod in virum transtulit." He proceeds: "Hace quidem sententia est communior, et probabilior videtur speculative loquendo; sed practice loquendo valde

probabile est, quod ait Cone. Tourn. loc. eit. eum Pontas, nempe quod si incisio non posset fieri nisi per manus chirurgi, non tenetur mulier hane incisionem pati eum tanta verecundia, quod esset onus plus quam gravissimum; si enim puella non tenetur, nec etiam ad servandam sibi vitam, in aliquo morbo verecundo chirurgi manum pati (juxta dieta lib. iv, 372), quomodo ad id tenebitur, ut ad usum conjugii aptam se reddat? Quid enim turpius (ait Collet, ibid.) quam ut virgo nuda oculis et manibus chirurgi subjiciatur, et incisionem foedam simul ac gravem pati cogatur?"

Before the marriage is really contracted, such an obligation does not, of course, exist. But, afterward, modesty alone does not seem to me sufficient reason for refusing the operation—all danger of life being excluded. I acknowledge that a virgo is not obliged nec etiam ad vitam sibi servandam to put aside verecundiam; but in the supposed case it is different, because the rights of another person have to be considered. The vis contractus (secluso mortis periculo aut gravi corporali periculo), as Liguori himself says (l. c.), binds the wife, "cum gravi molestia et dolore reddere se aptam ad copulam." Now, how can the verecundia alone be sufficient to exempt her from this obligation toward her husband, who is entitled to it by the contract?

Another kind of impotency on the part of the wife, which is not mentioned by the moralists, as far as I have been able to discover, and which probably would be classed by them under sterility, is the absence of the uterus, or the absolute closure of the vagina near the uterus, as said above. It does not prevent the copula, though it does absolutely prevent conception. An ennuch may, under certain circumstances, also consummate the copula cum completa voluptate venerea for both parties. At

this copula there is no ejectio seminis (but only mucus from the prostate gland, etc.); hence the copula is natura sua inapta ad generationem. If the uterus is absent, the copula is on the part of the husband, but not on the part of the wife, natura sua apta ad generationem. If, therefore, such a defect is known, there can be no doubt that the copula is to no purpose quoad generationem. I shall be answered that this is only accidentally so, and that exactly the same takes place, as in the case of copula, tempore gestationis. But there is this difference, that this sterilitas absoluta, in consequence of absence of the uterus, is lasting, while the accidental unfitness of copula tempore gestationis is only passing. Besides, the former is antecedent, the latter is not. But this is a point which the moralists must decide, as I am not competent to do so.

Finally Lignori says: "In femina impotentia esse censetur, quando (illa) seminare non potest, si verum est, semen feminale requiri ad generationem." As there is no such necessity, this kind of impotency does not exist.

- 3.—Relative impotency exists ob misadaptationem genitalium, si vagina feminae angustior est partibus viri, dum ambo matrimonio uti possint cum aliis. Generally adaptatio vaginae may be expected in such cases from repeated attempts, unless the stricture is very great, or unless there is much induration of the tissues (for instance, in consequence of sears), or unless the abnormal enlargement of the partes viriles (for instance, in elephantiasis) is too considerable. Experientia triennii is therefore admissible in such cases.
- 4.—Are hermaphrodites impotent? Liguori (lib. vi. 1095) says: "Valide contrahunt: 1. Steriles...2. Hermaphroditi, quia vere sunt potentes ad usum matrimonii. Et quidem, si alter sexus emineat, secundum illum tantum

valebit: si uterque sit par, optio illis datur, ut utrolibet utantur, ita tamen ut quem semel elegerint, semper retineant."

There is no necessity to be more explicit on this difficult point of hermaphroditism. Nearly all such cases are, on examination, of one sex, even should the general appearance and the external parts appear to be half-male, halffemale. Very few cases are recorded, wherein an exact examination (post mortem) showed either one testicle and one ovary, or on both sides one testicle and one ovary. The latter cases only can be concerned here. I could not find any observation made, whether such real hermaphrodites are productive. Procreative power cannot be presumed, because there is always in such cases a great deformity of the external parts. In practice, the question of impotency as an impediment to marriage is of rare occurrence, because few such hermaphroditic individuals reach the age of puberty. Should such a case occur, recurrence must be had to medical examination de sexu et de potentia.

E.—AFFECTIONS AND DISEASES DANGEROUS TO LIFE.

There is no doubt of the benefit arising to the priest in the care of souls from a knowledge of what affections and diseases are dangerous to life, and what are not so. It is a very difficult task to be very accurate in this matter, and to say all that is necessary for the priest to derive the proper advantage from it without preliminary medical information. Nevertheless, I propose to make the trial. It cannot, of course, be my purpose to enumerate all the diseases and accidents from which death might follow. I have to confine myself to naming the principal groups and the most frequent forms of disease-respectively speaking, causes of death. Nor can I explain, in the case of every single malady, how, when, and under what circumstances, death ensues. Here, also, general hints must suffice. My compilation will be of profit to the priest, perhaps, only in so far as it will make him less likely to omit any duty of his office through the negligence of others, his own attention being aroused to the possible or probable danger. I have used, at the same time, the technical terms, because the priest should know the more important ones, as he may hear them often, and perhaps them only, for instance, through the physician.

In addition to this compilation of dangerous diseases, I will try to point out the symptoms, discernible to unprofessional persons, which show the disease to be serious and

dangerous; the symptoms whose presence always indicates the approach of death; and, finally, those of death having taken place.

Among acute diseases, first, lesions of the principal organs are attended with danger to life. Injuries of the head, violating, crushing, or perforating the bony case of the skull, or lesions of the brain and its membranes (meninges). Concussion of the brain through falls or blows-commotio cerebri, etc. Rupture, dislocation of the bony spinal column, with lesion and concussion of the spinal marrow. Severe injuries to the neck, with lesions of the windpipe and æsophagus, or of one or more of the large vessels. Wounds perforating the cavity of the chest or of the abdomen, with or without lesion of the organs contained within. Severe bruises of the chest or of the abdomen, which are often accompanied by internal lacerations and malignant luxation (fracture), for instance, of the bones of the pelvis. Total crushing or tearing away of limbs, and injuries to bones, in complication with external wounds. Lesions of large arteries. All such injuries may be fatal, either immediately or quickly, or they may afterward terminate in death through excited inflammation.

Acute inflammation of the vital organs, from any cause, is prominent among the causes of death. Inflammation of the brain and its membranes, encephalitis. meningitis; of the bronchial tubes (in infants and old people), bronchitis; of the lungs, of the pleura (serous membrane which lines the cavity of the chest), pneumonia or lung-fever, pleurisy or pleuritis, pleuropneumonia; acute consumption, or acute pulmonary tuberculosis; inflammation of the sac of the heart, pericarditis; of the lining membranes of the heart-cavity, endocarditis; of the peritoneum (serous membrane which lines the abdominal cavity) in its different parts,

peritonitis; of the liver, hepatitis; of the kidneys, nephritis, Bright's disease:—all of these produce, more or less often, fatal consequences.

To these may be added a certain number of epidemic and contagious diseases. Small-pox, variola vera, sometimes also varioloid; Asiatic cholera; in infants and feeble old people also, cholerine; dysentery, dysenteria; typhoid fever, typhus abdominalis; relapsing or famine- or spotted-fever, typhus exauthematicus; pernicious intermittent fever, intermittens perniciosa; diphtheria, diphtheritis; puerperal fever, febris puerperalis; measles, morbilli; scarlet-fever, scarlatina; whooping- or chin-cough, tussis convulsiva, pertussis,—are generally fatal in infants, seldom in grown people.

Amongst acute diseases endangering life, must also be named seizures of apoplexy; severe sunstroke, insolatio; eroup of the larynx, larynyitis crouposa or pseudomembranacea; perforation of the intestines, invagination; strangulated hernia, hernia incarcerata; acute retention of urine, especially in old people; acute rheumatism of the joints, rheumatismus articulorum acutus; ervsipelas seated upon the head and face, and erysipelus migrans, which has the tendency to advance over almost every part of the surface; trismus, or locked-jaw, tetanus; general convulsions of infants, and of women during pregnancy and labor, eclampsia infantium et parturientium; hydrophobia, and eases of poisoning from glanders, malignant anthrax or murrain, and from poison developed in corpses and through violent mineral and vegetable poisons; pyæmia (poisoning of the blood through absorption of pus from wounds, etc.); gaugrene, first state of mortification, gangraena. Finally, profuse bleeding from the nose, lungs, stomach, womb, etc.

Besides the acute diseases which suddenly, or in a few days or weeks, come to a fatal issue, the chronic diseases are none the less angels of death. Perhaps just as many die of chronic as of acute diseases. Of course, deaths are not herein included arising from violence, whether resulting from accident or from the casualties of war.

Nearly all inflammatory disorders may assume a chronic character. Those which, in the acute form, tend to a fatal issue, lead as surely to death in the chronic form, although more slowly. Death then takes place through the general exhaustion of the organism, unless life is ended sooner by some complication: a result which often takes place suddenly. The general exhaustion of the vital powers is due (apart from losses of vital fluids) to the deficient supply of the necessary ingredients for life, and to the inability of the organs to recruit the bodily powers by appropriating the same. Nutriment and oxygen cannot be sufficiently absorbed and appropriated by disordered organs of digestion and respiration. Hence, the chronic disorders of these organs form two important groups of causes of death. The third group is formed by disorders of the nervous centres, the brain and spinal cord; the fourth by disturbances of circulation (diseases of the heart), and by profound changes in the chemical and vital properties of the blood (diseases of the liver and of the kidneys, cancer of the different parts, tuberculosis, malaria, etc.). When a chronic disease will end in death, is often very difficult to say. It is of frequent occurrence that, of two sick persons whose cases are to all appearances alike, one dies much sooner than the other without any discernible cause. Even the post-mortem examination does not, in many cases of sudden and unexpected death during chronic diseases, disclose what was just then and there the cause of death.

Hence it follows that the medical attendant cannot always foretell with certainty whether the death of a person suffering from chronic disease is near, or yet remote. As a general rule, precautions should be taken in chronic diseases, if there is general decline of the vital powers, or if specially alarming symptoms make their appearance.

F.—SIGNS SHOWING THE DISEASE TO BE SERIOUS AND DANGEROUS TO LIFE.

Sometimes the priest can obtain no other information about the disease and its danger than that furnished by his own observation. Such cases are of frequent occurrence in the country, and may often enough happen even in cities. For instance, the priest may not find an opportunity of questioning the physician, or the physician may not deem it necessary or expedient to make any particular communication to the relatives. Now it is quite possible for the priest to have sufficient knowledge of certain symptoms to enable him to suspect, at an early stage of the disease, any danger to life before it becomes an immediate one. It is in the highest degree desirable that he should be in possession of this knowledge. Hence the object of this chapter is to assist the priest in detecting himself the dangerous character of a disease, from certain signs and conditions easily discernible to the non-professional eye. These signs, however, show nothing more than that there exists a dangerous disorder, or disorders, if there are more than one, in the organism. They do not at all indicate the disease from which the sick man is suffering; still less do they afford any indication of what remedies should be employed. Neither diagnosis nor therapeutics belong to the province of the priest. It is sufficient for him to know whether such or such a disease exhibits symptoms of a nature dangerous to life.

Symptoms which show the disease to be serious and attended with danger to life, are:—

1. Great variations in the temperature of the body, and in the subjective sensations of the same. They always indicate serious disturbance. The natural standard of heat in the human body (measured by the thermometer placed in the armpit) is 37° C., or about 100° F. Increase of the temperature above 39.5° C., if continuing for some days, always denotes gravity of the disorder, especially if the temperature does not sink at all, or not much, in the morning. Death is imminent, if the temperature remains for any length of time above the point from 40.5° to 41.5° C. In chronic diseases, even a moderate rise of temperature is an unfavorable symptom: should it continue, it indicates the progress of exhaustion.

As a thermometer is not always at hand, the estimate of temperature must often be made by the touch. A great increase of heat is quite perceptible to the hand placed on the skin, and causes a burning sensation, generally that of dry heat. This sensation may become pricking, if the temperature is very high (calor mordax). Cases very rarely end favorably when this symptom is found.

The subjective sensation of warmth is generally increased in proportion to the increase of heat. If high temperatures are not felt as such by the patient, the activity of the sensorium (brain) is disturbed. This is an unfavorable symptom. With regard to a feeling of cold, of chills, when there is objective heat, see farther on.

Subjective feeling of heat, when an objective elevation of the temperature cannot be proved, is not an unfavorable symptom except in Asiatic cholera, where this symptom shows that the patient has passed into a typhoid state

(cholera typhoid), and where it is, therefore, a premonition of a new and dangerous condition. Again, when there are profuse inward bleedings from inner lacerations, the sensation of heat is increased at the place where the blood escapes, although objectively no augmentation of temperature be perceptible; or, rather, a lower temperature of the skin may ensue.

Objective lowering of the temperature of the body occurs only in grave disturbances. Very striking in cholera, it is also met with in profuse losses of blood, in dropsical, paralytical affections, etc. If the temperature suddenly lowers during acute diseases, it is a sign of approaching death. Again, if the temperature falls below the natural standard in the stage of exhaustion in chronic diseases, it is indicative of approaching death.

Generally, when the thermometer shows a decline in the heat of the body, the patient also experiences a sensation of cold. The latter is, however, not unfrequently the case, when there is a rising, or at least no falling, in the temperature; as in shiverings and chills. Fevers, even slight ones, commence generally with a chill or shuddering. Here the chilly sensations have no special significance for the prognosis, but if they recur often, or if they are renewed during the progress of the disease, they denote an aggravation or a complication, and are therefore symptomatic of danger (pyaemia, uraemia.)

- 2. Notable changes in the general feeling that cannot be traced to psychical causes, dulness, indifference, or great uneasiness, accompanied with anguish, restlessness, and whining fits, are circumstances denoting, generally, serious constitutional disturbance.
- 3. Awkwardness of movement, constantly lying on the back, with a tendency to sink to the bottom of the bed, are

symptoms attending grave fevers, and are due to serious sympathetic disturbance of the central nervous system.

- 4. Pain, on account of its subjective difference in this or that individual, is not a symptom from which unprofessional persons can justly infer danger to life. So much only is worth knowing, that the sudden or very quick disappearance of pain must be dreaded in cases in which there is no moderation of the coexisting fever, and where the progress of exhaustion indicates that the relief of pain does not result from the removal of its cause, but from the weakening of the perception of it.
- 5. The condition of the skin:—If the skin assumes a very pale or earth-colored, or a dusky-grey or a yellowish, hue, it is a symptom of great disturbance in the nutritive functions. Lividity, or blueness, over the whole surface occurs in cholera, and during the so-called cold stage of an intermittent fever; if marked in the face, especially over the lips and cheeks and on the fingers, it denotes deep disorder of the circulation.

Dryness of the skin is always an unfavorable symptom. If it is constantly very hot and dry, the disease tends to an unfavorable issue.

Increased sweats, especially profuse and continuous night-sweats, indicate, in chronic diseases, a low condition of the system. Cold sweats are always unfavorable, especially in acute febrile diseases. In chronic diseases, when there is at the same time great exhaustion, they may be considered as symptoms of the approaching agony.

6. Dropsy, general or local, denotes great constitutional disorder. Should it appear quickly during acute diseases, it generally denotes a speedily fatal issue. The sudden disappearance of long-continued swellings often indicates a hasty dissolution.

- 7. General and extreme emaciation is due to deep disturbance of nutrition, and, in chronic diseases, it is a sign of approaching death.
- 8. General convulsions, also convulsions of particular limbs, tremors, denote disturbance in the central nervous system. If they continue for any length of time, or if they return often, the disturbance is of a grave character and may lead to a rapidly, and even suddenly, fatal issue. Real epileptic attacks terminate often in death. But hysterical convulsive attacks, local or general, very seldom prove dangerous.
- 9. Twitching of the tendons, picking of the bed-clothes, an uncertain wandering of the hands on the bed, as if seeking for or grasping at something, often with closed eyes, or with a vacant and confused stare, are always to be dreaded.
- 10. Paralysis affecting single extremities, or the face on one side, one side of the body (hemiplegia), or the lower half of the body; also paralysis of certain muscles, especially of the sphincter-muscles of the openings of the body, are symptoms of danger. Involuntary evacuation of the fæces and urine portend the paralysis of the respective sphincter-muscles.
- 11. Sores and sloughs on parts on which the body rests, for instance, the thighs, the lower part of the back, heels, etc., denote an advanced state of exhaustion, and are bad symptoms.
- 12. Hurried pulse, above 130 beats in the minute (in adults); double (dicrotic), irregular or unequal, small, weak, wiry, easily compressible, pulse.
- 13. If the mouth stands open, sometimes attended with involuntary flow of saliva; if the angles of the mouth are strongly drawn to one side; if the lips become much

emaciated, or sunken and thin, and assume a pale or livid hue; or if the lips, teeth and gums, tongue, nostrils, are covered with a thick, brown, rust-colored coating or fur:—all these are symptoms of deep disorder, and threaten speedy dissolution. Again, sinking of the temples, or if the ears are getting thin or withered; if the nose seems pointed and thin, or is drawn to one side; sinking or immovable condition, or rolling and turning of the eyes; profuse shedding of tears; squinting, not previously existing; double vision; indifference of the pupils to light; unequalness of the pupils; clouding before the eyes; dimness and impairment of the senses of sight and hearing, and of the senses in general:—all these symptoms denote extreme danger.

- 14. Symptoms arising from exhaustion of the brain, as sluggishness of perception and of the intellectual faculties; loss or impairment of memory; sleep from which the patient can be aroused, but immediately relapses; coma (morbid disposition to sleep); lethargy (deep, unnatural sleep, from which it is very difficult to awaken a person); constant sleeplessness and delirium:—indicate increased irritability, are symptoms of disturbance of the brain, and are formidable symptoms.
- 15. Increased frequency of respiration occurs in pulmonary affections of a graver character, and in diseases of the heart during the last stages. Normal respiration is from twenty to twenty-five times a minute. Accelerated breathing of thirty-five and more (as many as sixty) respirations in a minute is a symptom of grave disease. Also, in grave disorders of the organs of the chest, breathing is either excessively labored, with great dilation of the nostrils and violent exertion of the muscles of the neck; or it is small and feeble, so that the inspiration is short and broken

off, while the expiration appears prolonged at the expense of inspiration. Extreme difficulty of breathing, or *orthopnoea*, that state where breathing is possible only in an erect posture, and under violent exertion of the whole body.

One easily recognized mode of breathing may be particularly mentioned, the so-called Cheyne-Stokes' sham breathing, which always denotes grave disorder. Here longer or shorter intervals occur between respiration; breathing stops, begins again almost imperceptibly, and increases in strength, sometimes becoming very labored and panting; then again it grows weaker, until another interval takes place. Late researches show that this mode of breathing is not always, as was formerly believed, a certain symptom of approaching death; but, when occurring in adults, it is always a symptom very unfavorable.

16. Expectoration streaked with blood is always suspicious; if it continues for any length of time, or becomes frequent, it is indicative of serious disturbance. Hemorrhage is always a symptom of a lesion threatening life, and may occasion speedy death.

When the matter discharged by expectoration is abundant, diffluent, or consists chiefly of pus, it denotes an extensive chronic disorder, and wears away the strength.

- 17. Frequent hiccoughing, deep sighing, and yawning, in acute diseases, are unfavorable.
- 18. Flatulent distention of the abdomen, tympanites (a swelling of the abdomen caused by accumulation of air in the intestinal tube or in the peritoneum), meteorism (distention of the abdomen with wind), during a disease, always indicate extreme danger. If these symptoms increase to a high degree, they threaten a speedily fatal termination.
- 19. Frequent and persistent vomiting portends the existence of deep disorder (cholera, cancer of the stomach)

During diseases of the brain and of the peritoneum, a less frequent, even a single, vomiting is indicative of serious disease of these important organs. Discharges of feeulent matter upward show that the bowel has become strangled, and that its contents cannot pass through. Vomiting of blood occurs only in serious lesions of the stomach (ulceration, cancer, of the stomach). Vomiting of pus is indicative of the breaking of an abscess in the neighborhood of the stomach or œsophagus, and is always a serious symptom.

20. Very frequent evacuations of liquid stools during chronic diseases, especially phthisis, are very unfavorable, and lead soon to exhaustion and death. Of the acute affections of diarrhæa, cholera, and dysentery, it should be said, if the discharges occur frequently, and if in dysentery the stools are bloody, the attack is serious and dangerous, especially at times when these epidemics are

prevalent.

21. Retention of urine, dysuria (inability to pass the urine), becomes always serious and dangerous if it is

protracted, particularly in aged persons.

22. Profuse bleedings of any kind are always serious. Danger of bleeding to death is present, when the face becomes pale and covered with cold sweats; if nausea, cloudiness before the eyes, or ringing in the ears, occurs; if the pulse becomes low, or weak, or disappears; if there are convulsions of particular limbs; if the eyes turn upward.

All these symptoms tend to show the existence of such disturbance in the organism as to threaten life. Some of them, of course, are more, others less, important. The coexistence of more than one of them renders the probability of fatal termination greater. Moreover, the same symptoms may be more unfavorable in one disease than in

another. To enter into any minute details hereon is neither possible nor necessary. I hope that the enumeration given will be sufficient to assist the priest, by the aid of his own observation, in detecting the presence of such diseases as are dangerous to life. It is certain that there are some critical conditions which are not discernible to unprofessional persons, nor can be made so.

In these cases, as well as in those of sudden danger, and in those wherein the priest has been called very late, it is necessary for him to be acquainted with the symptoms of approaching, and especially of immediately imminent, death. Many symptoms, a high degree of which indicates death as imminent, have already been mentioned in the above list. A combination of these symptoms, varying according to the disease, gives us a picture of the deathagonv.

G.—THE AGONY.

Gradually the decline of the whole organism progresses. Through paralysis of the muscles the lineaments of the face relax; the whole face becomes drooping, as it were; the lower jaw sinks, making the face appear longer; the evelids droop without closing, however; the nose and the temples shrink; every feature seems more sharp and pointed in consequence of the bones becoming prominent through the flaccid soft parts; the eyes become fixed; the cornea becomes dim, glassy, without lustre, and hollow; the mouth is half-open; the lips dry, thin, and apart; the whole face assumes a dusky grey-vellow, sometimes a bluish, hue; the ears, nose, and successively the whole face, become cold, and generally covered with a cold, clammy perspiration. Every motion of the extremities seems suspended, or else is manifested only in jerking attempts at motion. There is a tendency of the body to sink toward the bottom of the bed; the head is drawn backward or aside; limbs raised fall back powerless. The breathing is labored and slow, next irregular and unequal, sighing, stertorous, and croaking. Involuntary evacuations take place in consequence of paralysis of the sphincter-muscles. Often the larynx is paralyzed, and drinks fall through, as it were, and reach the stomach with a rumbling noise. The pulse grows weak, erratic, intermittent, and in the end stops entirely.

Coldness of the limbs extends upward, and unconsciousness supervenes; the senses of smell, taste, and touch,

become first extinct, then that of vision. Hearing generally remains to the last, and it sometimes manifests itself even after all the other senses have become entirely extinct. Persons in a trance are not unfrequently found possessed of the sense of hearing.

The entire skin becomes pale and withered. In chronic diseases, there is often a sudden disappearance of edematous swellings, and a drying-up of the surface of old ulcers.

After paralysis has attacked, in a more or less complete manner, all parts of the organism, the scene is generally ended with one or more deep inspirations, separated by longer intervals, and followed by a slow, long-drawn expiration.

The agony is also called the mortal struggle. Unprofessional persons may take such a view of it. But in the majority of cases the event of death is not at all violent, even if we set aside the easy death of people dying apparently of old age, which resembles almost a falling asleep. It is of no rare occurrence that patients experience in painful diseases an almost comfortable condition shortly before death. This results from nothing else than the progress of paralysis, by which the tormented organism is quietly dissolved, as the senses are dulled under its influence. Neither the manner of death, nor the duration of the agony, can be foretold with any approach to certainty from the circumstances, whether of the disease itself, or of the patient's strength, in acute diseases. It often happens that a strong person dies, after an acute disease, easily, and in a short agony; whilst an exhausted and emaciated patient, dying of tubercular consumption, presents the complete picture of agony for days, and expires only slowly and with difficulty, under stertorous breathing that is in a high degree alarming to those around him.

After the last respiration the person is considered dead, although perhaps sometimes minutes clapse before the vital spark becomes completely extinet. The muscles of the heart and of the arteries make, often, after the last respiration, some, although feeble, movements. If the agony and the gradual fading-away have been observed, we may be convinced of death some minutes after the last respiration. However, there are some forms of death wherein doubts may be entertained whether death has really taken place. Hence it will not be amiss to offer a few remarks on trance, and on the signs of death, and on the value to be attached to them.

H.—CASES OF APPARENT DEATH.

Apparent death, or trance, is that condition of the body wherein, although no signs of life are noticeable, yet probable or unmistakable signs of death may not show themselves. The functions of respiration and circulation seem to be extinct. There is no expansion of the chest or nostrils indicating respiratory movements; a looking-glass held before the nose and mouth sometimes does not receive any impression; even a feather oftentimes shows no movement. Pulse and contraction of the heart are entirely lost, or nearly so; the face and the mucous membranes are pale and without blood, as is also the whole skin.

Redness, or rising of blisters, produced by application of compresses with boiling water, or vinegar, or mustard-plasters, frictions, and chafing, is a sure symptom that the body is not in reality, but only apparently, inanimate. The absence, on the other hand, of these symptoms is no certain proof of death, as some cases of apparent death have come under observation wherein reddening of the surface and rising of blisters did not appear, yet resuscitation followed afterward. The same may be said, if drops of blood ooze, for instance, from the lips or tongue after the insertion of a needle. Their appearance is a sure sign of trance; their absence, no conclusive proof of death.

All motion ccases, the limbs either fall heavily if raised, or become stiff, and retain any position which may be given them. The eyelids do not close, if they are opened, or

if the eyeball is touched, because the patient is insensible to everything, or at least no sensation shows itself. The senses of sight, smell, taste, and also of hearing, seem to be lost. But it should be remembered that the sense of hearing may not be affected, even though all other signs of life be absent. Caution must therefore be used with regard to expressions and words in presence of persons apparently dead. There is apparent loss of consciousness, but it is apparent only, as has been the case in some well-proved occurrences of this kind.

The body may be warm, if the apparent death ensued suddenly, but the temperature of the body may also be very low, and may give way to the complete coldness of death; for instance, in cholera, and in persons drowned or frozen.

Cases of trance may occur after all spasmodic diseases, such as tetanus, epilepsy, eclampsia, eatalepsy, convulsions of infants, spasmodic asthma, etc.; after great loss of blood; exhaustion from long abstinence or great fatigue, for instance, after long, weary marches, or after difficult labors; or after freezing.

Trance may be the consequence of injury to the brain from blows, falls, pressure of air (explosions); from lightning, sunstroke, apoplexy. Again, it may take place after suffocation from irrespirable gases (carbonic acid, hydrogen gas, coal-gas); after choking, hanging, or drowning; or through the presence of foreign matters in the throat, or in the cavity of the mouth; also in the case of new-born infants.

Finally, it may occur after poisonings; especially after narcotic poisons, as chloroform, opium, morphia, prussic acid, etc.

From this enumeration of the principal causes of trance, it is clear that the danger of being buried alive is, after all,

not so very great as many represent it, amongst whom are some writers on pastoral medicine. The causes I have enumerated are of rare occurrence. Besides, they attract the attention of unprofessional and professional persons more than the common diseases and modes of death, on account of their strangeness. There may have been cases in which people have been buried alive, whilst in a state of apparent death; and, in some instances, they have awakened afterward. Certainly this is a horrible possibility to contemplate. But the number of casualties of the kind has been greatly exaggerated by sensational newspapers. The way to avoid such lamentable mistakes is easy. In doubtful cases the supposed corpse should not be buried till unequivocal signs of death have supervened. If any certain signs of death be wanting, the proper means of resuscitation should be made use of. (See farther on.)

J.—SIGNS OF DEATH.

Unequivocal signs of death are, "cadaveric rigidity and putrefaction."

In cadaveric rigidity (rigor mortis) the muscles are firmly contracted. They are tense and hard to the touch, and shortened; the flexor muscles overbalance the extensor muscles, so that the limbs are bent, and the thumbs are drawn a little into the palms of the hand. The lower jaw is again drawn up, and the mouth firmly closed. the rigidly bent limbs are stretched by force, the muscles do not contract again, but remain relaxed. This constitutes the difference between the contraction during cadaveric rigidity, and the spasmodic contraction of the living muscle. Rigidity appears in nearly all corpses; it is not developed perhaps in premature fœtuses, nor in frozen and thawed bodies. It appears one to twenty-four hours after death, and continues from six to forty-eight hours. Sometimes it continues only for a brief period, so that it may escape observation. The absence of rigidity therefore is no proof of trance, because it may have disappeared already, or it may not yet have been developed. The presence of rigidity is an unequivocal sign of death.

The process of putrefaction commences as soon as the rigidity disappears. It is manifested by a peculiar fetor of the corpse, by the greenish coloring of the skin, especially on the walls of the abdomen and on the spaces between the ribs; by the development of gases in the intestines, with flatulent distention of the abdomen, and, later on, of the whole corpse; by blisters and elevations of the skin filled with a fluid of dirty-greenish color, or with gases, and by a putrid oozing from the mouth. The anus stands open.

The process of putrefaction is accelerated by heat and moisture. This circumstance may be used to prove death. If there is, for instance, suspicion of death, and all means of resuscitation have been tried in vain, and if unequivocal signs of death are still wanting, the best way is to carry the corpse into a room heated from 18° to 20° R., wherein the air is kept moist by means of suspended wet cloths, or by water put in large flat dishes. If it be a case of apparent death only, no harm will arise from the procedure; otherwise the symptoms of putrefaction will soon appear.

Pretty sure signs of death are: cadaveric spots, and the broken eye. The cadaveric spots are of a dark blue and purple color, and appear from eight to fifteen hours after death, sometimes sooner, sometimes later, on the oblique parts of the body; that is, on that side whereon the body rests. Usually confined to the back and pelvis, because corpses generally lie on the back, they are also found on the face, chest, and abdomen, when the body has been lying on the face. They are not absolutely sure signs of death, because they have been observed even during life, and also on persons who have been resuscitated from apparent death. Especially after suffocation from coal-gas, they are found when life still exists. In this case, they are present, not only on the oblique parts of the body, but they are distributed over the surface of the body independently of its position. Their absence is no conclusive sign of life, because they may not yet have appeared, or

may not develop at all, as is the case in corpses which are either very empty of blood, or very dropsical. The presence of the cadaveric spots is, however, a pretty sure indication of death.

The broken eye. A few hours after death the consequences of evaporation are manifested in the eye. The tension of the eyeball relaxes; the selerotica (white of the evel assumes a vellow hue; a little later it becomes dry and attenuated, so that the choroid shines through with a bluish color, and causes irregular blue spots to appear on the sclerotica. The cornea loses its lustre, partly by evaporation, partly by the separation of the epithelium, and becomes dim and granulous, -dusty, as it were. the broken eve is not an unequivocal sign of death. dimness of the cornea is sometimes observed during, and even before, the agony. Also the attenuation of the sclerotica may occur during life. After some modes of death, however, the eye of the corpse remains for some time firm, tense, and shining; for instance, from sudden death from apoplexy, from suffocation, from chloroform, prussic acid, alcohol.

One sign of death, which is regarded by some as a quite sure one, may be mentioned here, although it is seldom that a priest will be able to apply the test. The pupil of the eye, after real death, soon loses its irritability, and neither contracts nor dilates any more. A living, not paralyzed, pupil contracts immediately under the influence of stronger light. On a corpse, even rays of light that have been concentrated by a convex lens have no such effect any more. A perceptible dilatation of the living pupil may be caused in a short time (10-15 minutes), by the instillation of a solution of atropine into the eye. The atropine has absolutely no effect on the eye of a corpse

one to two hours after death. Bouchut * calls atropine the "réactif de la mort." He says that he effected a clearly perceptible dilatation of the pupil of patients in very deep coma by a solution of atropine (0.1 gramme to 30.0 grammes of water). If such a solution is at hand, and a competent person † (a druggist in the absence of a physician) present to employ it, the first thing to be done is to compare both pupils, whether they are of the same dimension. If this is the case, the solution is instilled into one eye; after a while the comparison with the other not atropined eye will show whether a dilatation has taken place or not. Until further observations are made, I regard this "réactif de la mort" only as a pretty sure means of proving death.

The foregoing observations are equally applicable to the test of the contractibility of the muscles by electric currents; I prefer it, however, to the atropine test. It can seldom be employed, because it is not often that an electric apparatus is at hand. This is a great pity, for electricity may also be of great service as a means of restoring life. The excitability of the muscles declines soon after death, and becomes extinct about three hours after death has taken place. A reaction of the muscles, therefore, to electric currents would be an indication of trance, or would at least show that death is quite recent. The absolute absence of any reaction to strong electric currents may be regarded as a pretty sure sign of death.

There are other signs of death, but they cannot be as much relied upon. Coldness, for instance, may be present even in cases of apparent death: for instance, in drowned or frozen persons; also in those suffering from cholera, in

† Atropine is a very dangerous poison.

^{*} Quoted after Dr. J. Gayat, "Sur les signes oculaires de la mort," in the "Archives générales de médecine," May, 1876, pag. 531 ff.

that stage of this disease called asphyxia. Absence of all the functions of life is also a sign of death. Yet death is rendered probable only by the presence of the pretty sure signs; its absolute certainty can be concluded only from absolutely certain signs. The unequivocal signs render the probability of death the greater, the more of them are found together.

K.—WHAT IS TO BE DONE IN CASES OF DANGER OF SUDDEN DEATH, MISHAPS, AND ACCIDENTS OF A SERICUS NATURE.

Cases of trance, some morbid affections of various character, poisonings by organic and inorganic poisons, demand as prompt attention as possible, because, otherwise, they may rapidly lead to death. Immediate recourse to the physician is sometimes impracticable, especially in the country. The priest, however, is generally summoned immediately; and he is, often, the only one among those present who is possessed of knowledge and judgment enough to render him capable of pointing out and directing the necessary help under these difficult circumstances. For this reason I thought it of great importance to give here, at least, a general outline of what should first be done in cases of the kind. Abstaining from all physiological, pathological, and therapeutical explanations, I make only such suggestions as come within the reach of those outside the profession.*

^{*}It would be a very useful arrangement, especially in localities where there is no resident physician, if a supply of instruments, bandages, and medicines, were always kept on hand for use in cases of emergency. But as this will probably remain a desideratum, where the commonwealth or corporations do not take the matter in hand, I suggest only such means as can be used in the absence of such a supply. I refrain likewise from all directions as to what should be contained in such a supply of bandages and medicines

I.—RULES FOR RESTORING LIFE IN CASES OF APPARENT DEATH.

Help in such cases must be prompt and energetic, but not rash and inconsiderate.

The first thing to be done is to remove everything that presses on the body, or on parts of it: such as neckties (rope around the neck), suspenders, coat-bindings, bodices, belts, closely-tied garters. Total undressing is generally not immediately necessary, except in cases of drowning or freezing.

Nose, mouth, throat, and larynx should then be cleansed as much as possible from mucus, sand, and all foreign matters, either with the *fingers*, or by means of sponges, feathers, camel hair pencils, or wood-splinters wrapped with linen. The practice of resuscitation by setting the drowned person on the crown of his head is nonsensical and fraught with danger. The body of the patient may, perhaps, be laid on its side for some seconds with the upper parts a little inclined. Water that has been swallowed will not escape by this method, nor by the plan above denounced; but water that has only entered the throat and larynx will escape after only a slight inclination of the body.

The patient should be earried to a proper place: in summer, into the fresh air; in winter, into a moderately warmed apartment. (Frozen people must be carried into cold rooms: see farther on.) The patient should be placed on a bed, mattress, straw-ticking, or straw, with the head and shoulders raised, so that there may be free access to the body from all sides, and that those assisting may not be hindered. No more should be admitted into the room, or into any adjoining one, than are necessary: four, at most six, persons will do.

The means for reanimation are:-

1.—Irritants.

For the nerves of the skin:—The chest, arms and legs, hands and feet, may be rubbed and chafed, either with the hand, or with woollen cloths, fur, flax, straw, brushes. The temples and the forehead, the chest and the pit of the heart, should be washed with warm water, vinegar, brandy. Cold water may be sprinkled on the face and chest; affusion of a thin stream of cold water from a height of four to five feet on the head and down the spine. Hot water or sealing-wax may be dropped on the pit of the heart; mustard plasters, or blotting-paper with sinapine, should be applied to the pit of the stomach, calves of the legs, or the soles of the feet; dry cupping-glasses on the neck, thighs, back.

For the nasal nerves:—Some strong odor should be applied to the nostrils, such as hartshorn, eau de cologne, onions, horseradish, burnt feathers, or snuff; sneezing-powder, pepper, vinegar, may be put into the nostrils. Or the nose can be tickled with a feather, fine straws, or horsehairs.

For the throat:—The tonsils and the throat may be tickled either with the finger, or with a quill, hair-pencil, or a splinter wrapped with linen.

Also the rectum may be irritated by clysters of ice, or warm soap-suds or vinegar, or honey and water, saltwater, or tobacco-decoctions (fifteen to twenty grammes, to five hundred grammes water), etc.

2.--Means to Restore the Heat of the Body.

Besides the rubbing and brushing of the body, the bed may be warmed with bottles of hot water (they must not

be filled full, lest the corks should fly off), hot stones, or warming-pans; wrapping up the patient in hot blankets or cloths, covering him with hot ashes or hot sand. Where hot water can be had, a warm bath (30-32° R.) is one of the best means of communicating heat.

3.—Artificial Breathing.

This is the most important of all. Artificial respiration may recall the latent principle of life, and is therefore to be performed as soon as possible, together with the other aids, as warming and the use of irritants.

The mode of inflating the lungs through the mouth and nose of the patient, be it either from mouth to mouth or by bellows, is good for nothing, although still recommended. Even if the tongne is drawn forward and the larynx pressed back, the air will sooner pass into the stomach than into the lungs. A much better mode is either to compress and relax alternately the chest in front and from the sides; or to roll the patient from the belly to the side and vice versa, placing the arm of that side on which the body is to be rolled under the forehead. Another mode of effecting respiration is an alternate, slow and steady raising of the arms above the head, and lowering and pressing the same to the sides. These movements should be made ten, twelve, to fifteen times a minute, in a quiet and symmetrical way.

These efforts of resuscitation should be steadfastly continued from four to six hours. Encouraging signs are: reddening, especially of the lips and cheeks; warmth of the skin; contraction and diminution of the pupils after irritation by light; twitchings of the angles of the mouth, and of the fingers; slight tremors of the lower jaw, and of the

eyes; retching, sneezing, sobbing, sighing; a rumbling noise in the bowels; separate motions of respiration; a noticeable fluttering of the heart; returning pulse. If one or more of these signs of revival appear, the efforts should be steadily kept up, and especially those to produce respiration, until breathing and circulation and consciousness have been restored.

So soon as the patient can swallow, a small quantity of warm coffee, tea, or a little wine, or brandy and water, should be given him. Generally he then falls asleep. The sleep must not be disturbed, but the breathing and circulation should be meanwhile carefully watched.

If all efforts should prove unsuccessful, if no indications of returning life appear, the corpse may be covered; but it must be watched for the next twenty-four hours.

The bodies of frozen people require a somewhat different treatment. In removing the body great precaution must be observed, because the stiffly frozen limbs, and especially the smaller members, such as ears, nose, fingers, and toes, may be easily hurt, or even broken off. body should be carried to a cold place where there is no draught of air. The articles of clothing are to be cut off as well as they can be with a pair of scissors. Then the whole body, except only the mouth and nose, must be covered with snow, or blankets soaked with ice-cold water, or be placed into an ice-cold bath. If the process of thawing has progressed so far that the limbs may be bent, the skin should be rubbed with snow or wet cold cloths. After this, a cold clyster may be thrown into the bowels, and artificial respiration commenced. When the first indications of returning life appear, the body should be well dried, and rubbed with dry, and only moderately warm, cloths, and then be placed in a moderately warm bed, in

a cold room. Besides the means to induce respiration, the before-named irritants, and also tepid clysters, and tepid hand- and foot-baths, may be applied.

Single frozen parts, as hands, feet, fingers, which have become white, stiff, and insensible, must be treated in the same manner. They are first covered with snow, then rubbed with cold wet cloths, and only after this rubbed warm and dry, or put into a tepid bath.

If suffocated, hanged, strangulated persons, and also frozen persons after thawing, have the head red, the face blue or red, the eyes protruding and shining, cold applications should be administered on the head, or blood should be drawn, if a professional man is at hand.

II.—FIRST HELP AFTER SOME SUDDEN AT-TACKS OF ILLNESS.

Epidemics, such as cholera, dysentery, etc., which are treated at length under this head by some writers, I omit purposely. For non-professional help is, in the majority of such cases, only detrimental. Likewise, I do not think it necessary to treat of the prophylactic means against epidemic and other contagious diseases. Living according to the requirements of reason and health, avoiding all unnecessary communication with infected persons and their houses, tranquillity of mind and moral courage, are the best prophylactic means. Priests and physicians, who cannot avoid contact with the sick, must, during such periods, be especially careful to avoid all excesses; they should take plenty of exercise in the fresh air, and change their clothing often; they should frequently wash the face, hands, and mouth; and, perhaps, after great exertion, take,

from time to time, during the day, a draught of wine or good brandy. Other means, which are sometimes recommended, such as aromatic masticatories, and drinks, and the like, draw too much attention to the danger of contagion, and in this way, perhaps, make the disposition to infection only the greater. The counsel Vering gives to the priest, to have the windows and doors of the sick-room opened for some time, and the air purified by fumigations before entering, I can only approve of conditionally. So far as not only the priest, but also the patient and those about him, may derive benefit from it, there is no objection to it. But because the priest may, by excessive precaution, seem over-anxious about his own safety and the possibility of infection, which might exercise a depressing and, indeed, scandalizing influence upon the patient himself, and those around him, I do not think it well given. Both should be avoided by the priest. If he follows the advice, he should direct the sanitary measure of ventilation in such a way as to make it appear important and necessary, more for the health of the patient and his nurses than for his own safety.

Sudden, dangerous, attacks of illness, in which non-professional persons can render first aid with advantage, are:

Fainting or syncope: a sudden diminution or suspension of all the functions of life, sometimes almost resembling death. A common fainting-fit, with unconsciousness, is in general distinguished from apparent death, only by the presence of the action of the heart and of the pulse. The latter often cannot be felt. The efforts to promote resuscitation, however, are generally soon successful. The clothes should be loosened, and fresh air admitted. The application of simple irritants is sufficient. The most simple, and generally successful, means is to dash or sprinkle cold

water vigorously into the face of the patient. This may be very well done with the mouth, if no syringe is at hand.

Apoplectic seizure, apoplexy. The patient should not be carried far, but should be placed in a comfortable posture on the very spot of seizure, with his head and chest elevated. The next object should be, to loosen all articles of clothing which cause pressure, and to admit fresh air, even should it be cold. Then cold applications are to be administered to the head—best, of ice or ice-water; bottles of hot water are to be applied to the feet, mustard-plasters to the calves of the legs, cupping-glasses to the neck and thighs. Also a stimulating clyster of salt-water or soapsuds may be injected. Bloodletting should not be resorted to, if an experienced person is not present.

Strangulated hernia is always a dangerous affection, and requires immediate attention. It may be recognized, if an existing hernial tumor feels hard and tense, and cannot be returned. The patient has no stool, and there is vomiting, sometimes even of fæces, as the natural passage is obstructed. An attempt should be made to reduce the hernia. For this end, the patient is laid on his back in an entirely horizontal posture. He should draw up his thighs. Simple pressure on the hernia from above should never be resorted to. The swelling should be grasped so that the ends of the fingers span that part nearest to the belly (the aperture), and slightly squeeze it. It may then be tried to return the rupture by pressing it gently toward the abdomen; proceeding slowly with this pressure from the hernial aperture to the highest part (neck) of the sac. If the contents of the sac become soft, then the efforts have been partly successful and should be continued. The reposition is successfully accomplished, if the sac of the hernia, or the last part of it, suddenly glides back, generally with a gurgling sound. No violent pressure and squeezing on the sac should be used, because this may make it mortify. If these efforts fail, or if those present do not like, or have no courage, to attempt the reduction, the patient should at least be placed as above described. Then warm, softening dressings should be applied, of flax-seed, soaked bread, or compresses of hot water; or better, perhaps, cold (ice) and warm poultices may be alternately put on the rupture, so that either of these is kept on for one hour. This treatment will occasionally cause the return of a rupture. If the patient has not worn a truss before, it must be procured directly after the return of the hernia.

In these cases, as in all dangerous affections, a medical man should always be sent for immediately, before the private help is commenced.

Epileptic fits. Sometimes the attack is sudden, sometimes its approach is indicated by certain premonitory signs. The patient drops down, has cramps and convulsions of nearly all the muscles, contortions of the eyes, he grinds his teeth, his breathing is labored and often stertorous, he is deprived of consciousness. The thumbs are drawn across into the palms of the hands, the mouth ejects a frothy saliva, the forehead is often covered with cold per spiration; in short, the whole attack presents an alarming, and, alas! too well-known, spectacle. The prevalence of these fits has led to a great variety of treatment, in order to shorten or to stop them. From the experience I gathered in a great many cases of epilepsy, when attached to asylums of the insane, I can positively state that all these remedies recommended are useless, and that many, as, for instance, the favorite breaking of the clutched thumbs, are only injurious. During an attack little is to be done in the way of treatment, beyond keeping the body of the patient quiet, with the head raised, keeping him from injuring himself in his often violent convulsions and struggles, removing all articles of clothing which cause pressure, sending away all useless persons, and then patiently waiting till the attack subsides. If there should be vehement elenching of the teeth and convulsion of the jaws, it will be a safeguard, for the protection of the tongue and the teeth, to put a piece of wood, cork, leather, or the like, between the teeth. After some minutes, generally less than a quarter of an hour, and often after some seconds, the patient recovers consciousness, the cramps subside, the breathing becomes deep and sighing, the eyes fixed and staring. The attacks are generally not fatal, unless in patients who have suffered very frequent fits for a long period of time. Such persons are generally, nowadays, confined in insane asylums and similar institutions; consequently, death during epileptic fits seldom occurs outside of them. Whether an attack will end fatally or not, cannot be predicted. Death, when it occurs, is caused by apoplexy or suffocation, and is not to be looked for unless the attack is of a protracted character.

Spasmodic affections of hysterical persons occasion the summoning of the priest oftener than epileptic fits. I have spoken of them before, and I have only to repeat here that they do not generally end fatally. In epileptic fits I counselled absolute non-interference; here, I recommend that a glass of cold water be thrown, with some force, in the face of the patient. As consciousness is often present, the sudden shock will almost always make the attack of shorter duration.

Bleedings from inner organs, which make themselves noticeable outwardly:—

(a) Vomiting of blood. When blood is vomited from the stomach, it is known by its dark, dirty color, and by being coagulated and mixed with the other contents of the stomach. Even if liquid florid blood is vomited, it is readily distinguished from hemorrhage of the lungs by its not being frothy: it is shown to come from the lungs by its frothiness. Besides, when blood is vomited from the stomach, it is usually preceded and accompanied by weight, pain, and a feeling of heat in the region of the stomach. It is of use, in ascertaining the source of the blood, to find out whether there has previously existed disease of the stomach. patient's clothes should be loosened; cool temperature, rest of body, tranquillity of mind, and strict diet, are necessary. Cold liquids (vinegar, or lemon-juice in water, cold water, ice-water), but in small quantities only, and rarely, may be given; or, if possible, the patient may swallow bits of If even these things incite the stomach to new bleedings and vomitings, then only external applications should be used: cold dressings, ice on stomach and abdomen; large mustard-plasters on legs and arms; hot foot- and hand-baths, wherein some salt or ground mustard has been thrown.

Bleeding from the intestine. In general, the same remedies are to be employed. Also, a very cold, but small, clyster (6-8 tablespoonfuls) will often be efficient. Bleedings from hemorrhoids must be checked, if they last too long, or if too much blood escapes (more than 10-12 tablespoonfuls). Cold clysters, cold compresses, cold hip-baths, bladders filled with ice, are remedial.

(b) Bleeding from the lungs. The blood is coughed up, always florid, usually frothy, pure, or mixed with mucus and pus. The patient should lie absolutely quiet, with the chest raised, and should be prevented from talking. Strict

diet, the above-named cooling drinks, dry fine salt (every half-hour a teaspoonful), dry cupping on chest and back, mustard-plasters on thighs and calves, hot foot-baths of ground mustard, and, in bad cases, cold applications, or ice on the chest, are the treatment.

- (c) Bleeding from the nose, if very severe, may become dangerous to life. It is generally checked by the person sitting upright, avoiding coughing and blowing of the nose, sniffing cold water up the nostrils, or water with vinegar or alum, or a little hydrated sesquichloride of iron. In extreme cases, the nostrils may be plugged with bits of sponge, a rolled piece of linen, or a pledget * dipped in vinegar or in a solution of alum. A very good and easily applicable means is to press on the soft part of the nose for five to ten minutes. But herein, as well as in plugging, the flow of blood down the throat must be prevented. If this takes place, the openings of the nose into the throat must also be plugged, but only by a physician.
- (d) Uterine bleedings. Severe hemorrhage from the genitals, although a loss of blood from these organs is not so dangerous to women as bleedings from other parts, may soon become dangerous. Such bleedings are nearly always connected with the puerperal, or lying-in, period. During the first months of pregnancy, they occur with abortion, or at least they bring on the danger of abortion. During the later months, they are symptoms of placenta prævia (an insertion of the placenta over the mouth of the womb instead of on the fundus), and result from it: a condition which is very dangerous to both mother and child. In both eases, an absolutely quiet position is the first thing

Pledgets, or compresses of lint, are made by arranging the filaments parallel to each other, and by passing around the middle a thread of linen or silk. The ends of the thread are convenient for pulling the pledget out from the wound or cavity.

necessary, with the head a little lowered and the pelvis elevated, if possible. Cold applications around the lower abdomen, and, if possible, the plugging of the vagina by pieces of cotton or old linen, are of service. At all events, the physician must be called in as soon as possible.

During delivery itself the bleeding may also become profuse, and endanger the life of the mother. These bleedings are caused by the want of uterine contraction after the expulsion of the child, or by the contractions not being permanent. The hindrance to the contractions is generally in the placenta, which may have grown on, either partly or wholly, or may have become locked. The same position of the body, and cold applications on the abdomen, as above. But the plugging of the vagina is of no use in this case. The best thing is to rub and knead the uterus, which may be felt through the abdominal wall, and by this means to excite it to contraction. In this case, also, even should a midwife be present, a medical man should be summoned immediately. *

III.—FIRST HELP IN CASES OF LESIONS.

- 1. Bruises and contusions. Cold applications, ice, leadwater.
- 2. Bleeding from wounds. Here, temporary help consists of checking the flow of blood, and putting on the first bandage. The principal means of stopping the flow of blood, which may be employed by non-professional persons, are: pressure (either directly on the wound, or on the artery conveying the blood to the wound), cold, and the so-called styptic means (astringents).

^{*} Bleedings from placenta prævia, and in consequence of the placenta having become fixed, often have a suddenly fatal issue. In the case of their contreport the administration of the sacraments should not be delayed.

Bleeding may be stopped by direct pressure on the wound, or on the bleeding edges of the injured artery, if the blood flows out slowly, not in jets; also, if it comes from the capillaries (the minutest blood-vessels), or from the superficial, although larger, veins, or from the smallest arteries. In such eases, pressure should be made on the wound with a sponge or compress that has been dipped into cold water and well squeezed afterward. these applications have been made for some considerable time, during which pressure and cold work simultaneously, a thick pledget, either dry or wet, is placed upon wound and bound tightly, so that the pressure of the pledget stops the bleeding. In bleedings from very deep wounds, the wound must often be stuffed with pieces of sponge or with lint, if no one of the bystanders can sew them together firmly and closely. If the wound be of considerable extent (for instance, large lacerations, tearing off of limbs), and the bleeding cannot be checked by these means, the whole current of blood must be stopped by pressure on that artery which conveys the blood to the wound. This kind of pressure is always necessary, if an artery of medium size be wounded. The blood from a wounded artery escapes in jets; it can be distinguished by this feature from hemorrhage of the veins, from which the blood escapes in jets only when a ligature has been applied for venesection, by which the current of the blood is The arteries convey the blood from the heart to the organs; consequently, in order to stop bleeding from them, pressure or a ligature must be applied on the conveying trunks, above the wound, toward the heart. Ligatures can be applied only by a physician. Temporary help should simply consist in closing the artery by pressure till medical assistance can be obtained. First, the artery is

sought above the wound, toward the trunk: it is felt pulsating under the finger. An artery can be closed by pressure only in places where there is some support underneath, that is, on parts where the artery is nearly superficial and at the same time on or near a bone.*

*The most convenient and best points for compressing the arteries are:—
The common carotid artery. At the top of the larynx, press the same backward, and somewhat interiorly, against the vertebral column. Pressure cannot be kept up long, on account of important nerves lying between the artery and the vertebral column that cannot bear continued pressure. For facial hemorrhages.

External maxillary artery. At the anterior edge of the large masseter

muscle, press against the edge of the jaw.

Temporal artery. 2-3 lines $(\frac{1}{2} - \frac{3}{4}$ centimeter) in front of the angle of the opening of the ear against the temporal bone. Branches of the same are easily felt, and even seen, at the temples and foreheads of elderly people, and may be easily compressed against the skull. In bleeding of the forehead and the front part of the scalp.

Subclavian artery. Draw the shoulder well forward, and press from above the collar-bone deeply against the first rib. Rather difficult; very successful only with lean persons. In bleeding of the axilla and upper-arm.

Axillary artery. Between the anterior and middle third of the armpit, at the anterior edge of the hairy growth, press against the head of the humerus (arm-bone). The arm should be elevated. In bleeding of the arm or hand, Breehind artery. On the input side of the universal at the input side of

Brachial artery. On the inner side of the upper-arm, at the inner edge of the thick biceps muscle, against the bone of the upper-arm. Care should be taken to separate by taxis, as much as possible, the artery from the accompanying nerves, that these may not be injured. In bleeding of the fore-arm. Radial artery. One half-inch (1-2 centimeters) above the wrist, one centi-

Radial artery. One half-inch (1-2 centimeters) above the wrist, one centimeter from the edge of the arm, press against the radius. At this point the pulse is usually felt. In bleeding of the radial side of the hand, thumb and index-finger.

Ulnar artery. At the same distance from the wrist, and the same distance from the nlnar edge of the arm, press against the nlna. In bleeding of the nlnar side of the hand, middle, ring, and little finger.

Femoral artery. In the groin, about the middle (a little internally), between the median line and the anterior prominence of the hip-bone, against the publis, press backward and upward. Lower down, as far as the middle third of the femur, compression of the artery may also be made; but it is not as safe, and only to be resorted to in case of inguinal hetnia or other swelling in the region of the groin. In bleeding of the leg or foot.

other swelling in the region of the groin. In bleeding of the leg or foot.

Less sate is the compression of the posterior tibial artery, back of the inner condyle, against the condyle, in bleeding of planta pedis; of the pedal artery, by the side of the extensor tendon of the big toe at the outer

side against the cuboid bone; in bleeding of the back of the foot.

The descending abdominal artery and artery of the pelvis may be compressed through the thin abdominal wails against the vertebral column and bones of the pelvis, but the pressure is not readily borne. In bleeding of the inguinal, perineal, rectal, etc., region.

Whether the pressure is sufficient to close the artery, can be best found out, in such a case, from the stoppage of bleeding, or at least of bleeding in jerks. The most convenient means for making pressure is the hand, or the ends of the fingers respectively. The finger feels the artery and can compress it in a sure way, without, at the same time, pressing and squeezing other parts. Care must be taken not to press more strongly than is necessary to stop the bleeding: too much pressure cannot long be borne by the patient, and the fingers soon tire. If the pressing of the fingers cannot be made use of on account of fatigue or of necessary removal, a so-called tourniquet must be used. Of course, tourniquets made expressly for the purpose, the pledgets of which are placed on the artery and tightened by means of a serew, are generally not at hand. But a temporary contrivance can be readily made. A roller is placed on the artery; then a small compress, a hard pad of lint (or a potato or a stone wrapped in linen), a bandage, or a folded pocket-handkerchief, is tied around, loosely, but with a firm knot. A stick is then pushed beneath the circular bandage thus formed, between it and the skin, on the side opposite the artery, and twisted slowly, so that it screws the handkerchief or the bandage ight, till the blood ceases to flow. The stick is then fastened parallel in its length with the direction of the limb. In order to protect the skin, it is advisable to place a piece of paste-board, or a thin board, etc., beneath the screw. In extreme cases, the tourniquet can be made thus: a folded handkerchief or bandage is loosely tied around the limb, placing the knot itself as a pledget upon the artery, and then twisting by means of the gag. The tourniquet may be placed on the wound itself, if it is small. In this case the wound and the artery will close at the same time.

All such tourniquet-bandages must not be left on too long, because they arrest the circulation in the peripherical end of the limb.

Professor Esmarch* recommends (after Adelmann), in order to stop temporary bleedings from the arteries of the fore-arm, or hand, or lower part of thigh and foot, a forced bending of the elbow and hip-joint, by which the trunks of the arteries are so much bent that they allow no blood to pass. The bent fore-arm is bound as tightly as possible to the upper-arm, and the femur, turned as much as possible, is bound to the body. If there be no other way to stop the bleeding, this method may be tried; although the forced bending of the joints cannot be borne long.

When the bleeding stops, the wound is simply dressed in a loose manner. But the dressing has to be carefully attended to, lest the bleeding return beneath it unnoticed.

Bleeding from smaller vessels may be arrested by cold—cold compresses, ice, freezing mixtures. Cold causes the vessels to contract: small vessels contract so that they become totally closed. In olden times, there was scarcely any other means of stopping bleedings known than actual cautery by hot iron, red-hot knives, dipping into hot pitch or boiling oil, etc. Nowadays cautery is employed in very rare cases, and can be used by physicians only.

Styptics will generally arrest the bleeding from small vessels, but they have the disadvantage, that the wounds thus treated do not heal through direct union, but only through formation of matter (suppurations). It is best, therefore, to arrest or control the bleeding till the physician's arrival, if possible, without making the wound unclean. The following are styptics: flour, powdered char-

^{*} Esmarch, Dr. Fr., Handbuch der kriegschirurgischen Technik. Han nover, 1877: Carl Rumpler.

coal, alum, tannin, lunar caustic, acetate of lead, protochloride of iron, sulphate of iron and sulphate of copper, alcohol, diluted sulphuric acid, oil of turpentine. Alum, liquor sesquichloride of iron (liquor ferri sesquichlorati), tannin, oil of turpentine, are to be preferred. These styptics are either injected into the wounds as solutions, or a plug of lint, or a sponge, dipped into these solutions, is put on, or the dry substances are strewed on the wounds, either pure or mixed with powdered gum arabic; or cotton or lint, over which the powder has been strewed, is placed on the bleeding spot and fastened with strips of stickingplaster or bandages.

In cases in which leech-bites bleed too long, the flow may be arrested by patient pressure of a piece of punk, or it may be cheeked by the finger alone. In children, excessive bleeding from leech-bites may often become very dangerous. If there is no firm support underneath to enable adequate pressure to be applied, it is best to grasp the skin, where the bite is situated, in a fold, and to press this fold till the flow is checked.

There are certain persons called "bleeders," in whom a hemorrhagic diathesis exists. This constitutional defect is not often met with, and is generally hereditary. In such, the most trifling wounds are often followed by profuse, and sometimes fatal, bleeding. If a person or a family is known to have this hereditary defect, the most energetic means (tourniquets) to stop the flow must be employed, and the physician must be sent for, even in case of trifling lesions, or spontaneous bleeding.

3. In the event of a cavity of the body having become opened by a wound, we must not only stop the bleeding, but also see whether any of the contents of the cavity, for instance, a part of the intestines, have protruded. The

protruded parts must be gently pushed back, after they have been cleansed from any dirt with tepid water. Then the wound must be closed by means of adhesive plaster, or bandages put over compresses; at least, so as to keep the protruded parts in their place. If the brain is laid open, any handling of it must be avoided; and, to protect it from the external air and dust, a light handkerchief is laid loosely over the head.

It is of absolute necessity to close such wounds as have perforated an important cavity of the body, as soon as possible; it is also useful in so-called flesh-wounds, on account of the subsequent inflammation and healing. After checking the more copious bleeding, the wound should be closed; the edges of the wound being exactly adjusted and kept together by a closely-fitting, but not stoo tight, dressing.

4. In fractures of the bones, the main thing is to have the broken limb in the easiest position possible, and to keep it quiet, so that painful frictions of the ends of the bone, greater dislocations, and ruptures of vessels, may be avoided. If the removal of the sufferer is necessary, he should be carried on a bed, litter, or at least in such a manner that the broken parts are properly supported, and movements of the place of fraction avoided. After the broken part has been somewhat straightened, splints made of wood or paste-board, or long pads of straw, should be placed along both sides of the limb, and should be fastened with bandages or lavers of cloth, for the purpose of keeping the limb steady. It is very useful to place the injured parts between long pillows, or sacks filled loosely with sand: these can be made nearly everywhere, and quickly: besides, the limb remains accessible to refrigerant applications. the physician arrives, cold lotions, ice, dressings of leadwater, should be applied to the fracture. The same applies to sprains.

5. Burns and scalds. Very slight burns, of the so-called first degree, wherein the skin is merely reddened without rising into blisters (vesications), require only to be protected from the air, and to be rubbed with grease or oil. The main thing in burns of the second degree, that is, if blisters have risen, is also protection from the air. For this purpose, the burnt parts are wrapped in cotton, and covered with fine rags saturated with oil, grease, cod-liveroil, yolk of eggs, etc. If a drug-store is near, a so-called lime-limiment, consisting of equal parts of lime water and linseed oil, should be used to moisten the rags. Laceration of the blisters must be carefully avoided; after twelve to twenty-four hours have elapsed, they may be opened with fine needles.

Extensive burns of the second degree are dangerous to life. If more than one-third of the surface has been burnt in the second degree, the condition is very critical, and leads very often to fatal issues.

Cases of greater injury, where the skin is broken, or where the outer skin is destroyed even to the charring of the parts beneath, require, first, the application of coldwater dressings to relieve the violent pains. After relieving the greatest pain, tepid dressings of chamomile tea are very useful.

A similar treatment is applicable to cases of injury by caustic substances. First of all, the skin must be cleansed from the offending substances, not so much by washing and rubbing, as by rinsing. Water is always at hand, and, if applied in large, and often-renewed, quantities, will go far to remove, or at least to thin out, the caustic substances. It may be of service to add to the water substances

which neutralize the respective corrodents. If the injury was done by acids (sulphuric acid, vitriol, nitric acid), add to the rinsing water some chalk, soap, magnesia, soda, but not much, lest the injured skin be again irritated; if done by lime or lye, add some vinegar. No time should be lost in fetching these things, but a good rinsing with water should be first applied.

IV.—CASES OF POISONING.

There is reason to suspect a case of poisoning if a person is suddenly taken ill after having partaken of any kind of food or drink, and if the following symptoms are met with: nausea, retching, vomiting, pain in the stomach and intestines, diarrhæa, difficulty of breathing, sense of suffocation, violent hiecoughing; or, vertigo, fainting, stupor, coma, giddiness, delirious talking, convulsions, palsy in the limbs. The former set of symptoms indicate poisoning by corrosive and irritant, the latter, by narcotic, stupefying, poisons.

To remove at once the poisoning substance from the stomach and intestines, or to hinder its absorption, is the result to be sought for. Evacuation of the *stomach* by vomiting is promoted by copious draughts of warm water, salt-water, warm water and butter, egg-water (one egg to half-a-pint of water), tepid milk; also by tickling the fauces. Emptying the stomach of its contents by the stomach-pump should be done by physicians only; nor should medicinal emetics be used without the advice of a physician.

From the intestines the poison may be emptied by clysters, or by taking oil—castor-oil. Oil must not be used, if the poisoning is known to result from phosphorus.

For enveloping the (irritant, poison, strong sugar-water, water and albumen, pure albumen, milk, oatmeal gruel, etc., may be used.

This is all that can be done in many cases, for, generally, the nature of the poison is not known, and non-professional persons cannot make inferences from the symptoms.

If the poisonous substance be known, it may be rendered inert, or its effects counteracted, by appropriate chemical reagents (so-called counter-poisons). Cases of poisoning occur more commonly by:

Arsenic: as, arsenious acid (white arsenic), or arsenic combines (realgar and orpiment, arsenious cobalt, parisgreen), etc.

Antidote: ferrum hydricum in aqua (hydrated sesquioxide of iron, hammer-slakes, or iron sparklings, from the blacksmith's podge). Every quarter to half an hour, one to two tablespoonfuls. For arsenious salts, ferrum hydricoaceticum in aqua (liquor acetate of iron) is still better; every quarter to half an hour, one teaspoonful with water. If this cannot be had, calcined magnesia and water (two ounces in a cup of water), in tablespoonfuls. Glauber's salt, one ounce, to evacuate the intestine.

Lead: white lead, sugar of lead, liquor subacetate of iron.

Antidote: Glauber's salt, epsom salts (12 drachms to half-a-pint of water), every quarter to half an hour, one tablespoonful; castor-oil clysters.

Copper: verdigris (acetate of copper), some green colors. Antidote: much albumen, mush of iron-filings, 7 parts, and flower of sulphur, 4 parts, in water or syrup; copious drinks.

Mercury: corrosive sublimate, calomel, cinnabar or vermilion.

Antidote: albumen, flour mixed in water, powdered iron in syrup, milk, sugar and water.

Silver: lunar caustic (nitrate of silver).

Antidote: copious draughts of a strong solution of chloride of sodium (table-salt in water).

Iodine and iodide of potassium.

Antidote: starch paste in large doses, sugar-water, magnesia.

Phosphorus: matches.

Antidote: magnesia in water, as above under arsenic-(No oil.)

Caustic alkalies: caustic potash, concentrated solution of caustic soda (lyes), lime, liquid ammonia (spirit of hartshorn).

Antidote: lemon-juice, acetic lemonades, vinegar, sweet almond-oil.

Corrosive acids: nitric acid, muriatic acid, sulphuric acid (oil of vitriol). The characteristic of these poisons is the inflammation of the mouth and throat, with pain in the throat, coughing, vomiting of membranous matters, often bloody stools.

Antidote: carbonate and calcined magnesia, chalk, solution of soap, milk.

Tartar emetic.

Antidote: strong coffee or green tea; tannin, 16 grains every hour.

Vegetable poisons: narcotic or narcotico-aerid poisons; such are opium, belladoma, henbane, savin, tansy, conium, tobacco, lobelia, digitalis, aconite, veratrum, Calabar-bean, woorara, nux vomica (containing strychnia), and many more less known. To these may be added: chloroform, laudanum, ergot, croton-oil, poisonous fungi.

Antidotes: vinegar, citric acid, lemon-juice, strong

black coffee. If there is great failing, spirit of hartshorn, 15-30 drops in coffee, water, oatmeal or barley-gruel. Cold clysters, to which 10-20 drops of spirit of hartshorn are added. Vomiting is to be brought on; cupping-glasses on the neck and back along the vertebral column. Cold applications and effusions on the head.

Animal poisons, taken by the mouth, are the poisons formed in decomposing sausage, cheese, fish, cantharides, bad, poisonous bivalves. They cause flatulence of the stomach, vomiting, diarrhea. Mussels cause, also, red or puffy blotches over the skin and mucous membranes like severe nettle-rash, even complete swelling of the throat. Cantharides (Spanish flies) cause retention of urine.

Antidotes: carbonate of ammonia, spirit of hartshorn, black coffee, lemonade, wine, mucilaginous drinks; cold applications to the head.

Poisoning through bites, stings, or other infection, from venomous or diseased animals. Poison of wasps, flies, scrpents, mad dogs; poison developed in inflammation of the spleen.

Antidotes: the wounded part may be washed with limewater, vinegar, diluted muriatic acid, acetic acid, chlorinewater, green soap, wood-ash lixivium; or it may be sucked out by cupping-glasses. The cauterization of such wounds, either with the hot iron, or with powerful chemical agents, such as lunar caustic, muriatic acid, caustic potash, etc., as well as excision of the wounded part, must be left to the physician. If the wound is on a limb, it may be of avail to place a ligature above the bitten part, in order to hinder the entrance of the poison into the system. Yet such a ligature should only be applied in well-ascertained and dangerous cases of violent poisonings; for instance, by mad dogs or venomous serpents, because the part of the

limb below the ligature is exposed to the danger of becoming gangrenous. Internally, the same antidotes as against animal poisons taken by the mouth should be given.

If a case of hydrophobia is developed in a human being, the patient must be prevented from doing any injury to himself or others. All sharp instruments, and articles of furniture with keen edges, must be removed; if necessary, the struggles of the patient must be restrained by strait-jacket. He should be made to swallow small pieces of ice, and inhale small quantities of chloroform (forty to sixty drops on a towel held before the mouth). That abominable, superstitious belief must be guarded against, that it can be allowable to free those sufferers from their terrible affliction more quickly by suffocating them with pillows, or by letting them bleed to death, or by any violent anticipation, of any sort or kind, of its natural course.

L.—NURSING THE SICK.

The great majority of people are not able to procure a trained sick-nurse, when Providence afflicts any member of the family. Outside of hospitals, nursing of the sick by attendants specially trained is the exception; nursing by the relatives, the rule.

The proper management of the sick-room is of very great importance, and not an easy matter. I may say, without efficient nursing, medical art, in a great many cases, is rendered almost powerless. Let us, for instance, take the dietetical regimen. In health, diet may be left in great measure to inclination; and carelessness and faults, with regard to rational diet in the case of healthy persons, pass, perhaps, with impunity, whilst they end in great damage to the invalid. On the one hand, his disordered system lacks the power of resistance to noxious agents, and, on the other, he cannot ward them off at his own choice. A person in health, for instance, eats nothing that does not agree with him, goes into the open air when the room becomes too damp or close, selects his clothing, heavier or lighter, as suits him, etc., etc. But the invalid has to eat what is given to him, or has perhaps perverted desires; he is constrained to remain in bed and in the sick-room; he depends in all upon his attendants. The latter choose his

nourishment, take care of the cleanliness of his person and his room, have the care of his bed, have to cover, to lift, and to turn him.

Furthermore, how can the directions of the physician be executed properly by the invalid, even if he wished to do so? The taking of medicine, for instance, is not the most important of these matters; yet, even in this respect, many sick persons are sometimes neglectful and stubborn, whilst, often, they are rendered unable to help themselves by their weakness, or by the delirium of fever. The warding-off noxious agents, certain operations and handlings of the body, must be left partly or entirely to the help and assistance of others, etc., etc.

Certainly, the proper management of the sick-room is a matter of no mean importance. Yet few persons have any knowledge of the various important duties connected with it; and it is astonishing how few take any pains to acquire the requisite information, although they are likely to be called upon to fulfil these duties, not only in attendance upon strangers, but even upon those who are most dear to them in life. Our schools do not give information upon these matters: the young married couples know them not. Hence the incredible negligence and ignorance, hence the really perplexing and unyielding indocility in these important matters; hence, likewise, the many faults and mistakes committed in this respect, -mistakes which are not seldom followed by very injurious consequences. This accounts, too, for the many absurd and superstitious notions and prejudices about diseases and nursing which retain an obstinate hold on the people, and by which the door is thrown wide open to the tomfoolery of old women, quacks, and frauds. This state of things prevails, not only incountry districts and in the lower ranks of society, but

every physician can bear testimony that, from the beggar to the banker, he has to combat, in many respects, the same ignorance, the same prejudices, the same perverted and absurd notions.

It is not, of course, my object to write a complete treatise on everything that pertains to nursing; I only want to call particular attention to a few points, in order to enable the priest to exercise a beneficial superintendence over the nursing of his sick penitents. It will afford him, at times, an opportunity of averting by his suggestions the greatest evils; of obtaining for the sick great alleviation of their sufferings, and, perhaps, of saving human life from the results of stubborn stupidity.

The first rule to be observed in a case of serious disease is, that a physician must be called in. The priest must insist on this point, as well as resist all applications for medical counsel from persons who wish to avoid calling in a regular inedical practitioner. In the case of persons who are able to pay, parsimony is frequently the motive for their reluctance. In the case of poor people, the neglect to secure medical treatment, although it will cost them nothing, arises, often enough, from sheer indifference and idleness. By this neglect, a disease, easily remediable at first, may become firmly rooted in the constitution, or it may even have a fatal issue.

The second necessary requisite for efficient nursing must be, strict obedience to all the directions of the physician. It is not only negligent and inattentive people of the uneducated classes in whom the belief is firmly rooted that the taking of "medicine" is sufficient, but, even amongst the higher and more educated classes, it is not unseldom the case that a great variety of disagreeable and expensive medicines is swallowed with precise regularity

for weeks and months, whilst the most simple, but important, directions of the physician in reference to diet and other hygienic observances are set aside with incredible carelessness. This is one of the common kinds of deviation from medical orders. Another kind is the asking for, or listening to, the advice of more or less plausible individuals, and being guided by it, even whilst under the treatment of the physician. People who act thus, think they are imposing on the latter: they are in reality imposing on themselves. It is by no means uncommon to hear such observations as the following-made, too, with a kind of self-complacent exultation: "I did not take what the 'doctor' prescribed, but I used this, I did that, and now I am cured." Very well, there is nothing to be said against a patient taking his cure into his own hands; but there is a great deal to be said against his not having told the doctor, openly, what he was doing; or against his not having said to him: "My dear doctor," or, "My stupid doctor, I believe your 'medicine' will do me no good. You had better stay at home, and not trouble yourself any more about my case." Of course, he would not then have the pleasure of scoffing afterward at the doctor, and of telling him, either directly or indirectly, "It was not your treatment that did it." Besides, the scapegoat would be wanting on whose shoulders to lay the blame, should the disease take a fatal turn. For it is by no means of rare occurrence that the sick person dies whilst under, as it is pretended, the treatment of the physician, but when in reality he himself or his attendants have "cured" him to death. Were it necessary, I could relate here quite a number of illustrative examples; some not a little amusing, and some very distressing.

A third principle requisite for efficient nursing is the proper psychical disposition of the attendants. Patience,

self-control, self-denial, and an obliging, kind, and cheerful disposition, should be possessed by them. Kind and sympathetic behavior, cheerful conversation, avoiding all disagreeable topics, and consoling words, will attract the good-will and confidence of the invalid, and alleviate his The nurse should oblige the invalid in all his wishes, and supply his wants with amiableness and gentleness of manner, provided, of course, that these wishes are not against his real welfare. He should patiently bear the complaints of the patient; he should not let his temper be easily ruffled by his irritability and obstinacy, nor become vexed at the incessant interruptions about trifling things which the invalid may want done; he must even bear, with cheerful equanimity, impatience, rudeness, and want of appreciation of his services, on the part of the patient. must manifest no repugnance toward the most demeaning and humiliating offices.

I know how difficult it often is to maintain the right disposition and proper temper in the sick-room. The cares and troubles of daily life, the sorrow and anxiety attending the sickness of dear relations, may often require heroic efforts to control the feelings in the presence of the invalid. He, by all means, should know as little as possible of this common grief. He has an affliction of his own—his own pains and anxieties; and it is common philanthropy, as well as duty, on the part of relatives, to alleviate his burden as much as possible, and to ward off his share of the common hardships of life.

After this introduction, I proceed to the consideration of some of the points of special importance in the proper regulation of the sick-room.

I.—THE SICK-ROOM.

It is an abuse to have the meaner and smaller rooms of the house set apart for sleeping apartments, and every possible opposition should be offered to it, at least in cases of serious disease. The sick-room should be the best room in the dwelling. It should be large enough to allow the patient 35-50 cubic meters (1100-1600 cubic feet) of airroom. It should be airy and bright; if possible, on the sun-side, and away from noisy streets and courts. There should never be any unnecessary furniture, clothes, etc., in this apartment, nor anything, not absolutely necessary, which is calculated to present an obstacle to keeping it in a condition of complete order and cleanliness. Night-chair, bed-pan, bed-blankets, dirty linen, and soiled bandages, ought never to be allowed to remain in the sick-room, but they must be removed to one adjoining.

To keep the air pure is always of primary importance. For this reason, all excrements, strong-smelling essences, flowers, and fumigations, must be removed; above all, frequent ventilation must be resorted to. This is done best by opening windows in an adjoining room, because the invalid is thus safe from currents of air. If this advantage is not to be had, the windows in the sick-room itself may be opened, without any apprehension, if the patient is only protected from draught, either by a screen, or by drawing the quilt or bed-covering over his head, or by holding it high up. Only in inclement weather, or while the patient is bathing, or perspiring copiously, or while bandages are being put on, the windows should not be kept open. The temperature of the sick-room should be the same as is agreeable to healthy persons, about 150 R. In pulmonary diseases, and if the patient is old, it may

be raised to 16-17° R.; but when the disease is febrile (typhus, small-pox, searlet), the temperature of 13-14° R. is sufficient whilst the fever is at its height. If the room is heated by a stove, care must be taken that no coal-gas escape, and that the bed be not too near the stove.

The bed of the patient should never stand near the window. The best way is to place it with the head-end against the wall, so that there is easy access from all sides. If it has to stand parallel to the wall, it should, however, be removed from the same, one and a half to three feet.

Means should be taken, especially during pulmonary complaints, to keep the air moist; either by placing a wide, flat dish or basin in the room containing water, or sprinkling the floor, from time to time, with fresh water, or with a mixture of vinegar, or white wine and water. The latter mode is especially agreeable in summer. But the floor must be kept from being wetted, especially if the boards are not oiled.

The light of the sick room:—Full, glaring sunlight should not be allowed to strike directly on the bed, and the admission of full daylight should be moderated by curtains. It is not, however, intended by this that the windows should be covered either with heavy or dark curtains, or with shutters, so as to darken the room. Darkening is only serviceable in some few cases; for instance, when delirium is present, or for some affections of the eye. During night, the room is lighted best by a piece of waxen wick fastened upon a small tin-frame, and floating on the oil upon a corkpiece. If more light is needed, large lamps must be avoided (especially petroleum lamps); wax or stearine candles may be used. Lamps, as well as tallow-candles, give out too much smoke.

Avoid all unnecessary noise in the sick-room. Arranging

of furniture, cleaning the room, opening and closing of doors, treading with a heavy foot, or high heels, or creaking shoes,—all this may be, for the morbidly susceptible nervous system of the invalid, so many shocks which can be easily spared him, with a little care on the part of the attendants. Again, too long or too loud conversations in the sickroom should not be allowed; still less, those abominable whisperings. The invalid does hear them, although often he cannot understand them: and thus alarm is excited in his mind. Things that the patient ought not to hear, should not be spoken of in the sick-room: either silence should be kept about them, or the conversation should be carried on in another room.

II.—THE SICK-BED.

If a choice can be had of bed-materials, it may be considered that iron bedsteads are more airy-freer, too, from vermin; that wooden ones keep the bed warmer. The bed itself should consist of a mattress of horse-hair or sea-grass. A well-filled straw-bag, with a blanket spread over it, makes a good bed, and is often the only one to be had in the country, and by poor people. Feather-beds engender too much heat, and cause bed-sores: they should be used only for very old and feeble people, and perhaps for those who have been accustomed to them from childhood. Pillows may be filled with feathers; only in affections of the head, pillows of horse-hair should be preferred. For covering, blankets are the best material: feather-pillows and beds are too warm. In winter, any want of heat should rather be supplied by a moderate heating of the room; and the bed may be warmed by hot bottles, warm stones, etc, before changing.

Curtains should be discarded from the sick-bed, because they hinder the change of air.

It is a very good thing to attach a rope or a girth, either to the ceiling, or to the foot-end of the bed, with a handle, in order to assist feeble patients to get into an erect position.

When the bed requires to be made, or the bed-linen to be changed, the patient, in serious diseases, should be moved to another bed or sofa, or to an upholstered chair, with great care, and he should be well covered. If there is only one bed, and no other furniture near, a straw bag may, anyhow, be easily procured.

In changing the dress great precaution should be taken. The linen should be well dried and warmed. The body of the patient should never be entirely stripped, but only the smallest part possible, and for the shortest time possible. If the arm, for instance, is the part affected, the articles of dress should, of course, first be removed from it; because, otherwise, there would be too much forcible bending and stretching of the same. If a diseased limb, such as the arm, cannot be moved at all, the shirt-sleeve must be cut open to the collar and fixed with strings.

Daily washing is of great benefit to the patient. This might not be possible daily with all patients, but it should be the rule; and the same will apply with regard to combing the hair. This is not done in diseases of the brain only, and in typhus-fever. When washing, one part should always be finished and dried with a warmed, or at least not cold, towel, before another part is made wet. Finally, the patient must be made to cleanse his mouth often, and, if he is too feeble himself, it should be washed by others with fresh water.

If there is involuntary discharge of stool and urine, some

water-proof material (oil or caoutchouc cloth) must be placed under the under-sheet, and over it may be laid a blanket folded up several times. Of course, such invalids should be washed after each such accident.

During diseases of longer duration, especially of old people, and those suffering from protracted or malignant fevers, there often occur the so-called:—

III.—BED-SORES.

The best and easiest remedy is, to prevent their occurrence. A frequent change of position and of the sheets, as well as a frequent inspection and washing of the threatened parts, will generally be effective in this direction. A second precaution is, not to allow the shirt, or sheet, or blanket, to lie in folds under the patient's body. For this reason, the under-sheet should be pinned to the mattress smoothly, especially in the case of restless patients, and of such as sink in the bed on account of unconsciousness and feebleness. To prevent the sinking and bed-sores, it is very serviceable to lay the patient on a well-tanned hairy skin (the tail-end to the upper-end of the bed), or on india-rubber rings filled with air or water of 26-28° R., or on air- or water-pillows, or on complete water-beds. Instead of india-rubber rings, a contrivance may be made by wrapping linen or soft leather around a ring of straw, and placing it under the body in such a manner that the threatened, or already sloughy, part of the skin come in the opening of the ring, and be thus protected from pressure. The pillows at the head should not be too high, to avoil sinking in bed.

Every day, and repeatedly during the day, if the patient

be unconscious or suffering from serious fevers, those parts of the body on which such excoriations more easily appear, must be examined. These are: the haunches, or the lower part of the back, the shoulder-blades and the heels. If red, painful, swollen places appear on the skin, they should be washed with water, brandy, vinegar, wine; lemon-slices, white of egg, or dressings of lead-water, should be applied. A mixture of one well-beaten egg to half a-pint of water is very good for these washes.

Even mere red spots should be pointed out to the physician at his next call; and the more so because there is a malignant class of bed-sores in which bluish-red, or bluish-green, or black exceriations appear, generally with blisters covered with bright, or dirty-colored, and often putrid, matter. Dressings of good wine, eamphor-wine, with or without lead-water, of solution of chloride of lime (half-anounce to a pint of water), or of solution of carbolic acid (four scruples to a pint of water, or olive- or linseed-oil) must be applied. Also dressings of tannic lead are of good service; which may be easily made, by adding two parts of liquor subacctate of iron to a filtered decoction of two parts of oakbark with eight parts of water. The precipitate is collected by straining the water through a fine handkerchief, and is then used for poultices.

In order to purify the air and to destroy bad odors, as well as to arrest danger of contagion and to destroy the odor and poison of corpses, different so-called disinfecting agents are employed. Above all, importance has been attached to:—

IV.—FUMIGATIONS.

Unprofessional persons cannot do much herein without the special directions of the physician. Some of the substances most commonly employed by unprofessional persons, such as pastils, camphor, etc., only cover the offensive smells, but do not destroy them; they only intensify the impurity of the air, and they should not be used. Another class of fumigations, for instance the nitric and sulphuric fumigations, are intolerable to human beings.

The best fumigations, in all cases, are those of chlorine, which are used in different strengths, as the case may require.

Apart from a special prescription, the following one should be employed:—

1. In the sick-room. If here a disinfecting fumigation is necessary, place a pailful of water in the corner most remote from the invalid; add 10-15 ounces of chloride of lime, and stir the mixture from time to time with a wooden stick. In addition, linen rags dipped in a solution of chloride of lime may be suspended from a line.

It is pleasant to the olfactory organs, and is not, at all events, corrupting to the air, to evaporate vinegar or aromatic vinegar, either by sprinkling the floor, or by pouring it on hot stones or iron plates, or by simmering it over an alcohol-lamp. But hereby only the smell is improved; the infecting matter is not destroyed, and the air is not actually purified.

2. Funigations of *corridors* may be a little stronger. In different spots, place plates or earthen dishes, each containing $1\frac{1}{2}-2\frac{1}{2}$ ounces of chloride of lime, and sprinkle them from time to time with vinegar, or diluted sulphuric or muriatic acid.

3. After the death of the patient, fumigations, such as those described under No. 2, may be used, or even the still stronger so-called Guyton Morveau fumigation. But this strong chlorine fumigation is not only intolerable and even dangerous to men and animals, but it affects, also, metals, and destroys the color of plants. As it is generally intended, at the same time, to disinfect and to purify furniture, beds, wearing-apparel, etc., all these things must be placed or suspended in such a manner that their broadest sides are exposed to the fumigation: for instance, mattresses are put on the edges, clothes are suspended from frames.

The Guyton-Morveau fumigation is obtained in this manner: on a dry mixture, of one part black oxide of manganese, and three parts common salt, pour, little by little, a mixture of two parts concentrated sulphuric acid (vitriol) and two parts water.* The whole is placed, either over a night-light, or into hot sand. For a room of 35 cubic metres, it suffices to take 7 drachms salt, 2 drachms and 2 scruples brown-stone, of sulphuric acid and water, half an ounce (a tablespoonful) each. After the mixture is ready, close doors and windows as tightly as possible; then allow the vapors to take effect for some hours; ventilate well afterward.

A simple way of disinfecting linen is to soak it in a solution of chloride of lime (one ounce to a quart of water), before washing.

Hands and face are disinfected by washing in a solution of carbolic acid (16 grains to a half-pint of water), or of kali hypermanganicum (16 grains to a pint of water). The latter may also be used for cleansing the mouth after dealing with contagious diseases, corpses, or decomposing

^{*} The mixture of sulphuric acid and water should be made by the druggist; or else pour the sulphuric acid very slowly into the water, never vice versa, because then the mixture explodes, and may cause grave injuries.

corpses. On a corpse of very offensive smell scatter some chloride of lime, or put on some flaps of linen, cloth, flannel, etc., soaked in a solution thereof.

V.—ARTICLES OF DIET FOR THE SICK-ROOM.

A detailed regulation of both the quantity and quality of the food will be given by the physician, at least in serious diseases. The attendants should then strictly conform to it. Negligence and insubordination in this respect have often been the source of relapse and death. Mistaken kindness of gentlemen and ladies Bountiful, who think themselves bound to carry some "good things" to the patient, is frequently productive of serious mischief, especially in the case of little children.

Food and drink must neither be given too warm nor too cold, except by the special order of the medical attendant.

While eating, the patient should be raised in bed, if possible; his back must then be supported either with the hand or with pillows. It is better to put the dishesson a board which is placed on the bed in front of the invalid, than to have them on a table near the bed; an arrangement which often causes much inconvenience. Very feeble persons must be fed very slowly. While drinking, the patient's head should be raised; the vessel to drink from should not be too full; sometimes it is advisable to use a spoon for administering drink. Care should be taken not to give to patients who are unconscious or delirious, drinking-vessels which they might bite. Thus injury to the mouth will be prevented. Some drinks, as, for instance, acidulated lemonades, etc., must not be allowed to remain too long in vessels of metal.

As not unfrequently, especially in chronic diseases, the choice of food and drink is left to the patient himself or his nurses, it may be useful to offer a few hints as to what foods are more or less easily digested, and what are the best beverages.

1.—Animal Food.

Of easy digestion are: young pigeons and chickens, veal, roasted meat of young oxen, seraped raw ham and corned beef, the lean of mutton, venison, game, except that of a winged kind, lightly boiled or raw eggs. Also, milk in not too large quantities, whey, buttermilk, and curd with sugar and cinnamon, but not too cold. Fishes of easy digestion are: cooked turbot, haddock, pike, trout, perch, fresh herring; oysters, three to six at a time.

Hard to digest are: cooked beef, pork, all sausages, duck, goose, turkey, winged game, fried liver, mince-pies, hard-boiled eggs, beaten egg, all cheese. Of fishes: all fried fish, carp, salmon, eel, and most sea-fishes: lobsters, erabs, prawns, scallops, and mussels, are not of easy digestion.

2.—Vegetable Food.

Easily digestible: young carrots and peas, asparagus, spinaeh, artichokes, cauliflower, boiled and mashed potatoes, rice, sago, peeled-barley, groats, wheaten bread.

Hard to digest: all of the cabbage tribe (more digestible, perhaps, sauerkrout), white turnips, onions, cucumbers, mushrooms, truffles, pastry of every kind, farinaceous food, rye-bread; salads, the very bitter ones excepted.

Fruit is in general more wholesome if cooked. Raw, of easy digestion, are, if quite ripe: strawberries, raspberries, eurrants, apricots, sour cherries, grapes, apples and oranges. Of hard digestion: pears, peaches, plums, pine-apples; oily fruits, such as nuts, almonds. Also all fruit preserved with sugar or vinegar.

3.—Beverages.

Cooling drinks: water, ice-water, seltzer, mineral waters, lemonades with sugar and juices (of lemons, oranges,* raspberry, etc.), so-called fruit-water (baked apples, pears,

plums, cooked in water).

Mucilaginous, nutritive, stimulant drinks: milk, milk of almonds (beat 1-12 ounces of sweet almonds with a little water, pour a pint of water into the paste, which should be constantly stirred, filter, and add a small proportion of refined sugar), rice-water, barley-gruel (2-3 ounces of pearlbarley cooked with a quart of water), oatmeal-gruel (one tablespoonful of oatmeal cooked in a quart of water), arrowroot-mucilage (one teaspoonful cooked in a quart of water, add sugar and einnamon), toast-water (7 ounces crackers or rye-bread boiled in quart of water and strained), to which 2-3 tablespoonfuls of lemon-juice may be added, or one tablespoonful of cinnamon water, or one half-pint of rhineor red-wine and sugar; egg-wine (one well-beaten egg, 3-4 teaspoonfuls of sugar to a pint of water, with or without wine); good bouillon, beef-tea (take half-a-pound of good rump-steak, cut into thin slices, pour upon the whole about one quart of cold water, let it draw for two hours and

^{*}The lemons and oranges are cut a little, and then some of the juice is squeezed into the water. It is a wrong practice to put slices of the fruit, with the peel attached, into the water, because the essential oil thus solved from the peel may easily cause headache.

simmer for three to four hours over a slow fire—skim and strain; water with half or fourth part wine, light beer, pure wine, as the physician directs.

If wine is allowed, but cannot be had, this substitute may be used: take one-fourth pint good rye-whiskey or one ounce of rectified wine-spirits, add a quart of water and 1½-2 ounces syrup or sugar; to each quart of this mixture the yolk of two eggs well stirred, with sugar, may be added.

VI.—ADMINISTRATION OF MEDICINES.

Nothing is of a trivial nature in the management of the sick-room. A few rules, therefore, in reference to administering medicines may be given here, although they appear to some unimportant and clear in themselves.

The principal thing is to administer the medicine exactly in the quantity and at the time ordered. The label, therefore, with the direction for administering, should not be torn off. This may be the cause of much mischief.

There should be an interval, of half-an-hour at least, between the taking of medicine and a meal, unless, as is sometimes the case, it is ordered to be taken at meals.

The medicine bottle must be kept well corked; not too near the stove, nor exposed to the direct rays of the sun.

Medicines for external application should be kept apart from those for internal use. Without this precaution, there might be much mischief done. The spoon (china or so called medical spoons are the best) should be put in water, or well cleansed, every time after it has been used. While administering, the spoon should be held at the lower end of the handle: there is thus less danger of spilling.

When counting drops, the neck of the bottle should be moistened to the brim, in order to prevent a sudden rush of the fluid. As most medicines in drops are rather irritant, the dose should be poured into water, sugar water, or on sugar.

Pills, a very good form for medicines of bad taste, cannot be taken dry by some. In this case they should be given with half-a-spoonful of water, or they should be wrapped up in a morsel of bread, or in a plum from which the kernel has been removed.

Powders are administered either dry on the tongue, giving a mouthful of water afterward, or they are stirred in a spoon with a little water, or they are wrapped in a wafer. If stirred in water, care should be taken that the patient takes the whole. For, as the powders generally do not dissolve entirely in water, the principal part remains often in the spoon, which should be collected by another stirring and then given. If powders, any for instance of bad smell or taste, are to be wrapped up in wafers, dip a sufficiently large piece of the wafer into water, place it on a tablespoon, pour the powder on it, and then fold the edges together over the powder so as to form a small round ball. This is placed at the top of the spoon, and thus given to the patient, who takes a mouthful of water after it.

If the patient has to take an emetic, he should not shortly before eat any solid food: everything which causes pressure must be loosened or put off. Trusses only must not be loosened, but rather fastened as well as possible. When retching comes on, and not before, moderate draughts of tepid chamomile-tea, or warm water, or water and butter, etc., may be given to promote the vomiting. Generally, there are two to four vomitings caused by the emetic, which are sufficient. But if vomiting continues, or if the sensation

of nausea is still very strong, a cup of black coffee or a fermenting powder may be given, and a poultice of mustardmeal or the like may be applied to the pit of the stomach.

Emetics should never be given without the advice of the medical attendant. If an emetic has been ordered, but has not yet been taken, and there is spontaneous vomiting, diarrhæa, coughing of blood, vomiting of blood, cramps or violent griping, its administration ought to be suspended till the physician has been again consulted.

VII.—LOCAL (TOPICAL) APPLICATIONS.

Embrocations, plasters, salves. In ease of embrocations, which are done either with the naked hand or with a piece of wool, it is important to keep up a constant friction, but without using too much pressure, lest the epidermis be rubbed off, and the patient caused more pain than necessary. The patient must not be uncovered more than is absolutely necessary: on the one hand, to spare his modesty, and, on the other, to avoid exposure to cold. Irritant salves, and especially mercurial ointments, are rubbed in either with an old kid-glove or with a soft dry pig-bladder. This will prevent soreness of the fingers; moreover, without this precaution, a flow of saliva might be caused by the mercury. After every rubbing, even with the most harmless remedies, the hands should be well washed. Plasters and salves should not be spread too thickly over the linen; otherwise the skin is unnecessarily soiled. a wound is dressed with salves, the wound itself and the neighboring parts must be well cleared of pus and old salve, before another dressing is applied. The best way to remove the salve is to wash the skin with oil; the wound itself is cleaned by syringing and rinsing it with water, chamomile-tea, or a disinfectant solution prescribed by the physician. Plasters, especially adhesive, that do not adhere of themselves, are held for some seconds to the warm stove: the often-practised method of breathing on them is improper, because it moistens the plaster. Salves must be protected from dust, as well as from decomposition through light: the vessel, therefore, should be well closed after each use.

Poultices, cataplasms. The principal kinds are: the warm emollient, and the cooling cataplasms. In the first, warmth and moisture are the main thing. The temperature of the blood suffices: they are tested with the cheek, nose, or the back of the hand. They have to be renewed when the patient feels a decrease of heat, generally after one-half to one hour. If they are to be kept warm and moist for a longer period, they should be covered with a piece of water-proof material (oil-cloth, etc.), somewhat larger than the poultice itself. Poultices soiled by pus, blood, etc., ought not to be re-used, but must be replaced by fresh ones. Emollient warm poultices are prepared from linseed-meal, wheat-bread, groats, starch-meal, mucous plants (marsh-mallow), etc., and are wrapped in a thin cloth.

For cooling cataplasms, water is principally used in cold compresses, which must be renewed every five to ten minutes. It is very good to let cold compresses freeze. For this end, place them on a wooden table, put on them a flat metal pan filled with ice and some coarse common salt: they will freeze in a few minutes. Far better than all compresses, is ice or snow put into a bladder which is lined with fat inside, or into an india-rubber pouch, and thus applied. The pouch or bladder is filled with pieces of ice about the size of a nut, and some water, but not entirely, because

otherwise it will not so well adapt itself to the limb. Instead of ice, freezing mixtures may be put into the pouch; for instance, sal-ammoniac five parts, nitre five parts, Glauber's salt eight parts, water sixteen parts. If ice or freezing mixtures are used, it is better to put a folded dry pocket-handkerchief between the pouch and the skin, in order to protect the latter from too much cold.

So-called stimulant cataplasms are made of aromatic herbs—chamomile, linden-blossoms, peppermint (so-called herb-sacs). If moist stimulant cataplasms are wanted, the same herbs may be used; or add to any one of the abovenamed cataplasms some spirits of ammonia (40-60 drops), alcohol, whiskey, wine; or compresses of warm wine or

brandy and water may be employed.

Rubefacients and detergents. Mustard is very generally employed. The best method of preparing this poultice is simply to mix 2-5 ounces of fresh mustard-seed (pulverized) with water to a paste, and spread it thickly on a piece of linen or gauze. Mustard poultices produce inflammation in from five, ten, to twenty minutes, according to the quality of the mustard and the sensibility of the skin. Instead of it, however, a paste of mashed horseradish may be used, or a piece of thick blotting-paper soaked with mustard-spirits, over which a compress is placed; or simply moistened mustard-paper. Wash the reddened part of the skin with cream or milk, and put a piece of soft lint over it.

Cantharides is the irritating substance most commonly employed for a detergent. The plaster is made of various sizes, from that of a fifty-cent piece to that of a plate, spread to about the thickness of the blade of a knife, and provided with a brim of adhesive plaster. It must lie close to the skin: for this end, a bandage may be placed over

it, but not too tightly. If it is intended to redden the skin only, the plaster is left on, two to four hours; to draw blisters, twelve to fifteen hours. If suppuration is not wanted, the cuticle is cut open at the lower end without removing it, and the wound is dressed with lead-salve, wax-salve, oil, or simply with lint or cotton. For suppuration, the cuticle is cut open at the upper end and removed, and the wound is dressed with irritating salve. As the latter may easily disturb the night's rest, it is better to dress the wound at night with wax-salve. In order to procure stronger suppuration (fontanel), peas, small balls of orris-root, small bitter oranges, etc., are fastened over the wounded place by adhesive plaster, or by a rather tight bandage.

The other detergents, tartar emetic ointment, croton-oil,* ought never to be employed without special medical advice. Cauterizations of every kind can be applied only under the direction of a medical man.

Baths. Foot-baths should be taken when the invalid can go to bed immediately afterward. The temperature should be of $92-105^{\circ}$. They may be medicated with a handful of common salt, or $1\frac{1}{3}-1\frac{2}{3}$ ounces mustard-meal. If not otherwise ordered, they should reach only to the ankles, or a little above them.

General baths in the house must, of course, be taken in tubs, which are best made of zine. For feeble patients, place a thin cushion, for instance of straw or hay, or a folded blanket or cloth, at the bottom of the tub. This is filled with water high enough to have the shoulders and

^{*}The same applies to the so-called "Lebenswecker" (Baunscheidtism, also exanthematical remedies), which is nothing else than the rubbing of diluted croton oil into the small wounds made by the needles of the instrument. It is never safe to take a measure of such important consequences without medical advice. Thave seen several cases of serious crysipelas result from its employment.

arms of the patient immersed in the water. The temperature * is determined by the physician. If during bathing the water become too cool, an addition of hot water may be added carefully at the brim of the tub. While the invalid is in the water, he should not remain inactive, but apply friction to the skin; if he cannot do it himself, the nurse must do it—of course, with eare. The duration of baths is at the physician's direction: generally it is ten to twenty minutes. If the invalid faints while in the water, or if cramps or hemorrhage sets in, he must be carefully taken out of the tub. If there is determination of blood to the head, as is often the case, accompanied by headache, vertigo, humming in the ear, cold water may be poured on the head, or it may be washed with cold water; but if the attacks do not cease, but increase, the patient must leave the tub.

After the bath the body should be folded up in a large, well-warmed blanket, and should be dried with this (best on the bed), and immediately well covered. It is good to give to the patient, soon after, a little warm drink or soup: there is then generally inclination to healthy sleep.

Baths are generally of pure water: ingredients of any kind are to be directed by the physician; for instance, baths of wheat-bran (the decoction of 1-3 lbs. wheat-bran in a pouch cooked in five quarts of water, added to the bath); malt-baths (4-6 lbs; for a child, 1-2 lbs. malt cooked in five to twenty quarts of water for half-an-hour and strained: one to two quarts of beer-spice may do as a substitute), etc.

^{*} The following arrangement of baths according to temperature is likely to be useful: the cold bath 60-70°, the temperate 75-85°, the tepid 85-92°, the warm 92-98°, the hot 98-112°. The temperature should be tested with the thermometer; otherwise, not by the hand, but with a part of the body which is generally covered with clothes and more susceptible, for instance the elbow. Neglect of this precaution (for instance, on the part of midwives) has at times resulted fatally. New-born children have thereby been scalded to death.

Clysters (enemata) are generally applied by competent persons (midwives, etc.). It is consequently unnecessary to speak here of the mode of application. The materials are prescribed generally by the physician. For cases of necessity, it will do to know that in purgative clysters the dose for adults is twelve to twenty tablespoonfuls; for a child, according to its age, two to ten tablespoonfuls. In astringent and antispasmodic clysters, the quantity should be about one-half, in nutritive one-third, of purgative ones. The temperature, if not expressly ordered otherwise, 92–95°.

Purgative clysters are made of water mixed with additions of one to two tablespoonfuls of some fat oil (castoroil), one tablespoonful of sugar or honey, one to two teas spoonfuls of common salt, about three drachins white soap, one tablespoonful wine-vinegar. One of the most efficacious clysters, for instance in habitual constipation, hemorrhoids, is that of pure cold water.

Astringent clysters: decoctions of oatmeal gruel, linseed, marsh-mallow root, gruel of starch-meal. Ingredients, for instance, 5-10 drops opium-tincture, are prescribed by the physician.

Antispasmodic sedative clysters are generally made in the drug-store, and need only to be warmed up. Of great service, and of easy preparation, are decoctions of chamomile blossoms, valerian-root, and four drachms poppy-heads.

Nutritious clysters: good beef-tea mixed with the yolk of eggs.

Anthelmintic clysters, very serviceable for small intestinal worms, are generally medicated. Medical aid is not often sought for in such cases; but as the itching, and even the crawling of the worms into the genitals of female children, may be the cause of the practice of masturbation, it may be mentioned here that a decoction of six to eight cut garlie-onions in six to twelve tablespoonfuls of milk is, in the form of a clyster, a very efficacious means of removing these intestinal worms.

Bloodletting. Recourse to withdrawal of blood ought never to be had without the authority of the medical attendant. Besides, the application of cupping-glasses and venesection require some skill, and should be done only by competent persons. Leeches are applied often only by the attendants of the patient.

Leeches should be bought only in drug-stores, because otherwise there is no certainty of obtaining proper and healthy animals. Only the German or the Hungarian leeches should be used. Both have six longitudinal ferruginous stripes on the back: the back varies from blackish to grevish-green. The under-parts in the former variety are yellowish-green with black spots and edgings; in the latter, brownish-orange without spots, but with two black lateral stripes. The horse-leech has no stripes on the back, and must not be used. The leech is sick, if the mouth-piece (sharp end) is soft, if the animal is covered with dirty slime, or if such slime is seen swimming in its neighborhood in the water; finally, if it is not active in tepid, or even in fresh, water, but is lying lazily coiled up. Sick leeches ought not be used; generally, they do not bite.

Parts to which leeches should not be applied are: 1. Diseased parts of the skin: the leeches are affixed near such places, but not on them. 2. Parts where large blood-vessels lie directly under the skin. 3. Parts where the epidermis is too thick—palm of the hand, heel. 4. Parts where the healing of the bite might be disturbed by flowing pus or putrid matter.

The parts to which leeches are to be applied must be first shaved, if necessary, and well washed with a little soap and warm water, and lastly well dried.

Immediately before the leeches are used, they should be put for a few minutes into tepid water, infusing a few drops of white wine, if they are very lazy. Then they are taken and applied with the freshly-washed hand, or with a soft towel; or a better method is to place them in the lid of a pill-box, or under a small glass, which is applied to the affected parts. In order to affix a leech to a very small and particular spot, for instance the gum or palate, etc., the best way is to use a narrow tube, called a leech-glass. The leeches must not be let loose until they have bitten, which can be inferred from the wave-like movements of the neck, and from the circumstance that the head forms a right angle with the body. To prevent the danger of their crawling into a cavity (gullet, nose, anus), a thread may be drawn with a needle through the tail-end, from above, downward (not from side to side, because their blood-vessels are easily hurt thereby), and they may be held by this thread.

If the animals do not bite, scratch the skin with the point of a needle, and apply the leech to the spot moistened with blood. Or they may be made to bite, by moistening the surface to which they are to be applied with sugar and water, or milk.

Leeches should never be forcibly detached, as this may cause malignant inflammations and violent bleedings. They should be permitted to drop off spontaneously. If they must be detached, as for instance when, during their application, cramps or fainting supervenes, salt, pepper, or snuff should be scattered over them, after which they drop off immediately.

The bleeding may be kept up for the time prescribed, by fomenting the part with warm dry cloths, or by a warm poultice, or by sponges soaked with warm water. Cupping-glasses should never be applied to the bitten spots for this purpose.

The patient must not be left alone until the bleeding has been completely stopped. Children must be watched, even during the following night, on account of the danger of their bleeding to death. The bleeding may be generally checked by the application of a piece of punk or scraped charpie; * also by cobwebs, glue, pitch, alum, gunpowder, hydrated sesquioxide of iron (pressing a cork moistened with it, or a piece of lint soaked in it, and squeezed, afterward, on the wound). Pressure of the skin into folds will often arrest the bleeding. In more obstinate cases, especially of children, the aid of a physician should be sought, who will check the bleeding by cauterizing with hot iron, nitrate of silver, or by employing serrefines, or by a ligature, etc.

After the bleeding is checked, a soft dry compress is placed on the leech-bites; if inflammation sets in, compresses of lead-water are used.

In the case of a leech having been swallowed, the patient should drink a great deal of salt-water. If a leech has crawled into a cavity (nose, anus), injections of strong salt-water should be used. Leeches which have been used in contagious diseases (typhus, cholera, small-pox, syphilis, etc.), ought not to be preserved.

^{*}Scraped charpie is obtained by scraping with a sharp knife over a tightly spanned strip of linen.

VIII.—MISCELLANEOUS.

Temperature of the body. The appreciation of the temperature of the body has attained such an importance for diagnosis and prognosis, and even for therapeuties, that it can scarcely be dispensed with in acute diseases of a serious character; nor is its importance much less in chronic diseases. Where the physician lives at a great distance, he will sometimes commission a member of the family to measure the temperature. Besides, it may be sometimes useful for unprofessional persons, in the event of sudden attacks of illness, to have a criterion of the more or less serious character of the disease afforded by the measurement of the bodily temperature. It is to be hoped that in the course of time every educated family will be in possession of a thermometer adapted for this end. Until then, the physician must leave behind such a thermometer in all cases wherein he wishes to have the temperature measured during his absence. The heat is generally tested in the armpit; in the case of little children, in the rectum. In the former, all sweat is first wiped off, the bulb of the thermometer is warmed for some seconds in the hand, and then placed deeply into the axilla. In order to close the armpit more surely and tightly, the arm should be well pressed to the side, but somewhat to the front. The bulb should be everywhere close to the skin: articles of clothing, therefore, must be prevented from interposing. If the patient is fidgety, feeble, or unconscious, the arm should be held securely in its proper position, lest the test fail. The thermometer is allowed to remain in its position for ten to fifteen minutes; then the degrees are read, if necessary, by help of a light, and are noted down immediately, stating the day, hour, and time, used for testing. In testing the temperature in the rectum, the bulb is introduced into the rectum one to one and one-half inches, and is allowed to remain for five to six minutes; for here the instrument is better enclosed, and the maximum heat is consequently sooner ascertained. Care must be taken to hold both instrument and child earefully, lest the former be pressed out or broken by a violent movement of the patient, and the latter be injured.

The thermometers used for measuring the temperature of the body are generally centigrade; the single degrees are subdivided in fifths or tenths, which are also noted down. (5° C. are like 4° R.; $C = \frac{4}{5}$ (F-32), or $F = \frac{3}{5}$ C+32.)

Subcutaneous or hypodermic injections. These are sometimes left to be done by the attendants. In such cases the prescription of the physician must not be transgressed with regard to number and quantity. The syringe is provided by the physician.

The tube is filled by drawing the piston up. Then the syringe is held up, and the piston pressed forward, until some of the liquid is expelled. This is done to prevent injection of air. The quantity is either measured by a screw, or else so much of the fluid is expelled beforehand that only the prescribed quantity is left. Raise then, with the left hand, a fold of the skin, at the place pointed out by the physician, and pierce the needle of the syringe through the skin at the bottom of this fold parallel to the surface of the body, and parallel to the longitudinal direction of the fold. That the skin is pierced, may be inferred from the sensation of less resistance offered by the loose cellular tissue of the dermis. Now the fold is let loose, the piston is pressed slowly forward, and the contents of

the syringe are thus injected under the skin. Then a finger is placed on the opening, and the needle drawn back slowly. The sac formed by the injection may be distributed by gentle rubbing. Clean the syringe with pure water, blow the water out of the tube of the needle, and, in order to prevent rusting, put a fine silver-wire or a bristle through the tube.

Preserving excrements. If the physician orders the preserving of excrements, they should be received in pure vessels, and kept free from all foreign matter. Bed-pans are very useful for feeble patients, in order to preserve cleanliness. Expectorations should be preserved in a glass, a third of which is filled with pure water.

IX.—NURSING DURING THE LAST MOMENTS.

The duties of nursing last until the moment of death. and even beyond it. Here a few words of caution may not be out of place. First, the attendance to the bodily welfare of the dving should not be neglected. It is inhuman to render the last moments of dying persons, at least of those who retain consciousness, still more hard by giving way entirely to sorrow, and by neglecting to clean them, from motives of mistaken delicacy, or to administer the prescribed medicines. The dying are often much more molested by the noise, screaming, and weeping of those who surround them, than by the small trouble occasioned by medicines, drinks, etc. The administration of medicines might perhaps be dispensed with, unless prescribed to counteract the approaching paralysis; but it is of the utmost importance to alleviate that tormenting dryness of the mouth and palate caused by the difficult breathing from the open mouth, by giving spoonfuls of water, or water with a little wine, or even only by moistening the lips and the tongue. Admit as much fresh air as possible into the room, remove all unnecessary persons. that is, strangers. Nobody should be allowed to throw him. self over the dying. But, whilst urging the utmost control in the expressions of sorrow, we by no means advocate want of feeling. That foolish excitement and loud screaming, which, after all, is indeed not very Christian-like, is all we deprecate. Words of consolation, short prayers, are calculated to alleviate the last trying moments; whilst loud wailing, running hither and thither, and still more, crying into the ears of the dying, are calculated only to disturb and harass them. An abominable custom is practised in some districts, namely, that of drawing the pillow from under the head of the dying person, in order to shorten the mortal struggle. This is done, of course, out of compassion, but it is a very false one; and I suspect that there is in such inhumanity, really, although unconsciously, more of sympathy for the survivors, than of compassion for the dying person himself.

After death, the corpse should remain covered in bed for twenty-four hours, and should not be undressed and washed before. But where it is absolutely necessary that the dressing and washing should be done before that time, it should not be done before the corpse has become cold; and even then it should remain in the bed. There is no objection to closing the eyes; but it is a great abuse to bind up the mouth tightly, as is often done immediately after death. It should rather be always remembered that there is a possibility of death being only apparent, and then the bandaging of the mouth would prevent the return of breathing.

If possible, the corpse should not be left during the first twenty-four hours without being watched. Wakes in the proper sense are not necessary in general, and they lead to many abuses; yet the corpse should be watched, or at least looked at from time to time, until certain signs of death are established.

A. M. D. G.

THE END.







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