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NO. 1.

Original Contributions.

THE CARE AND TREATMENT OF THE CRIMINAL.*

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THE criminal has always been the most attractive person in the community, if we regard him from the standpoint of popular interest, and that this fact is generally recognized may easily be verified by a brief study of the daily newspapers. In a crude way we admit that, on "general principles," it is in the interests of the state that the criminal should be locked up, and the average man is not slow to say that punishment is meted out as a deterrent to the offender, and a warning to others who might be tempted to commit crime.

To-day the criminal is being studied and classified in a way that will result in his being cared for and treated in a more satisfactory manner than is at present the case, and with much better protection of the rights of the state. In taking up the question of the treatment of the criminal the first error to be avoided is that of confounding defect with disease, because without this distinction the whole question becomes muddled. Even Bosanquet does not seem to have fully grasped the difference, and in his work on the "Philosophical Theory of the State" writes about the "cure of the offender by medical treatment," as if there was always some disease to cure; and when he comes to write of the reformatory theory it is more patent still that he is not fully in touch with the facts now fully accepted by physicians, who have arrived at conclusions by practical methods. In dealing with the

* Read at meeting of Executive Officers of Provincial Boards of Health, held in Peterboro', September 10th, 1903.

question, I cannot lay claim to any great originality, and the views presented are those shared by physicians who have made a practical study of the criminal, and who hope that the day of radical reform in penology is not far distant.

The subject is, of course, an immense one, and there will not be time to take up the social and economic factors at work in the production of certain groups of criminals, and incidentally certain kinds of crime, but for fear that all present may not have a clear conception of the different classes of criminal ordinarily met with, I shall briefly refer to a simple classification: (1) The criminal insane; (2) Moral imbeciles; (3) Instinctive criminals; (4) Occasional criminals; (5) Habitual and professional criminals; (6) Accidental criminals.

The insane criminal, or properly speaking, the criminally insane man, that is, the criminal who commits a crime as the direct result of mental alienation, is not recognized by law, as a general rule, and his abnormal condition of mind must be very apparent, before either judge or jury can be brought to believe in the necessity of saving the prisoner from the rigors of the law. The result is that the death penalty is frequently imposed, even in cases where brain disease is clearly marked, simply because the unfortunate sufferer from the disease is supposed to know the difference between right and wrong in the abstract, a difference that nearly every patient in a hospital for the insane can give with satisfactory glibness. However, my views on this subject have been expressed so frequently, both publicly and privately, that I shall not weary you with them. To show, however, that the foregoing statements are not beyond the mark, it is morally certain that several insane murderers were hanged in Canada during the last few years, one of whom was actually arrested in the wards of an asylum for the insane, and tried without the slightest reference to his mental condition. In Germany, of 144 persons who were tried and eventually found insane, only 38 were recognized as insane before the judge, a condition of affairs rather startling in a country noted for the thoroughness of its methods. To those of us familiar with the everyday experiences in a hospital for the insane, perhaps the figures are not so surprising as they might appear to others not conversant with the popular idea of insanity, an idea not so far removed from the conception that insanity is in itself a species of crime; certainly something to be ashamed of. The present methods of attempting to detect the insanity of a criminal are inadequate and crude, especially when the mental condition of a prisoner is supposed to be established by a battle royal between rival lawyers and so-called experts in open court. Frequently those asked for opinions are refused permission to examine the prisoner, and the evidence becomes an attempt to

solve a problem more intricate than that of squaring the circle. It is wonderful though how often even physicians are anxious to square this circle; and the anxiety is generally in inverse ratio to the experience they have had. Of course common sense dictates that the proper time to examine the supposedly insane criminal is before trial, and it is probable that dignified and competent men, familiar with the aspects and manifestations of brain disease, can be found to give judicial opinions of even greater value than those of twelve jurymen, who, in all probability, never saw a case of insanity for more than five minutes in their lives.

A short visit to a penitentiary will soon convince the interested observer that justice has not always been done, and when I look over the endless list of insane persons sent from the penitentiary to Rockwood, suffering from chronic mental maladies, developed long prior to their incarceration in the prison, it is more than evident that man's inhumanity to man can be studied with painful reality at our own doors. Even the victims of gross brain disease are not exempt, and general paresis has time and again been seen among the convicts.

Moral Imbeciles.—The typical moral imbecile is one who is devoid, or nearly devoid, of moral qualities, just as we find some children deficient in intellectual qualities; such children are absolutely incapable of understanding the ordinary social, religious, and educational influences, and are almost invariably deficient in intellect as well as morality. Many, I might say most of them, are amiable, but drop into criminal acts without the slightest exhibition of what we call viciousness; indeed, the typical imbecile is rarely vicious in the true sense, he commits his crimes in the most innocent manner possible, and never realizes a sense of responsibility, simply because such feeling is an impossibility. Such cases reach me quite commonly, and some of the crimes committed by them are most astounding. All or nearly all, are easily managed when under proper care.

The Instinctive Criminal.—Some writers are inclined to place the moral imbecile and the instinctive criminal together, but I think a marked difference exists, for, while the moral imbecile is not usually vicious nor necessarily criminal, instinctive criminals are vicious from the outset. They reveal criminality in its most marked state, and while they form only a comparatively small proportion of the population of a prison, it is the element to be considered most seriously in the discussion of the care and treatment of the criminal. These people are not only mentally, but also physically abnormal.

In childhood they may be precocious, vicious, with sexual perversions of the most remarkable character, when at complete development they are moral monsters full of sensuality and self-

seeking impulses. Their depravity is absolutely beyond reach, their claims to mix with society untenable, and their degeneracy a menace to others not quite so low in the social scale.

Occasional Criminals.—The occasional criminal, who is not so far removed from the normal, as the members of the previous class, is one in whom weakness is the chief characteristic. Under ordinary circumstances he gets along fairly well, but if environment and circumstances are favorable to his fall he cannot resist temptation. If properly guided and cared for, he may be a useful citizen; if admitted to our so-called reformatories, ninety-nine times out of a hundred he will become that scourge of society known as the habitual criminal. As Ellis has so well said, "The steps by which the occasional criminal, aided on the one hand by neglect, on the other by the hot-bed of the prison, develops into the habitual criminal, are slow and subtle—that is one of the tragedies of life."

The Accidental Criminal.—The accidental criminal, or, as he is sometimes called, the criminal by passion, must also be referred to, although I confess when it comes to suggesting what should be done with him, I shall feel that it would have been much simpler to have left him out of the classification. The criminal by passion is, in the majority of instances, a normally constituted person, who, stung by some great injustice or wrong, takes the law into his own hands, and in a moment of passion commits a crime.

Now, having admitted that criminals are to be classified under some such headings as those suggested, what are we to think of our system of prisons and so-called reformatories. These are built to accommodate so many criminals who are presumably all of the same class, and who are from the very first herded together with as much regard to classification, as if they were so many sheep.

The one idea present is apparently that of punishment, an idea that is not tenable for one instant for the classes that are admittedly abnormal. That this is the assumption is easily demonstrated, if we recollect that the law is quite able to apportion the length of time it is necessary to deprive a man of his liberty, for committing crime. One magistrate will give a thief two years for stealing a loaf of bread, while the society thief may receive six months for the misappropriation of \$10,000. Another magistrate adopts a different rule, and still has the law for his guide—in other words, to quote from Gilbert's "Mikado," "they make the punishment fit the crime," theoretically, at least. As Professor Ferri remarks, "Up to recent times the criminal has been regarded as a kind of algebraic formula, the punishment has been proportioned not to the criminal, but the crime. What should be done is to attain scientific justice by ascertaining the reasonable treatment of abnormal members of society, not only

in their interest, but also in the higher interests of the society to which they belong."

It is quite true that law cannot be expected to take note of the many differences spoken of in the classification of criminals, but it can at least provide the machinery by which the criminal classes can be properly treated and cared for. It would be almost too much to expect that a magistrate without training would dispense law with the slightest regard to scientific justice.

Of course society must protect itself against those who have violated its laws, but it is a question if the highest kind of protection is assured when punishment is aimed at the offence alone. This seems, ordinarily, the basis of the treatment of crime. Then again, the punishment of a criminal does not accomplish all that it sets out to do, as it almost invariably neglects to take the slightest cognizance of the social conditions and defective institutions which played an important part in the production of this outcast from society. The great trouble with the punishment theory is that it is based on the supposition that the criminal is in all instances a normal being, when the facts go to show that in many instances he is markedly abnormal.

To the physician the suggestion of cure invariably implies the existence of disease, and it is a common belief that the medical theory is wedded to a belief that crime is invariably the outcome of disease. Nothing could be more erroneous, as the classification adopted shows, and the utmost contended for is the very co-operation of judges and physicians suggested.

It is true that among us there is a knowledge of the fact that many murderers are epileptic or insane, and we know that many others guilty of this crime are criminals by passion, the least anti-social of any of the classes.

However, leaving the region of theory for a time, and taking the practical method of investigating the application of our laws in the care and treatment of well-defined criminals, what do we find in our own country? A ray of light has broken through the cloud in a few places, but on the whole we have little on which to congratulate ourselves when we study the methods in vogue. Our one ideal is uniformity, with absolute disregard of the individual, in other words the only question considered is that of making "the punishment fit the crime."

To commence with our classification, viz, the criminal insane. As I have explained before, when these sufferers from brain disease commit murder they are almost invariably hanged. A very few escape the gallows, and are acquitted on the ground of insanity; these are sent to the provincial asylums, which are not equipped to care for the criminal classes. Outside of that it is distinctly wrong to allow the criminal insane to associate with

the harmless insane, but the law insists upon it, and there is no escape. In case the crime is not murder, and the insanity is not discovered until the prisoner is transferred to penitentiary or prison, the result is somewhat different. If in the penitentiary, and his mental malady is not particularly annoying to others, he is kept with the ordinary convicts; if he is troublesome, he is transferred to what is by courtesy called the criminal asylum. As a matter of fact, an insane criminal is not treated differently from any other convict; when his sentence expires he is then entitled to treatment in one of the provincial institutions, and although the number of transfers has been large, we may well be silent about the recoveries.

Now as to the moral imbeciles. It matters little what becomes of them, for Mark Tapley cannot be compared with them for cheerfulness. Being devoid of moral sensibilities, punishments have no terrors for them, and a sentence of death is received with as much equanimity as an invitation to dinner. It is needless to say our penal system is quite oblivious to the existence of any such being as a moral imbecile, and confers on him the right to freedom when he has worked out his sentence; it will be learned in time that it will be best for all concerned to keep him under control for the whole of his life.

The instinctive criminal enjoys the same glorious privileges as the more amiable degenerate, the moral imbecile, but is much more apt to get into trouble, as even in prison his vicious nature may lead him into crime. If he succeeds in getting through his sentence without complication, he is once more at liberty to commit all sorts of atrocities, and is in trouble very soon.

The occasional criminal, the habitual criminal, and the accidental criminal are cooped up with the degenerates just mentioned—it is one crime, one treatment. What need of classification when law is such a science that it can compute the exact number of days or years to extenuate a particular misdeed! What a picture, and what possibilities for the future!

How much, or rather, how little, is done in our prisons for the reformation of the convict. Little is possible under the present system, which is nothing better than an institution for the perpetuation of criminality. No wonder the tide of criminality has risen.

Havelock Ellis says: "The key to the failure of the prison, and a chief clue to its reform, lies in the system of administering definite and predetermined sentences by judges, who, being ignorant of the nature of the individual before them, and, therefore of the effect of the sentence upon him, and of its justice, are really incompetent to judge." Possibly a slight recognition of this fact has occurred in Canada, where there is a tendency in minor

crimes to use what is called the suspended sentence, and a modified form of the parole system. That its effect is excellent all recognize, for unless we have a system that enables us to discriminate between different classes, how can we look for different results than those which are now the rule.

No one can deny the statement that there are hundreds of criminals in our prisons to-day who might under certain circumstances be set at liberty, while others who will in time be freed, will only continue to prey upon society and commit anti-social acts with regularity. The first step in the solution of the problem is of course obvious, viz., the proper development of the indeterminate sentence. This can be regarded as a mere starting point, although of vast importance, because it transfers the responsibility of fixing a sentence from the judge, who cannot form an opinion of the highest value in regard to the classification of the criminal during the course of a trial, where rival counsels are almost invariably doing their best to build up their reputations, rather than add to the knowledge of the court in regard to the prisoner.

The authority of the judge having been transferred to another quarter, it is obvious that the responsibility should be shifted, with great care and circumspection, to the prison or reformatory authorities. As the administration of justice is a costly article at the best, and the expense caused by the criminal population is so great, no fault can be found with a just expenditure which will eventually save untold thousands to the country. The ideal prison, then, should have at its head a commission of the very best judicial and scientific men the country can produce, men whose knowledge of their subject is of the most complete character, and who are able to study and classify criminals properly, and suggest the rational treatment, or punishment, if you prefer the word, in each case. Under this arrangement, it would be possible to give each criminal the careful study his case demanded, before being allowed to associate with others, and it is very certain that few mistakes would be made.

The instinctive criminals would be forever shut up and kept from society, and the work of reformation, which is, of course, the true work of every prison, could be carried on intelligently and with some hope, especially in the case of the young. Not only that, a proper system of probation or parole could be developed. At present the occasional criminal serves his sentence and leaves prison with the brand of infamy stamped upon him, and while it is true that he has satisfied the demands of the law, he has not expiated his crime, no matter how trivial, in the eyes of the public. A strong man would require an iron will to fight against popular prejudice backed up by our so-called detective system;

a weak man finds it extremely simple to succumb to what seems to him the inevitable, and soon becomes a recidivist of the marked type. The system of probation should involve the finding of a proper situation for the probationer. The result is not uncertain, in fact in Elmira, where one of the few modern prisons is to be found, the percentage of recidivists under this system is extremely small. There the period of probation is generally six months.

I have hinted at the importance of having a highly trained and broad-minded commission at the head of the ideal reformatory. More important still is the necessity of having efficient and well-educated officials to carry out the instructions of these heads. We recognize the marvellous change that has taken place in hospitals for the insane, since the advent of the trained and intelligent nurse, and it is more important still that the warders in charge of criminals should have the most advanced knowledge regarding prisoners and their treatment. As Havelock Ellis suggests, "The criminal in all his manifold variations, with his ruses, his instinctive untruthfulness, his sudden impulses, his curiously tender points, is just as difficult to understand and to manage as the hospital patients, and unless he is understood and managed, there is no hope of socializing him."

The system of solitary confinement so warmly advocated by some cannot be too severely condemned. In Elmira, which we can regard as the nearest approach to the ideal reformatory, the endeavor is to occupy the convicts as completely and intelligently as possible, from the moment of waking until bedtime, leaving little or no opportunity for the development of evil, and not taking away the interest in life. For boys, physical and mental development classes are instituted, and the treatment adopted includes massage, gymnastics, baths, school work, etc., and a carefully regulated dietary restricted to the best requirements of the criminal.

The system, too, of allowing the hopeful criminals to win their way back to freedom, when properly applied, is excellent, as proved by competent observations. As has been well said, the chief aim of the ideal prison is that of being a moral hospital. It is, of course, impossible to more than indicate in a general way the lines along which the advances should be made, as the subject is too large to deal with here. Little has been said about the offences of minor criminals and drunkards. With the first class, providing that the offenders are not of the instinctive criminal class, the suspended sentence is excellent, although it is a mistaken kindness, in fact a grave wrong, with instinctive criminals. Great care should be taken by the magistrates when investigating

the crimes of boys, and if necessary, expert advice called in. This has been done occasionally with decided benefit.

Up to the present Canada has developed slowly and healthily, her expansion has been gradual, and we have escaped the dangers incident to sudden accessions of multitudes of immigrants from the older countries. Our record as a law-abiding people has been enviable, and on the whole the administration of the laws has made the comparison between ourselves and our neighbors to the south a very comforting one. As a matter of fact we have been drifting, and are now becoming blind to a danger that is apparent to any of those who have had much to do with the defective and criminal classes. It is useless to deny the gravity of the situation, and as an ounce of prevention is always better than the proverbial pound of cure, now is the time to face problems that are upon us.

As a general thing, Canadians are satisfied that in the administration of justice, we are ideal, and have little to learn, that when a prisoner has been convicted and punishment meted out our duty to society has been finished. Of course, those who have made a study of penology are well aware that Canada is a generation behind the times as far as the care and treatment of the criminal are concerned. The only explanation of the general apathy regarding the matter is, that we have been living under conditions particularly favorable to ourselves, conditions that will no longer prevail. The difference between Canada and the United States in the matter of crime is ordinarily explained by the assumption that our laws are better, and are administered with greater dignity and promptitude. There is something in that, in fact in some notable cases of insanity there has been far too much promptitude, and judicial errors of the greatest kind made—errors that in a few years will be impossible. As a matter of fact, we are years behind some of the States, notably New York, in the care and treatment of the criminal, and we have not had to face the problems that are encountered there. Up to the present the United States have been the Mecca for all the defective and criminal classes of Europe, and the slums of the larger American cities will always prove an attractive haunt; but our time is coming.

It is a question for the politicians to argue as to whether it is advisable or not to open our country to hordes of subsidized immigrants, but certain it is, that when the tide of immigration turns this way as it is now doing from Europe, we shall know more about the criminal than is the case at present. Even now it is extremely interesting to study the old world degenerates collected in our institutions, and one marvels that such specimens were allowed to reach our shores. In the anxiety to add to the

population, the doors have been practically wide open, and when a degenerate has once obtained a foothold here, a very brief residence makes him secure, until he commits a crime or develops insanity, in either case the result being that he becomes a burden upon the State which owes him nothing. We should take warning by the experience, which has resulted in such a serious condition of affairs in the United States, a condition referred to by Dr. Allison, of the Mattewan Asylum for Insane Criminals, in New York State, in an address read at the Medico-Psychological Association in Washington last June. I shall quote briefly from his paper, as the quotation contains suggestions that should at once be adopted by Canada, if she is to escape to even a slight extent.

Speaking of the care of insane criminals, he says: "Criminals are a great burden upon the community everywhere; many of them are of alien birth, and many others of foreign extraction. Congress has recently enacted measures amending the restriction of immigration of the defective classes, which interposes a bar to lunacy and crime coming to us from foreign lands. America has long been a refuge for persons of this class. Some of them come of their own volition; others are assisted by members of their own family, by prison associations, by benevolent and other societies, and at times by municipalities. Some of these immigrants are habitual criminals; others, who are poorly equipped mentally, soon become criminals. Numbers of such cases have come directly under our own notice. Discrimination is required to sift from prisons all such inmates, particularly degenerate examples of European origin. An important feature of the new law is the extension to three years of the period of probation, during which insane or criminal aliens who have landed in contravention of our laws may be returned to their native countries. This feature of the Act affords opportunity for investigation into the mental condition, and the antecedents not only of inmates of prisons, but of all institutions for the defective, dependent and criminal classes. Provision is made by which the Government may from time to time obtain information from the officers of penal reformatory or other institution concerning aliens in their custody. Agents in the Government service may be detailed to secure facts from such institutions through which the enforcement of this law may be facilitated."

Just as Dr. Allison says, it is a notorious fact that defectives of all classes are shipped to America as an easy solution of a serious difficulty, and if I could show you many of the degenerates I have met who came here under the name of desirable immigrants, you would marvel that they could have passed the most

perfunctory inspection, so obvious were the ear-marks of degeneracy.

Those of the insane type do not constitute the greatest menace, as it is the instinctive criminals that are most to be feared, not only for themselves, but for what they are likely to hand down as a legacy in the way of degenerate descendants. If we consider the matter alone from the dollars and cents standpoint, the cost to the State even for a small colony of degenerates will in the end be appalling.

In the photograph which I have of some of the degenerates in the Mattewan State Hospital, some seventy persons are shown from Central and Southern Europe alone. These seventy persons will cost the State something more than two hundred dollars per capita annually, and as they all probably belong to the incurable class, and will easily live on the average ten years each, here we have at once an expenditure of \$140,000 in this one small institution, an expenditure that should not be incurred by the State. That is not the whole question though. How many defective and criminal children will these degenerates leave? Those of us who know what a part heredity plays in the development of insanity and crime can appreciate the magnitude of the calculation.

Probably the most instructive history of the possibilities and cost of a criminal family is the much-quoted Jukes incident. Havelock Ellis details this as follows: "The so-called Jukes family of America is the largest criminal family known, and its history, which has been studied carefully, is full of instruction. The ancestral breeding-place of this family was in a rocky inaccessible spot in the State of New York. Here they lived in log or stone houses, sleeping indiscriminately round the hearth in winter, like so many radii with their feet to the fire. The ancestor of the family, a descendant of early Dutch settlers, was born here between 1720 and 1740. He is described as living the life of a backwoodsman, a hunter and fisher, a hard drinker, jolly and companionable, averse to steady toil, working by fits and starts. This intermittent work is characteristic of that primitive mode of life led among savages by the men always, if not by the women, and it is the mode of life which the instinctive criminal naturally adopts. This man lived to old age, when he became blind, and left a numerous more or less illegitimate progeny. Two of his sons married two out of five more or less illegitimate sisters—these sisters were the 'Jukes.' The descendants of these five sisters have been traced with varying completeness through five subsequent generations. The number of individuals thus traced reaches 709, the real aggregate is probably 1200. This vast family, while it has included a certain proportion of

honest workers, has been on the whole a family of criminals and degenerates, of vagabonds and paupers. Of all the men not twenty were skilled workmen, and ten of these learned their trade in prisons; 180 received out-door relief to the extent of an aggregate of 800 years; or making allowance for the omissions in the record, 2,300 years. Of the 709, there were seventy-six criminals committing 115 offences. The average of prostitution among the marriageable women down to the sixth generation was 52.40 per cent.; the normal average has been estimated at 1.66 per cent. There is no more instructive study in criminal heredity than that of the 'Jukes' family. The total cost to the State of this family, as a result of their criminality, is a million and a quarter dollars, and the end has not been reached."

I am aware that the dollars and cents question is not the only important one, but it is the one that appeals to the average taxpayer, and when we think how great already is the expenditure in connection with Provincial and Federal institutions, it is very evident that every available means should be adopted to lessen, rather than to add to, the load we should carry. As an illustration of the folly of holding the door wide open to foreign defectives, I can point to one imported criminal, who was deliberately shipped to Canada. His advent brought misery and tragedy, and cost the country, it is said, more than \$50,000. Under a rigid system of inspection, this criminal could not have reached here, as his record in other countries was well known. However, we are not lacking even in Canada in historical proof of my contention that we cannot be too careful in framing laws to enable us to get rid of defective and criminal immigrants before they have had time to do much harm.

In the early days of the settlement in Ontario what was called the scum of certain districts in the older countries obtained a foothold here, and it is notoriously true that the cost of these degenerates to Canada has been incalculable. From certain facts that came into my possession, I suspected that a reading backward of some of these family histories would prove very instructive, and the supposition was quite correct. My own observations have been confirmed by the researches of others.

To illustrate my point in a practical way: Kingston is as you all know a long-settled district, unaffected to any extent by immigration, and yet within the last ten years the Government has had to contribute no less than \$72,875.83 for the maintenance of defective immigrants, who would not have been permitted to obtain a foothold here if satisfactory alien laws had been in force. There were sixty-three of these defectives, seventeen of whom still remain with us.

Their maintenance rate was only calculated at \$130 per

annum, and yet the total amount is rather surprising. If that is already the case in one small institution, comparatively remote from the direct effects of immigration, what must be the total amount for the whole Dominion? What is it likely to be in the near future unless we adopt stringent protective legislation?

Of course it will be urged that if we are to have immigration on a great scale we must naturally expect to get a certain proportion of degenerates. This is correct as far as it goes, but does not represent the whole truth. It must always be the case that the failures in life will make a large showing in emigration returns, and while as a rule the sturdy agriculturists of the British Isles furnish a most desirable element to add to our population, the same cannot be said of the mental and physical weaklings reaching us from the slums and poorer quarters of overcrowded cities. These are not the greatest menace though. We have most to fear from the importations from Central and Southern Europe. The types of degenerates I have seen from these quarters far out-rank anything of the kind I have met elsewhere, and furnish a unique study in themselves. The social conditions developing these degenerates are well understood, and it is a debatable question as to whether we are not making a serious mistake in giving encouragement to immigration from this part of the world. The Northern races are far better equipped mentally and physically, and environment has been much more fortunate for them. The practical point though is, how are we to minimize the danger, and make the best of a situation that must prove serious if ways and means are not found to meet it more than half way. Already one Province has realized what it means to support the insane of an alien race. Two years and a half ago, when investigating the affairs of the Provincial Hospital for the Insane in British Columbia, I found one large ward in that institution devoted altogether to insane Chinese, and no doubt a fair proportion was to be found in the penitentiary. Apparently there was no relief from the burden, no law by which these foreigners could be deported to their own country. At that time the per capita cost was \$255 per annum, so the Provincial expenditure for these aliens was no trivial item.

Now I am by no means certain that we can find a perfect means of controlling the situation absolutely, as with our enormous frontier it is impossible to keep the door shut to degenerates and criminals. A far more rigid system of inspection than that in use at present should be adopted—that would exclude the palpably insane and defective, but in addition to this the indigent class of immigrants who show marked evidence of mental disease or defect, or criminal tendency, should be returned to their own country at any time during a residence of two or three years.

This is not an unreasonable proposition, and Federal and Provincial authorities should unite in vigorous action to control the situation as completely as possible.

The public has long ago awakened to the fact, that it pays in the long run to stamp out outbreaks of small-pox, even at a great outlay. No one objects to such expenditure, and the common sense of the thing appeals to all, and yet the ravages of an unchecked outbreak of small-pox are as nothing compared with the misery and expense dependent on the presence in the community of a very small body of degenerates. The proportion of our own weaklings is large enough at present, without being augmented by the addition of Old World specimens.

Surely the question is one that might fairly be taken up by the representatives of the different Boards of Health, and it is with the hope of exciting some intelligent enquiry into the subject that I have ventured to bring it up here.

I am not a pessimist, nor am I an alarmist, but I cannot shut my eyes to things as I see them. The alien degenerate is a spirit we should exorcise just as quickly and persistently as well-made laws will permit us.

THE OPEN METHOD OF TREATING FRACTURES.*

BY F. N. G. STARR, M.B. (TOR.).

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Mr. President and Gentlemen,—Upon more than one occasion I have been consulted by patients with a deformed extremity resulting from a fracture that has either not been properly reduced, or that has not been kept in position after reduction, or that has been in the neighborhood of a joint, and though perfect reduction and union have been secured, yet deformity of the limb has resulted owing to stiffening of the joint.

It seems to me that, when there is difficulty in reduction, or when there is failure to keep the broken fragments approximated, or when the fracture is in close proximity to a joint so that the associated inflammation may lead to ankylosis of that joint, or in fractures of both bones of the forearm where ankylosis of the radius and ulna may occur, the safer course to pursue is to cut down at once upon the fracture and unite the fragments by artificial means. In this way, the length of the convalescence is shortened, subsequent operations—if one succeeds in his asepsis—are avoided and one is able to begin, with safety, passive motion of the implicated joint at a much earlier period.

Of course in fractures near a joint where the bones are superficial this is not as essential, as for example in Colles's fracture, for here one may begin passive motion in a week by carefully steadying the broken fragments between the fingers and thumb, and thus secure an ideal result.

In connection with these remarks I desire to record a few cases in the treatment of which I have adopted the open method.

The first case that I shall mention was in a boy, aged 8 years, who, by falling from a six-foot fence, knocked off the external condyle of the right humerus. The line of fracture extended from the right external supra-condyloid ridge downward and inward through the radial head of the humerus. After some manipulation under chloroform, I thought I succeeded in reducing the fracture, and applied a temporary splint. At the end of five days, when I removed this splint to apply an Aikins, I found the fragment again in its faulty position, with its pointed end threatening to come through the skin. Dr. Peters saw the case with me, and again under chloroform we tried to secure reduction, but failing, decided to cut down upon the fracture. Accordingly, under proper antiseptic precautions, an incision was made over the

* Read at meeting of the Canadian Medical Association, London, August, 1903.



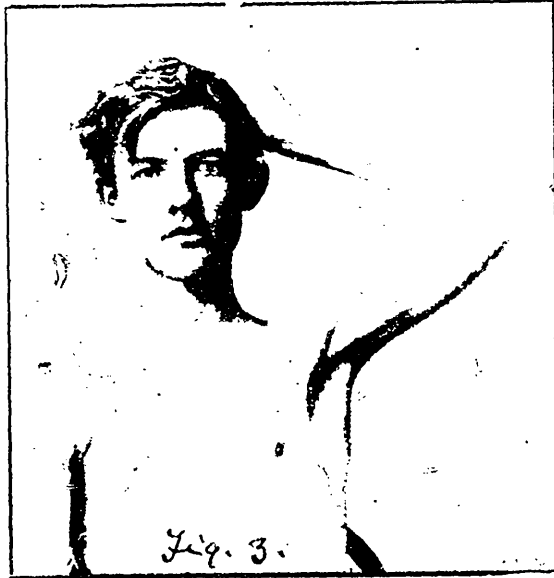
CASE 2.—Showing amount of movement at the end of ten weeks.

posterior and outer aspect of the external condyle, and the fracture exposed. Imagine our surprise at finding the fragment completely rotated upon itself so that the articular surface looked upward and forward. It was with the greatest difficulty, too, that this was brought into its proper position. Apposition of the fragments was finally secured by grasping the condyle with forceps, and using a strong periosteal elevator as a fulcrum. The fragment was then wired in place, the wound closed without drainage, and an Aikins' splint applied. Union by first intention was secured, and at the end of eight days passive motion was commenced, and carried out daily for two weeks, when the splint was removed altogether, and the child encouraged to use his arm. He was given a small pail to carry about, and from day to day additional weight was added so as to secure a good carrying angle at as early a date as possible. The result was very good indeed, for in six weeks he was again riding his wheel and playing ball with the other boys.

The second case, in a female aged 45, was one of fracture of the surgical neck of the humerus, with dislocation of the head, occurring in the practice of Dr. W. A. Sangster, of Stouffville, some eight weeks before. The doctor, after several unsuccessful attempts to reduce the dislocation, very properly brought the broken ends together, and put the limb up in this position, hoping to secure union, and then having the humerus as a lever, he hoped to be able to reduce the dislocation. I am reporting this case, not because it can, strictly speaking, be called a recent case, but to show the advantages of the open method over the usual methods laid down in some text-books. Under an anæsthetic, I endeavored to reduce the dislocation by Kocher's method, hoping for failure lest success might mean a rupture of some of the axillary contents. My hopes were realized in that, at the first attempt at manipulation, the recently united fracture at once gave way—in fact, very little attempt at union had occurred although the fragments were in perfect apposition. With Mr. Cameron's assistance, I cut down by means of an anterior incision, commencing just external to the coracoid process, and carrying the incision downward for about three inches, dividing the skin and fascia. The fibres of the deltoid were then torn apart, and the fracture exposed, while the dislocated head rested under the coracoid. Even now all attempts at reduction of the dislocation failed, consequently it was decided to excise the head. After stripping up the periosteum, and then detaching the muscular insertions, the head was removed without much difficulty. The ragged edges of the upper end of the lower fragment were snipped off, a drainage tube inserted, the wound closed, and an Aikins' splint applied. At the end of thirty-six hours the drainage tube was removed, but for four or five days

a considerable amount of bloody synovial fluid continued to drain away. At the end of ten days, the wound was entirely healed, and before three weeks passive motion was commenced. The patient left the General Hospital at the end of five weeks, and was then able, with some assistance, to put her hand to her forehead, and to carry a small weight in her hand without discomfort. Up to this period there had been no shortening. The last I heard of the patient is that she has a useful arm, and is able to do her housework. (Figs. 1 and 2.)

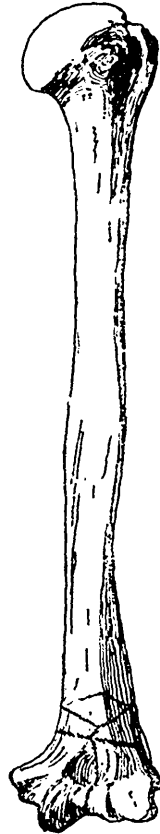
The third case that I shall mention is a somewhat complicated one, which occurred in the practice of Dr. Richard Raikes, of



CASE 3.—Showing extent of movement of arm at the end of two weeks.

Midland, with whom I saw the case upon the day of the injury. A lad, of 19 years, fell from a lumber yard truck, alighting upon his shoulder. Under an anesthetic, what I first took to be a dislocation of the head of the humerus was easily reduced, and as easily recurred. A mass was then discovered under the clavicle, but no amount of manipulation would move this. Thinking we had to deal with another case of fracture with dislocation of the head, I thought the best treatment would be to cut down upon the part, reduce the dislocation, if possible, and wire. Consequently, by means of the anterior incision, as already described, I exposed the site of injury. Upon exploring with the finger, I found the bump under the clavicle to be a knob of callus on its under sur-

face, resulting, as I afterward discovered, from a fracture of that bone two years previously. I then turned out the upper end of the lower fragment of the humerus, and found it rounded and burnished. Upon making this discovery, we felt satisfied that we had to deal with a dislocation of a false joint, which would account for the difficulty experienced in keeping the limb in place, when reduction had first been tried. Upon feeling for the



Representing lines of fracture in lower end of humerus in Case 4.

head it was found in the glenoid cavity. By grasping it with a pair of forceps, one was able to satisfy himself of its mobility. Its under aspect was hollowed out, making a socket for the new head. This socket was scraped out to freshen the surface, and from the upper end of the lower fragment a thin shaving was snipped off. The outer surface of each fragment, as far forward, and also as far backward, as possible, was then drilled, and two heavy silver wire sutures inserted, which, when tightened and

fastened, approximated the fragments accurately and firmly. As there was some general oozing, a drainage tube was inserted, the wound closed, and an Aikins' splint applied. The drain was removed at the end of forty-eight hours. At the end of a week, union having occurred, the stitches were removed, and gentle motion tried. The doctor then encased the shoulder, arm, and chest in plaster, and left this for two weeks more, when he commenced passive motion, and carried it on vigorously for another two or three weeks. At the end of seven weeks the patient was doing light work about the mill-yard. Exactly eight weeks after the injury, I was again called to Midland, when the patient met me at the train to show me his arm. I asked if he could use it, when, to my astonishment, he performed adduction, abduction, elevation and circumduction as freely as I could do it myself. He then picked up my heavy grip in his left hand, and carried it three blocks. For such a happy result, Dr. Raikes is to be congratulated, for it is largely due to his attention and perseverance. (Figs. 3 and 4.)

The fourth case is one of a man, aged 42 years, whom Dr. Raikes sent to the General Hospital, suffering from a compound comminuted fracture of the lower end of the humerus of the right side. In order to make out precisely all the lines of fracture, I determined to have the X-ray used, but after waiting for suitable weather for nearly a week, and then meeting with failure, I decided to cut down upon the injured bone, feeling certain that nothing but a stiff elbow could result from any other method of treatment. The fracture is best represented by this bone, Fig. 4.

Accordingly, an incision was made about 2 1-2 inches long, over the lower end of the posterior aspect of the humerus, dividing the skin, fascia, and tendinous part of the triceps, separating the remaining muscular fibres with the finger. Upon exploring the wound, four pieces of bone popped out from between the lower end of the main upper fragment and the upper ends of the main lower fragments, for this lower fragment was split, the fracture extending through the trochlear end of the humerus. The synovial sac, though greatly distended, was apparently intact and was kept out of the way by means of a retractor. Having now only three fragments to deal with instead of seven, I drilled the lower end of the upper fragment at the outer side and at the inner side, from behind forward, keeping my finger in front to avoid injury to the structures in front of the shaft. At corresponding points, each of the lower fragments was drilled, and stout silver wire sutures were inserted and made fast, approximating the fragments accurately. The wound was closed without drainage, and the elbow put up at a right angle on an Aikins' splint, and union by first intention occurred. I did not unite the two lower

pieces by wire, because the other sutures seemed to hold them so firmly in apposition. This, I am free to admit, was a mistake, for at the end of ten days, when I tried passive motion, I felt some grating of these two fragments, and had to refrain from further passive motion for another ten days, until some union had taken



CASE 4.—Showing the extent of movement at the end of two months, before forcible flexion and extension was resorted to.

place. In this way valuable time was lost. However, at the end of five weeks, the patient returned home with a considerable degree of movement at the elbow. He could touch the end of his nose with his finger, and could extend the forearm fully two-thirds of the way to the carrying angle, while pronation and

supination were almost perfect. Under chloroform, the doctor subsequently forcibly straightened the arm, and succeeded in getting a favorable result. (Figs. 5 and 6.)

The fifth case, though not one of recent fracture, fully demonstrates to my mind the wisdom of the open operation as a means of shortening convalescence. When I first saw the case, I suggested the possibility of an operation, but it met with such scant approval that I did not press the matter. It was a case of compound comminuted fracture of the right tibia occurring in a man, aged 55 years, whom I saw for Dr. Machell, during his illness in the summer of 1899. The patient chose the slower plan, and I put up the fracture with Dr. Primrose's assistance on a double inclined plane, but, finding this uncomfortable, I changed to an Edinboro box splint, and swung the limb in a cradle. At the end of six weeks, union was perfect in all but the pointed lower end of one of the middle fragments. In consequence of this he was kept quiet for another three or four weeks, at the end of which time, there still being movement, Dr. Machell cut down over the front of the tibia, snipped off the pointed extremity, wired this fragment to the upper end of the lower fragment, and put the limb up in a plaster splint. At the end of three weeks the patient was up, and has secured a perfectly good leg. Had this course of procedure been allowed at first, I feel certain the length of total disability would have been shortened by half.

I have purposely avoided mentioning cases of fracture of the vault of the skull, in which the open method of treatment was carried out, not so much, however, to secure an accurate line of approximation as to relieve urgent pressure symptoms, because this has already become a well-recognized practice.

It is possible that the day may yet come when the open method of treating recent fractures will be the only recognized practice, though I should hesitate for some time before advocating such a sweeping reform—if reform it would be. It seems to me, though that there are many cases, now treated by means of splints only, in which the result would be better, the convalescence shorter, and consequently the surgeon's gratification greater if the open method was adopted. One should, however, carefully consider the merits of each case before rashly resorting to the knife—a weapon that is decidedly dangerous in the hands of some.

PERSONAL EXPERIENCE WITH ALEXANDER'S OPERATION FOR RETROVERSION OF UTERUS.*

BY H. MEEK, M.D., LONDON, ONT.,

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My personal experience with Alexander's operation for retroversion of uterus dates from February, 1890. During the period intervening between that date and the present time, I have had about 200 cases. From this fairly large personal experience, I shall consider briefly in the time at my disposal: (1) The class of cases suitable for the operation; (2) Advantages of this operation over other methods of treatment; (3) My results; (4) Technique of operation.

1. I would classify cases suitable for the operation under two heads: (a) simple uncomplicated retroversion with free mobility of organs; (b) some cases complicated by disease of appendages, non-suppurative, and where adhesions are not too dense; in such cases, after breaking up adhesions, and dealing with complications through the dilated internal inguinal ring, the ligaments can be shortened and fixed in the usual way. All cases, however, of suppurative disease of appendages or non-suppurative cases with dense adhesions, binding organs to neighboring viscera, as intestine or bladder, are unsuitable cases for this operation, as such conditions can be dealt with, with greater safety, through a median abdominal incision.

2. *The Advantages of the Alexander Operation over other Methods of Treatment.*—In simple uncomplicated cases of uterine retroversion suffering from symptoms calling for treatment, there is a choice between treatment by pessary and some one of the surgical operations devised for the radical cure of the displacement. The objections to the pessary treatment are: (1) At best it is simply palliative—I have never seen a cure by the pessary; (2) the instrument can never be worn comfortably for any length of time; (3) it is liable to get displaced and cause ulceration of mucous membrane of vagina, and even fistulous openings into rectum and bladder; (4) it may be, and no doubt has been, a factor in causing infection of uterus, appendages and peritoneum. On account of these objections I would advise surgical intervention in preference to the pessary treatment in the vast majority of cases, and in my opinion the Alexander operation should be preferred to other surgical methods devised for a radical cure. Over the operation of ventro-suspension, which I consider the best of all the methods where a median abdominal section is

*Read at meeting of the Canadian Medical Association, London, August, 1903.

made it has the advantage of not being attended with any of the risks from this operation, viz.: (1) the slight risk of wounding the bladder with incision or with the suspension sutures; (2) slight subsequent risk from an abnormal ligament between uterus and abdominal wall; (3) the risk of interference with development of uterus during gestation and with the expulsive power of uterus during parturition; (4) the slightly increased risk attending all operations where abdomen is opened in median line. Over the method of shortening the ligaments after abdominal section, it has the advantage of greater safety. Shortening the ligaments through vaginal route is attended by risks to the future health of the woman from more or less infection of pelvic peritoneum, which cannot well be avoided, and from accidental injury to bladder which may occur. The Alexander operation is free from such risks. I have had no personal experience with this last method of operating for retroversion of uterus, but in one case in which this operation had been performed, I was called upon subsequently to open the abdomen for pelvic and abdominal pain; the tangled matted condition met with, the result of infection of the pelvic peritoneum, did not tend to impress me favorably with this method of treatment.

3. *My Results.*—(1) There has been no death among my list of cases. I may therefore, I think safely, say, that with the Alexander operation there should be no mortality. (2) If the case is a suitable one, and the operation properly performed, there should be no recurrence of the displacement. Among my earlier operations, when our technique was not what it is now, infection and suppuration occasionally occurred, and in one or two cases was followed by recurrence of displacement. Among my earlier operations, I have also had recurrence in one or two cases not suitable for the usual operation, in which there were slight adhesions holding the uterus back. In all such cases, both uterus and appendages should be properly freed before shortening and fixing ligaments, otherwise recurrence will take place no matter how trifling and insignificant the adhesions may appear to be. With a few exceptions from the causes I have mentioned, the cure of the displacement has been permanent. (3) I have followed several cases during subsequent pregnancy, parturition, and the puerperium. The only sensation directly resulting from the operation I have heard patients complain of, during gestation, was a sensation of tightness over the region of inguinal canals. There has been no interference with the development of uterus during gestation, and no interference with parturition. During the puerperium, involution goes on rapidly and normally, and there is no tendency to recurrence of displacement. In cases of retroversion not operated on, which become pregnant and go to full

term, the displacement almost invariably recurs after delivery, during the process of involution. In such cases involution is invariably slow and imperfect, shewing in this a marked contrast with cases in which the operation has been performed. For this reason alone I would advise the operation as a measure favoring more rapid and complete convalescence after parturition. (4) I have not seen hernia in the cicatrix follow in any of my cases, and I do not think it should follow if the operation is properly performed. I have in several cases cured small and large inguinal hernia, complicating the condition for which the operation was performed.

4. *Technique of Operation.*—The intestinal tract should be cleaned out on the day preceding that set for the operation by purgatives and enemas. A hot soap and water bath should be given the evening before the operation. Abdomen, pubes and vulva should be prepared by shaving and cleaning with soap and water and bichloride solution, and a bichloride pad applied. Vagina should be prepared by swabbing out with green soap and water, a bichloride douche followed by plain water douche and a packing of iodoform gauze inserted. At the operation the uterus should be curetted as the endometrium is in most cases in an abnormal condition. If the vaginal outlet is relaxed from old lacerations, this should be corrected by a plastic operation. After the uterus and pelvic floor have been attended to, the uterus is put in normal position, if freely movable, and a gauze packing inserted in vagina. The operation for shortening ligaments should then be performed. Taking the pubic spine as a guide, an oblique incision is made over the external ring, and inguinal canal on one side down to the aponeurosis of the external oblique. The pillars of the external ring are carefully exposed, particularly the external pillar. This is of importance, for in some cases the external ring is very small, scarcely any ring at all, and in some cases there are two or more openings, and the wrong opening may be mistaken for the ring, and time wasted in searching for the ligament, or the parts may be so disarranged in the search that the ligament cannot be found. I have never yet failed to find the ligaments. At the external ring there is only one place for the ligament, and if carefully looked for, it may invariably be found coming out over the external pillar usually accompanied by the genital branch of the genito-crural nerve, lying anterior to the ligament. In order to find the ligament after the external pillar is exposed, the fascia between the pillars should be nicked and with the finger slight pressure made on the aponeurosis just outside of the external pillar, slightly everting this pillar when the ligament may be seen bulging a little on the inner side of pillar. Avoiding the nerve the bulging ligament is caught with blunt

forceps and gentle traction employed. Traction should be gentle, because at this point the ligament is small and spread out fan-like, some of the fibres passing out over the pillar, while others pass backwards into the floor of the canal. The sheath surrounding ligament is adherent to the floor and aponeurosis. If strong traction is made, the sheath is torn and the delicate fibres of ligament broken, and the stump may retract into the peritoneal cavity, thus complicating the operation considerably. By gentle traction and the use of a small blunt hook or director the ligament can usually be easily separated and drawn out of its sheath without opening up the canal. When once separated from its sheath, it comes out quite easily, getting larger and resembling in appearance a frog's leg. If there should be any difficulty in freeing ligament at external ring, the canal can be opened up when the ligament can be quite readily freed. It should be drawn out as far as possible, usually four or five inches. After ligament on one side has been gotten out, the ligament on the other side should be gotten out in the same way before proceeding further with the operation. The peritoneal pouch accompanying the upper thick portion of ligament should be peeled back before the ligament is fixed.

In cases where it is thought advisable to explore pelvis intra-peritoneally, the canal should be opened up, the peritoneal pouch accompanying ligament opened, the finger introduced and the pelvic organs examined. Any posterior uterine adhesions can be broken up, the ovary and tube if necessary can be drawn out through the ring, and any pathological condition attended to. The opening in peritoneum can then be closed by a running suture of cat-gut, and the ligaments fixed in the usual way.

In these cases, however, to prevent any risk of subsequent hernia, the canal should be closed as in Bassini's operation for inguinal hernia. Ordinarily, the ligaments may be fixed by two or three sutures of fine chromic gut passed through pillars of ring and ligament, care being taken not to include the nerve, and not strangle the ligament. These sutures, when tied, bring together the pillars of the ring, fixing the ligament between pillars. The external wound may be closed by a running suture of cat-gut in deep layer of superficial fascia, and another running suture in skin.

Before closing the external wound, the excess of ligament may be cut off, any oozing from stump checked, and the stump then buried in the superficial fascia at lower angle of wound, or the excess of ligament may be doubled back and sutured in wound. A gauze pad is applied over each wound and held in place by strips of plaster, and a T bandage so arranged as to keep up moderate pressure over wound.

I do not consider a pessary necessary after operation if patient is kept in bed three weeks. The vaginal gauze packing is removed about the third or fourth day. Care in lifting should be exercised for three months.

If, during the operation, either ligament should accidentally break, and the stump retract into peritoneal cavity, the canal should be opened up, the deep epigastric vessels exposed, and the peritoneum opened above and to outer side of these vessels. The retracted stump can then be caught, brought out and fastened, and the peritoneum and canal closed in the way mentioned.

In several cases I have broken the ligament at lower terminal end, but retraction of stump into peritoneal cavity occurred in only one of my cases. Such an accident, however, is in every case, in my opinion, the fault of careless manipulation in getting the ligament out.

330 Queen's Avenue.

Proceedings of Societies.

CLINICAL SOCIETY OF THE NEW YORK POLYCLINIC MEDICAL SCHOOL AND HOSPITAL.

A MEETING of the above Society was held on December 5th, 1903, the President, Dr. James Hawley Burtenshaw, in the chair.

Amputation of Breast Demonstrating Triangular Dressing of Arm.—Dr. J. A. Bodine presented three cases of amputation of the breast for carcinoma, in which the arm had been dressed during the healing period on a triangle holding the upper arm at right angles to the body. He called attention to the consequent freedom with which the patients could use their arms. He had been using this dressing in all such cases for the past three years. An isosceles triangle, made of light splint-wood held in position by rubber adhesive strips, is so placed against the side of the chest that the upper arm is at right angles to the body, while the forearm in supination rests along one side of the triangle with the hand resting upon the hip. The triangle presses along the body between the line of incision for removal of the breast and the posterior puncture made for the drainage tube. The arm being in this position, the patient is perfectly comfortable while in bed and also while walking about. Adherence of the skin flap and scar to the under surface of the arm after enucleation of the axillary contents is an inch and a half to two inches nearer the shoulder end of the arm when dressed in this position than it is when bound against the chest. It is this difference in position of attachment of the scar and skin flap to the arm that gives such freedom from cicatricial contraction following amputation of the breast.

Dr. R. H. M. Dawbarn said that he had employed the method demonstrated by Dr. Bodine several times. It is more comfortable because the abduction of the arm slides the scar so that it does not adhere to the region of the vein nor the main lymphatics. Patients at times have been made very miserable after amputation of the breast by swelling of the arm, due to adhesion of the scar, the forearm and arm becoming large and edematous, and annoying the patient for a long time. He avoids it, partly by carrying the incision up the middle or even posterior part of the axilla, although the main dissection is sharply forward in the anterior portion of the axilla where the main vessels lie.

There is only one muscle which can take the place of the pec-

toralis major and minor, both of which must be entirely removed in the modern operation, and that is the deltoid. It is wonderful how this muscle hypertrophied, and being inserted into the outer third of the collar-bone, with a very poor leverage, how it accomplishes its mission. In the case of women who have very weak deltoids (the reverse of those shown by Dr. Bodine), it has been part of his regular operation of late years to dissect free from the clavicle one inch of the anterior edge of the deltoid, and to carry it inward as far as it will easily go, and then to sew it to the stump of the pectoralis major. That muscle, in course of time, becomes hypertrophied, and it helps a great deal; but in cases in which this operation is performed, it obviously would not do to use the isosceles triangle, with its necessary abduction of the arm. In the technique just described, as to the deltoid, the cephalic vein is liable to cause trouble, and he generally ties it off, but this may not be necessary if great care is taken. It is only when the axillary vein is involved in the cancerous growth that saving the little cephalic vein becomes a matter of importance.

Extirpation of the Jaw.—Dr. Bodine also presented two cases of face surgery to illustrate two practical points which he considers important in the treatment of these cases. Control of hemorrhage in all surgery above the level of the cricoid cartilage is accomplished by rapidly making an incision down to the carotid artery supplying the area to be invaded, passing an ordinary rubber band that has been boiled, around the vessel, and having it pulled taut by an assistant, thus as effectually controlling the blood-current as in the case of an Esmarch bandage around a limb. The rubber is withdrawn after the operation is completed without having done any damage to the walls of the blood-vessel. He had followed this plan many years in excisions of the tongue or jaw and in other bloody work about the head or face. The second point that the doctor wished to emphasize was that wounds of the face made by the surgeon should never be dressed with gauze. If no dressing whatever is applied, and the wound is exposed to the atmosphere, it heals *per primam*. Dressings applied to the wound usually become saturated, either with tear or with saliva, thus certainly infecting the line of incision.

One patient presented to the Society had carcinoma of the superior maxilla. A wide removal was practised, the hemorrhage being controlled as stated above. He did not lose more than a teaspoonful of blood during the operation, suffered no shock whatever, and on the third day after operation was permitted to walk about the ward.

The second case was one of removal of the left half of the upper lip, the gap being filled in by a plastic manœuvre. The wound had healed *per primam*, no dressing having been applied.

Fracture of the Patella.—Dr. Bodine showed a case of fracture of the patella, in which primary suture of the capsule had been practised. He said that in fracture of this bone the open operation of suture of the capsule is always to be preferred to treatment by splints. It is impossible to obtain bony union with perfect joint function in any other way than by open incision. The fringe of the fibroperiosteal capsule invariably drops between the broken margins of the patella, effectually preventing bony union. In addition, a blood-clot forms, which becomes organized and fixed. The only objection one can bring against the open operation is the possibility of sepsis. This can be avoided with almost absolute certainty, as illustrated by the patient shown, who was operated on without the fingers of the operator going near the wound, only four instruments being used. The entire operation can be performed in fifteen minutes, without any pain whatever, and with the use of one-fourth of a grain of cocaine. After incising the skin the blood-clot is washed away by a stream of warm salt solution, the ruptured capsule is picked up and sutured with kangaroo tendon, and the skin incision closed by a sub-cuticular suture. A posterior splint is then applied, and the patient returned to bed. It is not always necessary to enter the general articular cavity of the joint. The posterior reflection of the general synovial membrane is sometimes so high up on the posterior surface of the patella that the line of fracture is below it, and the general articular cavity escapes. The patient had been operated on four weeks previous to the meeting, and was able to flex his knee-joint nearly to its full limit. In two weeks more it was to be expected that the motion of the joint would be perfect.

Dr. Dawbarn opened the discussion of Dr. Bodine's cases by saying, in regard to the extirpation of the jaw, that he differed from Dr. Bodine as to the wisdom of never dressing a face wound, as he thought that an occasional stitch abscess, due to exposure to dust, might be prevented by the use, for instance, of sterile gold-beater's skin court plaster, one of the best of dressings. Lately he had modified the Ferguson incision in these cases, carrying it distinctly below the orbital plate, as, if carried into or closely below the lid, a certain degree of ectropion will result. The lower the scar, the safer the operation in this respect. He believed in a preliminary operation for control of the external carotid in every severe operation about the face, such as excision of the jaw, and was convinced that many deaths from shock would not occur if this procedure were carried out.

Regarding the fracture of the patella, he said that if it were his own patella, he would not submit to primary suture, but would have it treated by splints. He thought a close, fibrous union as satisfactory for practical purposes as bony union, and the element

of risk much less, for some slight risk exists, even at the hands of the most rigid aseptician. He differed with Dr. Bodine in regard to the falling downward of the capsule between the bones being the chief cause of non-union. He thought the main obstacle was a bulging forward of the loose synovial membrane between the two fragments. The bones could not unite, of course, through this membrane.

The Chairman, Dr. Burtenshaw, said that he well remembered the first case of fractured patella that came under his care. He brought the two pieces of bone together by means of adhesive plaster applied to the anterior aspect of the leg and thigh, bound the limb to a splint, and kept the patient in bed for the better part of three months. The result was perfectly satisfactory. He thought the danger of infection of the knee-joint by the open method very pronounced, but no greater, in the hands of a competent surgeon, than in many other wounds.

Dr. W. H. Luckett said that he did not think it best to omit the application of dressings to face wounds. He is in the habit of applying a wet dressing to all primary wounds of this character, not so much for its antiseptic effect as for its mechanical action in preventing too early sealing of the edges, with consequent accumulation of serum and blood in small pockets, which are favorable points for the growth of bacteria.

With regard to quadriceps muscle, he thought it helped to keep pieces of fractured patella apart, as well as certain tissues both in front of and behind the bone. He had never seen a synovial membrane come between the fragments from behind; in fact, the normal position of the membrane would prohibit this action. An absolutely bloodless field is necessary for a successful outcome of the operation, as one reason for adoption of the open method is to remove the fluid and blood from the sac, and from between the two pieces of bone.

Dr. Alexander Lyle said that he had operated by this method in three cases, and with excellent results in two. In the third ankylosis of the joint complicated recovery, but this was corrected under general anesthesia.

Dr. Victor Pedersen said that it is a well-established fact that there is no synovial membrane behind the patella in the human being. It stops at the margin of the patella, and behind it extends only as a modified membrane. Probably the structure which would interfere most frequently with union of the fragments would be the capsule.

Dr. Bodine closed the discussion by saying that the suggestion of interference with union by the general synovial membrane was entirely new to him, and from his knowledge of the anatomy involved, he did not see how it was possible. He did not think it

wise to irrigate the general articular cavity of the joint at time of operation. The irrigation fluid would produce more damage than a moderate amount of blood effusion. It is only necessary to wash out the blood-clot from between the two broken pieces and to suture the capsule. Operations should not be undertaken before the third day following accident, during which time all oozing of blood from the broken surfaces has stopped, and the application of the tourniquet is unnecessary; in fact, it is in the way.

Encephalocele.—Dr. Lyle presented a child, born April 14th, 1903, of healthy parents, which at birth had a tumor measuring one inch in diameter by one-half inch in depth above the nose and between the eyes. Through the courtesy of Dr. Whit, he was asked to see the child, and he advised immediate operation. On April 17th, three days after birth, the baby was placed under chloroform narcosis, and a longitudinal incision was made over the tumor and the frontal bone. The flaps were retracted, the sac dissected free, and the contents easily withdrawn. Two small horns of the sac extended down into the nares. After the dissection was completed, it was found that the absence of bone corresponded in size and shape exactly to that of a silver quarter of a dollar. To cover this opening and to prevent a recurrence of the protrusion, a corresponding amount of periosteum was raised from the frontal bone, turned on its pedicle and united with catgut to the margin of the ring. The skin was likewise sutured, a firm compress of gauze applied, and the head bandaged. The result was only fairly gratifying, and after a month a truss with double water-pads shaped like the finger tips was made and worn constantly. The present condition of the child is satisfactory. The periosteal flap is becoming more rigid, and the bone is filling in, while the child's general and mental condition is excellent.

Appendicitis with Complications.—Dr. L. J. Ladinski showed a girl, 18 years old, on whom he had operated for appendicitis. He said that when he first saw the patient, it was impossible to make a diagnosis. A second examination a few days later revealed the presence of a large fluctuating tumor in the pelvis, posterior and adherent to the uterus, but nothing abnormal was found in the iliac fossa. An incision was made in the median line. The tumor was found to consist of a mass of hypertrophied omentum, to which a coil of intestine and the inflamed appendix were intimately adherent. In the centre of the mass was a large collection of pus. The tip of the appendix and the coil of the intestine were adherent to the walls of the posterior cul-de-sac, and because of the gangrenous condition of this portion of the gut, about six inches of it were incised and a Murphy button inserted. The appendix was removed, and the adherent omentum

excised, and the pelvis and abdominal cavity drained from above. The patient made a good recovery after a protracted convalescence. Four weeks after the operation she developed a mastoiditis on the right side, and the bone was incised and scraped.

He also presented a patient with a large anterior labial hernia. He said that there are two varieties of labial hernia, the anterior, which is similar to the serotal hernia in the male, and the posterior, in which the hernia descends either in front of or behind the uterus into the vagina and labia. Labial hernia must be differentiated from fibromata, sarcomata, or cysts of the labia.

Immunity.—The paper of the evening was read by Dr. F. M. Jeffries. It was a fifteen minute *resume* of the investigations culminating in our present ideas of immunity. The paper opened with definitions of immunity and infection, and then described and classified the varieties of immunity.

After classifying the means by which immunity may be acquired, the speaker proceeded to a discussion of the production of toxins and antitoxins, and the statement was made that when the problem of the production of antitoxin is solved the problem of immunity will also have been solved. The subjects of hemolysis and bacteriolysis were briefly gone over, and then the two chief theories of immunity were explained, viz., Metschnikoff's theory of phagocytosis and Ehrlich's side-chain theory. It was stated that neither of these theories explains all the phenomena of the subject, although they have each added materially to our proper understanding of the same. Other conditions than those explained in these two theories must be taken into consideration.

The paper closed as follows: "To sum up, the processes of immunity are exceedingly complex, and there is no theory yet advanced which satisfactorily meets the requirements of a thorough explanation. The end is only attained by the activities of all parts of the body, the cells as well as the fluids. Nor must we lose sight of the fact that the bacteria themselves are subject to variation, as an example of which may be cited the colon bacillus, the normal habitat of which is the intestinal tract, and which probably has to do with the processes of digestion, yet let the proper conditions be supplied, and it gives forth its poison, that is to say, becomes pathogenic; and finally, we know that many or perhaps all bacteria produce in their growth enzymes which are bacteriolytic in themselves." A number of articles in English dealing with the subject were cited.

Dr. Albert Kohn opened the discussion of Dr. Jeffries' paper. He said that Metschnikoff studied the white cells. The origin of his work shows how laborious it must have been, and it is wonderful how his theory of phagocytosis was gained on a theoretical basis, working on the lower organisms. He studied the exoderm,

the endoderm and the mesoderm; the workings of this layer were to a certain extent of the same nature as those of the endoderm, that is, of a digestive type. He then began to prove his conclusions on marine animals, inserting foreign bodies in order to see what the action would be. He found that irritation was caused by what seemed to be attempts at digestion. Later, he modified his primary conclusions that the phagocytes were the only bodies concerned in the digestion of the bacteria and their toxins. His theory was accepted until Bouchard brought forward the theory that it is not the phagocytes that digest the live bacteria; that after their destruction they carried away their dead bodies.

As to the question of susceptibility, according to Ehrlich, all consideration of such outside factors as hygiene, traumatism, etc., must be omitted. If we have receptors which in the one set of cells will unite with certain parts of the toxins the haptophorus atoms, these receptors already exist, and they cannot be influenced by traumatism, hygiene, etc., unless the receptors are changed, decreased or increased by those outside factors. The fact that the alexin bodies can be destroyed by heat, a fresh supply of sear added, and the properties of the alexin bodies return, proves that the heat destroys the alexin.

Dr. James J. Walsh said that the subject of immunity was usually considered very complex. In reality, however, it is not more involved or inexplicable than is the simple matter of solutions. We pour sugar into water until it will not receive any more, but the same water will then take up a large amount of salt, and after it has become saturated with salt it will take up various other substances. A child suffers from scarlet fever and will not take the disease any more, but will, if exposed, take mumps or measles. It is as if the cells became saturated with the toxins of one disease after another. The first step in immunity, as regards our modern knowledge of the subject was taken by Pasteur when he demonstrated that chickens at the normal temperature would not contract anthrax, though if their temperatures were reduced to that of the animal in man, they were liable to anthrax. The six or eight degrees of higher temperature produced a natural immunity to the disease. In the light of Ehrlich's theory of immunity depending on the number of side chains or cells, one is tempted to wonder whether more side chains exist at the higher than at the lower temperature, and whether a chicken's immunity could be destroyed by a series of changes of temperature. As a matter of fact, Ehrlich's and Metschnikoff's theories are not so far apart as has often been thought. The protective substances in the blood and cells, according to Ehrlich's theory may well be supplied by the activity of the phagocytes.

The first immunizing process ever invented was Jenner's

vaccination. During the past week, Dr. Walsh said that he had been with Dr. Calkins, of Columbia University, who was working on the protozoon, supposed to cause smallpox. This protozoon occurs also in vaccinia. In the case of vaccination, however, the parasites invade only the cell bodies, while in smallpox they invade the nuclei of the cells, grow much more luxuriantly, and after a time invade the whole body, thus producing a generalized septic condition. In recent years we have come to realize as the result of studies in immunity, that babies who are fed on mother's milk are better protected against contagious diseases than are those artificially fed. The principal reason for this is that most mothers have had the ordinary diseases of childhood, and enjoy immunity from them. Immunizing substances occur in their milk, and are transferred to the child during the nursing. This constitutes another reason why mothers should be encouraged to nurse their offspring, and not allowed to neglect this sacred duty unless there is some absolutely necessary reason.

THE FOURTH QUARTERLY MEETING OF THE PROVINCIAL BOARD OF HEALTH.

THE Provincial Board of Health commenced its fourth quarterly meeting, at 2 p.m., on November 18th, 1903, at the Parliament Buildings. Those present were Dr. Kitchen, St. George, Chairman; Dr. P. H. Bryce, Toronto, Secretary; Dr. Cassidy, Toronto; Dr. Oldright, Toronto; Dr. Boucher, Peterboro'; Dr. Thompson, Strathroy; Dr. Douglas, Cobourg.

Dr. Bryce reported that the Province had been remarkably free from common endemic diseases, the deaths numbering only 1,992, or 12.5 per 1,000. The death rate from consumption was lower than usual, but nearly double all the rest. Smallpox was almost wholly absent, but diphtheria, in its distribution rather than its frequency, was ominous of an increase when the schools opened, and the result had been as feared. The returns for October to date from 52 municipalities reporting show 464 cases and 54 deaths, against 240 cases and 30 deaths in 38 municipalities in September, and 122 cases and 24 deaths in 27 municipalities in August. Reports during November indicate its continued appearance. The local health authorities seemed to be more than ever awake to their responsibilities. In Toronto the cases increased from 51 in August to 118 in October, with 14 deaths. Of 770 cases up to October 31st in Toronto, 445 were treated in hospitals, and the death rate was 12.72. The extension of the Isolation Hospital is expected to be completed in three months'

time. A medical inspector of schools has been appointed, whose duty it will be to follow up the suspects from the school-rooms.

In Guelph 9 cases of diphtheria were treated in hospital, without any deaths. In cities and municipalities where isolation hospitals do not exist the opposite story is told, and the increase of fatal cases of diphtheria has been marked.

In London, one of the best cities from the standpoint of site and sanitation, a number of fatal cases occurred in January and February, after which cases occurred, at first mild but almost steadily increasing in virulence. In June there were 23 cases and 1 death; in July 35 cases and 2 deaths; August, 18 cases and 4 deaths; September, 39 cases and 4 deaths; October, 94 cases and 8 deaths.

London had the worst experience in Ontario, but is now getting along better, with an isolation system of tents.

In Chesley a bad outbreak occurred. There were 23 deaths within thirteen days. The disease was spread principally by milk sold from the infected house before the local physician had learned the nature of the disease.

The principal cause of infection in diphtheria, Dr. Bryce said, was undoubtedly the games played by children at school. They played together, and one child with an infected throat, by kissing one other, might cause a large outbreak.

In Ottawa, out of 19 deaths in 319 cases, 9 occurred in January, when only a part were treated in hospital.

Scarlatina had decreased during the late summer months. Local Boards of Health were awakened by last winter's outbreak and were now adopting precautionary methods not formerly used. Typhoid has been remarkable for its absence.

Dr. C. A. Hodgetts, Provincial Medical Health Inspector, submitted a quarterly report upon smallpox. There had been a marked decline for the three months ending September 30th. The monthly returns were: July, 29 cases and 1 death in 11 municipalities; August, 15 cases and 1 death in 4 municipalities; September, 10 cases and no deaths in 2 municipalities. The total was 54 cases and 2 deaths in 17 municipalities. In 7 municipalities there was only 1 case each, showing the efficacy of the steps taken to prevent the spread of the disease. The outbreaks had been due in nearly every instance to mild cases infected at points outside the Province, some in Quebec and some in adjoining States. In every case with which he dealt he found no evidence of vaccination. It was as difficult to enforce vaccination now as it was five years ago. The indifference of the public was lamentable, and the present law was unwieldy. Dr. Hodgetts complained that those in high places often opposed vaccination, and he thought that if there was to be any progress made in stamping

out this disease some measures should be adopted to enforce vaccination in our schools and workshops. The indications for a general outbreak of smallpox this winter, he said, were not strong, though one centre in Frontenac, Lennox, and Addington, and adjoining townships existed in which he thought there had been infection undiscovered since last winter's outbreak.

A motion was carried that the Secretary communicate with the Minister of Education, with a view to securing, if possible, his co-operation in an effort to improve the ventilation and general sanitation of school buildings.

The Board met again at 10 a.m., on November 19th.

The morning was taken up in reading a number of communications from local boards of health. Mr. E. Mallon Davis, C.E., of Berlin, and Dr. Varden, M.H.O., of Galt, presented the plans for a system of sewerage for Galt. The system provides for a septic tank and coke beds, at an estimated cost of \$20,000. The system was passed by the Board.

The Board then took up the plans presented by Mr. Speakman, C.E., for a waterworks system for the town of Whitby. The scheme provides for filtration at the lake shore through the sand, and received the Board's approval.

In the afternoon the Board took up the consideration of a bill for the appointment of county medical health officers. It is the intention of the Board to send out a report to the various municipalities for their consideration, recommending the idea of county officers. In this connection it is the intention of the University of Toronto to establish a course leading to a diploma in public health.

Dr. Cassidy, Chairman of the Committee of Epidemics, introduced a report containing a number of resolutions to provide for the regulation of barber shops. Regulations of this kind had been passed by the Board at the fourth quarterly meeting of 1902. After they were published, however, objections had been made by the Barbers' Protective Association of Toronto to some of the regulations, especially to those providing for the disinfection of razors, clippers, shaving brushes, etc. The committee had endeavored to obtain further information as to the most expeditious and trustworthy methods of disinfecting the various tools, instruments, etc., used in the barber's trade. To assist the committee in their investigations, experiments for the disinfection of razors and brushes had been made on several occasions by Dr. Amyot, bacteriologist of the Board. The amended regulations for barbers' shops are as follows:

(1) A barber should be clean and neat in his person and dress, should use the bath regularly, and be particular in maintaining a healthful condition of the mouth and hands.

(2) No person suffering from any disease of the skin, scalp, or hair should act as a barber, nor should anyone suffering from consumption, or any disease commonly known as contagious, serve in this capacity.

(4) If diphtheria, scarlet fever, smallpox, measles or any other contagious disease should occur in the family of a barber, or among his friends or acquaintances, he should not nurse or visit the patients, nor in any way come in contact with them, and if any such disease should appear in his own dwelling or boarding house, he should temporarily change his residence.

(4) Persons suffering from any disease of the skin, scalp, or hair, or from consumption, or persons who have recently recovered from diphtheria, smallpox, scarlet fever, or other contagious disease, should not visit any barber shop or parlor, but should be attended by the barber or hair-dresser at their own homes. All instruments used on such patients should be carefully disinfected after such use.

(5) The floor of a barber shop should be made of hardwood, or, if not so made, should be covered with sound oilcloth or other impermeable floor covering. The floor of the shop should be frequently washed with hot water and soap. As a matter of ordinary routine, it should be mopped every morning with a damp woollen cloth. If the floor is to be swept, it should first be sprinkled with dampened sawdust or wet tea leaves, or oiled and then swept, in order that as little dust as possible may be raised.

(6) The shop or parlor should be well aired before the day's work is begun, and it should also be ventilated during the day. The shop must never be used as a dormitory. Every barber shop should be provided with running hot and cold water.

(7) The shop should be kept very clean, as should also all the chairs, razors, clippers, brushes, towels and all other articles or instruments used in the business. Towels should be carefully washed and boiled and then rinsed to remove the odor of soap.

(8) Customers should be encouraged to use, or have used on them, their own instruments (razors, soap, brushes, etc.), and in the case of persons suffering from diseases of the skin, scalp or hair, this practice should be compulsory. For operations on the dead body, a barber should have instruments used only for that purpose.

(9) (a) Razors, clippers and scissors may be disinfected by being boiled for ten minutes in soapy water or in water containing a little carbonate of potassium. For this purpose the instruments should be laid in an enamelled or galvanized metal dish, and be completely covered by the water. After boiling they should be quickly cooled in cold water and carefully dried. Steel

instruments boiled in the carbonate of potassium solution are not liable to rust.

(b) Razors may be disinfected by being held in a stream of boiling water for thirty seconds. They should then be put into cold water for a short time and carefully dried.

(c) Razors, clippers (disarticulated) and scissors may be disinfected by being exposed in a dish for fifteen minutes to the action of Hebra's spirit of soap, spiritus saponatus kalinus. They should then be rubbed dry.

(d) Razors, clippers (disarticulated) and scissors may be disinfected by being exposed in a dish to the action of 95 per cent. alcohol for forty-five minutes. They should then be rubbed dry.

(10) Hair brushes, shaving brushes, combs and straps may be disinfected by being first washed in a strong solution of sodium carbonate and soap, and afterwards placed in a small air-tight closet or case, in which is kept a saucer constantly filled with formalin, about one ounce of formalin to each cubic foot of space. It is recommended that all instruments be laid on racks or trays in this closet. This disinfection should be carried on every night.

(11) Shaving brushes may be entirely dispensed with, and a puff of cotton used instead, which can be destroyed after one using. A shaving brush may be disinfected by being placed in boiling water for ten minutes before using.

(12) Before passing from one customer to another, the barber or hairdresser should thoroughly wash his hands.

(13) The powder puff should be replaced by the powder blower, fresh ball of absorbent cotton or clean towel.

(14) A stick of alum should never be used to stop the flow of blood. A small piece of alum, after being used on a customer, should be thrown away. Astringent pencil may be used if after use it is disinfected in hot water.

(15) Sponges should not be used in a barber's work, because they cannot be cleaned as a towel may be. In place of sponges towels or balls of absorbent cotton should be used.

(16) Toilet wax should not be used indiscriminately; each customer should have his own toilet wax, which should be kept in a tube.

(17) The hairdresser should remove vaseline from the vessel containing it with a spatula or spoon. Preferably vaseline put up in collapsible tubes should be used by hairdressers.

(18) Only strictly clean linen—towels, wrappers, etc., should be used for each customer. If a freshly-laundered wrapper cannot be supplied to each customer, a clean towel should be used in place of the wrapper.

The report was adopted. This completed the quarterly meeting.

The Canadian Journal of Medicine and Surgery

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Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., must be in our hands by the fifteenth of the month previous to publication.

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NO. I.

Editorials.

A NEW YEAR'S GREETING.

To all our readers we wish a very happy and bright New Year. Thankfully, my esteemed confrere, the editor-in-chief, and myself have sealed the interchange of good wishes with a handshake, and now, metaphorically filling our pipes with the heart's-ease of contemplation, and 'at peace with the world, the flesh, and the devil, we take a retrospective survey of the fourteen strides from youth to young manhood our child, the CANADIAN JOURNAL OF

MEDICINE AND SURGERY, has made. Many a quiet laugh creeps in over some early enthusiasms, with an echo to that laugh at the prophecies spoken many a long year ago as to the length (or brevity) of our youth's career, and, with a kindly "Thank you" to the staff of godfathers, who have, by their unfaltering interest and the precepts contributed by ever-ready pens, kept our ward not only in the straight and narrow path of medical ethics, but have made its name one to conjure with, we greet 1904, and the commencement of our fifteenth volume. Ere we begin the New Year's long stiff gallop to success, we pause to take a stirrup cup, and to all our readers we drain the toast:

"A hand to you, a health to you,
And golden Memory's wealth to you."

W. A. Y.

EDDYITES MUST NOT WITHHOLD MEDICINES AND MEDICAL ATTENDANCE.

THE decision of the Ontario Court of Appeal in *Rex v. Lewis*, June 29, 1903, endorsing the finding of the trial court by which Lewis had been found guilty of manslaughter, established a precedent for estimating similar infractions of the Code in Ontario, and introduced an important change in the law of this Province respecting Christian Scientists and other unqualified persons attending cases of disease. It was "Held that the defendant (Lewis) had been guilty of an indictable offence under Section 210 of the Code, which enacts that every one who as parent, guardian, or head of a family, is under a legal duty to provide necessaries for any child under sixteen, is criminally responsible for omitting without lawful excuse so to do.

"Held, also, that evidence of cures effected by Christian Science treatment was not admissible.

"The law of the land must be obeyed, even though there be something in the shape of belief in the conscience of the person coming under its obligation, which would lead him to obey what in his state of mind he may consider a higher power or authority.

"Semble, medical aid, assistance, and treatment by some one other than a legally qualified physician or practitioner belonging to one of the recognized schools of medicine may in some cases, satisfy the requirements of the Code."

From the standpoint of Eddyism, a parent who believes in that cult is not only not required to call in a physician to see his sick child, but he would be acting wrongly if he were to do so. Several cases have been reported in the newspapers of this Province showing that Eddyites live up to their creed in this particular. Thus, in Toronto last June, a child, ill with scarlet fever, died after a short illness. The parents, Eddyites, treated their child; a physician saw the child two or three times, in less than two days before its death. On investigation a jury convened by Coroner Young found there was no actual negligence on the part of the parents of the child, because the evidence showed that a physician had been called in and, therefore, it could not be proved that the parents of the child totally neglected to provide medical attendance and medicine.

Last November, Dr. Robertson, Stratford, Ont., was called as M.H.O. to see a girl of fourteen years, who had been ill with typhoid fever for two weeks. She had received no medical treatment, her friends being Eddyites. At the time of Dr. Robertson's visit she was delirious, as she was jumping up and down, and grasping at objects on the wall of the room. Her attendants, Eddyites, were delighted with these manifestations of vigor, and pointed them out to the M.H.O. as proof that the girl was not ill, but recovering strength. She died three weeks afterwards from exhaustion, resulting from typhoid fever. In the Stratford case a coroner's jury found the parents guilty of culpable negligence, and one or both of them will be indicted for manslaughter.

As the law of the land on the question of providing medical attendance to minors is now settled, it is unnecessary to discuss the reasons for the decision arrived at by the Ontario Court of Appeal.

Leaving surgery aside, it is humiliating to confess that medical art, even when practised by masters, often yields disappointing results. Who can give a certain prognosis in lobar pneumonia, even when the patient is a person of distinction about whose fate much interest is felt by the public? The most skilful practitioners cannot promise that a child, ill with scarlet fever, will recover with a sound tympanum. To directly trace recovered health to medical ministrations, in a case of rheumatic fever, may be a bit of inaccurate reasoning, and the strongest advocates of modern medicine recognize the *vis medicatrix naturae* in disease, and the

necessity of strengthening, by every hygienic device, the power by which the body resists and conquers disease.

Admitting, however, the uncertainty of life when dominated by disease, we claim that the skill to direct a medical campaign to a happy issue, by employing a specific remedy, is as traceable to the trained brain of the attending physician as the rescue of a drowning man is to the strong swimmer, who plunges into the water and drags him ashore. For instance, it has been demonstrated that antitoxin, or the serum of immunized animals, is the best therapeutic agent in diphtheria. The investigation conducted by the American Pediatric Society has shown that the mortality under the serum treatment in 5,794 cases was only 12.3 per cent., and that when the treatment was instituted during the first three days, the mortality was only 7.3 per cent. Fifty per cent. of the laryngeal cases recovered without operation, and among those in which intubation was performed, the mortality was 25.9 per cent., or less than half as great as has ever been reported under any other form of treatment. This evidence is irrefragable.

Should any parent in Ontario, Eddyite or not, neglect to procure antitoxin for his child, sick with diphtheria, he neglects to procure a medicine necessary for life, and, in the truest sense, he would be chargeable with manslaughter if the child dies. True, he might plead ignorance of the merits of antitoxin, and, being a non-professional, he might be held excusable. Speaking parenthetically, we think that the plea of ignorance would not hold good in the case of a physician, if he while attending a case of diphtheria and knowing it to be such, neglected to use antitoxin. But that is another story.

The broad meaning to be taken from the decision of the Ontario Court of Appeal in *Rex v. Lewis* is that the care of sick children is to be left with physicians, and that medicines are necessary in treating disease in them. If an Eddyite parent allows his child to die without medicines or medical attendance, he is chargeable with manslaughter.

It seems, however, that a charge of manslaughter is in such cases a feeble deterrent. Fanaticism dies hard. The statute law of the State of New York makes the negligence of an Eddyite parent, which results in the death of his child, bear the gentler name of "misdemeanor," but the penalty may be a fine of \$500 or imprisonment for 500 days. Such a penalty was imposed,

October 11, 1903, by the New York State Court of Appeals, on a Dowieite, J. Luther Pierson, of White Plains, N.Y., for permitting his infant daughter to die of pneumonia, without medical treatment.

It seems reasonable to think that a charge of this kind (misdemeanor) will not savor of persecution, but will exercise a restraining influence on Eddyites and other believers in faith cure. A man, who would glory in being a martyr under a charge of manslaughter, would think twice before incurring a fine of five hundred dollars.

J. J. C.

**EXPERIMENTS IN THE STERILIZATION OF BRUSHES
AND KNIVES BY THE ONTARIO BOARD
OF HEALTH.**

In order to determine the value of certain antiseptics in the sterilization of brushes and knives, experiments were made recently by Dr. Amyot, bacteriologist of the Ontario Board of Health. Two separate sets of experiments were made, one with the brushes, the other with the knives. For cultural purposes, a specially nutritive medium, somatose bouillon, was used.

Three brushes, which had been in general use, were taken. Cultures were made in broth from the hair of each brush, each of which showed vigorous growth, but no attempt was made to isolate any of the varieties. Each brush was washed in a strong solution of soap and carbonate of sodium, and rinsed in tap water. Brush *a* was then laid aside without further treatment; brush *b* was soured in a 1 in 20 carbolic acid solution for ten minutes, and laid aside to dry; brush *c* was placed in a tight box and exposed for fifteen hours to the vapors of formaldehyde, generated by evaporation from a large shallow dish of formalin (box 12 by 12 by 15 inches). On the following day, cultures were made from all these brushes, and incubated for 72 hours at 37 degrees C. The formalized brush was the only one to show no growth. The experiments were repeated with the same results.

Three all metal knives were sharpened and subjected to the following treatment, after a previous sterilization by steam under pressure (two atmospheres). All the knives were infected

with a vigorous culture of *staphylococcus pyogenes aureus*, grown on nutritive agar. These were then dried in the air, and control cultures were made. No. 1 was then put under a stream of boiling water for thirty seconds, cooled with cold sterilized water, and placed in a broth culture tube. No. 2 was dipped in carbolic acid (95 per cent.), for three seconds, washed in sterilized running water, and put in a broth tube. No. 3 was put into the formalin box, with the brushes spoken of above, for 15 hours, washed off in sterilized water, and placed in a broth tube. All were given 72 hours' cultivation (the knives being taken out after 24 hours, on account of electrolization), with the following results: No. 1 knife, which had been exposed to boiling water for 30 seconds, was sterile; No. 2, dipped for three seconds in carbolic acid (95 per cent.), showed good growth; No. 3, exposed to formalin for fifteen hours, showed good growth. The experiments were repeated with the same results.

Subsequently, experiments were made to test the use of carbolic acid (95 per cent.) at different lengths of exposure. The knives were infected and dried as in the first experiments. They were dipped into pure carbolic acid (95 per cent.) for 10, 15, 30, 60, 90, 120, and 180 seconds, then washed in sterilized water, and each of them placed in a broth tube. Those dipped for 10, 15, 30 and 60 seconds showed growth, those dipped for 90, 120, and 180 seconds were sterile, though 72 hours were given them to grow in (knives removed after 24 hours). On repeating the experiments, the same results were obtained. The pure carbolic acid had no visible action on the knives. The tests were severe, because the organisms were protected by the agar. No experiments were made with spore-bearing organisms.

Other experiments were made to test the disinfectant action of alcohol (95 per cent.). Knives, clean and sharp, were infected in the usual way and then exposed for 3, 5, 8, 10, 15, 20, 30, 45, and 60 minutes to the action of 95 per cent. alcohol, and then allowed to dry in the air. Inhibition of growth commenced with the 20-minute exposure; only a slight growth was obtained after 30 minutes' exposure; but none whatever at the 45 and 60 minutes' exposure.

Experiments were also undertaken to determine the value of Hebra's Spirit (*spiritus saponatus kalinus*, 2 parts soft

soap to 1 part 65 per cent. alcohol, perfumed with spirit of lavender) as a sterilizing agent where non-spore-bearing organisms were in question. Instruments infected in the usual way were, after drying, placed in this preparation for periods of 3, 5, 8, 10, 12, 15, 20, 25, 30, 35, 40 and 50 minutes respectively. These were then washed in sterile water, and incubated in nutrient broth. Care was taken about electrolysis. The knife exposed for ten minutes showed no growth; all the knives exposed longer showed no growth; the knife exposed for eight minutes showed very slight growth.

From these experiments, Dr. Amyot concludes that knives infected with staphylococcus pyogenes aureus may be disinfected, (1) by exposing them to a stream of boiling water for 30 seconds; (2) by placing them for 90 seconds in carbolic acid (95 per cent.); (3) by placing them for 10 minutes in Hebra's Spirit; (4) by placing them for 45 minutes in 95 per cent. alcohol.

The behavior of the infected shaving brushes, as detailed in the first portion of this article, shows that the mere washing of brushes in a strong solution of soap and carbonate of sodium will not destroy the pyogenic organisms they contain. Neither will disinfection of such brushes follow a good washing in a 1 in 20 solution of carbolic acid. The fact, that an infected shaving brush can be disinfected by exposing it in an air-tight box to the vapors of formalin for 15 hours, is worth knowing. It shows one of the important things that barbers will have to do, if they wish to be just to their customers.

J. J. C.

EDITORIAL NOTES.

Cotton Gloves or Rubber Gloves in Surgical Operations.—

In an editorial which appears in the *Southern California Practitioner*, November, 1903, the writer notes the methods adopted by different European surgeons to secure asepsis. "In some clinics, like that of Von Mikulicz, of Breslau, Von Eiselberg and Zukekandle, of Vienna, caps, masks and cotton gloves are used. In no clinic in Austria or Germany have I seen rubber gloves used, other than in a few well-marked septic cases. The cotton gloves, so commonly used, are changed frequently, often ten or twelve pairs being used by the operator in a single case. Many operators do not use gloves of any description in other than septic cases. This

is true in the clinics of Mositig-Moorhof in Vienna, and in Olshausen's, Laudeau's and Israel's clinics in Berlin. In Israel's and Olshausen's neither caps nor gloves are used. In the clinic of Professor Von Mikulicz, of Breslau, there seemed to me the most perfect asepsis attained of any clinic I had the pleasure of attending across the water. It is more American than any other clinic I attended abroad. Here caps and cotton gloves are very frequently changed, and masks of the Mikulicz pattern were conscientiously used." Dr. Goepfert (*Centralblatt für Chirurgie*), whose remarks are summarized in *La Presse Medicale* by Dr. Romme, offers some views on the glove question in surgery. He thinks that the surgeon should use cotton gloves placed over rubber ones. If his hands were thus protected, the rubber gloves would not permit the microbes of the skin of his hands to pass into the cotton gloves, and from them into the operation wound. Similarly, the rubber gloves protect the surgeon's hands from infection in a case in which the cotton glove becomes impregnated with a septic fluid during the operation. In case of such an accident, either cotton gloves alone, or both cotton and rubber gloves together, could be removed and changed, which would take less time than giving the hands a fresh cleansing. If a surgeon wears cotton gloves over rubber ones, his hands have a better grip of the instruments, and he can tie ligatures more firmly than if he wears rubber gloves only. Besides rubber gloves are often cut by the ligatures. If, during an operation, a surgeon has to explore the abdominal cavity, or a hollow viscus, he has only to remove the cotton glove in order to restore to his finger, protected by the rubber glove almost its entire tactile acuity. In small operations the combined use of the two kinds of gloves does away with the necessity of frequent washing of the hands, which saves time.

Mugnai's Procedure in the Radical Cure of Hernia.—Mugnai's (*La Riforma Medica*, 1891) procedure differs from Bassini's in several particulars. In Bassini's operation, the inguinal canal and its two orifices are allowed to remain. Some continental surgeons think that the canal and its two orifices are unnecessary to provide for the passage of the cord through the abdominal parietes and, therefore, suppress the canal and one orifice, thus bringing together the walls of the inguinal canal into one resisting plane. This seems simpler, more easy of exe-

cution and ought to be more solid. In 1890, Postemski modified Bassini's operation, according to this general idea. After restoring the posterior wall of the inguinal canal, as Bassini does, instead of allowing the cord to drop into its place so as to remake the anterior wall of the inguinal above it, he keeps the cord elevated, remakes the anterior wall above the posterior one, upon which it rests, and afterwards allows the cord to drop. The cord then passes through the abdominal parietes at the position of the internal ring, and remains under the skin, in front of the parietes. The principal objection to this procedure is, that it allows the deep ring of the canal, the one which stretches, and at which nearly all the relapses occur after radical operations, to remain. In Mugnai's procedure, a plan, the reverse of Postemski's, is followed. The spermatic cord is allowed to drop behind the abdominal parietes, resting on the subperitoneal fatty-cellular tissue, and is brought out through the parietes at the superficial orifice of the inguinal canal. In fact, the deep, internal ring, the dangerous point, disappears, the two walls of the inguinal canal are remade, and placed over each other, and the spermatic cord passes through the parietes by an opening placed at the most resistant part of this region, for its lower external lip is formed of the crural arch, and its upper, internal lip by Colles' ligament, the conjoint tendon and the internal pillar of the abdominal ring, which are solid and resistant tissues. Dr. Begouin, Bordeaux, who has employed this method in fourteen cases, speaks well of it from the double standpoint of facility of execution and permanency of the result. He says, that, whether the reunion of the cut edges of the abdominal parietes is effected on one or two planes, by the aid of temporary or permanent sutures, he prefers Mugnai's method for the reasons given.

Diet in Bright's Disease.—According to Von Noorden, practitioners should inform patients with Bright's disease, that the free drinking of liquids increases the labor of the heart, that every case of Bright's disease is, in a certain sense, a case of heart disease and that, in many cases, the heart trouble is more dangerous than the kidney one. He allows his patients with Bright's disease 1 1-2 litres (52 1-2 oz.) of water per diem. This quantity of fluid is in excess of the water contained in solid and semi-solid articles of food. To promote the excretion of urea,

uric acid and the urinary salts, Von Noorden authorizes patients with Bright's disease to take once a week an increased quantity of water, 2 1-2 to 3 litres (87 1-2 to 105 oz.). Even in gouty nephritis, he recommends the restricted quantity of water, but advises the addition of small quantities of bicarbonate of sodium to the water. He guards against obesity, and argues against a fattening diet of milk, butter and vegetables, preferring that the patient's weight should not cause too much labor of the heart. Patients with Bright's disease should be allowed a sufficient and strengthening diet, without over-feeding. In case of overweight, the patient's weight should be reduced slowly, recollecting that in nephritis the object of treatment is not rapidity, but safety. In regulating the daily amount of food, he is guided by the patient's weight, endeavoring to keep down obesity, which is dangerous for the heart in Bright's disease. Meats rich in nuclein, veal, sweetbreads, liver and kidneys should be avoided, because uric acid is imperfectly eliminated in Bright's disease. Regarding the relative eliminability by the kidneys of equivalent quantities of meat albumen, egg albumen, milk and vegetable albumen, Von Noorden thinks that there is not much difference. He shows that, from this point of view, a logical distinction cannot be made between red and white meats. These facts, as given by Von Noorden, are of great practical importance, for, if confirmed, the diet of a case of Bright's disease could be made much more liberal and varied than it generally is.

Hemoptysis in Aneurysm of the Aorta.—Dr. Rouget reported to the Medical Society of the Hospitals (November 6th, 1903), the case of a soldier, under treatment at Val-de-Grace, for slight but frequently recurring attacks of hemoptysis. Auscultation showed slight emphysema. There were no bacilli tuberculosis in the sputa. As there was some difficulty in the patient's larynx, it was supposed that there might be a hydatid cyst in the lung, which caused compression of the recurrent laryngeal nerve. On employing the X-rays, Dr. Rouget discovered, to his surprise, an aneurysm of the arch of the aorta. The patient shortly afterwards died, not from hemorrhage, but asphyxia. The necropsy revealed a fusiform aneurysm of the arch of the aorta, with a very thick fibrinous blood clot, forming a valve over an ulcer which opened into the trachea. Two conclusions may be drawn

from this observation: (1) Some aortic aneurysms are latent, and present no special symptoms; (2) expectoration of blood by a patient who has a thoracic aneurysm is not a strong indication of an imminent rupture of the aneurysmal sac. Some authorities think that in such cases the hemoptysis may be due to pulmonary apoplexy, others that it may be due to one of the reflex disorders which are observable in such cases: for instance, acute edema of the lung.

A Test of the Time Taken for the Digestive Act.—At the Society of Biology of Paris, October 31st, 1903, Drs. Sicard and Infroit detailed the results of some tests made to show the propelling power of the human intestinal tube. They used an ordinary cylindrical gelatine capsule, fifteen millimetres long by six millimetres wide (about 9-16 by 4-16 in.). The capsule was first filled with bismuth and afterwards immersed for a few seconds in collodion, so as to get a covering on its surface, which would make it impervious to the digestive juices. By means of the X-rays it was then possible to localize the different positions occupied by the capsule during its transit through the intestines. After being swallowed in the morning by a fasting individual, the capsule remained in the greater curvature of the stomach about half an hour. Eight hours afterwards it had reached the cecum. The passage of the capsule through the seven or eight metres of the small intestine in eight hours was too rapid to permit the experimenters to obtain suitable pictures. On the contrary, it remained about four or five hours at the cecum. It passed through the ascending colon in one or two hours, the transverse colon in two or three hours, the descending colon in three or four hours, and at from the twentieth to the twenty-fourth hour came to a stop in the sigmoid flexure of the colon, where it remained ready for expulsion.

J. J. C.

PERSONALS.

DR. T. B. RICHARDSON has removed from 10 Carlton Street to 128 Bloor Street West.

DR. E. CLOUSE has returned from a trip to New Ontario, having visited the Lakes Wahnapiwai and Matagamashing sections, and spent some time at Crystal Mines.

DR. J. F. W. ROSS, with Mrs. Ross, left on December 3rd for Egypt and the Nile, and will be away for three months.

DR. T. S. WEBSTER has removed to his handsome new residence, south-east corner Willcocks Street and Spadina Avenue.

DRS. F. N. G. STARR, A. J. HARRINGTON, A. J. JOHNSON, H. T. MACHELL, and N. A. POWELL were among the sportsmen who spent ten days of November in the forest primeval.

DR. GEO. W. BADGEROW, house surgeon to the Throat Hospital, Golden Square, London, England, was at the King Edward Hotel recently. Dr. Badgerow is an old Toronto boy.

DR. JOHN W. SCANE has been appointed registrar of the Faculty of Medicine of McGill University, Montreal, in succession to Dr. von Eberts, who resigned a short time ago. Dr. Scane recently has been an assistant to the professor of physiology.

DR. HODGETTS, Provincial Medical Health Inspector, has returned from Kaladar, Hungerford and Tweed, where he has been examining into the smallpox outbreak. He reports that there have been twenty-nine cases in eight houses. One death has resulted, probably due to the disease. The outbreak is supposed to have originated from a woman who visited at Dale's Corners, with her children, who had what was termed eczema. The cases have now all been isolated and everything is being done in the way of general vaccination and other precautions to prevent the spread of the disease. It is now felt that the outbreak will be easily checked.

DR. ARNOTT, of Berlin, Ont., who is well known to many of the profession throughout this Province, some months ago decided to devote part of his time to the treatment of that painful complaint, stammering, and, with that object in view, opened the Arnott Institute, in his own town. Naturally, the doctor is anxious to have his medical confreres know what he is doing in this line of special work, and we are glad to call attention to his announcement on page xlii of this issue. Dr. Arnott is prepared to treat defects of speech of any kind, and, knowing as we do of the doctor's special adaptability for this work, we feel that those of his brethren in the profession who refer cases to him for treatment will have no reason to be disappointed.

News of the Month.

TORONTO UNIVERSITY SEEKING BETTER HOSPITAL FACILITIES.

THE medical faculty of the University of Toronto and the boards of trustees of the principal hospitals are at present negotiating with a view to arranging for accommodation and regulations to secure better hospital facilities for medical education. A need along these lines has been felt for some years and the union of the two medical faculties has paved the way for concerted action by the university and the teaching branch of the medical profession. A committee was appointed consisting of the Vice-Chancellor, Chief-Justice Moss, President Loudon, Mr. Irving Cameron, Dr. Primrose, Dean Reeve, Dr. Bingham, Dr. McPhedran and Dr. J. F. W. Loss (Chairman). They drew up a statement embodying the changes and improvements desired and presented them to the boards of the General and St. Michael's Hospitals. At the meeting with the Board of the General Hospital interest in the proceedings was increased by the presence of Mr. Rose Bradford, an eminent physician of University College, London, England, who addressed the Board upon hospital work in London.

The proposals dealing first with the subject of house staffs were, briefly, as follows: That the house staff be large enough to carry on the work efficiently, that one member of each staff be detailed to do clinical laboratory work exclusively, that the staffs be divided into seniors and juniors, and the seniors retire every six months; that the duties of the house staffs be defined by new rules, that no fees be paid any members of the house staffs by physicians or patients, that each hospital board should appoint an official anesthetist.

Then, with a view to increasing the material for clinics, it was urged that all patients in public wards be placed in charge of the clinical staff. The material at present available, the committee stated, was deplorably limited. It was proposed that a committee be appointed by each staff to supervise hospital admissions.

Closely related to the question of clinical material is the out-patient department. The report stated that a committee of the faculty recently visited New York, Boston, Philadelphia,

Chicago, Montreal and Baltimore, and reported fully on the value of well-equipped out-patient departments. The out-patient departments connected with the Toronto General and St. Michael's Hospitals lack proper organization, and must be considered as valueless in their present state. In the General Hospital the rooms are too small, the facilities for handling patients are too meagre, and the heating in winter is so poor that the health of the patients, the students and the staff is endangered thereby.

Better facilities for the study of pathology were asked by the taking of pains to increase the number of autopsies, and the keeping of proper records.

THE ONTARIO MEDICAL ASSOCIATION.

JUDGING from present appearances, the meeting of the Ontario Medical Association next June is going to be a record one under the presidency of Dr. J. F. W. Ross, and arrangements are being made to increase the interest taken in the annual meeting of the Association, and encourage the attendance from the smaller towns all over the Province. Dr. Ross entertained the members of the various committees at dinner at the King Edward Hotel on November 27th, when matters in connection with the Association were talked over, a most enjoyable evening being spent. The following are those who compose the different committees for the current year:

COMMITTEE ON PAPERS AND BUSINESS.—A. A. Macdonald, N. A. Powell, G. A. Bingham, J. T. Fotheringham, W. J. Wilson, T. F. McMahon, G. Chambers, R. D. Rudolf, J. Caven, H. Parsons.

COMMITTEE ON ARRANGEMENTS.—A. Baines, B. L. Riordan, H. J. Hamilton, A. Primrose, W. B. Thistle, D. J. G. Wishart, A. H. Garratt, J. M. Cotton, E. E. King, C. J. Hastings, A. Eadie, J. B. Gullen, H. A. Bruce, R. J. Dwyer, W. H. Pepler, F. Fenton.

TEMPORARY COMMITTEES.—*Hospital Abuse*.—W. J. Wilson, R. A. Reeve, C. J. Hastings, E. J. Barrick, A. A. Macdonald, C. Sheard, G. A. Bingham. *Necrology*.—A. Primrose, J. McCullough, A. H. Howitt. *Audit*.—D. J. G. Wishart, C. H. Carveth, G. Elliott.

THE Natural Food Co., 32 Church Street, Toronto, entertained quite a number of Toronto's medical practitioners at luncheon on December 11th, when a very pleasant hour was spent with the firm's genial representative, Mr. J. Hewitt.

ITEMS OF INTEREST.

New Montreal Hospital for Contagious Diseases.—The plans of the new Alexandra Hospital have been accepted. It will be erected soon at Point St. Charles, and will cost \$100,000.

Music in Hospitals.—In Boston during December, musicians employed by the Hospital Music Fund visited the Woman's Charity Club Hospital, New England Baptist Hospital, and the Children's Hospital.

Sir Frederick Borden Honored.—Sir Frederick Borden while recently in London was made a member of the permanent committee on Imperial defence. This is the first time a colonial minister has been honored in this way. He is greatly pleased with the result of his visit.

Polk's Medical Register.—The eighth revised edition of this well-known work is now under way, and will appear in due time. Send for descriptive circulars, and do not be deceived by imitators. Polk's Medical Register and Directory has been established sixteen years. R. L. Polk & Co., Publishers, Detroit, Mich.

A New Laboratory for Harvard University.—The Bussey Institution of Harvard University, situated in Jamaica Plain, is to have a new laboratory where vaccine and antitoxin will be manufactured for the State Board of Health, under the direction of Professor Theobald Smith of the Medical School. The estimated cost is \$20,000, and it is expected the building will be ready by next April.

Encouraging Order Received from Jamaica, W.I., by a Toronto Surgical Instrument House.—Chandler & Massey Limited of this city, were recently honored by receiving from the Royal Naval Hospital at Port Royal, Jamaica, W.I., a large order for their specialties for immediate shipment. When a firm turn out the quality of goods manufactured by the Chandler & Massey Limited, and spare nothing to ensure that any article bearing their name is the best that can be made, it is but right that such efforts should receive recognition such as above.

Pathological Study of Insanity.—Several interviews have lately been held with Hon. J. R. Stratton in connection with the question of providing more extensively for the pathological study of insanity at the Provincial asylums. It is believed that much advance could be made in the knowledge of causes and cures for insanity if more efficient study could be carried on. Mr. Stratton has given no definite promise that the plan would be carried into execution, but admitted the wisdom of some such course, and it is not unlikely that he will lay the matter before the House at its next session.

Virchow's Library.—The most valuable portion of Virchow's library has been presented by his widow to the library of the Berlin Medical Society. These six or seven thousand volumes are to be kept separately as the Virchow collection.

New Coroners.—The *Ontario Gazette* contains the announcement of the following appointments: Dr. John Marty, of New Hamburg, to be an associate coroner for Waterloo County; Dr. W. G. Dow, of Owen Sound, associate coroner for Grey.

Los Angeles Medical Journal.—The first number of this new medical journal appeared under date of November 15th. It is a monthly periodical devoted to medicine, surgery, dentistry and hospital nursing. The editor and manager is Ernest S. Pillsbury, M.D.

A Young Anatomist.—Some days ago two little fellows of seven and eight years heard older people speaking of skeletons. The seven-year-old boy listened intently to the conversation, when the elder boy, with an air of superior knowledge, said abruptly, "You don't know what a skeleton is, and I do." "So do I!" replied the younger. "I do know. I know for certain, I do!" "Well, now, what is it?" "It's bones with the people off!"—*Lippincott's.*

McGill Wants Recognition.—McGill University, Montreal, has made application to the Minister of Education for the recognition of its honor courses for the non-professional standing of specialists. It has been decided to have the application considered by a committee consisting of President Loudon, of the University of Toronto, Chancellor Burwash, of Victoria College, Chancellor Wallace, of McMaster University, Rev. Prof. Clark, of Trinity, and Dr. Knight, of Queen's University.

Plated Corpses.—A German professor has invented a process of silver-plating dead bodies so as to convert them into metallic images of the individuals as they were when in life. Gold plate can be used if the relatives can afford it. But, as the expense of silver-plating a body is \$12,500, there are probably few relatives who would deem themselves justified in squandering the deceased's estate on such a memorial.—*Am. Med.*

Disinfection of Slate Pencils.—The school board of Springfield, Ohio, at the suggestion of Dr. Seys, the Health Officer, has decided to disinfect the slate pencils used by the children in the public schools. The custom has been to gather up in the evening all slate pencils used during the day, have them sharpened, and distributed again in the morning. Hereafter, if Dr. Seys' suggestion is acted upon, the slate pencils will be kept in formalin over night, then washed off and sharpened in the morning before being given out for use by the pupils during the day.—*Med. Record.*

Radium May Cure Cancer.—The *Herald* (New York) recently had the following special from London: Some of the more sensational papers during the week stated that several patients at Charing Cross Hospital had been cured of cancer by the use of radium. The facts are that continuous experiments in this direction are being carried on and that several cases are making promising progress, but no absolute cure has yet been effected. Hopes are entertained that one woman patient suffering from rodent ulcer has been so much benefited that complete recovery will follow. Eleven cases are under treatment at the Cancer Hospital in Fulham Road.

Final Examination.—The following candidates passed the final examination of the College of Physicians and Surgeons in Ontario, December, 1903: Anderson Lazelle, Ingersoll; J. Brown, Forester's Falls; J. M. Boulter, Picton; Emma Connor, Stirling; N. Davis, Fallowfield; J. E. Davey, Waterford; H. R. Elliott, New Sarnia; W. J. Fischer, Waterloo; J. J. Fraser, Huttonville; W. A. Groves, Fergus; J. N. Gunn, Ailsa Craig; B. J. Hazlewood, Bowmanville; M. Logan, Meaford; W. R. Mason, Ottawa; T. McPherson, Stratford; A. P. F. Nelles, Windsor; F. J. Pattee, Hawkesbury; J. Roberts, Hamilton; J. J. Robertson, Belleville; J. M. Stevens, Chatham; H. E. Service, Peebles; R. J. Trumpour, Toronto; R. G. Williams, Meaford; O. C. Withrow, Woodstock.

Too Much Arsenic in Beer.—The British Royal Commission on arsenical poisoning from food and drink recommended the prohibition of the sale of beer and other liquid food, or of any liquid entering into the composition of food, which contains one-hundredth of a grain or more of arsenic per gallon, and the prohibition of the sale of solid food containing one-hundredth of a grain per pound, no matter whether habitually consumed in large or small quantities, or whether consumed at once (like golden syrup) or mixed with water or other substances (like chicory, etc.). The commissioners find there are serious defects in the present machinery available to safeguard the public and urge that more extended powers be given to the authorities to condemn unwholesome food, the establishment of official "standards" and the creation of a "board of reference" to which could be referred specific points, and those should be carried out by the department concerned, the latter's action to be subject to the control of Parliament.

African Dwarfs for the World's Fair.—The party sent out by the department of anthropology of the World's Fair to the Congo country of darkest Africa to gather together for exhibition at the exposition, specimens of African pygmies, has sailed from New York. The Rev. Samuel Phillips Verner, president of the Stillman Institute of Tuskalooosa, Ala., and a noted traveller in

African jungles, is the leader of the expedition. In company with several native African boys, whom he brought to this country several years ago, he hoped to reach Las Palmas, on the west coast of Africa, not later than December 9th. Dr. Verner has instruction to bring back with him eighteen of the most interesting specimens of the human race that will probably be seen at the World's Fair. There will be none but pygmies in his party, classified so as to interest the scientific student of ethnology, as well as the mere curious spectator. His instructions are to bring back one pygmy patriarch or chief, one adult woman, preferably the wife of the chief; an adult man, preferably the son of the chief; and an adult woman, wife of the son. Others to be included in the exhibit are a male and female youth, two infants, four adults, a priest and priestess, either of the Batwa or Dombe tribes; one fine type of the red African, preferably of the Ndombe tribe; three more red Africans and two native pygmies, each of a distinct ethnic type from the others. After the Fair these people will be returned to their homes.—*Am. Med.*

Harvard Medical School.—The foundations are being laid for the new Medical School, and it is expected that by the fall of 1905 the school will be moved from its present quarters behind the Boston Public Library to the new buildings near the Fenway in Boston. The fund was started at commencement in 1902, when a gift of \$2,000,000 from J. P. Morgan was announced. Subsequently donations were received from J. D. Rockefeller and Mrs. Collis P. Huntington, together with smaller contributions from friends of the university. Altogether a fund of \$5,000,000 has been secured. There will be six large structures, five of which will be grouped about three sides of a court 520 feet long and 215 feet wide. The sixth building, to be used as a power house, will stand apart from the main group. It has been decided to give up at present the contemplated new building for the Dental School. The buildings alone will cost over \$2,000,000, and it is believed they will be the finest of their kind in the world. They are to be constructed entirely of white Vermont marble, with the exception of their bases, which will be of pink Milford granite. The Medical School faculty are planning to have many affiliated hospitals near by. Among the several institutions to which the corporation has already made offers, and which have signified a desire to take advantage of the offer, are the Brigham Hospital, the Children's Hospital, the Samaritan Hospital, and the Infants' Hospital. The last-mentioned, which is to be built in memory of Thomas Morgan Rotch, 1901, will be smaller than was at first planned, as it has been decided to go ahead on the already existing gift of \$76,000.—*Med. Record.*

Obituary

DEATH OF DR. HUGH SPEARS, TORONTO.

DR. HUGH SPEARS, aged 69 years, a well-known figure in the East-End, was found dead in bed at 15 Hamilton Street, on November 25th. The discovery was made by Alexander Devitt, inspector for the Consumers' Gas Company, who called at the house to take the meter registration. The room was full of gas, and on investigation it was found that the deadly vapor escaped from a tube, which had become disconnected from a tiny gas stove, on which deceased had evidently been boiling a kettle of water. The body was propped up on pillows, and a German grammar rested on a stand in front, as though deceased had been reading. The supposition is that he fell asleep and did not notice the gas escaping.

Dr. Spears owned considerable property in the East-End. For the past few years he had lived alone. His wife and two daughters resided with the son.

DEATH OF DR. WILLIAM MATTHEW WARREN, DETROIT.

PERHAPS no better way could be found to convey the feelings of the vast number of friends of the late Dr. William Matthew Warren, on his death a few weeks ago, than to reproduce the following beautifully-worded resolution of the Board of Directors and all employees of the firm of Parke, Davis & Company:

"In loving memory of a beautiful and beneficent life, we, the assembled directors, executives and employees of Parke, Davis & Company, would fain express our sorrow and heartache caused by the untimely death of our general manager, William M. Warren. For the relief of our own grief, as a just tribute to a life rich in effective performance, and in deference to the sentiments of a wide circle of surviving friends, we record this testimony to the noble character, the massive and solid integrity, the large, warm, generous heart, the brilliant and gifted mind, the abounding energy of our beloved friend. As long as life and memory may linger in our mortal frames, we shall cherish the recollection of his lofty spirit and winning manner—simple, sweet, and genial. The benevolence of his heart shone out in the engaging

smile, in the keen and penetrating yet kindly eye, which gained for him a friend in every acquaintance. No man ever lived whose granite-like probity inspired quicker or more lasting trust. To know William M. Warren was to like him; to know him well was to love him and trust him to the gates of death. And what living creature ever trusted him in vain? His simple word was a tower of strength. When did he ever fail in the whole span of his short but shining life to fulfil his plighted faith with a chastity of honor that knew no stain—nay, when did he fail to beggar his promise by the opulence of his performance? Gifted he was, but his strength lay as much in moral weight as in mental endowment, and his remarkable success was only the destiny of character.

“Mr. Warren won many of the great prizes of life—high position, wealth, influence, popularity, business success—but he never paid any of their tragic penalties. His temper remained sweet, his faith in men unimpaired, his honor unsoiled, his love of humankind unchilled.

“It would hardly be fitting at this time to give more than a passing glance at Mr. Warren’s beautiful devotion to wife and orphaned child, to parents and sisters. He rose to the full height of all domestic duties; to him, indeed, they were not duties, but joys, for he cherished tenderly every family tie, and he could not draw a cheerful breath until those dearest to him shared in the rich happiness of his young and radiant life.

“Mr. Warren had barely crossed the threshold of his fortieth year. Entering the service of Parke, Davis & Company when a lad of seventeen, he rose steadily through its various grades until at thirty-two he filled the highest place in the gift of the house, that of general manager. At his death his administration was seven years old almost to a day. Its wonderful success has been manifested in a rapid and unceasing increase of the business; in the multiplication of our laboratories and branch houses; in the erection of new buildings, acre after acre; in the successful invasion of foreign markets and new fields of scientific enterprise; in heightened prestige; in the formation of a remarkable corps of veteran executives animated by the principles of their leader and trained to perpetuate his policies. No ambitious merchant could wish a nobler monument than the contributions made by William M. Warren to the power and growth of the great enterprise whose progress was the blood in his veins and the breath in his lungs! The secret of his brilliant career was threefold. He knew how, and loved, to discover talent. Into the hands of dozens of obscure and untried men he put the key of opportunity. Wholly free from national antipathy, race prejudice, or social narrowness, he measured his lieutenants by the single standard

of ability to produce results. As an organizer, as a co-ordinator and manager of men, his rare gifts would have brought him fame in public life. He had an eagle's eye for opportunity, and an insatiable appetite for fresh enterprise in fields that remain unperceived by the dull vision of the mediocre. In the arts of mercantile construction he was a gifted architect; and to build was the darling occupation of his bold and aspiring mind. Every actuality, every present-day condition that could affect the welfare of this house was the object of his assiduous study; but his also was the rarer power to connect the present with the distant future by new lines of policy. He had the statesman's instinct for tendencies as well as realities; and when the tendency of to-day became the fact of to-morrow it found him armed and prepared. With the magnanimity of a true leader, he feared no rivals; he reared and trained his own successors that his life-work might survive its author, that the house to which his labor was dedicated might thrive and prosper during the generations to come. Fidelity to a trust receives its supreme, its heroic expression when the trustee strives to make himself dispensable.

"Oh, beloved friend of happy days, partner of our triumphs, architect of our success, may thy serene spirit remain an invisible presence in our lives and comfort our aching hearts. May the sweetness, the strength, the wisdom, the genial cheer of thy young life be distilled upon our souls and sustain us in the task which thou hast forever resigned. May thy great, large-minded thoughts be breathed into our toil; may they help us dedicate our lives and our labors to a solemn work which touches the very nerve of pain and human suffering. In our feebleness we could not abridge thine ailment or prolong thy days; may it be given us to cherish, to preserve, and to augment thy handiwork!"

A Deserved Recognition.—Just as we go to press, we learn that the position of General Manager to the firm of Parke, Davis & Co., Walkerville and Detroit, has been filled by the appointment to that post of our esteemed friend, Mr. E. G. Swift, Mayor of Walkerville, and who for years has had charge of the Canadian branch in the latter town. We feel that Mr. Swift, who has shown peculiar adaptability for the work and proved himself an admirable executive officer, will be a worthy successor to the late Wm. M. Warren, and be the means of leading his firm to still greater success. A unique feature is that Mr. Swift, who was born in Canada, became an American citizen when he first went to that country, and started in with Parke, Davis & Co. When he became first manager of the Walkerville branch of the house he renounced his allegiance to Uncle Sam and returned to the flag of his nativity.

Selected Articles.

TREATMENT OF GASTRIC DISTURBANCES.

Nothing leads to a cure in gastric troubles so certainly as abstinence from food for two days, by that means giving the stomach a physiological rest. In the mildest cases a little food may be given, though in many others it need not be withheld more than twenty-four hours. It is often difficult to persuade patients, and even harder their friends, that it is safe to go without food for two days. That it is safe has been demonstrated so frequently that no proof need be cited. Experience has demonstrated the utility of abstinence from food in gastritis beyond peradventure. In the severer cases even a longer time must elapse before the stomach is used for digestion, but food should, during this period of abstinence, be given mostly in the form of rectal injections. But in severe cases, usually from a teaspoonful to a tablespoonful of peptonized milk may be given by the mouth at the end of the second day. These small quantities should be administered every half hour or hour. Although most patients are strong enough to go without food for one or two days without suffering dangerous weakness, it is not safe to starve for even a short time those who are already feeble. Such patients should be given nutritive enemata from the start. In severe cases vomiting is an early and constant symptom. It can be lessened by feeding bits of ice so that a wine-glassful will be taken in the course of an hour and a half or two hours. Cold effervescent drinks, such as seltzer water, also help to lessen it. A mustard plaster or a poultice placed on the epigastrium sometimes gives relief.

Thirst is always increased and often intense. Bits of ice or water taken in sips will help to quench it. Care must be taken that too much be not swallowed, as it will then provoke vomiting. Many times thirst can be lessened by rinsing the mouth frequently, or by holding a mouthful of water for some moments. If water is made slightly acid by a little phosphoric or muriatic acid, it will be grateful, and the temptation to drink large quantities will be lessened. When thirst is excessive and vomiting prevents drinking, water must be given by the rectum or by hypodermic injection.

After the requisite period of abstinence milk should be given;

at first only one or two tablespoonfuls each hour, but if it is well tolerated, one-half or two-thirds of a glass may be given every two hours. Occasionally it is vomited in large curds. This may be prevented by giving it diluted with lime water or seltzer, or by boiling it, and by thickening it slightly with flour. It is rare, however, that it is undigested if it is given at first in spoonful doses and only gradually in larger amounts. Even persons who do not like milk, and with whom it does not agree, can usually be taught to tolerate it when it is given in such small and slowly-increasing doses. It is best to maintain a milk diet until convalescence is established. It may be fortified, as convalescence approaches, by the addition of an egg or a little wheat flour. A few prefer it warm, and many can digest it best when it is warmed. Occasionally a person is found who prefers it if a little spice, such as nutmeg or a little salt and pepper, is added to it. These idiosyncrasies of taste may be gratified with safety.

There are, of course, patients who cannot tolerate milk in any form, and, rather than persist with its use, it is best to substitute some other form of diet. A preparation that has been found valuable in cases such as this, or when some concentrated form of nourishment has to be given in the smallest bulk, as in typhoid fever, phthisis, etc., is Lactalbumin. This is the soluble proteid of whey, and is the natural nerve food as supplied by nature in mother's milk. It is put up in three different forms: No. 1, chemically pure Lactalbumin; No. 2, 50 per cent. Lactalbumin and 50 per cent. Caseinogen; and No. 3, identical in proportion to the proteids as found in mother's milk, containing no ferment. Just recently, this preparation proved itself to be all that is claimed for it in a case of acute gastritis, where no nourishment could be retained till Lactalbumin was brought into requisition, also in another of deficient lactation, the result being that the milk secretion was materially increased within seventy-two hours.

Mrs. F. M., Toronto, aged 39, was seized a few weeks ago with acute pains across the stomach and over the cardiac region, about 5 a.m. Vomiting commenced soon after, and though it afforded relief from pain for a few minutes at a time, the retching came to be so severe that she got soon very much prostrated. The temperature ran up to 101.4, and the pulse beat 96. There was a great deal of tenderness over the stomach, and almost constant hiccough. It was only after administering 1-4 grain doses of hydrochlorate of cocaine with maltopepsin that any relief was afforded. Mrs. M. vomited everything, even to a drink of water, for the first four days. She was given small doses of champagne, peptonized milk, peptonized bouillon, essence of meat, custards, milk and apollinaris water, but with the same results. After taking a powder of 1-4 grain of cocaine dry on the tongue, about

an hour later a small teaspoonful of Lactalbumin, No. 3, was administered. It remained down, and the dose was repeated in four hours, with the same result. As it seemed to "fill the bill" all right, the patient's diet was confined to Lactalbumin, and, as she gained in strength, and the temperature gradually lowered, No. 2 was substituted for No. 3, and a little later the chemically pure was administered, with the result that though for some weeks she took nothing but Lactalbumin, she increased in strength, got well, and added to her weight.

The potent influence of this preparation, as a galactagogue, was shown in the case of Mrs. R. T., Toronto, who was recently confined and gave birth to a boy 9 1-2 pounds in weight. There was not more than half the normal quantity of milk secreted in the breasts, and the outlook for the baby was not the best. Lactalbumin, No. 3, was used, and in less than three days the milk was largely increased in quantity and enriched in quality, mother and infant doing well.

In mild cases bouillon may be given as well as milk, and its use may be begun early in convalescence. It may be strengthened with egg or soft boiled rice, crackers or stale bread, and meat juices (Brand's) may be added early to the diet. Then such foods may be eaten as malted milk, Robinson's barley, sweetbreads, squab, eggs, chicken, scraped beef, minced ham, soft boiled rice, tapioca, baked potato, fruit jelly, baked or stewed apple and prunes.

Care must be taken during convalescence not to give food in too large quantities, or food that is not easily digested, for the capacity of the stomach is so lessened that it is easily overtaxed. If the food ferments, producing acetic, lactic, or butyric acids, or other irritating substances, a relapse will be provoked. Such fermentation will surely occur if foods stay too long in the stomach. Patients should be cautioned to eat moderately, and to eat only the simplest foods for three or four weeks after recovery, because the stomach is left unusually sensitive by this disease for some time.

Tea is generally tolerated earlier than coffee, but neither should be permitted until the patient has recovered. When they are allowed, only a very small cup of either should be taken, and it should be weak. Alcoholic beverages must be forbidden. When they are the cause of gastritis, they should be forbidden permanently. It is true that dry champagne is sometimes administered with benefit in sips to lessen vomiting.

TONSORIAL ASEPSIS.

"THIS towel," said the attendant in the germ-proof barber's shop, "has been subjected to an extreme heat and is thoroughly sterilized. We take every precaution against exposing our patrons to infection or contagion.

"Good thing," commented the patron.

"This soap," went on the attendant, picking up the cake thereof, "has been debacterialized, and the comb and brush are thoroughly antisepticized."

"Great scheme," said the patron.

"The chair in which you sit is given a daily bath in bichloride of mercury, while its cushions are baked in an oven heated to 987 degrees, which is guaranteed to shrivel up any bacillus that happens along."

"Hot stuff," said the patron.

"The razor and lather brush are boiled before being used, and the lather-cup is dry-heated until there is not the slightest possibility of any germs being concealed in it."

"Fine," said the patron.

"The hot water with which the lather is mixed is always double-heated and sprayed with a germicide, besides being filtered and distilled. It is as pure as it can be made."

"Excellent," said the patron.

"Even the floor and the ceiling and the walls and the furniture are given antiseptic treatment every day, and all change handed out to our customers is first wiped with antiseptic gauze."

"Well, look here," said the patron who had been sitting wrapped in the towel during all this, "why don't you go ahead and shave me? Think I'm loaded with some kind of a germ that you have to talk to death?"

"No, sir," answered the attendant. "But I am not the barber."

"You're not? Where is he?"

"They are boiling him, sir."—*Dietetic Gazette.*

MR. DOOLEY AND THE DOCTOR.

"Th' dock puts a glass chube in me mouth an' says: 'Don't bite it!'

"'D'ye think I'm a glass-eater?' says I, talkin' through me teeth like a Kerry lawyer. 'What's it f'r?' I says.

"'To take ye'er timprachoor,' says he. While I have th' chube in me mouth he jabs me thumb with a needle an' laves th'

room. He comes back about th' time I'm r-ready to sthrangle and removes th' chube.

" 'How high does she spout?' says I.

" 'Ninety-nine,' says he.

" 'Good hivens,' says I. 'Don't come near me, dock, or ye'll be sunsthruck,' I says.

" 'I've just examined ye'er blood,' he says. 'Ye're full iv weeds,' he says. Be that time I'm scared to death, an' I say a few prayers, whin he fixes a hose to me chest an' begins listenin'.

" 'Annything goin' on inside?' says I.

" "'Tis ye'er heart,' says he.

" 'Glory be!' says I. 'What's th' matter with that ol' ingine?' says I.

" 'I cud tell ye,' he says, 'but I'll have to call in Dock Vinthricle, th' speccyalist,' he says. 'I oughtn't be lookin' at ye'er heart at all,' he says. 'I niver larned below th' chin, an' I'd be fired be th' Union if they know I was wurrukin on th' heart,' he says.

" 'So he sinds f'r Dock Vinthricle, an' th' dock climbs me chest an' listens, an' thin he says: 'They'se something th' matter with his lungs, too,' he says. 'At times they're full iv air, an' again,' he says, 'they ain't,' he says. 'Sind f'r Bellows,' he says.

" 'Bellows comes an' pounds me as though I was a roof he was shinglin', sinds f'r Dock Laporatteny. The dock sticks his finger into me as far as th' knuckle.

" 'What's that f'r?' says I.

" 'That's O'Hannigan's point,' he says.

" 'I don't see it,' says I. 'O'Hannigan must have had a fine sinse iv humor.'

" 'Did it hurt?' says he.

" 'Not,' says I, 'as much as though ye'd used an awl,' says I, 'or a chisel' I says, 'but,' I says, 'it didn't tickle,' I says.

" 'He shakes his head an' goes out iv th' room with th' others, an' they talk it over at tin dollars a minyit while I'm layin' there at two dollars a day—docked. Whin they come back wan iv thim says: 'This here is a mos' inthrestin' case an' we must have th' whole class take a look into it,' he says. It means me, Hinnessy. 'Dock,' he says, 'ye will remove its brain. Vinthricle, ye will have its heart, an' Bellows, ye will take its lungs. As f'r me,' he says, 'I will add wan more vermiform appendix to my belt,' he says. "'Tis sthrange how our foolish predecessors,' says he, 'niver got on to th' dangers iv th' vermiform appendix,' he says. 'I have no doubt that that's what kilt Methusalem,' he says.

" 'So they mark out their wurruk on me with a piece iv red chalk, an' if I get well I look like a rag carpet. Sometime they

lave things in ye, Hinnissy. I knowed a man wanst, Moriarty was his name, Tim Moriarty, an' he had to be hem-stitched hurriedly because they was goin' to a ball game that day, an' they locked up in him two sponges, a saw, an ice pick, a goold watch, an' a pair iv curlin' irons belongin' to wan iv th' nurses. He tol' me he didn't feel well, but he didn't think anything iv it till he noticed that he jingled whin he walked.

"That's what they do with ye nowadays, Hinnissy. Ivry time I go into Dook Fogarty's office he gives me a look that makes me wish I'd wore a suit iv chain armor. His eyes seem to say: 'Can I come in?' Between th' Christyan Scientists an' him 'tis a question whether ye want to be threatad like a loonytic or like a can iv presarved vigitables.

"Father Kelly says th' styles iv medicine changes like th' styles iv hats. Whin he was a boy they give ye quinine f'r whatever ailed ye, an' now they give ye sthrychnine, an' nex' year they'll be givin' ye proosic acid, maybe. He says they're findin' new things th' matther with ye ivry day, an' ol' things that have to be taken out, ontill th' time is comin' whin not more thin half iv us'll be rale an' the rest'll be rubber.

"He says they ought to enforce th' law iv assault with a deadly weepin again th' doctors. He says that if they knew less about pizen an' more about gruel an' opened fewer patients an' more windows they'd not be so many Christyan Scientists. He says th' diff'rence between Christyan Scientists an' doctors is that Christyan Scientists thinks they'se no such thing as disease an' doctors thinks there ain't annything else. An' there ye ar-re."

"What d'ye think about it?" asked Mr. Hennessy.

"I think," said Mr. Dooley, "that if th' Christyan Scientists had some science an' th' doctors mor Christyanity it wudden't make anny diff'rence which ye called in—if ye had a good nurse."
—*The Doctor's Factotum.*

MR. C. H. MORTIMORE, who has had extensive experience as male nurse in several hospitals in England, and bears the best of testimonials from men high in the profession there, recently arrived in Toronto, and has taken apartments with Mrs. Mortimore at 84 Wellesley Street, Toronto. Both Mr. and Mrs. Mortimore are anxious to introduce themselves and their methods to the medical practitioners in this city, and will appreciate any opportunity extended to them. Mr. Mortimore is not only male nurse, but a masseur as well, both he and his wife being prepared to take any kind of case at current fees.

The Physician's Library.

BOOK REVIEWS.

Nothnagel's Encyclopedin of Practival Medicine. American edition. Diseases of the Stomach, by Franz Riegal, Professor of Clinical Medicine in the University of Giesen. Edited by CHARLES G. STOCKTON, M.D. Authorized translation from the German under the editorial supervision of Alfred Stengel, M.D. Philadelphia, New York, and London: W. B. Saunders & Company. 1903. Canadian agents: J. A. Carveth & Co., Toronto.

This volume, being devoted to subjects of such vital importance to all countries and climates, has been looked forward to with much anticipation. It is one of the largest, and will prove one of the most useful of the series constituting this important work. Yet, on examining it, one regrets that he cannot agree with the editor that "in simple, strong, and dignified language, the author has presented his subject with such sincerity and clearness that his views will meet almost invariably with ready acceptance." The work suffers in comparison with any of the older writers. Much of the first section of the work especially is anything but "strong and dignified in language, and clear in presentation of views," and to this is largely due the unnecessary size of the volume. The editor might well have followed the example of the editor of a preceding volume by sending the translation back for revision. This observation is justified by the frequent occurrence of such expressions as "led to the formulation of an incorrect diagnosis," "if the patient is obese, this renders the examination more difficult," "the favorite locations of carcinoma," etc. "Can" is repeatedly used where "may" is intended, as "the pancreas can simulate a tumor," "Cancer can be localized in other portions of the stomach." The additions by the editor himself are not free from equally objectionable forms of expression. These are serious blemishes which detract very much from the value of the book. In a work of such pretensions, quite as much care should be bestowed on the form as on the matter.

The volume begins with an account of the methods of examination in diseases of the stomach, and the directions are explicit. For inflating the stomach he uses a teaspoonful of bicarbonate of

soda and a little less of tartaric acid, each dissolved in half a glass of water. The tartaric solution is first drunk and then the soda one. He uses these large doses in order to make the outlines of the stomach both visible and palpable. This shows not only the position and size of the stomach, but also its relation to other organs, tumors, etc. He says he has never seen any disagreeable consequences from the method, but he keeps a stomach tube in readiness for an emergency. He prefers this method to that of inflation with air through a stomach tube. Many people find the drinking of the soda and acid solutions more objectionable than the passing of the tube; then the tube often has to be passed in any case to obtain the contents for examination. Again it takes some time for the CO₂ to be absorbed, while the air can be allowed to escape before the tube is withdrawn. With the latter also the degree of distension of the stomach can be exactly controlled. To the use of the stomach tube in diagnosis he attaches great importance. It is as essential to the physician as the stethoscope or thermometer. By its use we ascertain the size, shape, position and relationships of the stomach, its motor power, as shown by its power of emptying itself in due time, and the character of its secretions. To the quantity of hydrochloric acid present, he rightly attaches less importance than to the motor power.

The sections on diet and treatment are unnecessarily long, as much of them is repeated again under the several diseases. This repetition is a chief cause of the undue size of the volume.

Notwithstanding its many shortcomings, the volume is a valuable one, as it presents a fairly reliable account of the subject and few of the most recent contributions are overlooked.

The publishers have done their part well. The print is clear, and the paper is heavy, but has the strong odor of the preceding volumes.

A. M'P.

A Practical Text-Book of the Diseases of Women. By ARTHUR H. N. LEWERS, M.D. (Lond.), F.R.C.P. (Lond.), Senior Obstetric Physician to the London Hospital and Lecturer on Midwifery in the London Hospital Medical School; Examiner in Obstetric Medicine to the University of London; Examiner in Midwifery and Diseases of Women at the Conjoint Board of the Royal College of Physicians of London, and of the Royal College of Surgeons of England; University Scholar and Gold Medallist in Obstetric Medicine, London University. Sixth edition, with 166 illustrations, four colored plates, and 74 illustrative cases. London: H. K. Lewis, 136 Gower Street, W.C. 1903.

Although a great deal has been written on this subject of late, and many new and valuable books have been issued, yet this neat,

bright, and well-written volume is destined to fill a place which has been noticeably overlooked by many writers. This it does by virtue of its clearness and practicability. It is not a picture-book, though it has a fair number of illustrations. It has what is much more valuable than the most correct photographs, namely, a number of good diagrams. These are of such a simple form that the reader at once grasps the general outline of what is aimed at, and it becomes fixed in his memory.

No space is wasted on detailed descriptions of the anatomy of the pelvis and pelvic organs. The writer takes it for granted that the student of gynecology knows his anatomy. He suggests not only the examination of all available cases of disease, but the examination of those cases which have been pronounced healthy. Without a perfect knowledge of the normal condition, it is impossible to study the abnormal. Another suggestion of decided value is that before beginning this subject at all, the student should take every opportunity afforded at post-mortem examinations to examine the relations of the pelvic viscera to each other in the cadaver. Dissection of these organs is suggested, and general rules are laid down as to what to dissect and how to dissect them.

The arrangement of the divisions of the subject seem to be in the natural order, from a clinical point of view. Beginning with the history of the patient, arranged in the form of question and probable answer, the reader is led on to the physical examination of the abdomen, ending with the special local examination. The diseases of the external parts of the vagina, the uterus and its appendages are all thoroughly gone into. Their diagnosis, prognosis, and especially their treatment, all contain valuable instruction. The author cites many very interesting and instructive cases which have occurred under his own immediate notice. These he rather apologizes for by saying that they are introduced, not only because he thinks they are helpful to the reader, but because they relieve the monotony of the more technical description of the subject. This is hardly necessary, as one of the strong peculiarities of this book is that it is not monotonous.

Flexions and versions of the uterus and their treatment by pessaries makes a very interesting chapter, and to many readers who knew the late Grailey Hewitt, will remind them strongly of his opinions. Sterility and its causes and cure are dealt with in an interesting manner, and the book is brought to a close with a chapter on the rest cure in neurasthenia.

This book must recommend itself to every student and practitioner, for in it he will find the gist of the whole subject written, not for the purpose of exhausting the subject, but providing a simple and lucid description of what too often is most elaborately

explained. The author evidently does not attempt to tell us all he knows, but merely gives us those points which he considers are of most value to the student and practitioner. A. J. J.

An Edition de Luxe of the Works of G. J. Whyte-Melville. Edited by the RT. HON. SIR HERBERT MAXWELL, Bart., M.P. Demy 8vo, gilt tops. The volumes are printed from new type on hand-made paper, specially manufactured for this edition, and handsomely bound in buckram with gilt tops. Limited to 1050 sets. Type distributed. Colored frontispiece to each volume on Japanese vellum, and full-page illustrations by Hugh Thomson, Bernard Partridge, H. M. Brock, C. E. Brock, Cecil Alden, G. H. Jalland, Harrington Bird, E. Caldwell, Fred Roe. Twenty-four volumes, \$84.00. London: W. Thacker & Co., 2 Creed Lane, E.C. London, Canada: T. Wilson Michelmore, 697 Colborne Street.

For those fond of out-of-door life, and there are a goodly number of medical men who can be counted as belonging to that class, there will be found few works that will prove as entertaining during winter evenings as those of G. J. Whyte-Melville, edited by Rt. Hon. Sir Herbert Maxwell, Bart., M.P. After spending some little time over the volumes, we say to our brother practitioners, Write without delay to Mr. T. Wilson Michelmore, 697 Colborne Street, London, Ont., and have a set forwarded by express. The price at which the entire set of twenty-four volumes is offered is little when compared with the genuine pleasure that will come to the purchaser, as he is able to sit in his smoking chair, toasting his toes, during the long dark winter nights, when the pack are safely housed over the cold weather, and the horn lies asleep in its leathern case, awaiting once again the voice of spring, when the music so dear to the heart of the hunting gentleman will be again heard throughout the length and breadth of the land. What can be more enjoyable to such a man than a sporting novel, especially one written by this king of novelists Whyte-Melville, who is now looked upon as being without a peer in his class?

The order of publication of the volumes is as follows: I.—Riding Recollections; illustrated by Hugh Thomson. II.—Katerfelto; illustrated by G. H. Jalland. III.—Uncle John; illustrated by E. Caldwell and H. M. Brock. IV.—Market Harborough; illustrated by Hugh Thomson. V.—Contraband; illustrated by Bernard Partridge. VI.—M. or N.; illustrated by C. E. Brock. VII.—Tilbury No-Go; illustrated by E. Caldwell. VIII.—Songs and Verses and Bones and I; illustrated by H. M. Brock. IX.—Black but Comely; illustrated by H. M. Brock. X.—The Brookes of Bridlemere; illustrated by Fred Roe. XI.—The White Rose; illustrated by Harrington Bird. XII.—Roy's

Wife; illustrated by Cecil Alden. XIII.—Satanella; illustrated by G. H. Jalland. XIV.—Digby Grand. Illustrated by H. M. Brock. XV.—Sarchedon; illustrated by Harrington Bird. XVI.—Rosine and Sister Louise; illustrated by H. M. Brock. XVII.—Kate Coventry; illustrated by H. M. Brock. XVIII.—Cerise; illustrated by H. M. Brock. XIX.—Queen's Maries; illustrated by G. H. Jalland. XX.—Holmby House; illustrated by G. H. Jalland. XXI.—General Bounce; illustrated by H. M. Brock. XXII.—Gladiators; illustrated by Harrington Bird. XXIII.—Good for Nothing; illustrated by H. M. Brock. XXIV.—Interpreter; illustrated by H. M. Brock.

Perhaps one of the best of the series is Vol. IV., containing two novels, "Market Harborough, or How Mr. Sawyer went to the Shires," and "Inside the Bar, or Sketches at Soakington." The volume is composed of over 400 pages, and in not one does the interest in any way flag.

The type, paper, and illustrations throughout are all of the best, and the set of twenty-four books makes indeed a handsome addition to any library.

Surgery: Its Theory and Practice. By WILLIAM JOHNSON WALSHAM, F.R.C.S. (Eng.), M.B. and C.M. (Aberd.). Eighth edition, with 622 illustrations, including 20 skiagram plates by Walter George Spencer, M.S., M.B. (Lond.), F.R.C.S. (Eng.), Surgeon to the Westminster Hospital. Philadelphia: P. Blakiston's Son & Co. 1903. Canadian agents: Chandler & Massey Limited, Toronto, Montreal and Winnipeg.

From its first appearance Walsham's "Surgery" has been a favorite both with students and practitioners. The author has a perspicuous style which is very acceptable to the mind in search of information upon abstruse subjects. The fact that already thirty-eight thousand copies of this work have been published, and that it is now in its eighth edition, speaks strongly in proof of the statement that it meets the requirements of the profession.

An examination of the book upon the subjects which are marked by most advancement in recent years, will show how thoroughly the book is brought up-to-date. This may be seen by a reference to such subjects as pyogenic organisms, separation of epiphyses, injuries of nerves, tendon transplantation, etc.

Viewing critically the author's teaching on the treatment of club-foot (page 1172), it must be considered less satisfactory. The foot of a young infant should never, for purposes named, be encased in plaster-of-Paris or other fixation apparatus. Till the time comes when the child is nearly ready to walk, manipulation is the only treatment to be employed. Such feet at best

are defective in development, and the constriction resulting from fixed dressings but emphasizes and increases the defect, while frequent massage and manual replacement of the foot will increase the range of rotation at the ankle and tarsal joints, and will further the natural development of the parts. As the walking period draws near, the deformity may be corrected in a short time, and the child be permitted to learn to walk on straightened feet, so that it is better that the surgeon should not directly intervene until about the end of the first year of life, or early in the second year.

The work pertaining to the eye and ear has been entrusted to those specially qualified to deal with those subjects. Full justice is done to the important subject of X-ray work as it must be in every up-to-date surgery. It may in all fairness be said that probably no "surgery" in English to-day affords a better general guide, and is more reliable in up-to-date information than this eighth edition of Walsham's "Surgery," edited chiefly by Walter George Spencer. The publishers' part is well done.

B. E. M.

Nervous and Mental Diseases. By ARCHIBALD CHURCH, M.D., Professor of Nervous and Mental Diseases and Head of Neurological Department, Northwestern University Medical School; and Frederick Peterson, M.D., President New York State Commissioner in Lunacy; Chief of Clinic, Department of Nervous Diseases, College of Physicians and Surgeons, New York. Fourth edition, thoroughly revised and enlarged. Handsome octavo volume of 922 pages, with 338 illustrations. Philadelphia, New York, London: W. B. Saunders & Company. 1903. Cloth, \$5.00 net; sheep or half morocco, \$6.00 net. Canadian agents: J. A. Carveth & Co., Toronto, Ontario.

The fourth edition of this excellent work is well worthy of its predecessors. The thorough revision has added all the latest information, and brought the work fully up-to-date. The combination of nervous and mental diseases in one volume is undoubtedly the best means of bringing these two branches of medicine before the student and practitioner since a proper comprehension of both can only be obtained by studying them together. This is especially evident in some of the functional neuroses, which in certain forms are frequently followed by mental derangement, a result which might have been obviated by the early treatment of these cases.

The chapter on motor neuroses is well done, the description of Thomsen's disease and of family periodic paralysis being remarkably clear and concise.

The chapter on the review of the recent problems of psychia-

try gives the latest and most authentic information regarding many of the important questions before the alienist of to-day. In the treatment of insanity, much that is practical and of great value is given. The question of isolation is fully discussed, and the benefit derived from the confinement of these patients to bed in the acute stage and combined with the rest cure is well described.

The illustrations are clear and well finished, the entire work reflecting much credit, not only on the authors, but also on the publishers.

We have much pleasure in recommending it to all students and practitioners who desire to keep *au courant* with the latest developments in these most important subjects. D. C. M.

Clinical Surgery for the Instruction of Practitioners and Students of Surgery. By A. J. OCHSNER, B.S., F.R.M.S., M.D., Chicago, Surgeon-in-Chief, Augustana Hospital, and St. Mary's Hospital; Professor of Clinical Surgery, Medical Department, University of Illinois. Cleveland Press (The Clinical Review Publishing Co.), Chicago. Canadian agents: Chandler & Massey Limited, Toronto, Montreal and Winnipeg. 1902.

It was with more than usual pleasure that the writer spent several evenings perusing Dr. Ochsner's "Clinical Surgery;" first, owing to having "rubbed elbows" with him for several years at the meeting of the American Medical Association, and in that way learning of his ability as an operator; and secondly, on account of the actual worth of the text-book as a reliable work "for the instruction of practitioners and students of surgery."

A book on surgery is increased in value just ten times when it gives the actual experience of the author himself, and depicts the methods he has employed in his own work. It is for this reason that Dr. Ochsner's book is valuable, in that it gives the reader a pen picture of the work carried on by him in his own clinic, and details his experience in the various operations, without their being advised as the only methods to be employed, but the ones that he has tried and tested, and not found wanting. Dr. Ochsner has not attempted to describe each and every operation upon the human body, because that would simply be a rehash and reiteration of what many other writers have already gone into. The book is, therefore, above all else, thoroughly practical, and will be found, for the reasons given, of immense value to the surgeon, who, from force of circumstances, is compelled to do a good deal of operating, and wishes to know just what the author would do himself under exactly similar circumstances.

Sir Henry Morgan, Buccaneer. A Romance of the Spanish Main. By CYRUS TOWNSEND BRADY. Author of "For Love of Country," "For the Freedom of the Sea," "The Southerners," "Hohenzollern," "The Quiberon Touch," "Woven with the Ship," "In the Wasp's Nest," etc. Illustrations by F. N. Marchand and Will Crawford. Toronto: The Copp, Clark Co., Limited, Publishers. 1903.

The edition is in a very attractive form, with numerous illustrations by F. N. Marchand and Will Crawford. The period of the story is somewhere about the year 1700, and deals with one of the many wild spirits of the time, Sir Henry Morgan, a fierce, ungovernable soul, who had caused himself to be knighted by unstinted donations of ill-gotten gold to the coffers of the "Merry Monarch," King Charles II.

Sir Henry then settled down to a quiet life as Vice-Governor of Jamaica, but on the accession of James II., was ousted from his position and rendered an outcast. He then gathered round him some choice spirits, former companions in piracy, and set forth on a last long cruise that was to realize all his fiendish desires and dreams.

A very pretty little love story adds much charm to the tale, one in which the Spaniard, the cruel desperado of the average romance, is made the hero. Throughout, the story is one of thrilling incidents, and culminates with the awful end of the arch-fiend, Sir Henry Morgan, brought about by one of his own band.

The interest in the story is sustained from first to last by the knowledge of the historical reality of the setting, and by the vivid, thrilling style of the author.

W. J. W.

The Four Epochs of Woman's Life. Maidenhood, Marriage, Maternity, Menopause. By ANNA M. GALBRAITH, M.D., Author of "Hygiene and Physical Culture for Women"; Fellow of the New York Academy of Medicine, etc. With an introductory note by John H. Musser, M.D., Professor of Clinical Medicine, University of Pennsylvania. 12mo volume of 247 pages. Philadelphia, New York, London: W. B. Saunders & Company. 1903. Cloth, \$1.50 net. Canadian agents: J. A. Carveth & Co., Toronto.

This work, written for the instruction of the laity on subjects of which every woman should have a thorough knowledge, is indeed a timely and excellent one. The fact that a second edition has been demanded in such a short time is sufficient proof that women have at last awakened to a sense of the penalties they have paid for their ignorance of those laws of nature which

govern the epochs of their lives. The language used is clear and comprehensive, yet, withal, modest, and the meaning easily grasped even by those unfamiliar with medical subjects. As a further aid a comprehensive glossary of medical terms has been appended.

In this new edition the author has made some excellent additions, viz.: A section on "The Hygiene of Puberty"; one on "Hemorrhage at the Menopause a Significant Symptom of Cancer"; and one on "The Hygiene of the Menopause." These sections make the work the very best on the subject we have seen, and physicians will be doing a real service by recommending it to their patients.

W. J. W.

Clinical Pathology of the Blood. A Treatise on the General Principles and Special Applications of Hematology. By JAMES EWING, A.M., M.D., Professor of Pathology in Cornell University Medical College, New York City. Second edition, revised and enlarged. Illustrated with 43 engravings and 18 colored plates drawn by the author. New York and Philadelphia: Lea Brothers & Co. 1903.

An immense amount of work has been done in recent years on the blood. The results of these experiments and discoveries have appeared in articles and monographs in various languages, and have, therefore, not been accessible to many readers. The author, about two years ago, made a very successful attempt to collect this scattered material, and presented it to medical practitioners and students of hematology in his "Clinical Pathology of the Blood." During the past two years, many valuable contributions to our knowledge of the blood have appeared, and these have now been incorporated in the second edition.

While much of this material may not directly assist the practitioner in his efforts to cure disease by therapeutic measures, yet it gives him a clear clinical picture of the character and nature of many of the pathological processes he is trying to combat, and thus makes his work far more scientific and intelligent. Every student and progressive practitioner should not merely read, but study thoroughly, this most excellent work on the blood.

A. E.

The Etiology, Pathology, Diagnosis and Treatment of Tumors. By A. HAMILTON LEVINGS, M.D., Milwaukee, Wis. Chicago: Cleveland Press. Canadian agents: Chandler & Massey Limited, Toronto, Montreal and Winnipeg.

This work is a rather finely got-up manual of over 800 pages. The paper is first-class, the typography excellent, and the illustrations very numerous and well reproduced. The only fault we have to find with the book-making part of it is that the type reading might have been a little closer, as it contains quite a number

of typographical errors—far too many, in fact, for a work of such a size and character.

In regard to the matter of the book, we cannot say that it is strikingly original, but it seems thoroughly up-to-date, and shows on the part of the author not only a wide practical acquaintance with the surgical side of his subject (for he is a practical surgeon), but also a commendable appreciation of the pure pathology of tumors, which unfortunately to-day so many surgeons lack. The ground covered by the author is very wide, and he includes, for instance, in his chapter upon Lymphomata, an account of the leucemias. Whilst here the description of the spleno-myelogenous type is fair, he is not so clear upon the lymphatic leucemia, and one would imagine from reading it that he confused the true lymphatic leucemia with Hodgkin's disease and the pseudo-leucemias.

J. J. M'K.

Saunders' Medical Hand Atlases.—Atlas of the External Diseases of the Eye. By PROF. DR. O. HAAB, of Zurich. Second edition, thoroughly revised. Edited, with additions, by G. E. DeSchweinitz, A.M., M.D., Professor of Ophthalmology in the University of Pennsylvania. With 98 colored lithographic illustrations on 48 plates, and 232 pages of text. Philadelphia, New York, London: W. B. Saunders & Company. 1903. Price, \$3.00 net. Canadian agents: J. A. Carveth & Co., Toronto.

Like almost all of Saunders' Medical Hand Atlases, that of the external diseases of the eye is a credit to its author. In too many instances is it the case that the general practitioner feels that, under no circumstance whatever, should he encroach upon the sacred field of the ophthalmologist, but in every instance refer even a case of simple conjunctivitis to his brother specialist. Dr. DeSchweinitz' atlas will be found of value in acquainting those who have not paid as much attention as they should to what lies within their field in external diseases of the eye, with knowledge that will prove, not only of the greatest assistance to them, but at the same time remunerative. The chrono-lithographic plates are excellent, and in themselves very instructive.

W. A. Y.

Anesthesia and Anesthetics: General and Local. By JOSEPH M. PATTON, M.D., Professor of Diseases of the Chest in Chicago Polyclinic; Associate Professor of Medicine in the Medical Department, University of Illinois. Chicago: The Cleveland Press. 1903. Canadian agents: Chandler & Massey Limited, Toronto, Montreal and Winnipeg.

The work under review is written to supply for the use of practitioners and medical students a concise, practical and up-to-

date guide in the important work of inducing surgical anesthesia. In a general way the author's attempt may be said to have been successful. Only one other work—that of Dr. Probyn-Williams—contains within the same space so much of practical value which should be, but which is not generally, known. In reading the work one is here and there impressed with the fact that the author could with advantage have been more dogmatic in his statements. For example, take this sentence: "Chloroform and its congeners are generally supposed to favor primary syncope where the sitting posture is assumed, and while this danger is probably over-rated, provided the respiration be eradicated and the anesthesia be not too profound or prolonged, it is best not to give chloroform in the sitting position, if it can be avoided." Let the author think of the ghastly and growing list of deaths under chloroform in the dental chair, let him recall Dr. Joseph Price's definition of an anesthetist as "one who takes a patient to the edge of the grave and holds him there till the surgeon completes his work," and in the next edition of this book he will at least cut out that last and most dangerous clause. The writer of this review has long taught that to allow a patient under chloroform to be raised to a sitting posture is to tempt Providence, to invite disaster and to trifle with human life. Notwithstanding this criticism, he commends Dr. Patton's book as one of the best yet issued on this subject.

N. A. P.

A Non-Surgical Treatise on Diseases of the Prostate Glands and Adnexa. By GEORGE WHITFIELD OVERALL, A.B., M.D., formerly Professor of Physiology in the Memphis Hospital Medical College. Chicago: March & Grant Company, Printers. Copyright, 1903.

Damage once done to the prostate by the knife is irreparable. "Better bear the ills we have than fly to those we know not of." Such is the opinion of the author. He does not, however, limit treatment of the prostate entirely to medicines, electrolysis, cataphoresis, etc., as he considers there are some neglected cases in which the use of the knife is indispensable; but conservatism in the use of the knife, and the use of ways and means by which to reach directly the seat of the disease are, in the author's opinion, the foundation for ultimate success.

The anatomy and functions of the prostate glands are carefully outlined, and the book is well illustrated.

The author adopts largely the plan of reporting clinical cases as a means of instruction for readers, some thirty-five cases being thus recorded, but these are brief, succinct, and readable.

This little book evokes considerable food for thought, the chapter on neuroses of the prostate alone being of sufficient interest to warrant its perusal by every thinking physician or alienist.

E. H. A.

A Manual of Medicine. Edited by W. H. ALLCHIN, M.D. (Lond.), F.R.C.S., F.R.S. (Edin.), Senior Physician and Lecturer on Clinical Medicine, Westminster Hospital; Examiner in Medicine, Naval Medical Service; late Examiner in Medicine in the University of London for the Royal College of Physicians of London and for the British and Indian Army Medical Services. Vol. V., Diseases of the Digestive System and of the Liver; Diseases of the Peritoneum and of the Vessels of the Abdomen; Diseases of the Kidneys, Diseases of the Ductless Glands. London: Macmillan & Co., Limited. New York: The Macmillan Company. 1903.

The more we read of "Allchin's Manual" the better we like it. The articles are all well written, are concise and very full. The first fifty-three pages are devoted to the general anatomy and physiology of the digestive organs, food and diet, and the bacteria of the alimentary tract. This makes a very useful introduction to the work. There are a number of illustrations, mostly of pathological conditions, three plates giving back and front views of abdominal viscera and tables showing levels of various abdominal structures in relation to the spines and bodies of the vertebra. There is also a table showing the vascular supply of the abdomen.

There is a staff of eleven contributors, including the editor, all men of the first rank connected with the various London hospitals.

We think "Allchin's Manual" the most useful work on medicine with which we are acquainted, and can, with confidence, recommend it to our friends.

W. J. W.

Encyclopedia Medica. Under the General Editorship of CHALMERS WATSON, M.B., F.R.C.P.E. Vol. XIII., Ulceration to Zinc Poisoning. Edinburgh: William Green & Sons. 1903.

This is the concluding volume of this interesting work. On account of the alphabetical arrangement alone, apart from the value of the care bestowed on the various articles, it necessarily followed that the volumes varied much in merit. This volume, though not the best, surpasses several preceding ones in merit. None of the subjects call for very long articles, but all are of practical importance. Among the most important contributions are: Vaccination, by Mrs. Garrett Anderson, in an admirable article which should disturb the "superior" consciences of the anti-vaccinationists; Visceral Pain, by James Mackenzie, of Burnley; and several articles on the uterus by as many writers. The book closes with an article on the Plague as an appendix.

The work, as a whole, will be found a safe and valuable aid by the general practitioner, especially the "busy" one, who has little time to read long articles or large books. The publishers' part is creditably done by William Green & Sons.

A. M. P.

Diseases of the Throat and Nose. By CHAS. H. KNIGHT, A.M., M.D., Professor of Laryngology, Cornell University Medical College, etc. Philadelphia: P. Blakiston's Son & Co. 1903. \$3.00 net. Canadian agents: Chandler & Massey Limited, Toronto, Montreal and Winnipeg.

The lectures given by the author at Cornell Medical College have formed the basis of this book. The fact that it was originally intended for the instruction of students leads to attention being given to many minor details which the general practitioner, whose training in this branch of medicine has usually been somewhat perfunctory, must learn by personal experience. Questions such as the choice of anesthetics to be used in removal of nasopharyngeal adenoids, and in tonsillotomy, are dealt with in unnecessary detail. Some six pages are given up to a description of the various methods and instruments used in removal of the tonsils. This prolixity gives a conversational tone to the book; which renders it easy of perusal, while enabling one to make an intelligent choice of one of the many methods in use. J. M.

Hygiene and Sanitation. A Manual of Hygiene and Sanitation. By SENECA EGBERT, A.M., M.D., Professor of Hygiene and Dean of the Medico-Chirurgical College of Philadelphia; Member of the Academy of Natural Sciences of Philadelphia; Member of the American Medical Association, etc., etc. Philadelphia: Lea Brothers & Co. 1903.

Modern scientific achievements in the realm of hygiene and sanitation are doing much to improve the condition of the race, and Seneca Egbert's practical little volume, which is just published, gives a *resume* of the comparatively recent discoveries in the realm of practical hygiene.

Personal hygiene and school hygiene are not neglected by the author, while the usual chapters on bacteriology, ventilation, heating, water, food principles and beverages, the removal and disposal of sewerage, military hygiene and vital statistics, and the examination of air, water and food, are treated in a manner suitable for the use of students, clergymen, teachers, and others interested in the public health. E. H. A.

The Medical Record Visiting List, or Physician's Diary for 1904. New revised edition. New York: Wm. Wood & Co., Medical Publishers. Canadian agents: The Chandler & Massey Limited, Toronto, Montreal and Winnipeg.

The most important change in this new revised edition is in the list of remedies, and their maximum doses, in both apothecaries' and decimal systems, and the indication of such as are

official in the United States of America. In addition to this, there is the usual condensed list of information, which is convenient for ready reference by the physician or surgeon for emergency work.

The visiting list, with special memoranda, is arranged for thirty patients a week. It is a well-bound and compact physician's diary and visiting list.

Wathen's Epitome of Histology. A Manual for Students and Physicians. By JOHN R. WATHEN, A.M., M.D., Professor of Surgery, etc., formerly Professor of Histology and Pathology, Kentucky School of Medicine, Louisville, Ky. 12mo, 220 pages, 114 illustrations. Cloth, \$1.00 net. Lea Brothers & Co., Publishers, Philadelphia and New York. 1903.

This little work contains the main facts of histology. It is essentially a condensed treatise, and is well adapted to serve as an aid to students and others in reviewing this branch of medical study. A short chapter is given to the technique of preparing and staining tissues. The book contains many good illustrations.

A. E.

Physician's Pocket Account Book. By J. J. TAYLOR, M.D. Philadelphia: The Medical Council, 4105 Walnut Street.

This book is suited for the pocket so that the physician may at all times have a patient's account with him. Each patient is given a page, and there is an index for names. By this system only one book is used. The page under patient's name gives a full record of services rendered, and amounts received on account. There is no posting at the end of the month, as that is covered by the daily entries. An account may be made up at a moment's notice and in this way time, and often money, saved. The system is very simple, and fulfils every requirement of the busy physician.

W. J. W.

The Silver Poppy. By ARTHUR STRINGER. Toronto: William Briggs.

An interesting story of a young Oxford man's life as literary hack, newspaper drudge and author, in New York City, entwined with an atmosphere widening from studio Bohemia to millionaire-dom, and a love story well told with the strength of a man's point of view, and an awakening as merciless as the thrust of a surgeon's knife.

Glimpses of Toronto; Picturesque Trinity. By the REV. C. B. KENRICK, M.A. Toronto: Geo. N. Morang & Co., Limited, Publishers.

We can hardly imagine a nicer or more acceptable Christmas or New Year gift to send to any old graduate, who claims Trinity

University as his *Alma Mater*, whether in medicine or arts, than a copy of "Picturesque Trinity." The Rev. Mr. Kenrick is to be congratulated upon his work. The glimpses of Toronto are simply beautiful, and each one is so well executed that it will be valuable as a keepsake.

The Heart of Rome. By FRANCIS MARION CRAWFORD. Toronto: The Copp, Clark Company, Limited. Cloth, \$1.50.

An entertaining book, very suitable for a New Year's gift. Just enough plot to form a background for a beautifully-sketched love story, and enhanced here and there by a glimpse of Rome, the proportions of light and shade, in view and narrative, perfectly maintained.

PAMPHLETS RECEIVED.

Laboratory of the Inland Revenue Department, Ottawa, Canada.
Bulletin No. 88, Paris Green. 1902-3.

Laboratory of the Inland Revenue Department, Ottawa, Canada.
Bulletin No. 89, Flavoring Extracts. 1903.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Fiscal Year, 1900. Washington: Government Printing Office.

Annual Report of the Supervising Surgeon-General of the Marine Hospital Service of the United States for the Fiscal Year, 1901. Washington: Government Printing Office.

THE firm of Chandler & Massey Limited recently purchased the business of Paterson & Foster, Phillips Square, Montreal. Mr. J. Daker Paterson will act as manager of the Montreal branch of The Chandler & Massey Limited, at 8 Victoria Street in that city, where a full stock of everything in physicians' supplies will be found. The Chandler & Massey Limited recently opened up another branch at 279 Fort Street, Winnipeg, Man., and are already doing a splendid business out through the West.