CHAPTER IV

THE UNSPEAKABLE QUACK

The Criminaloid. "By this (term) we designate such as prosper by flagitious practices which have not yet come under the effective ban of public opinion. Often, indeed, they are guilty in the eyes of the law; but since they are not culpable in the eyes of the public and in their own eyes, their spiritual attitude is not that of the criminal. The law-maker may make their misdeeds crimes, but, so long as morality stands stock-still in the old tracks, they escape both punishment and ignominy. Unlike their low-browed cousins, they occupy the cabin rather than the steerage of society. Relentless pursuit hems in the criminals, narrows their range of success, denies them influence. The *criminaloids*, on the other hand, encounter but feeble opposition, and, since their practices are often more lucrative than the authentic crimes, they distance their more scrupulous rivals in business and politics and reap an uncommon worldly prosperity."—Professor Edward Alsworth Ross, in the *Atlantic Monthly.*

As the main purpose of this book is an arraignment of the legalized abuses, if I may so word it, of the medical profession, it might seem at first thought that the advertising quacks and their methods were beneath our notice. This, however, is a mistake. Humiliating though the admission is, the fact remains that some of the most shameless of these outcasts are nevertheless legitimate practitioners of medicine. And as the law is now interpreted and enforced in most states, nine out of every ten manufacturers or vendors of patent medicines, provided these are not misbranded, are in as legitimate a business as though they were making cloth,

or bread, or other necessaries of life, instead of undermining the health of the community.

The modern quack, I repeat, is too often a *bona fide* doctor; that is to say, he has graduated from some sort of a medical college and succeeded in passing a State Board examination, thereby receiving his license the same as other practitioners. But these gentry are radically different in character and temperament from the "ethical" doctor, no matter how far the latter may depart, in secret, from the high standards with which he started. For the reputable practitioner is at least governed in his outward conduct by the conventions and proprieties of the profession, whereas the quack knows no law, social or professional, and is equally ready to violate legislative enactments, provided that he can keep out of jail. He is a moral defective,—in short, a high-grade criminal who employs his medical knowledge simply and solely as a cloak for graft and imposture. That he finds a lucrative field and a never-failing mine of wealth in the complete ignorance, the morbid fears and the easy gullibility of the unsuspicious public, goes without saying.

It is a well-known but none the less curious fact that many persons of unusual intelligence—shrewd, hard-headed business men, for instance, whom ordinary sharpers would not dare to approach—will frequently "fall" for some crude and obvious imposture in the form of a patent medicine, or an "electric" belt, or a "radium" brace, or the like. And what is more, they are not open to argument in such a matter. They will show implicit faith in "testimonials," which if submitted to them in support of anything else would arouse nothing but contempt. All of which goes to support

the old adage that "knowledge is power." Where we do not *know*, there is no alternative, but to *believe* or *disbelieve*, and our course is usually in the direction of our hopes and desires.

Such gullibility is next to impossible in those whose minds have had the discipline of scientific training. The ordinary untrained intellect, no matter what the degree of native common sense, does not readily appreciate the difference between authoritative knowledge and baseless assertion. The extravagant and preposterous claims made by quacks, obviously false and impossible to those who know, are more or less alluring baits to those who do not know. Instead of consulting the family physician, a man who has spent a lifetime in the management of disease, these dupes will secretly buy a wonderful new "catarrh cure," or an absurd "electric belt." Being unfamiliar with scientific thought, they are on unfamiliar ground from the start. Under the spell of a smooth-spoken quack, they will eagerly buy the gold bricks handed out to them, and clamor for more.

Even in New York, the great metropolis, such advertisements as the following are constantly appearing; and though generally suppressed and their imaginative authors frequently prosecuted, other outlandish claims just as rapidly crop out. These, of course, are old-time quacks, despite their modern nomenclature, and so render themselves liable to arrest:—

"Dr. C. Conrad, Founder, President and Medical Director of Vetus Academia Physio Medica (Inc.), Founder, President and Director-in-Chief of the Platen Institute (Inc.), Lecturer on Psychology and Physiology in the Old Physio Medical College; Founder of Osteotherapy; Demonstrator and Lecturer on Osteo-

therapy at Platen Institute; Founder and President of New York Society of Osteotherapeutic Physicians; Founder and Editor-in-Chief of the *Twentieth Century Journal in Osteotherapy;* Vice-President of the American Association of Physicians. Office, 56 West Sixty-fifth Street, New York, N. Y."

It is scarcely necessary to say that these institutions and societies were largely fictitious or else specially created by " Doctor " Conrad for his exclusive benefit. " Doctor " Starken's generous choice of baths also suggests a lively imagination, though the dupes who frequented his erstwhile popular establishment firmly believed in the doctor's ability to " deliver the goods." His " professional " card read as follows:

" C. F. Starken, Physician of Natural Cure and Balneo-technic, cures all kinds of Diseases without Medicine or instrument, Gives all kinds of massage and Heat Gymnastics, Magno-Electro and Hydropathic Treatments. Also all kinds of Cure-Baths, Herbs, Mineral, Sulphur, Iron, Lithion, Pine-needles, Aromatic and all Medicated baths. Specially for Blood purifying and good Complexion. Moussir, Steam, Hot Air, Vapor and Astringent Baths, For Males, Females and Children. Price Liberal. Dr. C. F. Starken, Consultation: 9-10 A. M.; 2-3 P. M. Fifty-second Street and Broadway, New York."

In Germany the public is protected by the most stringent laws against quackery, and those who attempt to circumvent the law usually land in prison. Only recently an advertising quack was sentenced to a long term of imprisonment with hard labor for " promising the impossible." Were such drastic measures taken in this country, I doubt if Sing Sing would accommodate the sudden accession to our criminal population.

In Germany, moreover, there is a wide-spread respect for authority and learning, so that the people look naturally to the medical profession to decide in such matters, and woe betide the gentleman who is officially denounced as a charlatan. In England, if the public do not pay quite so much deference to the doctors, they invariably listen to Henry Labouchère, the editor and proprietor of London *Truth*, who for a generation or more has fought and exposed every kind of fraud and humbug.

But to find the ideal remedy for quackery and its attendant evils one has to go to New Zealand, where the recent Quackery Prevention Act holds the publisher of fraudulent advertising as equally guilty with the advertiser. Clause 5 of the Act reads as follows:—

"If any person causes any statement to be inserted in breach of this act in a newspaper printed and published in New Zealand, the printer, publisher and proprietor of that newspaper shall severally (and without excluding the liability of any other person) be deemed to have published that statement in breach of this act, and shall be liable for an offence against this act accordingly."

Of course, we have laws against fraud, which, if properly enforced, would soon clear the country of every kind of medical swindler. "Obtaining money under false pretences" is a misdemeanor at common law and by statute in nearly every state in the Union. Why, then, is the law not enforced against advertising quacks? For two reasons. First, because the American people like to be humbugged; and secondly, because the fakers have plenty of money and use it freely, both with the press and with legislators, to ensure their protec-

tion. The exhaustive exposures made by the American Medical Association and similar bodies are thus, to a large extent, ignored, and quacks continue to " promise the impossible " and acquire vast fortunes by preying upon the credulous and ignorant sick. Their license to practise is therefore made as legal as that of the decent medical practitioner. As Mr. Labouchère puts it, we authorize them to " help to fill our hospitals and cemeteries."

Nevertheless the State of New York discovered the other day that it has an old law specifically prohibiting " untrue and misleading advertisements." Assistant District Attorney Moscowitz, of New York City, who unearthed it, applied it successfully against a dealer who advertised that he had purchased several thousand raincoats at a " customs seizure " and was going to sell them at marvellously low prices. It was easily proved that no such seizure had been made, and so the astonished dealer found himself under arrest.

" Now that the ball has been set rolling," writes the editor of the *Journal of the A. M. A.*, " the possibilities of this resuscitated law seem great. For instance, the Dr. A. C. Sanden Company advertises in the New York papers the wonderful virtue of its ' health belt.' A man wearing this device ' cannot grow old; he must be young forever.' Would this come in the ' untrue and misleading ' class? In another New York paper of the same date we are told of the ' miraculous cures of cataract,' in fact, ' all eye diseases,' which the ' Magic Eye-Lotion ' brings about! Can this be ' untrue and misleading '? And, in another line of activity, we are told through a New York paper that the ' bland qualities ' of ' White Rock ' ' make high-balls harmless.' Either this is ' untrue and misleading ' or physiologic chemistry needs re-

vising. These are but a few to start with, but the field is broad and there is no lack of material to work on."

"As one learns in detail of the methods and dangers of the modern medicine quack," writes Mr. Champe S. Andrews in the *Medical News*,[1] "there is at first a tendency to believe that the credulity of mankind is growing alarmingly greater, but a deeper study of the subject shows that the credulity upon which the charlatan relies, is the credulity that arises from weakened powers of resistance, from disordered minds, and from the mirage that such minds see mirrored in the clear sky of hope. The victim of the medical mountebank, by reason of his susceptibilities and infirmities, is in a class to himself and should have the especial care of the State."

And so he does abroad—here it is the "mountebank" who gets all the protection.

In an investigation of the psychology of quack influences, one fact is brought out with peculiar distinctness, viz., that all successful appeals to the public must be based on the skilful exaggeration of the commonplace symptoms of slight indisposition or the most trifling ailment. Certain erroneous beliefs regarding the gravity of these symptoms have consequently become firmly implanted, and when a physician contradicts them he is regarded with surprise and incredulity. The quack, on the other hand, fosters and strengthens all these delusions by every means in his power. To illustrate this I will mention a few of the most common of the exaggerated symptoms.

Pain in the back is popularly supposed to indicate

[1] "Medical Quacks, their Methods and Dangers." The *Medical News*, January 7, 1905.

kidney disease. Especially must this be so if the pain is felt in the "small of the back," a mysterious area located anywhere from the neck to the lower end of the spine. Now, as a matter of fact, the serious diseases of the kidney seldom or never give rise to pain in the back. Such pain as is commonly experienced there is almost invariably from muscular rheumatism, which is an insignificant affection and never dangerous to life. Nearly every person has, at one time or another, a touch of muscular rheumatism, or lumbago, in the back. But all have learned in a vague way of the terrors of Bright's disease, and it is an easy matter to make sick or ailing people take the most far-fetched and gloomy view of their symptoms. Indeed, when we consider how few people know anything about anatomy or physiology, it is no wonder that the quacks reap such a rich harvest by playing on their ignorant fears. When the poor dupes have been positively assured that their pains in the back are kidney pains, the deception is carried still further by an inquiry whether the patient ever has to get up in the night to urinate. He remembers, with sinking heart, that this has happened occasionally, though he forgets that at such times he probably drank an extra cup of tea or coffee for dinner. The quack shakes his head sagely and says he must analyze a specimen of the urine. This he does in the patient's presence, impressing his ignorance by a display of test tubes, burners and colored chemicals. The usual trick is to put in some diluted acid, and then add a little bicarbonate of soda. Now when these two substances are mixed together—even in clear water—they combine chemically, with an ebullition of carbonic acid gas. The trembling patient witnesses this experiment with vague

terror, and begs to know what it means. Then the quack places a hand on his shoulder and says: "My friend, I will not deceive you. You are in an advanced stage of Bright's disease. It's lucky you came to me, however, for I am the only man in the city who understands kidney disease, if I do say it myself. I will guarantee to cure you in six months. If you go to any other doctor you will be dead in three months."

Pain about the region of the heart is erroneously supposed to be a symptom of heart disease, but just as pain in the back seldom or never indicates kidney trouble, so pain near the heart is scarcely ever present in organic heart disease. This pain is nearly always from the stomach, which is connected with the heart by many nerves. Thus stomach trouble, or indigestion, often reacts upon the heart and, at times, causes an irregularity in its beat. So that, owing to the great prevalence of stomach trouble in America, the quacks do a big business in "heart disease."

Another trump card for the quack to play is varicocele, which is an exceedingly common condition among men. Now small varicoceles do no harm whatever, and even larger ones, though they may cause slight discomfort, are practically harmless. Should they become troublesome they may easily be removed by a simple surgical operation—otherwise a suspensory is all that is needed. The quacks, however, make the astounding statement that varicocele is the first stage of paralysis, and that, if not treated early, and by their particular method, the patient is doomed. A little knowledge of anatomy and physiology would show any man what a varicocele is and how it is formed, and such knowledge would also convince him of the absolute falsity of the

quack's statement that varicocele could have any causative influence in paralysis.

Catarrh is yet another of the quack's great strongholds, and for the same reason as the foregoing, namely, that it is a very common complaint. But, while it is an annoying affection, it is not in the least dangerous, although it is usually chronic in its course and difficult to get entirely rid of, hence being an ideal complaint for the quack's purpose. What more easy than to inform a patient that his catarrh will surely lead to consumption, cancer or glanders? The alarmed but unsuspecting dupe accordingly pays down a sum of money and starts in with a formidable course of treatment, which lasts just as long as his money and patience hold out.

But perhaps the frauds that pay best of all are those based upon venereal diseases, real and imaginary. The scoundrels in this case usually resort to small pamphlets, purporting to set forth the evils and horrors of "lost manhood," self-abuse, impotence and sterility. This lurid and misleading literature is put in the hands of youths and even boys. Men are often paid to stand on corners near to schools and other institutions to hand pamphlets to the boys as they come and go. It is a great pity that so much ignorance prevails among young people in regard to matters of sex, and that parents are so backward and diffident about mentioning them to their children. If such instruction were the rule, instead of the exception, boys and girls would be forewarned and forearmed against the real danger—the danger that lies in ignorance. The result is usually a morbid curiosity to learn more of this subject about which there is so much mystery. Such curiosity is al-

ways satisfied in time, but secretly, and often through the vilest of companions and associations.

The flaming literature of the quack at once arrests the attention of young men in this state of mind. The pamphlets are worded with diabolical art and cunning. The most ordinary and commonplace conditions are twisted into pathological symptoms. By the time a poor youth has perused the tissue of lies he is about convinced that he must be somehow a victim of venereal disease, even though he may never have been actually exposed to it. And if, in addition, he happens to have varicocele, he sees no future but that of an incurable paralytic. But at last a ray of hope illumines his darkened soul. The final paragraph states that the writer—this altruistic being who consents to practise medicine solely in the interests of humanity—has discovered the sovereign remedy. The victims of "youthful errors" and "lost manhood" may rely on him and him alone to save them.

"Young men! Come to me, if you would be saved from the errors of youth!" Some such legend is conspicuous in nearly every public toilet, a bait for the ignorant and unwary.

But thousands of grown men, who ought to have better sense, patronize these charlatans for treatment of venereal diseases. And here is where one of the worst and most far-reaching evils occurs. A man engaged to be married has contracted venereal disease. He may have acquired it during the jovial, alcoholic wind-up of a stag party, or perhaps his moral standard is so low that he does not consider his engagement as binding him to shun vicious associations. In any case he is now badly frightened, and in desperate haste to get

cured before the wedding day arrives. If sense has conquered shame he consults his family physician, and the latter strongly advises him to postpone his marriage indefinitely. For it takes not less than three years to cure syphilis, and at least six months to eradicate gonorrhœa. Just at this time, however, our Lothario reads a quack pamphlet. Ah, this is just what he wants! "All venereal diseases cured to stay cured after a few weeks' (or days') treatment." So he rushes off to the "specialist," and puts himself in his hands. In a brief time, as the latter promised, the symptoms have subsided or become obscured, and the marriage consequently takes place. A little later, however, the innocent wife is a victim of the loathsome venereal disease of which her husband thought the quack had cured him.

The power and influence of the advertising quacks depends largely upon the complete ignorance of the general public in regard to all matters medical, anatomical and physiological. Very few people know where the liver is. Several times, while treating patients for obscure or doubtful cases of a certain disease, I have been seriously asked: "Doctor, if I really haven't this disease, isn't there danger that your medicine might give it to me?" Absurd as is such a question, the enquirers have not always been fools. That it *could* be asked at all, and by persons otherwise intelligent, is a significant fact, and one that goes a long way toward accounting for the widespread and pernicious influence of the quacks.

No better illustration of this appalling ignorance, coupled with complete credulity, could be found than the two pathetic cases given by Dr. J. E. Miller (of Rogersville, Tennessee) in the *Journal of The American Med-*

ical Association of May 11, 1907. Undoubtedly hundreds of thousands of such cases would be unearthed were a systematic investigation made by the federal or the various state authorities.

" Case 1. In the latter part of May, 1906, I was sent for to amputate the breast of Mrs. M. T., aged about 55, who resided in this town. I found her in great agony. A cake of absorbent cotton covered the entire left breast, arm, side and back, down to the crest of the ilium. About three months prior to this time she had discovered a small, freely movable tumor about the size of a robin's egg in the left breast; it was not attended with pain or any discomfort. She became somewhat alarmed, and her sister, with whom she lived, found an advertisement in their religious paper of ' Dr.' D. M. Bye and his ' Wonderful Oil Cure for Cancer.' For many weeks prior to the time I saw her she had been using the ' oil cure ' with the result that all the skin and part of the flesh was burned off from the extensive region covered by the absorbent cotton, which had become converted into an extensive scab. (I see from one of his letters to her that the application of cotton was directed, and that in her case the ' oil ' had been somewhat modified, making it stronger.) The condition was septic in the highest degree, suppuration and absorption going on beneath the cake of cotton. I was able to remove the ' dressing ' by insinuating peroxide of hydrogen beneath it, the whole coming off in one solid mass. The wound had the appearance of a deep-seated burn. The lump in the breast, I was informed, had undergone no perceptible change. The woman was in a pitiable condition and no operation was considered. She died from sepsis and exhaustion in two days after coming under my observation.

" The little tumor, while probably malignant, was

not a factor in her taking off, but death, in my opinion, was directly due to the corrosive applications made by direction of 'Dr.' Bye. It appeared that she had paid the Bye concern $500 and at the time of her death a box of the 'treatment' arrived at the express office, for which $50 had been paid. The Bye concern refused to take it back or to allow the sister anything whatever for it, although they had guaranteed a cure. Removal of the growth was the only treatment that should have been considered in this case."

"Case 2. Mrs. B., a widow, with several small children, totally blind from glaucoma, had been told by myself and other physicians that nothing whatever could be done to restore or in any manner to benefit her sight. She was written to by 'Dr. Coffee, Eye Specialist,' who, without the least idea of the nature of her trouble, undertook to guarantee a perfect cure. The woman was very poor, but she managed to pay him $8 a month for more than two years. When she could no longer raise the necessary amount, he reduced the fee to $5 and this payment was kept up for many months, until it became utterly impossible for her to pay him anything whatever. He used the 'absorption' method. His letters to this woman are before me, and are cunning and ingenious. They explain in a graphic manner that a 'membrain' has formed over the sight, and just as soon as his medicine 'absorbs' the growth, her vision will be as good as ever; that 'vision would not return as long as there was a vestige of membrain,' that the 'membrain was growing thinner all the time,' and that it would return very suddenly, and that it would be disastrous to give up treatment, that maybe one more application of his absorbent would have been sufficient."

As the reader is no doubt aware, two prominent periodicals—*Collier's Weekly* and the *Ladies' Home*

Journal—have fearlessly exposed the quack and his methods, and in so thorough and energetic a manner that incalculable good has been done. Names and photographs were freely used, and so carefully were the proofs collected that suit was brought in only one or two instances. Mr. Samuel Hopkins Adams' series on "The Great American Fraud," which ran in *Collier's*, has since appeared in pamphlet form and has been largely distributed by the American Medical Association.

Mr. Adams investigated every phase of the subject with a completeness and vigor that leaves nothing to be desired. Several of the leading quacks, knowing they were in for an exposure, wrote begging him to pass them with his big stick. But Adams, following the excellent example of Labouchère, spared none.

Some of the most hideous schemes that he discovered were the so-called "cures" for drug habits. These "cures" were analyzed by expert chemists and found to contain large doses of morphine and cocaine. Another piece of deviltry was the "nasal catarrh spray," which also contained cocaine. Use of this for a short time almost invariably develops the frightful cocaine habit. This was the deliberate purpose of the quack, so that the victim would buy more and more of his "dope." Mr. Adams investigated a large number of the "testimonials" as to the wonderful cures wrought by this and that quack or patent medicine, and in every case he found them spurious. Either they were paid for in cold cash, or else the testifiers were brought to admit that they lent their names and photographs because of the satisfaction derived from seeing themselves in print.

The two influential publications above mentioned, and many other prominent monthlies and weeklies, have long since dropped all patent medicine advertising even to hair tonics and medicated soaps. The city dailies, the country weeklies, and especially the religious journals, are now the worst sinners in this respect, but it will be only a question of time till public opinion will demand as high a standard in the advertising columns of the press as in the body of the publication. When the privilege of advertising is denied to medical fakes, Uncle Sam will surely be shamed into denying them the use of the mails, either for circularizing the public, for receiving money, or for shipping their medicines, and when that auspicious day arrives, the unspeakable quack will have sunk into comparative harmlessness. In another generation, I venture to assert, a gentleman following this nefarious calling will be quite as much of a curiosity as a savage wolf at large. Both wolf and quack, unless I am greatly mistaken, would find themselves promptly placed behind bars.

But we must not overlook one great legislative victory that has already been won. I refer to the Federal Pure Food Law which went into effect January 1, 1906, and has unquestionably protected the public from many of the grosser frauds that were so shamelessly practised not only in the mishandling of drugs but in the drugging or adulterating of foods and liquors. The first case brought into court was that of Robert W. Harper, of Washington, D. C., a bank president and capitalist, but also proprietor of Harper's "Cuforhedake Branefude," which, although extensiely advertised as harmless, was found to contain the following ingredients:

Alcohol (per cent. by volume).....24.2
Acetanilid (grains per ounce).....15.0
Caffein (per cent.)..... 1.5
Antipyrin (per cent.).....1.0
Potassium, sodium and bromides also present.

Mr. Harper, as may be remembered, was fined $700, and narrowly escaped going to jail, whereupon many patent medicine manufacturers and advertising quacks decided to change their calling. Just why a man may be punished for misbranding a preparation and yet allowed to tell the most preposterous falsehoods about its curative properties or about his own skill in medicine is, of course, not very clear. Nevertheless an excellent start has been made, and all who desire to see the suppression of quackery in all forms should take courage.

In the meantime it behooves the regular practitioner not only to expose and condemn the practices of these swindlers, but to assure himself that he has been in no wise to blame for the deplorable evil. For, as Dr. John B. Roberts (of Philadelphia) remarks,[1] " the sick often seek the advertising doctor, and believe the false assertions of the patent medicine label because they have found the medical men known to them to be incapable, inefficient or so exorbitant in fees that help seems impossible at their hands."

" The family," adds Roberts, " which can obtain efficient medical aid for a moderate fee near its home does not often drift into the hands of the recognized quacks."

[1] At the regular meeting of the Medical Jurisprudence Society, Philadelphia, March 19, 1906. As reported in the *Journal of the American Medical Association,* April 21, 1910.

CHAPTER V

VIVISECTION—STRAINING AT THE GNAT

"So long as civilization exacts pain and toil, suffering and death of the lower animals, not only for commercial and industrial reasons, but in many cases simply for the gratification of vanity or the indulgence of luxurious tastes, so long will the reformer, desiring to alleviate animal pain, find an ample field for the exercise of his well-meant efforts, without ignorantly interfering in the most altruistic of all scientific movements, viz., the prevention and cure of the diseases to which mankind has long been heir."—From an editorial in the *Journal of the American Medical Association.*

Perhaps no subject pertaining to medicine has received so much public attention and been discussed so heatedly as vivisection. Certainly no subject has inspired such positive and conflicting opinions from lay writers. That one side must be largely in the wrong, either in its facts, or in the deductions based upon these alleged facts, goes without saying. In the following pages I propose to show how woefully misinformed the public has been on this matter, and how severe a blow would be dealt to science and universal progress were vivisection prohibited by law. I refer, of course, to animal vivisection—human vivisection will be taken up in succeeding chapters.

Vivisection, to the general laity, means the dissection of living animals without the employment of anæsthetics, ostensibly for the advancement of science—in reality to gratify a lust for cruelty. There can be no doubt, after reading at random in the newspapers and magazines, that this is the popular conception. So, naturally and to the great credit of human nature, the belief

that such diabolical cruelty is rife among surgeons and biologists arouses extreme indignation, and a desire for legislation that will punish the offenders and protect the dumb sufferers from future outrage.

But this idea is in most cases entirely erroneous, that is, so far as it relates to reputable surgeons and medical instructors, and were there any truth in it none would be quicker than they to raise a voice of protest. Surely their scathing denunciation of the real evils that have crept into the profession is sufficient proof that the charges of the antivivisectionists are largely fiction. Public opinion is not only unfair, but displays weak judgment when it classes these benefactors of the race with heartless students and degenerates who have been found guilty of torturing animals for the mere enjoyment of their suffering. And in striving to place a ban upon all animal experimentation, they would cripple the humanitarian labors of the most disinterested men of science while virtually encouraging that selfish indifference to human life that so alarmingly pervades our ranks. As the St. Louis *Republican* said of the proposed antivivisection law in Missouri: "It might fitly be called an act to substitute children and their parents for dogs, cats and mice in surgical experiments."

The true facts of scientific vivisection are these:

When, in the interests of human life and health, it becomes desirable to ascertain, if possible, certain physiologic, pathologic or chemical processes, a suitable animal is chloroformed, or otherwise rendered unconscious or insensible to pain, and then such section is performed, or such drugs introduced into the circulation, as is necessary for the demonstration.

There was a time, not many decades ago, when vivi-

section could be performed only on the quivering flesh of conscious animals, no matter how keen the repugnance of the experimenter to the suffering that he caused. That time of horror was prior to the use of anæsthetics in 1846. Then the most exquisitely painful surgical operations had to be performed without regard to the agony of the patient, whose body was usually bound to the operating table. The sufferer might hope for no relief during the terrible ordeal save when the torture became so excruciating that nature granted a blissful though brief unconsciousness. And following the operation came a long and tedious recovery, with inevitable infection of the wound by pus, and the added pain and suffering and blood poisoning caused largely by the surgeon's hands, which his limited knowledge had not taught him to disinfect.

Now all this is changed. Chemistry has given us anæsthetics, and bacteriology has shown the surgeon how to prevent pus infection—two magnificent results. But to what do we owe our present knowledge of the properties of chloroform and other anæsthetics, and of the science underlying clean surgery? To animal experimentation almost entirely. This is a matter of sober fact, and those who deny it merely display their ignorance of the history of scientific progress in surgery. Chloroform used ignorantly is an agent very dangerous to life. Before Sir James Simpson introduced it into surgical practice he tested its effects upon animals. Many animals were killed in these experiments, but Sir James thereby learned its properties, its virtues and its dangers. Had he not used the animals for this purpose, several human lives would have necessarily been sacrificed and very possibly the fear excited by the first failures

would have prevented further experiments with so dangerous a substance.

Was this grand result dearly bought, or wrongly bought, at the sacrifice of the lives of a few lower animals? Those antivivisectionists who have never had to endure a surgical operation may say yes. Those who have been through the ordeal, or seen a loved one under the knife, will pause and think before they condemn a knowledge so acquired, which has spared themselves and others the unspeakable anguish that our forefathers were forced to endure.

Then as to clean modern surgery. Formerly it was the rule to have protracted and painful healing of wounds. Nowadays this is the exception. Why? Because wound infection has been studied scientifically. Its causes are understood and every modern surgeon knows how it may be avoided. In the old days, before Lord Lister's time, wound infection was so common as to be nearly invariable, and when, in very rare cases, it did not occur, the phenomenon was regarded with wonder and even suspicion. This gave rise to a gross surgical misconception. The formation of pus was actually hailed as a favorable sign, and hence came the absurd misnomer "laudable pus." We of to-day know that pus, far from being laudable, is the surgical result of all others to be feared, being the actual cause of peritonitis, blood-poisoning, deformity, suffering and death. Furthermore, the occurrence of pus in a supposed surgically clean wound is generally a serious reflection on the technique and ability of the surgeon.

All must admit that this knowledge of antiseptics and aseptics is an immense boon to humanity. It would seem that almost any sacrifice would have been justifiable, or

at least excusable, to secure this end. And how was this knowledge arrived at? By experiments on animals: in no other way could it have been gained, except by actual experiment on human beings. Are the lives of a few dogs, rabbits and guinea-pigs, then, to be put in the balance against the present and future welfare of humanity?

The endeavor to improve the condition of domestic animals is certainly laudable. No one is fonder of horses and dogs than is the writer of this book, and none could feel greater resentment towards those who ill-treat them. According to the religious systems of the East, humanity owes to the animal kingdom a certain responsibility which, in the case of the higher domestic animals, is supposed to be essential to their further evolution. This is a beautiful idea, being, in fact, the spiritual concomitant of the Darwinian theory of physical evolution.

But there is a moral danger in these humane movements in the interests of the "lesser children" of nature. It is an obvious fact that those who are prominent in such societies are liable to become abnormally interested in animal welfare and comfort. There is a strong tendency to exaggerate the importance and sensibility of the lower animals both in nature and in their relation to mankind. And with this abnormal interest in animals there appears, not uncommonly, a corresponding indifference to, or even dislike of, children. This attitude is not by any means confined to members of humane societies. In the high and fast society of the mentally resourceless rich it is the rule for young married women to display absurd affection for pet dogs, and to refuse to become mothers. Often we see such women lavish affection—or what resembles it—on a

hideous pug dog one moment, and in the next repulse an attractive child. Indeed it is the cult of the dog, as the *British Medical Journal* points out, that leads the antivivisectionists into some of their most remarkable aberrations, so that the preposterous yarns that have been spread throughout the United Kingdom, like the most effective pictures, nearly all relate to legendary canines.

An amusing though typical case was brought up in the House of Commons recently when Mr. Ellis Griffith asked the Home Secretary whether his attention had been called to a public experiment performed on a bull-dog by Doctor Waller. He described to the horror of his listeners how a leather strap with sharp nails was secured around the meek animal's neck while his feet were immersed in glass jars containing salts in solution and the jars were connected by wires with galvanometers. Mr. Gladstone explained that this dreadful experiment consisted in making the dog stand for a time in water in which common salt had been added. " If," continued the Home Secretary, " my honorable friend has ever paddled in the sea he will understand the sensation. The animal —a finely developed bull-dog—was neither tied nor muzzled. He wore a leather collar ornamented with brass studs. Had the experiment been painful the pain no doubt would have been immediately felt by those near the dog. There was no sign of this." Mr. Gladstone, therefore, did not take any action.[1]

This grotesque example—and similar cases could be multiplied—shows to what inhuman lengths such misplaced sentimentality can be carried. I say inhuman, for can a man claim a well-balanced mind and a normal

[1] As reported in the *British Medical Journal,* July 17, 1909.

love of his species, who, in the face of the alarming spread of poverty, pauperism and physical deterioration that British statesmen and sociologists alike admit and deplore, would attempt to direct the attention of the nation to the alleged discomfort of a robust, well-fed bull-dog?

"They are not to be laughed out of court," says *Collier's Weekly*, "these crusaders in a mistaken cause, for their contention of unselfish and ennobling principles. But their apparent humanitarianism is fallacious. Intended to reduce the sum of animal suffering in the immediate sense, it (the proposed New York State law) would in the end immeasurably retard the work of alleviating human pain and saving human lives." And in another editorial: "No more weak and foolish agitation has been started than this attack on medical progress for the sake of the 'poor defenceless dog.' There is enough wanton cruelty in this world, whether to animals, or to children, women and men. Let our sensational newspapers, let excited friends busy themselves with the millions who are needlessly in pain and keep their hands off that profession which is doing most to lessen the suffering of this world. A law opposed by all competent doctors in the world is a foolish and harmful law to pass."

"They are queer people—the antivivisectionists,"—remarks the New York *Times*, editorially: "Unhappy victims of what Doctor Dana called the zoophil-neurosis, their love of animals seems to involve an actual hatred of human beings. The sight of a child dying of diphtheria or spinal meningitis leaves them cold, but the killing of the chloroformed guinea-pig throws them into hysterics of indignation."

But the antivivisectionists are not consistent even in their defence of animals. What do we hear of the bleeding of calves to produce " white " veal; of the rough and unsanitary castration of animals from which painful and unnecessary wounds often ensue; what of the plucking of live fowls, the clipping of dogs' ears, the branding of cattle, the fisherman's amiable disregard of the struggling victims of his sport? And how shall we explain the indifferent attitude of the antivivisectionists and other animal champions toward the slaughter of animals for food? Surely if human health and life itself must not weigh against the discomfort or premature death of a few small animals, no amount of mere gratification of the palate should sanction the ruthless slaughter of the millions of cattle, sheep and hogs which our modern civilization so complacently sanctions.[1]

I have mentioned angling, but what of the wholesale and heartless destruction of animal and bird life that passes muster under the name of sport? Think of the countless birds and deer and fur-bearing animals that are ruthlessly killed and mutilated every year. Women who are really sincere in their love of animals do not need these feathers and fur trimmings on their hats. Epicures may desire venison, but they can get along without it.

Then again, why do we not hear more about the ani-

[1] According to Dr. Charles W. Eliot there are slaughtered every year in the United States more than 50,000,000 beeves, sheep and hogs, and 250,000,000 chickens, turkeys and geese. Last year more than 360,000 dogs and cats were killed in a single year in twenty of the largest cities of the country merely to remove stray animals from the streets. In New York City alone during the past fourteen years more than 800,000 cats and 400,000 dogs have thus been destroyed.

mal traps used by farmers and hunters? Thousands—hundreds of thousands—of rabbits, ground hogs, minks, raccoons, skunks, etc., are annually caught in these traps, and, as a rule, are forced to suffer for long periods before the trapper arrives to put them out of misery and appropriate the torn and bloody pelt.

All this suffering, whether necessary or wholly preventable, inspires practically no murmur of disapproval; the antivivisectionist scarcely knows of its existence. But when a man of science, trained in the use of anæsthetics (and it is animals, strange to say, rather than men that get the services of the expert in anæsthesia), operates for the benefit of humanity on an insensible rabbit, a cry goes up that fairly rends the heavens. Listen to the sentiments of two leading crusaders upon the achievements of Pasteur:—

Mrs. Diana Belais (of New York) in a recent pamphlet: "Pasteur and his followers increased a very rare disease called rabies, and are making fortunes out of the antirabic virus." Which the *Sun*, slightly out of temper, styles "an infamous and malicious lie."

Mrs. Liza H. Badger, Secretary of the New York Anti-Vivisection Society, in a letter to the *Sun*, February 22, 1909: "I repeat that Pasteur was not only a murderer but a charlatan and a plagiarist, and we can prove it. . . . Boston, which 'knows it all,' has an 'Avenue Pasteur.' The world moves! We may yet outdo Boston and have an Avenue 'Jack-the-Ripper' in New York." "We maintain," retorts the *Sun*, "that it is a disgusting spectacle to see so great a benefactor as Pasteur treated in this frivolous manner by a parcel of unscrupulous women."

Before enumerating the results of vivisection, I must

concede that there are certain regrettable conditions which furnish ammunition to these belligerent extremists, and which a majority of the leading experimentalists, I am glad to say, regard as unjustifiable. One is the ordinary routine demonstration made in physiological laboratories merely for the purpose of showing to students the action of the heart, lungs, and so forth. I am unable to see where any great benefit results from such demonstrations, and there is the ever-present danger of arousing inhuman and perverted instincts in the spectators. Furthermore, I believe all reputable surgeons who encourage the practice among their students of operating upon anæsthetized animals will welcome the day when medicine and surgery will have become, as abroad, two distinct professions. Then, of course, the embryo doctor will have no business in the class of surgical experimentation and much useless, though probably well-intentioned, mutilation of animals will have been abolished. But till that time arrives the *system*, not the surgeon or the pathological demonstrator, must be blamed, since the professor has no idea which of his students are eventually to become surgeons, and neither in many cases have the students themselves.

Another condition I have in mind is where certain French and German psychologists have experimented on unanæsthetized animals for the purpose of studying the emotions under torture. The results obtained from such sources may be, in many instances, highly interesting, but their practical application to human welfare and happiness is at present too abstract or indefinite to justify the means employed. Personally I should be glad to see these two classes of animal experimentation forbidden.

I regret to see that several eminent experimentalists in this country have been led into certain of these by-paths of science, among whom is Dr. George W. Crile of Cleveland. Now Dr. Crile is an authority on shock, and the study of shock is of inestimable value in the development of surgery, yet one wonders if his enthusiasm did not get the better of his discretion when he performed the following experiment which he recently reported:—

"In a further effort to produce shock, the right hind paw was deeply burned. The left hind paw was burned. The right sciatic nerve was exposed, with some hemorrhage occurring during the operation. Peripheral and central traction was exerted and torsion, and the nerve was rubbed so much that it finally was rubbed through. The only effect was to increase the respiratory rate."

In any case he has managed to secure an immense amount of undesirable publicity, and has to that extent endangered the practice of the more essential and certainly less gruesome experiments upon animals that are carried on in the ordinary laboratory.

Let us now hastily survey the actual, tangible results of animal vivisection that have come to medicine and surgery, and hence that make for progress and the greater welfare of mankind.

Cocaine as a local anæsthetic and in eye surgery is unrivalled. But it is a powerful and very dangerous drug in ignorant hands. Had it not been first tried on animals many human lives would have been lost before its properties would have been understood sufficiently to make its use at all reliable.

Digitalis is one of our most valuable heart stimulants

and tonics. Doctor Senn's experiments are classic, and the thesis in which they were described won for him the degree of Doctor of Philosophy.

Surgery of the intestines became possible to surgeons in general after the experiments of Parkes, Senn, and others, with animals.

The spleen, stomach and gall-bladder have been removed when diseased or injured to an extent fatal to life had they been left in the body. Animal experimentation made this possible.

Laparotomy, or opening the abdomen, thanks to animal experimentation, is now a recognized surgical procedure when an accurate diagnosis cannot be made otherwise. Performed by a skilled surgeon the operation is only slightly dangerous in itself, while formerly the mortality from peritonitis made this one of the worst scourges of mankind.

Sunstroke is now better understood and more lives can be saved as the result of Dr. H. C. Wood's experiments.

Diphtheria has always been one of the most fatal and dreaded of diseases. It is still dangerous, but since the discovery of anti-toxin by Behring and Roux the mortality has declined marvellously.

Bubonic plague, the terror of the past, is to-day pretty well understood. Its mode of spreading by rats and fleas having been worked out by the exhaustive experiments of the British Plague Commission of India has made it possible to institute appropriate quarantine measures. Witness how the last plague invasion of San Francisco was stamped out.

When experiment demonstrated that animals could live after removal of one kidney, it become possible to save the lives of many persons afflicted with tuberculosis

or other fatal diseases of one kidney by its total extirpation.

Modern brain surgery is one of our most brilliant achievements. Many who would formerly have had to die of depressed fractures of the skull or brain tumors can now be saved because by experiments on the brains of living animals we have ascertained the principal functions of nearly every cubic inch of the brain tissue and the symptoms following injury or disease of any particular area.

Smallpox, formerly one of the most loathsome and fatal diseases, has dwindled into comparative insignificance. This is the direct result of vaccination, which is effected through animal agency.

Hydrophobia used to occur in about sixteen per cent. of persons bitten by mad dogs. The mortality was one hundred per cent., the disease being absolutely fatal. Since the employment of the Pasteur method the mortality in cases bitten has fallen from sixteen to less than one per cent. There is reason to hope that further experiments will finally result in a serum that will cure the disease after it has actually appeared.

We seem to be on the eve of wonderful discoveries in regard to the cause and treatment of cancer. Animal experimentation has led us up to this point. If anti-vivisection laws are enacted the cancer work in this country will have to stop where it is, and the multitude of victims of this dreaded disease must abandon the hope that now makes their wretched lives barely tolerable.

I could go on indefinitely in this vein, but will only refer to one more instance of benefit resulting from animal experimentation, and that is to animals themselves. Formerly, in Europe, thousands of cattle and hogs were

carried off yearly by anthrax, swine plague, etc. Pasteur studied these diseases and discovered vaccination processes which protected the herds from these former scourges.

For many years past the laws of Great Britain have practically prohibited vivisection. The result is that surgery in England is far behind surgery in other countries. When Lord Lister was engaged in the epoch-making series of experiments that gave to the world the knowledge that has made all of our great modern surgery possible, the short-sighted, sentimental laws of his own country obliged him to go to France to complete his work.

In America, strenuous efforts are being made by ill-advised persons and societies to have enacted antivivisection laws of a similar drastic character. Instead of confining themselves to the questionable experiments of faddists and perverts, and to the fruitless attempts of amateurs, usually students, to ape the ultra scientific achievements of such experimenters, they attack the legitimate work of our greatest schools and institutes, and clamor for the practical annihilation of this supremely important branch of medical research. They confront the whole mass of scientific demonstration with the bold statement of some obscure practitioner, notoriety-loving "reformer," or hysterical layman, and work on public sympathy by printing maudlin pictures, such as an old blind beggar being led about the streets by a dog, with the irrelevant legend, "A friend in need." All of which is flimsy sophistry and sentimentality, and inspires nothing but contempt or amusement in those who know. For it must be fully understood that this agitation is intended to appeal to the ignorant and ill-informed. As

the agitators in England frankly avow " the movement must be democratized." Democratized science!

If these ignorant meddlers succeed in having such antivivisection laws passed in the United States, it will be a matter of extreme regret on the part of the truly humane. Surgical progress will come to a standstill. Now we are in many respects in the lead, but in that event we shall have the mortification of seeing Germany and France, and in time every other country in Europe, surpass us. Surely the antivivisectionist might find a nobler task than blindly to attack one of the most fruitful fields in all modern science.

Concluding his memorable address delivered at the Massachusetts General Hospital, Boston, on the 63rd anniversary of Ether Day, October 16, 1909, Dr. Charles W. Eliot, President Emeritus of Harvard University, said:—

" If the educated public could only see clearly the immense benefits to mankind which have already come and may reasonably be expected to come in much larger amount from the experiments on animals which are necessary to the progress of medical research, if the public could only clearly realize the saving of human suffering and woe which has already resulted and is sure to result in still greater proportion from the sacrifice of a very limited amount of animal comfort and joy, the world would hear nothing more of objections to medical research. The most tender-hearted human being is ordinarily unable to fix a limit to the number of inferior animals he would sacrifice to save the life of one human baby. Now a baby is itself only a hope or a potentiality, its present power of enjoyment being extremely limited. What mother could fix a limit to the number of times a comfortable horse should be bled moderately,

or to the number of guinea pigs which should be sacrificed, in order to save her baby attacked by diphtheria? The tender-hearted men and women who object to animal experimentation have no vision of the relief of human beings from agony and woe which has come out of animal experimentation. If they had any such vision, they would themselves manifest extraordinary cruelty and inhumanity in opposing medical research; in their present blindness they attribute delight in inflicting suffering to the patient, far-seeing and far-hoping seekers for biological truth. Which is the truly humane and merciful man, the director of the Rockefeller Institute for Medical Research, who, by producing cerebrospinal meningitis in a few monkeys lately succeeded in providing men with a successful mode of treating that formidable disease, or the lawyer or newspaper writer who endeavored to prevent those experiments on monkeys, and is ready to let the human race remain helpless on the occasional visitations of that heretofore fatal disease? Humanity and mercy are conspicuously the attributes of medical research in the eyes of all people who can see what it has already done and what it promises to do."

In conclusion let it be remembered that the whole popular conception of animal vivisection is a gross exaggeration and distortion of the real facts. The word has become a misnomer and serves no other purpose than to call up distressing hallucinations and phantasms, and to influence public opinion against an imaginary evil. The antivivisectionist and his sympathizers are one and all straining at a gnat—how willingly and uncomplainingly they swallow the camel, human vivisection, will be shown in the next chapter.

CHAPTER VI

VIVISECTION—SWALLOWING THE CAMEL

"Oh, that men would stoop to learn, or at least cease to destroy!"—Stokes.

"We regard those as surgeons, and those alone, who have, by conscientious devotion to the study of our science and the daily habitual discharge of its multifarious duties, acquired that knowledge which renders the mind of the practitioner serene, his judgment sound, and hands skilful, while it holds out to the patient rational hopes of amended health and prolonged life."—Dr. Valentine Mott.

It is sometimes necessary in making up one's mind on an important issue to consider causes as well as resultant conditions. It is un-American, I admit, to grope around beneath the surface of things, and we generally come up gasping, yet the exercise is by no means harmful. Let me invite the reader to join me now in a brief excursion.

The reason that animal vivisection is, on the whole, free from the abuses which an ill-informed but imaginative public have conjured up is that it is not a paying branch of medicine. Rabbits and cats do not pay to have their kidneys removed, nor do they testify to the marvellous manner in which they were rescued from the jaws of death. The man who patiently devotes years of his life to original research receives, at best, the meagre salary of a professorship in some college, while if he is a practising physician or surgeon he loses rather than gains by his devotion to science. Even honors are few and far between, so that his research is, in nine cases out of ten, a pure labor of love. Such unselfish devotion does not ordinarily foster inhumanity;

on the contrary, these men, as a rule, are among the noblest in the profession, and deserve unstinted praise for their tolerant attitude toward their hysterical detractors.

The practice of surgery, on the other hand, is becoming lucrative. The fee charged for an operation on a wealthy patient is often enormous, and the most trifling ailment, if it calls for surgical intervention, costs the patient as much as weeks of treatment under a regular practitioner.

Now far be it from me to underrate the services of the skilled surgeon, or to say that a man of means should not pay handsomely for a necessary operation. I simply desire to show how existing conditions must naturally lead to unnecessary or fraudulent surgery, and to much incompetent surgery, whether fraudulent or not, at the hands of over-confident operators. There is no motive, except in the case of perverts, for the unnecessary mutilation of animals, but the doctor of ordinary ambition and easy conscience has every incentive to operate on his patient. In the first place, he gains practice thereby; in the second place, he gets paid for his work; and lastly, incredible as it may seem, whereas the mutilation or killing of animals brings disrepute, and is apt to be investigated by the public, the mutilation or killing of a human being ordinarily brings no disgrace, is not even investigated, and frequently means a substantial fee to the dishonest or incompetent operator. Here then lies the cause of the surgical outrages that I shall lay bare in this and the following chapters,—our "rotten system." [1]

[1] I am borrowing the expression from Dr. Graham Lusk. "The truth is," says Doctor Lusk, "that the whole system is rotten and

It was Bernard Shaw, I believe, who brought down the wrath of British surgeons by remarking that when it was a question of earning sixty guineas in an afternoon, it was a very strong temptation to a man who could do that by performing an operation to believe that an operation was necessary when it was not necessary. He did not think it was good public policy for any person to have a strong pecuniary interest in mutilating his fellows.

"It is one thing to make an honest search for the truth," writes Dr. G. H. Balleray (of Paterson, New Jersey) to the *Medical Record*,[1] "in the interests of the patient, and quite another to play the charlatan while pretending to base one's practice upon scientific accuracy." Continuing, he says:—

"With some practitioners every belly ache is called appendicitis, and an operation for the removal of a normal appendix follows forthwith. The writer has seen the appendix removed in a number of cases in which it was absolutely normal, and within the past five years he has been consulted by many women who had been told that they should submit to an operation for what was said to be appendicitis, but the subsequent history showed that no operation was necessary in most of the cases; and in those in which abdominal section was necessary it was found that the appendix had nothing to do with the symptoms complained of. In times gone by, when a physician was too indolent or too ignorant to make a diagnosis, he labelled the disease 'malaria,' and

reeking, and cries out for drastic reformation."—"Medical Education," in the *Journal of the American Medical Association*, April 17, 1909.

[1] The *Medical Record*, February 9, 1907. Doctor Balleray's letter is quoted in full in Appendix B.

everybody was satisfied. Now the so-called surgeon calls everything appendicitis, and cuts out the appendix, with equally gratifying results. The furor for unnecessary operations has spread to the laity, and the cheerfulness with which the would-be fashionable man parts with his appendix is only equalled by the *abandon* with which the modern woman submits to the evisceration of her pelvis by her pet gynecologist. Practising fantastic operations on the kidney keeps some men in the profession busy. A poor, thin, neurotic woman, whose circumrenal fat has been absorbed, leaving the kidney anchored only by its moorings, consults one of these men. With wonderful sagacity he diagnoses 'floating kidney' and at once performs nephrorrhaphy. If from rest in bed and general improvement in health therefrom a layer of fat is deposited around the kidney the woman is cured, and the doctor gives the credit to the operation."

Writing in the *Journal of the American Medical Association* upon "Conservatism in Surgery,"[1] Professor James E. Moore (of Minneapolis) has something to say on "radicalism" as well. To wit:—

"If from a surgical standpoint we thus condemn the conservative for his sins of omission, how much more must we condemn the radical for his sins of commission; for the former is not a surgeon in the common acceptance of the term, while the latter is classed as one because he is constantly performing operations. The radical is one who believes that operations are the whole of surgery and that any one who can secure primary union of wounds most of the time is a surgeon. His existence is due to the fact that our modern technique makes it possible to invade all parts of the body with impunity. He often an-

[1] The *Journal of the A. M. A.*, March 20, 1909.

nounces himself as a specialist in surgery without having had sufficient training to justify any such step, and too often secures patients by dividing fees with that class of practitioners who have a higher regard for their own pocketbooks than they have for the welfare of their patrons. He frequently performs unnecessary and even unwarrantable operations, and often when an operation is indicated fails to relieve the patient of his suffering because the surgeon's ignorance and inexperience prevent him from recognizing pathologic conditions or from removing them when found. He classes every operation from which the patient recovers as successful, regardless of whether any good has been accomplished or not. Every surgeon is consulted by a host of people who have been advised by the radicals to submit to all manner of operations for which there is no indication and for which very frequently positive contra-indications exist. The radical, for want of surgical training and experience, as a rule, does not perform radical operations. He is very apt to remove the stones from the gall bladder and leave those in the common duct. He removes the prominent part of a malignant growth, leaving the outlying parts and the neighboring lymphatic glands. The sins committed by the radical are legion. . . ."

Perhaps the most absurd example of surgical sophistry was communicated to the *American Journal of Clinical Medicine*[1] by a distinguished Chicago physician. "On my recent trip to ———," he writes, "I learned from a young surgeon of that city that pus might form in the body without rigor, elevation of temperature, exudation, induration, swelling or discoloration; and that this was especially true in appendicitis—pain local-

[1] The *American Journal of Clinical Medicine*, July, 1906.

ized being the only symptom, and that this warranted an immediate operation."

The editor comments as follows:—

"It seems presumptuous in an obscure individual like the writer to offer advice to the modern surgeon, but really we think the suggestion worthy of his serious consideration. In days of old, when the rage was for attributing everything to ulcer of the uterus, some worthy men in the front rank of the profession were nonplussed by failing to detect any ulcer in cases that really should have shown it to verify their theories. They, therefore, assumed that in such cases the terrible malady was there even when it wasn't—in other words that it was 'latent.' Now, why not have a latent appendicitis?"

I know a New York doctor, supposed to be a specialist—and still so considered by many—who was anxious to do a Kraske operation. He had never done one, but he had heard of the operation and was absolutely determined to avail himself of the first chance to perform it. In walked a poor old man, one day, eighty years of age, with senile debility and slight hemorrhoids, who complained of some pain along the lower part of the spine. The doctor, of course, saw a good chance to operate. Was this man of ninety suffering from cancer? The specialist thought he was, and thought so emphatically enough to advise operating immediately. The operation was an entire success. The poor old man died fifteen minutes after he had been put on the table, but the surgeon finished the operation and had the patient put to bed. He told the family not to disturb the old gentleman as the shock was sometimes severe, that if they came in the morning he was sure he would have a good report for them. The family came early

enough, for they were sent for in a hurry at a quarter to two. When they arrived at the hospital the sad news was broken that the patient had just passed away. They were not allowed to go into the room, however, for fear of detecting the temperature of the body. The undertaker took charge of the remains. The family today are entirely satisfied with this surgeon's work. The tissues removed showed no evidence of cancer and the operation was unnecessary, but the family do not know that. The result of course was unintentional, but to advise operation under such circumstances was practically murder.

This same " specialist," being slightly discouraged by his Kraske operation, thought he would turn his attention to prostatectomy, which at times is decidedly difficult. The next person who placed himself at his mercy was a man forty-eight years of age, and perfectly healthy. However, the surgeon discovered that he had an enlarged prostate gland, and nothing must do but to gouge it out. The family consented and so did the patient. He also was the unfortunate victim of surgical zeal. The prostate was taken out, but the results were not satisfactory and death occurred four days later.

I could give many cases similar to these, in some of which the technique was perfect, but the operation unnecessary or the patient unfitted to undergo it. " The temptation to do a complete and perfect operation is very great," says the editor of the *American Journal of Surgery*.[1] " A successful operation is often done, but the patient dies." Addressing the City and County Medical Society of Portland, Ore. (Dec. 6, 1905), Dr.

[1] *American Journal of Surgery*, September, 1909.

R. C. Coffey told of an acquaintance of his who operated on twenty cases of appendicitis with eighteen deaths, and cited an instance from Dennis of nineteen cases with nineteen deaths.[1]

" These men," says Doctor Coffey, " instruct the people that appendicitis means certain death unless immediate operation is resorted to. They thus distort the other and radical side of the subject, and bring discredit on the profession, for it is well known that not more than fifteen per cent. die, if left without treatment of any kind." Treated medicinally, Doctor Coffey might have added, the mortality would be less than one per cent.—that is, if the report of the French Army hospitals can be believed.

Of course, the cases just cited are exceptional, as even the average surgeon of the old school would have no such mortality; but the public hears so much from the surgeons (indirectly, of course) of their successful cases, that it is well to attempt to strike a balance. Dr. Samuel M. Brickner (of New York) evidently thought the same when he prepared his address to the Harlem Medical Society last year. " It is a common thing," [2] the address begins, " in these days of highly perfected surgical technique to report a large number of satisfactorily operated cases, and to present the specimens derived therefrom. I make no comment upon this procedure. It serves a laudable ambition and a laudable purpose. But it has seemed to me that it might not be amiss, for once, to present for consideration some of the accidents," etc.

[1] " The Present Status of the Treatment of Appendicitis: the Family Physician's Responsibility." Published in the *New York Medical Journal,* August 18, 1906.

[2] Published in the *American Journal of Surgery,* August, 1909.

Doctor Brickner deserves great praise for his temerity, and with such excellent precedent I shall proceed to give a few more cases of unsuccessful operations, which, by some strange oversight, have not been recorded among the brilliant achievements of modern surgery. First, however, let us consider what are the factors, apart from diagnostic judgment and operative skill, that make for success in surgery.

The greatest discovery in surgery since the employment of anæsthetics is undoubtedly asepsis, or Listerism up-to-date, which might be described as absolute cleanness. The surgeon's hands, and that part of the patient's body which is to be operated on, must be made scrupulously clean by the use of soap and water and scrubbing brushes, followed by one or more antiseptic solutions. The instruments and dressings have to be sterilized by boiling, or by steam or chemical solutions. Every modern surgeon knows that the observance of these precautions usually results in a clean wound, which heals quickly without pain or suppuration. Negligence of surgical cleanliness, on the other hand, invariably results in a dirty wound, painful, suppurating, foul, and dangerous both to the life of the patient and to the success of the operation.

The training in a modern operating room of a large hospital is such that surgeons and nurses perform their work in a cleanly manner almost by instinct. It is, therefore, a recognized principle that cleanliness is essential in operating and in the dressing of wounds, and surgeons who operate with dirty hands, or unsterilized instruments, are violating the most important law of modern surgery.

Dirty or careless surgeons fall into two classes:

Those who wilfully neglect their duty, and those who graduated before antisepsis was taught and consequently do not know any better. Now it is well known in law that ignorance cannot be pleaded as an excuse for crime or misdemeanor, so that in both cases, the modern surgeons who know, and the older ones who do not, surgical uncleanliness is malpractice in every sense of the word—in the former, wilful or criminal malpractice.

Should the merely ignorant surgeon, therefore, be excused because of his ignorance? I think not. This type is ordinarily a man of venerable appearance emphasized by a long gray beard, a relic of an earlier and (surgically) barbarous age. He might read up the progress of surgical science if he cared to, but he does not. Protected by inefficient laws, he roams about in senile complacency, dispensing incalculable suffering, deformity and death.

When an unprogressive operator of this description calls in a younger, modern surgeon to assist, the latter, as also the nurse, is fully aware of the blunders which are about to be committed. But professional etiquette forbids them to inform the victim, or the family, of the butchery they are to witness, to the shame and disgrace of true surgery that has to suffer for, and shelter, these gross incompetents. I am now referring to recognized surgeons, not to old practitioners who turn to surgery as a last resort. The latter, despite a lifelong experience in medicine, must be regarded as surgical novices and will be considered elsewhere as such.

Surgeon M., U. S. A., retired, was for many years a prominent physician and surgeon in one of our seaport cities. Thirty years ago, in the days of dirty

hands, wooden-handled instruments and " laudable pus," he had been regarded as a skilful operator. But, although, as we have seen, what was surgery then is butchery now, Doctor M. saw no reason for modernizing his antiquated methods. In fact he seemed to take peculiar delight in repeating the boast: " You fellows wash your hands before operating, but I wash mine afterwards." All this was *entre nous*, of course, but even had it been otherwise it would have had little effect on his large practice, both civil and military, since he had the (to the laity) obvious advantage of age, whiskers—probably dashed with tubercular sputum, for the doctor was a consumptive—and a full surgeon's shoulder straps.

To illustrate Doctor M.'s methods, I will narrate a laparotomy (opening of the abdomen) that he performed upon a fine, athletic young man suffering from a second attack of appendicitis. It was what is called a " clean " case, that is, one in which the vermiform appendix was in a state of catarrhal inflammation without pus formation or abscess.

When the assistants and nurses had prepared the patient for operating, and had got their hands and instruments, and everything else, in a state of the most scrupulous surgical asepsis, the old doctor walked into the operating room, his unwashed hands in his pockets and a disdainful smile on his face as his eye took in the usual careful preparations. He refused to have his hair and whiskers bound about with a strip of gauze, as all others in the room had done, but as a concession to the head nurse (for whom he entertained a fatherly regard), he dipped his hands perfunctorily into a basin of antiseptic solution, without, however, cleaning the

long, dirty finger-nails. He then donned a smock, took up an old-fashioned wooden-handled knife, and was ready for business.

In order to make what follows quite clear to the reader, it should be stated that the muscles of the abdomen are in three layers, and that the fibres of each run at a different angle, which gives a lattice work or grid-iron effect. This is Nature's arrangement to secure the greatest possible strength in the abdominal wall. The modern operation for appendicitis, devised by Doctor McBurney of New York, aims to preserve this structural strength by separating the muscular fibres instead of cutting directly through in the same plane, as was formerly done. The McBurney method did not appeal to Doctor M., however, who cut his way, with a sawing movement, right through everything down to the peritoneum, the membrane immediately covering the intestines. The younger surgeons present shuddered at this needless mutilation, but " medical ethics " and official respect closed their mouths. When the peritoneum was opened and the intestines exposed, the venerable surgeon laid down his knife, pulled his smock to one side, put his bloody hand into his hip pocket and drew forth a plug of tobacco. He bit off a piece, then offered the plug to the others, who declined the honor. As he replaced the tobacco in his pocket a nurse hastened forward with a basin of antiseptic solution. There was a moment of breathless expectancy. Would he wash his hands before plunging them into the patient's abdomen? The doctor readjusted his spectacles, waved the girl back to her station, inserted his contaminated fingers into the gaping wound, and began feeling about for the appendix. The enormity of such an action

cannot be fully appreciated except by surgeons and trained nurses, but its mere crudity ought, I believe, to appeal more or less to every reader. Had the incision revealed an abscess, the doctor's omission to wash his hands would not have been so serious, though entirely inexcusable as a technical blunder, but to shove dirty fingers into a clean abdomen means deliberately to expose the patient to the danger of fatal peritonitis.

The old surgeon had had plenty of experience, and so he soon found the appendix and drew it to the surface. He cut through its mesenteric attachments without tying the bleeding vessels, and then severed the appendix itself, without making the slightest attempt to prevent the intestinal contents from escaping into the peritoneal cavity. When he had tied the stump of the appendix, he pushed it back into the abdomen along with its still bleeding and unsecured vessels. The doctor now scratched his head with his bloody hand. Then he closed the abdominal wound with silver wire—wire!—through and through all the layers. By the way, modern surgeons invariably sew up each muscular layer *separately*, so as to make a stronger wall and to prevent a rupture forming afterwards. A dressing of *vaseline* completed this barbarous and antiquated butchery, called by courtesy a surgical operation.

As might have been expected, the results were bad. The patient's great vitality (or an interposition of Providence) prevented general peritonitis, but he nearly died from concealed hemorrhage owing to the untied blood vessels, which twelve hours later necessitated reopening the wound, after which the wire sutures cut badly and had to be removed. The patient made a long, lingering recovery after several weeks of misery,

whereas a modern, clean operation would have put him on his feet in seven days. Several months later a hernia (rupture) formed in the scar, which was subsequently operated on and cured by another surgeon.

This eminent surgeon died recently and was buried with military honors. After the funeral, his first assistant, a passed assistant surgeon of high standing, was heard to remark: "We're all sorry the old doctor's dead, of course, but we'll have to admit that his death is a godsend to his patients."

Now, while I do not wish the reader to understand that Doctor M. was typical of the surgeon of advanced years, neither do I regard his methods as at all exceptional. Indeed it is safe to say that there are thousands of surgeons still practising such antiquated methods, and bringing shame and discredit upon the profession.

I cannot dismiss this phase of the subject without again referring to that abomination of the operating room—a beard. The object of surgical cleanliness is to get rid of all dust and foreign matter, for these substances harbor the microscopic germs of disease. For this reason, the entire operating force generally wear cloths about the heads to prevent the introduction of dandruff and dust from the head into the wound. But where is there a greater catch-all for dust, particles of food, dried soup, sputum, dandruff and all manner of disease-bearing débris than the beard? Dr. Nicholas Senn said: "No surgeon should wear a beard; a modest mustache is all he can permit himself." And not only is a beard objectionable as a dust sprinkler, but supposing the men wearing them are near-sighted and have to bring the face close to the wound—*the*

beard then actually gets into the wound. I have seen this disgusting and lamentable accident several times, and invariably followed by pus infection.

Doctor Q., of New York, enjoys an excellent reputation as a surgeon, and his practice therefore is large and lucrative. It would seem that formerly he was a better operator than now; to-day he is certainly a menace to the community, and I have heard that several prominent surgeons are considering the propriety of exposing him as both irresponsible and dangerous. His deterioration has been ascribed to a drug habit, and this, if true, would readily explain it.

Doctor Q. recently operated, in a private hospital, on a simple case of varicose veins of the legs. The operation was tedious on account of the large number of veins to be attended to. After about two hours of work, and the end still far away, he became hungry and ordered a lunch prepared and served. When it was ready he suspended the operation and took a leisurely meal. During this pause for refreshments the patient was kept continuously under the influence of ether. When the surgeon's hunger was appeased, he washed his hands (I believe) and went ahead with the operation. This, of course, was an instance of flagrant malpractice—to interrupt a surgical operation under anæsthesia for any but the most urgent cause—and I have specially selected the case for the consideration of those antivivisectionists who are concerned about the scientific anæsthetizing of cats and dogs. To prolong anæsthesia unnecessarily is in direct violation of one of the main principles of modern surgery, yet it is only too frequently allowed by careless or selfish surgeons. Doctor Q.'s operation lengthened out to four hours, and

might easily have proved fatal. Fortunately, however, the victim was able to endure the strain, and, I am told, recovered in time.

In view of the foregoing it will hardly surprise the reader to learn that Doctor Q. is careless and dirty in his surgical technique. The result is that most of his cases become infected with pus, which has earned for him the unenviable sobriquet of "Doctor Pus" at a certain hospital where he operates. One of the nurses employed at that institution said to me lately:—

"Nearly all of his clean cases are pus cases in the end, and the strange thing is that he never removes the dressings to see if the wounds are suppurating until you can smell the patients in the hallways."

Doctor K. is a well-known physician and surgeon in a Western seaport, and has a large practice. He graduated less than twenty years ago, and should therefore be reasonably modern in his surgical technique. But he does not keep up with the progress of science, and employs obsolete methods in hernia and other surgical cases. During operations on clean cases he frequently forgets to re-cleanse his hands after having handled unsterilized objects in the room, and he greatly resents having his attention called to such omissions, even though there is time to correct them.

One of his fatal cases, now to be recorded for the first time, was Mrs. G., a well-to-do woman of about sixty years of age, who had been complaining for some time of pains in the stomach and chronic indigestion. There was occasional vomiting, loss of general health and weight, and some tenderness on pressure over the upper abdomen, especially toward the right side. She had never vomited blood, which is nearly always present in

serious conditions like ulcer or cancer of the stomach, but, considering her age and symptoms, and the fact that Dr. K. believed he was able to feel an abnormal mass under the left lobe of the liver and near the outlet of the stomach, the case did suggest cancer, though it was by no means typical. Dr. K. advised opening the abdomen and examining the stomach. Another and better surgeon who had also seen the case did not approve of an operation at that time, believing that the symptoms were not sufficiently definite, nor the patient's condition vigorous enough to expose her to the shock of laparotomy. Doctor K.'s counsels prevailed, however, and the lady went to the operating table.

Now Doctor K. is a very slow operator, and, as stated above, not sufficiently careful as to surgical cleanliness. In this instance, however, he planned to dazzle his assistant and the surgeon just referred to by an elaborate and original manœuvre in the department of asepsis. Before making his incision through the skin he buried the umbilicus (navel) by sewing the surrounding skin over it. A more futile and absurd proceeding can hardly be imagined, especially as the doctor did not wear the modern operating gloves, and his finger nails were not particularly clean. This preliminary detail consumed more time than should ordinarily have been used in opening the abdomen and exposing the stomach. In cases like this, every additional minute under the anæsthetic increases the danger to the patient.

When the stomach was at last exposed, no abnormal swelling or tumor could be found. The organ itself was somewhat dilated, but that was about all. Doctor K. felt the pylorus (the outlet), which was normally surrounded by a thick and firm ring of muscular tissue,

and insisted that this was an abnormal swelling and the first stage of cancer. He insisted further that the cancerous condition encroached on the lumen of the outlet, obstructing the discharge of food from the stomach, thus accounting for the pain and vomiting. Much more time was now lost in arguing whether or not cancer existed, though for some reason he did not demonstrate the presence or absence of obstruction as he might have done by means of a very simple test. All this time the patient was growing weaker and responding poorly to stimulants.

Having convinced himself of the correctness of his diagnosis, Doctor K. was much inclined to attempt a resection, or cutting out, of the supposed cancerous parts of the stomach. But this was a formidable operation and would take him considerable time, so he abandoned the idea. The stomach, therefore, was put back where it belonged, the abdomen was sewed up, a dressing applied, and the patient removed from the operating room and put to bed. The operation took nearly two hours and the consequent shock was so great that the patient never rallied as she should have done. On the contrary, she gradually grew weaker, and on the fourth day died.

Here we have an example of a blundering and worse than useless operation. The abdomen was opened, the stomach and other organs were handled and exposed to danger from pus infection, but absolutely nothing else was done to them, nor did they need it. The whole affair was a combination of hasty diagnosis and a desire to perform laparotomy on a patient able to pay a good fee.

I shall give another lamentable case of Doctor K.'s,

illustrating his criminal carelessness. Like that of Mrs. G., it has so far been omitted from his published reports of surgical achievements.

Mrs. J., a dressmaker, went to him complaining of a pain in the abdomen, which Doctor K. diagnosed as appendicitis. He accordingly opened the abdomen, in his none too cleanly manner, and found the appendix to be inflamed as he had surmised. After inserting several gauze pads, which is usually done to prevent the intestinal contents from getting into the peritoneal cavity and causing blood-poisoning, he proceeded to remove the appendix, and then, just for luck, the right ovary also. When ready to close the wound he pulled out, as he supposed, all the gauze pads, and then sewed up the various membranes.

Mrs. J. made a fairly rapid recovery, everything considered. She went back to her work sooner than was advisable, but then Doctor K.'s fee was high, and she was in straitened circumstances. Very soon, however, she began to experience abdominal pains again, which gradually grew worse until the poor woman could scarcely drag herself to and from her work. When she could endure it no longer, she returned to Doctor K. He listened to her symptoms and told her she had stomach trouble, for which he prescribed appropriate remedies. She paid for the advice and the prescriptions, but the medicine did her no good. Soon she began to develop a low fever and had to visit the doctor almost daily. All her scant earnings now went into his pocket, and she had to borrow money for further treatment.

Meanwhile Doctor K. became somewhat puzzled over the case, which he realized was not stomach trouble. He began to regret that he had not removed the other

ovary. At last, however, the patient could work no longer, and as she had clearly reached the end of her resources he lost interest in her and discontinued his treatment.

About a month later some charitable ladies who had formerly employed her sent Mrs. J. to a private hospital and engaged Doctor C., a first-class, up-to-date young surgeon, to take charge of the case. He made a careful examination and found an abnormal swelling or bulging in the vagina just back of the uterus. He at once suspected the presence of a deep, pelvic abscess and advised immediate operation. The consent given, Doctor C. had the patient prepared, anæsthetized, and brought to the operating table. His intention was first to make an exploratory incision into the swelling, and then, if this did not reach the abscess, to perform another operation.

The first proved to be all that was needed. As the knife pierced the swelling a quantity of foul pus escaped. Passing his rubber-gloved fingers into the abscess cavity to ascertain its depth and direction, Doctor C. encountered a large semi-solid mass lying posteriorily. He was puzzled for a moment only, for to his experienced touch, the feeling of the mass against his finger was not new, though happily rare. It meant only one thing. Keeping his finger on the mass, he took a long dressing forceps in his other hand, guiding them carefully with his other fingers, and then slowly drew out a large, blood-soaked, stinking wad of surgical gauze.

"Medical ethics," of course, caused Doctor C. to refrain from exposing Doctor K.'s egregious blunder, but he did inform him privately of the circumstance.

Doctor K., however, was far from grateful, although Doctor C. had discovered and rectified his blunder, and protected his reputation; in fact, he became his secret enemy.

I discovered a similar blunder a few years ago when a poor, emaciated girl came to my ward in a New York hospital. This young woman, also, had been operated on for appendicitis, but the wound had never healed, and so she had undergone a second operation for supposed abscess of pelvic origin. The second operation failed to relieve her, and on carefully examining her I decided to make a third. After making a small incision posterior to the uterus through the vaginal wall, I noticed that there was something quite out of the ordinary. I inserted a finger and to my surprise felt gauze, and presently pulled out of the abdomen through the vagina a large abdominal gauze pad. The girl made an uneventful recovery. The surgeon who performed the first operation had forgotten to remove one of his pads.

Still another similar case that came to my notice, but one that ended more disastrously, occurred in Washington, D. C. A young married woman suffering from irregular hemorrhages was told that a thorough scraping of the uterus would cure her, and so she submitted to this operation. The surgeon, finding that he had troublesome bleeding to deal with, decided to pack the large and boggy uterus with gauze. This he did, and he also packed the vagina. Twenty-four hours afterward he ordered the nurse to remove the gauze, and the latter, carelessly, or in ignorance, removed the vaginal packing only. When the uterus had remained packed for three months, the suffering patient con-

sulted an "expert." After due examination this specialist found that the uterus was abnormally large and hard, and decided that it was affected with "fibroid" and should be removed. So he performed a hysterectomy, only to find that he had removed a normal uterus filled with gauze, which the first surgeon and his nurse, between then, had carelessly overlooked.

An even worse case than the foregoing was that of Miss Donovan of Philadelphia, who died last year after eleven years of suffering, the victim of another surgeon's criminal carelessness. I will quote the account given in the N. Y. *Sun* of January 23, 1910, which is substantially correct:—

"Philadelphia, Jan. 22.—After living for eleven years with a pair of forceps in her abdomen, Miss Mary Donovan died last Wednesday, following an operation performed to remove the instrument.

"Miss Donovan scoured the world in search of health following the first operation. At intervals she was seized by severe pains and medical experts failed to give relief.

"At the request of a specialist who was summoned to the home of the young woman to attend her, an X-ray photograph was made. The forceps was discovered and an operation ordered.

"Dr. John G. Clark of the University Hospital was summoned and the operation was attempted. The patient could not stand the shock, however, and died."

That surgeons, and good surgeons, too, often overlook a gauze pad, a sponge, or even one or more instruments when closing a wound, the reader is no doubt aware—how frequently this deplorable blunder has happened, however, will never be known either within or without the profession. Many surgeons, moreover, ad-

mitting the terrible mortality among such victims of carelessness, nevertheless regard the accident as one that is bound to occur. "So long as surgery continues an art," writes Schachuer, "just so long will foreign bodies continue to be unintentionally left in the abdominal cavity." Truly a pessimistic outlook.

Dr. H. S. Crossen (of St. Louis) gives, at the close of a paper on this subject,[1] a table containing no less than two hundred and forty cases of a foreign body lost in the abdominal cavity. Commenting on his statistics, he says:

"The table includes only cases in which the abdominal cavity was involved. A number of cases given in other collections of foreign bodies left after operation were excluded because the operation involved the breast, neck, hip, etc., instead of the abdominal cavity. Other cases were excluded because the sponge or forceps was found before the abdomen was closed. Other cases were excluded because they were probably or possibly repeats.

"No particular effort was made to secure a large number of cases to date, by a prolonged search of literature nor by writing to surgeons for a list of personal cases. *A few recorded cases, more or less, make little difference, for these recorded cases represent only a small proportion of the total number of such accidents.*[2]

[1] "Abdominal Surgery Without Detached Pads or Sponges." Read at the 21st Annual Meeting of the American Association of Obstetricians and Gynecologists, at Baltimore, September, 1908, and published in the *American Journal of Obstetrics*, January and February, 1909.

[2] Referring to the frequency of this accident, Dr. Archibald Maclaren (of St. Paul, Minnesota) in a paper read before the American Surgical Association, June 4, 1909, and published in *Annals of Surgery*, July, 1909, says: "*I find that every interne, when cross-examined, knows of at least one such case,* although they confess with great reluctance and never tell who the operator was." The italics, both here and above, are mine.

My object, therefore, is not so much to present a long list as to present a quick survey of authenticated cases of such variety and number that the careful surgeon will be led to pause and think on this matter.

"A sponge is the article most frequently left in the peritoneal cavity, but in about one-fourth of the recorded cases the article left was a forceps or piece of an instrument or other small object used about the wound. This calls attention forcibly to the fact that small instruments should not be allowed about an open abdominal wound. Neugebauer long ago called attention to this danger of small instruments, and urged the use of long instruments exclusively in abdominal work."

As a matter of fact this terrible sacrifice of life and health is no longer excusable, for several leading surgeons have attacked the problem with the conviction that it can, and the determination that it must be solved. And so we have the check system, whereby only a certain number of pads are laid on the operating table, every one of which must be accounted for, as well as every instrument, before the wound is closed. Even better than this, so far as the pads are concerned, is the system elaborated by Doctor Crossen in the paper from which I have just quoted, which eliminates detached pads and sponges entirely, the gauze being used in long strips, one end of which is fastened to the sterile sheet. Either of these two methods, preferably the latter, with the use of long instruments, will practically guarantee the patient's safety from this horrible danger—that is, with competent and conscientious surgeons. But so long as the profession enjoys its present irresponsibility, the old, haphazard methods will probably remain in general favor, with torture or death in store for many a luckless patient.

CHAPTER VII

MORE SURGICAL OUTRAGES

"There is something absurd, and unworthy of the high standing of our profession, in performing any operation, however slight, which is useless; but it is a revolting thought to perform one that is worse than useless, viz.: injurious."—Dr. Abraham Jacobi.

"The task before me is a serious criticism of what is going on in every community. I do not single out any community or any man. There is in my mind no doubt whatever that surgery is being practised by those who are incompetent to practise it—by those whose education is imperfect, who lack natural aptitude, whose environment is such that they never can gain that personal experience which alone will really fit them for what surgery means to-day. They are unable to make correct deductions from histories; to predict probable events; to perform operations skilfully, or to manage after-treatment."—Dr. Maurice H. Richardson.

In one respect, at least, the town or country patient enjoys an advantage over his fellow-sufferers in the large cities, and it is this: that a country surgeon is forever meeting the victims of his carelessness or incompetence—provided they live—whereas a surgeon in a large city is practically never confronted with the evidence of his mistakes. This unquestionably tends to equalize things, for if the latter possesses greater skill and experience, the former has much stronger cause to fear the results of his blunders. As an outspoken surgeon writes: "To those of us who live in cities not so large but that almost daily we meet on the streets some of the living monuments of the pleasing and displeasing

results of our efforts, our successes or failures, these questions (the after-results of mastoid operations) become of more than passing interest." [1] Particularly is this true of amputations, which are in many respects one of the greatest reproaches to modern surgery. The time was when to attempt to save a limb, severely shattered or lacerated, was to subject the patient to the risk of almost certain death, whereas to-day, to amputate instantly, except in a case of hopeless mutilation, is a sign of criminal indifference on the part of the operator. Yet in our cities, where the busy surgeon has more cases than he can handle, or in the hospitals, where the ambitious internes have a multitude of helpless folks at their mercy to operate on as they please, amputations are constantly being performed where care and judicious treatment would unquestionably lead to the recovery and lifelong use of the limb so recklessly sacrificed.

Dr. W. Wayne Babcock, Professor of Surgery in the Medical Department of Temple College, and Surgeon-in-Chief to the Samaritan Hospital, Philadelphia, in a paper read at the North-west Branch of the Philadelphia County Medical Society, March 7, 1907,[2] reported the following scandalous condition in his own hospital:

"A few years since there was an understanding in the service of the Samaritan Hospital that all amputations below the wrist were to be placed in charge of the resident physician, and as a result there soon arose quite a competition between members of the resident staff as to who should have, during the service, the largest

[1] "Some Displeasing Results of the Mastoid Operation," by Dr. J. A. Stucky, in the *New York Medical Journal,* February 10, 1906.

[2] Published in the *Therapeutic Gazette,* September, 1907.

number of such amputations. We were amazed to find that amputations of the fingers constituted one of the most common of operations in the dispensary service, and at times several fingers were amputated in a single week. A rule was therefore enforced that no general anæsthetic should be given, and that no amputation be done, except under the direction of the attending surgeon or his qualified assistant. Although the dispensary service was progressively increased as to the number of cases attended, amputation of the fingers or the hand has become very infrequent."

Writing upon "Unnecessary Amputations," Dr. W. Louis Hartman (of Syracuse, New York)[1] gives several instances of patients saved from needless mutilation by his determined opposition to immediate amputation. He says:—

"One can just as well amputate some hours or days after injury as at once, and this without menace to the patient, and on the other hand save many members which are unnecessarily sacrificed. I understand it is much less trouble to take care of an amputation than of a fracture, but this must not stand in the way of duty. I do not know of any problem in surgery where good judgment and conservatism should prevail more than on this question, when to amputate and when not. I do not think internes in hospitals should ever be allowed to amputate without the counsel of the surgeon, as they are very often too eager to operate and their experience has at this time been insufficiently ripened to have the good sound judgment of the experienced surgeon."

It would be a waste of the reader's time to give instances of needless sacrifice of an arm or a leg—at least

[1] *International Journal of Surgery,* February, 1909.

a third of the cripples one meets are cases in point, and several authorities would probably place the percentage much higher. Many of these poor creatures, however, lost their limbs before the present perfection of asepsis and so no blame can be laid to surgery which did well, a generation ago, to save the patient's life. But the average amputation of to-day, such as the case given in the succeeding chapter, where a woman sacrificed her arm to gratify a youthful surgeon's ambition, is undoubtedly ill-advised, a gruesome testimony to our criminal incompetence.

In this connection I wish to present some remarkable examples of the result of care and skill in preventing mutilation. These are selected from a number of cases reported by Dr. John Egerton Cannaday, Surgeon-in-charge Sheltering Arms Hospital, Hansford, West Virginia,[1] who is an eloquent advocate of conservative surgery.

"Case 1.—D. M., male, aged 22, was referred to me by Dr. C. N. Watts, Dothan, W. Va.

"History.—The man had been shot in the left leg at about the junction of the upper and middle thirds by a Winchester rifle; the ball struck the tibia squarely and produced a badly comminuted fracture. An occlusive dressing was applied and the man kept in his shanty in a railroad camp with the hope that healing would take place. After six weeks of this, suppuration not only of the wound but of the entire leg below the knee had become so general that amputation was considered to be the only means of saving the man's life. At the time the patient came to the hospital he had severe chills,

[1] "Conservative Surgery of Arms and Legs."—The *Journal of The American Medical Association,* May 11, 1907.

fever and sweats, but I decided to make an attempt to save the leg.

" Operation.—Under general anæsthesia the wound was opened, cleansed and several fragments of dead bone removed; four long pus cavities were opened freely, irrigated and drained. These cavities lay in general in the direction of the muscle planes and were connected by sinuses with the original wound. One of them extended some distance above the knee joint into the thigh. Neither the ankle nor knee joints were involved. Under frequent dressings and irrigations some improvement of the leg was manifested, but during the next three months the patient had to be twice anæsthetized and new sinuses opened.

" Result.—At the end of the tenth week after admission to the hospital, the sixteenth week after the receipt of the injury, there was bony union and the patient was put on crutches. In a month he was walking in a limping manner, but the original bullet wound had not yet closed. The leg was painful when much used. Two subsequent operations had to be done for the removal of carious bone. These cavities finally filled and at the end of the tenth month of hospital residence he left well, with a straight, sound leg, capable of earning his own living and not likely to become a public charge."

" Case 3.—F. B., male, aged 21, a sawmill employee.

" History.—Patient fell so that his left arm came in contact with a rapidly revolving circular saw. Two and one-half inches below the elbow the forearm was more than two-thirds sawn in two. The radius was cut entirely in two and the articulate end of the ulna was torn completely out of the elbow joint and projected backward past the angle of the elbow for at least two inches. He was brought to the hospital about three hours after being injured and was operated on soon afterward.

"Operation.—The wound was irrigated with saline solution, the fractured ends of the radius were wired, and the elbow luxation was reduced. The wound was closed with the exception of a small drainage opening, and the arm immobilized in a right-angled splint. Healing was primary, and passive motion was begun at the end of the second week. Results were perfect and the man now has a normal arm with no elbow ankylosis whatever."

"Case 4.—G. H. W., Olcott, W. Va., was referred to me by Dr. W. W. Tompkins, Charleston, W. Va.

"History.—This man had been severely struck on the left elbow in an accident. The arm was terribly swollen, crepitation in the region of the elbow joint could be made out and not much else.

"Operation.—I made an incision lateral to the joint and found that the component bony parts of the joint had been crushed. I resected the broken end of the ulna, also the articulate head of the humerus, which was fractured entirely across its diameter. Through and through drainage was maintained for a time. A useful arm capable of considerable range of motion was the result."

It is a pleasure to cite such examples of well-directed conservatism, but I do not wish to be understood to say that surgical outrages are all on the operative side. The instances of lifelong misery and death from timidity on the part of the physician or of ultra-conservatism on the part of the surgeon are legion, and this applies to appendicitis, and even to amputations, notwithstanding the great preponderance of needless operations. "In intestinal obstruction," remarks Dr. Henry B. Luhn (of Spokane, Washington), "operation is often withheld until the diagnosis is written all over the belly, which is a fatal delay."

Writing upon this phase of the subject Dr. Q. W. Hunter (of Louisville, Kentucky) [1] says:—

"It can be amply demonstrated that in surgical practice ultra-conservatism is an exceedingly dangerous institution when indiscriminately applied, and under no circumstances does the truth of this statement become more apparent than in a certain percentage of instances in which amputation of extremities becomes imperative as a life-saving measure, or because of extensive crushing injuries. *Per contra*, however, the fact must not be permitted to pass unobserved that it is in this department of surgical practice some of the most brilliant results have been achieved by strict adherence to conservative principles."

In the preceding chapter I gave a number of shocking examples of bad surgery as performed by surgeons of the old school or by careless or inexpert operators. It would be unfair to these blunderers, however, and misleading to the public, were I to omit the mistakes and catastrophes of the higher men in the profession. Here it is hard to say just what measure of blame to apportion. All men in all professions make mistakes at times, even with the greatest care and devotion to duty. But some great surgeons, notwithstanding their brilliant achievements, are notoriously careless and indifferent to the lives of their patients. The following cases are instances of such carelessness; otherwise I would not have recorded them.

I was once invited to a surgical clinic held by one of

[1] "The Futility of Ultra-Conservatism in Destructive Injuries of the Extremities."—The *Medical Council* (Philadelphia), January, 1907.

the most noted surgeons in New York City. Expecting to see something out of the ordinary I attended, and certainly was not disappointed.

A woman was to be operated on for some kidney trouble, and the surgeon, after a lengthy discussion of the case before a number of physicians, stated that he would not operate if he were not sure that the diagnosis he had made was correct.

The operation was performed, but the kidney proved to be absolutely normal. This surprised the surgeon, and turning to the house surgeon he inquired for the history chart. After looking it over he exclaimed: "Who prepared this patient? I thought you told me it was the left kidney!" There was an awkward silence for a few seconds, whereupon the humiliated surgeon, recovering his self-possession, put back the left kidney and sewed the woman up. Then he had her right side sterilized, and operated upon the other kidney.

If this blunder was not the surgeon's fault, it was unquestionably his duty to see that the offender was found and punished. After the operation the patient's condition was serious. She lived, however, and an apparently satisfactory explanation followed as to why they had operated on both kidneys.

The following case occurred in the practice of a well-known New York surgeon:—

The patient was a young girl of about fifteen, the daughter of a wealthy family. One day she was taken ill with appendicitis and the surgeon in question was called in. He examined the patient carefully and advised operation. The consent of the family was obtained and the operation duly performed. The patient made an uneventful recovery.

While still in bed, however, she received an invitation to a ball which was to be given on the tenth day after her operation. She was particularly anxious to attend this ball, being very fond of dancing, so she sent for her surgeon and asked his permission to go. He consented, strange as it may seem, for he is a first-class operator and must have known that the edges of an abdominal wound do not unite with complete firmness for about eighteen days.

The young lady got out of her bed on the tenth day and went home. She was still weak, but, girllike, she insisted on dressing for the evening's entertainment. It is probable that she neglected to wear an abdominal binder, as it might have spoiled the fit of her gown.

The evening wore along merrily. The excitement made the girl forget her fatigue and she danced until early in the morning.

Suddenly she felt a sharp burning pain in the abdomen where the operation had been performed. She fell to the floor and was immediately carried to her room. When her clothing was removed her mother was horrified to find that the wound had burst open and that the intestines were protruding.

The surgeon was summoned immediately. He was greatly shocked at what had happened, and ordered the girl to be taken at once to the hospital. He hurriedly telephoned for his assistants, and then to the hospital, instructing them to be prepared for an immediate operation.

On her arrival at the hospital the girl was at once placed on the operating table, an anæsthetic was administered and a second operation performed. But in spite of the greatest care and precaution peritonitis de-

veloped within twenty-four hours and was shortly followed by collapse and death.

The fatal termination in this lamentable case was due to the amazing and criminal carelessness of the surgeon who permitted his patient to get up and dance on the tenth day after a laparotomy.

The following sad case which occurred recently in the practice of a well-known gynecologist of Greater New York resembles that of the poor Italian woman given in an earlier chapter. The details were related to me by a physician who was present at the operation. The patient was a woman of thirty, and as her case had been diagnosed as fibroid tumor of the uterus, the eminent surgeon had invited a number of doctors to witness him perform the hysterectomy (removal of the womb). This operation may be performed in two ways, either by opening the abdomen and taking out the organ from above, or by a more delicate operation which removes it through the vagina. In the present case the surgeon decided upon the latter method. My informant had no opportunity for careful examination prior to the operation, but he did not feel entirely satisfied with the diagnosis of fibroid tumor.

The patient was put under the influence of an anæsthetic and then placed on the operating table. When the field of operation was properly prepared, the gynecologist had retractors introduced into the vagina so as to expose the cervix or lower end of the womb. He seized this with a long sharp forceps, drew it downwards, and then examined the part with his fingers. Meanwhile he had been explaining the case to his audience at considerable length, for he was a good speaker and well versed in his subject.

As his practised fingers examined the cervix and the adjacent portion of the uterus he hesitated in his talk, and finally ceased to speak. An expression of doubt began to show in his face. Presently he remarked that the cervix felt much softer than usual in fibroid cases. After a further period of silence, during which he continued to palpate the uterine area within reach of hand and eye, he stated that as there were some peculiar features in the case he would be on the safe side and thoroughly explore the cavity of the uterus before clamping the ligaments and blood-vessels preparatory to cutting away the diseased organ.

Accordingly he drew the cervix down again as far as possible and passed his index finger into the uterus. He had ceased to speak now and the visiting medical men stood around the table silent and interested, wondering what the condition could be that had so suddenly nonplussed the great specialist.

The operator's finger had encountered something, a movable body that could be nothing else than a small internal fibroid tumor attached to the uterine wall by a pedicle, or band of fibrous tissue. The doctor's face cleared as he explained all this, and presently, with a dexterous twist of his fingers, he brought the supposed tumor down through the cervix and into full view.

Judge of his disgust and chagrin when the "fibroid tumor" turned out to be the leg of a three-months' child! He had now gone too far to draw back, for the case could never go on to full term. There was therefore no other course possible than to finish the miserable job. Furious with anger and humiliation, the doctor extracted the entire fœtus and applied a dressing. The unfortunate woman, her chances for motherhood de-

stroyed, was removed from the table to her bed, and the clinic broke up without the expressions of felicitation customary on such occasions.

During the afternoon the woman began to bleed profusely. The house surgeon did his best to stop the hemorrhage and sent for the chief. The latter could not be found. The patient's condition became worse. The house surgeon exhausted all the means at his command, short of immediate removal of the uterus, but to no purpose. The hemorrhage came from the retained and torn placenta or afterbirth, which the chief surgeon did not dare to remove with the fœtus for fear of causing the very condition which developed later. All efforts to locate the chief surgeon, however, were unsuccessful until late that night, and in the meantime the hemorrhage had proved fatal.

Now it is an unwritten law among surgeons to remain within call for some time after a serious major operation. They need not actually remain in the building, but are expected to leave word as to their itinerary so that they can be reached by telephone or messenger, should alarming symptoms develop. In this case it was most regrettable that the surgeon failed to leave correct information as to his whereabouts during the rest of the day and night. His unquestionably superior skill might have averted the crisis that his own blunder had caused.

The unfortunate case, with its unexpectedly fatal ending, however, made a profound impression on him, as may be inferred from the fact that he spent the next few days drinking heavily. To a man of any conscience or sensibility such a catastrophe must inevitably bring with it humiliation and remorse, and it is safe to say of this surgeon that his future patients will benefit by the

sad experience, in that they are far less liable to be the victims of insufficient examinations, hasty diagnosis and unnecessary operation.

Of the occasional blunders made by famous surgeons, none is more striking than one I myself witnessed some years ago, which I will now relate.

A Chicago surgeon, whom we will call Doctor A., a man of international fame, and one of the pioneers in intestinal surgery, performed one day, before his students, the operation of gastroenterostomy, or connecting the stomach with a section of the small intestine.

Before the operation, and while operating, Doctor A. gave the history of the case and the symptoms and signs upon which the diagnosis had been based. He then referred briefly to his own well-known experiments with animals, and those of other surgeons, which were made to determine the extent to which surgery might interfere in abdominal disease, such as the length of intestine that might be removed in cases of complete obstruction, the manner in which wounds of the bowels healed, and the best kind of stitches and quality of suture material. This was intended to lead up to a description of the ideal operation that had been conceived and made possible as the direct result of all these remarkable experiments. He told how, in obstruction of the outlet of the stomach from any cause, an artificial connection might be made between the wall of the stomach and a portion of the small intestine a little way beyond the obstruction. As he operated he described the various landmarks that must guide the surgeon so that he would be sure to seize the right loop of small intestine and not make the fatal mistake of sewing the large intestine to the stomach. He told how the large intestine could be identified by the

presence of certain bands running along its length, and so forth.

The operation was performed in the great surgeon's rapid and masterly manner. The patient was removed from the operating room to bed, and soon rallied from the shock, so that all promised well.

When it came time to feed him, however, the nourishment did not seem to afford relief. There was imperative hunger both before and after eating. The patient grew weaker and more emaciated. Nothing could relieve his constant demand for food,—something to satisfy his raging, abnormal hunger. Death occurred within a week, and on the following morning, the body, being that of a charity patient, was taken over to the morgue at Cook County Hospital for a post-mortem examination.

The morgue was crowded with students and physicians, though for some reason the great surgeon himself was not present. The pathologist who performed the autopsy was a great man in his specialty, and later became an author of note. Rumor had it that he and the aforesaid surgeon were not on the best of terms, to put it mildly, and this presumption lent an unusually keen interest to the autopsy that was billed for that morning.

Before beginning his examination the great man caused the clinical history of the case to be read aloud to the audience. After dictating a few appropriate remarks and describing the external appearance of the body, he proceeded with the examination of each internal organ. His usual routine was to begin at the head and work downward. He did not alter it in the slightest particular now, though well aware that the interest of all present, and for that matter, his own, cen-

tred almost entirely in the abdomen. So he examined the organs of the neck and chest, one by one, with exasperating thoroughness, as it seemed to the impatient students.

At last, however, he reached the abdomen and retracting the skin and muscles on either side, he surveyed its contents *en masse*. After describing these he began to draw the omentum to one side. The students breathed a little more quickly now, and some stood up so as to get a better view. Several who had brought opera glasses were greatly envied.

As the pathologist pulled the omentum away and exposed to full view the area of the recent surgical operation he paused. An expression of surprise appeared in his usually impassive face. He bent down more closely over the body and manipulated the stomach and intestines. The students held their breath. Not a sound was audible.

When the pathologist looked up, his face had resumed its wonted expression, in which mere personalities had no place or interest. His brief announcement, so far as I can remember it, was as follows:—

"Gentlemen: You will remember that the history of this case states that the operation of gastroenterostomy was performed last Friday. You will be aware, from your studies under Professor A., that gastroenterostomy means an anastomosis between the stomach and the upper portion of the small intestines, preferably the first part of the duodenum. In this case, however, the operation has been performed somewhat differently. I find that the stomach is joined, not to the small intestine, but to the transverse colon of the large intestine."

It came like a bomb-shell, this announcement of the

famous surgeon's fatal blunder. Of course everyone could now understand the patient's piteous craving for nourishment. The food had passed from the stomach directly into the large intestine, where it could not be assimilated without having been previously acted upon by the digestive juices of the liver, pancreas and small intestines. The unfortunate victim had actually starved to death.

One of the most ghastly mistakes in the annals of surgery is a case I will now narrate. It was described in the newspapers a few years ago, and many will recall the horror that the case aroused. Unfortunately it is not the only instance of the kind on record.

A noted Western eye specialist was treating a patient for a serious inflammation of the eyeball. The case was rather obscure, and it was not till after repeated and careful examination that a diagnosis of glaucoma was made. This is a very serious disease, and it often becomes necessary to remove the diseased eye in order to prevent a sympathetic inflammation of the normal eye, which would render the unfortunate patient stone blind.

The patient's condition became worse and the sympathetic inflammation which the specialist dreaded seemed imminent. He put the case plainly to his patient. The latter, dreading the thought of total blindness, finally consented to the removal of the diseased eye. The operation was performed and performed well. Both eyes were bandaged and the patient was put to bed in a darkened room.

On the following day the doctor called to dress the wound. When he removed the bandages the patient complained of the darkness and requested the doctor to open the blinds. A cold chill crept over the doctor. The

windows were wide open—it could mean only one thing. He could not speak for the horror of the thought. The patient raised his hand to his forehead, and then the awful truth broke upon him. The specialist had taken out the normal eye and left the blind one.

I do not know what passed between the surgeon and his blinded victim after the revelation came. A lifetime might be lived in that hour of anguish and despair. No reparation could possibly be promised or made.

And yet the surgeon took what seemed to him the only course indicated by honor after the desolation he had caused and could not undo. Several weeks later he entered the foyer of a large hotel and shot himself.

Such cases of over-confidence or criminal carelessness, and thousands of examples might be added, surely dispose of the idea that the only fault in our system lies in the preparation and training of the surgeon, and that when a high educational standard is set and maintained and all incompetents are weeded out, surgical outrages will be a thing of the past. This is based on the assumption that all surgeons are possessed of superhuman attributes and hence should be amenable to no law. Surgeons are but men, influenced by various motives, subjected to strong temptations. Granted a license such as no other body of men possess, and restrained only by general social and economic laws, and such interpretation as they choose to give to their self-imposed code of " ethics," is it to be wondered at that they assume an arrogant superiority towards the general public, and hence often come to value lightly the health and even the lives of the helpless folk who are so completely in their power? It is true that this very irresponsibility brings out, in some, the noblest traits and highest altruism; but only too

frequently it breeds a cruelty and criminal recklessness that is simply appalling to those who know.

These latter cases also show how great must be the danger of mistake on the part of the operators of limited experience or mediocre ability, when the most skilful surgeons are so liable to err. Surely the moral is that a most careful diagnosis should precede any surgical interference, that no factor that contributes in the slightest to the good of the patient should be neglected,[1] and, that contrary to the dictum of a noted gynecologist, the rule should be: *when in doubt don't operate.*

"I am not the bold operator whom you knew years ago in Zurich," wrote the great surgeon, Billroth, to a friend. "Before deciding on the necessity of an operation, I always propose to myself this question: Would you permit such an operation as you intend performing on your patient to be done on yourself? Years and experience bring in their train a certain degree of hesitancy."

"Every period of medical science has its fascinating catchwords," writes Dr. Otto Glogau (of New York) in *American Medicine.*[2] "Those of the present are appendicitis of the adult and adenoids of the youth. How many healthy appendices and how many strips of pharyngeal mucous lining, supposedly adenoids, may have been victims of bold science!" Continuing, he says:

"The present view as to the treatment of adenoids is their local removal; the same attitude was formerly maintained by the profession towards treating affections

[1] See Appendix C, containing an interesting and instructive account of the work of the famous Mayo Brothers in Rochester, Minnesota.

[2] "Nasal Obstruction in Children."—*American Medicine,* April, 1909.

of the thyroid gland, which, when hypertrophied and causing mechanical and general symptoms in a similar way to the adenoids, was completely extirpated at a time when our knowledge of its function was very scanty. But to-day, with our advanced knowledge of *cachexia strumipriva*, even the most daring surgeon is conservative in preserving a portion of the gland. Perhaps later on when the adenoid fury (furor adenoidicus) will calm down and we learn to recognize the symptom complex of *cachexia adenoipriva*, the physician will be more conservative in operating on an organ, the function of which is still unknown."

Writing upon "Tubercular Peritonitis in Women," [1] Dr. James N. West (of New York) says:—

"Osler states that fully one-third of the cases of tubercular peritonitis operated upon received this treatment under the mistaken diagnosis of ovarian cyst. I will add that I believe that fully another third of them are operated upon under the mistaken diagnosis of ordinary pyosalpinx. Perhaps, then, two-thirds of the cases in women receive a correct diagnosis only after opening the abdomen for some other disease. A considerable proportion probably die as a result of a complete failure to make a correct diagnosis."

The following plain language is from a remarkable article on the surgeon's sins both of omission and commission, entitled "Frenzied Surgery of the Abdomen." It was contributed to the *New York Medical Journal* [2]

[1] A paper read before the New York Obstetrical Society, March 9, 1909, and published in the *American Journal of Obstetrics*, May, 1909.

[2] The *New York Medical Journal*, November 23, 1907. This article is quoted in full in Appendix D.

by Dr. J. W. Kennedy, who is associated with Dr. Joseph Price of Philadelphia:—

"Incompetent surgery has made the practitioner a doubting Thomas and results in a tardy diagnosis with high mortality.

"Over eighty per cent. of our appendical work for the past two months has been pus, gangrene and peritonitis, which is a flagrant disgrace to the diagnostic ability of a large educational centre, and we can hope for little in the future unless our leaders stand for first hour operations.

"We had in the hospital at one time ten patients, on whom twenty-seven sections had been done, all pitiable examples of errors in diagnosis, incomplete surgical procedures, and frenzied surgical judgment from an anatomical, physiological and pathological standpoint.

"During the last six months nearly fifty per cent. of our work consisted of re-operations. Multiple scars marred the abdomen and were reproachful neglects of the untrained surgical mind. The sins of the operator had been visited upon the patient to the third, fourth and fifth scar. The patient has been made a chronic invalid and often an unwilling victim of some drug habit.

"Surgical achievements of the competent operator are so minimized by the incompetency of others. The complications incident to previous operations are a greater source of mortality than the lesion itself. Late and faulty diagnosis, incomplete procedures, and errors in judgment of pathological nature have brought us mortality which is an insult to the advanced surgery of the day."

And so I could go on adding testimony to testimony, and many from our highest authorities in surgery.

Some of these are ready to preach but forgetful in practice, while others are doing everything in their power to exalt the profession and stamp out the abuses I have endeavored to expose. Let me conclude with one more quotation, from a paper by Dr. J. L. Wiggins,[1] from which I have borrowed the title of this chapter:—

"Things which were permissible or even commendable under past conditions, are at present high crimes or misdemeanors. With the opportunities now available in morgues and clinics to see and study living and dead pathology, there exists no excuse for repetition of our former mistakes. We know that it takes more than the ability to cut and sew to make a surgeon. We know that a recent graduate, except in rare instances, is not competent even to operate. We recognize the wide distinction between the words 'operator' and 'surgeon.' We know that skill, confidence and judgment in any vocation come from constant repetition. We know that we, as individuals, would not select the occasional operator for ourselves or our families in any matter of serious import. We are capable of protecting ourselves; are not the public entitled to like protection?"

[1] "Surgical Outrages," by Dr. J. L. Wiggins (of East St. Louis, Illinois). The President's address delivered to the Ohio Valley Medical Association at French Lick, Indiana, November, 1908, and published in the *Lancet-Clinic,* November 14, 1908.