TRUTH ABOUT VENEREAL DISEASE

THE CONTROL OF PARENTHOOD

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Crown Svo. Cloth. 7s. 6d. net (Postage 6d.)

G. P. PUTNAM'S SONS, LTD., 24, Bedford Street, Strand, London, W.C. 2.

TRUTH ABOUT VENEREAL DISEASE

BY

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LONDON G. P. PUTNAM'S SONS, LTD. 24, BEDFORD STREET, STRAND, W.C.2

First published	••••	•••	January,	1921.
Second Impression	•••		February,	1921.

John Bale, Sons and Danielsson, Ltd., 83-91, Great Titchfield Street, London, W. 1.

HE subject of this book, the activities of the germs of the "sex diseases," is a theme of most urgent national importance. It should concern the whole world. It was thought that my pen might be of use in awakening the community to the truths already known to experts, but still out of reach of most people. This little book has been written at the request or with the approval of :--

Professor W. M. Bayliss, M.A., D.Sc. (Oxon.), F.R.S.; Sir James Crichton-Browne, M.R.C.S. (Edin.), M.D. (Edin.), F.R.S.E., LL.D., D.Sc., J.P.; Dr. Jane Hawthorne; Sir W. Arbuthnot Lane, M.B., M.S. (Lond.), F.R.C.S. (Eng.), and Sir John MacAlister, F.S.A., F.R.G.S., and the helpful interest they have shown has been invaluable.

I have also benefited by hearing the evidence which Sir H. Bryan Donkin, M.D., F.R.C.P., and the late Sir William Osler, F.R.S., F.R.C.P., brought before the Second Birth Rate Commission, when, in answer to many questions, they gave direct practical information.

I am particularly indebted to J. H. Sequeira, M.D., F.R.C.P., F.R.C.S., for first-hand information on various themes, on which he is a leading authority. I am also indebted both to Mrs. A. C. Gotto, O.B.E., and H. Wansey Bayly, M.A., M.R.C.S., for much information. Both the National Council for Combating Venereal Diseases and the Society for the Prevention of Venereal Diseases, of which they are the respective Secretaries, have done much valuable work in educating the public by meetings and through their numerous pamphlets and other publications.

Preface

The basis of the present work is knowledge which is the common property of the scientific world, embalmed in various, largely continental, scientific transactions, obtainable in London by all who take the trouble to verify original sources. In addition to these ascertainable *facts*, the book contains certain logical conclusions and deductions which a biologist is justified in drawing from them. The theme of this book is the inter-relation of the biological life-history of the germs and the biological and psychological characteristics of human beings.

These diseases generate the worst menace to happy and healthy marriage. This fact convinced me that all my work on behalf of the true understanding of pure love is jeopardized by the horror wrought by these invisible enemies, the germs of the sex diseases.

This realization made me willing to attempt to write about the subject. At first, like every normal and healthy person, I shrank even from acquainting myself with the utterly detestable facts, but, once I was acquainted with them, no course seemed possible but that resulting in this book.

I dare not do less than all I am able to do in defence of the holy citadel of marriage when myriads of deadly and invisible invaders are penetrating her bulwarks and threatening the race with calamity.

It is the hope of those who asked me to write this book, and it is my hope, that it may reach in time people who would otherwise risk infection, and arm them with sufficient realization of what they are doing to deter them, or if that is impossible at least to prevent them from adding to the number of those who

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are so ignorantly spreading the most terrible of contagions.

Since my little book was in type, Sir Archdall Reid's notable volume, "Prevention of Venereal Disease," has appeared, and should be read by everyone in the country, for it is a history of his very valiant pioneer fight with reactionary opinion.

M. C. S.

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"I am thankful to the gods that I preserved the flower of my youth, and that I did not make proof of my virility before the proper season, but even deferred the time."—THE EMPRAOR MARCUS AURLIUS.

Then, when it is too late, a man or a woman, perhaps even a boy or a girl, realizes the agonizing difference in power and happiness which they enjoyed when possessing a strong, untainted body instead of one which is weakened by accident or disease.

Diseases of many kinds which seemed, even a century ago, entirely mysterious, have become explicable to us since we have been able to look through the microscope at the innumerable varieties of minute creatures (which we call in a general way "germs") which invade our bodies for their own purposes. These "germs" generate colonies of their own kind within us, and directly, or by altering our blood or tissues by the poisons they give out, they originate their own particular variety of disturbance of our complex and delicately balanced human organism. To-day, even children know that " germs " are invisible to the unaided eve, that they may fly about in the air. float in milk or water, be wafted by the breath of a friend, carried on linen, or cling invisible to the surface of the paper of a letter written by someone suffering from fever. Hence, cleanliness is one of the greatest aids to health, for in dirt of all kinds germs are propagated.

There are "germs" of hundreds of breeds, "germs" which simply go from one person to another until chance gives them the opportunity of growing and multiplying so rapidly as to make the person who has become their host ¹ what we call "ill." There are also "germs" which do not travel directly from one person to another, but migrate indirectly through a series of different stages, living sometimes in human beings and sometimes in other animals or insects carried from one to the other according to their own requirements.

"Germs" are very various in their nature. Scientists classify them into bacteria, bacilli, protozoa, flagellates, fungi and other types of organisms. To the layman, however, they are all alike in being invisible, microscopically minute, and inhabiting larger living creatures to their harm.

All infectious diseases, all contagious diseases, all epidemics, even the common "cold," arise in human beings through invasions of some variety of these invisible germs. Each "germ" is a speck of life, generally with an intensely active reproductive capacity, so that if the one speck arrives under suitable conditions of warmth, moisture and nourishment, without enemies to destroy it, it may, in a few hours, have descendants reckoned in hundreds of thousands. In a few weeks the descendants of a successful "germ" may be reckoned in millions of millions.

Recent medicine, spart from surgery, is very largely the study of various germs and their habits, and the

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¹"The host" is the individual whose body is invaded by the "germs" and whose cells are the prey of the "germs."

discovery of means of checking their enormous powers of reproduction. Medicine also practises the behaviour indicated by these discoveries, and keeps apart the unfortunate human being who has become the host of these invaders, so that the one stricken individual shall not contaminate others with the infesting microbes which are damaging him.

It is, however, also well known that, although there are these dangerous germs, whose presence in our system is to be avoided or combated, yet there are others which inhabit the traffic ways of our bloodvessels and the seclusion of our tissues either harmlessly or beneficially. There are also in our human organisms special wandering cells of our own, and, in addition to them, actively poured out secretions, which are specifically calculated to deal with invading germs, demolish them or render them harmless. It is well known that a thoroughly healthy, clean person, leading an open-air life, may be invaded by germs of some sorts, more than enough to kill a susceptible or unhealthy person, and yet this healthy individual may appear to suffer no ill effects. The germs are powerless in his neighbourhood ; he may appear fever proof. but he may succumb to more deadly varieties of germs.

Although in many ways a mental atmosphere of health and an all-conquering sense of superiority to such petty and invisible invaders may very often be an effective shield against them, through the stimulus such an attitude gives to the whole vitality of the body, yet such a mental atmosphere is by no means always to be relied upon to counteract the material existence of actively harmful germs. The result depends on the number and virulence of the invaders

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in proportion to the protective germ destroyers within Hence, it is not only the duty, but also the the host. natural inclination of everyone who realizes the existence and frequency of germs in our crowded civilization, to use as need may arise some simple methods of protection from the germs as are to be found in disinfectants. That innumerable people do realize this and do use disinfectants against all sorts of germs and on many different occasions is to be learned from almost any daily paper or weekly magazine, where not only the well-known but many new disinfectants are freely advertised at such great expense and for such long and continuous periods, that one can be sure there is a correspondingly voluminous sale to justify the outlay.

The careful use of disinfectants makes a barrier before the onrush of epidemics. So important is it to check such epidemics as influenza, typhoid, diphtheria and others, that advice has been given from time to time by public departments on the use of gargles, mouth washes and other disinfectants. Those who travel in crowded conveyances where there is a serious risk that one or more members of the public may be "carriers" of such contagious germs as may infect his neighbour have been urged to gargle and rinse the mouth and nostrils. It is increasingly the habit to take fever cases (particularly of the more contagious fevers) to special hospitals. Where this is impossible, almost everyone to-day knows the value of hanging sheets soaked in weak potassium permanganate solution, Condy's fluid, or some other disinfectant between the door of the sick room and other parts of the house, and of fumigating the rooms and corridors.

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Indeed in these days when so much is written about germ-borne diseases, it is unnecessary to elaborate proof of the value of disinfection. Although it is not absolutely to be relied upon (for some of the invisible germs may slip through an incomplete barrier), nevertheless it is well known that the more careful and thorough disinfection is the less likelihood is there of the germs reaching healthy members of the community in sufficient numbers to be dangerous.

As germs are very active in reproduction it is essential not only to disinfect thoroughly, but to disinfect often, in case some germs have escaped and started their life-chain once more.

Yet, although this knowledge is almost universal, there is one group of diseases, the deadliest and most horrible in existence, against which ordinary simple precautions of disinfection are seldom taken by individuals, and against which ordinary simple precautions of cleanliness have only recently been openly advocated and against which proper disinfection has not yet been openly advocated in such a way as to instruct everyone about it. The Deadliest Germs. O say in the same sentence that there exist among us in large numbers germs of the deadliest and most horrible

nature, and at the same time to say that the ordinary individual members of the community are not instructed and warned to shun them and to use disinfectants against them as they would against small-pox, the plague, influenza or even a common cold seems ludicrously improbable: yet circumstances have so contrived that it has hitherto been a fact.

Will Irwin, writing for the American Social Hygiene Association, tells the following story :---

"Two young men, escorting two very nice young girls, once went boating on a Western river. Suddenly they heard muffled shouts from the rapids below them. They looked and saw that a man, swimming, had been caught in the swift current, and was going under. The young men rowed toward him. And then, one of the girls began to scream.

"Heavens!" she cried, "we can't take him aboard. He isn't dressed. He's-he's naked!" The other girl joined in the protest. Their escorts ignoring all this, continued to row. The girls went hysterical. They clutched at the arms of the rowers. Before that struggle finished, it was too late. The swimmer had gone under for the last time. All this happened, exactly as I tell it, in the Far West when I was a boy."

He follows this up by asking why it is that diseases of such a terrible nature still ravage civilization :--

"Why? Because as a general rule the moral, decent, and devoted part of our communities, the very people whom we most need in this endeavour, take the attitude of the silly little girls in the boat. It is a shameful thing; therefore it is not to be discussed. The average newspaper which, until a few years ago, printed for moncy the obscene advertisements of quacks, shrank from admitting to its columns the words 'syphilis' and 'gonorthœa,' or even the idea of venereal diseases. And this was not so much the fault of the editors as of subscribers, who would stop a newspaper containing 'such thoughts.'"

Nevertheless the public is not really to blame for this prudery, for it has not been told the truth; hence it could not realize the misery in its midst caused by these germs. Indeed medical science has only discovered in the last few years many of the worst and later effects of the germs, and every few months fresh evidence of their devastation comes to light. Let us mention a few of the results of allowing these germs to follow their activities unchecked.

The syphilis germs give rise either directly or indirectly to many of the most terrible diseases which scourge humanity, and syphilis aggravates and sometimes renders fatal many other serious diseases, and especially forms of heart and brain disease.

The public generally does not know that many other awful diseases are really the later effects of the sex diseases, and "nice" men and women will speak quite freely about a relative having general paralysis, or locomotor ataxia, and not know it is a later stage of sex-infection. A sex-infection perhaps long ago supposed by the victim to be "cured," and of which they did not know, or knowing would die rather than mention!

The first local sores of the sex infections are comparatively trivial. The germs lurk about and work more serious mischief later. Perhaps after twenty or thirty years the worst effects of the disease begin.

For instance, Spirochata pallida (see p. 21), concealing itself in the body years after the open sores it first caused are cured, causes paralytic strokes, locomotor ataxia (a painful disease which hinders walking) and softening of the brain. This germ is the cause of a large proportion of all the lunatics in lunatic asylums: all cases of general paralysis of the insane are due to syphilis; it causes ugly diseases of the skin, loss of the hair, baldness and rotting of the bones. The father or mother hand on the germs: thus the spirochæte causes physical and mental defect in children and gives rise to many other weaknesses resulting in early death. Even worse, it creates congenitāl: idiots, deaf and stupid children and wasting, miserable babies. The other sex disease, gonorrhœa, has many similar results although it arises from a different type of germ

"Twenty four per cent. of the cases of blindness in children are also due to gonorrhæa of parental origin, while Strper cent are due to inherited syphilis, making a total of 55 per cent resultingfrom the combined venereal diseases."—"The Dangers of the Venereal Diseases," by CHARLES J. MACALISTER, M.D.

The sex-disease germs give rise to many varieties of brain disease, many varieties of heart disease, many varieties of kidney disease. It is estimated that in the United States of America 300,000 people die every year from diseases which, under various names, are really traceable to the destruction started by syphilis germs, the all-pervading S. pallida.

Professor E. Pontoppidan, the Danish expert, considers that cancer of the tongue is frequently to be traced to the after effects of syphilis. This most cruel disease from which men die is, in his opinion a direct result of early, perhaps even almost forgotten sins, because it may develop many years after they have been told by their doctors they may consider themselves thoroughly cured of syphilis. The truth is you may never be sure you are thoroughly cured of syphilis, though you may be rendered non-infectious.

Another of the diseases, or what may perhaps be reckoned as a disease, is the incomprehensible suicide which puts an end to the lives of people superficially sound and happy. The inner invisible spirochætes may give rise to such a deterioration of the brain and will power that intense depression, even in outwardly prosperous circumstances, lures the victim to suicide as the only escape.

Then, too, in addition to causing weakly and diseased babies, these germs destroy babies before birth, and, many a mother suffers through them the repeated agony of abortions and still-births. Do the public know (to quote the words of Dr. George M. Kober) that syphilis is responsible for 42 per cent. of the abortions ("still-births") and that upwards of 60 per cent. of the offspring of syphilitics die before or shortly after birth?

While they have many effects similar in their result, as, for instance, in causing blindness, the difference between syphilis and gonorrhœa, the two so-called venereal diseases, is very marked in their effect on child-birth. Syphilis does not, unfortunately, make men and women sterile : it does an even more terrible thing. A mother infected by syphilis is fully, perhaps more than the average, fertile, that is to say she conceives a larger number of children than a healthier woman, but very, very seldom are those children healthy. Dr. Mott, before the Royal Commission, quoted details of thirty-four mothers infected by syphilis. These had altogetner 175 pregnancies, 104 premature births and still-births, 41 children seriously diseased and only 30 children apparently healthy, i.e., they appeared to be healthy, but there was no guarantee that as they grew older the terrible effects of syphilis would not appear in them. Visualize the compounded waste and misery to win only thirty doubtfully healthy births from one hundred and seventyfive times nine months of burden and agony! A hundred and thirty-one years of women's lives clouded and burdened, while streaked with a flickering hope that all may be well—but in the end only thirty children with a doubtfully healthy destiny as a harvest; for the rest, only torture in fact and memory for ever afterwards by the repulsive or tragic beings they produced.

Gonorrhœa, on the other hand, acts differently and often prevents conception. It mercifully sterilizes women after the first child, so they are spared the horror of bringing to birth foully abnormal children but at what a cost to themselves! Gonorrhœa may make a life-long ailing miserable invalid of a healthy young woman. If neglected, causing agonies of pain, and years after the contagion necessitating operations (see also p. 13).

The disease in men is less serious, and this perhaps is the explanation of its having heen treated more lightly than syphilis. Everyone, even every lad and girl, should know, however, that this disease may, if neglected, make it impossible for the girl ever to have the children which she would otherwise have had. It is important, therefore, that everyone should know that 50 per cent., that is one-half, of all the onechild sterility in this country is due to the fact that after she has had her first child the woman is infected by the gonococcus in such a way that she can have no more children. She will become a "barren woman." It may also make the lad sterile, so that when, later on, he marries and wants to found a family, he may find himself incapable of being a father. He may become a "barren man." Hitherto all the cruel scorn of all the ages has been poured on the barren woman—it is time for the barren man to be recognized and to get his share of our racial disapproval.

In these days much is said about the terrible crime of "Race Suicide," which is disturbing so many of our publicists and politicians. Many silly and superficial people also write to the papers about the "wickedness and selfishness" of women who are the mothers of only sons (and who has not seen these letters repeated again and again in almost every news sheet?) as though every woman was the mother of an only son from choice. One such mother I know had, as a result of syphilis, six fearful miscarriages and only one living child; for years her life was one long agony.

What audacity then for men to blame wives who have only one child, what heartless ignorance for other women who have been spared this horror to sneer at and condemn those who may be the innocent victims of a husband's cruel wrong-doing ! And, on the other hand, what incredible racial neglect that girls should be allowed to injure themselves through immoral acts (ignorant of what the evil result will be), which may sweep out of the realm of possible existence the little children they may later long for.

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Gonorrhœa, the disease which makes women sterile in this way, is very much more difficult to get rid of than syphilis. A syphilitic person may be made noninfectious,¹ but for years and years one who has had gonorrhœa may still have some germs lurking, though dormant, ready at the slightest provocation to become either virulently active in that person or to convey the disease to another.

Gonorrhœa leads to many other diseases whose connection with it is not properly known, such as a special and very acute form of rheumatism, for instance. In fact, it is estimated that 20 per cent. of all the "diseases of women" are directly traceable to gonorrhœal infection.

The most innocent of all victims of the assaulting germs, either of syphilis or gonorrhœa, is the little child born to diseased parents or born to a mother who has been infected by her husband, and who, from the hour of its birth, is permeated by the germs.

With syphilis, sometimes, if active medical treatment is undertaken during the ante-natal period, *apparently* healthy children may be born; but, even so, the germs may be there latent, and may develop in a few months or lie dormant ready to destroy with maniacal horror the budding womanhood or fresh young manhood of the innocent victim.

With gonorrhœa the greatest danger is to the infant's sight. Gonorrhœa often prevents even conception, so that few children are born infected with gonorrhœa. Generally it is only the first baby-

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¹See "Venereal Disease, its Prevention, Symptoms, and Treatment," by Hugh Wansey Bayly.

the baby who is conceived by a healthy mother and protected while within the mother by the membranes round it, who, in the hour of birth, has its eyes infected if, after its conception, the mother has been contaminated. Then the child becomes blind within a day or two unless medically treated in the moments of birth.

Think, then, all you who risk the infection, of the cruelty in giving birth to a little son or daughter who will be a life-long inhabitant of a blind asylum. No one could do it who understood. That millions have wantonly and ignorantly done this cruelty is proved by the fact that the greater part of all the inmates or blind asylums of the world are those whose parents infected them. In Switzerland they say that 79 per cent. of all those groping in blind asylums are there through the effects of sex diseases.

There are many subtler ways, only recently detected. in which the spirochæte germ brings ill-health and disease. For instance, it affects the cerebrospinal fluid, and it also narrows the blood-vessels in the brain so as to interfere with the nutrition of the brain cells and "take the edge off" the intellect; that is to say, the dullness and stupidity of many older men and women, their inflexibility, their incapacity to see new ideas (although this is not generally recognized as the cause), may very often be due to slight, long since "cured," infections of syphilis. (See Lecture by Brevet Colonel L. W. Harrison, M.B., D.S.O., on "Medical Practitioners and the Management of Venereal Disease in the Civil Community," published by the National Council for Combating Venereal Diseases.)

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Indeed, I am not sure that one may not safely say that the greater part of the devastating stupidity and the irritating way in which the old act as a break to all progress may be in no true sense the result of *age*, but may be the fruits of that "sowing his wild oats" which the last generation thought respectable. Pure and Happy Marriage is the Only True Safeguard of the Race. HOSE whose voices have been raised in outcry against all attempts to disinfect or to spread the knowledge of the necessity for disinfection against the

deadliest of racial germs generally have been those who maintained with absolute rectitude and veracity that such germs ought not to exist and would not have been propagated had sin not existed, and had humanity not profaned the sacred act of married union. Illicit unions are not only condemned by our religion, but are paid for by those who foolishly partake of them by the deprivation of the exquisite exhilaration of clean, pure, and vivid love in marriage. A price which they are too often unaware they are paying.

The reason why right is done in this world is seldom because of the risk of suffering or the fear of hell. but because it is natural for human beings to love that which is right. By a nature that has not been corrupted by false conditions and false instructions. the sweet, the pure, the beautiful, the healthy are chosen in preference to all else. But a nature left uninstructed in false conditions can scarcely escape the perversion of its impulses. Evil is perverted good ; even the foulest evils of the sex relations spring from the thwarting and misdirecting of the good and beautiful promptings toward natural love. It is good that young men and women should unite in love; but where the deep and holy bonds of profound love do not bind them, it is evil that they should unite in lust and uncleanness. Yet the source of the wrong is less

in them than in those who have taught them that all sex life is debased, and who thus left the young to infer that as it is all wrong—a thing to cover over and be ashamed of, degrees of wrongness within it are a trifle. Hence millions have logically inferred that laxity of conduct, whether in or out of marriage, is not of supreme consequence. Logic, based on false premises, leads one far astray.

Of all truths which humanity should realize at the present time, the greatest and most profound are the truths of the sex life. In another place I have pictured the beauty, happiness and possibilities of perfect mating in marriage's of that here I will emphasize only one point: the real reason why complete chastity before marriage and entire faithfulness to the one beloved after marriage is set before youth as the standard of life, is not because it is an acrobatic feat of the will nor because it is an artificial and "virtuous" attainment, but because it is the one and only way to attain perfect health and bodily development coupled with the intensest and most vivid mental and spiritual delight and joy.

O, young men and maidens to whom I am speaking, don't do as so many of you are now doing, and, scorning advice, throw the flower of your youth to the winds You will never know the health, the joy, the happiness you have missed. Because you have been given false or silly reasons for right action and your keen young brains resent the silliness of the arguments, do not, in your confusion, rush off to embark on wrong actions.

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¹See "Married Love," published by Messrs. G. P. Putnam's Sons, Ltd.

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Seek rather, the right reasons for right conduct. Listen each to your own hearts: there you will find in its deepest longing the desire for sweet and pure living and loving. If you have been so perverted that you cannot believe in the joy and development you will attain in rectitude, then for pity's sake safeguard at least those others who would be at your mercy were you to become a carrier of the deadliest of all germs. The Characteristics of the Deadliest of all Germs. HOSE deadliest of all deadly germs, those diseases with the most appalling after-consequences are spread from one to the other during the time of physical contact either in

the other during the time of physical contact enter in the illicit union between a man and a woman, or between a man and wife, one of whom has before or after marriage been unfaithful to the mate.

If every man from boyhood upward guarded himself to be absolutely pure for his future wife; if every girl till womanhood maintained a virgin purity for her future husband, and if, after marriage, each of the pair felt the profound truth that they are one, and that for any other person to touch them in an intimate way is a foul pollution of the sacredness of their love, then the germs of sex disease would have very little chance of spreading from one member of our society to another.

The deadly and most horrible sex germs differ thus remarkably from most germs in that :---

They do not blow about in the air like fever and cold and other germs.

They do not cling to or travel on dry paper, such as a letter, as may fever and other germs.

They do not have a "resting stage" when they are dried up and may lie for months ready to spring into activity again like many germs and harmful fungi.

They are not carried by flying insects such as the house-fly or mosquito, like malaria.

They are not carried by fleas or rats like the plague, nor by lice like typhus.

They are only carried in the moisture from some human infected person, generally by one human being who comes in contact with another, either by actual sex union, by kissing or touching ; but even then, when the touch is not on the sex parts, the eyes or the lips, there must be a little cut or scratch on the healthy person or the infection does not penetrate.

The only way without personal touch for the germs to be carried from one to another is in some human moisture which is left about and is still moist when the other touches it. This happens most dangerously in lavatories where people use a seat hastily without noticing that a drop may lie on it, or a washhand basin or towel or bath where germs may be left and kept damp. Sometimes a cup or spoon, and particularly a fork, may be used by another without thorough washing after someone diseased—perhaps a baby—has used it. But, most fortunately, once these sex disease germs have been thoroughly dried, their danger is almost destroyed.

The fact that the germs of these sex diseases depend only (as far as is known) on human carriers makes the object of utterly exterminating them possible.

Innocent children may carry disease on them contracted from parents; an innocent wife or husband may catch the infection from the spouse who has erred, but except for these direct contagion centres the diseases are rarely caught accidentally.

The one and only source of infection a very careful person cannot guard against is that quite disgusting person who has a habit of slightly spitting and spluttering while talking—if such a person has a disease sore in the mouth, he may shoot germs out on to his vis*distribution* and the source of saliva. Of course, in general, every sensible person keeps at least a yard from any one unknown or objectionable, but some will shove their faces into another's face. As it would hardly do always to slap them, the careful person should step aside or take out a handkerchief, and not use it again till it has been washed.

I want now to tell everyone exactly what the sex germs are like. There are two quite different sex diseases which are generally spoken of together, not because they are at all alike, not because they have the same effects, but because they both are spread by sex contact. The germs of both may be killed by disinfectants before they penetrate the tissues. As their results are so different, as the germs which are their source are so different, I must speak of them separately.

One of them is now beginning to be fairly well known under the name of "syphilis." In the year 1905, the actual germ itself was seen under the microscope for the first time and described by Schaudinn and Hoffmann.¹ The germ is a minute active creature whose body, even when seen magnified hundreds of times, looks like a thin hair of colourless, soft protoplasm, coiled ten or twenty times like a corkscrew, with a long point at each end. It moves like a tiny eel coiling on itself in a slow and complex way, How it exerts its marvellous penetrating powers we still do not know, for no magnification of the microscope is strong enongh to reveal specialized parts in it, or exudations from it which may dissolve or affect the tissues of the host, i.e., the person it has invaded.

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¹ Schaudinn, Fritz, and Hoffmann, Erich: "Vorläufiger Bericht über das Vorkommen von Spirochæten in syphilitschen Krankheits produkten und bei Papillomen," Arbeit, Kaiserl. Gesundheitsamte, vol. 22, pp. 527-534, 2 text figs., 1905.

What we do know, however, is that this germ generates decendants which live in the body of the infected person in large numbers, and these come out with the secretions and mucus, which are exuded by the active sex organs and on the sores, and when a small drop of any such fluid touches the sex organs of another person who is clean, that drop will convey one or more, even many hundreds, of these tiny, colourless spirochætes.

Let us scrutinize one of the germs. Its name is Spirochæta pallida.¹ Even one may be sufficient to make a healthy person into a hopeless invalid, a paralytic maniac, if that one germ follows its natural course. Let us imagine then that it has touched the organs of sex. It clings upon the skin, which is not a smooth surface as it appears to our eves, but is rough and corrugated owing to the surfaces of the innumerable cells of which it is composed, like the flat tiles on a roof. The S. pallida adheres and wanders about this, and, perhaps for an hour, it may still be on the outside. Indeed so squashy and soft is this little germ that where the skin is strong and tough. it is thought that it is not possible for it to wriggle its way even between the lavers of the actual skin cells, but that it can only get in where there is at least a tiny crack or break in the skin or membrane.

It can be washed off immediately before it has attached itself or penetrated in any way. It lies much as a little clinging eel might lie on the side of the

¹Schaudinn, Fritz: "Zur Kenntnis der Spirochæta pallida und anderer Spirochæten," Arbeit. Kaiserl. Gesundheitsamte, vol. 28, pp. 11-22, pls. II, III., Berlin, 1907.

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ridges on a shingle roof. Now, as you may imagine, if, against the tiles of a shingle roof, a tiny, rather sticky eel lay close, even a rush of water might pass over but not dislodge it if it pressed up against a protective crevice. Comparably, from the irregular surface of the skin, a vigorous swirling of the water may be necessary to wash off the germ and even that might fail to dislodge it. If plenty of plain cold water were present, it is very likely that would be enough to wash away the germ, or to chill and disable it, but as this is not certain, it is better to add some disinfectant which would kill it outright. If this is not done at once, however, this twisted eel-like little creature will have gradually prised or wormed its way in between the cells of the outer skin, slipping through even the tiniest crack or abrasion, and then it will be partly or entirely embedded between the lavers of the skin and lower tissues in the lymph spaces or in the capillaries of the blood system. Then no mere rush of water will dislodge it. Then it will be too late to hope to overtake it by simple washing. Although its progress and movements are fairly quick for the size of the creature, it actually moves very slowly, and hence, still for an hour or two, it has not penetrated very far beneath the surface. If within an hour or two water in which a disinfectant is dissolved is applied, and better still if a grease containing a penetrating disinfectant is rubbed on, then, as human skin is absorbent, the chemical molecules of the disinfectant may penetrate the skin and come up against the spirochæte. They oxidize or poison and destroy it; then it will lie dead and helpless in the skin, until shortly the natural growth of the tissues

peels it off and all may be well. Once the germ is dead it does not contaminate.

But now let us imagine that neither washing nor disinfectants are used: what does this germ do? At its own pace, in the course of a few minutes, hours or days, it penetrates between the cells or through the cells under the skin. The red corpuscles of the blood, which are free moving in the blood-stream, are massive spheres besides its tenuous, twisted length. Each cell boundary in the human tissues is so soft (unlike those in the plant world for instance with their hard firm walls) that the cells of the human body with their soft protoplasm are easily invaded by this boring slender germ, which is supposed to travel in the fine blood-vessels and live in and on the lymph system. When the spirochæta germs of syphilis have, by their complex corkscrewy movements, penetrated far enough, and are comfortable, they settle down to eat the human host and to reproduce. Each divides and there are two S. pallida; each feeds itself on the easy prey of the human cells; each generates again and there are four; again, and there are eight; again and there are sixteen, and within a short time, an army of these germs has congregated within the host's body. This army of germs may be so strong that the little phagocyte cells which try to eat up all invading germs and protect the human body are powerless against them. The germs are not only marauders, eating the host's cells, but they give off poisons into the blood-stream. Once established, every day they are forming numerous and ever more numerous colonies. Then, unless the individual who is being invaded by this invisible army places himself

under a medical specialist and is injected with counterpoisons in the form of drugs, and treated in such a way that these germs are killed, they will invade almost every tissue of his body, and have the most extraordinary and far-reaching effects upon his own health, and still worse upon any children he may generate. (See pp. 7-14.)

Once the syphilis spirochætes have penetrated the tissues, they are spread about the whole body by the current of blood in the blood-vessels, and in different parts of the body give rise to results which we call different diseases.

Now a fortunate thing for us about these spirochætes is that while outside or only just entering the skin of the body they are very delicate, and are easy to destroy with quite weak, and, to us, harmless disinfectants. They are indeed among the feeblest and easiest germs to kill, but directly they have penetrated thoroughly within the tissues of the body, they are most elusive, and among the most difficult to catch and kill out entirely, which we know. That being so it is comparatively easy to destroy them before they penetrate, and it is terribly difficult to destroy them after they have fully penetrated and started to breed within the body. For they have a disconcerting power of getting used to the poisons doctors inject to kill them and the sturdiest spirochætes of the army of invasion may live on and on and breed a defiant form which no drug can destroy unless it is so concentrated that, at the same time, it would destroy the human host. These adaptable germs are the cause of the cases which relapse and relapse and are never truly cured.

The germs of gonorrhœa are different in appearance (see Albert Neisser, "Ueber eine der Gonorboe

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eigentumliche Micrococcusform," Centralbl. f. d. med. Wissenschaft, No. 28, Jahrg. 17, pp. 497-500, Berlin, 1879). The "germs" are small, roughly spherical organisms which divide into two similar masses, and the two portions tend to remain attached together for a long time so that they are often seen in pairs. They multiply rapidly under favourable conditions, but, on the other hand, they may lie dormant for many years, and wait apparently for more favourable circumstances when they may spring into a frenzy of reproductionwhich gives rise to destructive inflammation of various parts of the lower half of the body of the host.

Surely if anyone allows the germs to touch him or her, the time to kill them is *before* they have penetrated beyond the surface. This, I think, everyone must agree with, but then we come again to another difficulty, and that is the simple human difficulty which an ordinary clumsy man has in catching some minute thing which he cannot see, and which is too small for him to hurt by pinching it. No human eye, no magnifying glass will reveal the presence of these germs. They can only be seen under very high powers of the microscope.

Therefore, of course, the sensible thing to do is not to give them any chance to come upon the skin of the body at all; the only sure way of doing this is not to have contact with any person who might knowingly or otherwise hand on any such germs.

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Contact is the the Source of Infection. NFECTIOUS contact is immoral, not only because religions demand chastity outside marriage and faithfulness within marriage, but also

because it risks injuring the race.

But, if such contact is risked, either as a result of sudden temptation or a deliberate course of life, then, as the human victim can neither see nor touch the germs nor know whether they are upon his skin or not, he or she must invoke the aid of the molecules of a disinfectant which are capable of dealing with the germs, or the germs will seize upon the opportunity to establish themselves in the human tissues.

By covering the skin of all the sex organs which are liable to be invaded by these germs with a complete film of grease before the human act of contact takes place their entry may be somewhat hindered. The spiral coils of protoplasm which compose these germs' bodies are clogged and tied up in a film of grease just as a fly is clogged and tied up in treacle. ' Grease also reduces friction which rubs in germs. So that the man who would so far as possible keep his skin free from the invasion of such germs should coat the whole of his sex organs with a film of grease. Ordinary vaseline will do, but it is better to use a grease to which a disinfectant has been added, as it increases the likelihood of destroying the germs. To do this it is necessary to rub the skin with a disinfectant grease, and for a man to pull the foreskin well back and cover every part of the skin within and without with the grease or ointment. Useful plain greases are ordinary vaseline or lancline; these only clog the germs as a wasp is clogged in treacle; they do not kill them. Boracic vaseline or 33 per cent. calomel ointment, both clog the germs of syphilis and kill them, for the disinfectant molecules in the grease act as a poison to the germs, but apparently gonococcus germs defy it, and against gonorrhoa the grease film is only a mechanical barrier. Remember in using any grease that the germs are numerous and invisible, and, if the grease film leaves uncovered an area of scraped off skin no bigger than a speck that may be like an island on which a germ will land: it may form a gateway through which a germ may enter. It is necessary, therefore, to spread the grease film thoroughly so as meticulously to cover all the parts.

Now a man knows that in his sex organs there is not only the outer skin, but the inner, and that his organ is like a double tube, and that the hole through the cylinder of this tube is too small for the man's finger to penetrate. It is, however, like an immense cavern to the germs which may travel up the inner tube with the greatest ease. It is not possible for the man to rub the inner skin of this tube, and, therefore, it is necessary to block the entrance of the tube with a little wedge of grease.

However carefully on every occasion the organs are greased, there is no final and absolute security, for no human being can do everything perfectly; nevertheless if the organs are thoroughly greased, the chances of germs penetrating are very greatly reduced. Following that, if, after union, the parts are thoroughly washed and lathered with soap and water followed by a disinfectant, such as a weak solution of potassium permanganate, listerine, milton or thymol, the germs have not very much chance of escaping complete destruction. All depends on the care and thoroughness with which every minutest portion of the skin has been covered by the grease and has been scoured by the water and the disinfectant. Tf this washing, scouring and disinfecting is done at once, and is done completely and thoroughly, with absolute perfection, then there is almost no chance of the disease germs penetrating. But, on the other hand, if one-hundredth part of a millimetre of the skin of the whole organs is left untreated, then that minute speck may be the "heel of Achilles," and through that minute speck of skin germs may enter. Therefore, with all the human care possible, and with a ninety-nine per cent. chance of safety, no one can be certain that he has destroyed all his enemies. the germs. Therefore, everyone who indulges in unsanctified unions must always be on the look-out for any symptoms which should take him straight to a doctor for treatment. Treatment Centres are now to be found in many big towns (the police will give the address on request) and hospitals and doctors everywhere are ready to treat cases in their early stages gratis.

Many a man may say or think: But what is the good of me knowing all this when I am sober, if it is only when I'm half drunk that I go with a stray woman? The answer to this is, first—Don't get half drunk. The evidence of the Royal Commission on Venereal Diseases made it quite clear that the excessive use of alcohol was of great assistance to the spirochaete and gonococcus germs in their struggle to obtain mastery of the human body. Once the disease has got a hold on a man or woman the use of alcohol excites the germs to activity and makes it much easier for the germs to win their first battle with our protective cells. Also, before anyone is diseased, alcohol is an ally of the germs, because very often it is the result of excessive alcohol, when self-control is reduced, which leads to a union of a base nature which a person's self respect would protect him from when not weakened by alcohol; and one solitary union of such a debased nature may convey the dreaded infection.

But still, men do get drunk, even when they vow they won't. What are they to do then? Wash the moment they are sober, don't risk even another half hour. Then go *at once* to a doctor and ask him to keep a sharp look-out for symptoms for as long as be thinks the circumstances make it necessary.

The man is, however, not the only one who runs such a risk. All women, from the innocent girl tempted for the first time, who yields from trustful if foolish and immoral love, to the practised woman who has had pretended love affairs with a dozen different men, to the tragic figures of the women paid by hundreds—every such girl, every such woman has taken a grave risk on every occasion, for the man who swears that he is clean may yet convey to her those invisible germs. What is she to do?

A woman's bodily organs are of a different shape from those of a man, much less easy to rub and to wash, and offering places where it is more easy for the germs to conceal themselves, as within the soft folds and crinkles of her inner skin. What is she to do? Of course, what she should do is not to allow the touch which may bring its pollution with it, but, if she is overcome by circumstances, or if her soul is not the mistress of her body, she may at least try to cleanse herself. If you can't be good, at least be clean, for cleanliness is next to godliness. The same substances as are useful for the man are what she must use, but she must take even greater care in rubbing the grease thoroughly over all her parts, and, owing to the crinkly and soft nature of the inner tube of the vagina, she must put on the grease in large quantities, leaving a thick smear both inside and out.

As the greatest danger to her is the entry of germs of gonorrhœa through the neck of the womb, she must have a wedge of cotton wool, thickly smeared with vaseline, or better still with grease with a disinfectant in it such as boracic vaseline or calomel ointment, and place that in the vagina, and then directly the man has withdrawn she should syringe herself with water in which permanganate of potasium crystals have been dissolved.

But a woman may ask, What am I to do in some small den where water and syringes are not to be had. in some field or park or woodland where nothing is to be obtained? The answer, of course, is: Have no contact with any man but your husband under such conditions, but, if you have had contact, then hasten directly either to some doctor's clinic or if you cannot do that at least go to a room where water is to be obtained, and you can add the disinfectant you should always carry with you (see page 38). Within an hour the germ may be overtaken; after that time the risk is ever greater, but with a good disinfectant like potassium permanganate or listerine, within a few hours a thorough syringing may make it as nearly safe as may be. Then after washing, at once go to a doctor, go even if you have to wait till the next day, and tell him you fear you have contracted the disease and get him to watch for the first symptoms.

It is often urged that the use of a "sheath" by the man reduces the danger both to the man and to the woman, and this is true, but the sheath, it must be remembered, only covers part of the organs, and it is also liable to be broken, so that it is no more than a partial protection, but it is wise to use it even if it only reduces some part of the danger.

The peculiarity of dangers of all kinds is that they spring upon the victim unawares. The accident in a motor car happens in a flash; the passenger whose breath conveys thousands of " cold " germs jumps into the carriage in a moment and may sneeze in one's very face. As I personally am particularly liable to catch "cold" infections, for many years past I have made it a rule to carry protection against such intrusions in the form of disinfectants in my pocket or handbag. I always carry a little tube of menthol wool, and if, when travelling in a bus or train, any person shows signs of being a centre of "cold" infection, I quite calmly and unashamedly, in front of the contagious person, take out my menthol disinfecting wool and fill my nostrils with it : breathing deep into the lungs, the germs are overtaken, further entry of them is prevented, and I generally escape the infection of a cold or cough.

Now I recommend that those who know themselves to be liable to come in contact with the germs of sex disease should *always* carry with them a convenient form of disinfectant (see p. 38). As these germs are not blown into one's face like "cold" germs by anyone

whom one chances to meet, but are placed definitely upon the local organs of sex by some selected person, everyone has the chance to disinfect and thus safeguard themselves against the germs. All who in the past have fallen to chance temptation, or who deliberately risk contact outside marriage, or who know themselves to be liable to meet with conditions which make such union possible, must supplement their weakened virtue by simple disinfectant means. "If it were possible to take every man who had exposed himself and properly disinfect him, there would soon be an end to venereal disease."—Brevet Colonel L. W. HARRISON, M.B., D.S.O.

To this I would add : if, also, it were possible to cure or isolate all congenital and latent cases, so that no more children ever caught it or spread it. Many cases are known where a child, born with it, handed the disease on to other innocent persons in the household.

Disinfectants do Disinfect. Disinfectants to be *completely* efficacious in destroying the germs, both of syphilis and gonor-

rhœa, must be most carefully undertaken. When used with care and complete thoroughness, the chances of the germ surviving are remote. Even when used with only ordinary intelligent care, the risk of infection is so greatly minimized that infections are rare where they would otherwise have been numerous. For instance, as reported by the Canadian Medical Officer in charge of the troops in Paris, the rate of infection was reduced from 20 per cent. to less than 3 per cent. by the use of disinfectants.

Sir Archdall Reid, in the *Times* of September 26, 1919, quoted the following experience where soldiers had been thoroughly instructed in the careful use of disinfectants :--

"Twenty thousand passed through these barracks in two years. Not one man who followed instructions acquired disease... I believe there is not a record, a single instance, of the failure of the method of quick disinfection " when properly carried out.

To quote the words of another authority :---

"The gonococcus and the Spirochæta pallida are the most delicate organisms in existence; they are planted on an exposed situation and easily liable to removal by urination or ordinary abliction. When natural agencies are assisted by the prompt application of antiseptics, it can easily be proved that the chances of infection may be reduced to an infinitesimal amount. In support of this I should like to quote some statistics.

In one group, 2,426 exposures to venereal infection were dealt with by disinfection within an hour and a quarter of exposure and were followed by only two infections." "Medical Practitioners and the Management of Venereal Disease in the Civil Community," by Brevet Colonel L. W. HARRISON, M.B., D.S.O., pp. 12-13.

Yet, notwithstanding the safeguards afforded, by the use of almost any disinfectant, the disease has spread rapidly in the last few years and is still spreading. Why? Because people do not know of the use of disinfectants, or knowing, are careless.

In the *Times* of December 11, 1919, giving the account of the discussion in the House of Lords on venereal disease, the Archbishop of Canterbury agreed that it was desirable that people should know and realize the gravity of the evil and the necessity of combating infection.

It is no good concealing the fact that the act of sex union varies very much as practised by different people under different circumstances. The union snatched under foul and degrading conditions by a man who is filled only with lust and with no true love for his partner, is likely to be a brief and purely excretory function; indeed, from what one is told of the conditions of some prostitutes' dens, the man may remain with the woman as little as fifteen minutes. When this is so, the immediate washing is likely to be in time to overtake the germ before it has penetrated the tissues (see p. 22). Where, however, the relation more nearly resembles the true union of the married pair, where for instance the man and woman have something approaching to or have even a real warm and affectionate feeling for each other, and where the woman is not a professional prostitute but a private woman who holds her honour cheaply, or who may perhaps be prevented by circumstances from marrying the man she loves, then the risk of infection and of the transference of disease germs from one to the other is much greater, because the pair will be likely to remain together longer, even perhaps the whole night. Also, as is usual, such people only having limited opportunities of meeting, they may have several unions in the course of one night. Such a relation is full of danger, because the pair are likely to wait until the morning to wash and use disinfectants, when already it may be, by hours, too late, and the germs may already have penetrated right into the tissues, making ordinary washing and disinfection comparatively fruitless. Therefore, when a man or woman thus unite, with a partner, of whose condition they are not absolutely sure (and none under such circumstances can ever be sure of the paramour, see p. 39) it is necessary, however repulsive and displeasing it may be, to separate and repeat after each connection the washing and the most careful greasing and disinfection, because the protective effect of the disinfections will not last the whole night through, and the germs may, in the hours after the union and before morning, have penetrated and got out of reach of ordinary washing or surface disinfection.

Of course, also, the more complete the energy and the movement of the union, the greater the danger of couveying any germs from one to the other.

Hence, after every doubtful union the man and the woman both ought to go to a doctor or treatment centre to be watched carefully and treated at once if need arise.

Under no circumstances should anyone who has been infected attempt to treat themselves, nor should one try "to do what a friend's doctor told him." Each case requires very expert individual treatment, which can only be given by a fully qualified doctor. Quacks and "patent" medicines are worse than useless, and the quack who tries to terrorize the patient and extort huge fees should be bravely exposed. The police will assist in bringing quacks and blackmailers to the justice they deserve. Free treatment centres are available, staffed by fully qualified doctors, and the police or the women police, without asking questions, will readily give the address of the nearest centre to any who require help.

The repulsiveness of the requirements and dangers of illicit union are surely a great argument on the side of clean, pure love.

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Disinfectants only Disinfect. NY washing, any use of grease or calomel ointment, any syringing or disinfection is better than absolutely none only in so far

as thus many of the germs outside the tissues may be destroyed, and perhaps with luck all of them. But washings and disinfections by the indulgent persons must not be mistaken for medical cures. It must be understood that disinfectants are only useful in catching and getting rid of the germs before they have penetrated, and forming a barrier through which few of them cau pass. Directly the germs have penetrated the tissues, that person risks or has actually got the disease, and then only specialized treatment by doctors can reach these germs and destroy them. Sir William Osler is reported once to have said about another disease, which arises through bacterial infection :--

"You must bear in mind that there are three ways of eradicating malaria, all of which are theoretically equally effective: (1) You might kill all the malaria parasites; (2) you might kill all the mosquito carriers; (3) you might kill all the people."

This observation applies also to the eradication of the sex diseases, and, as with the eradication of malaria, we do not wish to kill all the people. But the problem of sex diseases is simpler than that of malaria, for there are only two alternatives : (1) to kill all the people; (2) to kill all the germs, because the "carriers" are people.

As we are human beings, and as the germs are only carried by human beings, our only alternative is to kill all the germs. For this we need the aid of water, soap and disinfectants to catch the germs which are outside any human being on their way from one to the other, and expert medical treatment to kill the germs which are within human beings.

Potassium permanganate which destroys many varieties of germs is very effective against the germs of sex diseases, and it has this particular advantage that it does not need to be carried about in cumbrous form such as a bulky bottle of liquid liable to break, but it may be carried in a small glass tube or tiny box in the form of dried crystals, when, in a moment or two, with ordinary water, a few crystals will make a disinfecting solution. In addition to these easily handled crystals a wad of cotton wool should also be carried always and by everyone. Potassium permanganate crystals are very cheap; for 3d. one can get enough to make gallons and gallons of the disinfecting solution¹; they can be bought everywhere and they keep for years.

The circumstances under which the temptation and the actual consummation of the illicit sex union take place are so different and vary so much from time to time with different individuals that it is not possible to make any suggestion which can cover all circumstances. But this should be a general rule for everybody: Even if you know yourself to be impregnably virtuous, never go out of the house without carrying upon your person some disinfectant. You

¹ The crystals completely dissolve slowly, but rapidly dissolve to make a sufficiently strong solution. Five or six crystals shaken into a pint of water will be ready when they colour it a rich, port wine colour. When the solution is nearly black or too dark to see through it is too strong and should be diluted. The exact strength s not important, anything about 12 to 36 is recommended.

will find that if you are careful, you will use that same disinfectant for many different purposes. An unexpected call to a sick friend ill with diphtheria and you may gargle and save yourself from infection : an unexpected wound, and you may cleanse it and save yourself from a festering sore; an unexpected prolonged business talk with a person unscrupulous enough to be doing business while he has a heavy influenza cold upon him, and you may unblushingly insist on a glass of water being brought to you and gargle in his presence and thus save yourself from a cold. This same disinfectant vou must use if unforeseen circumstances place you at the mercy of those passions of the body which you are too little evolved or too weak to master. Then your disinfectant must be used and used with the utmost care.

If you are a man, you must remember this—that outside marriage to a faithful wife *never* can you feel sure, whatever the circumstances, that the woman who allows you to touch her is clean and free from sex disease germs.

Remember this, all boys and mon, that no woman, whatever her protestations, whatever the appearances in her favour, whatever her solemn declarations of perfect virgin innocence, NO woman who allows a man to have contact with her outside marriage can be relied upon to have contact only with the one man, yourself, and therefore she cannot be relied upon to be free from disease germs. I say most emphatically and unhesitatingly (with only one exception) that never is it absolutely safe to trust to the freedom from germs of a woman if she once allows an intimacy which should be reserved only for marriage (and this applies, of course, to married people who are false to the spouse.) You may say that you know your particular woman is a virgin. Even so, you cannot know that she is free from disease germs, for there is (and I regret to say it, though it is necessary that it should be known) in existence a cowardly type of woman or girl who will allow a man to play intimately with her body without taking her virginity, and through the contact which she allows she may acquire disease germs and thus pass them on to another.

And similarly, if you are a girl or woman, you can never be sure you are safe from disease if you allow any man, whatever his protestations, vows and promises, to touch you intimately outside marriage to a faithful husband. Therefore it is necessary for every person on every occasion who has any union outside of marriage to realize that they are taking a very high rate of risk of having transmitted to their flesh the actual germs of disease.

It is officially stated by the American Social Hygiene Association that they estimate that about 60 per cent. of all the prostitutes at any one time are diseased. That means, of course, that the risk a man runs from association with these girls is a 60 per cent. chance of infection unless steps are taken at once to destroy the germs which have been transmitted to him. Hence, the first idea of those who do not know social conditions profoundly is that if all professional prostitutes were rounded up and were put under medical treatment until they were free from disease, the disease could be checked in that way. Unfortunately this does not at all represent the truth. Indeed, from evidence which has been given before the Birth Rate Commission and

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in other ways, it is quite clear that the professional prostitute is in many respects less dangerous to the community than those who are sometimes described as "amateurs" and who cannot be detected by any "police" or "rounding up" methods. This depends on the fact that the "good class professional" generally knows of disinfection and takes careful precautions, while the "amateur" may be entirely ignorant and is often very dirty.

VIII.

Disinfectants Disinfect: They do Not Cure.

ISINFECTANTS may kill the germs outside the body; a doctor is needed to kill them once they are within its tissues.

Some people have objected to the public knowing about the value of potassium permanganate as a disinfectant, because the public is apt to look on it as a cure. In a general way permanganate is only a disinfectant, but by chance it happens that part of the cure for venereal disease involves the use of permanganate by medical practitioners. Hence has arisen the dangerous confusion of ideas that the public, if allowed to use permanganate, will think that they are "curing themselves," whereas they are only disinfecting, while when the medical practitioner is using permanganate he is curing; but we must remember that permanganate is only part of the cure the doctor is administering. The public must, therefore, clearly understand that the use by them of permanganate is purely as a disinfectant, and in no way as a treatment once the disease has started.

So long as germs are outside one, even though they are lying on one's skin, one is healthy. Every healthy person wants to wash off any dirt which carries germs and to remain healthy; therefore, the knowledge of disinfectants and their use in destroying all germs should be known to everyone. If disinfectants were used, not only in this connection, but to cleanse all dirty places, we could prevent very largely the spread of contagious diseases which are so prevalent at present. No one, except a little boy or girl in the stage of enjoying mud pies, likes to have filth of any

sort on their skin, whether on the hands, the face, or any part of the body. To wash off ordinary filth we have a kind of disinfectant in common soap and water which we use freely. The more fastidious, better brought up and cleaner the person is, the more they use soap and water to keep their skins free from substances which should not be upon them. Some add to the water scent, bath salts, and other minor disinfectants. When it comes about that on the skin are the foulest of all disease germs, which may penetrate into the very marrow and affect the whole life of the one who is invaded and ruin the children who follow him, then surely every person with any instinct for cleanliness will wish to wash and disinfect as thoroughly as possible every minutest speck which may carry such virulently active dirt.

But just as serious diseases are kept at bay by putting in quarantine as well as disinfecting everyone who has come in contact with them, so everyone who has had contact with those sex germs should consider themselves in quarantine. Hence they should keep in touch with a doctor or go to a treatment centre till pronounced safe, and in order that, if the disinfection has failed, treatment may be undertaken at the earliest moment and thus a real cure rendered more hopeful than would be likely were the disease to get a start untreated.

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Humanity can be entirely freed from this terror. F we only dealt with the horrible subject energetically enough we should be able entirely to stamp out the diseases more quickly and

easily than the plague, small-pox, leprosy and other dread diseases, which were once common and now scarcely exist at all in this country. At present, alas, we are not all in such a state of mental and spiritual cleanliness as is ideal : When we are, these disease germs will be utterly stamped out. Yet, we must never forget that, with the appalling power of multiplication and reproduction of the germs, if there were left one diseased individual in the whole world, and from him or her one germ settled on another individual and no treatment were undertaken, that one person might again originate the spread of the disease all over the world.

There is (and I wish to emphasize this) no doubt in my mind at all that ultimately we will be forced to realize that if we are to save our race from the nightmare horror that these diseases generate, it will be necessary to have a complete survey of everyone in the country. But it will probably be many years before the public realizes this and demands it. Something in the nature of a secret census based on medical tests will become necessary unless very active curative and preventive measures are taken. If the diseases linger, then rich and poor, those apparently healthy and those openly ill, everyone will have to be carefully tested by a competent medical expert so that we may know at last that we do not have among us unsuspected sources of contagion remaining indefinitely active. For one of the extraordinary things of the sex diseases is

that they may lie comparatively dormant in individuals who are even not aware that they are infected by these germs, and yet these individuals may convey contagion to many unsuspecting persons in whom the disease may develop in a more virulent form, or may have effects years afterwards when least anticipated.

Alas, there are now so many who are already centres of contagion that the possibilities of infection are numerous. Also it is unfortunately true that chance accidents have carried the contagion from one who was diseased to other people who were perfectly innocent, who had perhaps not even seen the person who left about the germs which settled on the unsuspecting innocent, and thus terribly injured individual.

As Sir James W. Barrett, in the "Twin Ideals," so rightly says :--

"Since the majority of victims of venereal disease are not responsible for its acquisition, and since many mothers, children and babies may and do suffer through no fault of their own, the usual enthusiastic but misplaced determination to treat these persons as social and moral outcasts and lepers is not only unjust, but of very doubtful utility to the cause both the medical men and the moralists are trying to serve."

One must not, therefore, fall into the easy and hasty error of some and assume that were absolute purity and rectitude to-morrow to become universal there would be no further risk of contracting the sex diseases. Wherever one person is in an infectious stage of the disease that person is a centre of danger for all who live in the same house, for all who work in the same office, for all who chance to come in contact with him or her when travelling, staying in a hotel, or using anything which he or she has used. It is very necessary to remember this. Yet, illicit unions originate and are the chief means of contagion of the sex diseases.

The sex diseases would never have saddled themselves upon humanity had not all sex knowledge been befouled by prudery. For with a pure knowledge of sex no one could have endured foul unions, and no one could have tolerated an infections disease as the associate of love. But through centuries children have learnt from dirty-minded servants, other children and school-fellows, such filthy nonsense about sex that their attitude towards the supreme act of life has been so debased that they do not feel the full sacredness of the marriage union. I wish they felt as I feel, but I have sense enough to know that myriads do not, for their minds were early polluted. Yet even about such people, such men and women, such boys and girls, I am hopeful, because, although they may find an overmastering desire to commit the sex act when they should not, if they once understand clearly about the germs they may encounter, they will have the grace to realize that they need not be dirty about it. If such people knew that they risk getting upon their bodies foul, disease-carrying and dangerous germs, they would, in their own interests, and that of the nation, take the trouble to cleanse themselves in such a way that they do all possible to destroy the germs which would otherwise become active within their tissues.

Having recognized that there is, and will be until much more skilled universal examination is undertaken, a certain number of danger points to good innocent people, we come back to the main consideration, which is the active scattering of disease by those who are not innocent, but who, for some reason or another (reasons which sometimes may appear to themselves very plausible), are yet having unions with a corresponding man or woman outside of the holy bonds of wedlock, either with some equal lover whom they do not marry or with some man or woman of loose life.

No one would willingly sleep with a case of smallpox or the plague. The sex diseases are the "Great Pox." Most people will listen to scientific facts, even if they have not ears for the tenets of morality.

As Sir Archdall Reid in the New Statesman, November 15, 1919, says:-

"Our social conventions are such that children get their ideas of sex from other children. All they learn from adults is reticence and secrecy. Vast numbers grow up with the notion that incontinence is a mere peccadillo, indeed, a finely romantic and adventurous thing. The fact that about half the population of this country—not half the male population, but about twenty million living and dying people—have suffered from venereal disease is sufficient evidence of immorality. . . . There are some who conceive the young man as wavering on the brink of promiscuity, and suppose that if you tell them, as I told those sweet innocents, my soldiers, 'I have talked to you till I am tired. If I cannot keep you straight, yet I will not have you bringing these beastly infections into barracks where they are a danger to your comrades' . . . you will hurl him over the brink."

But the public should realize that if all such unions were to-morrow to cease, and the union in sex life only to take place between those who are married, then immediately the scattering of the germs would be immensely reduced. If it were possible by any conceivable means to convert those who live loosely from the befouling and dangerous unions of promiscuity, such a conversion should be immediately undertaken. It is a most urgent subject for missionary zeal.

The Churches of all denominations, so slowly making so little headway in their reform of humanity, all agree that the only right way to live is to live a moral life without promiscuous sex union—but they are like ostriches hiding their heads in the sand while they profess to believe that disease *is being conquered* by purely moral means. It *should be* conquered in this way, but it is *not*. For the terrible and most tragic truth is that the spread of these diseases has increased until millions of people are infected and a source of danger to others.

It is known to all who face the truth that countless unions out of wedlock, countless unions based on transient feeling, or on a cash basis out of sheer animal lust, do take place every day of every week, and that such unions will take place next year and in the years to come unless some power of overwhelming and sweeping command suddenly and from some new quarter becomes active on the earth.

Such a power is, I believe, entering upon the earth at present, but it can only take its full effect in the generation now about to be born and the generations after that, and between now and the time that those who are shortly to be born will be grown youths and maidens, there is a hiatus of twenty or more years. In twenty years of such a devastating spread of the contagion of racial diseases as we have known in the last few years, humanity would run the risk of being

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so appallingly corrupted, so permeated by disease that it could not be saved. Immediately to stem the onrush of contamination (more rapidly than we can hope to convert to a pure morality when for centuries moral appeal has proved to make so slow a headway) it is necessary to bring some new factor into play on the side of health and cleanliness, so that we may to-day save the bodies alive of those whose souls the Churches may afterwards have time to save.

Strange that to deal with such a momentous issue, the new factor which lies as the swiftest weapon to our hand to stay the horror infesting us is the simple household friend of man-the disinfectant-and not any one particular disinfectant, just disinfectants in general. Some are better than others, some are easier to use than others, some are more efficacious than others, but almost all the ordinary disinfectants in use in almost any civilized home will act, if not as a complete armour against the deadly germ of sex diseases yet so as greatly to reduce the danger of the spreading contamination. By the careful use of disinfectants alone the plague might be kept within such reasonable bounds that the medical profession might then really be able to deal with those who were still the victims of the too active germs.

In spite of all the prayers of all the mothers who have borne their sons, in spite of all the love and tenderness and beauty in the world, it is to-day true that purity cannot be reckoned upon as youth's abiding shield, for youth is too often corrupted by vice and ignorance. Well, let us face that fact bravely and act accordingly, for we can no longer afford to allow the impure and reckless acts of illtrained minds to contaminate and jeopardize innocent society—children yet unborn, yet unconceived.

I maintain that, if every boy and girl had been so taught by their mothers as I recommend in "Radiant Motherhood" and had been told the truth about the great mysteries of life and sex and the generation of themselves and their children, and had the standard of love in marriage been such as I set forth in "Married Love," their purity would be an impregnable and vital shield. Then there would be few indeed who would irreverently and with baseness misuse functions so marvellous in their full powers. I know, however, that there are millions to-day who have not been brought up in such a way, who have not learnt from wise, loving and tender elders the truths of the rich fullness of life only to be gained by selfcontrol, virtue in its good old-fashioned sense, and love in its deepest and highest form.

An estimate has been made (quoted by Sir James Barrett in "Twin Ideals") which other authorities consider too conservative, that is to say an underestimate, that venereal diseases cost the United States of America every year 625 million pounds in loss and actual outlay. Did the individuals who spread those disease germs get 625 million pounds worth of *pleasure* out of their hurried soiled unions that year? I think not.

The sporting chance which each one always hopes will be in his favour is that the germs may not penetrate and that they may be washed off, or, if the germs have penetrated, the hope is that the antigerm protectors within the body will destroy them. This hope cannot be relied upon, because these germs, although very delicate when outside the body, once they are within it are exceptionally strong, and the anti-germ forces within our body are not strong enough to destroy them, even in individuals whose anti-germ properties may be sufficient to destroy and protect them from ordinary fevers and diseases.

But so strong is the feeling of lust in some natures that even such a fear is not sufficient to keep men and women apart. They see around them many who have taken such risks and escaped, or apparently escaped the worst dangers. They have perhaps too little imagination to realize that twenty years hence they may be paralysed or mad because some of the descendants of the germs they get to-day may have by then penetrated their brain tissues and clogged their bloodvessels. When they have upon them the well-nigh overmastering urge to unite with some beloved or some bought woman, it seems unbelievable that a lifelong wasting of powers and ultimate destruction and horror may be the price of that one brief union.

Some whose views on the morality of sex union are more lax than mine may say, "But what you are teaching is that no union outside of marriage is safe, and that even in spite of disinfecting which may kill most of the germs, there may still be some germs left so that it is necessary to go to a doctor. That makes an impossible position!" My answer would be that this, which is a fact, is a strong argument in favour of sound old-fashioned morality. No individual has a right to risk the health of the community. You as an individual may logically say: "I choose to have unions as and when I like without all this trouble, without the humiliation of going to a doctor after-

wards; I choose to take the risk of being sterile, of having lesions in my bones and of dying a paralytic." Very well, any individual may conceivably risk a horrible torment for himself, but no individual has the right to take such risks for other people without their permission and without their knowledge. The fact is that, even if he himself may think he will not object to them, a person who acquires these diseases is a source of infection and danger to others, and is wronging the community in such a way that every rightminded citizen has the right to protest, and to put him under constraint if need be as a public danger. The diseases which are at present devastating our race may be stamped out utterly: they must be stamped out utterly.

It is the duty of the Churches to win the people by moral precepts and teaching to a right view of life and pure living; it is the duty of the doctor to see that people are decently clean; it is the duty of the reformer to see that people *know* facts essential to their life and progress. In this respect the moralist and the doctor have essentially the same message to teach.

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