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# *Original Contributions.*

## THE GROWTH AND ORGANIZATION OF THE MEDICAL PROFESSION IN NOVA SCOTIA.*


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*Mr. President and Gentlemen,*—The first duty resting upon me is to thank you for the wholly undeserved distinction which you have conferred in choosing me to deliver one of the general addresses at this meeting of this Association.

I wish to apologize for my presumption in undertaking so serious a responsibility, feeling that local reasons, rather than any fitness on my part, must have counselled your request.

The subject upon which I shall endeavor to address you may be entitled "The Growth and Organization of the Medical Profession in Nova Scotia."

It was not without misgivings that I selected such a local topic, but I have been assured that there are ample precedents for such a course.

It may be confidently stated that there is at the present time a growing interest in the history of the medical profession in all its aspects. This may be regarded as part of the modern recognition of the important fact that no subject can be thoroughly studied and fully understood unless studied historically. Not only is this fact acted upon by the leaders of modern thought and the great teachers of the age, but it is becoming generally recognized by all thinking men that we must have some knowledge of the past to understand, really, the present,

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and to make progress in the future. Every movement has its past history, its present struggles, its ideals for the future.

The satisfactory condition of the medical profession in this province to-day has not been attained without much effort and a long history.

The present standard of medical education is sufficiently high, and the average attainments of the rank and file of the profession satisfactory, so that everywhere the public can obtain the services of men capable of coping with the ordinary emergencies met with in practice. The members of the profession are respected, and exercise considerable influence in social and public affairs. In their organized capacity they enjoy self-government—a privilege which they have used for the public benefit, but have never abused. There are active and energetic associations for mutual improvement and protection. The grosser forms of quackery are not prevalent, and what may be called "medical heresies" are scarcely represented. It can be affirmed without exaggeration that the position of the profession in Nova Scotia compares favorably with that which obtains in other provinces of Canada or in the states of the American Union. Such a status for the profession has not been achieved except by the continuous struggles of many generations.

It is to the past, then, that we may now turn attention for the better understanding and appreciation of the present. And if, in doing so, I should seem to present much that belongs to general history rather than specially to medical history, my excuse is that it is desirable, if not essential, to note the general condition of the province and its population, at different periods, in order to see what field there was for the special work of the profession.

It is now just three centuries since the first European settlement was made in this region of North America, at Port Royal, now Annapolis Royal, in this province, which is thus the oldest continuous European settlement on this continent north of Florida. The settlement was really made and the colony established by Poutrincourt, under a grant from de Monts, who had arrived there the previous year, 1604, with a grant, from Henry IV. of France, of all the territory between the 40th and 46th parallels of latitude. The Acadia of the seventeenth century was thus a very wide region, including the present New Brunswick, and, indeed, for a long time, the name Nova Scotia was applied to the same region. Sieur de Monts made many and extensive explorations during the summer, crossed the Bay of Fundy, and established a settlement on the island of St. Croix. The colony of St. Croix suffered great hardships during the winter of 1604-5; and it is from that

settlement that we have the earliest account of anything of strictly medical interest in Acadia. That year Samuel de Champlain—a name illustrious in Canadian history—was with de Monts at St. Croix, and he has left a most interesting acccount of a serious malady which attacked the colonists. Here let me quote part of Champlain's narrative:

"During the winter, many of our company were attacked by a certain malady called the mal de la terre, otherwise scurvy, as I have since heard from learned men. There were produced in the mouths of those who had it great pieces of superfluous and drivelling flesh (causing extensive putrefaction), which got the upper hand to such an extent that scarcely anything but liquid could be taken. The teeth became very loose, and could be pulled out with the fingers without its causing them pain. The superfluous flesh was often cut out, which caused them to eject much blood through the mouth. Afterwards a violent pain seized their arms and legs, which remained swollen and very hard, all spotted as with flea bites; and they could not walk on account of the contraction of the muscles, so that they were almost without strength and suffered intolerable pains. They experienced pain also in the loins, stomach and bowels, had a very bad cough and short breath. In a word, they were in such a condition that the majority of them could not rise nor move and could not even be raised up on their feet without falling down in a swoon. So that out of seventy-nine, who composed our party, thirty-five died, and more than twenty were on the point of death. The majority of those who remained well also complained of slight pains and short breath. We were unable to find any remedy for these maladies. A post-mortem examination was made of several to investigate the cause of their malady.

"In the case of many, the interior parts were found mortified, such as the lungs, which were so changed that no natural fluid could be perceived in them. The spleen was serous and swollen. The liver was woody and spotted, without its natural color. The vena cava, superior and inferior, was filled with thick coagulated and black blood. The gall was tainted. Nevertheless, many arteries, in the middle as well as lower bowels, were found in a very good condition. In the case of some, incisions with a razor were made on the thigh where they had purple spots, whence there issued a very black, clotted blood. This is what was observed on the bodies of those infected with this malady. Those who continued sick were healed by spring, which commences in this country in May. That led us to believe that the change of season restored their health, rather than the remedies prescribed.

"During the winter all our liquors froze, except the Spanish wine. Cider was dispensed by the pound. The cause of this last was that there were no cellars under our store-houses, and that the air which entered by the cracks was sharper than that outside. We were obliged to use very bad water, and drink melted snow, as there were no springs nor brooks; for it was not possible to go to the mainland in consequence of the great pieces of ice drifted by the tide, which varies three fathoms between low and high water. Work on the hand mill was very fatiguing, since the most of us, having slept poorly, and suffering from insufficiency of fuel, which we could not obtain on account of the ice, had scarcely any strength, and also because we ate only salt meat and vegetables during the winter, which produced bad blood. The latter circumstance was, in my opinion, a partial cause of these dreadful maladies."

Thus it appears that three centuries ago the French surgeons who accompanied this expedition were impressed with the value of post-mortem examinations for determining the nature of disease, and that they at least suspected the causal connection between salt food and scurvy. And this latter view was confirmed by further observation. After the awful experiences of the first winter at St. Croix, the survivors moved to Port Royal. There were still fatal cases of scurvy. By the third winter affairs had greatly improved, owing, no doubt, to the fact that the colonists had taken to hunting and providing themselves with fresh food instead of salt. Champlain reports of this third winter:

"We spent the winter very pleasantly and fared generously, by means of the Ordre de Bon Temps, which I introduced. This all found useful for their health and more advantageous than all the medicines that could have been used. By the rules of the order a chain was put, with some ceremony, on the neck of one of the company, commissioning him for the day to go a-hunting. The next day it was conferred upon another, and thus, in succession, all exerted themselves to the utmost to see who would do the best and bring home the finest game."

In 1613 the colony of Port Royal was greatly injured by an expedition from Virginia; war between France and England followed; but upon the restoration of peace, in 1632, France was still permitted to hold Acadia.

The work of colonization was resumed under the auspices of the New Company of France; some sixty families of farmers, fishermen and artisans were brought over, settling first at La Have, and subsequently at Port Royal. Most of these came from districts on the west coast of France, where it was customary to protect the low-lying lands from the encroachment of the sea

by dykes, and they adopted the same method, with notable success, to reclaim the rich and extensive marshes about the Bay of Fundy, and soon made comfortable homes for themselves. The progress of colonization was long retarded by internal dissensions, and by strife between the rival claimants to the territory—France and England.

From the final cession of Acadia to Great Britain and the peace of Utrecht, in 1713, to the year 1749, when Halifax was founded, not the slightest effort was made in the direction of securing British settlers for Nova Scotia. France, by the retention of Cape Breton and the fortification of Louisburg, was enabled effectively to checkmate the plans of England. When war broke out between the two nations in 1744, the governor of Louisburg promptly sent an expedition to regain Nova Scotia. Canso was attacked and destroyed, and it was determined to capture Annapolis—which meant the capture of all Nova Scotia. This attempt failed, but it so exasperated the New England people that they resolved to secure possession of Louisburg. A scheme, planned by a lawyer and executed by a citizen commander, with an army of artisans, fishermen, farmers and lumbermen, snatched, by sheer audacity, from the grasp of France the great stronghold of Louisburg, defended by a garrison of veterans. At the close of the war, however, Louisburg, conquered by arms, was restored by diplomacy. A storm of indignation swept over New England, which had the effect of quickening a plan long cherished by the British government, of establishing a permanent settlement and strong military station on the Atlantic coast of Nova Scotia, as a counterpoise to Louisburg, and Halifax was founded in the early summer of 1749.

## Halifax.

A fleet of transports, with 2,576 immigrants, of whom 1,546 were adult males, sailed for Chebucto Bay, under the command of Hon. Edward Cornwallis. New Englanders also came in considerable numbers, and contributed largely to the success of the undertaking. The plan of the town was quickly made, building lots were assigned to the settlers, and before winter closed in all were under shelter. A little later a German colony was planted at Lunenburg.

In 1758 Louisburg was captured by General Wolfe, and Quebec in 1759. With British rule thus assured immigrants from New England and elsewhere soon began to flow into the country and to occupy the fertile lands and the best fishing stations, so that by 1770 there was an estimated population of 13,000 in the Nova Scotia of that day.

During the progress of the war between England and the

revolted colonies of New England, many adherents of the Royal cause were driven from their homes and sought refuge in Nova Scotia. After the evacuation of Boston about two thousand refugees came to Halifax with the British forces. When the war closed large numbers of Loyalists withdrew from the United States, the greater part settling in Ontario and Nova Scotia. They consisted chiefly of the middle and upper classes, and were an intelligent and enterprising body of men of sterling character. They diffused themselves quite generally among the older colonists, and also laid the foundation of new settlements in widely scattered parts of the province.

Among the 2,500 settlers who came to found Halifax in 1749 there were twenty-eight medical men. Eleven of the number were accompanied by their families, which indicates that they, at least, came with the intention of staying in the country. All, probably, were army surgeons, thrown out of employment at the termination of the war with France, who were thus willing to accept a free trip to America and a grant of two hundred acres of land. How bitter must have been their disappointment when they beheld for the first time an unbroken expanse of forest, and realized that this was the home upon which they had based great hopes. Some found employment in connection with the hospital which had been established, but this did not last long, as the home authorities complained to Cornwallis that he supported too many surgeons and apothecaries. Only three out of the twenty-eight appear to have had the courage to face such a future. These remained with the other colonists, shared their hardships, and achieved some measure of success. The names of the three were Robert Grant, John Steele and Alexander Abercrombie. These were the pioneers in medicine in Halifax. Grant became a member of His Majesty's Council; Steele, a member of the House of Assembly; and Abercrombie, when he died twenty-eight years later, was deeply lamented, both for his medical skill and his benevolent disposition. The fate of the other twenty-five is unknown.

Only one physician accompanied the 1,500 German colonists who remained at Lunenburg, and it is uncertain whether he remained in the country. The New England and North of Ireland settlers, who came to the province prior to the Revolutionary War, were usually able to obtain medical aid. The missionaries, who regularly visited the sparsely settled and remote districts, had some medical knowledge. At some points the garrison surgeons looked after the sick. A few physicians came from New England and engaged in practice in the more thriving districts. Of these latter the professional knowledge

and skill may not have been great, but they were usually resolute, enterprising men, and useful members of the community in which they lived.

A large number of medical men accompanied the Loyalists. They were well qualified. The majority had served as surgeons during the war, and their influence in improving the status of the medical profession was marked, owing to their number, skill, and strong personality. In respect to the effect of the Revolutionary War on the fortunes of physicians and surgeons, Sabine remarks:

"The physicians who adhered to the Crown were numerous, and the proportion of Whigs in the profession of medicine was probably less than in either that of law or theology. But unlike persons of the latter callings, most of the physicians remained in the country and quietly pursued their business. There seems to have been an understanding that though pulpits should be closed, and litigation be suspended, the sick should not be deprived of their regular and freely chosen attendants. I have been surprised to find from verbal communications, and from various other sources, that while the 'Tory doctors' were as zealous and as fearless in the expression of their sentiments as Tory ministers and Tory lawyers, their persons and their property were generally respected, in towns and villages where little or no regard was paid to the bodies and estates of gentlemen of the robe and surplice. Some, however, were less fortunate, and the dealings of the Sons of Liberty were occasionally harsh and exceedingly vexatious. A few of the Loyalist physicians were banished; others, and these chiefly who became surgeons in the army or provincial corps, settled in Nova Scotia or New Brunswick, where they resumed practice."

I feel, sir, that this address bids fair to become too long, and there is still much ground to be covered. It seems desirable, therefore, that I should present the chief remaining facts of this subject in a summary form, and for this purpose it appears best to select certain important points, and to group the facts around those dates.

1749-1790.

The first date I have chosen is 1790, as we have an estimate of the population for that year. Prior to that date the population fluctuated very considerably; afterwards it steadily increased. The estimated population of Nova Scotia, in 1790, was about 35,000. The number of practitioners in the province at that time, as far as I have been able to ascertain, after considerable research, was thirty-five, a very large number when we consider the slender resources of the inhabitants and the limited extent of the settled area. The presence of so many

practitioners at that early period is explained by the circumstances that fully one-third of the number held permanent appointments in connection with the military establishments at Halifax, Windsor, Annapolis, Shelburne, and Sydney—appointments which they had received as a partial compensation of the losses they had sustained by the Revolution. Their official duties were light, and gave them ample time for general practice. After the founding of Halifax about nine-tenths of the physicians who came to Nova Scotia came from New England, and of the thirty-five practitioners in 1790 fully three-fourths were Loyalists. The latter did much to create that ingrained respect and loyalty towards the profession which is a characteristic of Nova Scotians, and this was accomplished by the individuality and force of character of those men as well as by their professional skill. The inscription on the tombstone of Dr. John Haliburton, in the old St. Paul's Cemetery, might not unfittingly be applied to each one of them:

> "If unshaken loyalty to his King, steady attachment to his friends, active benevolence to the destitute, and humble confidence in God can perpetuate his memory, he will not be forgotten."

## 1790-1828.

After 1790 no distinctive event stands out from which we can look back upon the growth of the profession until the year 1828, when an Act to regulate the practice of medicine was passed by the legislature. During this period of thirty-eight years the population had risen from 35,000 to 150,000—an increase largely due to an extensive immigration from the Highlands of Scotland. The older settlements had made substantial progress, and afforded an improved field for practice. The number of medical men had increased from 35 to 65; but the ratio to population had fallen from one in about 1,000 to one in about 2,300.

Two of those in practice in 1790 still survived—Jonathan Woodbury, of Annapolis, who came to the province as early as 1763, and Joseph Norman Bond, of Yarmouth, a veteran of the Revolutionary War, who enjoys the distinction of being the first medical man to perform vaccination in Nova Scotia. This was in 1802.

The additions to the ranks of the profession, during this period, were principally British graduates, who brought with them the traditions and customs of the profession in Great Britain. Many of them were retired army and navy surgeons, who had seen considerable service, and were accustomed to order, discipline, and regulations. Their personal influence

proved a potent factor in improving the status of the profession; their intimacy both with their comrades in active service and with the practitioners of the province became a means of diffusing throughout the country a knowledge of the advances and improvements in our art, at a time when communication was slow and uncertain and professional periodicals were still in the stage of infancy.

During this period a few medical men also come from the United States. About 1800, we note the appearance of native Nova Scotians, who had studied either in Great Britain or in the neighboring republic. Towards the close of this period there was a decided increase in the number of these. The first Nova Scotians were: Samuel Head, of Halifax, son of Dr. Michael Head, who came from Ireland to the province shortly after 1756; David B. Lynd, of Truro, a graduate of the University of Pennsylvania; Robert Bayard, of Cornwallis, a graduate of Edinburgh, better known in New Brunswick than in his native province; and W. B. Almon, of Halifax, also an M.D. of Edinburgh, and son of Dr. W. J. Almon, who first came to Halifax during the Revolutionary War. All of these were in practice in 1810.

The preamble to the Medical Act, and a subsequent amendment, point to the presence of a number of unqualified practitioners, especially in districts where medical aid could not be easily obtained. Many of these were men who had gained some knowledge, either through apprenticeship or a partial course at some college. Generally speaking, they were a deserving class, and should not be regarded in the same light as quacks and pretenders.

The early practitioners had to encounter many hardships and difficulties, except in the more populous districts. Many of the roads were mere bridle paths through the forest. Streams had to be forded. Water carriage, when available, was regarded as a boon. In the winter snowshoes were often necessary to complete a journey. Accommodation was very poor; domestic comforts were few; medical periodicals did not exist, and libraries were limited to a few volumes. The serious emergencies of a mixed practice had to be surmounted single-handed. Yet, in spite of all these disadvantages educated men toiled through long years, serving well their generation, and adding their quota to the slow but steady advancement of their profession.

Another point worthy of note is that, owing to the scarcity of educated laymen, and the absence of lawyers outside of Halifax, the doctors also rendered service to the public in the capacity of magistrates, judges of the Inferior Court of Com-

mon Pleas, prothonotaries, sheriffs, judges of probate, and they were frequently elected to the House of Assembly. This added to their labor and perhaps their income, and widened the sphere of their influence. It may be affirmed with justice that no other class gave more useful service to the public than the physicians; nor do the best men of the past suffer by comparison with the leaders of to-day; and they have left us patterns of humanity and energy well worthy of imitation.

1828-1854.

The next important step in the progress of the profession was the formation of the Medical Society of Nova Scotia in 1854. This association grew out of, or rather was an expansion of, the Medical Society of Halifax, which had been formed in 1844.

Between 1828 and 1854 the population had nearly doubled, chiefly through natural increase, and the number of practitioners had risen from 65 to 120. An analysis of the list of practitioners in 1854 indicates that more than one-half of them had been born in the province. Of the total number, 50 per cent. had been educated in the United States, 35 per cent. in Great Britain, and 17 per cent. were provincial licentiates. During this period the medical supply reached its lowest ebb, because but few practitioners came from abroad, and the cost of a complete medical education in a foreign country was greater than many Nova Scotians could afford. Quackery became prevalent and offensive. The petitions of medical men to the legislature had been disregarded, and the conviction became general that the only way to secure a remedy was by united action; hence the formation of the Medical Society of Nova Scotia.

1854-1872.

The next period, extending from 1854 to 1872, when a new Medical Act of great importance was secured, is characterized by a less rapid expansion of the population, owing to the fact that the era of emigration from the province had begun. But for the people who remained there was a better medical supply.

The new medical society soon made its influence felt. For some years its efforts were concentrated upon safe-guarding the interests of the profession and the promotion of measures to improve the public health. In 1856 the old Medical Act was amended, and new provisions were added to repress unqualified practice. A tariff of fees was framed; a code of ethics adopted; better remuneration for public services was secured; health legislation was improved, and an act for the collection of vital statistics was obtained.

The union of the provinces in 1867 widened the outlook of the profession; and the new order of things was promptly

signalized by the formation, that year, of this Canadian Medical Association. And here permit me to refer to the fact that the honor of first presiding over the deliberations of this important organization was accorded to a Nova Scotian, a gentleman of high standing in his profession, but one whose widely-recognized pre-eminence as a political leader and constructive statesman has caused his professional career to be almost forgotten—I refer, of course, to the Hon. Sir Charles Tupper. And I cannot omit mention of the second president of this association, also a Nova Scotian, and the ablest practitioner in the province, chosen for that place of honor because of his sterling character, public spirit and successful professional career, one who fortunately is still with us, an inspiring influence for all that is noble and good—I refer, of course, to the Hon. Dr. Parker.

In the same year, 1867, the Medical Society of Nova Scotia was reorganized. Up to that time the society had held all its meetings in Halifax. It was then decided to hold the annual meeting at different points in the province, with the view of securing the more hearty co-operation of members in the various parts of the country.

In 1867, also, a medical school was founded in Halifax in connection with Dalhousie College. At first nothing more than a short preparatory course, during the summer months, was aimed at. The venture met with success, and in 1870 it was decided to establish a full course of study and to confer degrees. This project encountered considerable opposition at first, and was not approved by the Medical Society. The supporters of the medical school took advantage of a strong and growing sentiment in the profession in favor of a more prolonged period of study than was required in the schools of the United States, from which the great majority of students obtained a qualification; and they took steps to secure the adoption of a new Medical Act, succeeding in 1872. The existence of a medical school within the province lessened materially the force of the objection raised in the legislature that the cost of a more prolonged period of study would restrict competition, and seriously affect the medical supply of the more sparsely settled districts. The propriety of founding a school at that time has been fully proved by the important part which it has played in promoting and maintaining a greatly improved system of medical education.

## 1872-1905.

Before considering the Medical Act of 1872, mention may be made of some minor events which have resulted in good. The Nova Scotia branch of the British Medical Association, formed in 1887, which meets at Halifax during the winter

months, and the Maritime Medical Association, formed in 1891, which holds its annual meetings alternately in the three capitals of the Maritime Provinces, have greatly promoted harmony and good feeling, as well as mutual improvement. The *Maritime Medical News,* founded in 1888, has been of material benefit to the various associations by preserving in an accessible form a record of their proceedings, and of their more valuable contributions.

The medical legislation in 1872 is of so much importance that I trust you will pardon me for giving an account of various steps leading to it. By medical legislation I mean, of course, enactments designed to regulate the study and practice of medicine, it being generally conceded that the state has full power in this respect. The basis of medical legislation is the necessity of affording protection to the people against ignorant persons and pretenders. The intention of such legislation is to secure a standard of professional education to be exacted of every one who is desirous of engaging in the practice of medicine, and such standard is obtained in various ways needless to specify.

The first step was taken while the military element in the profession predominated, and was perhaps suggested by the Medical Acts of Upper and Lower Canada. The Medical Act of 1828 is very brief, and is entitled "An Act to Exclude Ignorant and Unskilful Persons from the Practice of Physic and Surgery." Its substance is as follows: No person shall demand or recover any fee or award for medical or surgical aid unless he has a diploma from some college legally authorized to grant the same, or of having been examined in respect to his professional capacity by judges to be appointed by the Governor-in-Council. The Act being simple in character and adapted to the wants of that period, had some influence in restraining irregular practice, and it afforded partially instructed and deserving men already in practice a chance to obtain a legal qualification.

Next came the Act of 1856, promoted by the Medical Society of Nova Scotia. It provided for the registration of qualifications in the office of the Provincial Secretary. In addition to being unable to recover fees for services, unregistered persons were prohibited from holding provincial medical appointments, and were also liable to a fine of £5 for practising. Persons with defective qualifications could still become duly qualified by passing an examination before a board of examiners. This Act, like the previous one, was moderate in its provisions, and free from objectionable features. It remedied some defects which practical experience had shown to exist in the former measure.

The Act of 1872 conferred the privilege of self-government,

as its provisions secure to representatives of the profession full control of all matters relating to medical education, registration and discipline. The Act has since been frequently amended, but its essential features remain unchanged, and as they are similar to those of other provinces, further explanation is not necessary. But the composition of the governing body, and its policy in respect to some questions, demand brief consideration.

The profession as a whole is not incorporated in Nova Scotia, as it is in Ontario. The Act makes provision for a body corporate, called the "Provincial Medical Board," consisting of thirteen qualified medical practitioners, of not less than seven years' standing—seven to be appointed by the Governor-in-Council for life, and six to be elected triennially by the Medical Society of Nova Scotia. No other provision is made for collegiate representation, and there is no annual tax as in other provinces, the revenue being obtained wholly from examination and registration fees.

Until quite recently the requirements for registration differed in one important respect from those in other provinces, inasmuch as submission to a professional examination was not required from holders of diplomas from reputable schools, obtained after a sufficient course of study. Instead of examination the board insisted upon a rigid compliance with all its regulations relating to the preliminary examinations, period of study, and course of study—tests which effectually excluded applicants from schools of doubtful repute. This policy enabled the board, while maintaining the status of the profession, to keep an "open door" for licentiates from other provinces—a courtesy which so far has met with no reciprocal recognition. At the same time honest men from schools of good repute were spared "vexatious penalties of mind and body."

The principle of state examination was adopted a few years ago, not through conviction of its merits or necessity as a test of professional fitness, but from a desire to co-operate with other provinces in a general scheme of reciprocity. For the past three years an examination in the practical subjects has been demanded from all applicants for license, and the day is probably not far distant when the policy of the board, in this respect, will be adopted by other provinces, as it is now very generally recognized that medical boards and councils have not the requisite equipment, and can scarcely provide competent and independent examiners to conduct examinations in the scientific subjects on the lines of the more recent methods of instruction.

The Act of 1872 proved an important factor in causing a diversion of students from American to Canadian schools.

The ever-increasing proportion of Canadian graduates added

yearly to the Medical Register is a marked feature of this period and is worthy of special notice. An analysis of the Medical Register of 1875—thirty years ago—shows that of the whole number of practitioners, 78 per cent. were American graduates, 14 per cent. were British graduates, 2 per cent. were Canadian graduates, and 6 per cent. were Nova Scotia licentiates. A similar analysis of the Register of 1904-5 gives widely different results. Of the whole number, 53 per cent. were Canadian, 44 per cent. were American, and 3 per cent. were British graduates. The change in favor of Canadian schools is still more strikingly illustrated by an analysis of the additions to the Register from 1895 to 1904. Of the number added, 85.5 per cent. were Canadian, 14.2 per cent. were American, and 0.3 per cent. were British graduates. During the year 1904-5 the additions to the Register were exclusively Canadian graduates.

The predominance of the American graduates, numerically, has come to an end, but their influence, always exerted for good, will be felt for years to come; and it is pleasing to observe that the many evils which resulted from a lowering of the standard of medical education in the United States did not sensibly affect the status of the profession in Nova Scotia. This has been due in some measure to our geographical isolation, but chiefly to the circumstances that, from the earliest period down to the present time, the students from this province who went to the United States to obtain a qualification, have almost invariably selected the best schools in Boston, New York and Philadelphia.

The burden of maintaining and improving the status of our guild in this province, and throughout our great Dominion, is now fairly placed on the shoulders of Canadian graduates.

I fear, Mr. President and gentlemen, that I have rather overtaxed your patience, but trust that I have made it clear that our profession in this part of Canada has had a long and ever-widening history, and hope I have shown, by the citation of definite facts, that the profession in this province has, to say the very least, fully kept pace with the general progress of the country.

# REPORTS ON TONGUE-LIKE ACCESSORY LOBES OF THE LIVER AND ACHYLIA GASTRICA.

BY JAMES NEWELL, PH.B., M.D., M.CH., WATFORD, ONT.,

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THIS malformation is also known as linguiform lobe, partial hepatoptosis, Riegel's lobe or appendicular lobe.

My attention was particularly directed to the malformation by an article read before this Association by Dr. Alex. McPhedran, of Toronto, at the meeting held in 1896, and published in the June number of the *Canadian Practitioner* of the same year. These accessory lobes were first noted by Hyrtl. Haller, Gruber and Cruveilhier afterwards described them. They are parenchymatous prolongations, and are thin round, or tongue-shaped in form, and variable in size. They usually rise from the inferior surface of the liver, and are connected to it by a pedicle containing "vasa aberrantia." The quadrate lobe is the seat of predilection.

Toldt and Zuckerkandl, of Vienna, wrote an article on them in 1875, describing their form and structure. Broca found them on both upper and lower surfaces in a microcephalic individual. Eichorst refers to malformations caused by tight lacing, and Frerichs, in his treatise on the liver, mentioned tongue-like processes due to malformation of the liver, in 1858.

H. Thompson, of Oxford, reported a case in 1885, and in 1889 he saw the processus caudatus separate in a fetus.

Cecil H. Leaf, of Guy's Hospital, London, says these processes are atavistic, because they are often present in monkeys.

These tongue-like lobes are often quite movable, are often discovered accidentally, and may not be accompanied by any bad effects. They may seriously complicate the differential diagnosis of abdominal tumors, or cause symptoms, closely simulating calculous cholecystitis, and floating kidney. They may be mistaken even after most careful examination, for omental tumor, tumor of the pylorus, distended gall-bladder, pancreatic cyst, or appendicitis. In connection with the latter I wish to report the following case:

Miss A., aged 16, while attending school in Dec., 1903, was taken suddenly with acute pain in the right side of the abdomen. In due time she made a partial recovery, but the soreness remained, with indigestion, and a general feeling of ill-health. I saw her first in April, 1904, and after a careful examination, not having discovered any evidence of an abdominal tumor, diagnosed chronic

appendicitis of a mild type. I prescribed rest, proper diet, and intestinal antiseptics. She slowly improved, but her digestion was faulty, with some neurasthenia. In November, 1904, I performed an appendectomy, making a McBurney incision. On introducing my finger into the abdominal cavity, I felt what I at first thought was a dislocated kidney. Having extended the incision upwards, I brought to view a tongue-like process, two inches wide and three-fourths of an inch thick. It ascended and descended with the respiratory movements, and, having looked at it carefully, I knew without any doubt it was a tongue-like process having its origin from the right lobe of the liver. I had a long and tedious hunt for the appendix, as I found the transverse colon was prolapsed, and down in the right iliac fossa, and which very much complicated the search. Having found the appendix, I removed it, as it exhibited signs of having been inflamed. The patient made an uneventful recovery, and has improved so much in health and appearance that I failed to recognize her about a month ago. As there is slight ptosis of stomach, she still complains of some indistinct symptoms and slight uneasiness in the region of the incision.

I do not think that this abnormality of the liver is of frequent occurrence, as I have never before met it in any abdominal section I have done or been present at. Its occurrence in so young a person excludes tight lacing as a cause.

As the malformation is met with mostly in those of mature years, its occurrence in this young girl adds interest to the case. I wish to acknowledge my obligations to my friend, Dr. Basil Harvey, Instructor of Anatomy in Chicago University, for his assistance in furnishing me with the history of this malformation.

I wish to report the following interesting case of achylia gastrica, or atrophy of the stomach. It is a terminal of chronic gastritis, but is most frequently met with in carcinoma of the stomach. Riegel, in Nothnagel's Practice, says that total atrophy of the gastric glands may lead to serious disturbances of the general health, but that it has been demonstrated that a complete loss of peptic power may be tolerated for many years, without impairment of the general health, provided the motor power of the stomach remains intact, and the intestine can vicariously assume the functions of the stomach.

Mrs. M., married, aged 46 years, mother of one child, was first seen by me in August, 1903. I found her thin, pale and complaining of indigestion. She informed me that she had trouble with her stomach for the past five years, that she had little desire for food, vomited a greenish fluid frequently, and had at times considerable pain in the region of the stomach. On examination, I found the abdominal muscles tense and on guard, and that pressure over the stomach produced pain. She had, five years before,

an attack of mucous colitis, which lasted for several months. I prescribed various remedies and diets, without much benefit. In November, of 1903, I began lavage of the stomach, which, for a while, seemed to afford some relief. This was continued for months, but occasionally she would vomit quantities of the greenish fluid, which failed to give the reactions for bile. In August, 1904, she became worse and refused to eat, and I began giving nutrient enemata. These soon disagreed, and she asked for their discontinuance. I called in Dr. F. R. Eccles, of London, and, like myself, he thought she had cancer of the back wall of the stomach. There was now great emaciation, hardness of the muscles and absence of any tumor on palpation. I may say examination of the stomach contents showed absence of hydrochloric acid, but Uffelman's test gave lactic acid reaction. Microscopically yeast cells and micrococci were found, and I thought I discovered the Oppler-Boas bacillus. She died of starvation on October 21st.

*Sectio cadaveris,* four hours after death, made by Dr. Wm. Reid: Body greatly emaciated, no fat in the abdominal walls, nor epiploon, which looked like a net. The liver, gall-bladder and pancreas showed no sign of disease. The stomach was atrophied and in size no larger than the duodenum. There was no infiltration or enlargement of the mesenteric glands, and the walls of the stomach on section were found silently thickened, the gastric mucosa was very red, and had a velvety look. The stomach was empty and its capacity would not exceed four ounces. The cardiac orifice admitted my finger. The pylorus was almost closed, admitting the tip of my little finger, which is rather small, on using considerable pressure. The transverse colon for about ten inches was atrophied and its walls thickened, being about three-fourths of an inch in diameter. This was probably caused by the mucous colitis. While the walls of the stomach were sclerosed, I found no distinct evidence of cancer, and registered the cause of death as achylia gastrica. This condition of atrophy of the gastric mucosa is said by Riegel to be by no means so rare as is ordinarily believed.

# Medical Jurisprudence and Toxicology.

IN CHARGE OF
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## THE MEDICO-LEGAL ASPECT AND CRIMINAL PROCEDURE IN THE POISON CASES OF THE SIXTEENTH CENTURY.


BY CHARLES GREENE CUMSTON, M.D., BOSTON, MASS.,
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IN the long chain of history one is constantly meeting mysterious deaths seizing vigorous people in robust health. The subjects usually occupy some high position, and disappear just at the time when their presence becomes an obstacle to an heir or a competitor. One immediately has the feeling that all these deaths are merely instances of homicide, although there are no absolute proofs in favor of this hypothesis. Blood was not shed, the sword leaves no trace, nobody saw the assassin accomplish his crime and, nevertheless, general opinion refuses to believe that all these victims died natural deaths. They designate certain people by the terrible and detested name of poisoner. In point of fact poison has played a great part in history and was a much too convenient arm to be left aside, and it is always found in the hands of those who, devoured by ambition, had not the courage to end their desire by the price of an outright murder. The latter had the misfortune of leaving some trace behind, which sooner or later would denounce the culprit, while poison would only leave a doubt as to the true nature of death, and, for this reason, in all times it was employed in order to avoid intrigue. Poison was the arm of the aristocracy and kings did not disdain it, so that an example starting from so high a source was naturally followed by the courtiers in the first place and the people afterwards.

The true home of poison was the Orient, and the princes of Asia, tired of bloody spectacles, searched for new voluptuousness by witnessing the effects of poison given to their slaves, and consequently the history of Asia represents a long chain of dramas from death by poisoning. From the Orient this method came to Greece, but without making much impression there, because

the loyalty of these people made them repugnant to such crimes, and they reserved poison for those they wished to put to death legally. In imperial Rome things were not the same, and the then reigning conditions represented an essentially favorable midst for the development of homicide by poisoning, and such instances rapidly became numerous. During the Middle Ages this crime appeared to be rare in France. This, however, does not mean that poisons were not known, because their use has never been forgotten, but they were hardly employed anywhere but at the Court and by high personages. Among the people sorcerers were the only ones to resort to their use, and the ointments that they prepared only occasionally resulted in accidental death.

Suddenly, without hardly any transition, the Renaissance came to light. The Italians invaded France, giving this country all the great advances that the former had made in the culture of arts and sciences, but, at the same time, they brought with them their deplorable morals. Sensual and artistic, the princes of the Italian Court and by high personages. Among the people sorcerers grossness of the sword, which struck too openly, they preferred poison, which slowly infiltrated the veins and killed the strongest in the midst of feasts and fetes, without the loss of a drop of blood. They taught to France the most refined means of ridding those who came in the way, and they sowed all the advantages derived from mineral poisons, and taught the secret of the fearful poisonous compositions.

Catherine de Medicis arrived at the Court of France, followed by a band of devoted Italian courtiers who would obey any order, no matter what its nature, that she might give. She belonged to a family who had become sadly celebrated by the innumerable forfeits that it accomplished and especially by its murders from poison. At the Court she continued the traditions of her ancestors with the aid of the Florentine Rene, who furnished her all the necessary poisons for the accomplishment of her designs. All the high positions were occupied by Italians, who brought the customs of their country into use. Poison was immediately chosen as one of the most suitable arms, all the more so as it assured impunity to the culprit.

In point of fact physicians were at this time unable to recognize its traces in the cadaver, and autopsies only gave very vague information, while experimental researches had not as yet given the medical profession its precious concourse. Medical men occasionally were able to establish the reality of a death by poison, but they hesitated to announce the fact, because the discovery of the criminal might bring the hatred of some high personage upon them, whose influence was necessary. It was among the aristocracy that the poisoning habit first developed, and the Court adopted this means with eagerness so that the judgment that Tremoille

handed down regarding it was never so true as during the Renaissance, which represented a combination of greatness and baseness. "The court is an ambitious humility, a lubric chastity, a furious moderation, a tiresome love, a corrupted justice, a hungry abundance, a miserable highness, a state without security, a contempt of virtue, an exaltation of vice, a dying life and a living death; the highest are in greater danger than the lowly, because Fortune does not smile upon the security of the great."

From the Court poisoning reached Paris, and the nobles imported this crime into the provinces, but it is not probable that it penetrated into the country, and it is more likely that the peasants, as at the present time, used their natural arms to settle their quarrels without having recourse to these complicated procedures.

What was the role played by the physician in cases of poisoning, what means had he in his possession to detect the trace of poison, and what help could the medical art give to justice in the sixteenth century, are questions which are most interesting to solve, because it was at this time that forensic medicine was created. It was to the genius of Ambroise Pare and his students, Cardan and Porta, that this science was brought out from obscurity and the immense service that it has since rendered to justice is well known. It had not at that time all those means of investigation which it to-day possesses, but one is obliged to admit that it acquired a very rapid development, and that from its very commencement it was attentively followed by the legal profession. Without attaining the proportions that it reached during the following century, homicide by poison had become sufficiently frequent for justice to become disturbed, and it formulated special laws and punishments. Jousse, in his "Traite de la Justice Criminelle en France," published at Paris in 1771, tells us that the judges understood by the word poison "all drugs or chemical preparations capable of giving rise to death," and by poisoners, "those who employed such means for killing other people." Love philters and abortive drinks were not considered, properly speaking, as poison, but they entered under this head when they caused the death of people to whom they had been given.

This definition having been established, let us consider how the criminal procedure at this epoch was carried out. When a person in perfect health was suddenly stricken by illness, especially when this occurred after a repast, opinion was never wanting to attribute the death as the result of a crime. As traces of violence could never be detected, these deaths were immediately placed in the long list of the poison dramas. The news circulated from mouth to mouth, and the criminal was not long in being indicated under breath. In possession of these suspicions, justice

immediately commenced an inquest and its first act was to designate the physician to examine the victim.

One of two cases were then presented; there had been only a simple attempt and the person to be examined was living and could himself give all the necessary knowledge to the physician, or, on the other hand, the victim had died and an autopsy alone could verify or destroy all suspicion of poisoning. In the former case the physician based his opinion on the symptoms of poisoning, which, according to Ambroise Pare, were the following: "We recognize that a man has been poisoned, no matter in what way, when he complains of a great weight throughout the body, which makes him displeasing to himself; when the stomach gives him some horrible taste in the mouth, entirely different from that derived from ordinary meat, no matter how bad it may be; when the color of the face changes, being either livid or yellow, or any other strange tint and deformed; when he complains of nausea and the desire to vomit; when he is possessed of an uneasiness of the entire body and it seems that everything about him is turned upside down; when, without appearance of great or marked heat or cold, the patient falls from heart weakness, accompanied by a cold sweat." To these symptoms, which were always observed, other particular signs were noted with each kind of poison, which sometimes allowed the diagnosis of the substance given to be made. Besides, the physician found a precious auxiliary in the examination of the vomited matter, but, at this epoch, chemical research being unknown, this examination was merely an illusion. This can readily be seen, because it would be very difficult to recognize the nature of a poison by the color and odor of the stomach contents, but nevertheless physicians could establish the reality of death by poisoning by the procedures that we have mentioned, which at this time were the only ones that could be utilized.

When the victims had died an autopsy was performed, and if the body was livid, covered with spots, exhaling a very bad odor; with black nails which were hardly attached to the fingers; with foam at the mouth, there were already very strong presumptions in favor of death by poison.

If examination of the interior of the body revealed indication of corrosions in the esophagus or stomach, black spots in the intestine and congealed blood around the heart or in the stomach, there was no longer any doubt, so that the hypothesis was fully confirmed. If the poison was found in any of the organs it was sometimes experimented with on animals. All these means were extremely meagre with which to make a serious accusation on, but physicians of the sixteenth century could not do more than what the progress of science had up to that time taught them. Toxi-

cology was, at this epoch, absolutely unknown, and it was only later, under the influence of all the serious cases of death by poison that it was finally built upon a solid basis.

When in possession of these facts the physician wrote out a report which was handed over to the courts, and, as an example of one of these, I here translate one given by Ambroise Pare in his work: "M. de Castellan, physician in ordinary to the king, and Master Jean d'Amboise, surgeon in ordinary to the king, and myself, were sent to open the body of a certain personage that one suspected of having been poisoned, because, before having supped he had not complained of any pain. And soon after supper he complained of a severe pain in the stomach, crying out that he was suffocating, and the entire body became yellow and swollen, he was unable to breathe and panted like a dog who had run a long distance; because the diaphragm (the principal instrument for the respiration) being unable to have its natural movement redoubled its energy and thus increased the respiration and expiration; then he had vertigo, spasm and failing of the heart and consequently death. Now, in truth in the morning we were shown a dead body, which was greatly swollen, just like a sheep that had been blown up for the purpose of skinning. The said d'Amboise made the first incision, while I withdrew behind, knowing that a cadaverous and stinking exhalation would come out, this which did occur, and which all those present could hardly endure; the intestine and generally all the internal parts were blown out and filled with air; and thus we found a large quantity of blood which had escaped into the entrails and the cavity of the thorax, and it was concluded that the said personage might have met his death by poisoning."

I will now give another medico-legal report, although it was written much later, because it shows to greater advantage than the preceding one, which in reality is merely a simple recital of an autopsy, how these reports were made out. I translate it from "Doctrine des rappors de chirurgie," by Nicholas de Blegny, published at Lyons in 1684:

"Reported by us, master surgeons sworn, in the City and jurisdiction of Lyons, that this day, September 18, 1682, in execution of the ordinance of the Lieutenant-Governor, we went to rue des Landes, in a house which bears an ensign the image of Saint Margaret, in order to visit the dead body of Suzanne Pernet, a sworn matron, having found all the external parts in their natural position, we then proceeded to the opening of her body in the presence of Master Claude du Pradel, doctor of medicine, appointed to the place by the Lieutenant-Governor; and having commenced by the abdomen and afterwards opened the stomach we found it completely cauterized in its fundus, which contained

a black, sandy liquid in quantity about as much as an eggful, which, having been placed by us in a metal vessel, stained it, as would be done by acid and corrosive liquids, and which, having been given in a small quantity to a dog, acted on him severely, as we were able to recognize by his cries and howling, all of which made us consider that the said Pernet had been poisoned by arsenic or sublimate, or other such corrosive poisons of the mineral gender; in which we were all the more confirmed by the excellent condition of all the other internal parts, as much in the abdomen as in the chest and head, which we had likewise opened and where we found no cause for death, all of which we certify as true in faith of which we have, with the said Master du Pradel, signed the present report, in order that it may serve whom it may concern. At Lyons, the day and year above mentioned."

From these examples of medico-legal reports it at once becomes evident how little knowledge was gained by autopsies. The doubt still remained in suspense and this is quite enough to explain the real reasons for the great number of deaths by poisoning in the 16th and 17th centuries. The accused, in spite of most serious presumptions, always was hopeful of escape from death, because his guilt was always a matter of doubt and the charges accumulated against him rarely resulted in an absolute certitude of his guilt. For this reason it was not until toxicologic researches had been carried out that the development of this form of crime could be stopped, which at the present time is one of the least frequent causes of criminal homicide. Arsenic, which was then the king of poisons, has since been almost completely given up by criminals, because toxicology allows one to discover the most infinite traces in the cadaver of the victim.

The penalties applied to poisoners varied according to the country, but in general these criminals were condemned to death and the type of execution only varied according to the local customs. It is to be remarked in the first place that in most instances the crime was committed by women, which is easily explained because on account of the weakness of their sex they could not revenge themselves by the use of arms. The poison was a hidden arm, striking with certitude and which perfectly fulfilled the natural dissimulation of their sex. Consequently one continually finds in the law texts of the epoch a distinction between the penalty applied to women and that to which men were subjected. According to the Caroline Constitution, Article 130, he who attempted to take the life of another person by poison was condemned to death. If the criminal was a man he died on the wheel, like a vulgar assassin, while if it was a woman she was thrown into the water. It was also specified that criminals should be dragged to the place of execution and that before this

took place they should be more or less subjected to hot irons, according to their condition and the circumstances of the crime. The penalty of death was also inflicted on poisoners in France, while the type of execution varied according to the circumstances and also to the local customs. Sometimes they were convicted and sentenced to be burned. The closer the degree of relationship existing between the accused and the victim also came into consideration when making the sentence, and a son who poisoned his father or his mother was punished as a parricide, and parents who poisoned their children or wives their husbands entered under the same class.

The law established distinctions between those who sold the poison and those who administered it, and in the same sense it did not inflict the same sentence on those who had caused the death of their victim and those who had simply committed a mere attempt. All these laws are to be found exposed in Farinacius and we will here translate them as given by Jousse.

"It is, however, necessary to observe respecting those who prepare or distribute poisons for the purpose of poisoning somebody, or who buy poison with the same intention, that they should not be punished by the sentence of death only when they reduce their design in act, by doing something which may tend to cause death; and in this respect to those who sell and distribute it, knowing the use that one will make, they should not be punished with the ordinary laws applicable to poison, only when the design of him who wished to poison has been placed in execution and followed by death, otherwise they should be punished by a lighter sentence (Menochius)."

"If he who has bought, composed or prepared poison, in order to poison somebody, has not put his design into execution, because he has been prevented, he should not be punished by the sentence of death, but only by a less severe punishment according to the circumstances and the quality of the person."

"For a still more evident reason, this should also be applicable when the case is one where repentance prevented the criminal from executing his design, and in the second case the punishment should be still less than in the preceding case."

Such were the legal dispositions relating to poisoning followed by death and in cases of simple attempt at poisoning. Physicians, apothecaries, veterinarians and in general all people who, from their business, kept toxic substances, were allowed to sell them, but before giving them to a buyer, they were expected to inquire as to the honesty of their client and the use to which he intended to put them. If these precautions were not taken and death followed, he who sold the poison was brought to trial in nearly the same capacity as the one who had administered it.

and in many cases he was condemned to undergo the same sentence. Justice also applied laws to those who had committed multiple murders by poison, and the following are, according to Farinacius, the penalties that were applied to them. "Relative to those who poison the water of a well, or a fountain, in order to kill those who may drink at these places, they should be punished as homicides; and this should not suffer any difficulty in application, when somebody has drunk the water from this well, or from this fountain, and which has caused death. But, if this occurred accidentally, it appears that the accused should not be punished by a death sentence, but only by some other arbitrary sentence."

As a conclusion to all that we have said relative to the laws applicable to criminal poisoners, I would quote the two following judgments rendered by the courts. By a judgment handed down July 15, 1585, and related by Imbert in his "Institutiones forenses," a young woman of Paris, named Marie Lejuge, daughter of a merchant in the same city, was hung and burned for having poisoned her husband, this act resulting from a blow that he had given her. In another decision handed down by the criminal court of Orleans on September 12, 1602, a young woman 14 years of age was convicted of poisoning her husband, who died, and she was condemned to be hung, her body and her ashes thrown to the winds. She had administered arsenic in milk to her husband after having been seduced by the cure of the place. The cure's servant having been convicted for preparing the arsenic was, on Saturday, September 26th, of the same year, condemned to be hung by the decision of the court, and was executed in the Place du Martroi d'Orleans, on Monday, October 26th, in the same year. Curate condemned for incest with this young woman, his parishioner, was condemned to be burned alive and the decision was executed at once.

I can hardly terminate this paper without making a few remarks relative to the legislation governing love philters and abortive drinks, the following being the article of the Canon law relative to this question: "Those who give an abortive drink, or a love philter, even although they may cause no harm, but simply from the fact that such actions are a bad example, the culprits shall be condemned to the mines when they belong to the lower classes, while in the case of nobles there will be confiscation of one-half of their worldly goods and they shall be exiled to an island; but, if from their fault, the woman or man shall have perished, they are to undergo the severest sentence."

This text is exceedingly obscure and lends itself to several interpretations. In the first place, what does it mean by man or woman? The first hypothesis that may be admitted is that

the term man applies to an animated fœtus, which, from this fact, was morally considered as a living individual, and from this it becomes evident that the word woman was used to designate the mother of the said fœtus; or else the woman corresponds to the abortive drink and man to the love philter.

Far be it from my intention to even endeavor to in any way settle this question, but it would appear to me that the last hypothesis is probably the most plausible. Now, in point of fact, the article includes two different things, namely, the love philter and the abortive drink. Relative to the latter there can be no doubt, because it could only be destined for women. As to the second it was used in the male sex as well as in the female, but the construction of the article very probably only considered those cases where it was administered to a male subject. There is to be found in stated succession those who administer an abortive drink or a love philter, and further on, "if from this fact the woman or man shall have perished;" these terms appear to well establish a near relationship between the abortive drink and the female on the one hand and between the love philter and man on the other. However this may be, I consider, with Jousse, that there was not, properly speaking, any special legislation applicable to these particular crimes. Those who employed them sufficiently maladroitly to bring about death were considered guilty of homicide and were punished as such. The sentence was considerably increased when malice aforethought was added to the administration of a love philter. In the great majority of cases, however, the courts were rarely called upon to try these cases, because philters rarely gave rise to death. Drinks given to produce sleep, or cause sterile women to conceive were assimilated to philters.—*Medico-Legal Journal, New York.*

# Selected Articles.

## SUPERIORITY OF LIQUID MEDICINES OVER ALKALOIDS.

BY PITTS EDWIN HOWES, M.D.,

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CURATION of disease is a problem which is constantly confronting the practitioner of medicine. Among the multitudinous duties of mankind there are none that are so complex as those which fall to the lot of the physician.

The mechanism of man is a wonderful network of complicated organs; all striving toward a common goal—the health and strength of its various tissues. While anatomy is essential to the understanding of the structure, physiology is no less important in aiding us to comprehend the action of its component parts. Physiology, then, plays a large part in the practice of the successful medical man.

It teaches us that all nutrition is supplied to the body through the medium of the blood; that this nutriment is conveyed to the blood, and the parts needing renewal, by means of endosmosis and exosmosis; that it is necessary for this nourishing pabulum to be in a liquid state before these exchanges can take place.

Experimentation has demonstrated that liquids are much more promptly absorbed than articles of a semi-fluid or more compact nature. Hence the first point of the superiority of liquids over the alkaloids is the fact that they are absorbed with greater rapidity, and thus their beneficent action is commenced more quickly.

The action of the liquids is more gentle, because, as a rule, they are less powerful than the alkaloids which are extracted by means of chemical manipulation from the various fluid preparations that yield the alkaloidal principles.

All who are familiar with the workings of nature know, and must admit, that the more gentle the process the more lasting and complete is the result obtained. The constant dripping of water, drop by drop, will wear away the hardest substance over which violent measures, though more energetic in their onset, would utterly fail.

The soothing effect of liquid medication will aid materially in producing a more lasting relief from those conditions which are the cause of the departure from the normal or healthy standard.

The liquid preparation—be it infusion, decoction, tincture or fluid extract—contains all of the plant constituents, and combines in Dame Nature's own way the various ingredients.

Plants yield their medicinal qualities to a varying proportion of water and alcohol. The practical pharmacist knows that the right proportions must be used in order to get a reliable and complete representation of the plant under treatment. Again, the plants must be used at different stages of their existence in order to obtain the most reliable results. Some must be used in the green state with all their juices; others should be partially dried and a part of their liquid substance allowed to evaporate, while still others must be in a completely dried condition.

Physicians understand very well that they get better results from the medicines of some manufacturers than they do from those of others. They do not always stop to consider why this is so. It lies all in the process of manufacture. The practitioner who uses tinctures made from fluid extracts will be very apt to lose faith in medication, because of the poor results which he, many times, obtains. He charges the fault to the medicinal agent, when, in reality, the fault lies in the method of preparation. The blame should be laid at the door of the pharmacist.

The rapidity of the absorption of fluids by the blood will prevent the cumulative action which sometimes results from the use of the alkaloids. This is a factor which should not be forgotten. Many deaths could be properly charged to this mode of action in the alkaloids.

Many times the alkaloidal principle must be placed in a fluid vehicle in order to get the best results, as, for instance, the whole method of hypodermic medication. There is no question but that the hypodermic syringe has been a blessing to mankind. But where is the practitioner who would like to treat his cases wholly with this instrument?

The alkaloids, when you have said the best you can in their favor, are, at best, only a part of the original plant. We are apt to term them the active principle of the plant. How are we to demonstrate this fact absolutely? Can it be demonstrated? I think not. Who would be rash enough to assert that all of the good of cinchona lies in the quinine, or that of nux vomica in the strychnine? And not only of these two, but also of the entire list of plants, which, by means of manipulation, can be caused to give up their alkaloidal principles.

Those who are at all familiar with the early history of the Eclectic School of Medicine know how nearly it came to ship-

wreck because of the wild enthusiasm over the idea of alkaloidal medication. Fortunately, the error was discovered early and the more rational and scientific method of using the entire plant was substituted.

Without doubt there are fewer therapeutic nihilists to-day among the eclectic practitioners than any other school of medicine. It is due to the fact that they use almost exclusively the liquid medicines.

I do not wish to be understood that there is no place for the alkaloids in the medical practice, for I am willing to admit that there is. I do contend, however, that that place is very much smaller than many of its champions would have us believe.

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## THE PHYSIOLOGIC ACTION OF DIONIN.

W. H. SNYDER, of Toledo, Ohio, after explaining the pharmacology and the physiologic action of dionin at the recent meeting of the American Medical Association, described a number of experiments bearing upon its action on tissue and cells. The albino rabbit, medium size, was used; dionin in powder placed in each eye in larger quantities than would be necessary if the eye were abnormal; rabbits killed; globe and tissue enucleated, placed in formalin 4-per-cent. for forty-eight hours and later sections made from cornea. Control specimens were also made from normal rabbits' eyes. Pictures of the findings were projected upon the screen, showing the usual signs of general edema, vacuolation of the cells in the epithelial layer, the sections appearing water-logged and hazy. The lymph spaces were changed in shape and dilated. No absorption of cells as in edema of long standing. The surface uneven and the general picture that of edema of the cornea. He concludes that the action of the drug is purely local—greatest where the drug has actually rested; that its most marked acti.. is in eyeballs where the tension is increased; that it has some disassociating action on the intracellular cement substance, allowing a transudation of serum from a globe under pressure; that its analgesic action is explained by its lessening of tension and the well-known action of the derivatives of opium. In iritis with adhesions, plus tension, the use of dionin lessened tension and permitted absorption of the mydriatic with prompt relief of pain and dilation of the pupil. In corneal ulcers the repair process begins as soon as the ulcer is cleared. The more recent the inflammation and higher the tension the better the results. In beginning pannus he had cleared up the cornea and resisted permanent opacity more satisfactorily than

with any previous treatment, the lid, of course, being treated for the cause. In glaucoma he preferred it to eserin, relief from pain being very marked, due, he thought, to relief from pressure. In old vitreous opacities he had had poor success.

E. V. L. Brown, of Chicago, called attention to the fact that a recent German investigator had found that dionin did not affect all animals. Experiments had been made with dogs, rabbits, and cats. The cats were not affected at all.

In closing, Dr. Snyder said that the effect was very slight in rabbits, requiring a great deal more of the drug than the human eye.—*Amer. Med.*, Aug. 5th, 1905.

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## TREATMENT OF ERYSIPELAS OF THE FACE.

Z. Edwards Lewis, of New Rochelle, N.Y., treats erysipelas of the face with ichthyol. It may be used in any strength, but a 40 to 50 per cent. solution is his standard. The solution is painted carefully over every bit of the inflamed surface and over at least half an inch of all adjacent sound skin. According to the virulence of the attack and to the time that has elapsed from the onset, he regulates the frequency of re-application—from six hours to three days. The face should not be washed for re-application unless there is a material decrease of tumefaction. The fresh solution, as it is applied, revivifies all that remains.

The effect of the application is immediate, and in a very short time the patient gives expression to the relief felt. Tumefaction subsides—sometimes with astonishing rapidity—and generally there is uninterrupted recovery. Applications are repeated at increasing intervals till a thorough washing, after a three days' interval, shows no disease. The applications are to be made without friction, with a soft brush or pledget of cotton, preferably the former.

The conditions of general health and bodily functions are to be inquired into, and any needed regulations secured. Loaded primæ viæ and imperfect depuration are a serious bar to remedial progress.

The sole objection to the treatment is cosmetic. It looks almost as bad as a silver nitrate stain, but is not so permanent, most of it being removed by one washing. The feelings of the patient and of onlookers may be conserved by covering the face with a mask of soft white muslin or linen, carefully adjusted. If this sticks, a little gentle dabbing with wet cotton will loosen it. Obviously, not the slightest force is to be used in the removal.

In cases where the elevation of temperature is too great to be

negligible, a good antipyretic of the coal-tar series is indicated; and the added effect of this in soothing irritability and pain is often a desideratum.—*N. Y. Med, Jour.,* July 22nd, 1905.

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**A Word in Favor of Proprietary Medicines.**—A successful medical practitioner of many years' standing makes the following statement: "There are a large majority of combinations which extemporaneous pharmacy cannot prepare properly; and I know that through the dishonesty, ignorance, or indifference of many retail druggists, we are not able to get on prescriptions the very best drugs; hence it is to the manufacturing pharmacist, whose best interest lies in the purity and uniformity of his product, that we must look for our most reliable remedies. I endorse worthy proprietaries, but I most heartily condemn the great tendency of the 'half-baked,' so-called manufacturing 'chemist,' to foist upon the profession and public cheap imitations of standard preparations."

**Malta Fever.**—To the *Journal of the Royal Army Medical Corps* for September, Major Horrocks and Dr. Zammit contribute articles on Malta fever. Two of these papers, containing the important observations on the occurrence of the disease in goats, have already been noted in the *British Medical Journal* of August 26th, p. 447. In another communication, Major Horricks gives some interesting details of the experiments on the mode of conveyance of the micrococcus melitensis to healthy animals. He brings forward experimental evidence to show that the germ may be absorbed in dry dust or in food by monkeys. When transmitted through an unbroken mucous membrane the process of absorption is comparatively slow, and under these conditions the wave of fever appears to be prolonged. On the other hand, when absorbed through a crack in the mucous membrane or in the skin, the absorption is rapid, the fever curve usually rising rapidly and falling rapidly. He also finds that healthy monkeys may become infected by urine secreted by diseased ones, the probable route of infection being by the paws, which have become soiled with the secretions. His experiments on mosquitoes as carriers were uniformly negative. This latter point is important, as it would indicate that infection in man is probably by food or dust, the former channel being the more likely in view of the recent researches on the organism in goat's milk.—*B. M. J.,* September 23rd, 1905.

## ABSTRACTS.

**Congenital Dilatation of the Colon.**—J. Ibrahim (*Deutsche medicinische Wochenschrift,* Berlin and Leipsic) gives illustrations of an infant with an abnormally long and flexible sigmoid flexure, inducing tympany and stagnation of feces. He regards the case as the initial stage of idiopathic dilatation of the colon.

**Puerperal Infection.** — v. Rosthorn (*Deutsche medicinische Wochenschrift,* Berlin and Leipsic) passes in review the various methods of treating puerperal infection, remarking in regard to intravenous infusion of a solution of formol that this method of treatment has been discarded on account of its dangers, demonstrated by experiments on animals. He is convinced that intravenous injection of the silver salts is perfectly harmless, with good technic, but that their action is unreliable. They probably act by their chemotactic inhibiting influence on the bacteria, but enormous quantities of leucocytes are sacrificed in the struggle. If the blood-forming organs are unequal to the task, then the drug fails to cure. There is also a possibility of some electrocatalytic action. On account of its harmlessness and our helplessness generally, the method should be given a trial and not be dropped too quickly. He gives, in a table for comparison, the details of the six antistreptococcus sera on the market, Marmorek's, Aronson's, Tavel's, Moser's, Meyer's and Paltauf's. The reason why serum treatment fails so completely in one case and succeeds so brilliantly in an apparently entirely similar case is a matter for further research. Tavel suggests that there may be a lack of cytases or leucocytes in the negative cases, and that it may be possible to supply the missing elements when we learn which they are.

**Ocular Symptoms in Epidemic Cerebrospinal Meningitis.**—Heine, Breslau (*Berliner klinische Wochenschrift*) writes from the eye clinic at Breslau in regard to the ocular disturbances noted in an experience of 100 cases of epidemic cerebrospinal meningitis. The pseudo-glioma characteristic of this disease leads to atrophy of the eyeball, but, although the eye is blind, it is not disfigured and never requires operative interference. This form of severe metastatic ophthalmia never entails sympathetic ophthalmia. This finding is so characteristic of epidemic cerebrospinal meningitis that we may almost conclude from it in regard to the pronounced or abortive occurrence of the disease at some past time. In his experience, with a single exception, it has been unilateral, but the milder affections, which do not reach this

severe stage, frequently appear in both eyes. The one exception was a child, blind and deaf as the result of the disease, with bilateral pseudo-glioma. He reviews the experiences at other hospitals throughout Silesia. In every 100 patients, 20 presented ocular symptoms, the total list including 15 involving the motor apparatus 10 the optic nerve tract, and 5 the interior of the eye. In his own 100 patients, optic neuritis and disturbances in the retina were observed in 9 patients and were probable in 5 more. In 13 there were nystagmus, strabismus or paralysis, etc., probable in 2 more, and unilateral ophthalmia in 3, bilateral in 2, the total being 21 patients, with 27 positive and 7 probable ocular disturbances. In conclusion he reviews what has been written lately on the subject. He has never had occasion to see some of the symptoms described by other authors, such as edema of the conjunctiva and subepithelial infiltration of the cornea. He calls attention to the rarity of winking, especially at the onset of the disease. It may aid in differentiation.

**Death from Drowning.**—E. Margulies (*Berliner klinische Wochenschrift*) shows that the first phase of drowning—that of arrested respiration—lasts from 31 to 76 seconds, according to different authors. The second stage, that of dyspnea, lasts from 60 to 150 seconds, Brouardel favoring the shorter time. The drowning man breathes deep, with open eyes, and swallows water. The third stage—that of asphyxia—lasts for one minute, according to Brouardel, and the terminal respiratory movements for about 30 seconds longer. Rescue during the first minute of drowning has every chance of success; the chances during the second minute are less favorable, and after the beginning of the third minute they grow more and more dubious. Brouardel has further established the fact that when an animal is drowned after excessive muscular fatigue these various stages of the drowning succeed each other in less than half the time required in normal conditions. One factor that prolongs the act of drowning is that the drowning person is liable to come to the surface and get a breath of air, thus postponing the terminal stage. In sea bathing, to prevent accidents from drowning, Marguiles advises that attendants be stationed where they can reach a drowning person in less than one minute. No time should be wasted in throwing life preservers, but the attendant must be ready with a boat. As the interval is so much shortened in case of fatigued muscles, a narrow limit should be set for the swimmers, any one passing beyond that limit doing so at his own risk, on account of the inability to reach him in the half of the brief interval on which one can count in the case of other drowning persons.

DR. NORMAN BETHUNE'S CLEVER CARTOON OF THE FATHERS OF SURGERY IN UPPER CA

This picture is reproduced from a lithograph printed in 1884, now in possession of Dr. Charles O'Reilly, the Toronto General Hospital. An inscription beneath the original reads as follows: "Did these bones more ne breeding than to play at loggats with them? Mine ache to think on't!"—*Hamlet*. The central represents Dr. Widmer, that on his left in the act of playing is Dr. John King, and the other shade repre George Herrick, most eccentric of the trio.

# The Canadian Journal of Medicine and Surgery

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# *Editorials.*

## THE CLINICAL FORMS OF CHRONIC RHEUMATISM.

CHRONIC articular rheumatism, following an acute attack of rheumatic fever, at a longer or shorter period, is the outcome of a microbic infection. Between this form and the primitive form of chronic rheumatism proper, no clinical or pathological differentiation can be made. They should, therefore, be considered as one and the same form of rheumatic infection, preceded by an

acute stage in the first case, chronic from the beginning in the other.

Dr. René Veerhogen, of Brussels, who presented the second report on clinical forms of chronic rheumatism at the French Congress of Medicine, held at Liege, last September, expressed the opinion that pseudo-rheumatisms, acute or chronic, are not distinguished from pure rheumatism, by clinical particulars, sufficient to place them in a category by themselves. The sole really admissible difference between them is found in the nature of the infecting agent, which in true rheumatism is variable and vague, while in any one of the pseudo-rheumatic class it is constant and definite. According to this view, the two groups should be merged into one. Dr. Veerhogen thinks that arthritis deformans has nothing in common with rheumatism, properly so-called. There are also partial forms, three of which deserve mention: Retraction of the plantar or palmar aponeurosis (Dupuytren's disease), rhizomelic spondylosis, and Heberden's nodes. These different syndromes are often traceable to rheumatism, but may also be caused by gout or by diabetes. The same may be said of rheumatic spondylosis, described by Forestier, which is not of a specific character.

Rheumatic purpura, erythema nodosum, and myositis are also classed among the chronic manifestations of a rheumatic infection. Dr. Veerhogen combats, at considerable length, the view held by Dr. Poncet, of the Lyons Medical School, who holds that in a tubercular patient acute or chronic disease may exist, exhibiting all the ordinary appearances of true rheumatism, for instance, acute articular rheumatism, and ankylosing plastic arthritis, the aponeurotic retractions, rhizomelic spondylosis, arthritis deformans, and rheumatic flat-foot.

According to Poncet's view, the above-named diseases are derived etiologically from tubercular infection, which, he says, may also produce pseudo-rheumatism, either by localization of the bacilli or by virtue of an action which tubercular toxins placed at liberty in a visceral centre might exercise from a distance, or even in the latent condition.

Dr. Veerhogen thinks that, from a clinical standpoint, Poncet's hypothesis cannot be accepted.

According to his own opinion, the co-existence of tuberculosis

and rheumatic disorders does not possess any demonstrative value, and for the following reasons:

1. The frequency of mixed infections, the exaltation which the presence of tubercular toxins causes in the virulence of pathogenic agents, such as the bacillus coli, the streptococcus and the staphylococcus, explain the appearance of acute or chronic articular rheumatism in phthisical patients.

2. Observations relative to pretended tubercular rheumatisms bring no proof to show that the bacillus of Koch has been the only causative factor in the many cases described.

3. The influence of salicylic acid medication is not more decisive, since that form of treatment has proved its efficacy in several cases credited by authors to bacillary rheumatism, while it often proves inefficacious in true rheumatism.

4. The apparent transformation of some local rheumatic affections into typical articular tuberculosis is not conclusive, for identical facts are observed after gonorrheal rheumatism and the other infectious pseudo-rheumatisms, as well as after true rheumatism.

5. The pathological anatomy of bacillary rheumatism does not exist in the tubercular cases; all that is found in them are the characteristic lesions of tuberculosis properly so-called (tubercular synovitis, first stages of white swelling), or else commonplace lesions.

To explain a class of cases like these latter, Poncet has imagined the hypothetical action from a distance of toxins secreted in a visceral lesion. Dr. Veerhogen affirms that no experimental fact confirms this supposition. For tubercular virus, on the contrary, appears to act only where the Koch bacillus is present, the soluble toxins of this bacillus not having, up to the present time, caused any experimental articular lesion. His conclusions are as follows:

1. Rheumatism is an infectious disease, the pathogenic agents of which are multiple and variable in different cases.

2. Chronic rheumatism assumes different forms, grouped in four principal types, all of which are often co-existent in the same individual.

(*a*) The osteo-articular type comprises primitive and secondary rheumatisms, some rare forms of spondylosis, in which

deforming articular lesions exist, and certain cases of Heberden's nodes.

(*b*) The serous type includes manifestations in the serous and synovial membranes (chronic synovitis and vagino-tendonitis), some forms of chronic pleurisy, and generally, also, dermic and sub-dermic disorders (purpura, erythema, nodosum, etc.).

(*c*) The fibrous type: hypertrophy of the peri-articular organs; some cases of Dupuytren's disease; some cases of spondylosis with change in the vertebral ligamentous apparatus; some cases of scleroderma.

(*d*) The muscular type: chronic rheumatic myositis; some cases of spondylosis of muscular origin.

3. The existence of tubercular rheumatism is, up to the present time, simply an hypothesis. Tuberculosis appears, however, to determine, in an exceptional manner, diseases of the joints, which have nothing in common with rheumatism, and which may be derived, perchance, in a secondary manner, from a lesion of the neuro-muscular organs. J. J. C.

## THE TORONTO HOSPITALS AND PRIVATE SURGEONS.

THE question is sometimes asked—Can people who use dispensaries afford to pay a doctor? Just now, when some rich men have given considerable sums to the building fund of Toronto General Hospital, the question is quite proper. The motives of the charitable donors are of the best; but, because money is given to build a hospital here, it would not be correct to infer that Toronto really wants one. To want a hospital is one thing; to shift the burden of the sick to the shoulders of your neighbor is another thing. One reason why people send the sick to a hospital is that they do not want to be troubled with attendance on sick persons. Besides, the nursing and doctoring of a patient in a private house are very expensive. Another reason is that a good many people, by some hazy process of reasoning, regard free medical service at hospitals just as most city people regard police protection, fire protection, and free libraries.

In an article entitled "Need any man lack a job?" which appears in the September number of *The World's Work*, page 6663, instances are given which show that people who are not poor will impose on the hospitals if allowed to do so:

"At Johns Hopkins Hospital a story is told of a woman, who, after being treated, lingered in the dispensary. 'Is there anything further, madam?' a young doctor asked. 'Oh, no, I'm just waiting till they've treated my maid.' A Boston woman, who weekly visits fifty families of wage-earners to collect their deposits for a savings institution, recently questioned the families about their use of dispensaries. All of them went to the dispensaries to be treated; only in exceptional cases, child-birth, for example, was a private physician called in. The Chicago Board of Health gives free antitoxin in diphtheria cases, when the request is accompanied by a physician's statement that the family is unable to pay. Two years ago, the Bureau of Associated Charities became convinced that free antitoxin was going to many families who could afford to pay for it, and arranged with the Board of Health that the applications, though promptly granted, should be investigated. Since then the Bureau has investigated every case, and its records show that in two-thirds of the cases the families were able to pay."

This statement reflects on the veracity of the physicians of Chicago, as well as on that of some of its people. But let that pass. A physician, trying to do his best for the child of a penurious person, might have to choose between a falsehood and payment for antitoxin out of his own pocket. Indiscriminate free antitoxin, it is to be hoped, will not be introduced into Toronto. It would seem, also, that there is room for a Bureau of Associated Charities here, which, by co-operating with the municipal Health Board and the M. H. O., would assist in heading off the attacks of persons who receive at hospitals, and for nothing, medical assistance for which they ought to pay. It seems, however, that with the advent of millionaires and the striving of lesser fry to outdo each other in munificence, modern hospitalism has secured a firm hold on Toronto, so firm, indeed, that in future years it will be but a poor place for all but the chiefs of the medical profession.

Another abuse is cropping up, by which Toronto hospitals, built out of charitable bequests and public funds, are placed in a position inimical to the private surgeon, and the chief sinners in this respect are the hospital surgeons. A private surgeon wishing to operate on a private or semi-private patient at Toronto General

Hospital, or St. Michael's Hospital, must first consult with one of the hospital staff of surgeons, and operate with his assistance. The surgical staff of either of these hospitals are allowed to levy on private and semi-private cases tolls, which in no way belong to them. If a surgeon of Toronto General Hospital is entitled by right to a consultation with an outside surgeon who sends a patient to that institution, and if he is also entitled to be present during the operation, he is also in a position to demand fees for his professional services to another man's private patient.

The effects following the exercise of this rule are not quite evident; but some such as these may be foreseen: The creation in Toronto of a surgical caste, which, by receiving the cream of the surgical work, will be made into a sort of surgical aristocracy. It is true that private hospitals, where private surgeons could do operations, without having to pay tolls to the aristocracy, would appear to overcome this difficulty. A ready answer to this solution is found in the fact, that a private hospital cannot compete in cheapness with a public one, and the patient, who pays both hospital and surgeon, naturally prefers to patronize an institution in which cheapness is combined with efficiency.

Recognizing, as one must, the advantage of having surgeons skilled in diagnosis and operative work attached to the medical faculty of the University of Toronto, the private surgeons of Toronto should yield to the teaching surgeons all the free patients of the hospitals. A surgeon who practises for a living must hold his own cases; to do otherwise would be to commit professional suicide. As the hospitals of this city, owing to the advantages they possess in endowments, together with provincial and municipal grants, can cut under the prices of the private hospitals, they should not admit private patients to their wards. Their financial resources, their right of appeal to a sympathizing public, the skill of their surgeons, the business acumen of their trustees and managers should be consistently devoted to the service of the impecunious sick. More than an even chance is not fair in commercial competition. Neither should hospitals, the outcome of Christian charity, place professional men in a position to compete unfairly with their brethren. But, at all events, whatever hospitals may do, "Live and let live" is a motto which should pass currently among brethren of the scalpel.

J. J. C.

## EDITORIAL NOTES.

**Returns of the Inland Revenue Department for the Past Year.**—The returns of the Inland Revenue Department show the consumption of spirits, last year, to have been 1.031 gallons per head of population. This is an increase over the year before, when the consumption was .852 per capita. However, the consumption of spirits is on the decrease, as in the seventies it was frequently above a gallon and a half per capita, and in later years it has generally been below a gallon per capita. The consumption of beer is increasing. Last year it was 4.822 gallons per capita, about the same as the year before. The average since 1869 has been 3.231 gallons. In the seventies the consumption averaged about two gallons per capita. The wine consumed last year was .09 gallon per capita; the average since 1869 is .122 gallon. Tobacco was last year consumed to the extent of 2.686 pounds per capita. The year before it was 2.765, and the average since 1869 was 2.184 pounds. The statement of quantity for every man, woman and child in the Dominion is as follows:

| | Amount. |
|---|---|
| Spirits | 1.031 gals. |
| Beer | 4.982 gals. |
| Wine | .090 gals. |
| Tobacco | 2.686 lbs. |

**The Faradic Current as a Means of inducing Artificial Respiration.**—To overcome syncope, occurring during the administration of chloroform, Dr. Villette (*Presse Médicale,* September 13th, 1905) employs the Faradic current, applying it to the pectoral regions on both sides. This produces a lively excitation of the sensory nerves of the parts, and yields all the benefits of artificial respiration. He says: "In lifting the arms of a person who is in a state of syncope, the ribs are slightly elevated. If you then excite the pectoral muscles, which are in a state of relaxation, the contraction of these muscles will cause a full respiration. This last remark will not appear exaggerated if you observe that the superficial reaction of the muscles of the thorax is accompanied by a reflex contraction of the diaphragm; it is very curious to notice at this moment the close solidarity which unites the organs collaborating in the

production of the same function." Should a respiratory syncope occur to an anesthetized patient the anesthetist places the patient's arms behind his head, and, after dipping the electrodes into a solution of bichloride, applies them to the pectoral muscles, each electrode over the external third of the corresponding muscle. A strong respiratory effort is immediately produced. When this is finished, the anesthetist removes one of the electrodes, and a mechanical expiration follows, which may be reinforced by pressure over the patient's ribs. At first, the anesthetist should evoke from fifteen to twenty respirations in half a minute; later on he should take advantage of a spontaneous respiratory effort, and he should endeavor to amplify it. Dr. Villette also employs the Faradic current during anesthesia as a preventive of syncope. Thus an anesthetized patient may have either a too agitated or a too slow respiration. By applying the Faradic current and exciting the pectoral muscles, or any other region of the body, especially the internal surface of the thighs, the patient is partially awakened, and the breathing becomes more tranquil and more rhythmic. He mentions the following experiment to show the utility of such a procedure: "When I have normally anesthetized dogs, I can produce two or three successive attacks of syncope in them, and I can relieve them by faradization. Should they exhibit, on the contrary, a violent and arrhythmic respiration, and should I not endeavor to modify it by the Faradic current, the first attack of syncope which supervenes often proves fatal." The conclusion to be drawn from Dr. Villette's experiments and clinical observations is, that during the administration of chloroform a properly equipped Faradic battery should be placed on a stand beside the anesthetist, who will thus be in a position to use it as a preventive of respiratory syncope, rather than as a treatment for that condition.

**Analyses of Jams, Jellies and Marmalades.**—Bulletin No. 104, issued June 15th, 1905, from the laboratory of the Inland Revenue Department, Ottawa, gives the analyses of jams, marmalades and jellies. Of the total number of samples examined, 66 per cent. contained glucose, 15 per cent. contained preservatives, 30 per cent. contained dyes. Glucose, compared with cane sugar, is less sweet, much less soluble in water, and less disposed to crystallize and, when injected into the blood vessels, it does not

pass off to the like extent by the kidneys. Diabetic, urinary, and hepatic sugar have the like chemical composition as glucose. Looked at, therefore, from the standpoint of chemistry or physiology, there can be no objection to the substitution of glucose for cane sugar. If it is cheaper than cane sugar, then jams, marmalades and jellies in which a percentage of glucose is used ought to be sold more cheaply than if cane sugar were the only sweetener used in their manufacture. No dyes were found in any samples of peach jam, gooseberry jam, or plum jam; in some samples of black currant jam, raspberry jam and strawberry jam dyes were found. Of the 29 marmalades analysed, 3 samples (manufactured by a Toronto house) contained a dye. Of the 14 jellies analysed, 4 contained a dye. In the opinion of some manufacturers a dye is necessary to give an air of vraisemblance to the finished article, as, for instance, to red raspberry jelly, strawberry jelly, red currant jelly. The analyst does not mention the name of the dye used in these cases, so we are free to suppose that it is not a poison; probably cochineal or some other innocent substance capable of giving a reddish shade to jelly or jam, is used. The useful point to remember is that in eating a jam or jelly, the natural color of which is red or black, you are likely to get a dyed article; neutral-tinted fruits, such as peaches, plums and gooseberries, do not call for dyes, and when converted into jam or jelly are not dyed. As the quantities of preservatives found are not mentioned, we are at liberty to infer that benzoic acid and salicylic acid are not used in poisonous quantities. The use of these acids raises a therapeutic question. However, we do not suppose that the manufacturers of jams and jellies have any notion of the therapeutic uses of these acids, and are only interested in their use as food preservatives.

**Bulletin No. 103: Peppers.**—Bulletin No. 103 reveals a curious condition of affairs in respect to the public taste anent pepper. Of the black and white peppers collected and analysed, 47.7 per cent. were found to be adulterated, and only 40.7 per cent. undoubtedly genuine. Many of the adulterated samples contained wheat flour and foreign tissues; some contained foreign tissues and dirt. Of the six samples purchased in Toronto only one was found genuine. One contained wheat flour and foreign tissue; one contained pepper tissue with some foreign tissues; one con-

tained a little foreign tissue; one contained wheat starch and foreign tissue, and one contained pepper tissue and some foreign tissue. Evidently some of the Torontonians are not anxious to use the carminative stimulant in a pure form; but that is not a reason why grocers should be allowed to sell a cheap, adulterated pepper at the price of the real article. The Inland Revenue Department should institute trials and have the sellers of adulterated foods fined for foisting them on the public. If the adulterant used is noxious, let the public and the manufacturer know it. If it is dirt, be equally explicit. Twenty-three years ago the writer of this note listened to the reading of a paper on food adulterants by the late Professor Prescott, of Ann Arbor, Michigan, in which were given, *inter alia*, details of the adulterants used in pepper. The adulterants mentioned were similar to those given in Bulletin No. 103. From the standpoint of chemistry, the analysis is interesting; but why not test the question in the courts? If the public are satisfied to use pepper dust, wheat starch, etc., on their food, they are certainly entitled to the reduced price of the article they buy as well as the retail grocer. Of the six samples of black pepper taken from Toronto grocers, only one was genuine, and it was sold at twenty-five cents per pound. Of the five other adulterated samples, one sold at twenty-five cents, three at thirty cents, and one at thirty-five cents per pound. If one grocer could afford to sell pure pepper at 25 cents per pound, why could not the other five do the same?

**Toronto as a Summer Resort.**—The love of change is the real motive which induces people to go away from home in summer, the heat of the weather is often a pretext. It is sometimes as hot at the place we go to as it was at the spot we left behind. People want a change of some sort; want to get away from the observation and criticism of their neighbors; want to see new faces, hear new stories, eat new dinners, drink new fluids, in fact, want change. The brain cells are wearied by repeatedly viewing the same scenes, hearing the same sounds, inhaling the same odors, and we long for something new. Perhaps of more importance than conveniently situated summer hotels in Toronto are the behavior and manners of the inhabitants, as well as the traveller's opportunities of meeting the best of them. Of what use is it to a traveller of acute observation, refined manners and cultivated

tastes, if he passes some days in a city, unknown, unsought, unappreciated? Sunsets, sunrises, hills, plains, lakes, forests are well enough; they were here centuries ago, they will be here when we are ashes. The men and women who live in a city interest us more than the scenes in which they live. Man is the picture; scenery is but the framing of the picture. Travellers, often of an inferior grade, who have been clever enough to obtain introductions, or who are accredited to clubs, can come from Jamaica, Louisiana, Texas, to Toronto, and find cultivated men and women living here in a pleasing environment. Without the magic introduction to the people the environment soon palls. It then becomes a question of ice-water and the thermometer. "Yes, the weather was delightful, and we had some charming sails on Lake Ontario; but we did not know a soul, and we were glad to get back to the old place."

**Eternal Vigilance vs. Emergency Spurts.**—Reports presented at the fourth quarterly meeting of the Ontario Health Board by Medical Inspector Dr. Bell show that smallpox is prevalent in Ontario. The disease is generally mild and the mortality from it small; but it is smallpox, and not chicken-pox, or a rash caused by poison ivy. The practice of other countries in the matter of vaccination deserves our approval and imitation. Smallpox has been practically stamped out in Germany and France, owing to a strict enforcement of vaccination laws. In England vaccination is obligatory every seven years. In these countries quarantine during the prevalence of foreign epidemics of smallpox has been superseded by a system of examination and inspection, which is operative all the time. If smallpox is to be stamped out in Ontario indifference to the benefits of vaccination should be succeeded by a demand for vaccination and re-vaccination. But experience shows that in too many cases people who should know better, instead of submitting to vaccination, or even asking for it, try to escape from the operation. The prevention of smallpox, therefore, should be placed in the hands of the Ontario Health Board and the vaccination laws of this Province should be made to imitate those of France, England and Germany. A law should be passed making vaccination or re-vaccination compulsory on every individual, before he or she reaches adult age.

J. J. C.

# News of the Month.

## THE BRITISH MEDICAL ASSOCIATION.

*Patron*: His Majesty King Edward VII, K.G., F.R.C.P., F.R.C.S.

The seventy-fourth annual meeting of the British Medical Association will be held at Toronto, Canada, on Tuesday, Wednesday, Thursday, Friday and Saturday, August 21st, 22nd, 23rd, 24th and 25th, 1906.

### Programme.

*President.*—George Cooper Franklin, F.R.C.S. (Eng.), L.R.C.P. (Lond.), Surgeon, Leicester Infirmary, Leicester.

*President-elect.*—Richard Andrews Reeve, B.A., M.D., LL.D., Dean of University of Toronto Faculty of Medicine.

*Chairman of Council.*—Henry Wm. Langley Browne, M.D., Ch.B., F.R.C.S.E., Consulting Surgeon, West Bromwich District Hospital.

*Treasurer.*—Hy. Radcliffe Crocker, M.D., F.R.C.P., Physician Skin Department, University College Hospital, London.

An address in Medicine will be delivered by James Barr, M.D., F.R.C.P., F.R.S.E.

An address in Surgery will be delivered by Sir Victor Horsley, F.R.C.S., F.R.S.

An address in Obstetrics will be delivered.

The scientific business of the meeting will be conducted in twelve sections, as follows:

*Medicine.*—President: Sir Thomas Barlow, Bart., K.C.V.O., London. Vice-Presidents: Dr. Alex. McPhedran, Toronto; Dr. James Stewart, Montreal. Hon. Secretaries: Dr. R. D. Rudolf, Toronto; Dr. J. T. Fotheringham, Toronto.

*Surgery.*—President: Professor I. H. Cameron, Toronto. Vice-Presidents: Dr. F. LeM. Grasett, Toronto; Dr. Francis Shepherd, Montreal; Dr. A. B. Atherton, Fredericton, N.B.; Dr. T. K. Holmes, Chatham. Hon. Secretaries: Dr. H. A. Beatty, Toronto; Dr. F. W. Marlow, Toronto.

*State Medicine.*—President, Dr. F. Montizambert, Ottawa. Vice-Presidents: Dr. C. Sheard, Toronto; Dr. P. H. Bryce, Ottawa; Hon. Dr. Pyne, Toronto. Hon. Secretary: Dr. J. Langrill, Hamilton.

*Obstetrics and Gynecology.*—President: Dr. Freeland Barbour, Edinburgh. Vice-Presidents: Dr. J. A. Temple, Toronto; Dr. A. H. Wright, Toronto; Dr. Wm. Gardner, Montreal. Hon. Secretaries: Dr. Frederick Fenton, Toronto; Dr. K. C. McIlwraith, Toronto.

*Therapeutics.*—President: Professor D. W. Finlay, M.D., Aberdeen. Vice-Presidents: Dr. J. L. Davison, Toronto; Dr. A. D. Blackader, Montreal. Hon. Secretaries: Dr. V. E. Henderson, Toronto; Dr. C. P. Lusk, Toronto.

*Pathology and Bacteriology.*—President: Professor J. G. Adami, M.D., F.R.S., Montreal. Vice-Presidents: Dr. J. J. Mackenzie, Toronto; Dr. W. T. Connell, Kingston; Dr. Ingersoll Olmsted, Hamilton. Hon. Secretaries: Dr. G. Silverthorn, Toronto; Dr. Harold C. Parsons, Toronto.

*Psychology.*—President: Professor W. T. Mickle, London, Eng. Vice-Presidents: Dr. E. H. Beemer, Toronto; Dr. C. K. Clarke, Toronto. Hon. Secretaries: Dr. A. T. Hobbs, Guelph; Dr. G. W. Howland, Toronto.

*Ophthalmology.*—President: Mr. Marcus Gunn, London. Vice-Presidents: Dr. G. H. Burnham, Toronto; Dr. J. W. Stirling, Montreal. Hon. Secertaries: Dr. J. M. MacCallum, Toronto; Dr. D. McLennan, Toronto.

*Laryngology and Otology.*—President: Dr. Dundas Grant, London. Vice-Presidents: Dr. G. R. McDonagh, Toronto; Dr. H. S. Birkett, Montreal. Hon. Secretaries: Dr. D. J. Gibb Wishart, Toronto; Dr. Geoffrey Boyd, Toronto.

*Anatomy and Physiology.*—President: Professor B. C. A. Windle, M.D., F.R.S. Vice-Presidents: Professor A. B. Macallum, Toronto; Professor A. Primrose, Toronto; Professor J. Wesley Mills, Montreal. Hon. Secretaries: Dr. C. B. Shuttleworth; Dr. G. S. Cleland.

*Dermatology.*—President: Dr. Norman Walker, Edinburgh. Vice-Presidents: Dr. Graham Chambers, Toronto; Dr. H. B. Anderson, Toronto; Dr. James Galloway, London. Hon. Secretaries: Dr. D. King Smith, Toronto; Dr. D. McGillivray, Toronto. Hon. Local Secretaries: Dr. F. N. G. Starr, Toronto; Professor J. J. Mackenzie, Toronto; Dr. D. J. G. Wishart, Toronto. Hon. Local Treasurer: Dr. J. F. W. Ross, Toronto. Secretary to Exhibition: Dr. Arthur Jukes Johnson, Toronto.

*Pediatrics.*—President: Dr. G. A. Sutherland, London. Vice-Presidents: Dr. H. T. Machell, Toronto; Dr. A. M. Baines, Toronto. Hon. Secretaries: Dr. Arthur Wright, Toronto; Dr. J. S. A. Graham, Toronto; Dr. E. Stanley Ryerson, Toronto.

*Pathological Museum.*—Professor J. J. Mackenzie, Toronto; Dr. Maud Abbott, Montreal; Dr. W. T. L. Connell, Kingston; Dr. J. A. McGregor, London, Ont.; Dr. A. R. Gordon, Toronto; Dr. Gordon Bell, Winnipeg.

*Local Committee of Arrangements.*—Drs. A. McPhedran, G. A. Bingham, J. A. Temple, A. A. Macdonald, C. J. C. O. Hastings, R. B. Nevitt, J. J. Mackenzie, D. J. G. Wishart, F. N. G. Starr, and R. A. Reeve (*ex officio*).

*Reception Sub-Committee.*—Chairman: Mr. I. H. Cameron. Secretaries: Drs. A. Primrose and W. F. Clarke. Drs. N. H. Beemer, G. H. Burnham, W. Harley Smith, W. Britton, R. A. Stephenson, J. T. Gilmour, C. K. Clarke, A. B. Macallum, Price-Brown.

*Finance Sub-Committee.*—Chairman: Hon. Dr. R. A. Pyne. Secretary: Dr. Wm. Goldie. Drs. Chas. Sheard, C. Trow, J. T. Duncan, Alex. Davidson, W. J. Greig, Ald. A. Lynd, Ald. John Noble, J. F. W. Ross (*ex officio*), G. S. Cleland, and Ald. W. S. Harrison.

*Excursion Sub-Committee.*—Chairman: Dr. N. A. Powell. Secretaries: Dr. C. P. Lusk, Dr. W. H. Pepler. Drs. C. J. Wagner, W. J. Wilson, A. O. Hastings, H. A. Bruce, G. R. McDonagh, W. J. McCollum, J. O. Orr, J. W. Peaker, C. Gilmour,, T. McKenzie.

*Transportation Sub-Committee.*—Chairman: Dr. B. L. Riordan. Secretaries: Dr. H. A. Beatty and Dr. Geo. Elliott. Drs. W. P. Caven, W. H. Harris, H. W. Aikins, J. H. McConnell, J. C. Patton, S. M. Hay, H. Hunt, A. D. Watson, Forbes Godfrey.

*Dinner Sub-Committee.*—Chairman: Dr. F. LeM. Grasett. Secretaries: Dr. H. A. Parsons and Dr. C. J. Copp. Drs. Allan Baines, D. C. Meyers, E. W. Spragge, R. J. Dwyer, R. T. Noble, G. A. Peters, H. C. Burritt, C. L. Starr, J. E. Elliott.

*Sub-Committee in Charge of Exhibits.*—Chairman: Dr. A. Jukes Johnson. Secretaries: Dr. W. A. Young and Dr. T. D. Archibald. Drs. James Spence, John Caven, John Hunter, T. F. McMahon, R. B. Orr, C. E. Stacey, B. Z. Milner, T. H. Stark, A. J. Harrington.

*Printing and Publishing Sub-Committee.*—Chairman: Dr. A. H. Wright. Secretaries: Dr. J. N. E. Brown and Dr. A. J. Mackenzie. Drs. J. T. Fotheringham, C. M. Foster, E. E. King, John Ferguson, W. H. B. Aikins, D. King Smith, H. B. Anderson, E. R. Hooper, J. J. Cassidy.

*Local Entertainments Sub-Committee.*—Chairman: Dr. H. Crawford Scadding. Secretary: Dr. H. S. Hutchison. Drs. J. L. Davison, J. J. Palmer, A. H. Garratt, Allan Shore, J. N. Henwood, B. E. Hawke, J. D. Thorburn, Wm. Oldright, G. S. Ryerson, W. McKeown.

*Hotels and Lodgings Sub-Committee.*—Chairman: Dr. H. T. Machell. Secretary: Dr. F. A. Clarkson. Drs. H. J. Hamilton, A. C. Hendrick, G. B. Smith, J. H. Rowan, G. H. Carveth, S.

Johnston, E. A. McCullough, R. J. Wilson, J. S. Hart, R. Griffith, E. H. Greene, C. R. Sneath, C. A. Hodgetts.

*Membership Sub-Committee.*—Chairman: Dr. R. W. Bruce Smith. Secretaries: Drs. W. H. Cronyn (Rosedale), G. E. Smith. Drs. W. B. Thistle, C. O'Reilly, S. Johnston, D. M. Anderson, Jas. Caven, T. A. Todd, Thos. Wylie, Paul Scott, Helen MacMurchy.

*Corresponding Members of the Membership Sub-Committee.*—British Columbia: Dr. O. M. Jones, Victoria; Dr. S. J. Tunstall, Vancouver. Saskatchewan: Dr. W. D. Ferris, Edmonton. Alberta: Dr. J. D. Lafferty, Calgary. Manitoba: Dr. F. R. England, Winnipeg; Dr. R. S. Thornton, Deloraine. Quebec: Dr. John MacCrae, McGill College, Montreal; Dr. A. Marois, Quebec. New Brunswick: Dr. Murray Macfaren, St. John. Nova Scotia: Dr. John Stewart, Halifax. Prince Edward Island: Dr. Jenkins, Charlottetown. Ontario: Dr. Forbes Godfrey, Mimico; Dr. W. S. Bond, Eglinton; Dr. A. H. Perfect, Toronto Junction; Dr. W. J. Charlton, Weston; Dr. W. Walters, East Toronto. Ottawa: Dr. R. W. Powell. London: Dr. H. A. MacCallum. Kingston: Dr. Jas. Third. Hamilton: Dr. A. E. Malloch. Brantford: Dr. J. A. Marquis. Peterboro': Dr. T. C. Neal. Woodstock: Dr. A. B. Welford. St. Catharines: Dr. W. Ratcliffe. Niagara Falls: Dr. E. T. Kellam. Paris: Dr. W. Burt. Sault Ste. Marie: Dr. R. J. Gibson. Owen Sound: Dr. T. H. Middlebro. Collingwood: Dr. J. L. Bray. Midland: Dr. R. Raikes. Belleville: Dr. W. J. Gibson. Orillia: Dr. W. Gilchrist.

*Honorary Local Secretaries.*—Drs. F. N. G. Starr, Prof. J. J. Mackenzie, Dr. D. J. Gibb Wishart, of the Medical Laboratories, University of Toronto.

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## THREE "ECCENTRIC PIONEER SURGEONS" OF TORONTO.

THROUGH the kindness of *The Sunday World* we are enabled to reproduce a clever artistic production by the late Dr. Norman Bethune, of the three "eccentric pioneer surgeons" of Toronto, Dr. John King, Dr. Christopher Widmer and Dr. George Herrick. Dr. King was born in Ireland in 1806 and came to Toronto when he was 24 years old. He was a member of the first General Hospital staff when that institution was on the corner of King and John Streets. Dr. King died in 1859. Dr. Widmer was the father of surgery in Upper Canada, and the very life and soul of the General Hospital. He came to Canada in 1812, and died in 1858 at the age of 78. Dr. Herrick, the third member of this illustrious group, was a native of Cork, Ireland, and first saw

the light of day in 1789. He was the most eccentric of the trio. He came to Toronto in 1838, and lived and died a bachelor. He had neither gas nor carpets in his house, and was in other ways conspicuous for his eccentricities. Dr. Herrick gave two dinners a year—one at Christmas and the other on his father's birthday. His guests were always the younger men of his acquaintance. He regularly retired at 9 p.m., and had no hesitancy in asking his guests to move off when his bedtime approached. Dr. Herrick, also, was a valuable member of the General Hospital staff for many years. One of his individual peculiarities was a nervous habit of putting out his own tongue at his patients whenever he desired to examine their tongues. The doctor was an ardent admirer of Dr. John King, whom he affectionately called "Rex, my boy." As will be observed by reference to the engraving Dr. Herrick almost invariably carried his arm behind his back, and his right arm swinging as he walked along the street. The lithograph from which the engraving is made was presented to Dr. Chas. O'Reilly by the late George Lewis, whose signature it bears, and who bequeathed $10,000 to the General Hospital. During the recent visit of His Excellency to the General Hospital, Earl Grey was much interested in this weird yet wonderfully correct cartoon of the fathers of medical surgery in Upper Canada, which had hung in Dr. O'Reilly's office for many years, and expressed a desire for a copy. Not only His Excellency, but many Canadian medical men, will be pleased to secure a souvenir of such genuine historical interest and value. Truly these are shades of men who set a high standard for those who came after them and for the science of surgery in Canada. If they were eccentric it was the pardonable eccentricity of genius.

## ITEMS OF INTEREST.

**Canadian Medical Association.**—The Canadian Medical Association convenes in Toronto on the Monday and Tuesday immediately preceding The British Medical Association, which opens in August next, about one week prior to the opening of The Canadian National Exposition. Professor A. McPhedran is president, and Dr. Geo. Elliott, 203 Beverley Street, Toronto, general secretary.

**Dr. Ross' Appointment.**—George W. Ross, M.A., B.A. (Toronto), M.R.C.S. (England), L.R.C.P. (London), son of the Hon. G. W. Ross, has been elected to the position of Pathologist and Registrar to the Victoria Park Hospital, London, England. Dr.

Ross, who has for some time been "walking the hospitals" in London, has been unusually successful in his profession. Last month's number of *The Lancet* contains an able article from his pen, prepared in conjunction with Professor A. E. Wright, who is quite an authority on therapeutics and bacteriology.

**New Provisions at Toronto General Hospital.**—Dr. J. N. E. Brown, the new Medical Superintendent of Toronto General Hospital, sent out recently the following announcement, which we consider a step in advance of the old regime: "*Dear Doctor,*—I have the honor to inform you that provision has been made in the Pavilion for private and semi-private ward gynecological cases, which may be treated by any member of the profession. For semi-private wards a charge of $6.00 and $8.00 a week is made, and for the private wards $12.00 to $17.50 a week. Provision has also been made for the admission to the Emergency Hospital of a limited number of semi-private and private cases (medical and surgical) at $6.00 a week and $12.00 a week, respectively. Any physician may have charge of private or semi-private ward cases in the main building of the General Hospital. We also have accommodation in the Burnside Lying-in Hospital for private ward as well as public ward cases."

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**Hemolysis in Relation to Practical Medicine.**—Hahn, Nauheim (*Berliner klinische Wochenschrift*), in his numerous experiments and experiences with human volunteers, confirms Koeppe's assertions in regard to hemolysis from acids and heat. He further concludes that alcohol is a decided poison for the blood corpuscles, inducing hemolysis proportionately to the concentration and, with a given concentration, proportionately to the temperature. The intensity of the hemolytic action is further dependent on its duration. When supplemented by the action of chloral, the alcohol hemolysis is reinforced. The superposed action of alcohol and chloral—even at normal temperatures—suggests the advisability of caution in administering chloral to alcoholics, and also in case of fever. The alcohol further diminished the resisting power of the red corpuscles and rendered them more susceptible to other injurious influences. The melting point of the blood corpuscles was lowered in proportion to the concentration. He believes that the alcohol, plus chloral, dissolves out the fatty elements in the wall of the blood corpuscles, thus inducing hemolysis by another mechanism from that of the osmosis of water hemolysis.

# The Physician's Library.

## BOOK REVIEWS.

*A Practical Treatise on Sexual Disorders of the Male and Female.* By ROBERT W. TAYLOR, A.M., M.D., Consulting Genito-urinary Surgeon to Bellevue and to the City Hospitals, New York. Third edition, thoroughly revised, with 130 illustrations and 16 plates in colors and monochrome. New York and Philadelphia: Lea Brothers & Co. 1905.

Dr. Taylor's experience in the treatment of sexual diseases has been very extensive, enabling him to record and describe much that he has seen himself. In this edition the whole text has been gone over and revised, many new chapters and sections have been added, and the work has been made more attractive and useful by the introduction of several colored illustrations. Special attention is given to the matter of therapeutics, both medical and surgical, in order to make the author's intentions regarding treatment plain and easily understood.

We are quite sure that this edition will be even more popular than the former ones. A. E.

*The Treatment of Fractures.* With Notes Upon a Few Common Dislocations. By CHARLES LOCKE SCUDDER, M.D., Surgeon to the Massachusetts General Hospital. Fifth edition, thoroughly revised. With 739 illustrations. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian agents: J. A. Carveth & Co., Limited, 434 Yonge Street, Toronto.

It was a service of real value when Dr. Scudder published his work on "The Treatment of Fractures" only five years ago. Already a fifth edition is before the public—a new edition every year. This is a remarkable record, and is explicable only when the merits of the book are considered.

The use of anesthesia in the examination and dressing of fractures, of the Rontgen rays in diagnosis, and of asepsis and the open method in their treatment, has relegated the older surgical monographs on this subject to a place on the shelves of the reference library. The use of the terms "open" and "closed"

fracture, instead of "simple" and "compound," illustrates well the general trend. In this edition important changes have been made in the discussion of the treatment of fractures of the neck of the femur. Important changes are advocated, based upon recent clinical advances, which promise something approaching a revolution in the surgical treatment of this distressing class of fractures.

The publisher's share of the work, done in illustration and otherwise, is in the highest style of the printer's art.

B. E. M.

*The Journal of Advanced Therapeutics.* Official organ of the American Electro-Therapeutic Association; Official organ of the International Association of Climatologists. Rahway, N.J., and New York: A. L. Chatterton & Co. Published monthly. Terms, $3.00 per year.

This, the pioneer journal of physical therapeutics in America, is under the editorial management of William Benham Snow, M.D., with Mary L. H. Arnold Snow as associate editor, assisted by a host of associate editors of departments and a large number of collaborators, assuring high efficiency. The departments are: Gynecology and metallic electrolysis, constitutional diseases, high-frequency currents, radiotherapy, phototherapy, radiography, thermotherapy, hydrotherapy, dietetics, therapeutic exercise, psychotherapy, mechanical vibration therapy, climatology, ophthalmology, and oto-laryngology, review of French current literature, each in most able hands and most capably conducted.

The journal maintains its high standard of excellence and is a most valuable exponent of physical methods in the treatment of disease, and has played no mean part in placing the claims of physiotherapy fairly and prominently before the medical profession, for which it deserves great credit.

*The Era Key to the U. S. P.* A Complete List of the Drugs and Preparations of the United States Pharmacopeia. Eighth decennial revision (1905). Vest-pocket size; 83 pages; price, 25 cents. New York: The Pharmaceutical Era, Publishers, 90 William Street.

The publishers announce a new edition of the well-known "Era Key to the U. S. P.," whose object is to further the introduction and employment of the official drugs and preparations of our national standard, the United States Pharmacopeia, the eighth revision of which is now in force. The book comes in vest-pocket size and gives in a "nut-shell" all the essential information required by the physician who desires to prescribe pharmacopeia remedies—their official names, synonyms and constituent parts,

with average doses in both metric and English systems. The idea of putting the essential information of the pharmacopeia in so small a compass is claimed to be original with the publishers, under whose direction the little work was compiled. The busy physician will find it both helpful and suggestive in his effort to prescribe official pharmaceutical preparations.

*Hand-Book of Physiology.* For Students and Practitioners of Medicine. By AUSTIN FLINT, M.D., LL.D., Professor of Physiology in the Cornell University Medical College. With 247 illustrations in the text, including 4 in colors and an atlas of 16 color-plates, including 48 original figures taken from actual stained microscopical preparations. New York: The Macmillan Co. 1905. Price, $5.00.

This is not merely a revised edition of the author's "Text-Book of Human Physiology," but is practically a new book. He states that it is the outcome of a desire to present to students a work that may serve to connect pure physiology with the physiology useful to physicians.

Everyone who has heard Professor Flint lecture on this subject knows of his power to make his teaching plain, concise and interesting. In order to make its teaching valuable in actual medical practice, the subject, as far as possible, is treated from a medical standpoint.

The publishers have been generous in the matter of illustrations. The ordinary ones are very good, while the colored ones are exceedingly fine.

This is an excellent work, and we are sure it will meet with great success.

*A Text-Book of Clinical Diagnosis.* By Laboratory Methods. For the Use of Students, Practitioners, and Laboratory workers. By L. NAPOLEON BOSTON, A.M., M.D., Associate in Medicine and Director of the Clinical Laboratories at the Medico-Chirurgical College, Philadelphia. Second edition, revised and enlarged. Octavo of 563 pages, with 330 illustrations, including 34 plates, many in colors. Philadelphia and London: W. B. Saunders & Company. 1905.

When the first edition of this book came out it was thought, by many, at least, that it would be impossible to improve upon it. Time, however, and the advance of science, has made it possible to introduce so much new matter into this edition that one is led to wonder how we ever did without it. Among the changes the following may be included: Biff's new hemogelometer; Wicker's reaction; Ravold's albumin test; Cipollino's test, with

some other tests. In the subjects treated in the former edition, many are given a much more extended space, which enables the author to emphasize methods that he suggests To the student, the bacteriologist, and microscopist, as well as to those interested in urinalysis, this book will be found of the greatest possible value. The print is large, and the subjects are arranged in such a way as to lead the reader on by easy stages to a right appreciation of the subject. A. J. J.

*Abdominal Operations.* By B. G. A. MOYNIHAN, M.S. (London), F.R.C.S., Senior Assistant Surgeon to Leeds General Infirmary, England. Octavo of 695 pages, with 250 original illustrations. Philadelphia and London: W. B. Saunders & Company. 1905. Canadian agents: J. A. Carveth & Co., 434 Yonge Street, Toronto. Cloth, $7.00 net.

This work deals with the complications and sequelæ of abdominal operations, with chapters on penetrating wounds of the abdomen, acute peritonitis, tuberculous peritonitis and subphrenic abscess. There is also a chapter on the treatment of visceral prolapse. A section is devoted to the surgery of the stomach, another section to the surgery of the intestines, and the two final sections to the surgery of the liver, the pancreas and the spleen.

The author is now well known as an acknowledged authority on the subject of abdominal surgery. His writings, previously published, have been most favorably received, and the present volume is certainly the most important contribution he has yet made to surgery. Each of the subjects brought under review is treated in a thoroughly scientific spirit and at the same time in a most common-sense fashion. We cordially endorse his opinion regarding mechanical appliances, button or bobbin, for intestinal anastomosis. He says: "I believe that the purpose of these mechanical aids has been served and that their interest is now only historical." Simplicity in operative technique, with thoroughness in detail, are perhaps the most striking features of Mr. Moynihan's surgical work as presented in the treatise under review.

The chapter on appendicitis is excellent. The conclusions he comes to concerning the treatment of the great variety of conditions which present themselves in trouble of appendiceal origin, are those of a conservative surgeon of wide experience, and we know of no better guide to the rational treatment of this most common of all abdominal diseases requiring surgical interference. He sums up his comments on the treatment of the appendix, where abscess is present, by saying: "There can be no doubt, I think, that in many cases of abscess the removal of the appendix

is unnecessary, and that in almost all its removal involves far too much risk to be desirable."

The illustrations are nearly all original and are excellent. There are a great many of them and they are of the greatest possible assistance in making the descriptions of technique in the text clear and easily understood. The book is well printed on first-class paper, and from the publishers' point of view is an admirable production.

We recommend the work without any reservation as an admirable guide in the field of abdominal surgery. It is undoubtedly one of the best monographs on the subject at present available.

A. P.

*Golden Rules of Medical Practice.* By LEWIS SMITH, M.D. (Lond.), M.R.C.P. (Lond.), Assistant Physician and Pathologist to the London Hospital; late Medical Tutor to the London Hospital Medical College. No. IV. Enlarged and entirely re-written. Sixth edition. Bristol: John Wright & Co. London: Simpkin, Marshall, Hamilton, Kent & Co., Ltd.

This is a booklet suited to the vest pocket, 2½ x 4 in., and 120 pages. It is a veritable *multum in parvo*. The golden rules are the result of careful observation by men of the first rank in medicine. They cover the whole field, are always interesting and helpful, and should be on the table of every physician.

W. J. W.

*International Clinics.* A Quarterly of Illustrated Clinical Lectures and Especially Prepared Original Articles on Treatment, Medicine, Surgery, Neurology, Pediatrics, Obstetrics, Gynecology, Orthopedics, Pathology, Dermatology, Ophthalmology, Otology, Rhinology, Laryngology, Hygiene, and other topics of interest to students and practitioners. By leading members of the medical profession throughout the world. Edited by A. O. J. KELLY, M.D., Phila., U.S.A., with the colloboration of Wm. Osler, M.D., Oxford; J. H. Musser, M.D., Phila.; Jas. Stewart, M.D., Montreal; J. B. Murphy, M.D., Chicago; A. McPhedran, M.D., Toronto; Thos. M. Rotch, M.D., Boston; John G. Clark, M.D., Phila.; J. J. Walsh, M.D., New York; J. W. Ballantyne, M.D., Edinburgh; John Harold, M.D., London; Edmund Landolt, M.D., Paris; Richard Kretz, M.D., Vienna. With regular correspondents in Montreal, London, Paris, Berlin, Vienna, Leipsic, Brussels and Carlsbad. Vol. II. Fifteenth Series. 1905. Philadelphia and London: J. B. Lippincott Co. 1905.

This volume of the fifteenth series of "Clinics" consists of twenty-three lectures on various subjects, including five on

Treatment, five on Medicine, eight on Surgery, and one each on Gynecology, Ophthalmology, Rhinology, Physiology and Pathology. The volume is one of the best of the series published for some years. "International Clinics" has the advantage in that each volume is a separate and distinct book and independent of any other of the set. The lectures are all by men who hold a prominent place in the profession, and, as a quarterly, "Clinics" should be subscribed for almost as regularly as is one's favorite medical monthly or weekly.

*The Physician's Pocket Account Book.* By J. J. TAYLOR, M.D., Editor *Medical Council,* Philadelphia, Pa.

We receive each year, from time to time, quite a number of pocket account books, specially arranged for physicians' use After looking over carefully Dr. Taylor's "Physician's Pocket Account Book," we can say with candor that it is one of the best. It is practical and requires only one entry of each transaction. Every patient's account is in such shape that a moment's reference furnishes every detail. It is simple in the extreme, uniquely convenient, and should save the average physician many a dollar from the day he adopts its use. The desk size account book sells at $4.00. W. A. Y.

*Progressive Medicine.* A Quarterly Digest of Advances, Discoveries and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., assisted by H. R. M. LANDIS, M.D. September 1, 1905. Philadelphia and New York: Lea Brothers & Co. Six dollars per annum.

The most interesting and perhaps the most important part of the first section is the discussion on tuberculosis. Its prevention, channels of infection, early diagnosis, and methods of treatment are some of the topics. Other parts of this section are taken up with reviews of the literature on pleurisy and other lung affections, and various diseases of the heart and arteries.

Some of the more important topics in dermatology are the use of the Finsen light in lupus vulgaris and in tuberculosis of the skin, the treatment of nevus, pruritus, and syphilis.

Part III. is devoted to reviews of the literature on diseases of the nervous system. There are interesting discussions on tabes, poliomyelitis, neuritis, epilepsy and hysteria.

Many important subjects relating to obstetrics are discussed in the last section. Among others are: Albuminuria in pregnancy, eclampsia, ectopic gestation, accidents of labor, puerperal infection, and rupture of the uterus.

This number is quite up to the usual high standard of excellence, and every article is full of interest.

*Manual of Operative Surgery.* By JOHN FAIRBAIRN BINNIE, A.M., C.M. (Aberdeen), Professor of Surgery, Kansas State University, Kansas City; Fellow of the American Surgical Association; Membre de la Société Internationale de Chirurgie. Second edition, revised and enlarged. With 567 illustrations, a number of which are printed in colors. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1905.

A very seductive-looking book, so elegant, indeed, that, on picking it up, one might expect to find a hondsomely bound collection of lyrics. This, of course, shows the art of the publishers. The author states that he does not intend to deal, even in a cursory manner, with all the subjects ordinarily found in a manual of operative surgery. His aim is to be practical, "to describe operative procedures as they are done on the living subject, instead of the normal cadaver."

He omits reference to amputations and ligations. Little is said of genito-urinary surgery or of rectal surgery. Operations on the bones and joints of the extremities are also omitted. The subject of operative surgery, however, is an extensive one, and Dr. Binnie has much to tell us, and he does it in a very clear, satisfying way in his manual of 645 pages.

The work is divided into seven parts: The head and neck; thorax; abdomen; genito-urinary system; the extremities; the spine; unclassified topics. The author shows a good grasp of his subject. He accredits the various operations described to their inventors, presenting the salient points of each operative procedure in a clear, non-verbose style. To the operating surgeon Binnie's Manual would be a useful *vade mecum.* J. J. C.

*A Text-Book of Practical Therapeutics.*. With especial reference to the application of remedial measures to disease and their employment upon a rational basis. By HOBART AMORY HARE, M.D., B.Sc., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia; Physician to the Jefferson Medical College Hospital, etc. Eleventh edition, enlarged, thoroughly revised and largely rewritten. Illustrated with 113 engravings and 4 colored plates. Philadelphia and New York: Lea Bros. & Co. 1905.

The eleventh edition of Hare's Therapeutics, as it has come to be known for a number of years, is divided into four parts. Part I. is devoted to general therapeutical considerations; Part II. to drugs; Part III. consists of two chapters, remedial measures other than drugs, and feeding the sick; and Part IV., of 300 pages, dealing with treatment of diseases, table of doses of medicines, index of drugs and remedial measures, and index of diseases and remedies.

One of the principal causes for many of the alterations in this volume is the appearance recently of the new United States Pharmacopeia, many preparations which were official having been dropped out and a large number of new ones added. Not only that, but a lot of tinctures have been changed in their strength and (for that reason) in their doses, and the names of many drugs materially altered. This will naturally lead to a good deal of confusion at first; but with a text-book recently and thoroughly revised, as Hare's has been, the trouble will soon be overcome. The author has done wisely in arranging his titles in alphabetical order, so that the reader can refer to the book without delay.

*Dissecting Manual.* Based on Cunningham's "Anatomy." By W. H. Rockwell, Jr., M.D., formerly Assistant Demonstrator of Anatomy in the College of Physicians and Surgeons, Columbia University, New York. New York: Wm. Wood & Co. 1905.

This manual is an exceedingly well-arranged production. The classification is complete, and abounds in references to Cunningham's larger "Anatomy." Its descriptions are terse and well written. The only adverse criticism which might be offered is the absolute lack of description and illustrations of the necessary proceedings while dissecting. W. J. W.

*Quiz-Compends—Histology.* A Compend of Histology. By Henry Erdmann Radasch, M.S., M.D., Associate in Histology and Embryology in the Jefferson Medical College; formerly Fellow in Chemistry in the University of Iowa (1895-6); formerly Lecturer on Chemistry and Director of the Chemical Laboratories in the College of Physicians and Surgeons, Keokuk, Iowa (1897-8). With ninety-eight illustrations. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. 1905.

This volume just escapes the dignity of a text-book, at the same time being more complete than the existing compends. Embryology is only touched upon in so far as it bears directly on histology, except in the chapter on placenta and umbilical cord, where embryology is essential for a thorough knowledge of their structure. Here, however, we find somewhat more detail. Technic has been made as complete as is necessary for routine work.

The subject is treated in a manner at once lucid and scientific, and the book should enjoy a very considerable popularity.

W. H. P.

*Rose o' the River.* By KATE DOUGLAS WIGGIN. Toronto: William Briggs. Cloth.

The authoress is not at her best in "Rose o' the River," but to be at her best means much to her devoted readers, for who among that number, and they are legion, did not fall in love with "Rebecca of Sunnybrook Farm"? And was not "Penelope" inimitable, in her way? The sketch of "Rose" is placid, neither deep nor stirring, just a cool, pleasant draught of water from one of Mother Nature's wells, refreshing amid the heat and hurry of the day's work. Every physician can recommend it to the nurses tending his cases, "to be read aloud"; in its tranquility it will prove helpful. W. A. Y.

*The Millionaire Baby.* By ANNA KATHARINE GREEN. Toronto: McLeod & Allen. Cloth, price $1.25.

To those who like mystery, this story is a treat in store. Well planned, an intricate spider's web, the unravelling of which keeps the interest keen and the reader absorbed from the first chapter to the finish. W. A. Y.

*Clinical Treatises on the Pathology and Therapy of Disorders of Metabolism and Nutrition.* By PROFESSOR DR. CARL VON NOORDEN, Physician-in-Chief to the City Hospital, Frankfort-on Maine. Authorized American Translation. Edited by BOARDMAN REED, M.D., late Professor of Diseases of the Gastro-intestinal Tract, Hygiene and Climatology, Department of Medicine, Temple College, and Physician to the Samaritan Hospital, Philadelphia; Physician to the American Oncologic Hospital, etc. Translated by Florence Buchanan, D.Sc., and J. Walker Hall, M.D. Part VII., Diabetes Mellitus: Its Pathology, Chemistry and Treatment. Lectures delivered in the University and Bellevue Hospital Medical College, New York. Herter Lectureship Foundation. New York: E. B. Treat & Co. 1905. Price, $1.50.

Professor von Noorden's lectures on metabolism and nutrition are published in a series of monograms: No. I. Obesity, No. II. Nephritis, No. III. Colitis, No. IV. Acid Autointoxication, No. V. Saline Therapy, No. VI. Drink Restriction, and the present volume, No. VII., Diabetes Mellitus.

The author has treated some 2,500 cases of diabetes, a number much greater than falls to the lot of even the most fortunate. His close observation and ability as a clinician, together with his excellent laboratory facilities, have combined to place these monograms on a very high plane in medical literature.

Von Noorden's views will have their effect on life insurance.

On page 147 he says: "Diabetes frequently, though not always, indicates a family predisposition," and again, "Transitory glycosuria, not due to a diet rich in sugar, is in most cases the warning signal of later diabetic disease."

Most text-books tell us to avoid carbohydrates. Von Noorden explains how and why, and also points out that proteids may, under certain conditions, produce glycosuria, while too rigid a restriction of carbohydrates is apt to lead to acetonuria and its dangers.

The work is original, and we think marks a distinct advance in the problems of metabolism and the causes, conditions and treatment of diabetes mellitus. W. J. W.

*The House of Mirth.* By EDITH WHARTON. Toronto: McLeod & Allen. Cloth, price, $1.25.

The novel of the hour, and worthy of its place. A story of the life of a beautiful girl in New York "society," as the term is now understood. Skilfully told, every sentence rings true; so little of the didactic, free from exaggeration, and leading on, step by step, to the inevitable yet beautiful ending. Satisfying to the reader, inasmuch as some one has said of the authoress, "She has often stood on the threshold of life; now she has entered into its tragic and mysterious secrets." Y.

*The "Extra Pharmacopeia"* of MARTINDALE and WESTCOTT.

"We cordially welcome the advent of the 11th edition. The thoroughness and usefulness of the book are still its leading characteristics. Of special interest is the new section on radiology, in which the Roentgen rays, Finsen lamp, high-frequency current and radiant heat are discussed. The attention directed to radium is also reflected in a very interesting and exhaustive monograph, describing its preparation, properties, tests for purity, and its uses and methods of being used as a remedial agent; this is quite the best summary on the subject which we have yet seen, and, in addition to radium, other radio-active elements are dealt with. The chapters on antitoxins and organotherapy have been largely rewritten, and that on analytical methods has been carefully revised and brought up-to-date.

"The index, which has been increased by more than 1,500 titles, forms a striking feature, and now occupies no fewer than 138 pages; space has been economized in the text, however, by the omission of cross references, thus rendered unnecessary. Though the large amount of new matter has caused bare addition of 112 pages, the size of the book has actually been reduced, through the use of finer paper.

"We have touched generally on the principal alterations and

improvements effected, for their number renders more than an indication of them impossible in the space at our command. No one engaged in medicine or pharmacy can afford to be without a copy of the latest edition of this valuable work of reference."—*British Medical Journal,* May 21st, 1904.

"The eleventh edition of the "Extra Pharmacopeia" is now in the press, and an inspection of the press sheets suffices to show that it is not likely to prove less indispensable than any of its predecessors. It contains more than a hundred pages in excess of the tenth edition, published three years ago, but by the employment of finer paper it has been found possible to decrease the size and weight of the volume without impairing the clearness of the type. The notes on many of the older drugs and preparations have been omitted, space being thus found for information regarding more than 300 new remedies, in addition to more detailed accounts of many useful therapeutic agents at present in use.

"Less space than heretofore is devoted by the revisers to older references from medical journals, but many new references to treatment are added. Cross references are for the most part omitted, but all titles will be found in the index, which has been increased by 31 pages, and now contains 1,500 titles, including the names—with doses—of many preparations in general use, but not elsewhere mentioned. There are new sections on surgical dressings and apparatus, mineral waters, and radiology, the last-mentioned including very full notes on Roentgen rays, high frequency current, the Finsen lamp, and radiant heat, in their important applications to therapeutics. Further, the mass of pharmaceutical research work has been carefully abstracted, the therapeutic index has been revised and rearranged, the analytical memoranda are extended by paragraphs on tests for the detection of various substances of pathological significance in urine, the notes on water analysis have been revised, the bacteriological notes are corrected up-to-date, and the sections on antitoxins and organotherapy have been almost entirely rewritten. The usefulness of the book has been further increased by the inclusion of useful tables of international atomic weights, freezing mixtures, the approximate melting-points and consistence of fats and waxes employed in pharmacy, thermometric equivalents, etc."—*Pharmaceutical Journal,* May 7th, 1904.

"The 'Extra Pharmacopeia' is now so universal a part of the stock-in-trade of the complete pharmacist that it cannot be out of place to mention in this section the appearance of a new edition (the eleventh). The little engraving which we give shows that the form of the book is slightly altered, the edges being round, and although the book contains 809 pages, as compared with 688 in the last edition, it is thinner and lighter. The appearance is alto-

gether much improved, and the print is easier read, perhaps because the paper is free from the yellow tint of previous editions. Dr. W. Harrison Martindale and Dr. Wynn Westcott have been engaged on the revision of the book during the past eight months, and while the increased number of pages suffices to indicate the extent of the revision and the elaboration, the fact that 1,200 new titles are included in the index is the best evidence of the increased worth of the book. It includes new sections on radiology, mineral waters (exceedingly concise), and a rearrangement of the information on surgical dressings and appliances. The therapeutic index of diseases is also completely rearranged, internal remedies being printed in Roman type and external remedies in italics. Our examination of the new edition shows that the revisers have been careful to retain all that is valuable in the old, and have introduced a very great deal that is useful to prescribers and dispensers. For example, there is a clever table of approximate melting-points and consistence of some fats and waxes suitable for suppositories, pastes, creams, and ointments, which ought to be worth a good deal to dispensers."—*Chemist and Druggist*, May 7th, 1904.

"The appearance of the 11th edition of the 'Extra Pharmacopeia' of Martindale and Westcott will be welcome alike to the physician and the pharmacist, for we know of no volume which is more of a *sine qua non* to either of those practitioners than the work published by Mr. H. K. Lewis, 136 Gower Street, London, W.C.

"The first thing that strikes one with the present volume is that it is smaller than its predecessor; this decrease is, however, entirely one of bulk and not of text, as by the adoption of a thinner paper the weight has been reduced from 11 ounces to 8½, a matter of no small moment when we consider the number of physicians who carry the book in their pockets as an ever-reliable guide, philosopher and friend. Not only is the number of pages not lessened, but there is actually an addition of 112, and yet the price is less than of the 10th edition—9s. 6d. as against 10s. 6d. We, as far as time has permitted, have carefully compared this issue with those of previous years and do not find that the value of the book has suffered in the least; indeed, considering that a very large number of new articles are dealt with the usefulness has materially increased.

"The former scheme of the work has in its essentials been maintained, but the increasing list of articles which have to be dealt with—over 300 fresh drugs or preparations are included—has rendered excisions and curtailments necessary; but the task of revision has been conducted with care and judgment, and the 'Extra Pharmacopeia' remains a book which no pharmacist or

physician who wishes to keep in touch with the latest introductions in curative agents can afford to be without."—*British and Colonial Druggist,* May 6th, 1904.

*The Bloodless Phlebotomist.*—This is a pamphlet issued regularly by The Denver Chemical Mfg. Co., of New York and London, England. It deals with the therapeutic value of their preparation, Antiphlogistine, and shows how that article is of value in any condition where it is considered necessary to deplete, with uniform and certain results.

*Some Recent Medical Publications by well-known Authors.*—Our readers will be interested in reading the announcement appearing on page vi., of this issue of our journal, of Mr. H. J. Glaisher, 57 Wigmore St., Cavendish Square, London. This gentleman has been identified for many years with medical publishing, and has the reputation of placing at the disposal of the profession only works of high standing and scientific interest. Some of those published by Mr. Glaisher are: Froussard (Dr.).—Mucomembranous Enterocolitis. Crown 8vo, sewed, 60 cents net, by post 66 cents. Herschell (George, M.D.).—Indigestion. 3rd edition. Demy 8vo, cloth, 84 cents, by post 92 cents. Ready shortly. West (Samuel, M.D., F.R.C.P.).—On Granular Kidney and Physiological Albuminuria. Demy 8vo, cloth, $1.80 net. Blake (Edward, M.D.).—The Intestinal Catarrhs. Being the 2nd edition of "Colitis, Appendicitis and Their Allies," with a special section on Treatment and Copious Index. The only English Treatise. Demy 8vo, cloth. Freely illustrated. Price $1.20. Cowen (R. J.).—X-Rays: their Employment in Cancer and other Diseases. Crown 8vo, cloth, 60 cents, by post 66 cents. Williams (Charles).—A Short Essay on Insanity. Demy 8vo, sewed, 24 cents, by post 26 cents. Bell (Robert, M.D.).—The Cancer Problem in a Nutshell. Demy 8vo, sewed, 24 cents, by post 27 cents. Prenderville (A. de, M.R.C.S.).—Ethyl Chloride in Surgical and Dental Practice. 3rd edition. Demy 8vo, 24 cents net, by post 26 cents. Cullingworth (C. J., M.D., D.C.L.)—Clinical Illustrations of Diseases of the Fallopian Tubes and of Early Tubal Gestation. Roy. 8vo, cloth, $2.52 net, by post $2.64. Herschell (George, M.D.).—Manual of Intragastric Technique. Demy 8vo, cloth, $1.50 net, by post $1.60. Hutchinson (Woods, A.M., M.D.).—Studies in Human and Comparative Pathology. Demy 8vo, cloth, $3.00 net, by post $3.12. Savill (Thos. D., M.D.).—Clinical Lectures on Neurasthenia. New edition. Demy 8vo, cloth, $1.20 net, by post $1.28. Mr. Glaisher's Canadian representatives, from whom books can be promptly obtained, are: Chandler, Ingram & Bell, Limited, Cor. Yonge St. and Wilton Ave., Toronto.