elsewhere, at a time when he is free from the prejudices and preconceived ideas which are sure to obscure the judgment of the man who has gained his medical experience second hand from books or lectures.

The general public will gain the simple protection which any civilized government owes its citizens.

In this very city there are opportunities such as exist in scarcely any other community of this country for the realization of our ideals in medical instruction—a city of over 300,000 inhabitants, a fine old hospital of nearly 900 beds, a single school connected with a university of honorable past and most promising future. Tulane University has been a leader in this branch of medical education, but it can do more. The university can still offer to the hospital and the hospital to the university that which might make New Orleans the model for the rest of the country.

Original Articles.

THE BOY'S VENEREAL PERIL.*

[The author believes that the objects of this paper will be furthered by substituting initials for his name and by omitting his address in reprints thereof.]

FERD. C. VALENTINE, M.D.
NEW YORK.

I. INTRODUCTORY.

Many important books have been written and many valuable papers contributed to medical journals on the dangers of venereal diseases. All show that venereal diseases are more perilous to the individual, the family and the state than are all other ailments combined.

Study and effort directed to their abatement lead to the inevitable conclusion that venereal diseases are due essentially to prostitution, clandestine and public. The knowledge that venereal diseases are due mainly to prostitution does not, however, reveal the means of curing the evil: 1, Because all efforts to reduce public prostitution have proven and are always likely to prove futile; 2, because clandestine prostitution is necessarily beyond all efforts to limit its still greater power for evil.

The principal cause for the physical and moral wrecks produced by prostitution lies in ignorance. The same ignorance misleads many of the victims of prostitution to regard lightly the ailments thereby acquired.

The need for public enlightenment being manifest, many earnest men, I among them, have advocated lectures to the people on these subjects. More mature thought has, however, brought the conclusion that such lectures would fall short of their purpose, principally because, to be effective, instruction must be given at the opportune moment. A state of receptivity dependent on a condition so individual as mental, physical and sexual puberty must necessarily, in any assemblage, form as varying a factor as there are people present.

Obviously the effective teaching of these matters can be done only in private. It would seem at first glance that this is the father's duty. But some, indeed many men are so far removed psychologically from those nearest them that they could never successfully undertake this delicate task. Such men must relegate the duty to the physician, the teacher or the clergyman.

Among teachers and clergymen many have vague, and often gravely erroneous ideas on these sub-

jects. Indeed, a majority of them has not received even rudimentary education on the structure and functions of the genito-urinary organs. They consequently have no knowledge whatever of the diseases due mainly to misuse of the genesic function.

If, for the reasons given, the father, clergyman or teacher is disqualified from imparting the necessary warnings, it may be well to direct the youth to study the third, fourth and fifth divisions of this paper.

II. THE DANGERS OF VENEREAL DISEASES.

In occasional contributions to our medical journals one eminent man or another asserts that the exercise of the sexual act is unnecessary for the preservation of health. As far as I know this has not been refuted. One reason for this silence may be, and probably is, that such refutation would be more likely to be read than were the articles contested. They would, as all such things do, fall into the hands for which they are least intended and be perverted to serve as scientific endorsement for libertinage and profligacy.

Wiser and deeper students may, in the course of time, establish whether illicit relations between the sexes is ever a vital necessity. For the present it suffices to say that young men are everywhere beset by temptations and induced by the spirit of evil, by the jests of their companions and by the solicitations of mainly clandestine offenders to seek sexual gratification, the desire for which is thus awakened.

The present purpose would not be advanced by a discussion of the need of sexual gratification for the maintenance of health. Moreover, the subject seems too individual for generalization and therefore not capable of wide application.

So much, however, experience shows, that no matter what volumes may be written on the wisdom of male sexual purity, whatever the endeavors of moralists, there will be, as there always has been, a vast majority who disregard precepts which oppose their desires. In consequence there is, as there always has been and will be, an overpowering multitude of men who acquire venereal diseases to the detriment of themselves, their families and the state.

To what extent this detriment goes is incalculable, as statistics on the subject can not be reliable. It will suffice here to note that conservative authors estimate that one-eighth of all the patients in the hospitals of New York are inmates thereof because of venereal diseases or their consequences.¹

Those in hospitals represent but a small fraction of the people attainted. The latest study of the question² made by a body of physicians appointed by the New York County Medical Society for the purpose, makes the appalling declaration that 200,000 people infected with venereal diseases are walking the streets of our city.

The working and consequently earning power of these people is materially reduced. If every infected person loses only \$1 per day, then the loss of earnings from this cause alone amounts to *sixty million dollars* per year. This loss is directly or indirectly borne by all, even those who are so inexpressibly selfish as to have no feeling for the sufferings of others.

1. Specific mention of the works of such eminent writers as Morrow, Sturgis, Tarnowsky and others, is intentionally omitted here because they are well known to the medical profession. Laymen who may desire further information on these subjects, can easily obtain from their physicians the titles of the best works that treat of them.

2. Morrow: Report of the Committee of Seven on the Prophylaxis of Venereal Diseases in New York City. Medical News, No. 25, 1901.

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Practice of Medicine, and approved for publication by the Executive Committee: Drs. J. M. Anders, Frank A. Jones and W. S. Thayer.

The heaviest part of the burden rests on physicians, who must give their services gratuitously to over 66 per cent. of their patients. But they do not complain of their unrecognized philanthropy, nor do they advertise it. They exercise it as the most important part of their priesthood.

Men who devote their lives to the relief of misfortunes which bring the deepest woes, are daily astounded at the consummate ignorance that prevails among all classes regarding what is, from the nature of things, a generally tabooed subject. It is not only the uncultured, uneducated man who is the victim of unbridled passions; his cultured, educated and intellectual brother is equally and just as frequently unfortunate. There is no excessive charity in here using the word "unfortunate," for he is truly unfortunate and it avails nothing to consider him otherwise; nor is there any excessive optimism in the conviction that if all men could be informed of the dangers of venereal diseases, fewer would contract them, or having contracted them would neglect them as they now do.

Honest endeavors are continually made, especially by physicians, to enlighten the public on this subject. But their excellent counsel must ordinarily be limited to persons who have already acquired the disease, and for whom the topic has at the time absorbing interest.

The ignorance that prevails on these subjects is far-reaching in its effects. The patient, uninformed of the dangers to his health and life, generally does not seek early and radical treatment for the infection. More frequently still, associating venereal diseases with the only mention of them that has come to his notice, namely, in the advertisements of quacks, he consults one of these harpies or their congeners, the patent-medicine dealers. Later on, and often too late, he learns that every community has conscientious practitioners who scientifically study these diseases. Only then does he discover that he has wasted time, injured his health and imperiled his life through his ignorance and the shamelessness of those who have taken advantage thereof.

As little as the patient knows of the dangers to himself of venereal diseases, so little is he aware of the menace to his family. He should know at least two facts, which in efforts laid before the profession were elsewhere discussed. These facts are:

1. That of all women who die of diseases of the reproductive organs, 80 per cent. are victims of gonorrhea, of which their husbands imagined themselves cured.
2. That of all children born with seeing eyes who became hopelessly blind within a few days after birth, 80 per cent. lost their sight because of infection by gonorrhea, of which the fathers imagined themselves cured. (This paragraph refers to the time before the *Crédé* method of protecting children's eyes at birth was employed.)

The patient is, as a rule, as ignorant of these frequent results as he is of the danger which venereal diseases are to the community. The need, therefore, of instructing the people at large on these subjects is manifest. As said before, however, the knowledge usually is imparted after the damage is done.

Many physicians, I among them, have striven to aid in combating this most dangerous ignorance. Although the papers written were received in a most cordial and kindly fashion, they could not meet the fundamental defect which prevails, that of preliminary education in those whom physicians must instruct. This shortcoming

was made painfully apparent by letters from practitioners in all parts of the country.

Manifestly, then, there is need for explanation to the young which will appeal to them at the most susceptible age, that of puberty. To meet these evident requirements I have, at various times, attempted to construct an essay that would serve the ends in view. But at almost every line I was confronted by the dread that, by the very writings, the youthful mind might be directed to temptations that might not otherwise come to it.

It was my fortune, at the second conference for the Prophylaxis of Venereal Diseases, held at Brussels early in September, 1902, to receive a copy of Professor Fournier's article addressed "To Our Sons When They Have Reached Their Eighteenth Year." This admirable paper, written temperately, with much wisdom and great tact, indubitably meets the requirements of the sons of intellectual people. The temptation at once presented itself to translate Professor Fournier's paper, but throughout it is permeated with the spirit which makes it so eminently acceptable to the French line of thought. It would not apply as well in our own country, where the Anglo-Saxon manner of thinking and living predominates. Appreciating the need of a similar effort it is now attempted in the hope that better pens will take up the matter for the benefit of the rising generation.

The proposition, as suggested before, involves the problem, at what period of the young man's life this information should be imparted to him. Those closest to him must be the judges of the opportune moment.

The remainder of this paper consists of:

1. The evidences of awakening genesic tendency.
2. Masturbation and the impulses or defects that lead thereto.
3. The evil influences that mislead youths into immorality.
4. Prostitution, public and clandestine, and the mental and physical destruction they bring.
5. Gonorrhea, chancroid, chancre, and their sequelæ.
6. Advertising quacks, nostrum venders and an exposé of the methods they employ to swindle those afflicted with real or imaginary genitourinary and other ailments.
7. The reasons why a youth with a real or fancied illness due to immorality should consult a physician whom he knows, or whom his father knows.
8. The reason why reputable practitioners do not advertise.

These matters, being addressed to boys, are necessarily presented in such elementary outline and puerile language that they have no place in a scientific publication. The author therefore requests their omission here, but for completeness will add them to the reprints of this article, which will be furnished to physicians on request to that effect.

31 West Sixty-first Street.

DISCUSSION.

DR. JAMES J. WALSH, New York—The great universities of Europe, especially those in Berlin, have deliberated on this question, and the students are taught what is meant by venereal diseases and what their significance is. This is certainly not a pleasing question for deliberation, but it is an exceedingly important one. At the University of Berlin a course on the significance of venereal disease, open to all the students, is supported out of the emperor's purse, and is very largely attended, thousands of young men attending such lectures. The time must come, and shortly, too, in America when the universities do something to protect the students and give them this much-needed knowledge. At the present time all

the universities are necessarily situated in the large cities, and the young men from the country are invited to come to the city, where they meet with the dangers of city life. I think it is our duty to give these young men such knowledge as will protect them against the physical evils of venereal diseases. Faculties which do not make some provision for this are neglecting a serious duty. Any objections to such a course being instituted in our universities are founded on pusillanimous prudery.

DR. F. W. ROBBINS, Detroit—I think the paper is written in a strong style and will impress the readers. I think that mental impression is of more importance to the youth than the mere knowledge. It seems to me that the period of life at which the intelligent young are instructed in these matters is, in most respects, too late. There are two periods in the boy's life when he should be impressed with this knowledge: 1. The early period, which comes at the ninth or twelfth year. Children at this period can scarcely be expected to be much impressed with such a paper in which there is so much discussion. Then it is that the boy more particularly requires the attention of the father and not of the physician. 2. At a later period, when the boy goes to school, he should be given this knowledge. I believe it is an injustice to allow these boys to go without this precious knowledge. I think it is not so much the knowledge as the mental impression which keeps these boys moral.

DR. DELANCEY ROCHESTER, Buffalo—I am particularly interested in Dr. Valentine's paper because twelve or fifteen years ago I presented a paper on a similar subject before the American Academy of Medicine. I believe the proper time for giving such instruction to these boys is during the high-school period, and the best way of imparting this knowledge is by the proper teaching of physiology in the schools by physicians. The whole subject of physiology should be taught and not—as at present—only part, and that imperfectly. The truth should be taught; and that is that there are two great functions of the organism, namely, the preservation of the individual and the perpetuation of the race; that the functions of the various organs of the body are subsidiary to one or other of these great functions.

A thoroughly careful and competent teacher could show by the history of the complete separation of the sexes in plant and animal life that there has been developed the most beautiful in flowers and the noblest in animals. Time does not permit me to elaborate the scheme, but I thoroughly believe that physiology taught in this way would arouse in each one a noble respect for the human body in all its parts and a determination to do all in his power to develop a perfect human being and to keep it pure and holy. I believe that by careful selection of teachers physiology could thus be taught in the public schools.

DR. THEODORE POTTER, Indianapolis—My experience has led me to somewhat the same conclusions as Dr. Valentine has reached. There are two periods in the boy's life when such instruction can be given: 1. At the time of puberty, when the boy is at home under the influence and control of his parents and family physician; 2, when he goes to school or college. At this latter period he will look on such instruction as may be given him in a serious way. If I am allowed to differ with the last gentleman who spoke, I must say that I question whether the public school or the intermediate school will give the proper opportunity for giving such instruction, because the boy is more or less immature at that time and looks on such teaching as frivolous and makes a joke of it. Later he will listen and take it in a more serious way. When attempts have been made by public school teachers to instruct the boys in this country they take it as a sort of joke; but this is not so among the college students. It really is surprising what a great amount of ignorance is displayed by those young men who are entering or who have gone through college. I have had experiences in the west as well as the east in institutions, and I have seen the most lamentable examples of young men, not bad men at all, who have gotten into trouble largely through ignorance. This is the point: The young man goes free for the first time when he enters college and, since human

nature is imperfect, when he reaches this time of freedom something goes wrong and it is largely through lack of proper instruction. I believe Dr. Valentine is right when he states that when the young men attend college, reaching the age of maturity, then is the time that serious instruction should be given.

It has been my habit, and this I think should be done by the physicians all over the country, to say to my patrons who have boys, that I am going to talk to a few boys at my house and if they wish they may send their sons. Invariably I have met with a willing response, and I know that my efforts have been crowned with success, so far as instructing them is concerned.

DR. M. M. SMITH, Austin, Texas—I desire to lay special stress on the influence exerted by the home circle in the prevention of venereal diseases in young men. During the earlier years of the boy's life he is constantly with the mother and if she is careful of his conduct and associates and watches him carefully and teaches him obedience and morality during these years, instead of spending much of her time at card parties or other amusements, when the boy runs loose about the streets during her absence, he will show the value of this watchfulness in his character. Equally important is the duty of the father, and especially is this true when the boy reaches the age of puberty. This is the time the father should be his companion and friend, and especially watch his conduct and companions and guide him safely over these few years when he is developing into complete manhood. A little denial of lodge meetings or the absence from clubs or other social functions will result beneficially to the boy's welfare in life. It is too often the case that the parents are earnestly at work to further some charitable and noble enterprise in that public-spirited manner; but at the same time they are neglecting their own children at a time when their influence will leave its effects all through their lives. The subject should engage the attention of the parent, the teacher and the physician; in fact, on the proper solution of the subject depends the future welfare of the nation.

DR. FRANK A. JONES, Memphis, Tenn.—I doubt very much the propriety of bringing this matter before the laity as advocated. By doing so there will be a tendency for the boy of young age, who is disposed to look further into such matters, to investigate further with disastrous results. We meet sexual neurasthenia which is purely an imaginative condition; many come to us with trivial affections and even talk of suicide, and this may be the result of publicity being given to such matters. I do not think this subject should be placed before the public. Try and enjoin on the young men this, that the way of the transgressor is hard. I think the young men can be reached better through the medical profession than through the public press or other means of publicity. I think it would be wise to distribute Dr. Valentine's article by the thousands to various physicians in the American Medical Association.

DR. E. L. STEPHENS, Des Moines—Before the boy reaches the age of puberty I think he should be taught the sacredness and naturalness of the sexual instinct, and this can be done in a quiet way. There has been published a book, "Almost Fourteen," by Mortimer Warren, which I think is most suitable to place in the hands of young men, and the only one that I have been able to find after nearly forty years' search. That is, I believe, the only one that can be safely placed in the hands of young men as being scientific and pure. Since the American Medical Association has been reorganized we now have a means whereby we can legitimately place such information before the public; previously it could only be done by quacks. Now each councilor in each district has the privilege of using the public press for disseminating proper information. Why not take this opportunity for exercising this point? I would not think it proper, nor would I advocate placing posters in water closets, etc., but we can present through the public press the right ideas and the right information which would offset the wrong impressions given the laity by charlatans and quacks.

DR. WALTER SHROPSHIRE, Yoakum, Texas—I think that if anything is to be accomplished toward protecting the young:

of this country it should be done at a time when it would be effective. When the boy reaches college it then is too late. If we should wait until some definite period we should select that period when such instruction would be most efficient and that is concomitant with the development of the sexual function in the boy. When he first learns of this function he should be taught the dangers of its misuse. I really believe that physicians should teach physiology in the public schools and, at the same time, they should teach regarding the sexual function and the dangers which its abuse entail.

DR. FERD. C. VALENTINE, New York—Naturally it was impossible in the brief synopsis which I presented to cover the entire ground; that has been largely done by the gentlemen who so kindly discussed my effort.

With regard to Dr. Walsh's remarks, I may say that the universities in Germany, beginning in Berlin with Lassar, have given instructions to students regarding the dangers, etc., of venereal diseases. Lectures are delivered to students of all the departments of the university. The brilliant success of Lassar was so encouraging that it caused an increase in the number of such lectures, with exceedingly good results. But you may ask how many of those young men who came there to be educated and were instructed in venereal diseases had not unfortunately educated themselves. In Berlin the war is directed against the repetition of contracting such diseases, as well as instructing regarding their nature and results. I agree with Dr. Walsh, that some method should be introduced in this country to teach the young men the evils of venereal diseases. I wish to emphasize his remarks and say that university students who attend these lectures derive much benefit at the time when they certainly are qualified to receive such instruction.

What Dr. Robbins says regarding the time for receiving such instruction is undoubtedly correct, but he says it is not so much knowledge but impression which is of value, and that they should be taught at an impressionable age. But what is that age? That varies with the individual. There are some boys who are impressionable at the age of 12. I am now treating one not quite 14 years old, who has a gonorrheal prostatitis. This boy is the only son, in a good family, and has been correctly raised. With six others he was solicited by a girl of 14; all six contracted gonorrhea. Had he been instructed at the period when he was of the impressionable age his misfortune might have been averted.

FAT NECROSIS OF THE KIDNEY.*

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DUBUQUE, IOWA.

When we consider the rather superficial location of the kidney, its importance and the various pathologic changes to which it is liable, it is strange that for so long a time it eluded careful examination and escaped the surgeon's knife. In the past five years, however, the surgeon has made determined, successful efforts to make good that deficit.

Fat necrosis in the tissues of the body is neither a new process nor a new discovery. It has long been recognized in the several tissues of the human body, notably in the abdomen, in the abdominal walls, in the subperitoneal fat, in omental structure and in the pancreas. For a long time it was supposed to be due to some form of pancreatic disease, but it is now well known to occur independently of any affection of that organ. The accepted physiologic view is that fat may be formed in both animal and vegetable bodies from albuminoid matters. Proteids break up in the body into nitrogenous and non-nitrogenous compounds. This is

demonstrated in the human subject and by experiments on the lower animals. The non-nitrogenous compounds not being completely oxidized in the cells are formed into fat. The process actually occurs wherever fatty substitution takes place in the animal cell. Hoppe-Seyler takes the view that fat is not directly formed from albumin, but that glycogen is first formed and that fat is a resultant product. Volt's view, and the one generally accepted, is that fat is formed directly from proteid material. Graham Lusk,¹ after quoting various experiments along this same line, concludes, "It seems rational that in acute fatty metamorphosis of the cell that dextrose found may be quantitatively converted into fat."

The physiologic fact, I think, as well as the chemical changes underlying it, are reasonably well understood and generally accepted, but the etiologic factors, active and predisposing, are by no means clearly settled. Fat necrosis, as the term is employed in this paper, denotes a type of necrosis to which certain tissues are liable, separate and distinct from fatty degeneration. It presupposes the fact of fatty degeneration and, subsequently, a necrosis forming of the entire structure of fatty emulsion.

According to Stengel, there are a few microbes which form emulsifying ferments, which may cause this fatty emulsion. The term "liquefaction necrosis" probably better conveys the correct meaning. Ziegler says, "A liquefaction necrosis may occur in the tissues where the cell wall becomes dissolved in the fluid present in the part." "Fatty degeneration may so terminate," says this distinguished authority. Bacteria is said by some observers to be concerned in this change. The part played by these organisms is still under investigation. Dörsch says, "The cortex of the organ is most frequently involved, though the medullary portion is frequently affected in a minor degree." Hektoen considers this condition due usually to the escape of the fat-splitting ferment, resulting in the formation of fatty acids and lime salts. Gaylord states that fat in the kidneys occupies the space between the lobules in the connective tissue.

There are many causes assigned for the formation of a fat necrosis in the tissue, either with or without liquefaction:

1. Changes in the supply and composition of the blood.
2. Diminished oxygen.
3. Blood diseases.
4. Narrowing of the arteries supplying the part. (Narrowing of the blood vessels of the heart leads to fatty degeneration, according to Hektoen.) Fatty degeneration of the kidney in pregnancy is due to disturbed circulation, says Stengel.
5. Persistent venous congestion. Displacement of the kidney producing, as it certainly does, changed blood supply, diminished oxygen, torsion of the renal artery and, together with a constant venous congestion, is a sufficient cause for liquefaction necrosis of the organ.

In the literature which I have been able to examine the references to this subject have been sparse indeed. A case is reported by Dr. T. Charlewood Turner² of a girl 13 years old who died of pericarditis. The autopsy revealed a fatty kidney, and he described a necrosis with softening and, though it is not distinctly stated that the necrosis affected the fatty tissue, yet from the present light I think this a fair presumption, that the

* Read at the Fifty-fourth Annual Session of the American Medical Association, in the Section on Surgery and Anatomy, and approved for publication by the Executive Committee: Drs. A. J. Ochsner, J. E. Moore and De Forest Willard.

1. Report before the American Physiological Society, Boston, Tenth Annual Meeting.

2. Transactions Pathological Society of London, 1886.