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Original Contributions.

Certainly it is excellent discipline for an author to feel that he must say all he has to say in the fewest possible words, or his reader is sure to skip them; and in the plainest possible words, or his reader will certainly misunderstand them. Generally, also, a downright fact may be told in a plain way; and we want downright facts at present more than anything else.—RUSKIN.

ADDRESS IN SURGERY.*

BY W. MITCHELL BANKS, M.D.EDIN.

Fellow and Member of Council of the Royal College of Surgeons of England; Surgeon to the Liverpool Royal Infirmary; Emeritus Professor of Anatomy, University College, Liverpool.

THE SURGEON OF OLD IN WAR.

I AM indeed greatly honored by having to deliver to you to-day an address in Surgery. Fortunately for me the title is a wide one, and I shall take advantage of that fact to diverge from the strict consideration of surgical disease, and shall offer you instead a brief sketch of some of the most notable work done of old by a body of members of our profession who have never received their due reward—those, namely, who have devoted their lives to the succor of the sick and wounded in war.

MILITARY SURGEONS IN THE ROMAN ARMY.

Twelve months ago my friend, Dr. Barnes, of Carlisle, ex-President of this Association, made me acquainted with a remarkable paper by the late Sir James Simpson, entitled "Was the Roman Army provided with Medical Officers?"—a paper exhibiting such profound learning, so charmingly written, and so little known

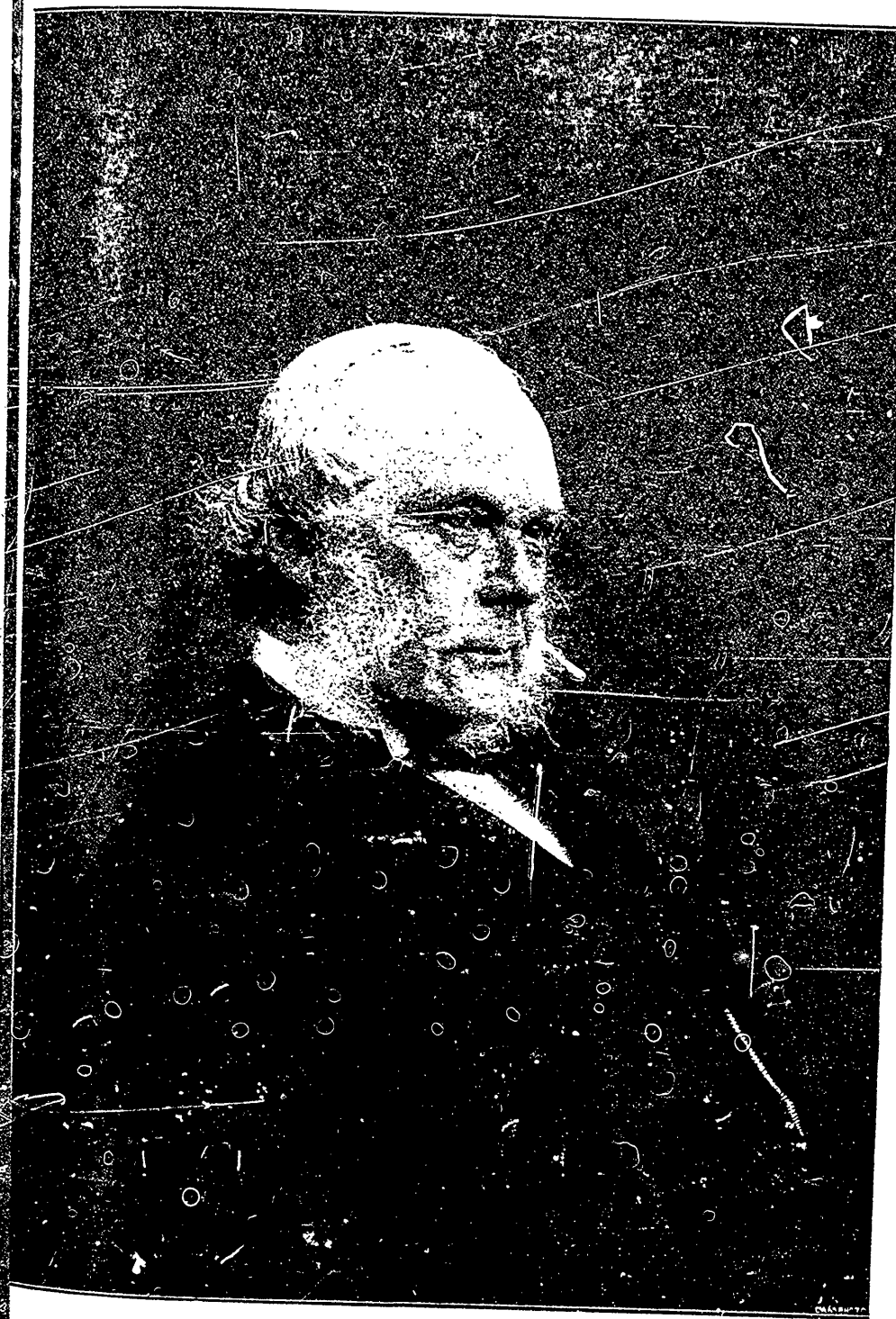
* Read at meeting of British Medical Association, Montreal, September, 1897.

that I need not make any apology for acquainting you with some of its chief points of interest.

The most careful investigations have failed to make out from their writings whether the Romans regularly appointed physicians and surgeons to their armies or not, although nearly every other question relating to their military organization has been treated of, sometimes very fully. Curiously enough, what little information we possess on the subject comes mainly from mortuary or from votive tablets. Borcovicus, in Northumberland—now called Housesteads—was one of the principal stations on the line of Hadrian's wall. Here, about seventy years ago, was found a monumental tablet, now in the Newcastle Museum. On it is the following inscription;

D M	D(IIS) M(ANIBUS)
ANICIO	ANICIO
INGENUO	INGENUO
MEDICO	MEDICO
ORD COH	ORD(INARIO) COH(ORTIS)
I TUNGR	PRIMAE TUNGR(ORUM)
VIX AN XXV	VIX(IT) AN(NOS) XXV

The First Tungrian Cohort is known to have been present at the battle of the Mons Grampius, and to have served at Castlecary, at Cramond near Edinburgh, in Cumberland, and at Housesteads. The tablet is highly ornamented, and antiquarians hold that a rabbit and round bucklers carved in the upper part, which are emblems of Spain, show that the young military doctor was probably a native of that country. From various works treating of Roman inscriptions Simpson was enabled to find that four more tablets, in which surgeons of cohorts are mentioned, existed. They were found at Rome. One of them is a votive tablet, the inscription upon which intimates that it was dedicated by Sextus Titius Alexander to Æsculapius and to the safety of his fellow-soldiers. It was cut in the year of the consulship of F. Flavius Sabinus, which is known to have been A.D. 83. As the Roman legion consisted of ten cohorts, it is interesting to know that there were not only medical officers attached to each cohort, but also one attached to the legion—a sort of surgeon-colonel, as we should call him nowadays. Three tablets have been discovered in which the *medicus legionis* is mentioned. One found at Verona was a tablet raised by Scribonia Faustina to her dearest husband J. Caelius Arrianus, medical officer to the Second Italian Legion, who died at the age of 49 years and 7 months. Furthermore, Simpson routed out of Mommsen's Latin inscriptions of Naples a tablet, now in the Dresden collection, which was found in the Elysian fields near Baiâe, close to the Portus Julius, which was the station of a division of the Imperial fleet. The inscription tells that M. Satrius Longinus, *medicus duplicatorius* to the Trireme Cupid, and the heirs of those freed by Julia Veneria erected the tablet to



LORD LISTER.

the manes of that deserving lady. The term *duplicatorius* means that by reason of long or meritorious service he was entitled to double pay and rewards. These little gleanings from Simpson's paper show what an interesting one it is, and one is astonished at the labor that must have been expended in digging up the information contained in it.

AMBROISE PARÉ.

Hundreds of years went past before there came upon the scene any military surgeon of note, but when he did appear he was a man of transcendent merit—the illustrious Ambroise Paré. From 1517 to 1590, for seventy-three years, he lived a long and incessantly active life, the contemporary of Vesalius, the immediate predecessor of Harvey. We have only to glance at the soldier-surgeon side of Paré's life. For over thirty years he followed the wars under four kings of France—Henry the Second, Francis the Second, Charles the Ninth, and Henry the Third, with intervals of a few years at home in Paris. Perpignan, Metz, Verdun, Rheims, Hesdin (where he was taken prisoner and had to write to his wife for his ransom), St. Quintin, La Fère, Amiens, the taking of Rouen, Dreux, Moncontour—these are but some of the bloody battles and sieges at which he was present. Through them all his humanity, his love of his profession, his independent character, and his jovial, frank disposition carried him safe, and made for the son of the poor country joiner warm friends among the greatest and noblest warriors of France. Even that miserable monster, Charles the Ninth, loved the Huguenot surgeon, and when the awful day of St. Bartholomew came, Paré was spared to tend his wretched master through the brief term of agonized and remorseful life that was given him. The description in Dumas's novel, the "Two Dianas," of the wound of the famous warrior, Duke of Guise, where the lance entered above the right eye and came out between the nucha and the left ear, breaking short off, and how Paré lugged it out, with the chance that when it did come, one terrible gush of blood would finish his illustrious patient's life and his own career at the same moment—the picture of all this is real history.

Amid all the splendid work, both anatomical and surgical which Paré did, the application of the principle of the ligature to bleeding arteries is of course that with which his name will be for ever associated. In this day of grace it is impossible for us to imagine the horrors that awaited a wretched man so soon as his limb was cut off and the process of stopping the bleeding began. Think of the raw and exquisitely sensitive stump exposed to the red-hot cautery or plunged into boiling pitch! For this frightful treatment Paré substituted the ligature, which in our own day, employed in the form of an aseptic animal material which the tissues quietly absorb, has practically reached the pitch of perfection. In his time, too, there was a fixed belief that the danger from gunshot wounds arose from the poison of the gunpowder

conveyed on the bullet. To destroy this poison the treatment was to pour into the wound boiling oil in which elderwood bark had been stewed. On one occasion, not having this infernal concoction at hand, Paré used a cold mixture of yolk of egg, oil of roses, and turpentine to his wounded soldiers. He passed a sleepless night from dread that this would injure those to whom it had been applied, and his delight next day was proportionately great when he found that they had had but little pain, while their wounds were free from inflammation and swelling. This was his panacea for wounds ever afterwards. There are of course persons who wish to make out that he was not original in the matter of the ligature. He himself says this about it: "Taught me as I interpret it by the suggestion of some good Angel, for I neither learnt it of my masters nor of any other man. And thus I wish all chirurgions to doe. For it is not in our Art, as it is in civill affaires, that prescription, law, or authority should prevail over right reason." But these cavillers have doubtless never heard of an ancient proverb which says that there is nothing new under the sun. In spite of them the world will ever believe in a glorious trio—Paré, the Frenchman, who invented the ligature; Morton, the American, who discovered anæsthetics; and Lister, the Englishman, who introduced antiseptics. In the fulness of years, possessed of affluence and surrounded by friends, died Paré, the whilom poor barber-chirurgeon. now a Councillor of State and Surgeon-in-Chief to the King. One final touch will perhaps reveal a sentiment that permeated and guided his every labor. On one occasion, after the successful treatment of a wounded officer, he made this wise and reverent remark, afterwards adopted as his motto: "*Je le pansay; Dieu le quarist*"—I treated him; God cured him.

ROBERT CLOWES.

Coming to England, a surgeon who saw no little fighting was Robert Clowes, who was born somewhere about 1540 and died in 1604. He served in France in the army commanded by the Earl of Surrey, and was afterwards for several years in the navy. He then began practice in London and was made surgeon to St. Bartholomew's and Christ's Hospitals. But. after being about fourteen years in civil practice, he was despatched by Queen Elizabeth's orders into the Low Countries to attend upon the Earl of Leicester, Commander of Her Majesty's forces. He was at Zutphen when Sir Philip Sydney was killed. His last piece of service was a glorious one, he being with our fleet that defeated the Spanish Armada. It is told of him that he always kept beside him his military surgical chest with the bare and ragged staff of his old chief Leicester on the lid. He finally settled down once more in London, where he was very successful in practice, and was made surgeon to the Queen. He wrote several works in English, of which the most important is entitled "A profitable and necessarie

Booke of Observations for all those that are burned with the flame of gunpowder, &c., and also for curing of wounds made with musket and caliver shot, and other weapons of war commonly used at this day both by sea and land." A good half of this treatise is occupied with a record of surgical cases of note which he had treated, and this renders the work very entertaining, inasmuch as we get an accurate and positive knowledge of everything that was done for a wounded man in those days, while there are numerous little side-touches very characteristic of life at the time it was written. He tells us, for instance, of "The cure of one Master Andrew Fones, a merchant of London, which, being in a ship at the sea was set upon by the Flushingers, in which fight he was very dangerously wounded with gunshot" There is "The Cure of one Henry Rhodes, one of the waiters at the Custom House, he being upō the river of Thames a skirmishing with his peece, and by reason the peece had certain flaws in it, did breake into many peeces, and made a great wound upon his chin, and carried away a good part of the mandible and the teeth withall; moreover, it did rend his hand greatly; all which I cured without maime or deformitie." There is "An observation for the cure of the master of a Hoy that had both his legs fractured and broken in many peeces with an iron bullet, shot out of a great basse or harquebusse of crock at the sea by a Pyrat or sea rover." These few titles will give you an idea of Clowes's clinical cases. The importance which attaches to them, and the reason why they constitute a distinct advance in the science of surgery is that the author gives his actual experiences and tells us what he did to his patients, whereas at that period the tendency was to write endless commentaries on ancient writers, to whose every dictum the blindest and most unreasoning respect was paid.

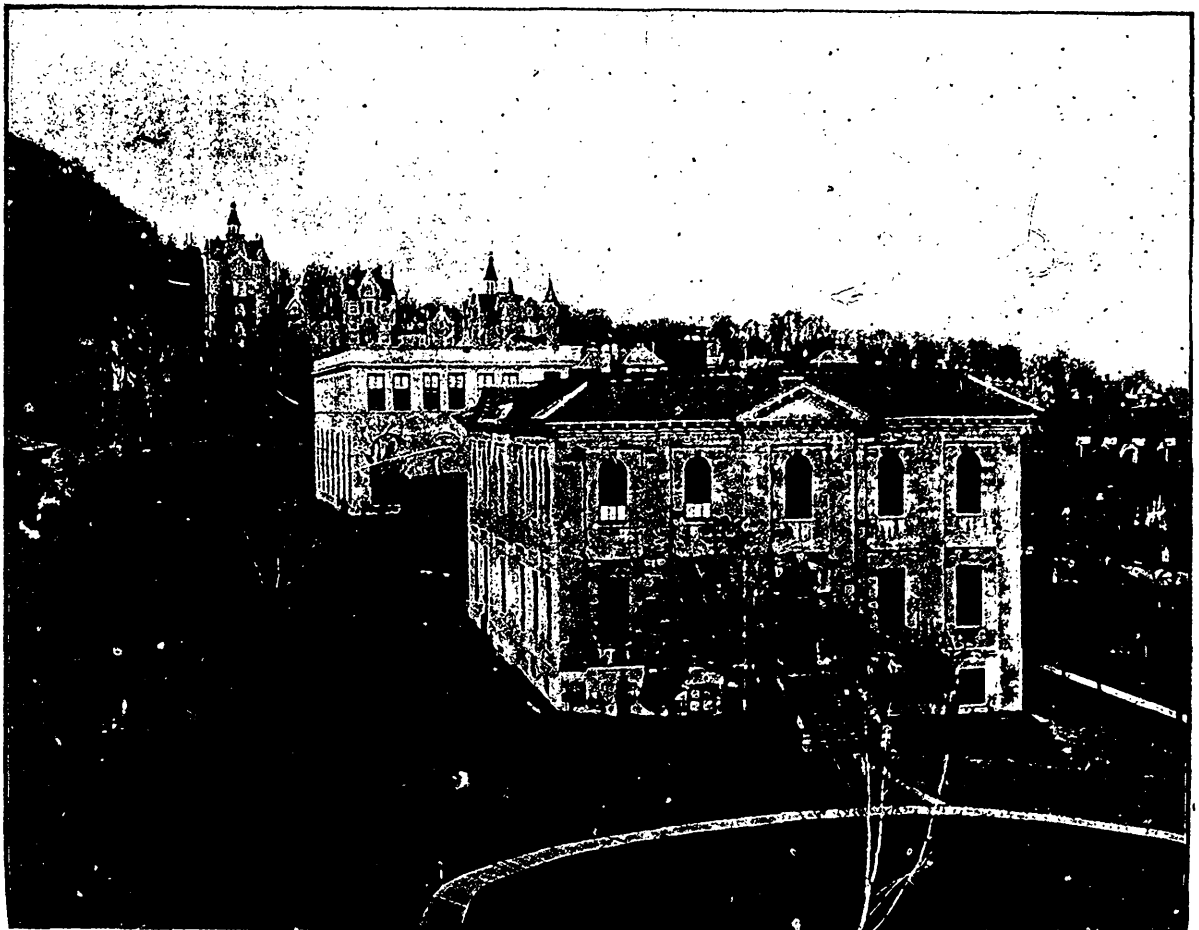
PETER LOWE.

Contemporary with Clowes was a most interesting character—Maister Peter Lowe—who was born in Scotland about 1550, and lived some sixty or sixty-five years, reaching well into the seventeenth century. Like many of his countrymen, he went to France when very young, where he lived, for some say ten, some twenty years. Then he returned to Glasgow, where he lived and died a citizen of much renown, having obtained in 1599 from King James the Sixth a charter for the Faculty of Physicians and Surgeons of Glasgow, which he thus founded. A few years ago Dr. Finlayson published a most charming account of Maister Peter.

His most important work is termed "A Discourse of the whole art of Chirurgery, compiled by Peter Lowe, Scottishman, Doctor in the Faculty of Chirurgerie at Paris, and ordinary Chyrurgion to the French King and Navarre." The first edition dated from 1597, and is one of the earliest, if not the very earliest, work embracing the whole art of surgery published in English. It is clear that Lowe must have seen a good deal of military service

abroad, being "Chirurgion Major to the Spanish regiments two years at Paris, and since that time following the King of France my maister in the warrs." In his day, as we have seen, the surgical world was still greatly exercised about gunshot wounds and burning by gunpowder, as it was believed that they were injuries of quite a peculiar and very poisonous character. Lowe, however, treats of them with great good sense. Thus: "Of Wounds done by Gun-shot.—These wounds come indifferently to all parts of our body whereof there are divers opinions; some think that there is a venenosity in the powder, and burning in the bullet, which is false, for the things whereof the powder is ordinarily made, as Brimston, Saltpeter, coales of divers sorts of trees, Water, Wine and Aquavitæ, have no venenosity in them; likewise there is no burning in the bullet, for if the bullet of lead being shot a great way, should burne, through heat would be melted itself. I have cured divers within these thirty yeares of divers nations which have followed the warres in Fraunce and other cuntries, in the which I have found no more difficulty than in any other contused wounds." Here, again, we have a most important advance made by a military surgeon, for only those who are acquainted with the medical literature of Lowe's time can understand the ridiculous views then held about gunshot wounds, and the dreadful consequences to the patients which followed from them.

We have seen that Paré lived between 1517 and 1590, and that Peter Lowe was in France between 1570 and 1580; consequently, he probably learnt all about the ligature for the arrest of hæmorrhage. When treating of amputations he describes the whole process of the operation up to the removal of the limb. Then he says: "One of the Assisters shall put the extremities of his fingers on the great vains and arteries to stay them from bleeding till the Chyrurgion either knit or cauterise them one after another. Where there is putrefaction we stay the flux of blood by Cauters actuals, and where there is no putrefaction, malignitie nor humour venomous we use the legator." He narrates the case of a certain valiant Captain Boyle, of the Spanish troops, whom he, in the capacity of Chyrurgion-Major to the regiment, was summoned to treat for an "aneurisme on the right side of his cragge." Lowe ordered it to be let alone, "but the captain sent for an ignorant Barbor who did open the swelling with a launcet, which being done, the spirit and bloud came forth with such violence that the Captain died in fewe howers after." Having duly castigated the Ignorants who do such things, Lowe observes that his treatment for such cases is first to draw blood in both arms, and then to apply on the tumor "Rec, Pulveris subtilissimi boli arminici, sanguis draconis, myrtilorum, lapidis calaminaris in aceto extincti, absinthi ad unc. cum cerato refrigerantis Galeni quantum sufficit, fiat unguentum." Curious to note how, even in men of distinct ability like Lowe, a complete ignorance of pathology dragged them into the perpetration of the silliest empiricism.



MEDICAL BUILDINGS, McGILL UNIVERSITY, MONTREAL.

WOODALL'S "VIATICUM."

In 1628 appeared the first work in England specially devoted to military and naval surgery. Some eleven years later a second edition appeared, and this is its title—"Viaticum, being the Pathway to the Surgeon's Chest, containing chirurgical instructions for the younger sort of surgeons imployed in the service of His Majestie or for the Common-Wealth upon any occasion whatsoever intended for the better curing of wounds made by Gunshot, by John Woodall." A perusal of the "Viaticum" shows that Woodall was a very practical surgeon and an eminently religious man, and the way in which he mixes up pills and piety is sometimes very diverting. After some excellent general advice to the surgeon's mate, including a warning against "being given and dedicated to the Pot and Tobacco-pipe in an unreasonable measure,"—he enumerates the instruments for the Surgeon's Chest, including among others Catlings, Rasours, Trapans, Trafine, Lavatories, Cauterising Irons, Storks bills, Ravens bills, Crowes bills, Terebellum, Probes or flamules, Glister Sirings and (what would have utterly damned his book in the present day) "one bundle of small German instruments." Then comes a list of medicines under the heading Unguentum, Aqua, Sol, Oleum, Chemicall Oyles, Syrups, Conserva, Electuariæ, and so on, winding up with a list of the Simples, and of the Herbs and Roots most fit to be carried. A long and careful description of the uses of the instruments and drugs follows, and then come chapters on wounds, apostumes, fractures, dislocations, amputation, scurvy, the plague, gangrene, and other topics. He observes that the cauterising irons had gone somewhat out of fashion, and he did not use them much himself "because of the feare they put the Patient into and for speech of people who are ready to scandalise an Artist upon each light occasion." In amputation, moreover, they are "now wholly forborne for reasons aforesaid, and for that a more pleasant course is known, better for the patient and the Artist by making a ligature upon the veine, wound or artery, which is the binding of each end thereof, being first caught and holden with some fit instrument, and tied with a sure and strong thread."

Woodall advances the cure of wounds a distinct step, once more putting us under an obligation to the soldier-surgeon. This he does by sharply attacking all through his works the inordinate and meddlesome use of strong caustics. He says that he had seen men lamed by the needless use of caustic medicines, even in slight wounds to which if an old wife had only applied her one salve for all sores, no such thing had happened. "They will not see a wound incarne and red and good flesh to grow, but straight they slander it of pride, and call it proud flesh, like their owne; and then must at the fairest Precipitate or Vitriale burnt goe to work, yea though the Patient be lame for it, or at the least the griefe put back again."

RICHARD WISEMAN.

I wish I had time to give you a proper account of the adventurous life of Richard Wiseman, who has been termed the Father of English Surgery, and that not without reason. Born in 1620, dying in 1676, he lived in the time of Charles the First, of the Commonwealth, and of Charles the Second. He was a naval surgeon to begin with, serving in the early part of his life in the Dutch navy. Being, however, a devoted Royalist he served with the armies of Charles the First, and after his death went into exile with his son in France. He was present at the battle of Worcester, where he was taken prisoner, and afterwards confined in Lambeth House for awhile. During the Commonwealth he was naturally under a cloud, and even went off for three years to serve in the Spanish navy. At the restoration the King did not forget his old surgeon, who had done and suffered so much in his service, but appointed him his surgeon-in-ordinary, and afterwards serjeant-surgeon. The first edition of his work, printed in 1672, is quite a small book, and is entitled "A Treatise of Wounds," but it afterwards expanded into a very large volume.

Nothing reveals a man like his own words, and so in trying to give you an idea of these old worthies I have let them tell their own stories. Wiseman believed in the need for giving stimulants to a man who was in the habit of taking them, if that man was in a dire strait. After describing the parlous case of a certain patient, it seems that the "man swooned and complained that he could not live without wine. I complied with his desire; he drank again as he pleased, his sickness went off, his wound digested, and he cured. This I have often seen in some of our Dunkirkers at sea, who drank extraordinarily, and were full of drink in our sea fights. I could scarce ever cure them without allowing them wine, and thereby their spirits were kept up, and I had the liberty to bleed them as I thought fit." From this it is clear that the old saying about Dutch courage has a distinct origin in fact. But if the unhappy Batavians were liable to be bled at once by the lance of the enemy and the lancet of the surgeon, one can hardly wonder at their taking something to keep their spirits up.

When speaking of gunshot wounds, he insists upon the bullet being searched for and extracted at once. "The part is at first dressing, with what diligence you can, to be cleared of all such Foreign Bodies as have made violent Intrusion into it, while the patient is warm with the heat of Battel, and the wound fresh and very little altered by either Air or Accidents, so that less pain must necessarily follow upon the extraction. In the *Armada Naval de Dunquerque*, where we Chirurgeons were oft employed in this service, we after every fight went together visiting one another's wounded men. Amongst us it was thought a great shame if any of this work of Extraction was there to be done. It hath been the cause of the death of many a brave Souldier, and every Battel

produces instances of it, to the discredit of our profession." This is good surgery and straight talk. I think it must have been a fine spectacle to have seen these rough old surgeons, with their limited knowledge and their miserable means of treatment, walking round to see each other's patients and learning how best to mend their mistakes.

He has a chapter entirely devoted to a great case of a fracture made by a splinter. The patient had his arm badly smashed above the elbow, and ought to have had it amputated; but a sudden cry of fire stopped this. "I hastily clapt a dressing upon his wound and rouled it up, leaving his arm in his other hand to support it, and endeavored to get up out of the hold as the others did, I verily believing I should never dress him or any of them more. But our men bravely quitted themselves of the Fire-ship by cutting the Sprizil Tackle off with their Hatchets (which they wore during fight sticking in their Shashes); we were freed of the fire, and by our hoisting up the top sails got free of our Enemy. Now, I was at a loss what to do with this man, who lay not far off complaining of his arm. I would have cut off his arm presently with a Razor (the Bone being shattered there needed no Saw); but this man would not suffer me to dress his arm; he cryed 'it was already drest.' The Fight over we got into the next Port; I caused presently the Mariner's Bed to be set up (which was four pieces of wood nailed together and corded, and a Bear's skin laid upon it); this was fastened between two Guns to the Carriages." Wiseman then set hard to work to save this unfortunate mariner's arm; but "when it came to my turn to be visited by my brother Chirurgeons of our Squadron, they did not dislike the wound nor my way of dressing (for we, being used to see one another's Patients, had all much one way of dressing); but they laught at the excuse I made for not cutting of his arm, and doubted I should yet be forced to do it. But at the end of two months, there was in this Patient a strong callus, filling up the void place of the lost Bone at least two inches, with little or no shortening of the arm." Well done, Wiseman!

BARON LARREY.

Up till the time of the French Revolution it is clear that military surgeons were not men of much importance, and probably had very little influence, if any, in the conduct of campaigns. But in the latter part of last century war was made on a scale which was never known before, and was made also with a rapidity and a precision quite unprecedented. Moreover, the science and art of surgery had been rescued from quackery, and surgeons in actual practice were able to be of great and real service to the wounded. As a result of the vast masses of men that were hurled against each other, the number of wounded after a big battle amounted to thousands, and civilization had so far advanced that it was imperative that immediate help should be given to them. So that about

this time the military surgeon really became an important officer in warfare, and began to have his rank and pay well defined, and his merits (up to a certain point) recognized.

In 1776, near the Pyrenees, was born Jean Dominique Larrey, the Chirurgien-in-Chef de la Grande Armée, the friend and body surgeon of Napoleon. the greatest military surgeon that ever lived. He studied at the medical school at Toulouse, and in 1792 joined the headquarters of the Republican Army of the Rhine under Custine. Now, the ambulances of those days were obliged to remain about a league from the army, and the wounded were only picked up after the fighting was done. General Custine was a man who moved his troops very rapidly, which made matters worse for the wounded. This greatly affected Larrey, who set to work and devised a new ambulance hung on springs and combining great strength with lightness. Such carriages were termed *ambulances volantes*. They could keep up with the advanced guard of the army with the speed of flying artillery, and they carried off the wounded almost as they fell. Larrey had early perceived the enormous advantage a wounded man got by having his fracture set or his bleeding stopped as rapidly as possible, and by then getting a roof over his head before night set in. General Beauharnais, in a despatch to the Convention, made special mention of "Surgeon-Major Larrey and his comrades with flying ambulances, whose indefatigable care in the healing of the wounded has diminished those afflicting results to humanity which have generally been inseparable from days of victory, and has essentially served the cause of humanity itself in preserving the brave defenders of our country." The staff of a flying ambulance was about 340 in number. For each division there were four heavy carriages and twelve light ones. Some had two and others four wheels, and they were furnished with mattresses. In Napoleon's Italian campaigns they came greatly to the fore, and the great man displayed a lively interest in them, reviewing them and causing them to manœuvre before him just as if they were on a battle field. After one of these inspections he said to Larrey: "Your work is one of the most happy conceptions of our age. It will suffice for your reputation."

When Napoleon undertook his Egyptian campaign Larrey proceeded to Toulon to organize the medical staff. So readily did professional men respond to the call made by him that he soon was able to reckon on 800 well-qualified surgeons, of whom many had served in the army of Italy, and these were in addition to the medical officers actually attached to regiments. This, I think, shows the value that the king of commanders set upon the health of his troops, and the trouble and expense which he was prepared to face in order to maintain it—a great contrast to the miserable way of dealing with this subject, which has too long been the fashion with our military rulers. Not long after the landing at Alexandria a certain General Figuières was severely wounded.

CHEMICAL LABORATORY, McGILL UNIVERSITY, MONTREAL.

By able treatment he recovered, and in gratitude for the preservation of his life he asked Napoleon to accept a valuable Damascus sword. "Yes," said the latter, "I accept in order to make a present of it to the Surgeon-in-Chief by whose exertions your life has been spared." Upon the sword were engraved the words Aboukir and Larrey, and the surgeon had it to the fatal day of Waterloo, when the Prussians robbed him of it. Some months after the occupation of Egypt a terrible revolt took place in Cairo by fanatical Turks. Utterly regardless of anything except how to get at Frenchmen to murder them, they attacked the hospital, which was crowded with sick and wounded soldiers, but the doctors valiantly defended their patients, and two staff-surgeons, Roussel and Monjin, were killed, while Larrey nearly shared the same fate.

At one period there was a total dearth of meat, and Larrey had nothing wherewith to make even a drop of bouillon for his patients. He ordered camels' meat to be used for this purpose, and, when that fell short, he used up the horses. Years afterwards, in the second campaign against Austria, the Imperial Guard and several other corps were crowded together in the island of Lobau in the midst of the Danube, which Napoleon was endeavoring to cross. The days were roasting and the nights icy cold, and provisions became so scarce that Larrey's patients were in danger of starvation. Without more ado he impounded certain officers' horses and had them slaughtered and employed as food. As there was a lack of kettles, he employed the cuirasses of those who had been killed, and made his horse-flesh soup and stews in them. Certain generals made bitter complaint to the Emperor of Larrey's proceedings, who summoned the Surgeon-in-Chief, and in the presence of his staff demanded an explanation with a severe expression of countenance. "What!" he said, "have you on your own responsibility disposed of the horses of the officers in order to give soup to your wounded?" "Yes," answered Larrey. He added no more, but soon afterwards he heard of his promotion to the rank of Baron of the Empire.

One of the most appalling retreats, next to that from Moscow, was Napoleon's retreat from the invincible walls of St. Jean d'Acre through Jaffa. There is no doubt that at that place a considerable number of patients sick of the plague were quietly put out of their misery by opium. Allison says sixty; Sir Robert Wilson says five hundred and eighty. The retreat had to go on, the Turks were only an hour's march behind, and nothing but a cruel death awaited these unfortunates, so that whether this was a justifiable deed or not, may well give ground for argument. But, as Allison says: "History must record with admiration the answer of the French chief of the medical staff when the proposal was made by Napoleon to him: 'My vocation is to prolong life, and not to extinguish it.'"

In those days means of transport were so inferior, and the necessity for removing hopelessly damaged limbs as soon as possible

after the injury so imperative, that amputations were performed on the field of battle, while it was still raging, and amid showers of bullets. During the battle produced by the landing of the English at Aboukir Bay, General Silly had his knee crushed by a bullet. Larrey saw that unless the leg was promptly amputated the case would prove fatal, and the general giving his consent, the operation was performed in the space of three minutes under the enemy's fire. Just then the English cavalry came upon them. "I had scarcely time," said Larrey, "to place the wounded officer on my shoulder and carry him rapidly away towards our army, which was in full retreat. I spied a series of ditches, some of them hedged with caper bushes, across which I passed, while the enemy, owing to the ground being so cut up, had to go by a more circuitous route. Thus I had the happiness to reach the rearguard of our army before this corps of dragoons. At length I arrived at Alexandria with this honourably wounded officer, where I completed his cure." We must all agree that these were a pair of heroes.

As may be imagined the awful retreat from Moscow called into play all Larrey's resources, and many an interesting story could be told of his efforts. Think of the awful battle of the Borodino, where under Larrey's own direction two hundred amputations were performed, where there were neither couches nor blankets nor covering of any kind, and where the food consisted of horseflesh, cabbage stalks and a few potatoes; think of cold so intense that the instruments requisite for the operations too often tumbled from the powerless hands of the French surgeons. Think of the savage Cossacks hovering about the while, and waiting their chance to kill the surgeon and the wounded man equally with the combatant. Then came the passage of the Beresina. Take an incident of it. Among the wounded was General Zayonchek, who was over sixty years of age. His knee was crushed, and without amputation the saving of his life was impossible. It was performed under the enemy's fire, and amid thick falling snow. There was no shelter except a cloak, which two officers held over him while the operation was being performed; but the surgeons did their work with such coolness and dexterity that the old general survived, and died fourteen years afterwards Viceroy of Poland. Larrey succeeded in getting over the Beresina with the Imperial Guard, but discovered that the requisites for the sick and wounded had been left on the other side. At once he recrossed the river, only to find himself in the midst of a furious struggling crowd. He was on the point of being crushed to death when providentially the soldiers recognized him. No sooner did they do so, than they carried him across the river in their arms, with the cry, "Let us save him who saved us!" And forgot their own safety in their desire to preserve the man whose tender kindness they had so often experienced.

Following his adored master through victory and defeat, Larrey at last stood at night on the field of Waterloo alone, except for some medical officers and the wounded who lay groaning

around them. Down upon them came a squadron of Prussian lancers. Expecting no quarter he fired his pistols at them and galloped away. They shot his horse and sabred him as he lay on the ground. Leaving him apparently dead they went off. But he recovered his senses, and tried to crawl by cross roads into France. Again he was seized by another detachment of Prussian cavalry. They robbed him promptly of all he possessed, and took him before a superior officer, who ordered him to be shot. What a reward from a soldier to one whose life had been passed in succoring soldiers! About a quarter of an hour before the sentence was to be carried out, a surgeon-major recognized Larrey. He had attended with deep interest a course of lectures which Larrey had delivered in Berlin six years previously. The prisoner was brought before Bulow, and finally presented to Blücher, whose son in the Austrian campaign had been badly wounded, and captured by the French, and who owed his life to Larrey's exertions.

Larrey's honorable and glorious life terminated in 1842. Napoleon, when he made his will at St. Helena, wrote in it: "I bequeath to the Surgeon-in-Chief of the French Army, Larrey, 100,000 francs. He is the most virtuous man I have ever known." From Napoleon's lips the words of free, spontaneous, ungrudging praise such as this rarely fell.

PESTILENCE MORE DEADLY THAN THE SWORD.

In the middle of last century, while surgery had distinctly improved, the gross neglect of the Government, and the pig-headed obstinacy of the generals was such that our unfortunate soldiers and sailors were hardly any better off than they were in the days of Paré. It has been maintained that Smollett, in the appalling picture of naval life as witnessed in the miserable expedition to Carthagena which he drew in "Roderick Random," and which is known to have been the record of his own experience as a surgeon's mate, grossly exaggerated the evils thereof. I do not believe this. Look at the awful and unsuccessful expedition to Porto Bello in 1726, when nearly the whole of the crews of the ships were destroyed by fever three times over; where 2 admirals, 10 captains, 50 lieutenants, and about 3,000 to 4,000 inferior officers and men perished without striking a blow. Look at the taking of Havannah in 1762. The Earl of Albemarle took with him in the fleet 11,000 soldiers. Between June and the middle of October, when Cuba was ours, we had lost 560 men by wounds, and 4,708 by sickness. At the end of the Seven Years' War, a statement was drawn in the "Annual Register" for 1763 from which it appeared that in all the naval battles of that war there were but 1,512 sailors and marines killed, while 133,738 had died of disease or were "missing." Look even at the end of last century, and consider the wretched and disgraceful Walcheren campaign. Never did our poor soldiers fight with more gallantry than in that campaign, only to perish beside Dutch ditches and canals from fever and ague and dysentery.

MILITARY COURAGE.

As we have just seen, Baron Larrey's whole life shows that, while absolutely devoted to the work of his profession, he displayed a cool courage on the field of battle not less heroic than the more dazzling deeds of his fellow combatant officers. Not less does it mark the military surgeon of the present day. Have you ever heard of Surgeon Thomson who, during the Crimean war, when the army marched off after the battle of the Alma, volunteered, with his servant, John McGrath, to remain behind on the open field with 500 terribly wounded Russians, and passed three awful days and nights—these two Englishmen alone—among foreign foes, some dead, some dying, and none able to raise a hand to help themselves? Have you ever heard of Assistant-Surgeon Wolseley, of the 20th Regiment, who, at the battle of Inkerman, had quietly established his field hospital in that awful place, the Sandbag Battery? When the 150 men, who were all that remained of its defenders, were forced to desert it, about one hundred of them fell back in one direction, and in that they found, at thirty paces from them, a Russian battalion blocking their path. There was not a combatant officer left, so the assistant surgeon took command. He had not even a sword with him, but, laying hold of a firelock with a fixed bayonet on it, he spoke a few words to the men within range of his voice, and told them that what they now had to fight for was not victory but life. Then he gave them the word of command: "Fix bayonets, charge, and keep up the hill." The soldiers answered him with a burst of hurrahs, sprang forward to the charge, and the next instant were tearing through the thickest of the Russians. One half of these reached the other side alive. Have you ever heard of Surgeon Landon, who was shot through the spine while attending to the wounded on Majuba Hill? His legs were paralysed, but he caused himself to be propped up, and continued his merciful work till his strength ebbed away. When unable for more he quietly said: "I am dying; do what you can for the wounded." Have you ever heard of Surgeon-Captain Whitchurch, who gained the Victoria Cross at the beleaguering of Chitral for the most determined courage in endeavoring to save the life of Major Baird? Yes, you have, for last year at Carlisle you gave him the gold medal of the Association, the highest honor which our Association can give to its members. There died the other day a certain Surgeon-General Reade, C.B., V.C. During the siege of Delhi, while attending to the wounded at the end of one of the streets of the city, a party of rebels advanced from the direction of the bank, and having established themselves in the houses in the street commenced firing from the roofs. The wounded were thus in very great danger, and would have fallen into the hands of the enemy had not Surgeon Reade drawn his sword and, calling upon a few soldiers who were near to follow, succeeded under a very heavy fire in dislodging the rebels from their position.

Surgeon Reade's party consisted of about ten in all, of whom two were killed and five or six wounded. Ladies and gentlemen, Surgeon Reade was a Canadian, and the son of a colonel of the Canadian Militia. Of the 118 wearers of the Victoria Cross fourteen are surgeons, nearly 12 per cent. of the whole number. They stand in the proportion of 9½ per cent. of all the officers of the army, so at all events they have contributed not less than their fair share of the deeds of valor which alone can win that glorious distinction.

THE ARMY MEDICAL SERVICE TO-DAY.

Ladies and Gentlemen,—I have diverged from the beaten track common to the givers of addresses such as this to tell you what splendid men have been the military and naval surgeons of old, who not merely did their duty nobly and courageously as such, but who have in their day enormously contributed to the advance of the art of surgery. I have done it with a purpose; with the hope of attracting more strongly than ever the sympathy and help of this great Association to their military brethren in a critical juncture of their history. To-day Her Majesty's Government cannot induce candidates to come forward for the medical service of the Queen's army. And why? Because it has persistently treated the Army Medical Department meanly and shabbily. To-day the Government of India can secure the services of the pick of our newly fledged doctors for its army. And why? Because it has always treated the Indian Medical Service liberally and generously. I am not going to enter into the reasons for this; I desire merely to emphasize one point, namely, that money is not at the bottom of this difficulty. The soldier-surgeons of to-day are the same men now that they were in the days of William Clowes, who winds up his book, as I shall my address, with these verses:

> When valiant Mars, with brave and warlike band,
> In foughten field with sword and shield doth stand,
> May there be mist a surgeon that is good,
> To salve your wounds and eke to stay your bloud.
>
> To cure you sure he will have watchful eie,
> And with such wights he means to live and die,
> So that againe you must augment his store,
> And having this he will request no more.

Dr. Albert A. Macdonald leaves this month for England on a six weeks' vacation.

Dr. W. J. Wilson has purchased No. 159 College Street and intends removing there at once.

Dr. George Elliott, of 129 John Street, was married to Miss Sophia Gardiner on August 24th.

Dr. Holford Walker returned to Toronto on August 24th, after spending several weeks at Nauheim.

The British Medical Association

MONTREAL MEETING, AUGUST 31ST TO SEPTEMBER 3RD.

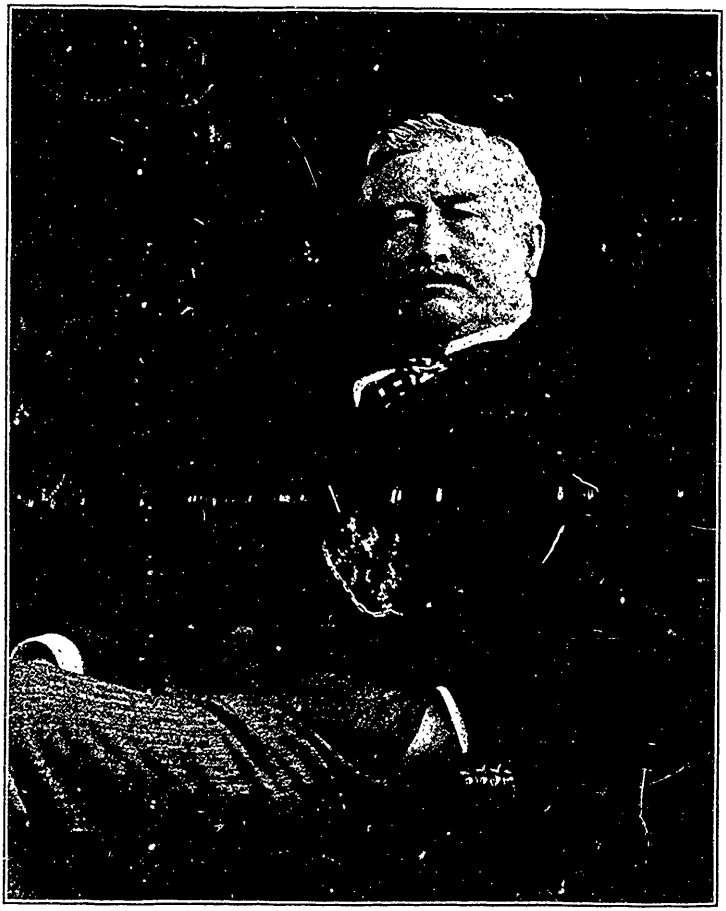
PRESIDENTIAL ADDRESS.

[*Abstract.*]

In welcoming most cordially the members of the Association, the President, Dr. Roddick, M.P., referred to the meeting as an honor to the country, and as serving to impress still more upon the memory of Canadians the year 1897, the Jubilee year of the great and good Queen Victoria. He referred in the most complimentary terms to the recent visit of Sir Wilfrid Laurier to Great Britain. Sir Wilfrid's presence in England as the chosen representative of the Dominion, was an object lesson to the Empire and to the world of the harmony existing between the two nationalities which comprise the Canadian people. It gave him special pleasure to see so many American physicians and surgeons at the meeting, a proof of the cosmopolitan character of the medical profession. He also referred in appreciative terms to the official representative of France, professor of physiology in the University of France, who would feel that he comes not to a foreign country, for in the Province of Quebec he will find another France with a delightful mingling of the old with the new, his own beautiful language spoken with all the grace and purity of the old *régime*. Reference was made likewise to Lord Lister, the most illustrious surgeon of this generation, who has made operative proceedings possible which only twenty-five years ago would have been considered criminal. Our Sovereign in conferring upon him the richly deserved distinction which he bears with such gracious dignity, only gives expression to the general feeling of his countrymen throughout the Empire and his admirers the wide world over.

The speaker then gave an interesting sketch of the rise and progress of the British Medical Association, which was founded in 1832, by Sir Charles Hastings, M.D., of Worcester, for the benefit solely of the provincial profession of England; but which now not only embraces the whole of the British Isles, but extends to that Greater Britain beyond the seas, until it is now of Imperial proportions and importance. There are sixty-five branches of the Association at present in existence, and a collective membership of over 17,000. Of these branches, twenty-seven are in India and the colonies. There are seven branches in Canada. Much of the success of the Association is due to the untiring efforts of Mr. Ernest Hart, the editor of the *British Medical Journal*, and to the financial and administrative ability of Mr. Francis Fowke, the Secretary and General Manager of the Association. The Canadian

people, and especially the citizens of Montreal, are highly flattered and gratified that Canada should be the first country outside the United Kingdom to be honored by a meeting of the British Medical Association. It was suggested that the great Island Continent of



T. G. RODDICK, M.D.,
President British Medical Association

the antipodes, Australia, would at no distant date welcome the Association, either at Sydney or Melbourne; and assurances were given that if ever a meeting was held under the Southern Cross, the hospitable Australians might count on a large contingent from the Dominion of Canada.

The President next proceeded to discuss the climatic conditions, the health resorts and the "Spas" of Canada. The chief health resorts of Canada are the St. Agathe region, in the Laurentian Mountains, known as the Adirondacks of Canada; the Muskoka

HENRY BARNES, M.D., F.R.S.E.,
Ex-President British Medical Association.

Lake region, in Ontario; Southern Alberta, in the North-West Territories, and the beautiful valley of Kamloops, between the Rocky Mountains and the Cascade Range. That Canada is an exceptionally healthful country has been proved repeatedly by obser-

vation; showing that the Anglo-Saxon and Anglo-Norman not only increase in strength in this country, but also increase in height and weight.

The best known Canadian "Spas" are the Caledonia, the St. Leon, the Plantagenet and the Thermal Springs of Banff. Among the artesian wells or springs are the Laurentian and Radnor, a rival of Apollonaris. People suffering from subacute and chronic rheumatic conditions are quickly benefited by the Caledonia water; while the far-famed Thermal Springs of Banff have been used with decided success in rheumatism, gout, sciatica and glandular affections, in certain forms of skin disease and in tubercular affections of the skin and mucous membrane.

Medical Education in Canada.

In speaking of medical education the President made a strong plea for the establishment by universities of a special scientific course for students who ultimately intend to study medicine. He suggested a course embracing Latin, Greek, French, German, physics, chemistry, biology, psychology, elementary mechanics, a practical laboratory course on electricity, and drawing. After two years' study this might entitle the successful candidate to the degree of Licentiate in Science. Reference was made at some length to an arrangement which is now being carried out in the University of McGill, whereby it is possible for students to obtain the degree of B.A., along with M.D., C.M., after only six years of study. The primary subjects, anatomy, physiology and chemistry in medicine, are made to count as subjects of the third and fourth years in Arts. It follows, then, that at the end of four years' study, a student may obtain his B. A. degree, and have two years of his medical course completed. The speaker hoped that ere long every graduate in medicine shall of necessity be also a graduate in Arts or Science; at present about 20 per cent. have that qualification.

Turning to professional education, the speaker stated that there were in Canada eleven medical schools, including one for women only; all having the power of granting degrees, and all connected directly or by affiliation with the university bodies. There were in Canada, all told, during the last winter sessions, 1,736 medical students and 286 teachers, including professors, lecturers and demonstrators. He then went into details, and showed how high the standard of medical education is throughout the Dominion, and how thoroughly abreast of the times it is. He spoke of the munificence of such Canadians as Sir Donald Smith (now Lord Strathcona and Mount Royal), the Molsons and others, to whom medical education owed so much. He referred at some length to the new department of hygiene recently established in connection with the medical faculty of McGill University, thanks to the generosity of the same nobleman. In speaking of nurses and nursing, the reader

of the address referred to the recent establishment by the Countess of Aberdeen of the Victorian Order of Nurses, and strongly commended the scheme which will doubtless soon be one of the national institutions of Canada.

Medical Legislation in Canada.

On Confederation, in 1867, the legislatures of the several provinces were empowered exclusively to make laws in relation to education; hence there is no uniformity in Canada respecting the standard of medical education or qualifications for practice. Each province has its own Medical Board or Council, which grants license after an examination or under certain restrictions, on presentation of the diploma or degree of a recognized university. The Maritime Provinces have just established what Ontario and British Columbia already possess, an Examining Board. Medical men of one province cannot pass into another on their professional rounds, unless armed with a license. Two remedies for this evil have been suggested; the establishment of a central Examining Board in each province, with a uniform standard, to be subsequently followed by some scheme of reciprocity; or a Dominion Examining and Registering Board which shall be composed of the best men from all the universities. The latter is to be preferred, because it will enable the licentiate to practise not only in any part of Canada, but also to register in Great Britain, and thus receive recognition throughout the Empire. As qualification for registration is not a matter of Federal but Provincial legislation in this country, our University degrees are not recognized by the British Medical Council; the several provinces forming the Dominion being, of course, not autonomous—the condition of registration by that Council. Australians can register, but Canadians cannot, though our form of government is admittedly superior to theirs. Canadian legislators are beginning to see the system which obtains in this country is unworthy of it.

In concluding his address, the President spoke of the loyalty and unanimity with which the profession throughout the Dominion had co-operated with the Montreal Committee in its efforts to make the meeting a success. The committee had also been greatly aided by the active good-will of the Dominion and Quebec Governments and by the Civic Government of Montreal.

SURGICAL SECTION.

Mr. Christopher Heath gave the opening address in the surgical section on "The Teaching of Surgery." After commenting on the subjects of appendicitis and cancer of the rectum, which would be discussed in the section, he said that nothing was more remarkable than the recent progress of abdominal surgery.

Twelve years ago he was engaged in editing a dictionary of practical surgery and neither appendicitis nor the operation for the removal of the rectum was mentioned, although he had the assistance of the leading London surgeons. Kraske's original paper was published in 1855 and is referred to in Bell's work on the rectum published in 1857. Appendicitis dated from a paper by Mr. Treves in 1885, so far as British surgery went, though the title of it was relapsing typhlitis treated by operation.

Surgery of the kidney and the liver had advanced *pari passu* with that of the hollow viscera, and the labors of Morris and Robinson in England and of Keene and others on this side of the Atlantic had done much for the relief of suffering and the prolongation of human life.

Nothing was more astonishing than the treatment of calculus. The speaker traced the steps of treatment from Fergusson, who did the lateral method so fraught with the danger of septic infection, to lithotrity by Thompson, and then to litholapaxy, and lastly to the recurrence of the old high operation of Peterson. He (the essayist) was told that it was difficult to get students now to take the trouble of making neat dissections; they would rather study the beautiful preparations in spirits instead of laboring to get this portion of the anatomy out for ourselves.

He regretted that the teaching of anatomy in Great Britain was gradually getting more and more into the hands of professors who were anatomists but not surgeons, and that their tendency was to lay stress upon transcendental data rather than surgical relations. When these gentlemen happened to become examiners, the tendency to specialize became very marked, and they being placed equal to teachers of physiology and chemistry, the unfortunate medical students became the victims of science (falsely so-called), and sometimes developed into that marvellous being, a London B.Sc.

Were they not overdoing the scientific teaching of the man who has after all to get his living as a practitioner of medicine, surgery and midwifery? Was there not too much time devoted to scientific study? In his day, the speaker said he took the advice of his teacher in physiology to never let a day pass without visiting a hospital. But now, students were practically forbidden to enter wards until they had satisfied the examiners in anatomy and physiology, and then there was but too short a time left to study *totam rem medicam.*

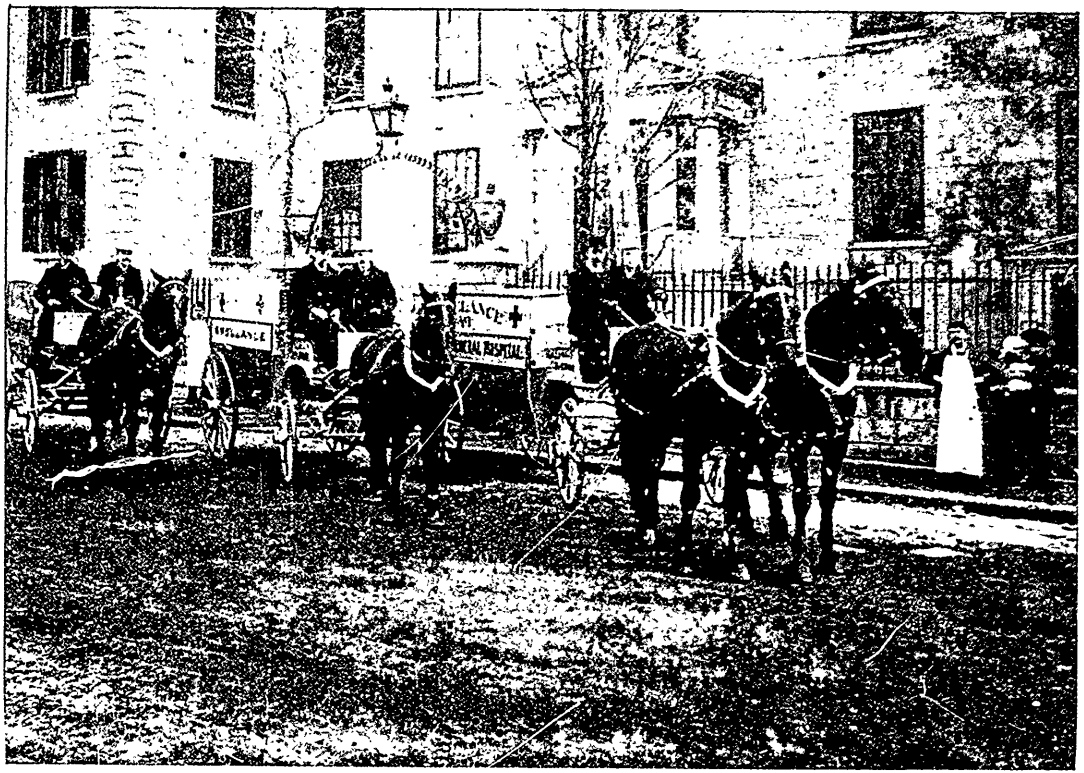
The great care to induct students into the mysteries of auscultation and percussion was beyond all praise; and if with some teachers treatment was regarded as of secondary importance, the student had to study the *vis medicatrix naturæ* untrammelled under one teacher and watch the effects of every new drug upon the human system under another. And all this took time, and so also the labored manipulation of the gynæcological department, the researches of the pathological professor. And where did the

teaching of surgery come in? I am fortunate if I can get candidates for a surgical diploma for three months. How could they see cases such as aneurisms, rare tumors, tetanus, etc., in that short time? And yet surgical activity was immense. Why the anomaly? He was afraid we must allow that a great many mistakes are made in diagnosis, and that an operation is undertaken often to "clear up the case." And then there was the great desire for publication of the successful case in society or in one of the numerous medical journals. How could it be wondered at that the young surgeon's stock-in-trade of professional l. wledge was of the simplest, blossoming rapidly into an operating surgeon in some special department.

Still the great foundations of the art and science of surgery remain undisturbed. Without a knowledge of anatomy, physiology and histology the progress of surgery is impossible, and it is for those who hold important positions of teachers in our medical schools to insist upon the foundations of scientific and practical training being given to our students if they are to become successful practitioners of the future. The tendency of the non-medical teachers of co-lateral science is to regard their particular subject as the most essential, for the student must be restrained and the preliminary period of medical study must be cleared of many obstructions if the student is to have the necessary time to devote to the thorough study of those strictly medical subjects which will fit him to be a sound practitioner and at the same time a scientific physician and surgeon.

Dr. Armstrong (Montreal) opened the discussion on appendicitis. It consisted in the report of 517 cases, the statistics of which were collected from several of the Montreal hospitals. He said he could throw no new light on the etiology of the disease. He presented a number of specimens which showed a constriction of the appendix. Where this constriction appeared near the distal end as a result of inflammatory or lacerated change there was little danger present, but where the constriction took place toward the intestinal end, and thus prevented the exit of material from the lumen and dammed back the products of the tube, serious results might follow. The result of the statistics tended to show that surgical interference was justifiable in most cases of appendicitis. There were 63 fatal cases in the list, 36 being due to septic peritonitis; two were tubercular, 18 were abscess cases, and in five there was septic inflammation of the mesentery with abscess of the liver. The technique of the operation was then described. His personal experience with a number of cases was then cited. His practice was to use three drainage tubes, one in each loin and one in the pelvis.

Dr. J. Ward Cousins (Southsea) said that in his experience the pain was an early symptom, to disappear in cases in which the progress was satisfactory, while in the opposite class of cases the pain continued. He advocated operation if there was no improve-



AMBULANCES AND FRONT VIEW OF MONTREAL GENERAL HOSPITAL.

ment in two or three days. He preferred the oblique incision and used silk ligatures instead of retractors, thus avoiding bruising of the tissues. The abscess should be thoroughly cleaned by gauze swabs and drained, but he did not interfere too much with the wall. He preferred not to use too large a drainage tube, nor too many tubes

Prof. C. B. Ball (Dublin) divided the acute cases into three classes—the fulminating, those with abscess formation, and those in which the symptoms were such that how the disease was progressing could not be exactly ascertained. It was in this latter form that the question of operation was very difficult to decide.

Mr. Jordan Lloyd (Birmingham) divided the cases for practical purposes into those in which the disease was confined within the appendix, and those in which there was more or less inflammation outside the appendix, the situation of the tumor depending on the natural situation of the point of the appendix. He would not interfere with the wall of an abscess, but relied on cleansing and drainage.

Sir William Hingston (Montreal) said that while it was easy to keep statistics in a hospital, it was the reverse outside such institutions, and it should be from these latter cases that the history should be written. He had only operated on one in ten of the cases brought into the hospital. He considered that the operation was to blame for many deaths.

Dr. Vander Veer (Albany) emphasized the fact that the location of the appendix might vary within considerable limits. He would operate after the second attack and not subject the patient to recurrent attacks. He would remove as much affected tissue as possible, as Dr. Armstrong had advocated. He would not advise the family physician to wait until he could demonstrate McBurney's point, while quite admitting the value of this symptom when present. Early operation was *the* important point.

Dr. Alex. H. Ferguson (Chicago) recommended operation in all cases in which the diagnosis was clear and the disease uncomplicated. Then the operation was easy and the results excellent. Then the McBurney operation of separating the muscles in the lines of their fibres could be made use of. He would not search for the appendix where it was difficult to find. He preferred to flush out the abscess cavity.

Dr. Gordon (Portland, Me.) strongly recommended the saline treatment for appendicitis, as carrying 90 per cent. of the cases through the attack. He would operate after the attack. If vomiting was present, the saline might be given by enema. Abscesses were treated by simple incision. For the pain he relied on hot saline solutions by the mouth and enemata. Opium was to be avoided.

The President agreed as to the treatment of the chronic cases. He would not operate in all the acute cases. To relieve the pain he applied belladonna over the region of the cæcum and over this a

good hot linseed poultice. Rest in bed and careful diet were very important.

Dr. Armstrong, in reply, said that he had never had any satisfaction in the use of gauze for the drainage of pus. Poultices were of great use to control pain.

Dr. A. E. Garrow (Montreal) reported an interesting and rare case in which there was an umbilical and a ventral hernia in the same patient, each having a separate sac, and described the treatment he pursued.

Mr. Alexis Thomson (Edinburgh) took up the subject of stricture of the intestine as a sequel of strangulated hernia. He noted the various causes of this condition, as peritoneal bands, adhesions, etc., and reported illustrative cases and their treatment.

Dr. H. O. Marcy (Boston) explained his views on the best method of suturing wounds.

Mr. Langley Browne (West Bromwich) showed photographs of a case of traumatic aneurism of the internal maxillary artery for which he had tied the common carotid.

Mr. Jordan Lloyd mentioned a similar case which had been caused by a hayfork running into the cheek. He had ligatured the external carotid.

Dr. Ashurst (Philadelphia) said that it was very difficult to determine which branch of the artery was wounded. In his experience cerebral symptoms were rarely produced by ligature of the carotid. In this latter statement the President concurred.

Mr. Browne had chosen the common carotid in preference to the external carotid on account of the field of operation being limited by the incisions of the previous operation.

Dr. Theodore McGraw (Detroit) described a case of invagination of the cæcum and appendix. The principal symptom had been intense pain. It was treated by excision of the intussusceptum and suture of the cut edges.

Dr. Jas. Bell (Montreal) and Dr. C. B. Ball (Dublin) opened a discussion upon "Operative Treatment of High Cancer of the Rectum."

Dr. Bell said that the subject had received but scanty attention up to the year 1885, when Kraske made known the results of his investigations. When in an early stage the thorough removal of all the cancerous mass with the enlarged glands offered as good a hope of cure as in similar operations upon the breast.

Operation was useless after the general involvement of the pelvic structures. The diagnosis was only made after there had been some ulceration and hæmorrhage. Even in advanced cases no tumor can be felt in some cases. Early digital examination of the rectum would avoid such delay. The author divided the cases into the three following classes: (1) where the disease was limited to the gut itself and the whole mass can be removed readily; (2) where there is some invasion of the sacral glands which makes operation of doubtful value. Even if recurrence takes

place in this class after operation, the life of the patient is prolonged and there is often considerable increase in weight. (3) Where the disease has extensively involved the surrounding pelvic structures and metastases have formed. Here operation is contra-indicated. A colotomy might be performed, but merely as a palliative measure.

Dr. Bell strongly favored the osteoplastic operation as advocated by Kraske by replacing the bone. In some cases he found it advisable to remove the left lower portion of the sacrum. Preliminary colotomy in most cases was necessary.

Dr. Ball (Dublin) advocated the removal of a triangular portion of the sacrum in the place of the osteoplastic operation, as by this method the danger of infection was lessened. He had never seen a case where the upper limit of growth could not be reached without difficulty.

Instead of the preliminary colotomy, he advocated free purgation for several days previous to operation, with copious enemata, the administration of an opiate the evening before operation and thorough washing out of the bowel immediately before operation.

Dr. W. W. Keen (Philadelphia) very ably discussed the subject of both papers.

Dr. Ashurst said he was never very enthusiastic about operation for the removal of cancer of the rectum. His views had been somewhat modified since visiting the city, having seen some cases in which it had proved beneficial. He thought if the disease had gone on to obstruction, it was better to construct an artificial anus. He was rather in favor of doing the preliminary colotomy as a safeguard; for in some cases in which resection was done without this preliminary step, a low form of peritonitis was set up accompanied by vomiting, etc., so that there was difficulty in nourishing the patient either by mouth or by rectum; whereas if there was an opening in the colon, this could be used for the introducing of food, saline injections, etc., without interfering with the rectum itself. He agreed with Dr. Ball that it was better to remove the coccyx entirely. He wished to speak of one procedure of a palliative character which he found very useful,—that was a small longitudinal section of the rectum through the mass of disease in the median line posteriorly.

The President then read a communication on the subject from Dr. Kraske.

Mr. Bernard Roth gave a paper containing an analysis of 1,000 cases of lateral curvature of the spine treated by posture and exercise exclusively. The author had described the technique of his treatment in his book on the subject published in 1889. In this series of cases he had noted that 84.5 per cent. of the cases were females; that the average age at which the deformity was noticed was 12.32; that they came under observation at the average age of 15.65. Among the assignable causes were heredity, too rapid growth, preceding history of fevers, etc., disease of the lungs,

residence in the tropics, various neuroses, over-study, premature birth, etc. Rickets played but a small part in this list, as there were few poor patients. A classification was then given, based on the direction of the convexity of the curvature. Pain was present in 476 cases; flat-foot in 565; 202 cases had been treated unsuccessfully previously. The average duration of the author's treatment was three months, which he holds is a very much better result than can be obtained by supports.

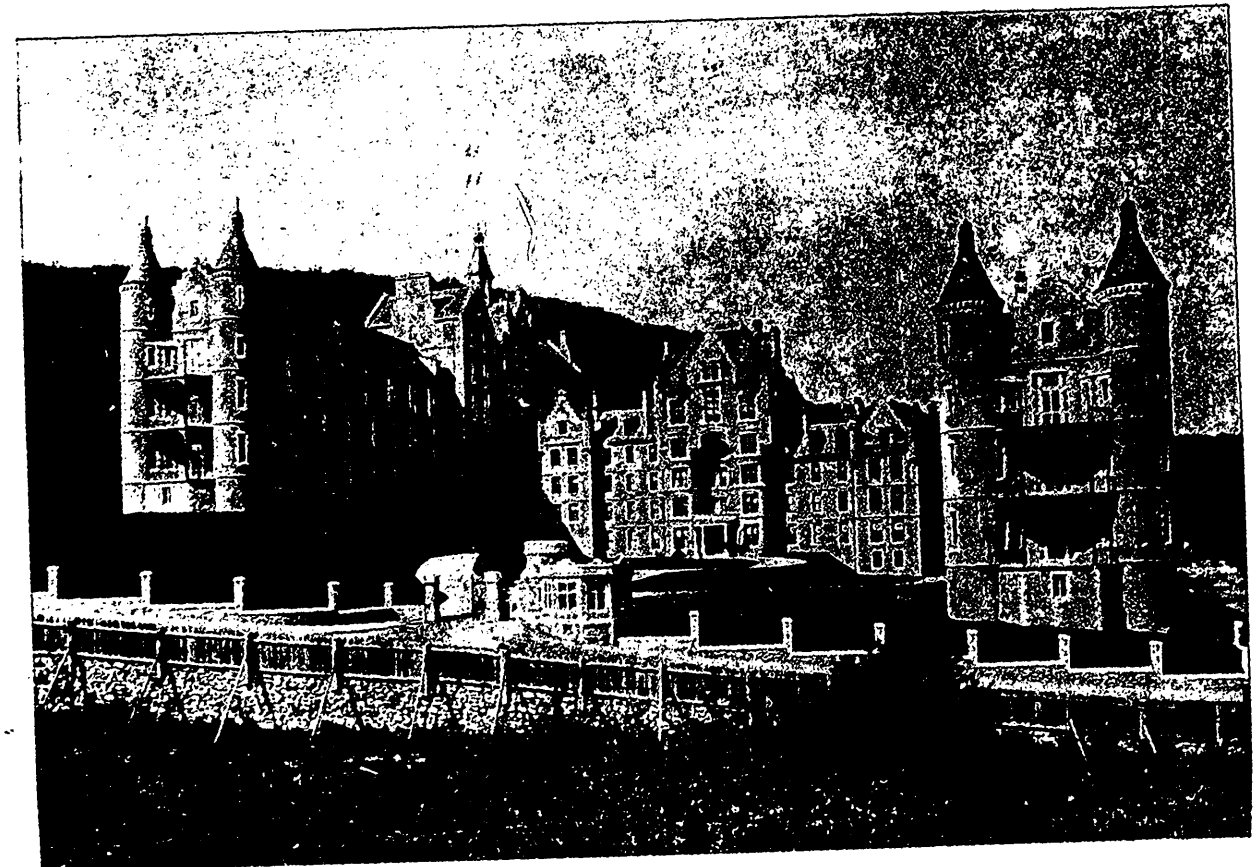
Dr. T. McKenzie (Montreal) presented an apparatus for taking accurate measurements of spinal curvature, and gave a demonstration of its use.

Mr. Christopher Heath, in discussing Mr. Roth's paper, said that in consideration of the importance of this subject, he had asked Mr. Roth to furnish the chapter on Spinal Curvature which was published in his dictionary in 1885. He said that instruments had been used in the most reckless way, and were not only of no use but did positive injury. He had the opportunity of observing many of these cases treated by muscular exercises, and found that they had done well.

Dr. Gibney (New York) followed. He said that until he had noticed Mr. Roth's method, he used to use mechanical appliances for the treatment of lateral curvature but since that time he had almost entirely abolished them, and found that his successes were infinitely better. He found one or two difficulties in carrying out the method. One was the difficulty of keeping up the patient's interest in the gymnastics under the supervision of the doctor himself or his assistant, the friends maintaining that these exercises could be done as well at home. He still used the instruments in cases of stupid girls who absolutely could not be compelled to carry out the serious treatment of their case. He thought Dr. McKenzie's apparatus for tracing the best he had seen. He thought Mr. Roth's results were very satisfactory. He was very much impressed when in England with the amount of pain complained of by patients suffering from lateral curvature. This was not the case in the United States, whatever was the reason. Perhaps it was that the cases he saw, being among the poor, were more inured to pain than the cases (mostly among the well-to-do) which he saw in England.

Dr. Ketch (New York) said that he had made an analysis of 229 cases. Fifty-two were cases of deformity which had existed before.

Dr. Shepherd (Montreal) reported a case of successful removal of six and a half feet of intestine which complicated a large abdominal tumor. The patient had been referred to him by Dr. LaFleur. He was a young man, aged 28, who upon being examined presented an abdominal tumor filling the whole cavity. It had been growing several months. It was smooth, hard and freely movable, but did not cause much discomfort. With the assistance of Dr. Armstrong an attempt was made to remove it. There were some adhesions.



ROYAL VICTORIA HOSPITAL, MONTREAL.

below and in front. It was seen to be growing from the mesentery. In ligating the arteries which ran to it, the blood supply was cut away from six and a half feet of ilium. This gut they were obliged to remove. Hæmorrhage was severe. The patient suffered greatly from shock, but rallied and made a good recovery. The patient was presented to the Association in good health. Dr. Shepherd gave the bibliography of the subject. This was the second longest case on record.

Dr. Tobias Nunez (Mexico) read a paper on "The Diagnosis and Treatment of Penetrating Wounds of the Abdominal Cavity." He called attention to the difficulty of ascertaining the extent of wounds of this sort. The two great dangers to be feared were peritonitis and internal hæmorrhage. He advised treating expectantly, but the surgeon should be ready to do laparotomy at any moment.

"Personal Observation on the Surgery of the Bile Ducts."

A paper thus entitled was read by Alexander Ferguson (Chicago). He pointed out how during the last few years, the treatment for stone in the bile ducts and gall-bladder had progressed. They were clearly surgical cases. Operation should be done as soon as the diagnosis was established. He had dealt personally with forty-six cases which were made up of flexion of the gall-bladder, dropsy of the gall-bladder, empyæma of the gall-bladder, general cholangitis with hepatic abscess, stone in the gall-bladder and cystic duct, stone in the gall-bladder, cystic and hepatic ducts, stone in the cystic duct alone, stone in the common duct alone, stone in the hepatic duct, stone in the common and hepatic ducts, stone in the cystic and hepatic ducts, stone in the cystic and common ducts, rupture of the gall-bladder, laceration of the gall-bladder, and fistula of the gall-bladder. The more prominent clinical features in each of these cases were then given by the essayist. In two cases of flexion, colic and tenderness were noted. The first case was complicated with a tongue-like lobe of the liver which might have had something to do with displacing the gall-bladder backward and downward. In the second case the patient suffered from biliary colic six years. During the attacks a tumor appeared, which disappeared as the suffering subsided. He performed cholecystotomy. An easy recovery followed. In one of his cases of dropsy, the diagnosis was complicated with that of floating kidney. Out of all cases the cystic duct was obstructed by calculi in three, and by fibrous structures in the fourth. In the cases of empyæma there were rigors and fever. In one case the temperature was 104.2. A tumor was present, and patient was so weak that an anæsthetic could not be given. The operation was given under cocaine, and pus, bile, and calculi allowed to escape. In one of the other cases patient had suffered from biliary colic five years The bladder was found contracted, containing several gall-stones, and the cystic duct contained calculi which were removed. After a few

weeks patient became very ill again; had a recurrence of symptoms with a fatal termination. Post-mortem showed marked inflammation of the ducts and multiple abscesses in the liver. There was primary cancer of the gall-bladder in two cases; treated unsuccessfully. The essayist showed a number of well-marked drawings illustrating the above conditions. He described the technique he followed in these cases, and presented several instruments which had come in handy in the progress of the operation. One was a long, small scoop which he used to introduce into the ducts to remove impacted stones. He showed a small ball-nozzle syringe, with which, when filled with water and introduced into the mouth of the common duct, by pressure, he was able to tell whether that duct was patulous or not, the water escaping into the duodenum if open.

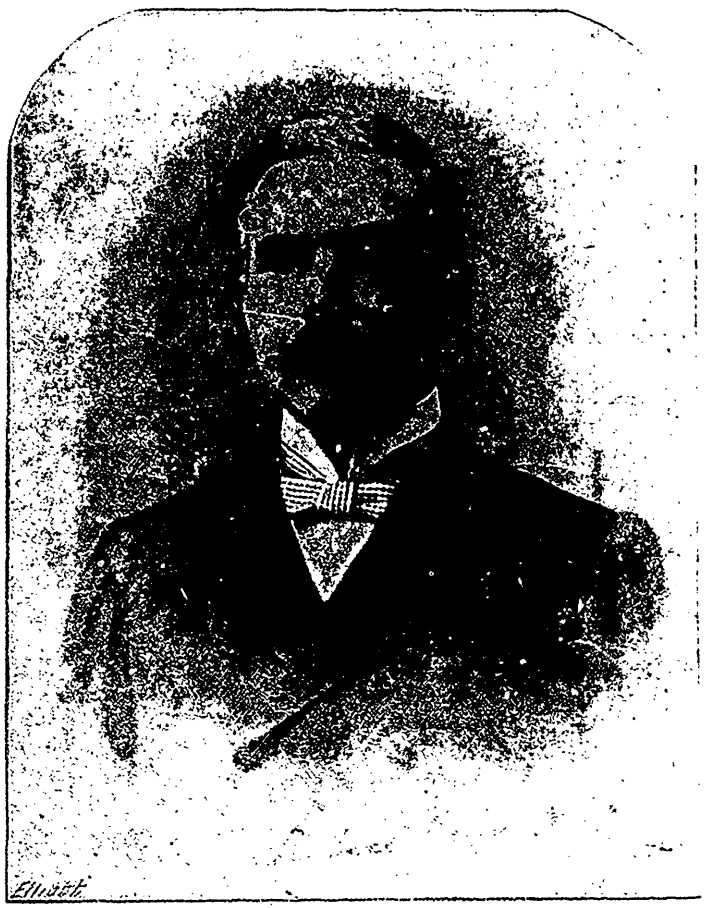
Dr. A. B. Atherton (Fredericton, N.B.) reported a case of intestinal obstruction, caused by strangulation of the loop of ilium through an opening in the mesentery with Meckel's diverticulum. The patient had a small umbilical hernia, and had numerous attacks of cramps attended with diarrhœa. These had become more serious of late. The essayist was called in consultation in one of these attacks. The temperature was slightly elevated. There was tympanitis and a good deal of pain and tenderness to the right and below the umbilicus. Suspecting appendicitis, he opened the abdomen under the light of a lamp, his only assistant giving the anæsthetic. The appendix was removed on account of some adhesions surrounding it. He did not consider this a sufficient cause for the symptoms, so a search was instituted through another opening made near the navel. Here Meckel's diverticulum distended in the shape of a pear, was found partly gangrenous and contained masses of fæces. He experienced some difficulty in withdrawing it from the abdomen during its removal. After further search the abdomen was closed up quickly, the patient being in a very weak state. Within thirty hours the patient died. Since operation, temperature had gone up to 101°, but subsided to normal. Pulse was very rapid. The patient had a pinched look, and finally became delirious. Autopsy revealed the condition indicated in the title.

Mr. Christopher Heath commended Dr. Atherton on the management of his case.

Dr. W. W. Keen thought that much good came from the reporting of these unsuccessful cases. The essayist had made a mistake, but it was a very pardonable one.

Dr. Jordan Lloyd (Birmingham) gave a conversational address on "Stone in the Ureter, and Its Treatment," which was well received. He said he was struck many times about ten years ago with the absence of stone in the kidney when all symptoms pointed to that condition. He could cite cases where the kidney had been removed and then no stone discovered. He had found that the symptoms in many such cases were due to stone in the ureter. He had had five or six of such cases, which he had treated successfully.

What made him work at the subject was that on one occasion he had cut for stone in the kidney, found none, and in six hours the calculus was passed. One symptom of great importance he thought was to give the patient a fierce prod over the tender spot: then whether this was over the kidney, ureter or bladder, the



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patient would experience a stabbing pain. This with the paroxysms, nephralgia or hæmaturia pointed strongly to urethral involvement. If the stone were in the lower part of the ureter, it might be palpated by rectum; if between the neck of the bladder and the pelvic brim, anterior exploratory incision, if the symptom was pronounced, was allowable. In many of these cases where there was complete

blockage of the ureter, the patient suffered from water-log symptoms, which was marked with moist skin, very rapid pulse, sub-normal temperature, abdominal distension. To get at the stone in the lower part of the ureter, he would perform super-pubic cystotomy, opening the bladder. If in the middle section of the ureter, he would, after establishing a diagnosis, make a lateral incision and would get at the stone without entering the peritoneum. If in the upper portion of the ureter, he would perform the ordinary lumbar incision. Usually the stone would be found in the lower three inches of the ureter. Of course, calculi in the bladder could quite readily be negatived.

Dr. W. W. Keen related a case simulating appendicitis in which he had operated. Found nothing wrong with the appendix, but did not think of examining the ureter until the following day. Ten months after he removed a stone from the bladder. He was particularly pleased with Mr. Lloyd's paper.

Dr. Shepherd and Mr. Heath also complimented Mr. Lloyd on his careful study of this department in surgery.

"Seven Cases of Appendicitis complicating Salpingitis" was the title of a paper by Dr. A. L. Smith. Since preparing his paper he had seen an eighth case in which severe pain had been felt on the right side. The right tube, which was pregnant, was adherent to the left side, and the appendix was there too. Whether the appendicitis caused the salpingitis, or *vice versa*, he was not prepared to say. He thought, perhaps, the appendix floating around in the abdomen sometimes came in contact with an infected tube, and in that way became inflamed. His method was to cut the appendix off flush with the bowel, and then invaginate, so as to bring the peritoneal surfaces together.

The paper was discussed by Dr. Marcy (Boston), and Dr. Ferguson (Chicago).

SECTION OF MEDICINE.

The presidential address was delivered by Stephen McKenzie "On the Influences which have Determined the Progress of Medicine during the Preceding Two and a half Centuries." The essayist drew a picture of the condition of affairs in medicine when Europeans first settled in Canada. In the first place, the influence of greatest importance was the study of anatomy. Next was the study of histology with the aid of the microscope. Just as anatomy had to reach a certain stage before physiology and morbid anatomy became possible, so normal histology had to advance before pathological histology could come into existence. This, in turn, had led to the study of bacteriology. The essayist then referred to the information which had been gleaned through the use of the thermometer, ophthalmoscope, laryngoscope and the sphygmograph, etc., etc. He next dealt with the question of auscultation, and

stated that the diagnosis of diseases of the chest had reached a state of precision unequalled in any other department of practical medicine. The subject of vaccination and its influence was then dealt with. He called attention to the fact that, great as had been the progress of medical science, and precise as a rule were the methods of research, it was remarkable that up to the present time in two diseases in which preventive and curative inoculation had been most conspicuously successful—namely, small-pox, for which we have to thank Jenner, the first vaccinator, and hydrophobia, in which Pasteur had succeeded in attenuating the virus and using it as antidote—we had not succeeded in finding the micro-organism, that is, the true virus, unless, indeed, Copeman Moncton had at length done so in the case of small-pox and vaccinia.

Speaking of therapeutics, he said that up to the present time scientific therapeutics only influenced our treatment to a small extent. In preventive medicine, the greatest triumphs of medicine had been and would continue to be gained. The works of Jenner, Pasteur, Lister, Koch and other pioneers of preventive medicine had saved more lives than remedial art could claim. One influence which had tended to promote scientific study was the establishment of the university system. Turning to clinical medicine he said, in reference to fevers, that much good work had been done, particularly with regard to the study of malaria. One of the most important advances was the separation of enteric from typhus fever. The work of Bright, Wallace, and others in reference to renal disease was well known. One of the triumphs in modern medicine had been the recognition of the association of increased arterial tension with renal disease and the far-reaching effects of this in the production of cerebral hæmorrhage, etc.

The advance in the study of nervous diseases, Addison's diseases and myxœdema were then referred to at some length. In conclusion he stated that several years had been added to the most useful and valuable period of life, and there had been a manifest decrease in the mortality from small-pox, scarlet fever, enteric fever, etc.

Dr. Jas. Stewart (Montreal) then read a paper on "Arthritis Deformans and its Relation to Phthisis, Rheumatism, and Disease of the Spinal Cord." The lecturer presented an analysis of forty cases in which the following factors were associated with or preceded the disease: rheumatism, tuberculosis, nervous diseases, exposure to cold, alcoholism, but most of all gonorrhœa was the most frequent; 15 per cent. had no apparent cause. The speaker considered that the indications pointed most strongly to the existence of a previous infective process. He criticised the idea of it being nervous in origin and considered that there was no evidence of this. Phthisis was only indirectly connected as all other depressing influences, by lowering the vitality and so favoring the onset of infection. The connection with rheumatism he thought was very close, and this was important, as in all probability rheumatism was due to microbic influence. He thought that further

investigation along these lines would yield the best results. As to treatment, the prolonged use of arsenic and cod liver oil he found to be the most useful drugs, but had recently employed with considerable relief of pain and some improvement of motion the hot-air bath. The speaker, in conclusion, expressed the belief that while there was no connection with tubercle, the probability was that

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there was some relationship between rheumatism and diseases of the nervous system.

Prof Osler spoke briefly on the difficulty of separating this disease from chronic rheumatism, and considered that, owing to the similar appearance to be found in some of the spinal cord lesions and in rheumatoid arthritis, there was some connection between them.

Dr. Jacobi went into the subject at some length. He contrasted the lesions of rheumatoid arthritis and chronic rheumatism, showing that there was a marked difference. He was more inclined to the nervous theory of the origin of the disease, and opposed the infectious idea.

Dr. Wilson (Philadelphia), Dr. Shattuck (Boston), and Dr. Moorehouse (London) spoke along the same lines.

Dr. Graham spoke of the difficulty of separating from gout and chronic rheumatism, and emphasized the necessity of an accurate knowledge of the pathology before making a diagnosis.

Dr. Griffith (Swansea) considered that the symptoms of rheumatic arthritis were the symptoms of a number of conditions, and that they did not *per se* constitute a disease. He also spoke of the difficulty of diagnosis.

Dr. Gibney (New York) detailed the treatment by means of hot-air baths.

Dr. Tyson also made a few remarks.

The President, in summing up, congratulated Dr. Stewart on his paper, and spoke of the great difficulty both of diagnosis and treatment. He thought that while in all probability not one present had had his views changed by the discussions, none the less these discussions were of the greatest value and tended to promote knowledge of the subject in hand. He himself thought that rheumatic arthritis was a distinct disease.

Dr. Stewart then replied briefly to some questions.

In discussing a paper on "Some Forms of Insomnia," Dr. Henry Barnes said: In considering the treatment of insomnia the first question we should, I think, decide is this: "Is the patient really suffering from the want of sleep?" I am accustomed to tell patients when importuned for sleeping draughts, that an hour of natural sleep is worth four or five times that amount of drug sleep, and will do them much more good. The absence of sleep is sometimes very distressing and very trying both to the patient and his attendants, but we should be on our guard against accepting the patients' statements, as they often say the amount of sleep which they obtain is much smaller than what those in a position to judge from actual observation know has been obtained. Patients are very apt to fall into the habit of taking sleeping draughts without due necessity. It has happened to me to have my attention called to the frequency with which patients were indulging themselves in sleeping draughts or powders. The morphia habit, the chloral habit or the sulphonal habit is easily set up, but not so easily cured. In England where patent medicines containing opium are easily obtained, I have found patients indulging themselves in chlorodyne in extraordinary quantities. I had one patient who informed me that her usual dose was a four or six penny bottle of chlorodyne. This contains 2 oz. and 2 drs. of chlorodyne. We should be chary in prescribing hypnotics, and satisfy ourselves that they are really demanded. Some people can

do with less sleep than others, and the absence of sleep produces more deleterious effects in some patients than in others. How much sleep each one should have is a point which cannot be laid down. Time spent in real sleep cannot be said to be wasted, but this cannot be said of time spent in drug sleep. Sleep is a wonderful restorer of nervous energy, but it must be genuine sleep to do good. A learned English jurist's division of the day was as follows:

> "Six hours in sleep, in law's grave study six,
> Four spend in prayer, the rest on nature fix."

Sleep may be induced in two ways: (1) We may lessen the flow of blood to the brain, or (2) we may lessen the functional activity of the brain cells. The former object may be accomplished by removing anything which tends to force the flow of blood forcibly through the brain, by ensuring a sufficient degree of warmth and bodily comfort, by a warm bath at bedtime and by a strict attention to the general health. There is one cause of insomnia which is, I think, insufficiently recognized. It is very common in gouty subjects. We all know how sleep is sometimes suddenly interrupted in the early hours of the morning by the acute gouty paroxysm. A simpler form of sleeplessness is often dependent on acid or fermentative dyspepsia. According to Duckworth, Cullen was the first to call attention to this. Cullen said: "Persons who labor under a weakness of the stomach, as I have done for a number of years past, know that certain foods, without their being conscious of it, prevent their sleeping. I have been awakened a hundred times at two o'clock in the morning when I did not feel any particular impression, but I knew that I had been awakened by an irregular operation of that organ, and I have then recollected what I took at dinner which was the cause of it." Murchison has described a form of sleeplessness which he attributed to hepatic derangement inducing lithæmia and other forms of gout. The sleeplessness comes on suddenly. The patient goes to bed apparently quite well, and goes to sleep as usual. Suddenly sleep is interrupted, and there is sometimes nausea and stomach discomfort, lasting two or three hours. I am inclined to think insomnia has a gouty origin more frequently than is generally supposed. In such cases a draught of hot water, or potass-water with sal volatile, gives some relief, but attention to diet, fresh air, abundant exercise are very necessary to prevent recurrence. Rhubarb and soda or Gregory's powder at bedtime are very useful.

Insomnia also sometimes depends, especially in elderly people, on atheroma of the arteries, whereby they lose their contractile power, and they are unable to regulate the flow of blood to the brain. In these cases iodide of potass is useful, and the addition of a few grains of bromide helps to quiet the brain cells.

In other forms of insomnia I rely mainly on paraldehyde. Patients don't like it, and the habit is not so easily set up. It

is especially useful and safe in cardiac affections, in acute inflammatory diseases of the lungs, in fevers and in delirium tremens. In mental cases I have used sulphonal up to thirty-grain doses and trional in twenty grains, and I am so satisfied with their effects that I do not use any other of the newer hypnotics.

Dr. Tyson then read a short paper on the proper use of terms to denote myocardial changes. He apologized for the smallness of the subject, but considered that it was very desirable that there should be uniformity of nomenclature. Hypertrophy of the heart was always preceded by dilatation whether the hypertrophy was due to peripheral resistance or valve changes. But the dilatation occurring before hypertrophy was not accompanied by degeneration of heart muscle, whereas that dilatation occurring after hypertrophy was accompanied by degeneration. To the former he thought we ought to apply the term cardiac expansion, to the latter cardiac dilatation.

Dr. Whittaker and Dr. Davis made brief remarks on the paper.

Dr. Fussell then reported two interesting cases of hæmophilia in two brothers aged ten and twelve years respectively. A feature of the cases was the marked leucocytosis and enlargement of the spleen. The patients were doing well on calcium chloride.

Dr. Allen A. Jones asked to have a thorough examination made of the blood, in order to clear up the cause of the leucocytosis.

Dr. Saundby read a paper on "The Dietetic Treatment of Diabetes," in which he said the usual diabetic diet, with its rigid restrictions, can only be carried out by the doctor's authority and the patient's docility. Compromise is the rule, but arrived at by the doctor's opinion being sacrificed to the exigencies of the patient. Diabetes mellitus is a clinical group, of which the causation and proper classification are still debatable. These, therefore, should not be allowed to rule our views on treatment. Glycosuria is an abnormal phenomenon, but occurs when the amount of carbohydrates ingested exceeds the utilizing capacity of the body. This capacity varies in different individuals, and perhaps in the same individual at different times. Those who become easily glycosuric from slight excess stand in close relation to the milder forms of diabetes. In severe diabetes glycosuria persists even on flesh diet—a fact explained by the formation of a carbohydrate molecule when albumen is converted into urea. Hence in severe diabetes there is no physiological ground for persisting with strict diet in the hope of thereby removing the glycosuria. We must look to clinical results for the justification of our treatment, and must not be led too far by our prepossessions in favor of any disputed pathological doctrine. Instead of following a blind routine we should give each case as much carbohydrate as experience shows he can assimilate. Of carbohydrates it is best to give 1½ pints of milk, 6 ounces of baked potato, 1½ ounces of levulose, and, in mild cases, 4½ ounces of dry toast. Fat bacon should, if possible, form one meal, but diabetics appear to absorb fat badly. Alcohol, in the absence of albuminuria, may be allowed up to 4

ounces daily, well diluted with mineral water, or, in mild cases, a bottle of light Moselle or Bordeaux wine, or even a pint of bitter ale. It is of great importance to prescribe definite quantities, and to test the effect of the diet by weekly body weighing, urine measurement, and sugar estimation. Of these the first is the most important.

Dr. Shingleton Smith (Bristol) thought it was important to distinguish between the varieties of diabetes. In the diabetes of young persons he would hesitate to allow any considerable amount of freedom. In older patients greater latitude was indispensable. He had been watching a case for fifteen years in which the slightest deviation from the ordinary diabetic diet was invariably followed by the reappearance of sugar in the urine.

Dr. Ebenezer Duncan (Glasgow) thought patients should be kept upon a strict diabetic diet until the results of this method were apparent, and that latitude should only be allowed if symptoms of debility arose.

Dr. Tyson (Philadelphia) agreed generally with Dr. Saundby. As long as the sugar was two per cent. he advocated a considerable degree of liberty. The pure meat diet increased the di-acetic acid in the blood. His plan was to watch the urine carefully and to give as much liberty as the circumstances of the individual case permitted.

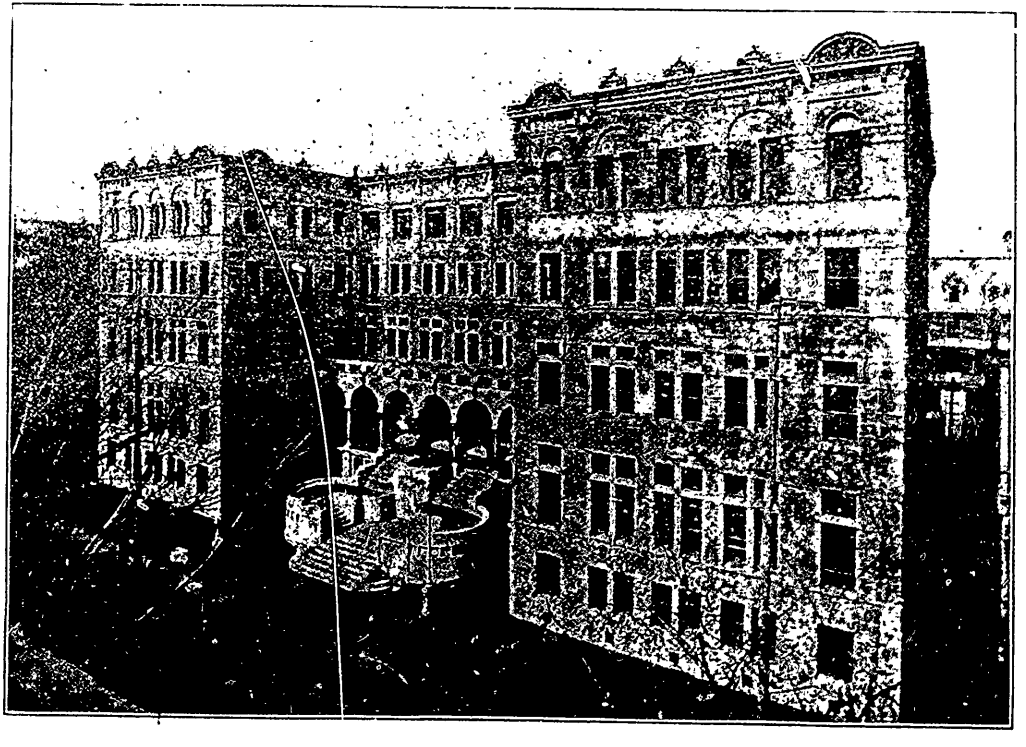
Prof. Jacobi (New York) thought that the diet depended essentially upon the patient's age. The younger the patients the less do they thrive upon carbohydrate. His experience was that patients did not get worse when allowed milk.

Dr. Lindsay (Belfast) thought there was not so much diversity of view amongst the speakers as might at first sight appear. He thought he could agree generally both with Dr. Saundby and Dr. Shingleton Smith. We must distinguish between the different varieties of the disease and regulate the diet accordingly. Young patients and old patients required very different rules. The general clinical condition was the best guide to the patient's progress, the indications afforded by the urine, though very important, being secondary. He had lately seen a case, aged 4, in which a decided improvement in the urine under dietetic treatment was followed by the sudden death of the patient. He strongly condemned the treatment of cases with an exclusively skimmed-milk regimen.

The President of the Section (Dr. Stephen Mackenzie) briefly summarized the views that had been set forth and expressed his sense of the value of the discussion.

Dr. Saundby replied. He objected to being understood as advocating latitude. His principle was rather that of adapting the diet to the indications of each individual case. He thought even young persons might have a little carbohydrate. Children always die and we should make their life as comfortable as possible. It was important to calculate the total amount rather than the percentage of sugar.

The discussion then concluded.



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Dr. Duncan (Glasgow) read a paper on "The Treatment of Diabetes by Nitrate of Uranium." He gave details of five cases treated by him in this manner at the Victoria Infirmary of Glasgow. He had used doses of from 5 to 15 grains of nitrate of uranium with a restricted diet. In three of these cases very great improvement followed in diminished flow of urine, lessened excretion of sugar, and increase of weight and strength. In two well marked cases the sugar entirely disappeared and the urine became normal in amount.

Dr. Tyson (Philadelphia) and Dr. Saundby (Birmingham) did not think that uranium nitrate had any specific action upon diabetes.

Papers were also read by Dr. Graham (Toronto), Dr. Koplik (New York), Dr. John Musser, Dr. Whittaker (Cincinnati), Surgeon Captain Cummins (Bermuda), and Dr. Harvey (Bermuda).

Dr. Geo. Atcheson (Galt) read a paper, entitled "Atony of Rectum." The essayist dealt at some length with the physiology of the act of defæcation, showing it to be partly voluntary and partly involuntary. He showed that impairment of the nervo-muscular apparatus caused constipation, and it was very important to recognize this in order to treat the condition properly. He emphasized the frequent use of large warm enemata as a cause of constipation by relaxing and dilating rectum. This was true in a less degree of cold enemata. Besides unpleasant subjective sensations, this complaint caused vertigo, hysteria, and hypochondria, and other physical troubles. Diagnosis was made by digital examination and by the symptoms above mentioned. Treatment was removal of cause, use of coarser foods and fluids, exercise, bathing, and, most of all, regularity in habits. Purgatives should not be used as a rule, but general nervo-muscular agencies, as nux-vomica, combined with belladonna and ipecac, etc. These, along with small cold or astringent injections. It might be necessary to dilate the sphincter and empty the rectal pouch under an anæsthetic.

SECTION IN OBSTETRICS AND GYNÆCOLOGY.

The first discussion was opened by Dr. J. A. Temple (Toronto) on the Hyperemesis Gravidarum.

Dr. Temple considered this a very serious trouble about which very little was known. Treatment as a rule was very unsatisfactory. He had found the disease severe in first pregnancies. Various uterine diseases had probably something to do with producing the condition and also disturbances in the nervous system or alimentary tract. He reported one case in which no reason could be assigned at all.

Following in the discussion Dr. Giles stated that in a large number of cases he had seen, one-third of the patients had not

suffered from vomiting. He had found dysmenorrhœa a frequent complication. The increased nervous tension of pregnancy, the irritation of the expanding uterus, the easy channel for the discharge of nervou disturbances through the vagus contributed largely to the causation of the trouble. Treatment should be begun early.

Dr. Hanks held that rest and nourishment were two main points in treatment.

Dr. Jewett recommended bromide *per rectum*.

Dr. Gardner (Montreal) spoke of the relief afforded by abortion, but said this should never be undertaken without consultation.

Dr. Skene (Buffalo) said the vomiting at first might be physiological, but long continuance induced a pathological condition.

Dr. Cameron (Montreal) said abortion could not be proceeded with until the medical man was satisfied that the disease was uncontrollable.

Barnes' boundary line was illustrated by Dr. Giles.

The President, Dr. Sinclair, then read his address, entitled "Injuries of Parturition: the Old and the New."

The burden of this essay was that obstetricians of the present day used forceps too freely. He reported a number of cases of serious sequelæ which had come under his care and had led him to this conclusion. This condition of affairs was due to the hurry most men were in in terminating labor or to a desire to mitigate a patient's sufferings (for her own sake) as quickly as possible, or thirdly, because they think that following the principles of modern surgery, tears, etc., could readily be cured. He felt sure that many men who did this sort of thing were unaware of the seriousness of such lesions as a cervical or vaginal tear.

Dr. Japp's closing words were: How are we to proceed in order to reconcile the avoidance of injuries to our patient which may carry important consequences to life and health in their train with the use of the scientific resorts of our generation which should enable us, under proper safeguards, to soothe and curtail the mental and physical sufferings which, at the best, are inherent in the process of parturition?

A paper entitled "A Further Report on the Treatment of Fibroids by Vaginal Ligature" was presented by Franklin Martin, of Chicago. He pointed out the advantages of this method of proceeding, and said that if success did not follow, removal by the abdominal route might be done.

The paper was discussed by Drs. Vineberg and Skene.

Dr. W. Gardner (Montreal) related the history of a case of vesicle calculi which he had removed from a patient suffering from procidentia uteri. There were many dozen stones, varying in size from shot to that of hen's eggs.

"Labor Complicated by Abnormalities of the Cervix, Uterus and Vagina" was the title of a paper read by Dr. Jno. Campbell (Belfast).

It was discussed by Drs. Murray, Kelly and Jewett.

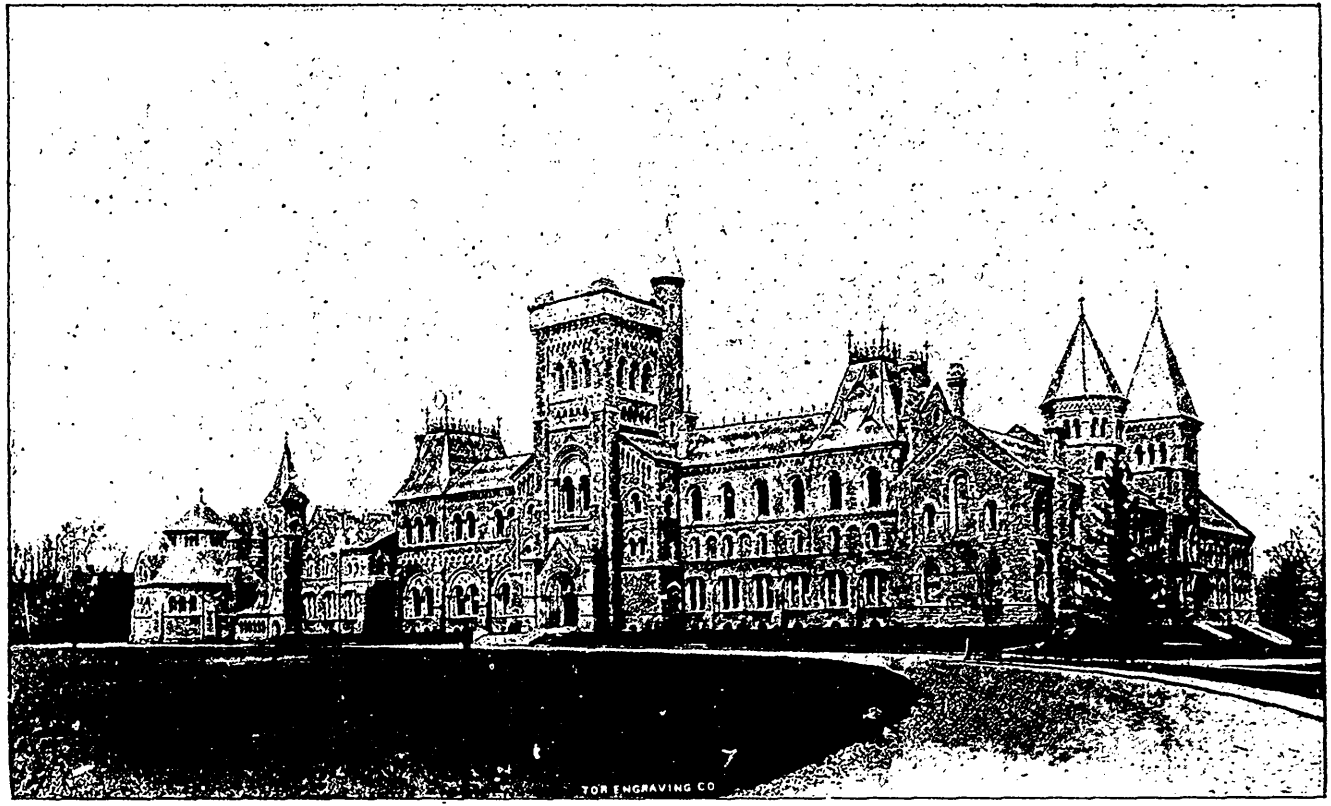
Dr. W. C. Lusk presented drawings and photographs and plaster casts illustrating the first stage of labor.

Dr. J. F. W. Ross (Toronto) read a paper on the diagnosis of intra-pelvic tubercular disease. It was not to be wondered at that the peritoneum should be the seat of tubercle when the frequency with which it attacked the pleura was noted. The port of entry might be through the intestine from the ingestion of milk. The other opening into the cavity was from below. If the cavity was invaded by tubercle from the rectum, the intestines or the bladder, tubercle would be present in these organs. If contamination took place through the vagina, the uterus and tubes, these organs would be found affected, it would be reasonable to suppose, but this was the exception, not the rule. The doctor then reported a case.

F. D., aged 23; single. Menstruation regular. After missing two months menstruation came on profusely and continued for three weeks. After a week's interval the flow again returned. Some leucorrhœa was present. Patient was considerably emaciated. There was a good deal of pain in the lower abdomen at intervals. Patient's both parents had died of phthisis. The temperature chart was characteristic of salpingitis with pelvic peritonitis. On opening the abdomen, the left ovary was found to be cystic, and the omentum congested, and there was evidence of acute peritonitis. The ovaries and tubes were found to be studded with tubercles. The fimbriæ of the tubes were thickened. No nodules were seen in the intestine or in the omentum. Posterior surface of broad ligament was studded with small nodules. The ovaries and tubes were removed. Patient afterwards married and was in fair health. Speaker thought it was very improbable that the intra-pelvic tubercle originated from bacilli introduced into the vagina. The disease most frequently affected virgins. It was remarkable that it was found more frequently in women than in men.

The doctor then reported a case in which there was a tubercular ulcer of the peritoneum. Patient was a woman married seven years, whose last child was born three years ago. Her chief complaint was pain in the pelvis and discharge from the bowels. There was a tender area half way between the umbilicus and the crest of the ilium on the left side. Temperature elevated. On opening the abdomen on the left side over the left utero-sacral ligament a nodular raw surface was discovered. The right meso-salpinx was studded with nodules. Nothing further was done. Temperature ran 102. The last report from the case states that the woman suffers in much the same way still.

A third case was reported in which the symptoms were similar to the ones above mentioned. A small fibroid was noted on the posterior wall of the uterus. Operation revealed the ovary studded with sago-like nodules. Exploratory incision, as a means of diagnosis, was necessary until the symptoms produced by the



TORONTO UNIVERSITY (MAIN BUILDING).

disease were better understood. The condition might be mistaken for three other things—salpingitis from some other cause, hysterical neuralgia and pelvic peritonitis of the subacute variety, due to ovarian or uterine growths. The doctor then called attention to the differential diagnosis between these conditions.

Other cases of salpingitis were due to sepsis after miscarriage; infection of the vaginal tract with gonorrhœa. A careful search would soon reveal the true region of the disease. To differentiate the trouble from hysteria, the thermometer was useful, and if the temperature showed an elevation and the patient failed to improve under treatment, an exploratory operation should be done. In the third case, a definite tumor could be discovered. As in the one case referred to above, the two conditions might co-exist. The doctor then reported a case of a female aged 30, unmarried, who suffered much from metrorrhagia. She suffered much pain on the right side. Was constipated and suffered from nausea and feverishness. Was tender over the hypogastric region. Pulse, rapid. On opening the abdomen a dermoid cyst of the hydatid of Morgagni was found filled with old cheesy pus. Both tubes were filled with the same sort of deposit. Patient made a slow recovery.

Another case was reported in which the patient had never menstruated. An abdominal incision showed the tube to be filled with inspissated pus. Both ovaries and tubes were removed. The condition could never have been ascertained without the exploratory incision. From the limited experience he had had with primary tuberculosis of the tubes, ovaries and pelvic peritoneum, he believed that it was wise to remove the tubes and ovaries in such cases, or as soon as the peritoneum in the neighborhood is found affected, even though the tubes are apparently healthy.

THERAPEUTICS AND PHARMACOLOGY SECTION.

A paper was read by Dr. Fotheringham (Toronto) on "The Prescribing of Proprietary instead of Pharmacopœial Preparations." This the essayist believed to be a growing evil the profession was becoming addicted to, especially on this continent. It was the result of several causes, of which the following were mentioned: The commercial ardor and enterprise of the manufacturer; the clamoring of the public for more palatable medication; and the bad influence of a large section of the medical press, which were merely media for advertising all kinds of proprietary remedies, good, bad and indifferent. He thought a serious responsibility rested on the instructors in therapeutics to properly inculcate in the minds of students the present dangerous tendency. After discussing the definition of a *Proprietary article*, and referring to the centralization of the drug trade in the large manufacturing houses, the speaker dealt with the question from the

three chief points—the patient, the trade, and the profession. In conclusion he gave the following rules to govern the use of remedies not mentioned in the pharmacopœia: First, no nostrum of unpublished formula should ever be ordered; second, the mere fact that the formula is published does not make the use of the preparation either safe or desirable from the standpoint of patient or physician; third, that in regard to drugs, such as trional, phenacetin or sulphonal, which are copyrighted and patented, as well as patent foods and surgical appliances, suitability for the particular case, and actual merit, be allowed to control our use of it. And, finally, that no matter what order they might issue, they were to consider first and foremost the good of the patient, next the rights of the profession, and lastly the interests of the trade.

The discussion on diuretics was opened by Dr. Barr (Liverpool), who dwelt at length on the physics of the circulation, especially in pathological conditions. He then proceeded to deal with the treatment of diseases in which diuretics were indicated. The flushing process was based on the principle of washing out waste products, ptomaines, etc., and natural springs were no better than similar artificial products for this purpose. In granular kidney the best treatment, he thought, was to cut off nitrogenous foods, to take a purely vegetable diet, to drink whey and mild alkaline waters, and regulate the intestinal secretions by calomel. Benzoate of ammonium in uræmia was recommended. In heart disease cardiac tonics, combined in some cases with vaso-dilators, were regarded as most efficacious. In obstructive lung disease, ammonia, senega, and the saline diuretics; in cirrhosis of the liver, vaso-motor and cardiac tonics with mild saline purgatives; in hysteria with anuria, water and whey freely, vaso-motor tonics and saline diuretics were recommended. Local and general venesection and antimony were regarded as the most effectual agents in the dropsy of acute Bright's disease. In conclusion, the speaker said that diuretics were simply adjuncts to treatment; that no disease or process of disease should be solely treated by them.

Mr. Marshall (Cambridge) then dealt with the question of diuretics. As this subject could not be separated from the physiology of renal secretion, this was first considered. Various recent views were mentioned and criticised, and the possibility of explaining urinary excretion on a purely physical basis dealt with. Special stress was laid upon the metabolism of the renal cells as factors in accounting for the composition of the urine. The definition, classification, etc., of diuretics was next considered, and an illustration of so-called tachyuretics was given. Munk's, Sobieranski's, and Raphael's work was specially considered and the action of certain types of diuretics described. Dr. Atkinson (Newcastle) spoke on the absence of increased diuresis after the administration of nitrites and nitro-glycerine, and Dr. Shingleton Smith (Bristol) referred to the effect of digitalis and diuretics in certain conditions, and commented on the fact that apocynum cannabynum had not

been mentioned. This was little known in England, but in some cases it was a useful diuretic. As many papers remained to be read, the President then closed the discussion with a few remarks.

Dr. H. A. McCallum (London, Ont.) then read a paper on the action of Behring's serum in diseases not caused by the Klebs-Lœffler bacillus. The effect on consumption, cancer, pelvic inflammation, lupus, etc., was discussed. In one case of tuberculosis 25,000 units were given in three months, apparently with benefit. A favorable action was reported in a case of lupus. The theory suggested was that the serum increased the internal secretions. In connection with this paper, Dr. Bazin's or diphtheria antitoxine was read. He regarded it as important that the strength, date of production, etc., should be stated on the label. He believed that a "clinical suspicion" afforded sufficient grounds for the use of the serum; bacterial examination should follow this. Immunisation should be more generally followed. The President asked if cardiac failure did not sometimes follow the injections, but Dr. Bazin believed this was a coincidence and not a result of the antitoxine. He corroborated Dr. McCallum's observations on the hypnotic effect of the serum, and stated that slight turbidity, or rather fluorescence, was not prohibitive to its use.

PYSCHOLOGY SECTION

Dr. Bucke (London, Ont.) delivered the sectional address in psychology. He spoke of psychology as the most interesting and comprehensive of the sciences. Man is more important to himself than the whole outside world, and his most essential part is the mind. Our methods have always been very imperfect, for it is impossible to comprehend a single human mind without including in our examination all other human minds in all stages, and all other minds to which our own is related—our kinsfolk, the animals. As man's body is evoluted from pre-human ancestors, so his mind is rooted in the senses and instincts of his ancestral species. These senses and instincts still live in him, making up indeed far the larger part of his current, everyday life, while his higher psychical life is merely an outgrowth and flower of them. In the growth of man we recognize two processes. First, the gradual evolution to perfection of the faculties that have already come into existence, and second, the springing into existence of faculties which had previously no existence. Hearing and sight developed by slow progress from the centres of touch; so also the realm of the intellectual, conceptual life was born from ages of receptual and millenniums of the perceptual. Dr. Bucke then discussed the mental growth of the individual and the race, tracing it from the first signs of excitability and discrimination to the capacity for pleasure and pain, then memory, recognition of individuals and communication of ideas, then the

TORONTO UNIVERSITY BIOLOGICAL DEPARTMENT.

moral faculties. The human being at about two years of age has reached the mental plane of the higher animals. At the average of three years in the human individual, self-consciousness is born, and the individual from the point of view of psychology has become a human being; but the color sense, the sense of fragrance, the musical sense, and the human moral nature are all acquired at a later period of life. Many thousand years must have elapsed since the first development of self-consciousness in the human race. Memory and simple consciousness appear a few days after birth; the use of tools twelve months after; shame, remorse and a sense of the ludicrous at fifteen months; and it is to be noted that in every instance the time of the appearance of the faculty in the infant corresponds with the stage at which the same faculties occurred in the ascending animal scale. Three laws are worthy of notice, and govern the acquisition of new faculties in any given case. First, the longer a race has been in possession of a given faculty, the more universal will that faculty be in the race. Second, the longer a race has been in possession of a given faculty, the more firmly is that faculty found in each individual of the race who possess it. Third, the state of dreaming seems to reveal the fact that in sleep such mind as we have differs from our waking mind, especially by being more primitive—in dreams we pass backward into the pre-human mental life. After referring to the probable periods at which the distinctive human faculties appear in the race and in the individual, and to the broad division of consciousness into *simple* consciousness and *self* consciousness, Dr. Bucke then said: The mind is still growing. No man can ever say positively that his theory is the true one, but I am prepared to say of the above hypothesis that, if accepted, it will enable us to understand something of the phenomena of mind as we observe it. In this idea of evolution lies enveloped the mystery of the past, the explanation of the present, and the sure prescience of the future, giving what we were, what we are, and what we shall be. If this hypothesis be correct, then all forms of insanity, including all forms of disease, are cases of atavism. First, by slow and devious stages taken in darkness, our remote ancestors climbed to consciousness. After another long interval they reached self-consciousness. But that cannot be the end, the cosmic consciousness could not stop there. Our old mental faculties are fading out, others advance to greater perfection alongside of them, others are only now springing up. So-called telepathy and clairvoyance seem to be specimens of such commencing faculties; so also the phenomena of spiritualism. The labors of the Society for Psychical Research have made it plain that the phenomena are real and well authenticated. To me these are cases in which a given human being has faculties which are not commonly preserved.

Dr. A. T. Hobbs (London) read a paper on "Surgical Gynæcology in Insanity." The gynæcological examination of one hundred insane women under anæsthesia in London (Ont.) Asylum

had shown that ninety-three suffered from pelvic disease, including all of those found in this region. He held that if the physiological development, working and decadence of these organs had a marked influence on a woman's mind, it was likely that pathological lesions would often act as a causative agent of insanity.

The essayist then entered into the details of some methods of treatment, and the results. Thirty patients recovered.

Dr. Daniel Clarke (Toronto) read a paper on "Reflexes in Psychiatry." Dr. Clarke thought it was doubtful if the specialism of the day was a good thing. It fostered fanaticism. A specialty, to be successful, should be based on a knowledge of the whole human organism in health and disease. The doctor then referred to certain reflex disturbances. One influence might begin from without and might end in some of the great nerve centres; so it might begin in one great nerve centre and show its malign influence in some particular organ. Atonic dyspepsia, ovarian neuralgia, various convulsions, angina pectoris, asthma, diabetes, and various others of this class had been treated locally, not only without benefit but with positive injury to the nerve centres in which lay the primary cause. Many women have been unsexed to their moral and mental undoing, by unwarranted interference by the gynæcologist. In his experience not more than three and a half per cent. of female insane patients were afflicted because of uterine disease, but at least forty per cent. were certified as being through this cause. It was a fact that when insanity set in many subacute diseases of the uterus disappear. Dr. Clarke held that neither change of life nor the puerperal crisis had any special danger in the production of mental disorders, unless there existed a predisposition thereto. The essayist quoted Skene, Lusk, Goodell, Tait, and Abbutt in support of his views.

A discussion took place on the relation between pelvic diseases and insanity, and the value of gynæcological operations in the relief of mental symptoms.

Dr. J. Russell, Superintendent of Hamilton Asylum, read a paper on "The After Effects of Surgical Procedure on the Generative Organs of Woman for the Relief of Insanity," in which he opposed the views of two papers read before, claiming that uterine disorders were not a common cause of insanity, and that when they were found to exist in the mentally afflicted, operation was rather detrimental than otherwise.

Drs. Clarke, Dewey, Burgess, Brush, Urquhart and Alexander followed in discussion, the majority favoring the view that surgical interference with the genital organs of insane women should be practised only when the same indications were present which demanded operative procedure in the sane.

THE SOCIAL SIDE OF THE MEETING.

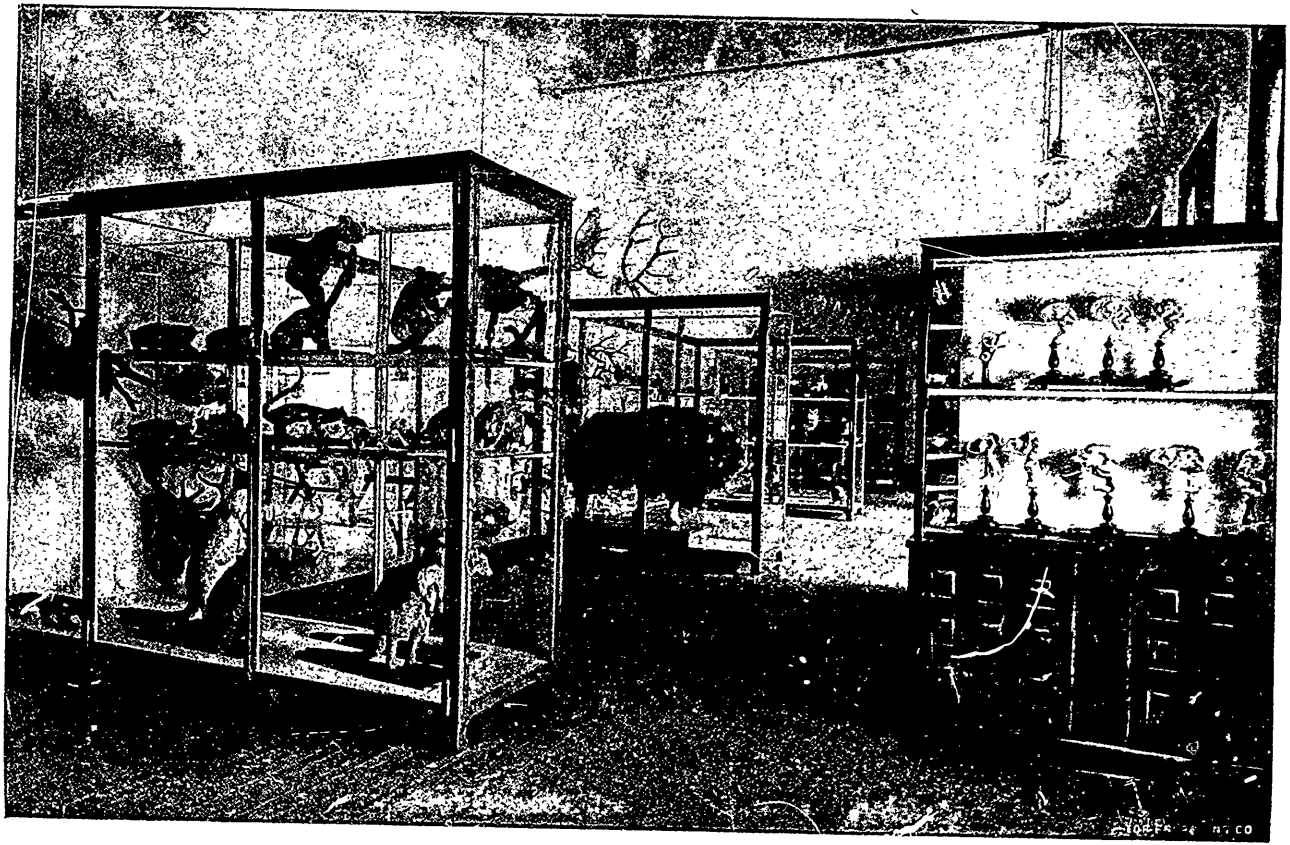
The entertainment of the guests and members of the Association by the Montrealers has, we believe, never been paralleled in the history of medical associations in America. Of the opening service at the Cathedral; of the welcome extended by the Mayor, the Lieutenant-Governor, the Governor-General and the President of the Association; of the free transportation to the many delightful places in the city; of the afternoon tea and reception at the Art Gallery by Miss Roddick; of the soiree at Laval University, and the reception by the Governor-General; of the special excursion down to Lachine and the run through the rapids; of the garden party at the Royal Victoria Hospital; of the magnificent reception by the Right Hon. Lord Strathcona and Mount Royal; of the Mayor's lunch on the Mountain; of the reception at the Golf Club; of the garden parties given by Mesdames Hague, Finley, Ross, Greenshield, and others; of the corner-stone laying of the Nurses' Home at the General Hospital by Lord Lister; of the trips to Lake St. Louis, Ottawa, Memphremagog, Saranac and other places; of the conversazione at Old McGill, and a score of private dinners, a book might be written eulogistic of the hospitality and open-handedness of the profession and citizens of Montreal.

At Miss Roddick's tea, given in honor of the ladies accompanying the United States, English and Canadian doctors, there were over one thousand people present, composed not only of medical men and their wives, but of many of Montreal's best people. It was a most enjoyable function, and was an auspicious opening to the socialities for which the President's daughter is to be highly congratulated.

The Mayor's luncheon on Mount Royal was a delight; the weather was perfect, the surrounding view entrancing. Lord Lister, in replying to the toast of the British Medical Association, said he must assure their entertainers how profoundly grateful the members were for the magnificent reception that had been accorded them in Montreal. They would never forget it, nor the beautiful panorama that stretched itself before their eyes at that moment.

But, perhaps, what "capped the climax," was the immense reception of Lord Strathcona and Mount Royal, at his beautiful residence, where the two thousand guests were entertained in a princely way.

All the entertainments were carried out without a hitch, and we, voicing not only the opinion of the Toronto and Ontario delegation, but also that from the other provinces, the British Isles and the guests from the United States, say that the friendly welcome and hospitality of the profession and people of the Metropolis of Canada were beyond all praise, and we are sure that throughout their lives the most vivid and pleasant recollections shall come to all of those who had the good fortune to be present at the sixty-fifth annual meeting of the British Medical Association.



INTERIOR BIOLOGICAL MUSEUM, TORONTO UNIVERSITY.

The Canadian Journal of Medicine and Surgery

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Editorials.

ARTERIOSCLEROSIS.

A NEW treatment for angina pectoris and other forms of arteriosclerosis has been recently brought forward by Professor Th. Rumpf, of Hamburg (*Berlin Klin. Wochenschr.*, March 29th, April 5th, 1897). It is well known that the elimination of lime-salts from the body is increased by the subcutaneous injection of calomel, corrosive sublimate, iodide of mercury, or lactic acid; also by the use, per orem, of acetate of potash, oxalic acid, and the greater number of diuretics, as well as fasting.

Professor Rumpf finds that a diet poor in lime provokes an abundant elimination of lime, and he recommends the following diet for cases of cardiac atheroma and angina pectoris:

250	grammes	of	meat	containing	0.75	per cent. lime.
100	"	"	bread	"	0.15	"
100	"	"	fish	"	0.04	"
100	"	"	potatoes	"	0.03	"
100	"	"	apples	"	0.02	"

This menu, which contains 93 grammes of albumen, 14 grammes of fat and 93 grammes of hydro-carbons, gives 892 calories. An addition of 100 grammes of butter brings the number of calories up to 1700, and to 2000 if 100 grammes of cream and 50 grammes of sugar are added. This menu contains ten times less lime than milk, given in the quantity required in full milk diet, and three or four times less than the diet allowed to replace milk (Hoffman). Apples may be replaced by French beans, cucumbers or green peas. Milk, which is extremely rich in lime, is absolutely interdicted, as well as cheese, eggs, beets, savoy cabbage, rice and spinach. For drink he orders distilled water or boiled water, which has been cooled. He prescribes the following mixture:

℞ Sodium bicarbonate ..... 10 grammes
Neutralize with lactic acid.....q. s.
Then add lactic acid,
Syrup .....āā 10 "
Distilled water ..... 200 "
Mix. To be taker in the twenty-four hours.

Professor Rumpf contends that this formula, unlike some other cardiac tonics, may be used for a long period without the slightest inconvenience. He has treated twelve cases of arteriosclerosis in this way, and in three cases of angina pectoris the success has been marvellous. In all these cases an exact account was kept of the amount of food taken, as well as the excretions (fecal and urinary), and it was proved that the patients excreted more lime than they took in their food. Rumpf asks if the good effects of the treatment are due to the decalcification of the coronary arteries? He does not pretend to cure calcification of these vessels; at most he hopes to keep the atheroma *in statu quo*, and wishes

that his experiments may simply be considered as a new method of treating cardiac atheroma.

There does not seem to be any reason to think that in well-selected cases this combined dietetic and pharmaceutical treatment of calcification can do any harm. Flint says that "calcification may be a conservative process, as when it checks the growth of tumors, or it may be detrimental, as when it affects the arteries or cardiac valves." In the former it would not be advisable to interfere; in the latter, however, as the increased elimination of lime-salts ought to prevent the deposit of fresh calcareous matter from the blood in the walls of the weakened vessels, Rumpf's treatment holds out a hope of relief to patients affected with a very grave pathological condition, and seems well worthy of a trial.

J. J. C.

VIN MARIANI.

THE millennium must certainly be nigh, when the frequenters of saloons have taken to calling for the excellent tonic and stimulant mentioned at the head of this article, instead of the beverages ordinarily sold in such places. Or it may be, that the moderns have discovered that a mere stimulant is insufficient to obviate the various exhausting demands, made on the human organism by business and pleasure, and find in Vin Mariani a happy assistance, which unaided wine cannot give. Substituting coca for honey, we may say with Dryden:

> "A pleasant beverage he prepared before,
> Of wine and COCA mixed."

The popularity of Vin Mariani is not to be wondered at, when we consider, that the principal well-known effects of coca are manifested, in enabling those who use it to remain for a long time without food, to endure muscular fatigue, and to preserve a cheerful temper, all of which are most desirable indeed, and frequently hard to obtain, especially the last. However, in quaffing Vin Mariani, we must not forget that coca is a medicine, that it should be used medicinally and under medical supervision. It would be regrettable indeed if so potent a preparation, recognized by the French Pharmacopœia, should be placed in the same list as vermouth, absinthe or Saint Raphael.

The fact, that to please his patrons, a saloon-keeper undertakes to play the parts of physician and pharmacist, and dispense Vin Mariani at so much a glass, is not a sufficient reason, why the License Department should interfere with the sale of unbroken bottles of this preparation by a qualified pharmacist.

It is quite likely, also, that the high price of the article in France, where a half-litre bottle retails for a dollar, would make it unprofitable for a Canadian saloon-keeper to sell it to customers by the glass, at what they would consider reasonable rates.

Reasoning in this way, people desirous of obtaining a guaranteed preparation, may prefer to get an unbroken bottle, bearing Mons. Mariani's signature; and it seems a hardship that they should be compelled to obtain this preparation from a wine merchant, when they have been accustomed to get it from a pharmacist.

This view is all the more reasonable, when we remember that a great many liquid preparations dispensed by pharmacists contain alcohol, and it seems absurd for the Liquor License Department of Toronto to wish to apply to the sale of Vin Mariani a rule, which does not apply to Vinum Quiniæ and the officinal tinctures.

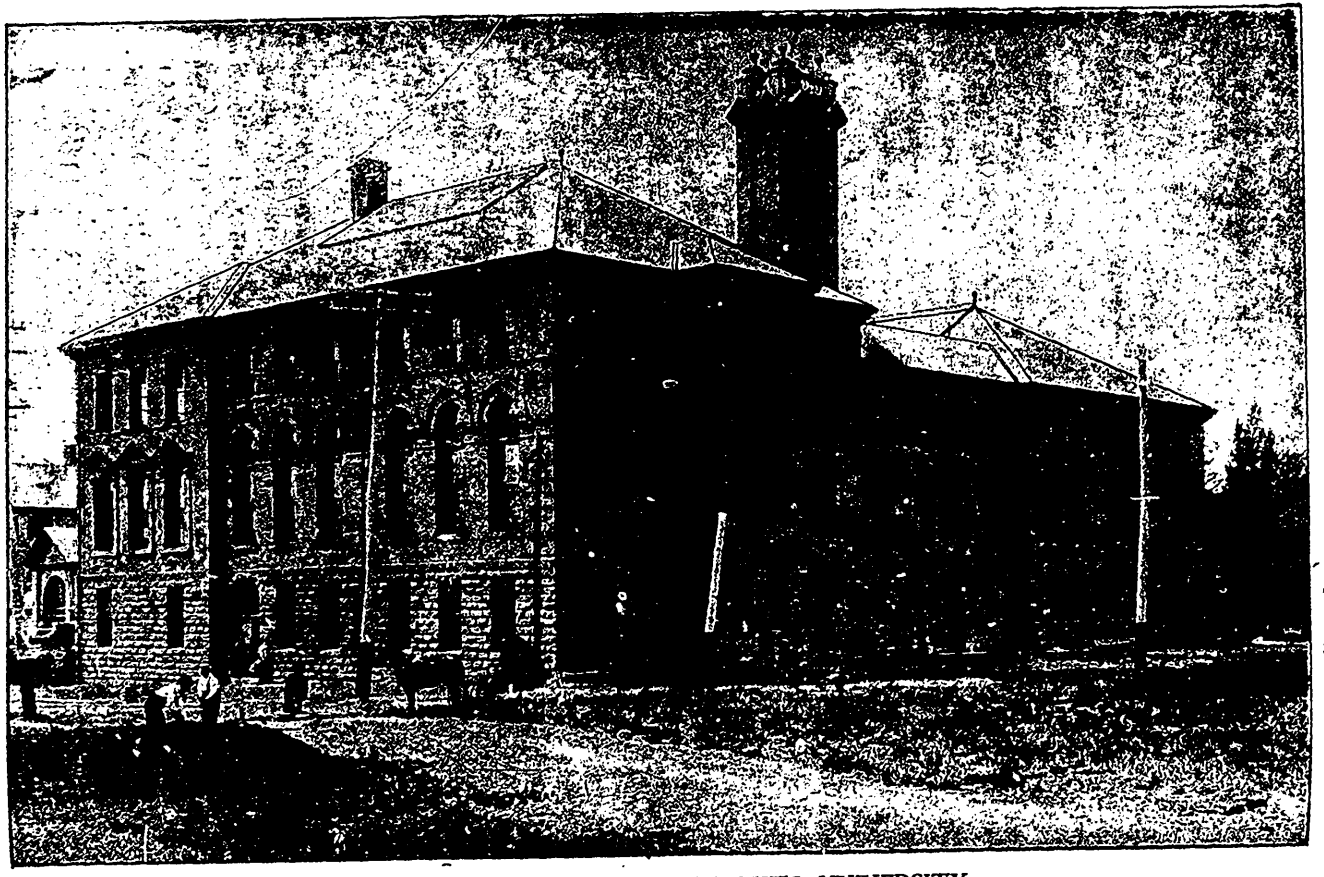
J. J. C.

THE DISTINGUISHED GUESTS AND THE HOSTESS.

"Sir, you are very welcome to our house.
It must appear in other ways than words,
Therefore, I scant this breathing courtesy."

—*Merchant of Venice.*

THREE centuries ago Jacques Cartier, the master pilot of St. Malo, set sail to find Cathay. On he sailed through the Straits of Belle Isle, and along the west shore of Newfoundland which he thought "must be the land God allotted to Cain," so rugged and barren it seemed. But soon fertile soil and sunny skies greeted his eyes, and at Gaspé he landed and set up a great white cross in the name of the Sovereign of France. Then farther north he came and "discovered Canada," at that time the old Huron-Iroquois name given to a town of Indian dwellings on the north shore of the St. Lawrence; but now the name Canada signifies great self-governing provinces stretching from the Atlantic to the Pacific, and indeed the "happy hunting ground" of a contented people. And so to this country have come from across the sea the wise men of the nineteenth century to discuss the problems of science, also to wonder at



CHEMICAL LABORATORY, TORONTO UNIVERSITY.

the progress of this New World, and guess at what life meant to the early settlers, hewing their way to the light out of the dense primeval forests amid which they had chosen to build their homes. And young Canada extended to the Scientists a smiling welcome. She received the earliest arrivals among her guests in her Queen City, Toronto, beautiful with its garlands of luxuriant foliage, and gay with bright flowers that seemed to love to bloom and add their grace and fragrance to the occasion, conscious perchance of the value of even their little lives in the sight of the great men who study, and wonder, and say,

> "Little flower, but if I could understand
> What you are, root and all, and all in all,
> I should know what God and man is."

Surrounded by Nature's loveliness, and almost within hearing distance of the thunders of grand old Niagara, for a second time in its existence, the British Association for the Advancement of Science honored Canada with its presence, and opened its sessions in the University of Toronto, situated in the centre of the Queen's Park and surrounded by the scientific and Parliamentary buildings. Many remarks expressive of admiration were passed by the visitors upon viewing the handsome group of buildings, rearing high their stately heads, giving an air of solidity, a suggestion of Old World architecture, and the needed crown of dignity to the gay young city. During the leisure hours between their discussions of the "deep and hidden things," the brain-workers took many a peep at Toronto's breathing spots. High Park, the play-ground of the city, where Nature reigns supreme, appealed to many a lover of the beautiful—its lofty trees, its great pines flinging their perfume and breathing their strange sighing song as they are rocked to and fro in the summer breeze; its winding paths beginning in soft shadows so suggestive of coolness and ending in visions of restful beauty, where tall ferns shelter the wild flowers as they play hide-and-seek like happy-hearted children. The look of interest on the faces of the Scientists deepened as they were told that the immense park was the gift of one man, an Englishman born and bred, but who in later life found in Canada such a kind stepmother that he bequeathed to her fairest city this garden of nature, free as the sunlight, and where the rich and the poor might meet together and feel the "same Father over all."

Many and many a pleasant hour was spent by the visitors in

enjoying glimpses of the home life of the "Colonists," and many dainty banquets were spread temptingly with the products of the soil. Niagara, the inimitable, was seen, ever to be remembered.

* * *

All too soon, however, it seemed, the 1897 meeting of the British Association for the advancement of Science came to a close, but many of its members hastened on to Montreal, there to again take part in a notable meeting. This time they became the votaries of a common cause, with but one subject to consider, perhaps after all the most wonderful, for truly "the greatest study of mankind is man."

And so the British Medical Association met to commemorate the wonderful discoveries in the art of Surgery and the science of Medicine, and to give by personal contact a new impetus to study, and so to speed the day when, so perfect the mechanism, so certain the results accomplished, and so sublime the power of anæsthetics, that pain shall be no more.

The medical men of this younger country deferentially bow to the men of the Motherland, and honor them for what they have already achieved. They also revere the men of the great Republic to the south of Canada, for from there came the discovery of anæsthesia. Prof. Goldwin Smith, in discussing the wonderful achievements of the era, said he thought the most wonderful perhaps was the discovery of anæsthetics.

Very highly the Canadians appreciated the privilege of meeting once more with some of those at whose feet they sat in student days in the Old World, and honored indeed to join forces with them for further study and the exchange of thought, realizing that "in union lies strength." In another part of this issue of the JOURNAL our readers will find some of the papers read, and also a synopsis of the proceedings; and for the benefit of those who were unable to be present, from England and the States, a number of half-tones, reproduced from photographs, of the principal universities and hospitals, have been inserted.

Many were the words of praise of the European and Canadian delegates present as to the skilful management of the many efficient committees who took charge of the various sections. So interesting the papers read, and the discussions following their reading, in every section, that great disappointment was felt that even in the high pursuit of knowledge the rule that a body cannot occupy two places at one time remained inflexible. Considering

the distance, and the fear of *mal de mer*, the attendance from the Old World was comparatively large. The United States also contributed a few representative physicians. No doubt many more would have been present, but somehow the idea became noised abroad in the States that the British Association meeting was to be a sort of "a family tea-party." The prevalence of that idea was much to be regretted. As to the Canadians, they were out on time and in full force (we know whereof we speak), participating in everything scientific and social, and wishing everybody "many happy returns" in cooling draughts of Louis Roederer, Mumm, and Pommery!!

Montreal indeed extended to her visitors "the glad hand," and, with a politeness born of the blending of the Norman and Anglo-Saxon races, said, "Messieurs, the city is yours." So in the quaint streets, almost suggestive, in places, of Paris, or resting a moment amid the dim beauty of some fine temple of worship, or enjoying the view from that high tower of the city, the Mountain, might be seen groups of the honored guests. Perhaps the delightful sensation of "running" the Lachine rapids (for Dame Nature is unsurpassable) was more appreciated by the guests than any of the many outings arranged for their special enjoyment. With garden parties, dinners and banquets, and so many hospitable doors standing open, the hours seemed to take wings. Retaining very pleasant memories of their visit, Canada speeded her parting guests, with the hope strongly cherished on the part of her physicians that it was not "good-bye" that was said, but only "*au revoir.*"

It is to be regretted perhaps that Canada was seen only in ball dress and under summer skies, for what a vision it would be to British eyes, tired with the fog and smoke of old London, could they have awakened in Canada to find their window panes adorned with wondrous pictures of "Jack Frost's Little Sister,"

"That dear little girl, in her little white ulster and hood,"

and to hear amid the city's noises the merry jingle of the sleigh bells, and could they only have experienced a slide down Montreal's mountain-side on a toboggan. My! how the old ice slide at Earls Court would have sunk into utter insignificance in their estimation, and even formal Britishers for once might have cast dignity aside and Mont Royal have resounded with the shout. "Boys, it's the real thing."

W. A. Y.

MUSKOKA COTTAGE SANITARIUM.

On Saturday, August 21st, the Muskoka Cottage Sanitarium, at Gravenhurst, was opened with appropriate ceremonies. In response to the courteous invitation of the Board of Management, a large number of the profession, amongst whom were several lady physicians, with a goodly number of representative citizens, were taken up from Toronto by special train. The day could not have been improved upon—Dr. Powell having made special arrangements with "O. P. Probs" fully a month before.

Muskoka Cottage Sanitarium, near Gravenhurst.

On arrival luncheon was served on the verandas of the main building and cottages, and was fully appreciated by all present, there being somewhat of an "aching void" in the neighborhood of their solar plexus after the four hours' journey by rail. The opening ceremonies were presided over by Sir William Meredith, and addresses given by several noted men, among others being Dr. Barnes, the ex-President of the British Medical Association, Dr. Roddick, Dr. Geikie, Dr. Gould, of Philadelphia, Mr. W. J. Gage, Mr. Massie, Mr. Howland, and the Mayor of Gravenhurst. The

main building is one of the most complete on this continent, having very many points of improvement upon the sanitarium at Saranac Lake. The style of architecture is colonial. Special attention has been paid to such important details as heating, lighting, and ventilation. From cellar to tower the interior is finished in hardwood —birch, highly polished, having been the wood selected. Handsome fire-places (with their great logs) adorn the rooms and hallway on the main floor, and add much to the fine appearance of the interior and comfort of the patients.

The Sanitarium is situated in a most ideal spot on a promontory in the lake, only one and a half miles from Gravenhurst, and is surrounded and almost hidden by trees. The benevolence of the late Mr. Massey, Mr. W. J. Gage, Mr. Wm. Davies, all of Toronto, and others, in erecting such a beautiful home-like building, solely for the use of those afflicted by tuberculosis, cannot be too highly commended. The Board of Management intend, we are glad to say, to use great discretion as to the cases to be admitted to the Sanitarium, especially in one particular, that being that only those patients are to be admitted who, after an examination is made of the sputum, can be considered to be in the primary stages of the disease, as it is desirable that the Muskoka Cottage Sanitarium be the means of sending out cases cured of tuberculosis, and not simply be a resting place where the afflicted ones go to die. We are sure that the medical profession of Canada will be most happy to lend a helping hand to this worthy project, and in every way they can to further the interests of the Muskoka Cottage Sanitarium. For the advantage of those of our many readers who were not present at the opening, through the kindness of Dr. Powell, who took and furnished us with the photograph, we have reproduced on the preceding page a half-tone of the main building.

W.A.Y.

We regret exceedingly that owing to lack of space we are not able to give a synopsis of the recent sessions of the Medical Health Officers Association or the Provincial Board of Health, but hope to do so "in our next." For a similar reason, we have had to waive the insertion of The Index Medicus.

We extend our congratulations to Dr. Jimmie Thorburn, on his recently assuming the serious duties of "papa."

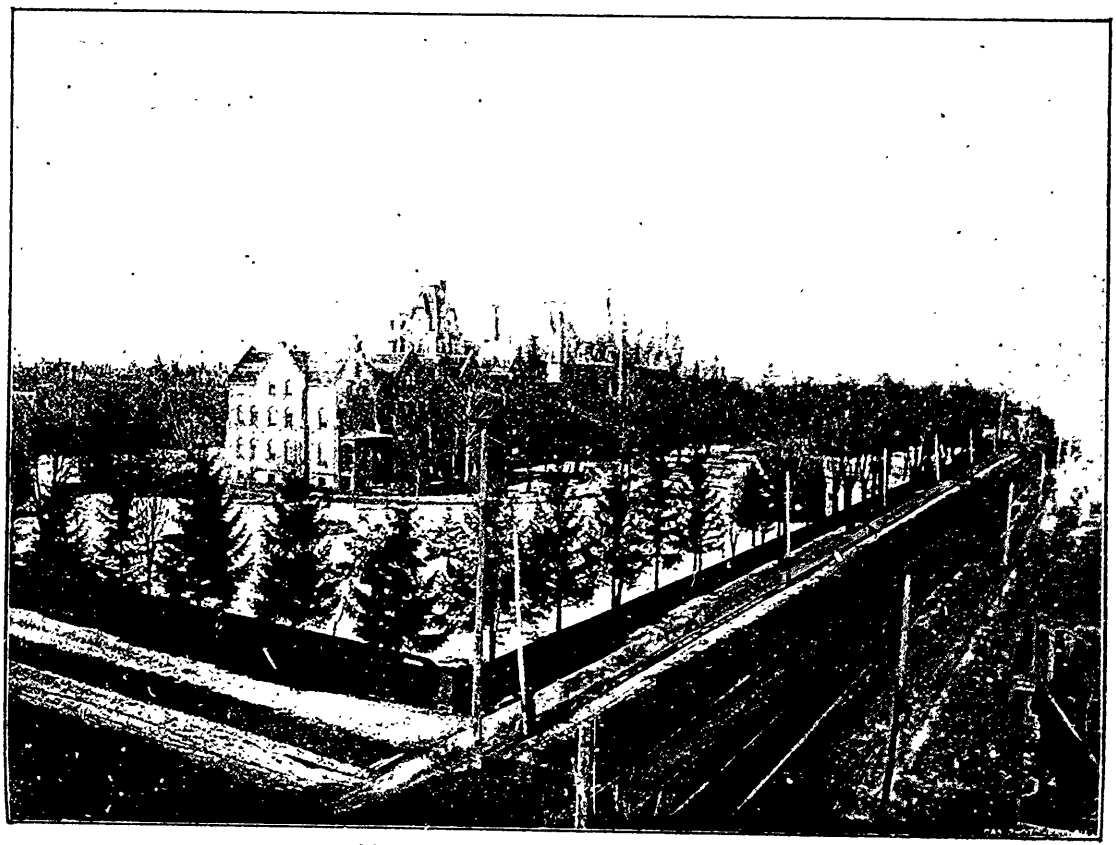
[PUBLISHERS' DEPARTMENT.]

The British Medical Association Museum.

THE museum, containing the various exhibits of pharmaceutical preparations and surgical instruments, in connection with the recent meeting of the British Medical Association in Montreal, was held in the Victoria Rink, immediately in the rear of the Windsor Hotel. It can be safely said that never before in the history of the association have the exhibits been so complete in every detail, and it would be very interesting for members to have, as one of the souvenirs of the meeting, a photograph of the entire interior of the rink, decorated, as it was, with any number of Canadian and American flags and a profusion of flowers. The exhibits were not only larger and more complete than ever, but the advancements made in practical pharmacy, during the past year even, were everywhere to be seen.

We, however, must find fault with one serious error made by the Committee who had the Museum in their charge, and that was that owing to its not being somewhere in the grounds of McGill College, where all the different sections met, the attendance of visiting physicians was not what it would otherwise have been, and many were the complaints on this point heard from exhibitors, who, in most cases, had expended several hundred dollars in order to be present at the meeting. Had the museum been placed in one of the many buildings in connection with McGill University, many medical men would have dropped in to see the various exhibits between the section meetings, who otherwise might never have done so, especially those who were not fortunate enough to get accommodation at the Windsor Hotel in the immediate neighborhood of Victoria Rink. We hope that the next time Canada is honored with the meeting of the British Medical Association, the committee will carefully consider this point, and encourage, rather than otherwise, our American and English manufacturers, who, without a doubt, have the best interests of the medical profession at heart.

We don't wish to criticise any further the Museum Committee and their work, but we cannot understand what idea they had in allowing the general public admission to the rink on one or two occasions. What interest could the public have in drugs or surgical appliances? We hardly think that this was wise, or to the benefit of those firms who came to Montreal to further their respective business interests and have their goods judged by members of the medical profession generally, and not to cater to the idle curiosity of the *ὁι πολλοι*, who attended the exhibit for no other reason than to secure samples, so as if possible to cure their own ills for the balance of the warm weather, and in that way dispense with the services of their doctor.



TORONTO GENERAL HOSPITAL.

It will be interesting to our readers who could not attend the meeting to know who were the exhibitors and what they had that was new.

Mr. R. L. Gibson (Toronto)—who acts as Canadian representative for such well-known firms as Duncan, Flockhart & Co., of Edinburgh, Scotland; Reed & Carnrick, the Maltine Manufacturing Co., and the Palisade Manufacturing Co., of New York—had a very tastefully arranged exhibit of the goods of each of these houses. He exhibited D. & F. chloroform, 1490 (practically non-decomposable); D. & F. Blaud Pill capsules of every kind; Maltine in its different forms; Hæmaboloids, Elixir Lactopeptine, etc., etc. The arrangement of every detail in this exhibit was carefully carried out, as the uniform maxim of the genial Toronto representative is, "If a thing is worth doing, it is worth doing well." We need not say a word in praise of the goods manufactured by all the firms represented. Duncan, Flockhart & Co.'s chloroform is known to be the best in the world. Their Blaud Pill Capsules are exceedingly attractive to the eye, and being quite soft and pliable to the touch, can be easily swallowed by the most fastidious and just as easily digested. D. & F. put up a full line of these capsules, and they are now sold at the same price as goods of a very much inferior character. The various preparations of Maltine were to be found in this exhibit, done up with a quintessence of neatness, the appearance of the wrapper itself being always a temptation to prescribe it. Mr. Gibson is to be congratulated on the handsome appearance of his exhibit, and Mr. Christie on his personal magnetism.

H. K. Mulford & Co. (Philadelphia and Chicago) occupied the choice position in the centre of the rink. The canopy erected was in beautifully carved wood, decorated in cream and gold, being part of the stall used by this firm at the World's Fair. Mr. Mulford was present himself with a staff of genial assistants. Among the many preparations shown by this enterprising house were: Mulford's Diphtheria Antitoxin (concentrated), which is supplied in 2 degrees of concentration; "Special," containing 200 units, and "Extra Potent," containing 500 units to each cubic centimetre. Mulford's Serum, we are glad to know, is making good headway throughout Canada, and is being adopted in almost all the hospitals of the Dominion. The firm also showed their Antitoxin for tuberculosis, Antituberculin; Mallein, for the diagnosis of equine glanders; Tetanus Antitoxin; Anthrax Vaccine; as well as a full line of their well-known compressed goods; antitoxin and hypodermic syringes, also medicine cases.

Bovril, Limited, was well represented by Mr. Silcock, the Canadian manager. This wealthy firm recently bought out the business of The Johnston Fluid Beef Co., and even in the past few months has done wonders, having already established a name for the purity and reliability of their preparation, Bovril, among the medical profession. Bovril is the vital principle of prime ox beef, being far in advance of some other meat preparations, owing to the

fact that it has introduced into it albumen and fibrine, desiccated at a low temperature by a special process and subsequently pulverized to a minute degree of subdivision, thus giving the patient, not part, but the entire nourishment supplied by animal food. Mr. Silcock also exhibited invalid Bovril, Bovril lozenges, Bovril beef jelly, Kudos cocoa and special emergency foods. The members of the association evinced the greatest interest in examining this exhibit.

ARTHUR P. TIPPET & Co., of Montreal, act as agents for Alexander Riddle & Co., and also for Lazenby & Co., of London. This firm exhibited Stowers' lime juice and similar preparations. The juice when taken with soda makes an exceedingly palatable drink, and would doubtless prove very refreshing in the sick room. Stowers' lime juice has not the bitter flavor of many other so-called lime juices, but gives the pure essence of the fruit. For Lazenby & Co. Tippet & Co. showed a full line of this firm's now well-known soup squares. The square, as it is called, contains the concentrated essence of the various soups, and has only to be added to a pint and a half of boiling water to make at once the same quantity of good soup with just as rich a flavor as if it had been recently made. These goods are eminently suitable for the use of convalescents, and will, doubtless, have a large sale in Canada. Of Lazenby's solidified soups the *British Medical Journal* says: The "solidified soup-squares" sent to us by Messrs. E. LAZENBY & SON, 18 Trinity Street, S.E., contain in each packet of about two ounces sufficient soup, stock and vegetables to make 1½ pints of soup. Each square is stated to contain the soluble portion of 1½ lbs. of beef free from fat and bone. Our analysis shows that these soup-squares consist of more than one-half of solidified meat stock mixed with carrots, lentils or other vegetables, or with tapioca as specified. Boiled as directed, the "solidified soup-squares" serve a very ready means for the preparation of excellent and nutritious soups.

SHARPE & DOHME, of Baltimore and New York, who have in the past year established such a reputation for their soluble hypodermic tablets, had a very complete exhibit under the charge of Dart & Co., of Montreal. Amongst other goods they showed a full line of medicinal extracts; solid and powdered extracts; gelatin and sugar-coated pills; enteric pills, effervescent salts; medicinal lozenges; tablet triturates and soluble hypodermic tablets. There is no doubt that S. & D. hypodermic tablets dissolve at once in but a few drops of water, thus not necessitating any delay in cases of emergency. Lapactic pills have already established a reputation for their tonic laxative properties, and ergotole is well known as not causing any local irritation when used hypodermically, or nausea when administered by the mouth.

DART & Co. also showed a complete assortment of the antitoxins as manufactured by The Paul Paquin Laboratories, of St Louis, among others being antitoxins for tuberculosis, tetanus, diphtheria, small-pox, puerperal fever, erysipelas, scarlatina and

ST. MICHAEL'S HOSPITAL, TORONTO.

cancer. Dr. Paquin has had very large sales for these goods in the States and will doubtless find a lucrative field for his goods awaiting him in Canada.

ARMOUR & Co., of Chicago, had an exceedingly attractive stall, in charge of a gentleman who was the personification of cordiality. Armour & Co. are now known all over the civilized world for the excellence of their goods. Their facilities for turning out preparations of meat are simply unsurpassed, their laboratories being only a few yards distant from their slaughter-houses, so that the stock they use is absolutely fresh, and in that condition yields an extract containing all the nutritious products of the meat. There were in the exhibit, Armour's pepsin in scale, guaranteed to be five times the B.P. strength; pepsin insoluble P.O. 1.3000: pepsin precipitated P.O. 1.3000; pepsin tablets, 3 grains each, equal to 15 grains B.P. pepsin; peptonizing tablets, specially prepared for predigesting; infants' and invalids' foods; nutrient wine of beef peptone; glycerole and essence of pepsin; pancreatin in different forms; thyroid tablets; extract of red bone marrow; beef juice and Vigoral. These goods were shown to the best advantage. The preparation which seemed to excite most interest was Extract of red bone marrow. This is made by macerating the marrow of young calves' bones in glycerine. It has since its introduction to the profession a year or two ago proved most efficacious in cases of leucocythæmia.

EVANS & SONS, LIMITED, of Montreal, took this opportunity of demonstrating to the profession the value of the use of such a pharmaceutical product as Savaresse's Capsules. These goods are not made of gelatine at all, but of a membrane; on that account not dissolving until they have passed into the duodenum, thus doing away with the fault to be found with ordinary capsules of sandal, viz., the disagreeable eructations always following the administration of this otherwise valuable therapeutic agent. This point ought to be carefully borne in mind by physicians, always specifying Savaresse on the prescription. Evans & Sons, Limited, also exhibited Montserrat lime juice; Montserrat arrowroot; antiseptine, digestivine, different preparations of cascara (in which the persistent bitterness is entirely removed, without in any way detracting from its strength); a full line of Evans' fluid extracts; Evans' granular preparations, infusions, liquors, syrups and Hæmo-hypophosphites. They also made a good showing of Eli Lilly's coated pills, for which house this firm are sole agents for Canada.

THE CHLORIDE OF SILVER DRY CELL BATTERY CO., of Baltimore, Md., made a splendid showing. Their galvanic, faradic and combination batteries were shown in a most complete manner by both Lyman Sons Co., Limited, and Paterson & Foster, of Montreal. We would direct our readers' attention to this firm's advertisement on the third cover page of this issue. The Chloride of Silver Dry Cell Battery Co., have established for many years past, that a satisfactory combination battery can be made, there being very few

doctors who have not found this out from actual use. The advantages of these batteries are cleanliness, compactness and portability, ease of renewal, and convenience and rapidity of action.

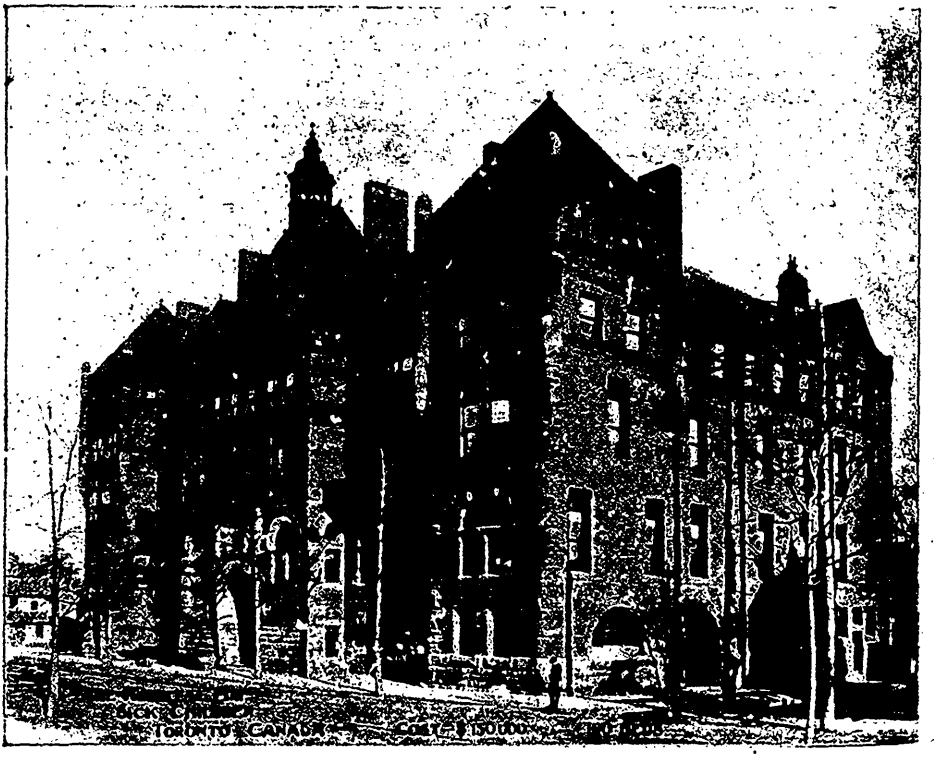
THE SANITARY CONSTRUCTION CO., of New York, exhibited their Formaldehyde generators. These instruments are now recommended by a large number of Canada's authorities in matters of hygiene, among others, Dr. Wyatt Johnston, of Montreal. The generators sell at very small cost, ranging from $14.00 to $35.00 and higher, and are guaranteed in five hours to destroy all germs of a pathogenic nature in a room of large dimensions by simply turning the pointed mouth of the instrument through the keyhole of the room to be disinfected. Mr. Taylor, the Company's manager, made, amongst other sales, a trial one of fifty instruments to a prominent visiting physician.

S. KUTNOW & CO., LIMITED, London, Eng., and New York. This exhibit was directly inside the entrance to the rink. The firm was represented by the President of the Company from London, a gentleman of unequalled courtesy, as also his brother, who manages the New York branch. This exhibit excited unusually great interest, and among other preparations shown, the principal one was Kutnow's Improved Effervescent Carlsbad Powder. This powder we have taken time to examine, and have found that it is all that is claimed for it by such journals as the *British Medical Journal, English Lancet* and the *Medical Press and Circular*. Kutnow & Co. are not a firm who press their different preparations upon the physician; but, on the other hand, fearlessly leave the decision as to the merits of their goods in his hands. The Carlsbad Powder is manufactured by a method of desiccating the salts containing the active principle of the mineral waters, and adding effervescents thereto. In this way the efficacy of this world-renowned spring is reproduced in wonderful exactness. There is no doubt that there are salts manufactured from other continental springs which are positively disagreeable, but in Kutnow's Carlsbad Powder, we think that there is a combination of palatability with gentleness in action, that proves most efficacious to those who suffer from constipation from leading too sedentary lives. In acid dyspepsia and those cases of skin eruptions arising from gouty, rheumatic or uric acid disease, the benefits to be derived from using Kutnow's preparation will certainly be marked.

DAVIS, LAWRENCE & CO., LIMITED, Montreal, had an exhibit worth spending a long time over. This firm hold a very large number of valuable agencies, among others being John Wyeth & Bro., of Philadelphia, Pa.; The J. Ellwood Lee Co., of Conshohocken, Pa., and Fellows' Medicine Co., of New York. Of Wyeth's goods little need be said. Few physicians there are who do not know all about Wyeth's Malt Extract, tablet triturates, compressed powders, ophthalmic discs, effervescing lithia tablets and beef Juice. Davis, Lawrence & Co.'s stall, under the able management of Mr. Charlton of that firm, had a full line of almost every one of these different

preparations, and every caller was treated with unlimited courtesy. No trouble was spared to prove the solubility of their hypodermic tablets, or the extra potency of Wyeth's Malt Extract in cases of wasting disease. Davis, Lawrence & Co., also showed Fellows' Syrup of Hypophosphites, and it was easily seen that all the doctors present were already satisfied as to the constancy of this old-time, reliable preparation, from the number present who gave vent to the expression, "I know all about Fellows' Syrup and prescribe it regularly."

LEEMING, MILES & Co., of Montreal made an exhibit of such goods as Seabury H. Johnson's Dressings and Plasters, The Bovi-



nine Co., The Ammonol Co., The Ripley Co., Marchand's goods, Hunyadi Janos Mineral Water, E. Fougera & Co.'s preparations, Nestle's Milk and many others, the firm holding a number of valuable agencies. Bovinine is one of the original beef juices manufactured by the cold process. It is having a steadily increasing sale in Canada, and has been shown on the best authority to be a most valuable agent in cases of anæmia and any condition of the system in which there is a lack of tone, with a paucity of red blood corpuscles. Hunyadi Janos water is now known the world over as a gentle, saline laxative and systemic depletant. The sales per

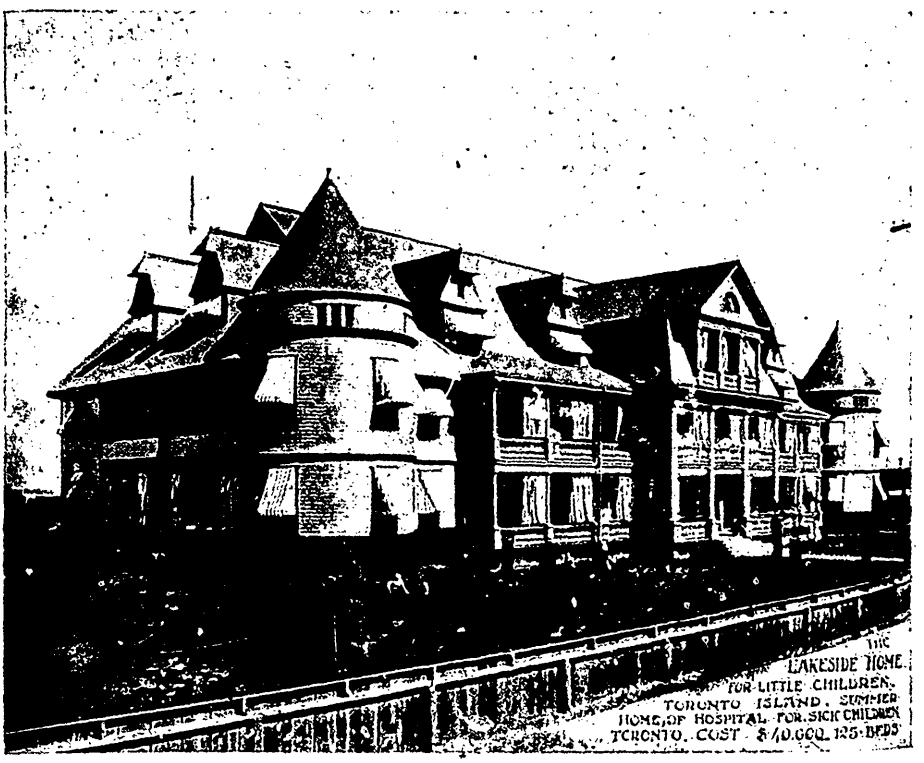
month are enormous, and getting larger from year to year. E. Fougera & Co., of New York, who are agents for all of Rigaud & Chapoteaut's goods (which are noted not only in France, but universally for their efficacy), showed at Leeming, Miles & Co.'s exhibit Apioline, Morrhuol and many other goods. They attracted considerable attention.

J. M. GROSVENOR & Co. (Boston, Mass.) took particular pains in showing the visitors their Konseals, made of rice flour. We congratulate this firm on the name chosen for these foods. It is in itself a reminder. The Konseals are bound to become more and more popular, and it seems to us to be a most unique and effective way of administering especially nauseating drugs. There is perfect solubility without any compression of the powder into an insoluble mass by the aid of an excipient.

FREDERICK STEARNS & Co. (Detroit, Mich.) made a wonderfully attractive display. They were represented by Mr. S. C. Stearns and "Mac," their popular Toronto traveller. They showed principally their Wine of Cod Liver Oil, Stearn's Essence of Diastase, Aromatic Cascara, a full line of elixirs, extracts (fluid and solid), liquid hæmoferrum, kolavin, elixir of lactinated pepsin, liquors, ointments, Dike's pepsin, and sugar and gelatine coated pills. Stearns' cascara has years ago proved itself to be one of the most palatable as well as effective preparations of the bark manufactured. Stearns' Wine of Cod Liver Oil, liquid hæmoferrum, and preparations of kola are daily meeting with a most hearty reception at the hands of the profession in Canada. "Mac" says that physicians would do well, in ordering Hæmoferrum, to recollect the fact that Stearns manufacture that preparation in both liquid and dry form, and to specify which they wish in their prescription. Stearns & Co. were amongst the first manufacturers of preparations of kola in America. Dike's pepsin is to be procured in scales or powder, being prepared by a new and original process. It has a high digestive power, dissolving three thousand times its weight of congelated albumen in six hours. We regret that Dr. F. K. Stewart could not attend the meeting, numbers of his friends being disappointed at not seeing him in his place.

GILMOUR BROS. & Co. (Montreal) are representatives in Canada for Johnson & Johnson, of New York, Upjohn Pill and Granule Co. of Kalamazoo, Horlick's Food Co., of Racine, Wis., and Dr. Bengue's Ethyl Chloride. The firm of Johnson & Johnson are now well known as manufacturers of surgical dressings, and had a very attractive display. What seemed to please the eye of the doctors most were the elegant compressed antiseptic absorbent cotton swabs. They are to be procured in several sizes, compressed into the shape of a penny, but the moment they are dropped into water they immediately open out and thus make a most conveniently-carried swab for washing a granulating surface or for gynæcological use. The Upjohn Pill Co., who are well known for their being the first firm to put up a friable pill which can be easily crushed beneath the

finger on the least pressure, were distributing a souvenir at the exhibit—a tie-pin in the form of a tiny bottle almost the size of a capillary tube, filled with granules made by the firm. It was intensely amusing at this exhibit one evening when the Firm's representative was demonstrating, to a number of physicians standing round, the friability of Upjohn's pills and the ease with which they are dissolved in the human stomach, to hear a woman, who was not a student of either pharmacy or human anatomy, but an uninvited outsider, break into the conversation and declare that up till then she had never been able to swallow pills, but now she



would adopt that method of medicinal administration at once; and pointing to a block of wood into which competitors' pills had been hammered, added, "but these pills hammered into that there block of wood are so good and hard that I will never notice them going down." It is needless to say that there was a considerable laugh at her expense. We direct the attention of our readers to Gilmour Bros. & Co.'s page announcement in this issue of the JOURNAL.

The S. B. CHANDLER, SON & CO., LIMITED (Toronto), made a most effective display of the Kny Scheerer goods, for which they are the Canadian agents. We have seldom seen so complete an

exhibit of everything in the surgical instrument line. There were surgical and hospital supplies in the form of operating tables, instrument and dressing tables, infusion and transfusion apparatus, bedside utensils, etc., etc. There was also a full line of surgical dressing sterilizers, reservoirs for the sterilization of water, apparatus for the generation of formaldehyde gas for the process of disinfection. The firm's Orthopedic and Natural Science departments were well represented. Altogether the stall was a most attractive one, and we understand a very large number of sales were made.

W. LLOYD WOOD (Toronto) exhibited Listerine, the standard antiseptic. It is needless for us to say anything in support of this well-known preparation, it is already too well known. The Lambert Pharmacal Co. have for many years put up preparations of such a high standard that the medical profession have not any hesitation in endorsing them. Mr. Wood also had a large exhibit of O'Keefe's malt extract, a new preparation, but one already meeting with favor.

H. K. WAMPOLE & CO. (Philadelphia, Pa.) had an exhibit arranged in a most attractive manner in a richly carved oak canopy, in the main aisle near the rear of the building, but, notwithstanding the fact that it was somewhat removed from the door, there was always a crowd of physicians drinking in the words of wisdom as they flowed from this firm's popular Toronto representative. The preparations shown were: Wampole's Tasteless Cod liver oil, which is a solution of the combined alkaloid and other active medicinal principles of cod liver oil, all the oily or fatty portion being eliminated. Then on the shelves were arranged Compound Syrup of White Pine, Syr. Hydriodic Acid, Asparoline Compound, Hypnobromic Compound, Antiseptic Solution, Compound Syrup of Hypophosphites, Tasteless preparation of Cascara Bark, Saw Palmetto Wine, Kola Wine, etc., etc. Wampole's Asparoline compound is now well known to the medical profession, being almost a specific remedy for dysmenorrhœa, and is composed of parsley seed, black haw, asparagus seed, henbane leaves and aromatics. Wampole's Hypnobromic Compound contains hydrate of chloral, bromide of potass, extract cannabis indica extract of hyoscyamus and morphia. It has been found valuable in cases of sleeplessness due to hysterical conditions, and is having a very extensive sale. We cannot but say that Wampole & Co. are fortunate in having a Canadian representative who is so very popular with the doctors.

LYMAN SONS & CO., LIMITED (Montreal), exhibited a full line of surgical appliances. This firm are agents for Arnold's sterilizers, Chloride of Silver Dry Cell Batteries, Leitz's microscopes, as well as for such houses as Howard & Sons, of Stratford, England. Their goods were arranged in a very tasteful manner, and had the advantage of being close to the front door of the rink. Mr. Walters, who has charge of the surgical instrument department, was present almost all the time, and received a very large number of physicians

who for many years have been customers of the firm. Judging from the instruments shown as samples, the class of goods manufactured by Lyman Sons & Co. is the very finest. Of Howard & Sons' goods, the principal lines on exhibition were Howard's Quinine (known all over the world), Howard's Cocaine, Howard's Camphor, etc.

DOWN BROS., of London, Eng., had a very large display of surgical instruments extending along a table of considerable length, and arranged in so attractive a manner that there was always a crowd present. The two or three representatives of the firm had a difficult task in attending to the wants of all inquirers. They showed a very full line of aseptic furniture for use in the operating theatre and hospital wards. The ether inhaler, as used by Mr. Tyrrel, of St. Thomas Hospital, as well as the "Rimball-Birch Gas and Ether Inhaler," were examined with care and interest. Of anastomosis buttons, those used by Dr. Mayo Robson, of Leeds Infirmary, Dr. Murphy and Dr. Paul, of Liverpool Infirmary, attracted most attention. Down Bros. also showed antitoxin syringes, Aymard's milk sterilizers, cleft palate instruments, ear instruments, intestinal clamps, laryngeal instruments, gall-stone forceps, empyæma tubes and many other instruments of the very latest designs. Down Bros. are indeed to be congratulated on bringing so complete an exhibit such a distance, and they may rest assured that it was appreciated by all the members of the Association.

KERRY, WATSON & CO., of Montreal, showed a magnificent lot of goods manufactured by W. R. Warner & Co., of Philadelphia. They included fluid extracts, tinctures, powdered drugs, elixirs, effervescing salts, also Warner's parvules, granules, compressed tablets and hypodermic tablets. Martin's Concentrated Cardinal Food attracted many of the visitors. This is prepared from selected wheat flour, carefully steam cooked, with the addition of milk sugar. The firm of Warner & Co. gave away to the members of the Association, as a souvenir, a leather card case with the name of the firm on the inside, along with a number of samples of their goods. We were pleased to learn that the sales of this firm's goods are increasing every day in Canada.

PABST & CO., of Milwaukee, Wis., had a stand at the back of the hall, where they had tier upon tier of bottles of their now well-known Malt Extract. This extract is rapidly gaining favor with the medical men of Canada, the color, flavor and chemical analysis denoting the exclusive use of malt and hops in its preparation, along with a perfect system of brewing. Pabst's Malt Extract is unequalled for the use of nursing mothers. It can safely be recommended by all physicians.

FAIRCHILD BROS. & FOSTER, of New York, are now without a peer in the manufacture of pancreatic and pepsin preparations. They exhibited a full line of their goods, which are almost too well known to even require mention. They include Peptogenic Milk Powder, Extract pancreatis, Trypsalin, Pepsin in powder and scales,

Diastasic Essence of pancreas, Peptonizing Tubes and Panopepton. The firm through their representative gave practical demonstrations illustrating the action and utility of the various ferments in many important directions. Their Panopepton presents the entire substance of prime lean beef and best wheat flour in a most diffusible and palatable form. After the beef and wheat are thoroughly cooked, digested and sterilized, they are dissolved in sherry wine. For elegance of preparation, strength of action and ease of administration to even the most fastidious, Fairchild's goods certainly take first place.

THE RADNOR MINERAL WATER CO., LIMITED, succeeded admirably in making their exhibit attractive. This water has been very rapidly coming to the front, being not only rich in the more

Trinity University, Toronto.

important sulphates, chlorides and bicarbonates, but contains in the natural state bromide of sodium, something other mineral waters do not possess. This fact is a most important one to the medical profession. Radnor water is bottled at the spring in the Laurentian mountain district of Canada. It has been deservedly endorsed by I. T. Donald, professor of chemistry in Bishop's College. The water springs from a bed of gneiss rock hundreds of feet beneath the surface of the earth, and filtering through a potsdam fountain, flows forth clear as crystal and icy cold. The analysis will be found on page 4 of this issue of THE JOURNAL. All that need be said is that it has been endorsed by the highest authorities in this country and has been found to be a most valuable therapeutic agent.

STYRA-PHENOL is a new antiseptic compound, and was exhibited by Dr. Henry Ievers, of Quebec. This preparation is composed of:

Balsam peruferum, 6 drachms.	Olibanum, 1 scruple.
" tolutanum, 5 "	Colophony, 9 ounces.
Benzoin, - - ½ drachm.	Phenol, - 3 "
Styrax, - - 1 scruple.	

There is no doubt that for years past there has been felt a want of a reliable antiseptic ointment. The formula of Styra-Phenol is somewhat of a departure from the old-time formulæ. It is well known that the presence of oil in any preparation deprives it in part of its antiseptic properties, owing to its non-miscibility with the discharges usually found in wounds and therefore preventing contact, a prime requisite in all germicides. The great advantage to be found in styra-phenol is that *it has not any greasy base at all*, so that the fault alluded to is at once done away with. That being the case, a wound dressed with this new preparation will be found not to require the usual number of dressings at all, as the preparation stays directly in contact with the granulating surface, and does not permit of the entrance of any further pathogenic germs. It seems to act also as an anodyne, therefore being very useful in burns or scalds. It is also styptic in action. We invite the profession to examine Dr. Ievers' preparation. Evans & Sons act as agents, and will supply samples.

FRANZ JOSEF NATURAL APERIENT MINERAL WATER was exhibited under Mr. Molloy, from New York. This water is one which for gentleness in action has come rapidly to the front during the past few years. Its action is thorough and prompt. Franz Josef is now employed and recommended by the leading medical authorities of Europe and America. Prof. Oser, of Vienna, said of it: "I frequently order the Franz Josef water in the Rothschild Hospital and in my private practice, and I obtain, even with small doses, satisfactory results in all cases." In cases of portal congestion, ordinary torpidity of the liver, Franz Josef can be ordered with a certainty of good results. The water can be obtained in Toronto from all leading druggists.

THE WILKINSON TRUSS, as manufactured by Bernard Lindmin, of Toronto and Montreal, was shown to the best advantage. Friend Lindman is (if we may say so) a host in himself, but when he gets "talking up" the Wilkinson truss, his hearer must of necessity be dumb. There is no doubt that what the manufacturer says of his truss is quite true, as there are very few doctors now but admit that this truss will hold up the worst case of hernia and result frequently in cure, without resorting to any operation at all.

THE ALPHA RUBBER CO., of Montreal, exhibited a full line of air pillows, catheters, invalid rugs and cushions, ice-bags, Alpha atomizers, Alpha and Omega syringes, urinals in all shapes, operating pads, bed-pans, etc. The Alpha goods are now looked upon

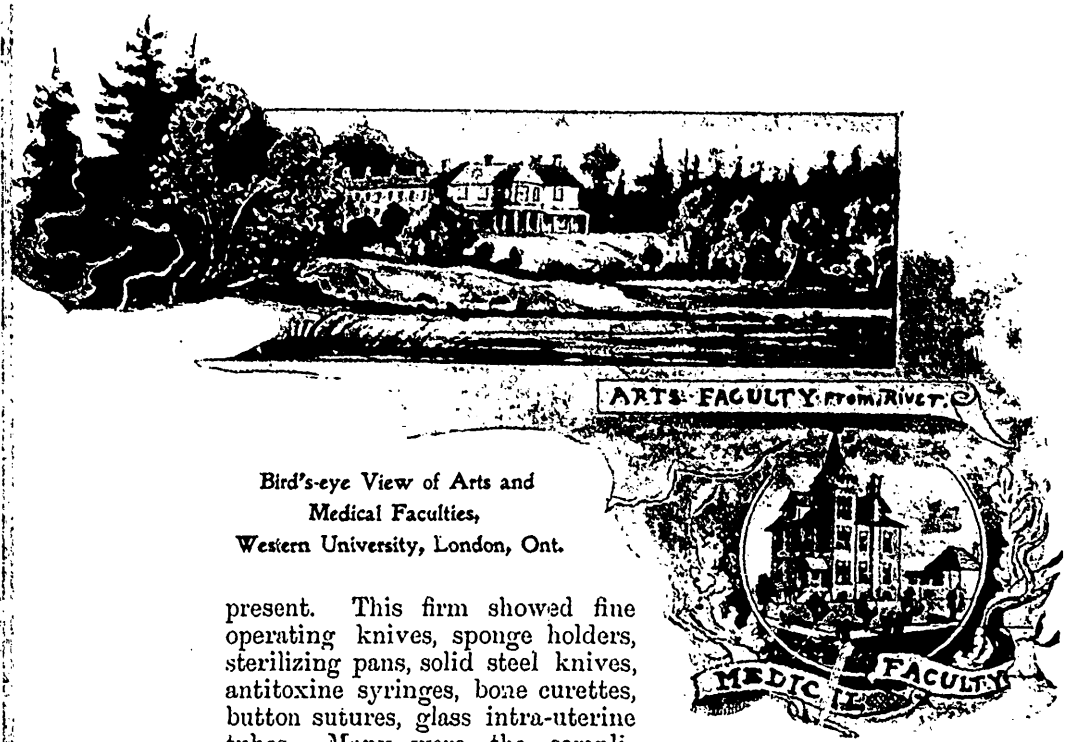
as the most reliable in the market. Their Atomizers and Syringes cannot be excelled, and are reasonable enough in price to be procurable by all. The catheter, with the depressed eye, as made by this firm, has long ere this been looked upon with great favor by medical men. The bed-pans, ice-bags and caps are thoroughly reliable; in fact, all the goods turned out by the Alpha Rubber Co. have stood the test, and nothing but the latest machinery is used in their factories. Physicians in ordering any goods in rubber would do well to *specify* ALPHA in their prescription.

THE WELCH GRAPE JUICE CO., of Watkins, N.Y., had a display of their now well-known grape juice. This article is made from

Rotherham House, Isabella Street, Toronto.

only the choicest Concord grapes, pressed and sterilized by the most improved apparatus. During the proper season the choicest grapes that can be secured are cleanly pressed, and the juice heated in porcelain, afterwards being hermetically sealed in glass bottles. The juice as turned out by the Welch Grape Juice Co. is most palatable and agreeable to the fevered patient, and could only be turned out by a firm who used not only the utmost cleanliness in the process, preventing the least particle of alcohol from coming in contact with what is bottled, but skill acquired by long experience.

THE J. STEVENS CO., LIMITED. of Toronto, had a very pretty exhibit, and one which no one passed by. It was looked after by Mr. Stevens himself, who was most courteous to every person



Bird's-eye View of Arts and Medical Faculties, Western University, London, Ont.

present. This firm showed fine operating knives, sponge holders, sterilizing pans, solid steel knives, antitoxine syringes, bone curettes, button sutures, glass intra-uterine tubes. Many were the complimentary remarks passed by the physicians who had the privilege of examining this display. Powell's button sutures were much admired for their utility and lightness. The firm also exhibited a very full line of antiseptic dressings packed in their own laboratory in Toronto, and made by the best English makers. Their sutures are as fine as any surgeon could wish for. The Hageorn Needles (Carsten) were examined by almost everyone present, as also was the strong glass intra-uterine tube of Angus McKinnon, of Guelph. Mr. Stevens is to be congratulated on the showing made by his firm.

ONE of the displays which always drew a crowd was that of the Hot Appliances Co., of 36 Cortlandt street, New York City. We are free to say that this is one of the best devices we have ever seen. There is now no use for a doctor having to employ someone to look after poultices, as the day of such old-fashioned ideas is certainly past, when one can procure one of the Appliances as made by this firm. It is so put together that with 5 cents' worth of methylated alcohol, the water circulating through the coil, which is applied, say, to the patient's chest, is kept hot for 24 hours, and what is more, the heat can be beautifully regulated by simply adjusting a collar encircling the flame. There is no danger in the use of this instrument at all, and we don't hesitate to say that we question if there is any physician who will after this put up with those abominations, linseed poultices, if he is within telephone distance of a surgical supply house who has in stock a "Hot Appliance" as made by this firm.

THE BALL NOZZLE SYRINGE CO., LIMITED (Toronto), had a most effective display, and judging from the amount of hustling done by

the genial president of the company, Captain Howard, there are few physicians who were present at the meeting who had not demonstrated to them how much in advance of the old-fashioned pip- tte, the Ball Nozzle is. The great advantage justly claimed by this firm is that it thoroughly cleanses the cul-de-sac, something that very few syringes do. There is bound to be a big sale for this article, as it is not only made of the very best of material, all imported, but particular attention is given to each syringe before it is turned out. We heartily endorse the Ball Nozzle to every practitioner.

BRAND & Co., of Mayfair, London, England, had a very satisfactory exhibit of all their meat preparations. They showed their beautifully prepared meat jelly, meat lozenges, and extract of beef. Brand's meat jelly is certainly a palatable preparation, and we cannot imagine the most delicate stomach not being able to retain it. Their meat lozenges consist of the concentrated essence of meat put up in the most convenient possible form, and eminently suitable for persons going on a journey or into camp. We are glad to know that these preparations are to be procurable after this from a Canadian depot.

AN instrument that attracted the attention of both physicians and surgeons, was HOLLAND'S IMPROVED INSTEP ARCH SUPPORTER, exhibited by Mr. Geo. G. London, of Boston. There is no doubt that there are many cases met with by the surgeon in everyday practice where the patient complains of a constant ache in the ankle-joint. It is not what it is frequently suspected to be, viz., rheumatic in origin, but, on the contrary, is due to *pes planus*, or flat-foot, a condition which nowadays is much more common than it used to be, and one which ought to be carefully looked into. Holland's Improved Instep Arch Supporter is a very ingeniously devised and yet simple instrument. It is very light in weight, is made in all sizes, and fits neatly into the boot. We are glad to know that it is to be procured from The S. B. Chandler Co., Limited, of Toronto.

OF the publishers who exhibited, Blakiston & Co., and Lippincott & Co., of Philadelphia, and Young J. Pentland, of Edinburgh, were there. Blakiston & Co. had a splendid display of their latest publications, amongst others being Crocker's Work on the Skin, Gould's Dictionary, Fick on Diseases of the Eye, Deaver's Work on Appendicitis, Blackburn's Autopsies, Gower's Manual on Diseases of the Nervous System, Leffmann's Chemistry, Harris' Dentistry, MacBride's Diseases of the Throat, and about a hundred other works. Mr. Roberts, the Canadian representative of Lippincott & Co., was there hustling all the time. He showed Garretson's Oral Surgery, Keating's Diseases of Children, Duhring's Cutaneous Medicine, Da Costa on Diagnosis, Rotch's Pediatrics, Woods' Practice of Medicine, William White's Text-Book of Genito-Urinary Surgery, and Lippincott's Medical Dictionary.

LEA BROS. & Co. also had a very large display of books. They had Loomis' American System of Medicine, Davis' Obstetrics,

Denins' Surgery, Clouston's Mental Diseases, Dercum's Nervous Diseases, Dunglison's Dictionary, Gray's Anatomy, Green's Pathology, Hare's Therapeutics, Hyde's Work on the Skin, Taylor's Venereal Diseases, and many others. W. A. Y.

The Physician's Library.

Surgery of the Rectum and Pelvis. By Chas. B. Kelsey, A.M., M.D., New York. Professor of Surgery at the New York Post-Graduate Medical School and Hospital, Member of the New York Academy of Medicine. With 281 illustrations and half-tone plates. New York: Richard Kettles & Co., 129 Fifth Avenue. 1897. Price, cloth, $6.00; sheep, $7.00; morocco, $8.00. Postpaid.

This is without any doubt one of the most complete works on the subject issued to date. The author's works on The Diseases of the Rectum already published were good, but this work is far in advance of anything yet written by him. It is something which will be found invaluable not only by the surgeon, but also by the gynecologist and genito-urinary surgeon, as in this book Dr. Kelsey has added to the text all such operations as are required in cases of laceration of the sphincters and perinæum, recto-vaginal fistula, recto-vesical fistula, retro-displacements of the uterus, acute and chronic prostatitis, fibroid tumors, etc. This combination therefore of The Surgery of the Rectum along with that of the pelvic organs is one never before attempted by any authority on such diseases. We think that, though the author has in the past met with very large sales of his other five editions of the work on the rectum, he will find that in this combined work he will receive a still more flattering reception. Physicians will do well to apply for copies at once to the publishers.

REPRINTS, PAMPHLETS, ETC., RECEIVED.

Fifteenth Annual Report of the Provincial Board of Health of Ontario, being for the year 1896.

Model Plumbing By-law, approved by the Provincial Board of Health, February 11th, 1897. Recommended for adoption by municipalities in Ontario.

Tuberculosis in cattle, specially prepared and published by the Ontario Department of Agriculture.

Atrophic Rhinitis, by John Edwin Rhodes.

The Antiseptic Treatment and the Limitation of Climatic Treatment of Pulmonary Tuberculosis, by E. Fletcher Ingals, M.D.

DR. THOMAS P. WEIR has moved away from Charles Street.

LORD LISTER, when in Toronto, stayed with Dr. I. H. Cameron.

DR. BOWIE has removed from Harbord Street to 191 Spadina Avenue.

SIR WILLIAM TURNER, of Edinburgh, was lately a guest of Dr. F. Lemaitre Grasett, and Dr. Henry Barnes, the ex-President of the British Medical Association, stayed with Dr. James Thorburn, and afterwards with Dr. George Peters.