THE VANCOUVER MEDICAL ASSOCIATION

BULLETIN

Published monthly at Vancouver, B. C.

Inflammatory Diseases of the Ear

Diagnostic Aphoris

Native Digitalis

Health Statistics

APRIL, 1925

Published by
McBeath Spedding Limited, Vancouver, B. C.

Doctors of British Columbia

Do not miss the 56th Annual Meeting of the Canadian Medical Association to be held in Regina, Saskatchewan, June 22-26, next.

A most interesting and important programme is arranged, including eminent men from our own country and abroad.

We want you to come, not only to hear papers and addresses, but for a holiday—to meet again the classmates of other days—and to enjoy the entertainment and hospitality which it will be our pleasure to provide.

Address communications to
Dr. M. R. Bow
care of Regina General Hospital
Regina, Sask.

Inserted by
Regina
Medical Society

PRESCRIPTIONS

filled exactly as written

Phones: Seymour 1050 - 1051

Day and Night Service

Georgia Pharmacy Ltd.

Georgia and Granville Sts. *Vancouver, B. C.*

THE VANCOUVER MEDICAL ASSOCIATION

BULLETIN

Published Monthly under the Auspices of the Vancouver Medical Association in the Interests of the Medical Profession.

Offices:
529-30-31 Birks Building, 718 Granville St., Vancouver, B. C.

Editorial Board:
DR. J. M. PEARSON
DR. J. H. MACDERMOT DR. STANLEY PAULIN
All communications to be addressed to the Editor at the above address.

VOL. I. APRIL 1st, 1925 No. 7

OFFICERS, 1924-25

President
DR. H. H. MILBURN

Vice-President
DR. STANLEY PAULIN

Secretary
DR. O. S. LARGE

Treasurer
DR. A. J. MACLACHLAN

Past President
DR. F. J. BULLER

TRUSTEES

DR. W. F. COY DR. W. B. BURNETT DR. J. M. PEARSON

Delegate to B. C. Medical Association
DR. J. A. GILLESPIE

SECTIONS

Clinical Section

DR. LYALL HODGINS - - - - - - - Chairman
DR. W. L. PEDLOW - - - - - - - Secretary

Physiological and Pathological Section

DR. C. H. VROOMAN - - - - - - - Chairman
DR. R. E. COLEMAN - - - - - - - Secretary

Eye, Ear, Nose and Throat

DR. G. C. DRAESEKE - - - - - - - Chairman
DR. COLIN GRAHAM - - - - - - - Secretary

Genito-Urinary

DR. G. S. GORDON - - - - - - - Chairman
DR. J. A. E. CAMPBELL - - - - - - - Secretary

COMMITTEES

Library Committee

DR. WALLACE WILSON
DR. R. E. COLEMAN
DR. W. A. BAGNALL
DR. W. F. MACKAY

Orchestra Committee

DR. L. MACMILLAN
DR. F. N. ROBERTSON
DR. J. H. MACDERMOT
DR. W. D. PATTON

Credit Bureau Committee

DR. L. MACMILLAN
DR. J. W. WELCH
DR. G. A. LAMONT

Dinner Committee

DR. N. E. MACDOUGALL
DR. A. W. HUNTER
DR. F. N. ROBERTSON

Credentials Committee

DR. G. E. SELDON
DR. D. MCLELLAN
DR. NEIL MCNEILL

Summer School Clinics

DR. ALISON CUMMING
DR. HOWARD SPOHN
DR. G. S. GORDON
DR. MURRAY BLAIR
DR. W. D. KEITH
DR. G. F. STRONG

VANCOUVER MEDICAL ASSOCIATION

Founded 1898. Incorporated 1906.

Programme of the 27th Annual Session

GENERAL MEETINGS will be held on the first Tuesday of the month at 8 p.m.

CLINICAL MEETINGS will be held on the third Tuesday of the month at 8 p.m.

Place of meeting will appear on Agenda.

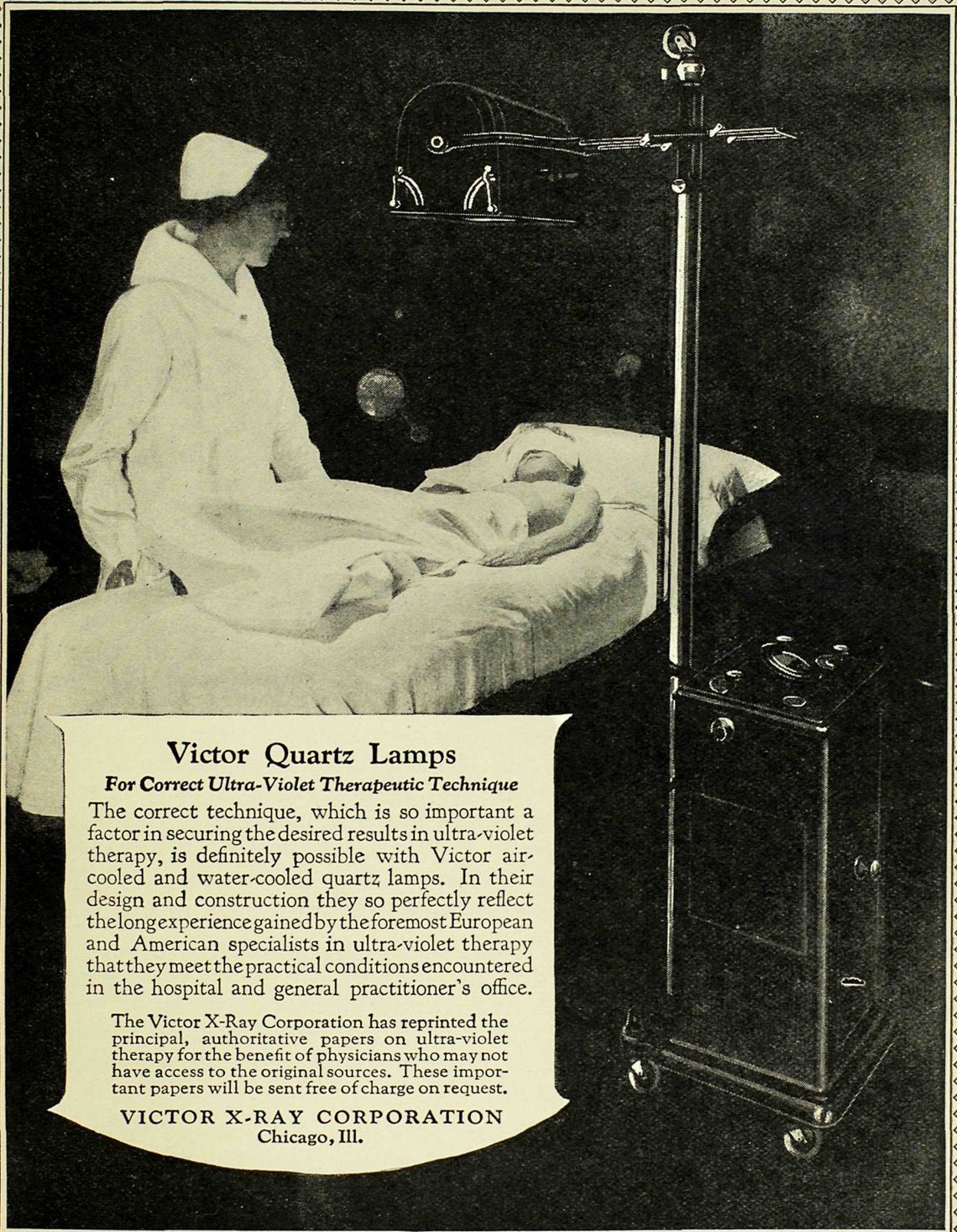
GENERAL MEETINGS will conform to the following order:

8 p.m.—Business as per Agenda.
9 p.m.—Paper of Evening.

SPRING SESSION

1925

JANUARY 6th—	*General Meeting.* The OSLER LECTURE by DR. FREDERIC BRODIE, "Aphasia."
JANUARY 20th—	*Clinical Meeting.*
FEBRUARY 3rd—	*General Meeting.* Paper: DR. W. A. DOBSON, "Neuroses in Everyday Practice."
FEBRUARY 17th—	*Clinical Meeting.*
FEBRUARY 25th—	*Special Clinical Meeting.* DR. C. E. HAGYARD (Seattle). Subject: "Colitis."
MARCH 3rd—	*General Meeting.* Paper: DR. R. B. BOUCHER, "Inflammatory Diseases of the Ear."
MARCH 17th—	*Clinical Meeting.*
APRIL 7th—	*General Meeting.* Paper: DR. J. L. TURNBULL, "Differential Diagnosis of Acute Abdominal Conditions."
APRIL 21st—	*ANNUAL MEETING.*



Victor Quartz Lamps

For Correct Ultra-Violet Therapeutic Technique

The correct technique, which is so important a factor in securing the desired results in ultra-violet therapy, is definitely possible with Victor air-cooled and water-cooled quartz lamps. In their design and construction they so perfectly reflect the long experience gained by the foremost European and American specialists in ultra-violet therapy that they meet the practical conditions encountered in the hospital and general practitioner's office.

The Victor X-Ray Corporation has reprinted the principal, authoritative papers on ultra-violet therapy for the benefit of physicians who may not have access to the original sources. These important papers will be sent free of charge on request.

VICTOR X-RAY CORPORATION
Chicago, Ill.

Photo by courtesy of Rush Medical Dispensary, Chicago

VICTOR X-RAY CORPORATION, Publication Bureau, 236 So. Robey St., Chicago

Please send me descriptive bulletin on Victor Quartz Lamps. Also reprints of authoritative papers on Ultra-Violet Therapy. I am interested especially in the treatment of

.....

I am also interested in Victor Apparatus for

☐ *Medical Diathermy* ☐ *Phototherapy*

☐ *Surgical Diathermy* ☐ *Ionic Medication*

☐ *Sinusuidal Therapy*

Name.....

Street.....

Town..... State.....

A-217-A

EDITOR'S PAGE.

We would call the attention of our readers to an article printed in this issue of the BULLETIN upon the local preparation of digitalis from the native foxglove. This is the first of a small series of articles of a similar nature which, through the kindness of Prof. Clark, of the Department of Chemistry in the University of British Columbia, we hope to print or reprint from time to time.

We think that a knowledge of this work should be more prominently brought to the attention of the medical profession of the province. It represents original research of a valuable description and of eminently practical worth. In the case of digitalis it is evident that a native drug has been produced which compares favourably with any commercial preparation. The product is both active and reliable, and only too often some of the preparations we order for our patient are neither the one nor the other. The way is undoubtedly open for the commercial manufacture of this drug. Whether it can be profitably made here is, of course, a question to be answered by those who would undertake its production. The common foxglove (digitalis purpurea) apparently flourishes in diverse climates either in a wild state or as a cultivated product. Whether the conditions of climate and soil as found in British Columbia are peculiarly suitable for the proper development of the active theraupeutic principles of the plant, is not of course clear as yet. But digitalis is only one of a number of drugs which are capable of being extracted from plants, shrubs or trees of native growth. Others have been investigated by Prof. Clark and his staff. Cascara Sagrada, for example, has been the subject of considerable research.

The tree Rhamnus Purshiana is indigenous in this part of the world, and the collection of the bark is, we believe, undertaken here on behalf of manufacturing chemists elsewhere. Experiments in the University of British Columbia seem to indicate that a considerable degree of the well-known specific properties of the bark reside also in the wood.

Concerning this and other preparations we hope, later, to publish articles. Enough has been said to draw the attention of our readers to the latest possibilities which undoubtedly exist in the Province of British Columbia in this direction. It is possible that some members of the profession, of a botanical turn of mind, may have had their attention drawn to the possible native source of other drugs, which might repay investigation.

* * *

The Committee on Arrangements for the Annual Summer School of the Vancouver Medical Association is hard at work. Already, as has been noted, considerable advance has been made in the programme. Each year the intellectual promise of the speakers selected seems to excel that of the previous session. We would

commend this now annual fixture to our readers. It is not too early to begin to plan your arrangements so as to enable a considerable proportion of the practitioners outside Vancouver to be in attendance. This is a co-operative endeavour to bring the wisdom, for the most part of the East, to supplement the practical knowledge of the West. We expect and usually get a condensed account of the progress which has recently been made in the department of medicine in which the speaker is particularly interested. The subjects are diversified and a practical turn is always emphasized.

* * *

NEWS AND NOTES.

A special meeting of the Association was held on the 25th ultimo, when Dr. C. E. Hagyard, a prominent gastro-enterologist of Seattle, Wash., read a very interesting paper on "Chronic Non-specific Colitis." Dr. Hagyard also held a clinic at the Vancouver General Hospital on the morning of the 25th, on gastro-intestinal disorders. Full reports of Dr. Hagyard's clinic and paper will appear in subsequent issues of this BULLETIN.

The regular monthly meeting of the Association was held on Tuesday, March 3rd, Dr. H. H. Milburn, President, in the chair. A letter from Dr. H. A. Barrett was read, and spoken to by the Doctor, calling attention to the apparent lack of appreciation of the importance of physio-therapy by the profession at large. It was moved by Dr. Sutherland, and seconded by Dr. Welch, that Dr. Barrett be given an opportunity of placing his specialty before the profession.

Dr. G. H. Clement's motion to amend the rule concerning election of nominees to Hospital staff appointments, was amended so as to have the election held at the meeting of the Association, and each nominee to have received a majority vote of the meeting.

The Chairman was also authorized to appoint a Committee to act in connection with the Victorian Order of Nurses' drive for funds.

Dr. R. B. Boucher gave a very full and instructive paper on "Inflammatory Diseases of the Ear," part of which is given in this issue. The remainder of Dr. Boucher's address will appear in two subsequent issues.

We are pleased to report that Dr. K. Shimo Takahara, who was recently operated on for appendicitis, is doing well and has left the hospital.

Dr. C. H. Vrooman was elected Chairman of the Health Bureau of the Vancouver Board of Trade, at their annual meeting held recently.

Dr. G. H. Worthington, Chairman of the Health Committee of the City Council, recently appeared in a new role and

delivered the weekly Health Talk through the *Province* broadcasting station, his subject being "The Importance of Vaccination Against Smallpox."

Dr. T. H. Lennie has recently returned from a holiday trip in California.

* * *

THE PHYSIOLOGICAL VALUE OF B. C. FOXGLOVES.

By JAMES ARNOLD DAUPHINEE.

(Working in the Departments of Chemistry and Botany, University of British Columbia. Abstracted from the American Journal of Pharmacy, Nov., 1924.)

The following report is an account of an investigation carried on during the year 1922-23 into the therapeutical value of the glucosidal content of British Columbia grown foxglove leaves (Digitalis purpurea, Hinni); and also into the effect, if any, of different fertilizers upon this value.

Five different samples of cultivated leaves have been analyzed by two different methods: (a) the "cat method" of Hatcher and Brody; and (b) the "guinea-pig method" of Reed and Vanderkleed. The plants from which the leaves were taken were originally growing wild in the Burnaby Lake region. They were transferred to the Botanical Gardens of the University at Point Grey. Here they were planted in four plots each eight feet wide and twenty-one feet long. There were on the average one hundred and fifty plants in each plot.

The plants were one and two-year-old specimens before they were transplanted. They were grown under the influence of fertilizers for a period of one year. The leaves were collected during the last week of June, 1922, just while the plants were flowering. All the leaves were removed from the plants and were dried in the shade on specially made trays. They were dried in this manner for four weeks and then made into tight bundles and sent to the laboratory.

When received at the laboratory they were further dried in dessicators in a partial vacuum over lime until their petioles would break with a sharp fracture. The deeply stained brown leaves were discarded. The remainder of the leaves were crushed and ground to a No. 60 powder and then placed in air-tight brown glass containers.

Tinctures were prepared from each specimen of leaves according to the directions given in the U. S. P. IX under the heading "Type Process P. Percolation," page 444.

The results obtained from the various tinctures are summarized in the following table:

TABLE IV.

Tincture No.	Particulars	Physiological Assay			
		Cats		Guinea Pigs	
		No. of Animals Used	M. L. D. per Kg.	No. of Animals Used	M. L. D. per 250 gms.
6	Digitalis purpurea, variety alba. Fertilizer—cow manure.	4	0.0716 gms.	14	0.033 gms.
7	Digitalis purpurea (purple flowers). Fertilizer—cow manure.	3	0.0634 gms.	10	0.040 gms.
8	Digitalis purpurea (purple flowers). Fertilizer—superphosphate.	5	0.0772 gms.	10	0.045 gms.
9	Digitalis purpurea (purple flowers). Fertilizer—ammonium sulphate.	2	0.0741 gms.	11	0.036 gms.
10	Commercial Preparation No. 1 diluted to tincture strength. Procured from the pharmacy of the V. G. H.	1	0.168 gms.	17	0.126 gms.
11	Commercial Preparation No. 2 diluted to tincture strength. Procured from the pharmacy of the V. G. H.	6	0.0857 gms.	14	0.048 gms.
12	Digitalis purpurea (purple flowers). No fertilizer.	—	—	12	0.038 gms.

[Tinctures of Digitalis, as well as powdered Digitalis leaves. as prepared at the University of British Columbia and referred to in this article, have been used therapeutically in the medical service of the Vancouver General Hospital.

Definite digitalis effects have been repeatedly obtained fully equal in character to any from commercial preparations. In stability, reliability and potency, these preparations have ranked high on clinical application.—ED.]

* * *

THE IMPORTANCE OF DIAGNOSIS.

THE DOCTOR, THE PATIENT, AND THE HOSPITAL AS CO-OPERATING FACTORS IN DIAGNOSIS.

(A Few Suggestions from M. T. MacEachern, M.D., Chicago, Director of Hospital Activities, American College of Surgeons, Who Recently Visited Vancouver and Renewed Old Acquaintances.)

The present trend of medical education is towards a better background of science and cultural subjects to train the student to be a more accurate observer and thinker and develop in him an investigating mind. This is fundamentally essential for diagnosis. Four questions arise in my mind as I write:

(1) Do we as a profession, individually or collectively, always make the necessary study of each case in arriving at the diagnosis?

(2) Do we consult with each other as we should?

(3) Does the general practitioner call in the specialist as frequently as he should?

(4) Does the specialist call in the general practitioner as frequently as he should in the interests of the patient?

Every patient entering a hospital to-day is entitled to the following as far as possible:

(1) An early, accurate diagnosis.

(2) An efficient and effective treatment.

(3) The best possible and most permanent end result.

All this can only be accomplished through a careful study of the patient by the doctor, using natural or human resources for doing so, and these augmented by such measures as the clinical laboratory, the X-ray, the metabolator, and many other diagnostic and therapeutic adjuncts now found in every well regulated hospital. It is sincerely hoped that the day is far distant when the laboratory, the X-ray and other technical adjuncts will replace entirely the careful physical examination by the doctor himself. These adjuncts should always be used in a consulting, assisting and confirming capacity. Thorough diagnostic and therapeutic work is best for the patient—for the doctor—and for the establishing and maintaining of public confidence. All this is possible in Vancouver. The hospital facilities are all that could be desired and are liberally offered to the entire profession, thus affording them a wonderful opportunity for thorough work.

The following diagnostic proverbs may be of interest:—

"A diagnosis is a decision. Lack of decision has lost some of the world's greatest battles and has changed the destiny of nations."

"We cannot build castles in the air—one might as well try to construct a building without a foundation as to treat a patient without a diagnosis."

"The diagnosis is not made for its own sake, but rather as a means of promoting the recovery of the patient."

"A tired physician cannot give his best to his patient."

"The intelligent co-operation of the patient is required."

"A suitable environment is required for careful clinical work —quietness and good light."

"Uninterrupted concentration is required for reliable examination."

"Forms for recording work and observations should be provided."

"Begin with the symptoms which caused the patient to seek medical advice. Do not make a hurried diagnosis and then work backward, trying to make the symptoms fit your preconceived ideas of the case."

"The medical student, the interne, the patient, and his friends are very apt to be carried away by the grandstand play of the man who makes a positive snap diagnosis."

"Thoroughness and accuracy are the watchwords of the reliable physician. Snap diagnoses are dangerous."

"Indefinite signs propounded by enthusiastic observers are not always reliable."

"Do not ride your scientific hobbies to death. The physician who sees his particular hobby in every patient is apt to stretch his imagination."

"The patient must not be allowed to lose his best opportunities for recovery while refinements of diagnosis are being investigated and discussed."

"The history is an important factor in every case."

"Findings should be carefully recorded *at the time of the examination.*"

"More than one examination is required in most cases."

"Examination of one organ or system is only a partial examination of any patient."

"Most patients have defects in more than one organ or system."

"The clinical thermometer, pulse rate, and the scales often reveal things we can neither see nor hear."

"Properly controlled, prompt, and reliable laboratory and X-ray service required."

"The laboratory and X-ray are necessary assistants, but cannot replace sound clinical judgment and a thorough physical examination."

"Routine examinations of urine, blood, and sputum should be made."

"Careful records by nurses and internes are valuable; careless records are dangerous."

"All findings should be carefully reviewed before making a definite diagnosis."

"The hospital should have a library of reference books available for use of physicians and internes."

"Two heads are better than one. A careful physician does not hesitate to seek advice or consultation."

* * * *

LIBRARY NOTES.

Lewis Stephen Pilcher. A Surgical Pilgrim's Progress, 1845-1925. J. B. Lippincott. 1925. $5.50.

This is a very readable autobiography, written and brought up to date by one now in his 80th year, and still actively engaged in his chosen work.

Like many in the neighbouring land south of us, while cherishing democratic ideals, he cannot refrain from delving in the past, and traces his family across the sea to the land which furnished the origin of so many of the ablest men produced in the

United States. And so it is not surprising if a Pilcher coat-of-arms is found. But pride of birth should be a source of strength and not of weakness—and so I think it proved in his case.

He has traced his family history among the early settlers in Virginia, and in their wanderings later on to found new branches of the family in various States—and this all makes interesting reading, as shewing the spread of the settlements westward and the opening up of new country.

Later his story becomes more intimate and takes us within the family circle. His father was an itinerant Methodist preacher of more than ordinary ability. He rapidly became a leader in his church, and as presiding elder and secretary of conference had many legal problems to settle. To better understand law he studied it and later passed the bar examinations of his State of Michigan. Later, while stationed at Ann Harbor, Michigan, he was interested in the young University of the State of Michigan, and was one of its regents for some years.

While thus employed he became interested in the foundation of its Medical School, and even took a course and graduated as Doctor of Medicine in his 49th year. Such a father made a deep impression on his sons. Thus, one brother became a missionary to China, engaged in educational work, and rose to be the first president of the Pekin University, which he helped found. Another was a distinguished military surgeon and author, founder and editor of the "Journal of the Association of Military Surgeons," and author of a successful standard text-book on "First Aid in Illness and Injury."

Hs only sister was for twelve years matron of the Seney Hospital, New York.

And his mother comes in for a very loving pen picture, with the life in the parsonage, bringing up a family on $400.00 a year, always loving, cheerful, hopeful and helpful. The chapter on his mother, their simple life and simple pleasures, is well worth reading.

As for our hero himself, having faithfully pictured the environment in which he grew up, it was but natural that the thread of that influence should be traced through his subsequent life. At the age of 18 he received his M.A. degree, and later that fall entered on his medical studies. Being of age for enlistment, he joined up that winter as a hospital steward, serving to the end of the Civil War, and then back to college in 1865. By means of credits granted for war service and for hospital service in the army, he was able to graduate the next year, and then his life was before him. He enlisted in the navy and saw service at the Isthmus and at Havana, and there got an experience in malaria and yellow fever, which he did not forget, for later on when the experiments at Havana proved the source of infection, Dr. Pilcher was among the first to recognize the discovery and report in his journal its importance.

It would be tedious minutely to follow his subsequent career. He left the navy and, recognizing his limitations, due to his short course at the Medical School, began intensive study to better himself. Settling in Brooklyn, he founded a school of anatomy, later incorporated in a medical school, and following surgery for his life's work, attained high success.

As a teacher his first appointment was as Adjunct Professor of Anatomy in the Long Island College Hospital. Later for 18 years he was Attending Surgeon to the Seney Hospital.

Following this was a success as a New York surgeon, together with the establishment of a private hospital of his own.

And during all these busy and struggling years he was a prolific writer, and even as late as 1920, in his 75th year, appeared in Ochsner's System a chapter by our author on "Surgery of the Large Intestine."

But long before this he was at work on what constitutes his greatest plea for the good will of our profession, for his pen was employed as a journalist in the interest of practising surgeons.

In 1880, he was associated with others in bringing out the Annals of the Anatomical and Surgical Society, which publication was succeeded next year by the Annals of Anatomy and Surgery—and, in 1885, by the Annals of Surgery. Since that time for forty years Dr. Pilcher has been the editor of that magnificent journal. The worth of the man is proved by this work, for no one but a broad-minded, scientific and practical surgeon could have made such a success, and through it earned the gratitude of the profession.

His life's work began before Pasteur and Lister, before anaesthetics, and thus he lived through the golden age of medicine and surgery, ever keeping abreast of new work, not even waiting for it to come to America, as his repeated trips to Europe prove. Great sacrifices had to be endured to make the earlier trips, and his example should be a source of inspiration to our ambitious young men to follow along a path which led to success.

Our hero is still with us—still editing the Annals of Surgery—and enjoying the love and respect of the profession as well as the lesser rewards obtained by a successful career.

Long may our exemplar yet live!

R. E. M.

* * * *

RECENT ADDITIONS TO THE LIBRARY.

Symptoms of Visceral Disease. F. M. Pottenger.
St. Andrew's Institute Reports. Vol. II.
Harvey Lectures for 1922-23.
International Clinics. Vol. IV. 1924.
Surgical Clinics of N. America. Oct. and March numbers.

A Surgical Pilgrim's Progress. Lewis Stephen Pilcher.
Common Disorders and Diseases of Childhood. G. F. Still. 4th Ed. 1924.
Crime and Insanity. Sullivan.
Diseases of the Heart. Prof. Henri Vaquez.
Goitre. de Quervain.
Medical Education. Abraham Flexner.
Principles of Psychotherapy. Dr. Pierre Janet.
Life of John Hunter. Stephen Paget.
Works of John Hunter in 4 vols. 1835.
Trans. of Ophthalmological Society of U. K. 1924.
Medical Clinics of N. America. Nov., 1924.
G. U. Diseases. Compend. C. S. Hirsch.
Integrative Action of the Nervous System. C. S. Sherrington.

* * * *

VANCOUVER HEALTH DEPARTMENT.

STATISTICS FOR FEBRUARY, 1925.

Total population—estimated	126,747
Asiatic population—estimated	10,000

		Rate per 1000 of Pop. per annum
Total Deaths	133	13.7
Asiatic Deaths	17	22.2
Deaths—residents only	88	9.0
Total Births—Male, 155; Female, 150	305	31.4
Stillbirths—not included in above	9	
Infantile Mortality.		
Deaths under 1 year of age	9	
Death rate per 1000 births	29.5	

Cases of Infectious Diseases Reported.

	February.		March to 15.	
	Cases.	Deaths.	Cases.	Deaths.
Smallpox	124	0	52	0
Scarlet Fever	95	0	39	0
Diphtheria	23	1	8	1
Chicken-pox	55	0	30	0
Measles	3	0	1	0
Mumps	47	0	25	0
Erysipelas	4	0	2	0
Tuberculosis	28	0	9	0
Whooping Cough	3	0	2	0
Encephalitis Lethargica	1	1	0	0
Cases from outside City included in above.				
Diphtheria	2	0	1	1
Smallpox	6	0	1	0
Scarlet Fever	5	0	5	0

B. C. MEDICAL ASSOCIATION NEWS.

The Fraser Valley Medical Society, one of the most active and progressive in the province, held its monthly meeting on February 4th. It was attended by all the New Westminster doctors, and also Dr. L. Broe, of Hammond, and Dr. F. D. Sinclair, of Cloverdale.

Interesting addresses were given by Dr. D. A. Clark on the "Dick Test and Scarlet Fever," and Drs. Bruce W. Cannon and G. W. Sinclair (New Westminster) on "Anatomy, Physiology and Surgery of the Pancreas."

At the next meeting of the Fraser Valley Medical Association, held on March 5th, Dr. W. A. Robertson, of New Westminster, gave an excellent talk on "Fractures About Joints," and Dr. H. B. McEwen on "Insulin."

Dr. S. E. Beech has relinquished his practice at Ashcroft, B. C., and is now at Salmon Arm.

Dr. Richard Gibson, who has been in practice in Vancouver for some years, recently went to Ashcroft to take over the work of Dr. S. E. Beech at that place. Dr. Gibson has the best wishes of his many friends in Vancouver.

It is interesting to note that several vacancies in the province have recently been filled through the business office of the B. C. Medical Association. This office is gradually becoming a very busy centre, as it is being more and more used by members of the profession to help them in their difficulties. Some idea of the amount of correspondence may be gathered when we say that in three days, recently, sixty-three letters were sent from our business office. This is as it should be, and we would urge all those who feel that we might help them in any way possible, to make the fullest use of the facilities provided.

A meeting of the Victoria Medical Society was held on Monday, March 9th, at which Mr. R. M. Johnston, Deputy Minister of Finance of the Provincial Legislature, addressed the members on "Health Insurance. Dr. Gillespie, of Vancouver, attended the meeting as a visitor to Victoria. Mr. Johnston's address proved of deep interest, though he admitted that he did not know all there was to be known about the subject. In this he finds himself in good company. It is evident that this subject is claiming the interest of a great many people in different sections of society. It is hoped that Mr. Johnston may repeat his address in Vancouver at some future date.

The B. C. Medical Association will have the pleasure of hearing Chief Justice Murphy at a luncheon to be held next month, when His Honour will speak on "Medical Evidence," or some allied subject. This address should prove of the greatest interest to medical men, and a good attendance is hoped for.

The March number of the C. M. A. *Journal* contains a full account of the Conference on "Medical Services," held in Ottawa

last December. A discussion in the case of each paper is by no means the least interesting or valuable part of the proceedings. Perusal of these addresses will show the wide range of subjects touched upon and the keen interest that was taken by those participating.

Dr. R. G. Large, assistant to Dr. H. C. Wrinch, of Hazelton, has been appointed Medical Health Officer and School Medical Inspector for that district, by the Provincial Government.

Dr. D. W. MacKay has left Salmon Arm for Nelson, B. C., where he will assist Dr. L. E. Borden.

An interesting piece of medical history in British Columbia is recalled to mind by the retirement, through superannuation, of Dr. G. L. Milne, Victoria, B. C. A fuller notice of Dr. Milne's activities appears in the C. M. A. *Journal*, but it is of especial interest to B. C. practitioners to refer to the connection that this well known and well beloved practitioner of medicine had with the beginning of medical legislation in British Columbia. In his case history dates back forty years, to a time when B. C. was a raw province in the making; when the C. P. R., C. N. R. and P. G. E. were still things of the future, and when everything was in its beginning. The establishment of a Medical Council; the enactment of a Medical Act; the defining of Laws and Regulations governing the practice of Medicine were all to be done, and it is due to the foresight and statesmanship of men of the type of Dr. Milne that these things were done, and done as well as they were. It is surprising to us now that there should ever have been any difficulty in bringing about this legislation, but it was not without hard and persistent work that the legislators of those days were convinced of the necessity for proper regulations of medical practice, and it was not until 1886 that the first Medical Act was passed. We do well to think occasionally of these men of a day somewhat behind us, who have retired from active practice, and are apt to pass more or less into an undeserved obscurity, yet without whose devotion to the best interests of their community, and self-sacrifice in serving those interests, we should not now be in the position of security and dignity that we hold to-day, and the public would be even worse served than it is at present.

* * * *

REACTIONS AFTER TRANSFUSIONS.

By GRACE A. WILSON, M.A.,

Vancouver General Hospital Laboratory.

Recently a severe reaction followed a transfusion to a baby from its mother after careful grouping in the laboratory. As such reactions have been rare in this Hospital, we feel that this case will be of interest to the profession.

The patient, a young baby, was typed according to the usual technique and found to be in Group Four. The mother

was also found to be in the same group. A transfusion of blood was given the baby, and no reaction occurred. Six weeks later the baby was given a second transfusion, using the same donor. This time there was a marked reaction, and the child was in a serious condition for several days.

Re-agglutination confirmed the previous findings, at room temperature both patient and donor being in Group Four. However, when agglutination was done at ice box temperature, the baby's cells were weakly agglutinated by Sera 2 and 3, showing it to be a weak Group One. This agglutination disappeared after twenty minutes at room temperature, only to re-appear on being returned to the ice box. A cross-agglutination showed a weak agglutination of the patient's cells by the donor's serum at ice box temperature, disappearing again at room temperature, thus confirming the grouping test.

This case illustrates the increasing importance of the careful selection of donors. Though transfusions have been attempted since the days of the early Romans, the frequency of severe and fatal reactions prevented any general use until some form of selection, such as Moss's method of blood grouping, became available about twenty years ago.

Until recently all agglutinations were done at 37° C., but in February of last year the Johns Hopkins' Hospital (1) commenced publishing some studies indicating agglutination in the ice box to be more delicate and accurate. These investigations have also shown that by this method there are more than four groups. It is therefore possible that the above weak Group One reaction indicates a serious incompatibility of blood in these two individuals.

Another source of trouble which has been reported from a number of laboratories (2) is the increasing frequency of reaction in those patients who have previously received donations of blood. The frequency would seem to increase in proportion to the number of transfusions the patient has received, and would appear to be more common when the same donor is used. To account for this, some authors postulate the development of specific antibodies against the donor in question.

Another possible explanation of some reactions is illustrated by a case (3) in which a severe reaction occurred in a recipient who was known to be sensitive to milk. On inquiry it was found that the donor had consumed large quantities of milk prior to the transfusion.

References:

(1) C. G. Guthrie & J. F. Possel. Johns Hopkins' Bulletin, Feb., 1924.

(2) McClure & Dunn. Annals of Surgery, July, '23, P. 1.

(3) W. W. Duke & D. D. Stopper. Med. Cl. of North Amer., Jan., 1924.

INFLAMMATORY DISEASES OF THE EAR.

By Dr. R. B. Boucher.

Part One—*Of the External Ear and External Auditory Meatus.*

(Paper read before the Vancouver Medical Association, March 3, 1925.)

Anatomy.

In presenting this paper on some acute inflammatory conditions of the ear, it seems to me to be proper to briefly recall to your mind the salient points in the *anatomy of the ear.*

The external ear consists of the pinna and external auditory meatus. The pinna is a laminar structure, with a pyriform outline and presents a very uneven surface. It consists of a framework of elastic or reticular cartilage, which gives it its characteristic shape. Its skin covering is thin throughout, and is connected to the perichondrium of the cartilage by a scanty subcutaneous layer. On the outer aspect of the pinna the skin is tightly bound down, but on its inner, or cranial aspect, its attachment is much looser.

The ear is very vascular, chiefly from the anterior and posterior auricular arteries.

The auriculo temporal nerve sends branches to the outer aspect of the pinna. The great auricular nerve sends branches to the greater part of the skin on the cranial aspect of the pinna. The small occipital furnishes branches to the summit of the auricle, and to a limited area of skin on the adjacent portion of its cranial aspect.

The *lymphatics* from the outer surface feed into the parotid glands, and especially to one which is situated in front of the Tragus. The lymphatics from the cranial aspect of the pinna make their way, for the most part, to the suboccipital or mastoid glands, which overlie the mastoid bone and tendinous insertion of the sterno-mastoid.

The *external auditory meatus* extends from the concha to the membrana tympani. It is about 35 m.m. long or 1½ inches in the adult. It is made up of two parts—the *cartilaginous and bony.*

The *cartilaginous* begins at the concha and runs into the bony meatus.

By its exterior the lower wall forms the roof of the parotid recess, and is closely invested by the parotid gland. The outer extremity of the condyle of the lower jaw forms an important relationship to the carilage of the meatus.

The bony meatus is formed above by the squamous segment of the temporal bone which juts outwards at this level, forming the posterior root of the Zygoma. The upper and back part of the outlet is another projecting ridge—the *supra meatal spine*—which is formed by a downward projection of the squamous bone. It furnishes a valuable landmark in mastoid operations. The

floor is formed by the dense tympanic bone. At the termination of the meatus there is a narrow sulcus running circumferentially, called the *Sulcus Tympanicus,* which surrounds the greater part of the passage, but it is deficient above and in front. It gives attachment in the recent state to the membrana tympani or drum. The back part of the meatus is covered by a thin layer of compact bone which separates it at its inner aspect from the mastoid antrum, and at its outer part from the anterior mastoid cells. The anterior wall of the meatus is related to the posterior compartment of the *Glenoid fossa,* which is occupied normally by some dense connective tissue and usually also by a small extension of the parotid gland. These structures separate the meatus from the condyle of the lower jaw and from the temporo-maxillary articulation.

The *long axis of the meatus* inclines forwards and inwards. It is not quite straight and shows some slight bony irregularities. The floor at its commencement ascends slightly, and as it approaches its termination it inclines downwards to its junction with the membrana tympani, forming with it an angle of 45 deg. This is a favourite locality for foreign bodies.

The *calibre of the meatus* is not uniform. It is widest at its commencement and narrowest at its termination, but between these two it is somewhat constricted—-namely, at the junction of the bony and cartilaginous.

In infants the tympanic membrane is flush with the outer surface of the skull, the tympanic bone is in an undeveloped state, and the bony meatus is usually complete about the sixth year, consequently the canal in infants is much shorter.

Blood vessels. The cartilaginous meatus is mainly supplied by small branches of the superficial temporal and posterior auricular arteries. The bony meatus is supplied by the deep auricular branch of the Internal maxillary.

Nerves. The auriculo temporal nerve sends two branches to the meatus, which reach it by piercing the connective tissue which connects the cartilage with the bone. The deeper part of the passage is supplied by the auricular branch of the vagus nerve.

Acute Inflammatory Conditions of the External Ear.

Only those of the more common type will be considered.

From without in—

1. Dermatitis of the Auricle.

Traumatic Dermatitis. This occurs as a result of mechanical influences such as thrusts, blows, falls upon the ear, insect bites, scalding, piercing the ears, and irritation of the cutis through wearing too tight ear-rings. The extent, intensity and duration of the inflammation depends upon the severity of the injury. Such an inflammatory process may vary from the slightest form of a transient erythema to the development of a circumscribed gangrene of the skin.

Treatment is purely antiphlogistic and is regulated according to the severity of the inflammation.

Dermatitis erysipelatosa. This form arises from erosions, excoriations and injuries of the auricle and external meatus, and is due, of course, to the entrance of the streptococcus erysipelatosus. Its occurrence is facilitated by all forms of moist eczema, by erosions, maceration, and fissure formation of the cutis, due to purulent discharge from the ear. Primary erysipelas of the auricle is rare. It usually occurs in combination with that of the face and head, occasionally it extends into the canal of the ear. It is not necessary to enlarge on this condition, as you are all only too familiar with it.

Dermatitis Phlegmonosa. Usually follows an injury. It usually begins as a superficial dermatitis accompanied by high fever. It closely resembles an erysipelas, but extends into the deeper parts. The ear, as a rule, becomes extrmely sensitive in 24 to 48 hours, and a distinct fluctuation can be felt on the third or fourth day. After incision it heals readily.

Dermatitis congelationis auriculae — commonly called chilblain or frostbite according to severity.

The skin of the auricle is specially predisposed towards this form of inflammation. This is explained by the fact that it is exposed to atmospheric influences, that it has a relatively thin cutis, and that the subcutaneous tissue, which separates it from the cartilage, is tense and scanty. All forms of this trouble are observed on the auricle. The acute hypersthenic forms which arise from excessive cold, with a simultaneous freezing of the nose, may lead to partial necrosis, and gangrene of portions of the skin and cartilage with partial loss of the auricle. This is specially prevalent in the north. We also meet with the chronic form associated with moderate swelling and redness, and finally circumscribed, rather sharply defined dermatitis—the true frostbite.

Tissue changes lead to the formation of nodules and excoriations, especially on the elevations of the auricle—most frequently on the helix. These show little tendency to heal and are sooner or later covered by crusts tinged with blood. After these have been cast off, desquamation of the skin often remains for a long time. Young chlorotic individuals, especially girls, are most often affected by this affection. It appears at a fixed time every year, at the beginning of cold weather. It must be mentioned, however, that it is not necessary (in those predisposed) for the temperature to be below the freezing point in order to bring on the mild type of this trouble. It occurs more frequently in the low temperature of the autumn, and is especially occasioned if the patient has been exposed to atmospheric influences for a long time. The following subjective symptoms are important:—

Lancinating pains when the auricle is exposed to the air, especially when it is dry and the wind severe; itching, burning,

and a feeling of heat, which induce incessant rubbing and scratching, and which become almost unbearable in heated rooms and in bed.

Treatment in cases due to extreme cold, snow or ice bags. In the milder types cold applications of Goulard water or Burrows Solution is servicable.

Goulard water:—Lead aceate, 170 gms.; lead oxide, 100 gms. to a litre of water, and boiled.

Burrows' Solution:—Alumin. Crud, 70, dissolved in 280 parts of distilled water.

The ear may be painted with Iodin. Collodion. For the intolerable itchiness: Collodion, dr. 1; Ol. Ricini, M.XX; Ol. Terebinth, oz. 1, is useful.

Frequent applications of camphor ointment are also useful.

Inflammation of the External Auditory Canal.

The cutis of the external meatus is always the seat of the primary forms of inflammation, and the changes produced here seldom extend to its cartilaginous or osseous walls. The inflammation is either in the cartilaginous meatus, where especially the glandular elements of the cutis are affected, or in the osseous portion from which the superficial diffuse inflammation often extends to the cutis of the membrana tympani. The external meatus is seldom uniformly inflamed in its entire extent.

Otitis Externa presents a number of characteristic forms, the peculiarity of which depends partly on the situation and partly on the nature of the exudate. I will only recall to your mind the commonest types which you will most frequently meet with:—

(1) *Acute Eczema.* This affection may be localized either in the auricle or in the external auditory canal, or it may involve the whole ear. It begins with great redness and swelling of the skin, which is soon followed by the formation of numerous closely clustered vesicles containing a serous fluid. This eruption is msotly found on the posterior surface of the auricle and on the lobule. The entire auricle is seldom affected. The vesicles are rarely seen in the canal or on the drum membrane on account of their early destruction. After rupture of these vesicles, moist surfaces, denuded of epidermis are seen on the auricle and in the meatus. In a few days these become covered with a light yellow crust (Eczema crustosum), under which the exudation of a serous or viscid fluid still continues. Pustules of the size of a bean are sometimes formed, accompanied by marked inflammatory phenomena. When these burst, thick crusts are formed under which the purulent secretion is confined (Eczema impetigiosum). According to Rohrer, the serous secretion contains diplococci, and in the purulent discharge which arises later, staphylococci.

Etiology. Acute eczema develops either as a primary affection or as part of an eczema of the face. It may arise without any known cause, or in consequence of external agencies, such as cold

baths and douches, heat (Eczema solare), warm fomentations or the application of irritating remedies (chloroform, mercurial ointments, mustard poultices and iodoform). One of the artificial forms of this disease is that circumscribed eczema which occurs on the superior surface of the crista helicis. It usually appears symmetrically on both ears and in persons who sleep on hard pillows of horsehair. Occasionally it comes on as a sequela of seborrhoea and coincident with pediculosis capitis. Acute eczema not infrequently arises in the course of an acute or chronic ear discharge. This is due to the irritating discharge and is especially observed in children and those whose skin is delicate and easily irritated. As a rule, individuals of a scrofulous dyscrasia and those affected with rickets are especially predisposed to eczema.

Symptoms. The acute form begins with a feeling of heat, burning and itching, which is followed by severe pain, after the appearance of the vesicles.

In children (more rarely in adults) the disease is accompanied by slight pyrexia, restlessness and sleeplessness. The hearing function is normal in those cases confined to the auricle. If the auditory canal is affected, a mechanical disturbance of hearing, combined with tinnitus, arises. Such a disturbance is brought about by the swelling of the lining membrane of the canal and by the accumulation of the desquamated epidermis and crusts. The intercurrence of middle ear catarrh is seldom observed.

Course. Acute eczema generally runs a typical course. The milder forms quickly dry up on the second or third day, the epidermis desquamates and recovery ensues.

In the more severe forms the vesicles rupture early, followed by clear discharge, which abates after several days, the exposed parts becoming covered with light or brownish crusts. Under normal circumstances when the exudation has ceased, a new epidermis is formed beneath the crusts, which, after the latter have been thrown off, soon assumes its normal appearance. It occasionally takes several weeks for this to occur. The skin of the affected area remains hyperaemic for a long time.

Furunculosis of the External Meatus.

Furunculosis of the external auditory canal is a circumscribed inflammation involving either the hair follicles or the sudoriferous glands. As these organs are limited to the cartilaginous portion of the canal, the furuncles are not found in the deeper or osseous portion. They may occur without known cause or they may be part of a general furunculosis. They may occur in the course of a suppurative Otitis Media, from constant irritating discharge or complicating a chronic eczema. Patients with chronic eczema usually complain of intense itchiness. Anything from a finger to a toothpick, a match or a hairpin is used to relieve this itchiness. Hence infection. Any form of traumatism to the external canal is also a factor. General debilitating diseases predispose. It is seen in all ages.

Symptoms. The hearing is but slightly affected in most cases, as the lumen of the canal is not completely obstructed. The pain is more or less intense, according to the depth of the inflammation. The furuncle does not always present the appearance of a boil, as the skin is tense and closely adherent to the cartilaginous meatus, thus preventing the usual elevated appearance.

The auricle is extremely sensitive to the touch and the movements of the jaw in mastication cause pain. The tension of the skin becomes so great that the patient is often unable to sleep. The swelling of the external meatus is more or less diffused on account of the close adhesion of the skin to the cartilaginous meatus and, with the inexperienced may be mistaken for the redness and swelling in the posterior portion of the meatus in mastoid inflammation. It is easily differentiated, however, by remembering that the swelling due to mastoid disease is limited to the post-superior wall of the osseous or deeper portion of the meatus, while that due to furunculosis is in the posterior superior, or inferior wall of the outer or cartilaginous meatus. In infants the differentiation is not easy, as the meatus is very shallow and the swelling is near the drum.

The temperature is irregularly elevated during the first few days. Deafness and tinnitus may be present if the meatus is occluded, though they may be present without occlusion, and when this is the case the drumhead and tympanum are probably involved. The more superficial the furuncle the greater the redness and the more circumscribed its area. Pain is severe if deep involvement. The redness is more diffused if the deeper tissues are involved. In some cases the surrounding tissues become more or less swollen, as, for instance, when the anterior portion of the meatus is involved the skin in front of the Tragus is swollen and purple in colour and the pre-auricular gland is involved; whereas, if the posterior portion is involved, the mastoid skin may be swollen and simulate mastoiditis. Cervical glandular enlargement is *not* commonly present.

Course. The course varies according to depth. It usually goes on to suppuration, which takes place in from three to six days. The pain and swelling rapidly subside after the escape of pus. Incision should be made early, as if allowed to rupture spontaneously, granulations may spring from its centre and delay recovery.

Recurrences are common. After incision, mopping out with warm boracic or carbolic and insertion of a wick, is about all that is necessary. The earlier treatment consists of the instillation of Glyc-ac-carb into the meatus and the application of either heat or cold. My experience leads me to think that heat is the most gratefully received. When tension increases, early incision. Any of the coal tar products give considerable relief to pain. Plain water seems to lead to a relapse, hence should not be used.

Other Forms. Bony exostosis—Strictures—Lues and Lupus and Mycosis, are other forms only to be mentioned in passing in this paper.

(To be continued)

PARKE, DAVIS & COMPANY'S

PARMACEUTICAL, BIOLOGICAL
AND GLANDULAR PRODUCTS
ARE STANDARDIZED AND
HIGHEST QUALITY

Correspondence solicited on all
Pharmaco-Medical subjects

PARKE, DAVIS & COMPANY

Walkerville, Ont.

Montreal Toronto Winnipeg

To the Physicians and Surgeons of B.C.

DO YOU KNOW—

THAT the MUTUAL LIFE OF CANADA returned for the year 1924, 24.95% of its premium income in *profits to its policyholders.*

THAT 20 Payment Life policies are paid-up in 14½ years by application of annual accumulated profits.

COMBINE PROTECTION for your Family with a Guaranteed Life Income for yourself.

EXAMPLE: *Age* 40, $12,000, 25 *Year Endowment, Guaranteed Life Income* to you of $1,200 per annum, payable $100.00 monthly as long as YOU live.

1st year's deposit	$491.10	Issued 1924.
1st year's dividend	77.60	Payable 1925.
2nd year's deposit	$413.50	

Annual Cash Dividends increase yearly.

Are you fully Protected? Let me quote you figures. You will be interested.

MUTUAL LIFE OF CANADA

WILLIAM J. TWISS

402 PENDER ST. W. VANCOUVER, B. C.

BURNS DRUG COMPANY

LIMITED

732 Granville Street, Vancouver

TELEPHONE
SEYMOUR 606

To the Doctor out of town:
We will look after any Mail Order Prescription promptly.

INSULIN DEPOT FOR B. C.

Dispensary Specialists.

B. C. Pharmacal Co. Ltd.

329 Railway Street,
VANCOUVER.

Manufacturers of Hand-made Filled Soluble Elastic Capsules.

Specimen Formulae:

No. 10—
Blaud Pill, 10 gr.
Arsen. Acid, 1/50 gr.
Strychnine, 1/50 gr.

No. 15A—
Blaud Pill, 15 gr.
Liq. Ext. Cascara. 10 m.
Ext. Nux Vomica, 1/8 gr.
Arsen. Acid, 1/50 gr.

Special Formulae Made on a Few Hours' Notice.
Price Lists and Formulae on Application.

Say it with Flowers

Cut Flowers, Potted Plants, Bulbs, Trees, Shrubs, Roots, Wedding Bouquets.

Florists' Supplies and Funeral Designs a specialty.

Three Stores to Serve You:

48 Hastings St. E. — Phones Sey. 988 and 672
665 Granville St. — Phones Sey. 9513 and 1391
151 Hastings St. W. — Phone Sey. 1370

Brown Bros. & Co. Ltd.

VANCOUVER, B. C.

SHIRTS

Genuine English Broadcloth

"Loomed in England."

$2.95

Coat Model, Negligee Style, Soft Cuffs, Beautiful Lustrous Fabrics, light in texture and weight, but will wash like a linen handkerchief. For Business or Sport.

To out-of-town Doctors we will send two, three or six of these Shirts on approval, along with half a dozen selections of Neckwear. You may select what you like from lines sent, return any you do not like, and send us a cheque for the ones you keep. We will pay mailing charges each way.

Just let us know your preference as to color and price.

D. K. BOOK LIMITED

Correct Clothes

137 HASTINGS STREET WEST

Vancouver, B. C.

Stevens

Pink Back Z. O. Adhesive Plaster

Made in England

Adheres to the limit, yet will not irritate.

A Perfect Plaster.

Fully Guaranteed.

Stocked in Rolls 12 in. by 5 yds. and in Spools of 5-yd. and 10-yd.

1 in., 2 in., 2½ in., 3 in. widths.

THE B. C. STEVENS CO., LTD.

730-732 Richards Street,

Summer School Clinics

Vancouver Medical Association

July 2-3-4, 1925

Speakers:

SIR HENRY GRAY,
Surgeon in Chief, Royal Victoria Hospital, Montreal.

DR. HUGH CABOT,
Prof. of Surgery, University of Michigan.

DR. ALAN BROWN,
Head of Department of Paediatrics, Toronto University.

(The speaker in Medicine will be announced later.)

Lectures will be arranged for the afternoons and evenings only.

Phone Douglas 2688

Bute Street Hospital

Mrs. M. E. Johnson, R.N., Supt.

Medical, Surgical and Maternity Patients

786 BUTE STREET

Nurses' Central Directory

Phone Fairmont 5170
Day and Night

Registrar--Miss Archibald

601 13th Ave. West, Vancouver

Medical Men

Neat and attractive stationery will always make a good impression. Entrust us with your next order.

McBeath Spedding Ltd.

569 Howe St. Phone Sey. 2487

Orthopedic Appliances

Extensions for short limbs, Trusses, Arch Supports, Abdominal Belts, Sacro-Iliac Supports, and Artificial Limbs, manufactured and made by Experts and guaranteed by

A. LUNDBERG CO.

938 Pender Street West *Vancouver, B. C.*

The Owl Drug Co., Ltd.

All prescriptions dispensed by qualified Druggists.

You can depend on the Owl for Accuracy and despatch.

We deliver free of charge.

5 Stores, centrally located. We would appreciate a call while in our territory.

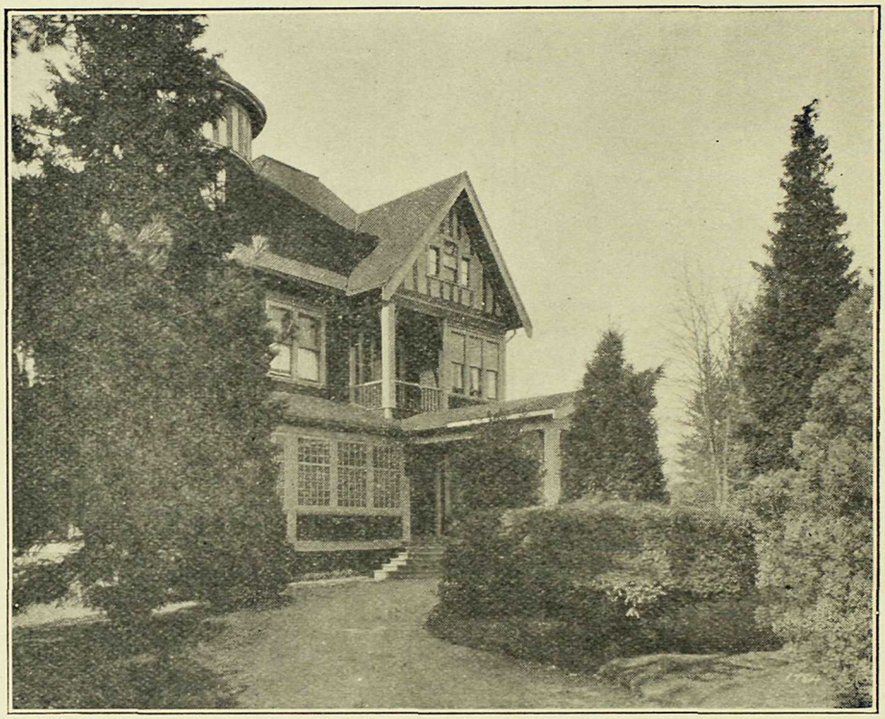
Ambulance Service

TELEPHONE
Fair. 58 & 59

Mount Pleasant Undertaking Co. Ltd.

R. F. Harrison W. E. Reynolds

Cor. Kingsway and Main



Hollywood Sanitarium
LIMITED

For the treatment of

Alcoholic, Nervous and Psychopathic Cases
Exclusively

Reference ~ B. C. Medical Association

For information apply to

Medical Superintendent, New Westminster, B. C.
or 515 Birks Building, Vancouver

Seymour 4183 Westminster 288