VANCOUVER MEDICAL ASSOCIATION
1898
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The BULLETIN

of the

VANCOUVER MEDICAL ASSOCIATION

Vol. XV. SEPTEMBER, 1939 No. 12

With Which Is Incorporated
Transactions of the

Victoria Medical Society

the

Vancouver General Hospital

and

St. Paul's Hospital

In This Issue:

THE PHYSICIAN IN RELATION TO THE SOLUTION OF CRIME

NEWS AND NOTES

BRITISH COLUMBIA MEDICAL ASSOCIATION
ANNUAL MEETING, SEPTEMBER 18, 19, 20, 21

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BULLETIN

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

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EDITORIAL BOARD:

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All communications to be addressed to the Editor at the above address.

VOL. XV. SEPTEMBER, 1939 No. 12

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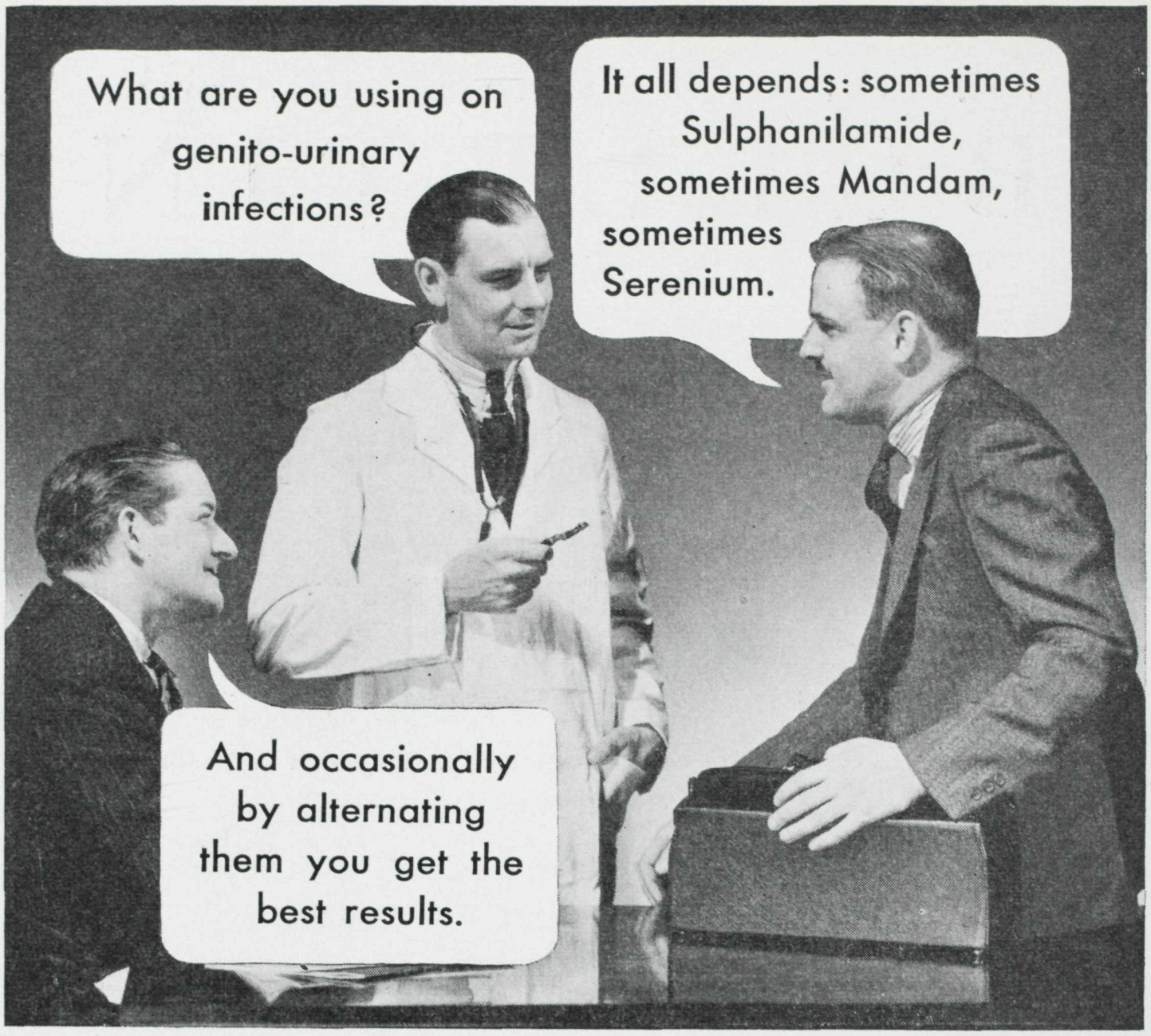

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VANCOUVER HEALTH DEPARTMENT

STATISTICS—JULY, 1939

Total population—estimated	263,974
Japanese population—estimated	8,891
Chinese population—estimated	7,728
Hindu population—estimated	389

	Number	Rate per 1,000 Population
Total deaths	228	10.2
Japanese deaths	4	5.3
Chinese deaths	8	12.2
Deaths—residents only	200	8.9
BIRTH REGISTRATIONS:		
Male, 186; Female, 166	352	15.7

INFANTILE MORTALITY:	July, 1939	July, 1938
Deaths under one year of age	6	8
Death rate—per 1,000 births	17.0	22.4
Stillbirths (not included in above)	6	8

CASES OF COMMUNICABLE DISEASES REPORTED IN THE CITY

	June, 1939		July, 1939		August 1st to 15th, 1939	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Scarlet Fever	19	0	3	0	6	0
Diphtheria	0	0	1	0	0	0
Chicken Pox	28	0	12	0	0	0
Measles	3	0	1	0	0	0
Rubella	0	0	2	0	0	0
Mumps	21	0	4	0	2	0
Whooping Cough	86	0	28	0	4	0
Typhoid Fever	0	0	0	0	0	0
Undulant Fever	1	0	0	0	0	0
Poliomyelitis	0	0	0	0	0	0
Tuberculosis	30	18	28	16	9	--
Erysipelas	1	0	0	0	0	0
Ep. Cerebrospinal Meningitis	0	0	0	0	0	0

V. D. CASES REPORTED TO PROVINCIAL BOARD OF HEALTH, DIVISION OF VENEREAL DISEASE CONTROL.

	Burnaby	West Vancr.	Richmond	North Vancr.	Vancr. Clinic	Hospitals, Private Drs.	Totals
Syphilis	0	0	1	0	33	34	68
Gonorrhœa	0	0	1	0	48	11	60

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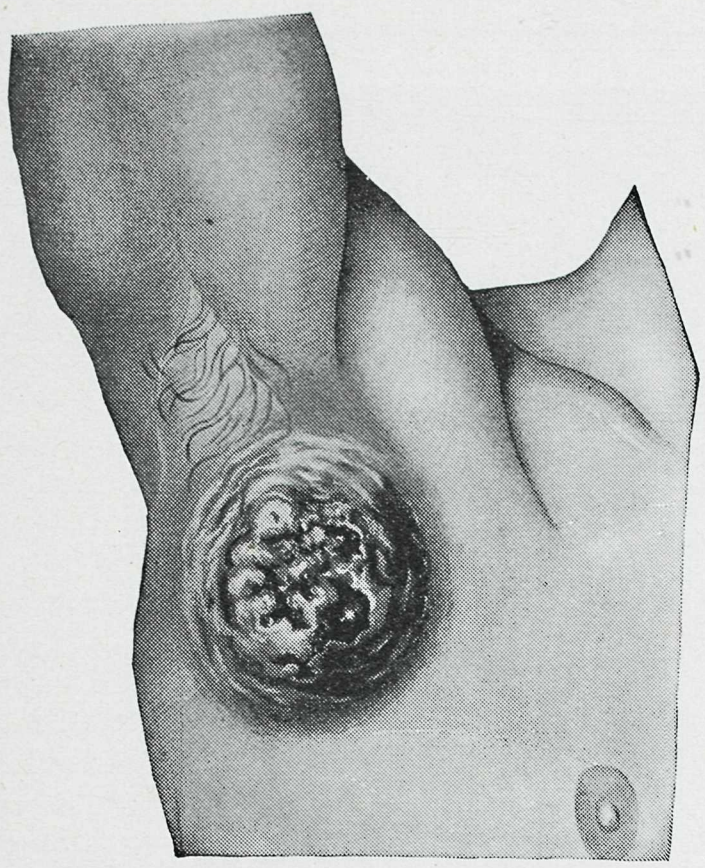

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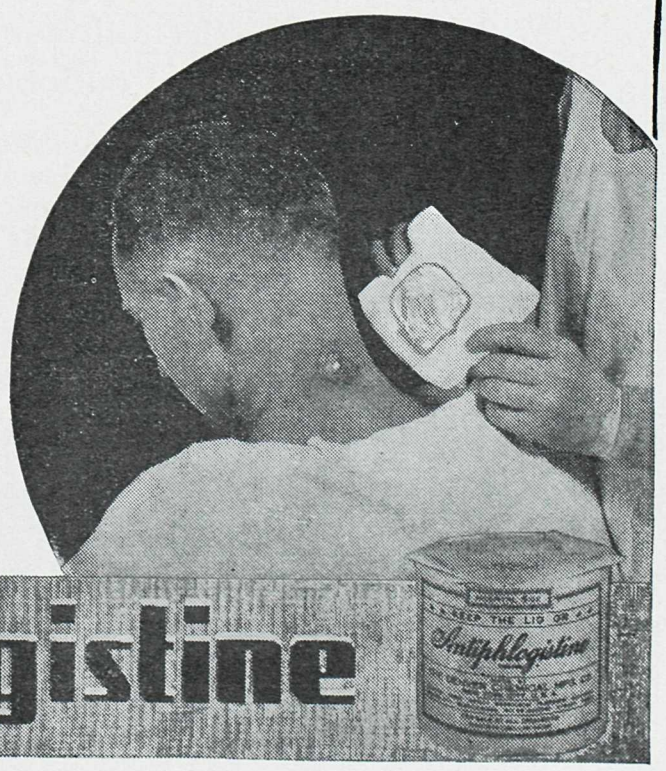

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THE EDITOR'S PAGE

SPECIAL NOTE

We are at war. All of us must, of course, put our country and her needs first, and be willing to give up cheerfully anything that may in the least degree conflict with the fullest co-operation we can give. But, with this clearly undrestood, there are still our daily duties, our common tasks, our private and public responsibilities, both as individuals and collectively, as members of the medical profession. The question has been raised, whether we should cancel the forthcoming Annual Meeting of the B. C. Medical Association. It will be greatly curtailed, no doubt—many of its speakers will be at other tasks and duties. But we feel that the rest of us should carry on. There are many things that need to be done. Let us not forget that it was in 1917, in the full tide and flood of war, that the Workmen's Compensation Act came into force. The B. C. Medical Association, and the Vancouver Medical Association, functioned then as guides and helpers to the Government of the day in the shaping of that Act. So today we must still function as an organised medical profession. Other considerations arise. Many of our men are going away. We should organize to protect them and to protect their practices and incomes in their absence. There must be no profiteering amongst ourselves, and we hope we shall not again see men coming back from their period of service overseas to find their work gone, their positions usurped, and held against all protest, by men whom they had trusted, or by others who had stepped in and stolen their possessions. We should organise against this.

Let us hold our meeting and make it a success. Let us not allow Herr Hitler and his gang to panic us or force us to neglect our duties. Let us remember Drake, who was bowling when the Armada hove in sight, and one came running to tell him—"Let them wait," said Drake, and " he stooped and finished the game."

We have our game to play, our rôles to fill, our duties to do, and we should do them, calmly, deliberately, thoroughly, and without haste. For the world will go on, and a new order will arise, and peace will come; may God grant it be soon. —Ed.

* * * *

We wish all success to the Annual Meeting of the British Columbia Medical Association, which will be held from the 18th to the 21st of this month inclusive. The programme is a busy and a most interesting one—full of variety, too. One wishes for a really dual personality, so that one could take it all in, and still continue one's necessary work. The wise men of the East will be with us, and are giving us generously of their store: and full use is being made, too, of our own local opportunities for advancement. We congratulate, in all sincerity, Dr. M. W. Thomas, Executive Secretary of the Association, who has worked hard to bring this meeting to a successful ending: and are confident we shall be able to say, in the old Latin phrase, "*Finis coronat opus.*"

We have referred to the programme in a previous number, and all members will by now have it in their hands: so little need be said further in this regard—but there are one or two things that will bear another reference. Perhaps the chief of these, what the modern phrase calls the keynote, will be the emphasis on Medical Economics. Our readers, *i.e.*, the members of the B. C. Medical Association, will shortly receive, in ample time for careful study before the meeting, a tentative Plan for Voluntary Health Insurance for wage-earners or groups of persons, whose annual income falls below a certain level. This Plan has been most carefully worked out by the Committee on Economics, under the chairmanship of Dr. Cameron McEwen, and our readers will perforce agree that it represents a tremendous amount of work. We regret extremely that Dr. McEwen has been ill—and, while he is reported to be much better, it is hardly likely he will be able to be with us when his plan is presented for discussion. We shall all join in hoping for his speedy recovery—and in the meantime congratulate him and his Committee on an excellent piece of work.

This plan has been most carefully moulded into its present shape. It is not merely a vague outline: it is a concrete, legally unassailable, workable plan, and has been gone over

and put into proper form by a solicitor. Some such arrangement could be offered to the public without any hesitation on our part, and would be a proof of our sincerity and good faith—besides being, we believe, a constructive and quite feasible contribution to public welfare. The trend of the day is towards collective bargaining in all lines of human endeavor, and in the form of co-operatives one sees it succeeding, and with an adequate past record of success, in commercial life. There is no *a priori* reason why it should not succeed in professional relations, and especially in such things as health. It may yet prove to be a better way out of our difficulties than any yet suggested, or at any rate a valuable adjuvant to other methods.

Then we are looking forward to meeting Mr. Hugh Wolfenden, well known to all of us as an eminent actuary. He will make a very valuable contribution to our efforts to improve the economic status of medicine. In this connection, Dr. T. C. Routley, General Secretary of the Canadian Medical Association, will also be able to assist us greatly.

So read your programme, read the reports, study the plan sent to you and come prepared for a record meeting.

* * * *

In this issue we are printing an excerpt from the 36th Annual Report of the Canadian Medical Protective Association dealing with the dangers of the doctor's position in cases of sterilization of men or women. We confess that we had not ourselves realized all the implications of this matter, which is fraught with real danger to the conscientious surgeon, who may have, in perfectly good faith, done an operation with the full consent and knowledge, and indeed, at the expressed desire, of the patient, only to find himself faced with malpractice and damage claims, because he omitted to protect himself adequately. We urge our readers to give careful consideration to this. In our next number we propose to print an extract from a recent publication, dealing with the physician's attitude and conduct in courts of law as a witness. We think the majority of medical practitioners would be the happier and safer for instruction along these lines, by an expert such as this writer.

NEWS AND NOTES

IMPORTANT

In view of the existing situation of world affairs it will be of special interest to members to learn that arrangements are being made to hold, during the Annual Meeting of the British Columbia Medical Association, a special meeting dealing with "The Role of the Doctor in War." This will probably be arranged for Tuesday, September 19th, at about 4:30 p.m., and should be very informative and helpful.

Mrs. E. J. Lyon of Prince George is making satisfactory progress following a recent operation.

* * * *

News from Penticton shows Dr. D. J. Sweeney of Vancouver as a recent visitor.

* * * *

Dr. John Gibson, a Penticton boy, graduated from Queen's in 1937 and has, since finishing his interneship in Regina, been holidaying at home before taking on a practice in the Mackenzie River District.

* * * *

Dr. F. O. R. Garner of Tranquille has been conducting a travelling clinic through the Okanagan.

* * * *

Dr. M. R. Basted and family of Trail are holidaying in the South.

Dr. F. P. Sparks of Nelson is in Chicago doing post-graduate work.

* * * *

Dr. William Leonard of Trail attended the B. C. Championship Rifle Shoot in July, returning home with the Championship itself. Congratulations, Dr. Leonard.

* * * *

Dr. H. R. Christie of Rossland is enjoying a post-graduate course in Gynæcology and Obstetrics in the Jersey City General Hospital.

* * * *

Dr. M. G. Archibald of Kamloops returned from his eastern visit, and we are all pleased to learn that he has recovered from his unfortunate illness while away.

* * * *

Congratulations are extended to Dr. and Mrs. G. D. Saxton of Ocean Falls on the birth of a daughter.

* * * *

Dr. Richard Gibson left for Port Alberni, where he will do *locum tenens* during Dr. Jones' absence.

* * * *

Dr. A. E. Kydd is at Bella Coola relieving Dr. H. Douglas Galbraith.

* * * *

Dr. John G. Robertson will leave shortly for extended post-graduate study.

* * * *

Dr. H. Cantor will carry on at Tofino during Dr. Robertson's absence.

* * * *

Dr. Ethlyn Trapp has left for the Eastern States by air. She will attend the International Cancer Congress to be held at Atlantic City, and then will visit hospitals in Boston and New York. She will return about the 18th of September.

* * * *

Threats of war have interfered with the plans of a number of those planning to go to Europe for post-graduate work. Dr. F. Bonnell, who had planned to leave at the end of August for the East, has changed his plans and is, at the time of going to press, on duty with the No. 12 Field Ambulance Corps.

* * * *

Dr. Eleanor Riggs, who was on her way to England and had reached Montreal, has decided to postpone her sailing until a later date.

* * * *

Dr. R. R. Laird has been doing *locum tenens* in the absence of Dr. Gordon James of Britannia.

* * * *

Dr. P. M. McLean is now associated with Dr. R. N. Dick in the practice at Chemainus.

* * * *

Dr. H. Ostry has been at Port Alice during Dr. G. A. Lawson's absence.

* * * *

Dr. T. C. Holmes of Burns Lake is out on vacation.

* * * *

Dr. George Langley of Wells is away doing extended post-graduate work.

* * * *

Dr. J. H. Black, formerly at the Vancouver General Hospital, is now at Wells.

* * * *

Dr. James W. Wilson, son of Dr. George T. Wilson of New Westminster, has been home on a visit.

* * * *

The many friends of Dr. W. F. Drysdale were relieved to learn by direct news from Nanaimo that injuries sustained in a car accident on August 21st were not considered serious. Nevertheless we regret his unnecessary suffering, which, we understand, was occasioned by being crowded on the road by another car.

Dr. G. A. B. Hall of Nanaimo is making an extended trip through the Yukon.

* * * *

Dr. R. N. Dick of Chemainus has acquired the sloop formerly owned by Dr. C. C. Browne and is on vacation.

* * * *

Dr. F. H. Bonnell, radiologist, who has been connected with the X-ray Department at St. Paul's Hospital, has left for a visit to the Eastern States and Canada, following which Dr. Bonnell expects to go to Great Britain and Europe for an extended period to do post-graduate work in radiological centres.

* * * *

Dr. C. G. Campbell of Halifax, N.S., will take Dr. F. H. Bonnell's place in the X-ray Department at St. Paul's Hospital for a year. Dr. Campbell, who is taking his D.M.R. course, has been working with Dr. W. A. Jones in Kingston, Ontario, and is continuing his studies in radiology.

* * * *

Dr. C. M. Eaton has returned from a three months' visit to Eastern Canada. Dr. Eaton attended the annual meeting of the Canadian Medical Association in Montreal.

* * * *

Dr. G. A. Davidson has returned from Victoria, where he spent five weeks. Dr. Davidson lectured to the students attending the Summer School, held at the Normal School in Victoria.

* * * *

The Association extends its sympathy to Drs. J. Moscovich and B. B. Moscovich on the death of their father, Mr. M. H. Moscovich, which occurred recently after an extended illness.

* * * *

Dr. J. R. Neilson has returned from England, where he spent six months, taking post-graduate work in surgery. Dr. Neilson is now specializing in surgery.

* * * *

Congratulations are extended to Dr. and Mrs. Russell Palmer upon the birth of a daughter on July 22nd.

* * * *

We also congratulate Dr. and Mrs. Wesley Simpson on the birth of a son on August 1st, and Dr. and Mrs. J. Ross Davidson on the birth of a daughter on August 7th.

* * * *

Dr. Louis E. Sauriol, Medical Supervisor, Provincial Mental Hospital, New Westminster, has returned from a three months' study and survey of hospitals and clinics in several States.

* * * *

We offer our best wishes to Dr. and Mrs. Austin N. Dobry on the birth of a son on August 5th.

* * * *

Dr. Donald Munroe has left for California. He will spend a year at the University of California, working under Dr. William Kerr, Professor of Medicine at the University.

* * * *

Dr. E. Christopherson is now connected with the offices of Drs. Lennie, Schinbein, Strong, Vrooman and Wilson, in the place left vacant by Dr. Donald Munroe.

* * * *

Dr. B. M. Fahrni is now connected with the offices of Dr. Hodgins, at 710 Seymour Street, together with Drs. R. E. McKechnie II and Dr. S. E. C. Turvey.

British Columbia Medical Association

(Canadian Medical Association, British Columbia Division)

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1939 ANNUAL MEETING
VANCOUVER

HOTEL VANCOUVER

SEPTEMBER, 18, 19, 20, 21

FOUR FULL DAYS

Make Your Plans and Reservations Early

SCIENTIFIC SPEAKERS

DR. R. FRANKLIN CARTER, New York City; Associate Professor of Clinical Surgery, Post-Graduate School, Columbia University.

DR. W. G. COSBIE, Toronto; Senior Demonstrator in Obstetrics and Gynæcology, University of Toronto.

DR. H. B. CUSHING, Montreal; Emeritus Professor of Pædiatrics, McGill University.

DR. ALEXANDER GIBSON, Winnipeg; Associate Professor of Clinical Orthopædic Surgery, University of Manitoba.

DR. ROSCOE R. GRAHAM, Toronto; Assistant Professor of Surgery, University of Toronto.

DR. F. S. PATCH, Montreal; Professor of Urology, Head of the Department of Surgery, McGill University.

DR. E. P. SCARLETT, Calgary; Internal Medicine.

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DR. F. S. PATCH, Montreal, President.

DR. T. C. ROUTLEY, Toronto, General Secretary.

MR. HUGH H. WOLFENDEN, Toronto, Consulting Actuary to Committee on Economics, Canadian Medical Association.

MONDAY, SEPTEMBER 18th

8:30 a.m. Registration.

9:30 a.m. 1. Dr. W. G. Cosbie—Cancer of the Cervix.
2. Dr. Roscoe R. Graham—The Surgeon's Responsibility in Cancer.

3. Dr. Frank S. Patch—Renal Infections.
4. Dr. H. B. Cushing—
Indications for and the Results of the Removal of Tonsils and Adenoids.

12:30 Luncheon—Dr. Frank S. Patch, Dr. T. C. Routley, Mayor, President Vancouver Medical Association.

2:00 p.m. Clinical Demonstration—Vancouver General Hospital.

8:00 p.m. Annual Meeting—College of Physicians and Surgeons of B. C.
" " British Columbia Medical Association.

TUESDAY, SEPTEMBER 19th

8:30 a.m. Round Table—Obstetrics, Dr. J. W. Arbuckle.

9:30 a.m. 1. Dr. H. B. Cushing—The Principles of Artificial Feeding of Infants.
2. Dr. E. P. Scarlett—
Angina Pectoris and Coronary Thrombosis, a clinical study of 100 cases of each condition.
3. Dr. R. Franklin Carter—
The Treatment of Cervical Lymphadenitis in Children.
4. Dr. W. G. Cosbie—Maternal Mortality.

12:30 Luncheon—

12:30 Luncheon—Mr. Hugh H. Wolfenden—
"The Development of Health Insurance Throughout the World and Its Bearing on Medical Economics in Canada."

2:00 p.m. Venereal Disease Demonstration—Place to be announced.

8:15 p.m. Medical Economics—Round Table Conference, Mr. Hugh H. Wolfenden.

WEDNESDAY, SEPTEMBER 20th

8:30 a.m. Round Table—Orthopædics—Dr. Murray Meekison.

9:30 a.m. 1. Dr. Alexander Gibson—Fracture of the Neck of the Femur.
2. Dr. Frank S. Patch—
The Importance of Early Diagnosis in Urinary Tract Tumors.
3. Dr. Roscoe R. Graham—
Cæcostomy, a simple and safe measure in diseases of the colon.

12:30 4. Dr. E. P. Scarlett—Peptic Ulcer—New variations on Old Themes.

12:30 Luncheon—Meeting of Board of Directors.

2:00 p.m. Public Health Demonstration—Main lecture room.

8:15 p.m. 1. Dr. Alexander Gibson—Fractures of the Forearm.
2. Dr. R. Franklin Carter—
The Diagnosis of Appendicitis in Children in the Formative Stage. The Results of Our Attempt to Reduce the Mortality in Appendicitis.

THURSDAY, SEPTEMBER 21st

8:30 a.m. Round Table—Nutrition and Gastro-Intestinal Diseases—
Dr. H. A. DesBrisay.

9:30 a.m. 1. Dr. Alexander Gibson—Mechanism of the Spine.
2. Dr. R. Franklin Carter—
Selection of Cases with Gall Bladder Disease for Surgery.
3. Dr. F. P. Scarlett—
Common Fallacies in the Diagnosis of Cardiovascular Diseases.

12:30 Luncheon.
Golf.

7:00 p.m. Annual Dinner—Hon. R. L. Maitland, K.C., M.L.A., will be the guest speaker.
Distribution of prizes.

SPECIAL FEATURES

Monday, September 18th—2:30 p.m.

Demonstrations of Various Technical Procedures of General Interest.

All of these Demonstrations will be held in the *Nurses' Auditorium* of the *Vancouver General Hospital* (Corner 10th Ave. and Willow St.) *except* Artificial Pneumonthorax and Pneumo-peritoneum which will be held in the *Tuberculosis Centre* (adjacent building).

2:30 p.m. Demonstration of Miller-Abbott tube for Gastro-Intestinal Decompression —Dr. J. R. Neilson (Dept. of Surgery).

2:45 p.m. Demonstration of Sternal Puncture—Dr. H. H. Pitts and Miss M. Erskine (Dept. of Pathology).

3:00 p.m. Friedman Modification of Ascheim-Zondek test—Dr. E. A. Gee and Miss Dorothy Wylie (Dept. of Pathology).

3:15 p.m. Sedimentation Test—Mr. W. Pottinger (Dept. of Pathology).

3:30 p.m. Clinical Demonstration of the Results of Treatment of Cancer—Dr. A. Maxwell Evans (B. C. Cancer Institute).

4:00 p.m. Some practical points in the Differential Diagnosis of Intrathoracic Lesions; Pulmonary and Cardio-vascular—Dr. W. H. Hatfield (Chest Clinic).

4:30 p.m. Newer Developments in Thoracic Surgery—Dr. W. E. Harrison (Chest Clinic).

4:45 p.m. Demonstrations of Pneumothorax—Dr. W. W. Simpson (Chest Clinic). To be given in the Tuberculosis Centre.

5:00 p.m. Demonstrations of Pneumo-peritoneum—Dr. W. A. Coburn (Chest Clinic). To be given in the Tuberculosis Centre.

Note: These demonstrations will start and finish on time.

Please register for transportation to the Vancouver General Hospital.

LUNCHEONS

Monday, Sept. 18th, 12:30—Official Luncheon
Tuesday, Sept. 19th, 12:30—Special Luncheon

ROUND TABLE CONFERENCES

Main Lecture Room.

Tuesday, Sept. 18th, 8:30 - 9:30 a.m.—
"Obstetrics," conducted by Dr. J. W. Arbuckle.

Tuesday, Sept. 19th, 8:00 p.m.—
"Medical Economics," conducted by Mr. Hugh R. Wolfenden.

Wednesday, Sept. 20th, 8:30 - 9:30 a.m.—
"Orthopædics," conducted by Dr. Murray Meekison.

Thursday, Sept. 21st, 8:30 - 9:30 a.m.—
"Nutrition and Gastro-Intestinal Diseases," conducted by Dr. H. A. DesBrisay.

PUBLIC HEALTH

Lectures and Demonstrations.
Main Lecture Room.

Wednesday, Sept. 20th, 2:00 p.m.—
This session will be presided over by Dr. J. H. MacDermot. Those participating will present the present programme of Public Health.

MOTION PICTURE

Tuesday, Sept. 19th, 2:30 p.m.—Lecture Room, Hotel Vancouver

Dr. D. H. Williams has secured a special sound-film which will give 90 minutes of Clinical instruction. This film was prepared by the American Medical Association and the United States Health Services and is highly commended for the impressive way in which it presents the whole subject.

LADIES' ENTERTAINMENT

Monday, Sept. 18th—

9:00 a.m. Registration. All ladies are requested to register.

Tuesday, Sept. 19th—

9:00 a.m. Registration.

1:00 p.m. Scenic drive for visiting ladies. Will the visiting ladies please meet at the Registration Desk in the Social Suite (1st mezzanine). The local ladies who are driving will please come to the Registration Desk to meet their parties.

4:00 p.m. Tea—Jericho Country Club.
All ladies who are registered are invited to be the guests of the British Columbia Medical Association.

Wednesday, Sept. 20th—

4:00 p.m. All ladies are invited to Mrs. Cleveland's Tea to be held at the home of Mrs. G. H. Clement, 1550 West Thirty-fourth avenue (second house west of Granville street).
Note: Trams No. 6 or No. 7 stop at Thirty-third and Thirty-fifth Aves. Visiting ladies will please meet at the Registration Desk for transportation.

Thursday, Sept. 21st—

7:30 p.m. DINNER—to be held in the Social Suite.
All ladies are requested to register. In the case of local ladies, husbands may secure Invitation Cards for the Tuesday Tea and Dinner Tickets at the Ladies' Registration Desk.

ANNUAL REPORTS OF STANDING COMMITTEES BRITISH COLUMBIA MEDICAL ASSOCIATION

Please read before coming to the Annual Meeting.

CONSTITUTION AND BY-LAWS

At our Annual Meeting last year in Victoria, our Constitution and By-Laws were radically amended to provide for our Association becoming a Division of the Canadian Medical Association. This necessitated a good deal of work on the part of this Committee during the previous year and left little to be done this year. It is not usual or advisable to further amend a Constitution and By-laws which has been materially changed, for at least a year, unless occasion demands. There was no such occasion during the past year.

The new Constitution and By-Laws were printed and mailed to all the members of our Association after it had been approved by the Canadian Medical Association and sufficient extra copies kept in reserve for future needs.

Following the Annual Meeting last year, your Chairman assisted the College of Physicians and Surgeons in arranging for the collection of the Canadian Medical Association fee from the members of our Association until a Membership Committee was established.

All of which is respectfully submitted.

H. H. MILBURN, Chairman,
Committee on Constitution and By-Laws.

PROGRAMME AND FINANCE

Programme:

The Annual Meeting for 1939 speaks for itself and no further elaboration on this subject is required.

Tours have been arranged through the Province in the past year as follows:

1. Sept. 30th-Oct. 12th, 1938. Doctors Murray McC. Baird and Roy Huggard travelled to the Okanagan and Kootenay Districts where they addressed the Annual Meetings of No. 4 District Medical Association at Kelowna, the West Kootenay

Medical Association at Trail, and the East Kootenay Medical Association at Cranbrook. Other luncheons and meetings were attended en route at Chilliwack, Lytton, Penticton, Grand Forks, Nelson, Creston and Revelstoke.

2. November 10th, 1938. Doctors D. E. H. Cleveland, Roy Huggard and J. R. Naden addressed the Annual Meeting of the Upper Island District Medical Association at Qualicum.
3. June, 1938. Dr. H. A. DesBrisay addressed the Spring Meeting of the Upper Island District Medical Association at Qualicum.
4. August 1st, 1939. Doctors D. E. H. Cleveland and Roy Huggard travelled to the Cariboo, Prince George and Prince Rupert. They were the principal speakers at meetings at Chilliwack, Prince Rupert and Prince George. Most of the profession were visited en route.
5. August 28th, 1939. Dr. D. E. H. Cleveland addressed the Annual Meeting of the West Kootenay Medical Association at Nelson.

In each case our very efficient Executive Secretary, Dr. M. W. Thomas, made the detailed arrangements for these trips and accompanied the speakers.

Finance:

The Association at present operates on a budget of $2,500. The increasing demands made on this budget because of increased activity in the central office will shortly mean that this sum will be inadequate to carry on a service satisfactory to our members.

The tours, which we have long felt were a valuable part of the service rendered to the medical profession in this Province, should be continued and not restricted by lack of funds.

It may be necessary, therefore, to appeal to the Council for some increase in the annual appropriation for the activities of the British Columbia Medical Association.

All of which is respectfully submitted,

G. F. STRONG, Chairman,
Committee on Programme and Finance.

MEDICAL EDUCATION

Mr. President:

Herewith the report of your Committee on Medical Education.

This Committee has been active during the past year. As a result of keeping on file the calendars and entrance requirements of all Canadian Medical Schools, the Committee has been in a position to assist prospective medical students to a selection of the proper school and it is understood that this effort has been successful in certain instances. As a side issue, one or two residences abroad have been secured for local internes.

Another phase has been the opportunity of introducing, by personal letter, some of our members to outstanding men in America in certain specialties. It is felt that this service could very easily be broadened. There are, no doubt, in this Province, specialists in all branches who, among them, are personally acquainted with all the leading men in the particular branch of work. It should be simple to establish a central clearing house for necessary information and personal letters for our members who are desirous of making post-graduate tours.

So far, an unsuccessful attempt has been made to have in this Committee a central repository for information concerning residences and interneships, which may be available throughout America. No doubt, in time, this can be worked out.

The question of exchange of position between local hospital residents and men practising in outlying communities who are desirous of brushing up in our larger hospitals, has been considered. Here, there are difficulties in the way which, in time, may be circumvented.

The problem of placing British Columbia students in medical schools continues to be acute, although some progress has recently been made in this respect. This brings forward the important question of a Faculty of Medicine at the University of British Columbia. It is felt that there is adequate material in Vancouver for school purposes and an excellent nucleus for a faculty is available among our members. The supply of internes for our

hospitals throughout Canada falls 30% short of the demand. This would suggest that there is ample room for another "CLASS A" school in Canada, unless our requirements are to be met by the use of refugee physicians from Europe. Representations should be made to the Government with respect to the establishment of at least the first two years of a good medical course, including a Department of Anatomy, at the University of British Columbia.

Standards of medical schools in Canada are high and, in view of this fact, your Canadian Committee as a whole, holds only a "watching brief" with respect to these standards. On the other hand, standardization of entrance requirements to these schools would seem to be desirable. The Canadian Committee is co-operating with other bodies toward the establishment of boards for the certification of specialists in the not too far distant future. Such boards are now functioning very successfully in the United States, and constitute not only a protection to the public but also to the physician.

Finally, this Committee welcomes at all times suggestions for study for the betterment of medical education standards, or suggestions as to how it may better serve this Association.

All of which is respectfully submitted,

D. M. MEEKISON,
Committee on Medical Education.

ARCHIVES

For a long time it has been felt that some attempt should be made to collect information regarding the history of Medicine in British Columbia, and particularly data regarding the men who engaged in practice here, where they came from, where they worked, and the conditions under which they worked. It would be very pleasant, also, if the Association were able to establish a kind of Museum of Medical Mementos, where objects of historic interest could be on display. Your Association, however, unfortunately suffers from a lack of any permanent home with adequate space to house such exhibits even if they were available.

It seems, therefore, that the only practicable archives would consist of a book, or a series of books, in which are recorded facts, not only about the past but about those of our members who are making history today and have made it in the past, for we must not forget that some day someone will refer to our times as "the good old days."

With the object of beginning some such storehouse of information, your Committee has written to a goodly number of members of your Association, men who are in a position to tell something of themselves, the men and places they have known in British Columbia and, it may be, medical anecdotes of vast interest. If these men will all co-operate with your Committee by writing something for inclusion in the first volume, a book of surpassing value will result, for the edification, instruction and inspiration of future generations.

In this way it is hoped that a beginning will be made of the Archives of the British Columbia Medical Association.

The following is a list of members to whom letters have been written:

Vancouver—Dr. Saul Bonnell, Dr. R. B. Boucher, Dr. F. W. Brydone-Jack, Dr. W. B. Burnett, Dr. Glen Campbell, Dr. J. S. Conklin, Dr. Newton Drier, Dr. James C. Farish, Dr. G. M. Foster, Dr. Joseph Gibbs, Dr. G. S. Gordon, Dr. B. D. Gillies, Dr. A. W. Hunter, Dr. T. M. Jones, Dr. W. D. Keith, Dr. R. E. McKechnie, Dr. W. C. McKechnie, Dr. P. A. McLennan, Dr. F. J. Nicholson, Dr D. G. Perry, Dr. H. W. Riggs, Dr. A. M. Robertson, Dr. J. E. Spankie, Dr. A. A. Sutherland, Dr. W. H. Sutherland.

Victoria—Dr. W. A. Fraser, Dr. E. C. Hart, Dr. H. M. Robertson, Dr. H. J. Wasson.

Nanaimo—Dr. W. F. Drysdale, Dr. G. A. B. Hall.

Campbell River—Dr. W. A. Richardson.

Parksville—Dr. Robert Elliot.

Prince Rupert—Dr. W. T. Kergin.

North Vancouver—Dr. Harold Dyer.

New Westminster—Dr. G. H. Manchester, Dr. W. A. deWolfe Smith.

Chilliwack—Dr. R. McCaffrey.
Quesnel—Dr. Gerald Baker.
Kamloops—Dr. M. G. Archibald.
Armstrong—Dr. W. B. McKechnie.
Vernon—Dr. Osborne Morris.
Kelowna—Dr. B. de F. Boyce, Dr. W. J. Knox.
Penticton—Dr. R. B. White.
Grand Forks—Dr. C. M. Kingston.
Cranbrook—Dr. F. W. Green.
Jasper—Dr. T. F. O'Hagan.

Respectfully submitted,

MURRAY McC. BAIRD, Chairman,
Committee on Archives.

MATERNAL WELFARE

The Committee on Maternal Welfare was organized last October on a Province-wide basis with a Nucleus Committee of Doctors practising in and around Vancouver. Representatives were appointed from the District Associations, and with five Vancouver Doctors made a Committee of eighteen in all. Whilst it has been impossible to have a full Committee meeting, several meetings of the Nucleus Committee have been held, including one with Dr. L. C. Conn of Edmonton, during the Summer School of the Vancouver Medical Association, his ideas being very helpful, and the rest of the Committee have been consulted and advised of what was done by letter.

The first question taken up, and the one that was considered most pressing at the time, was that of improved prenatal care. In this respect the question of greater co-operation between Public Health Nurses and Doctors was taken up and Dr. H. E. Young of the Provincial Board of Health was interviewed. He pointed out that it was the policy of the Public Health Department to have their nurses co-operate with the Doctors in these cases to the fullest extent and urged that wherever Public Health Nurses were stationed, the Doctors should make full use of them and work with them, and advised that where there was no Public Health Nurse stationed that efforts be made to get one.

He also pointed out that his Department issued monthly prenatal and postnatal letters to patients advising them how to take care of themselves and their babies and when to consult their Doctors. These letters will be sent on application from patient or doctor and should be especially useful in outlying districts where it may be difficult for the patients to see their doctors regularly.

Better prenatal care by the Doctors was also considered and it was realized that in many cases this could be considerably improved. As a result of a conversation with Dr. T. C. Routley, General Secretary of the Canadian Medical Association, and correspondence with Dr. McQueen of Winnipeg, Chairman of the Maternal Welfare Committee of the Canadian Medical Association re the Manitoba survey, the benefits of which are already beginning to show in their records, it was felt that if all maternity cases were reported on filing cards which could be sent periodically to the Public Health Department for abstracting and then returned to the Doctor for his file, that it would result in more careful work being done.

Such a card has been drawn up and made as simple and concise as is consistent with adequate prenatal care and record of Delivery. Dr. Young has been interviewed about these cards and has promised the co-operation of his Department in the printing, sending out and abstracting of these cards.

It is urged that this card system be endorsed by the members of the British Columbia Medical Association at this meeting by the adoption of this report so that the cards can be printed and distributed in time for the institution of the scheme with the New Year.

The Committee on Maternal Welfare would also be glad to receive reports on interesting or exceptional cases occurring in the Province and especially full reports on any

maternity deaths associated with pregnancy, so that they can be reviewed and suitable treatment advised by a specialist in Obstetrics.

Respectfully submitted.

C. T. HILTON, Chairman,
Committee on Maternal Welfare.

PUBLIC HEALTH

The opening meeting of the year of the Committee on Public Health was called on October 19th, 1938, by Dr. A. H. Spohn, Chairman. In his opening remarks he mentioned briefly the function of the Committee, pointing out its importance and the wide scope of its problems. He urged that physicians play a more active part in shaping policy regarding public health matters. Lay organizations were showing contrasting activity and aggressiveness in this field, an example of which had been the Public Hearings in June, 1938, concerning the proposed amendment of the Marriage Act. Numerous briefs from interested lay organizations had been presented, but none from the medical profession, every member of which had a vital interest in this question.

Although it is twenty years since the B. C. Medical Association first took official action advocating compulsory pasteurization of raw milk, the committee undaunted continued to press for this essential improvement. It was recommended that the following resolution, addressed to the Honourable Mr. Pattullo, Premier of British Columbia, be presented to the Board of Directors of the British Columbia Medical Association for approval:

A Memorandum

Re *Pasteurization of Raw Milk in British Columbia.*

"To the Premier of British Columbia:

"The milk question in British Columbia is of such importance to public health that we beg again to request that immediate action be taken by the Provincial authorities to remedy the existing unsatisfactory state of affairs.

"The present typhoid fever epidemic at Merritt has been investigated, we understand, by the Provincial Board of Health and other agencies and has been found to have been transmitted through raw milk.

"Without effective pasteurization there is no safeguard against similar occurrences in other parts of our Province. We, therefore, petition your honourable body that some practical legislative measures be adopted during the coming session of the Legislative Assembly to further safeguard the public from infected raw milk."

Approval of the Board of Directors was forthcoming and the resolution was forwarded to the Honourable Premier Pattullo, and copies to the Honourable G. M. Weir, Provincial Secretary, and the Honourable K. C. Macdonald, Minister of Agriculture. Although receipt of the resolution was acknowledged, the committee has not been informed of any steps having been taken as yet to put into effect the recommendation embodied in it.

The Committee was informed by the Greater Vancouver Health League that Japanese midwives were registering the births of Japanese children. The Health League was of the understanding that according to law, a doctor should be present at each birth and should register the birth with the Registrar of Births, Deaths and Marriages. Further, it was pointed out that laxity in regard to strict enforcement of the regulations concerning registration of births might permit a serious situation to arise regarding the health of the community. Information received showed that in the City of Vancouver, four Japanese midwives, who have had two or three months' training in Japan, delivered a very large percentage of the Japanese births. This matter is still under consideration.

A joint letter from Dr. Dolman, Director of the Division of Laboratories, and Dr. Williams, Director of the Division of V. D. Control, Provincial Board of Health, to Dr. D. E. H. Cleveland, President of the B. C. Medical Association, concerning the distribution of confidential laboratory forms to patients was referred by the Board of Directors to the committee. This letter pointed out that the confidential report forms issued by the Division of Laboratories of the Provincial Board of Health, which recorded negative findings relating to Kahn tests on blood specimens, or to microscopic examinations for gonococci

were being handed over to prostitutes by physicians in Vancouver and other cities in the Province. Since physicians are familiar with the facts that a negative reaction may be present in the earliest and most highly communicable phase of syphilis, and that negative smears are frequently obtained from persons having gonorrhœa in a communicable state, the distribution of negative reports to prostitutes, who in turn used them to show prospective clients as a guarantee of freedom from venereal disease, aided and abetted the spread of venereal disease and endangered the public health.

Dr. Spohn and Dr. H. E. Young, Provincial Health Officer, collaborated on a letter which was sent to all members of the profession, pointing out the dangers of medical certification of prostitutes.

As representative of the B. C. Medical Association, Dr. M. W. Thomas attended a conference in Victoria called by the Honourable A. Wells Gray, Acting Provincial Secretary, to consider the disposition of 108 single men suffering from V. D. in the City of Vancouver who were to be cut off from relief assistance. It was pointed out in the discussion by the Director, Division of Venereal Disease Control, that a factor in the concentration of V. D. population in Vancouver was the lack of remuneration of physicians in outlying parts of the Province where clinics were not available for persons on relief suffering from V.D. The conference recommended a plan be arrived at to pa yphysicians in outlying districts of the Province for care given to indigent and low income persons suffering from V. D.

Dr. Spohn prepared a résumê of public health matters in B. C. for the annual report of the Canadian Medical Association Health Committee.

Respectfully submitted,

D. H. WILLIAMS, Secretary,
for Dr. A. H. Spohn, Chairman,
Committee on Public Health.

PHARMACY

This Committee had several meetings during the year, and on March 14th they met representatives of the Pharmaceutical Association to discuss the matter of a Provincial formulary. The representatives of the Pharmaceutical Association were of the opinion that it would be for the mutual benefit of patient, doctor and pharmacist if the doctors of the Province could be persuaded to use a Provincial formulary.

It was felt by both the pharmacists and your Committee that if such a formulary were compiled and made sufficiently comprehensive, it might do away to some extent with the prescribing of expensive proprietary drugs which are often quite useless. It was suggested that possibly the formularies that are in use at the Vancouver General Hospital and other hospitals in the Province might be combined into one Provincial formulary that might become universally used in the Province.

In order to make a success of such a project it was felt that the formulary would have to be distributed free by either the British Columbia Medical Association or the College of Physicians and Surgeons, and this would be a matter of an expenditure of about $500. The matter was brought to the attention of the executive, but they felt that they could not authorize such an expenditure of money at the present time.

Your Committee feels that this is a matter that should be discussed by the physicians and, if there is sufficient demand, would suggest that further steps be taken during the coming year for planning such a Provincial formulary.

Respectfully submitted,

C. H. VROOMAN, Chairman,
Committee on Pharmacy.

HOSPITAL SERVICE

This report of your Committee may, in most respects, be somewhat disappointing.

There was some doubt in the minds of the Committee at the outset, as to what constituted the duties or work to be considered. It had been hoped that the visit of Dr. Harvey Agnew last fall would enable active work to be undertaken.

This Committee has met on several occasions and the various phases of the work considered and discussed. Request was made to the outside members in the Province for the submission of any problems with which it was deemed this Committee might be of service. In this request your Committee drew a blank.

Later, a sub-committee was appointed in an effort to segregate the work as it was found that much that was being considered overlapped the work of other committees.

This sub-committee is still at work, co-operating with other committees where possible overlapping occurs, and a sincere attempt is being made to place the Hospital Service Committee on an active basis.

While little has apparently been accomplished this year it is felt that the foundation has been laid for active participation in the affairs of the Association next year by the Committee on Hospital Services.

Respectfully submitted,

W. S. TURNBULL, Chairman,
Committee on Hospital Service.

STUDY OF CANCER

I beg to submit to you the report of the Committee on the Study of Cancer for the past year 1938-39. The work of this Committee has been wide and varied and monthly meetings have been held throughout the year, a dinner meeting being held in May. At the beginning of the year the members of this Committee were chosen in such a manner that all districts of the Province were represented.

Every co-operation was lent through the offices of this Committee to the Central Executive in their work with the Cancer Foundation in establishing a Medical Staff to that institution. This work did not properly fall within the scope of the Committee and will, in all probability, be reported in detail elsewhere.

The Speakers' Bureau, under the Chairmanship of Dr. M. W. Thomas, provided through the year speakers for addresses which were delivered under the auspices of the Canadian Society for the Control of Cancer.

It is interesting to note that the medical profession has co-operated widely in the efforts of this organization and that this organization might well be congratulated upon the formation of 67 units throughout the length and breadth of the Province.

The work of the Department of Cancer Control was also carried out and some 16 hospitals were invited to set up Cancer Study Groups. To date nine have responded and it is anticipated that within the passage of time these Cancer Study Groups will increasingly show results in the efforts being made by the profession to deal with this disease.

The report forms which have been prepared by headquarters at Toronto have been placed in the hands of all Study Groups in the various institutions and we shall hope that the coming year will find this work well established. This organization was carried out under the able chairmanship of Dr. Harold Caple.

During the year the Committee discussed at great detail the advisability of the establishment of a Biopsy Service as an adjunct to the present laboratory services supplied by the Government. A most comprehensive report was made of the situation by Dr. H. H. Pitts. The Executive of the Association empowered this Committee to take such steps as would seem necessary to bring this service to fruition. At the present time negotiations are proceeding.

We have the most sympathetic support of the Minister, Hon. G. M. Weir, and Dr. C. E. Dolman, Director of Provincial Laboratories, as well as Dr. H. E. Young, Provincial Medical Health Officer. It is not unreasonable to suppose that during the coming year these efforts might well become a reality as the Committee on Cancer believes that this is a most essential service that should be established as soon as the details may be worked out.

The able help and advice at all times of Dr. M. W. Thomas should be mentioned at this time. He has been most co-operative and a constant attendant at our Committee meetings. I cannot pass without mentioning the amount of detailed work that our able

Secretary, Dr. Ethlyn Trapp, carried out during the past year. Without her help little could have been accomplished.

In closing, one desires to thank the members who served throughout the past year without thought of time, and contributed freely of their advice and counsel in all matters that were undertaken.

Respectfully submitted,

ROY HUGGARD, Chairman,
Committee on the Study of Cancer.

EDITORIAL BOARD

During the past year there has not been a great deal for the Committee to do except at the time of the Annual Meeting. During the year itself the Bulletin of the Vancouver Medical Association has given space to the British Columbia Medical Association for the report of its activities throughout the year. An important feature, and one that is greatly appreciated, we think, by the men at large throughout the Province, is the admirable series of news and noted supplied by Dr. Thomas, the Executive Secretary of the Association. He has reporters in various parts of the Province and they supply him each month with accounts of the doings of various men.

Following the Annual Meeting of the British Columbia Medical Association in September, 1938, the papers read at that meeting were collected, edited and published in a Supplement to the Bulletin, together with papers read at the Summer School of the Vancouver Medical Association in the same year. This year a different plan will be followed. The Committee of the Vancouver Medical Association Summer School is publishing its own papers for the benefit of those only who took part in the Summer School. The papers read at the forthcoming Annual Meeting, it is hoped, will be collected and published, after suitable editing, as a supplement to the Vancouver Medical Association Bulletin, for distribution throughout the Province. The employment of a stenographer and suitable secretarial help has been authorized by the Executive of the British Columbia Medical Association and will greatly facilitate this work.

We cannot close this report without expressing to the Vancouver Medical Association our sincere thanks for their generous co-operation in the matter of publication. There is no doubt that their action in allowing the doings of the British Columbia Medical Association to be published monthly in the Bulletin is of great value to all the men in the Province and is tremendously appreciated by them.

Respectfully submitted,

J. H. MacDERMOT, Chairman,
Editorial Board.

ANNUAL MEETING—CENTRAL CARIBOO MEDICAL SOCIETY

(Northern area, including the Cariboo.)

The visit to Prince George on August 9th of Dr. D. E. H. Cleveland, President of the British Columbia Medical Association, Dr. Roy Huggard and Dr. M. W. Thomas, Executive Secretary, was the occasion for convening a meeting of all the doctors in the Northern Interior.

Dr. E. J. Lyon of Prince George, the energetic President, presided over the sessions. Doctors Cleveland and Huggard presented two papers each to the meeting, which was well attended.

Dr. Thomas attended the business sessions and was able to give much helpful information. The necessity for laboratory services was discussed and it was decided that if a Provincial Laboratory could be established in Prince George it would be very helpful to the members in that whole area. It was felt that a good technician might be sufficient. A resolution was unanimously passed by which the Provincial Board of Health would be

approached asking that steps be taken to establish a laboratory service in Prince George.

The question of the C.N.R. Employees' Medical Aid Association and its definition of surgery to dependents was discussed. It was decided that the secretary should write to the various doctors in the district securing their individual written opinions in this matter.

Those in attendance included Dr. Ross Stone of Vanderhoof, Dr. G. G. Ferguson of Smithers, Dr. L. M. Greene of McBride, Dr. J. C. Poole of Wells, Dr. Lois Stephens Poole of Wells, Dr. J. C. Kovach of Quesnel and Drs. E. J. Lyon, Carl Ewert and J. G. MacArthur of Prince George.

The elections returned Dr. E. J. Lyon as President and Dr. J. G. MacArthur as Secretary.

It was the expressed opinion that these meetings be held annually and that the British Columbia Medical Association be requested to co-operate by assisting with programme.

POST-GRADUATE TOURS

The visit of the lecture team of Drs. D. E. H. Cleveland and Roy Huggard, together with Dr. W. M. Thomas, to Prince Rupert was the occasion for the gathering of the men of the Prince Rupert district to attend the special meetings. Dr. W. E. Austin of Hazelton, Dr. S. G. Mills of Terrace, Dr. C. A. Armstrong of Port Simpson and his assistant, Dr. Wilson, and Dr. Large, all availed themselves of this opportunity of hearing some very excellent speakers and enjoying fraternal associations.

THE PHYSICIAN IN RELATION TO THE SOLUTION OF CRIME*

Dr. Frank R. Menne

The physician, by virtue of his training, is pre-eminently fitted, to my mind, to take part in the understanding and interpretation of human behaviour, and so becomes a vital element in the solution of crime. My activities in recent years have oscillated between the medical profession and the law enforcement to such an extent that some of my friends have thought of me as just an ordinary cop, but I have been thrown into this field by virtue of my position in the University as a director of the Department of Pathology, in that it became our duty to perform post mortem examinations held on the convicts since 1932, and in that connection we have been thrown into contact with the law enforcement officer and those conversant with all sorts of crimes, and it has been most interesting to me to apply some of the knowledge which I have acquired as a physician to the conditions of human behaviour and to the interpretation and motivation of crime. I do not think that my profession is so definitely confused as, for instance, the owner of a certain store who dealt in canaries, among other things, and one day a lady entered his store and said she was desirous of having a bird in her home and naturally she wanted one that would really sing. "My husband has agreed to my getting this bird," she said, "and he says it must be one that will sing."

"Here is a very fine young bird, he has colour, he has the general appearance of a good singer and he really is a canary. He is young as yet and has not started to sing. If he is a female he will not sing, but if he is a male, he will sing," said the storekeeper.

"How am I going to tell whether it is a male or female?" enquired the lady.

"Take him home," he told her, "and secure two earth worms, one male earth worm and one female, and put them before the canary. If the bird takes the male worm, it is a female, and if it takes the female worm, it is a male."

"And how am I to tell which is the male and which the female earth worm?" enquired the lady.

"That is your business," replied the storekeeper. "Mine is canaries."

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* Address given before the Vancouver Medical Association Summer School, June, 1939.

I really do not feel that the line is so sharply drawn here. I think we are aware in all countries that there is an increasing problem of crime. In the United States it is stated that the cost of crime is fifteen billion dollars annually, and crimes are being committed in increased proportion by younger and younger individuals.

In the solution of crime there are certain definite problems. First there is the interpretation of the motivation and character of crime. Among the motivations of crime I think we can definitely state there is this so-called congenital psychopathy. There is, for instance, the young boy who grows up nervous, peculiar. He does not know any better, has no sense of values. The boy's constitutional make-up is such that he may run up against anything. He is the little boy who starts throwing dirt at the neighbour's washing, goes down to the store and comes back with the store's oranges, gets into bad company and will end up in the house of correction, institute for young boys or the penitentiary. He goes on and on, he comes out into society and then gets thrown back again.

In this main group we think that the physician can come to the fore in the recognition and classification of such an individual so that he may be properly taken care of by the State in the right way to begin with, so that he may be saved from becoming a social problem.

Everyone may know of these individuals, and I think, as physicians, we can assist the Courts in saving such individuals from the necessity of repeated arrests and charges.

I think too that one cause in the motivation of crime is *the instability of the home.* I think that invariably when such individuals come before you there is evidence of separation, the mother and father have been separated and the children allowed to shift for themselves, have not been given any guiding hand or moral persuasion. They too, for another reason, do not learn the difference between right and wrong, do not have a sense of proportion, a sense of values. They are subjects of heroism, they admire boys of the neighbourhood, relive the history of the race, become Indians, soldiers of warfare and burglars and anything that appeals to their senses, and away they go and they are embarked on a career of crime.

Again we know there are criminal individuals who are subjects of *sex complexes,* who are victims of *organic diseases,* who need correction of these diseases. I could name any number of cases in my experience in which the disposition of men and women, which was very largely the result of certain endocrine disturbances, could have been corrected. I think with all of this group physicians could certainly play a real part in helping to identify and localize and isolate the so-called criminal.

Some motivations of crimes are merely those that occur in the heat of passion, anger and excitement, the result of some unusual contact and unusual experience. There are members of society who commit crimes either because of an inherent congenital disposition in that direction and who are, *per se,* natural habitues of crime and will never be anything else, and there is the so-called casual, accidental criminal, the one who commits a felony because he is the victim of circumstances. He runs into the complexities of the law of the land.

I would like to tell the story of a policeman who was given a gun and stick and told to go down a certain street and start patrolling his beat. He went down about half a block and saw a motorist come along, stopped him and said, "You are under arrest."

"Why, what have I done wrong?" enquired the motorist. "I did not know I had done anything."

"Don't give me any of your gab," responded the policeman. "You may tell that to the judge. I do not know what law it is at present you have violated, but I am sure you have violated some."

That is the casual, accidental criminal. That is where we might find ourselves on some occasion, in the clutches of the law, simply as ordinary citizens.

In all of these cases I think the physician can play a very definite part in the identification and segregation of those committing felonies or minor crimes by the appropriate isolation, or perhaps some new method of procedure will have to be adopted or instituted, and I think we as physicians can assist law enforcement officers in the recognition of such deficiencies.

I know that at the present time we are the victims of the attorneys who solicit our assistance on one side or the other, and we find ourselves in the Courts, and the cleverness of the attorney may enable him to practise the tricks of his trade in such a way as to bring the medical profession into ridicule. Now I hope that some day and in some way this situation may be changed so that the physician may become a real friend of the Court, an advisor of the Court, and that he may be called by the judge to give his opinion in certain cases, preferably prior to the trial rather than be induced to come into the Courts of Justice as a public exhibitionist, as is often the case.

I recall a case in which there was a number of distinguished colleagues in a certain Court, and I do not think that one or any of them knew really what they were testifying. They were being tricked in the testifying. Attorneys are very clever in that respect and say that Doctor So-and-So said so and so and what is your opinion, and before you know if you are called into Court so that there is that continuous spectacle, and we are all aware of it, where the physician is called in to give evidence in the height of the trial and becomes the victim of the attorney. I think it should be the other way round, we should be called in by the Court, we should be called in to testify as to the mental and physical state of the prisoner; when there is any scientific evidence it should be obtained before the prisoner comes into the Court at the so-called pre-trial when evidence and facts should be brought up before the trial occurs. It makes for courtesy.

I do not mean that only certain members of the community should be called into Court and that no Doctor should be called into Court. I think that if there is a legitimate differece of opinion there should be no ill-feeling towards the doctor if he goes into Court. The opinion must be based upon something more than sentimentalism.

A learned attorney once asked me how it came about that in any trial one could get physicians into Court and have them perjure themselves on any side. I think what he was hinting at is that physicians are found on opposite sides of a case in Court and they are within their rights. The attorney's entire living is made by a difference of opinion. There would be no trials if there was not a difference of opinion as to innocence or guilt, right or wrong. So physicians are, of course, entitled to go into Court. I do think, however, and it has been my experience, that we are victims of interplay on the part of the attorneys. That should be corrected in some manner.

Now once a criminal has been apprehended and he has been declared guilty by the law, then I think our work is pretty well over. The real value of the physician in the solution of crime and his place in the human relationship to crime must come along before the vital pronouncement of the sentence of the judge, because it is my candid opinion that prisons and penal institutions do not in any way correct the commission of crimes or interfere with the commission of crimes, and in reality they constitute institutions of high learning in the art of crime.

The percentage of those who come back and fall into complete line among those in society is exceedingly limited. So I hope that some day we may have a sharper differentiation of the types of criminals, certainly with a complete correction of the penal codes, so that there may be a distinction made between the unfortunate habitués of crime and those who are criminals to the end, and those who cannot help committing crimes.

There are those who can be put into some useful occupation in society rather than giving them an opportunity of going out again and murdering another citizen, and that is a thing to which we must look forward.

Another interesting thing is the relationship of the physician to the coroner's assistant and the medical examiner's assistant. The Coroner's office is a constitutional office in the United States and in a number of States. In my own State that constitutional authority has been shorn of the power first invested in the district attorney. In a number of States the coroner is out of existence. In certain States a medical examination system has been established. The system was established in England in 1911 and it has been transmitted to this country, and, as I have said before, is admirably adapted to a rural civilization, but it is wholly incompetent to take care of the advance of civilization. There was a survey made by a learned attorney, a pathologist and a judge in the United States under the auspices of the National Research Council, and that bulletin we have available in our

Washington, D.C., quarters, and it was their opinion that the coroner's office is no longer capable of fulfilling its dual activities. The dual requirements of the coroner's office are, first, the holding of investigations of unnatural and unusual deaths, suicides, homicides, etc., the holding of inquests, and the holding of certain individuals suspected or held guilty for the Grand Jury or other tribunals. There are, therefore, two qualifications, namely, first, the ability to examine dead bodies, and, secondly, the ability to establish certain legal relationships by virtue of the commitments of the coroner's inquest.

It was the opinion of this Committee that in the United States the average coroner did not possess either of these qualifications. He was not particularly trained for making a complete and adequate examination, he certainly was not trained for legal work.

In many instances, as is true perhaps of your situation here, and it is true of our situation in Portland, the coroner has done an excellent job within the limitations of his office, but it is an inadequate office, and as far as our State is concerned we are looking definitely for its abolition and we hope to relegate to the medical profession of our State the duties of examination of bodies under the constructive programme of the unification of procedures.

There may be some disagreements as to the methods of procedure. Through my contact with post-mortem examination I have been led to believe that we are not aware of the vital relationship of this procedure to the solution of crime . Again and again we have had opportunities of going back over bodies when some little detail was missed which gave the key to this solution.

To recall an experience I had recently: I was on a case where an Indian woman had been in a drunken brawl with her husband. She was found on the following morning dead, and the Indian was charged with murder. An examination was made of the body, and there was not anything that showed anything more than that there had been a drunken brawl. The woman was undoubtedly bruised. Someone said that Indians bruise terrifically when they are intoxicated. Someone else has said that the way to tell if you are dealing with an Indian is, if you examine his blood and find it contains 95% alcohol, then he is an Indian.

We are able to go into such a case, and the physician, using his experience and knowledge, would examine the body of that woman and determine that while she was good and drunk, she was not drunk to the point where intoxication would be fatal to her.

In our own laboratory, for example, when we can take an individual, put him in the next room and give him a certain quantity of whisky and have someone bring us a sample of his blood every so often, we can tell you just what state he is in. This can be told by the quantity of alcohol in the blood.

We are talking about the ability of the individual to exercise his mental functions in the normal manner, and we can determine that by the alcohol content. We found that the woman was probably good and drunk, but we also determined that it was the shock that killed her. In this case there was sufficient evidence to convince the Court that the Indian was guilty.

In a number of instances we find by the detailed examination that when you make a mistake in a diagnosis it is because your examination has not been complete—you fail to start at the top of the head and terminate at the soles of the feet; and so it is, too, in post-mortem examination. In the solution of crime, where there are failures, it is because incomplete and incorrect post-mortem examinations have been made, and so incomplete and incorrect evidence has been found.

The modern law enforcement officer has been raised to a very high standard and we have reason to be proud of him. They have precisely the type of training that we as physicians are accustomed to—the detailed examination with the accumulation of all the facts, which enables them to make a diagnosis and which enables them to make a right conclusion as to the determination of a given crime. By the analysis of build, type of build, grouping, etc., we are able to discern a lot of things about the grouping of individuals.

In the solution of crime through the post-mortem examination we, as physicians, are able to co-operate with officers to the extent that we can help them piece together the facts and evidence in such a way that the conclusion may be drawn.

Finally, let me say that if we, as physicians, take our place in the determination of the motivation of crime and do our part in the eradication of those things which make for the motivation of crime, if we will take our part in the identification and isolation of those who are criminals by birth, by constitutional make-up, if we will take our part in identifying these criminals before the trial, and if we will further take our part in the appropriate methods of punishment, in the further training in the art of dealing with crime, then the former relationship to the solution of crime will become static.

* * * *

Dr. A. W. Hunter discussed Dr. Menne's address.

Dr. Hunter said he had seen the Medical Examiner System in operation, as well as the Coroner System; both had political interference. Whatever system was used, the essential factor was co-operation between the courts, the law enforcement officers and the medical profession. Today that does not exist. He cited ways whereby with our present system more help could be given the courts and the police, but the Government must improve the facilities to the doctors in the less populous areas.

Preventive Medicine Section

THE IMPORTANCE OF THE EXAMINATION OF THE CEREBROSPINAL FLUID IN SYPHILIS

S. E. C. Turvey, M.D.
Consultant in Neurology, Vancouver Clinic.

The cerebrospinal fluid was first removed by puncture with a needle through the lumbar interspaces by Quincke in 1891, and Ravaut in 1903 first applied the technique to the detection of syphilis. About 1915 it was shown that syphilitic involvement of the nervous system occurred very early in the course of syphilis, that early neurosyphilis in the stage before the appearance of secondary lesions could only be recognized by examination of the cerebrospinal fluid, and it is from this date that the test came into its true perspective in syphilology. The purpose of this note is to emphasize the importance of repeated examinations and to indicate when these should be done.

Abnormalities of the spinal fluid in syphilis are often present months or even years before any neurological symptom or sign appears, and it is these "asymptomatic" cases that respond best to an intensification or modification of routine treatment. This cannot be overemphasized, that the spinal fluid may be the sole guide to an early and severe affection of such vital structures as the brain and spinal cord. Therefore, it is an absolute requirement that the fluid be examined in all early and latent cases at the proper time during their course.

The incidence of abnormal findings in the spinal fluid is listed in Table I.

Table *I.*

Abnormal Spinal Fluid Changes (Stokes)

1.	In primary syphilis	7–25% of cases
2.	In secondary syphilis (untreated)	40–45% of cases
3.	In treated syphilis	24–26% of cases

Thus, at the end of three years in the course of syphilitic infections, there will be 25% involvement of the central nervous system which has not been cleared up by the patient's resistance or ordinary treatment. If the spinal fluid is not examined routinely as outlined below, most of these are missed at a stage before fixed damage to the tissue occurs and when they would respond to treatment.

In the Neurological Section of the Vancouver Clinic of Venereal Disease Control there are now 628 cases registered. Of this number of known neurosyphilitics, 103 had a nega-

tive blood Kahn on admission. No more telling indication for the necessity of spinal punctures need be shown.

The indications for a lumbar puncture may be summarized as follows:

1. Within the first six months after a primary or secondary infection; if positive, repeat in six months; if negative, repeat in two years or prior to discharge as a "cure."

2. As part of the preliminary or diagnostic examination of all patients with a positive blood test, other than those with primary or secondary syphilis.

3. Before suspending treatment in an early case. "No rest without a spinal test" in all early cases. If positive, no rest is allowed.

4. In all cases of so-called "fixed Wasserman" or "Wasserman-fast" syphilis. Neurosyphilis is a common reason for the "fixed Wasserman."

5. Regularly in neurosyphilitic cases, as an index of progress of treatment. The frequency must be determined by indications in the individual case.

The essential tests of the spinal fluid are four:

1. *Cell Count.*—An increase of cells is the earliest and simplest form of reaction. It is an index of meningeal reaction and is therefore non-specific. The normal count should not be over four lymphocytes per cubic millimetre. Cell counts from five to ten are definitely abnormal and significant. A fluid with a high cell count and positive Kahn has a better prognosis than one with a low cell count and a positive Kahn.

2. *Protein Estimation*—An increase of protein above the normal thirty to forty milligrams per one hundred cubic millimetres is an early and non-specific sign of meningeal reaction. It is of chief aid in prognosis, as it is the last of the four tests to return to normal under treatment.

3. *Kahn Test*—This has proven to be as reliable on the cerebrospinal fluid as on blood. It is the only specific test on the cerebrospinal fluid, but it is well to remember that it may be, in rare instances, negative throughout an actively progressing neurosyphilis.

4. *Colloidal Test*—This test is non-specific and it is impossible to confirm or negate a diagnosis of syphilis by this test alone. Its chief value is as an indicator of the character and severity of the syphilitic involvement of the nervous system. The "first zone" curve (5555543210) is invariably of serious prognostic significance, but may occur in tabes, dementia paralytica, meningovascular syphilis or any other type of neurosyphilis. The "second zone" curve (0124554100) occurs in forms of neurosyphilis other than dementia paralytica. A change in the curve in the absence of a positive Kahn is of no significance.

In their order of value or general significance, they should be placed: Kahn test, cell count, colloidal reaction, protein estimation. No one test can stand alone as diagnostic or prognostic, but considered together they are invaluable.

(The technique of spinal puncture will be described in a later paper.)

THE REPORT OF THE GENERAL COUNSEL FOR THE YEAR 1937-38

Secretary, Canadian Medical Protective Association,
Ottawa, Ont.

The attention of the profession is drawn to the following very important opinion given before the Annual Meeting of the Canadian Medical Association by their General Counsel. We suggest a careful perusal.—Ed.

Dear Sir:

As General Councel for your Association, I have the honour to submit the following report.

During the past year all completed actions against your members have been dismissed and there have been no decisions of the Courts which alter the existing law relating to our problems.

In my report for the year 1936-37, reference was made to an appeal which had been taken to the Court of King's Bench of the Province of Quebec. This appeal was rejected by a three to two majority of the Court. After careful consideration, it was felt that the importance of the case and the chances of success warranted a further appeal being taken to the Supreme Court of Canada and this will be heard at the October term of the Court.

As various members of the Association have asked for advice as to the circumstances under which it is legally and ethically justifiable to sterilize a man or woman, it may be well to deal with it briefly at this time.

It is practically certain that a surgeon may not sterilize a man, and possible that he may not sterilize a woman, even with their consent, for the sole reason that the patient wishes to avoid having children. The law considers it to be in the interest of the State that every citizen shall be able to reproduce, regardless of his or her fitness as a parent, and unless this axiom is modified, voluntary sterilization will remain illegal. A surgeon who is asked to perform a sterilization operation in the interests of the patient's health should satisfy himself that health would be seriously endangered if he did not do it, or he will risk a criminal prosecution. If something goes wrong and the patient dies, he may be tried for manslaughter. If the wife or husband is aggrieved, he is in danger of being prosecuted at their instance.

Where the operation is decided upon in the interests of the patient's health, the surgeon should be more careful than usual to explain, in simple language, what the consequences will be and to obtain a written consent.

Oral consent cannot be really safe. Although a witness, and better still, two witnesses, may prove that a patient gave consent, yet actions may be brought when memories are vague and witnesses dead or untraceable. One of the British protective associations has devised forms which it recommends its members to use:

> "I,_____of_____hereby consent to undergo the operation of_____and/or such further or alternative operative measures as may be found to be necessary during the course of such operation."
>
> (The latter may be struck out if it is not clearly applicable).

For sterilizing operations on women it recommends the alternative formula:

> "I,_____of_____hereby consent to undergo the operation of_____the effect and nature of which has been explained to me."
>
> and
>
> "I_____of_____the husband of the above named _____hereby consent to such operation."

It is not necessary in law for a husband to consent to an operation on his wife, provided that the wife herself consents, but the form is used to save dispute afterwards.

All these remarks apply equally to radio-therapy, which, I understand, normally produces considerable discomfort and sometimes actual burning, which is often used to bring about sterilization, and which when applied to the pelvis often sterilizes the patient incidentally.

All of which is respectfully submitted,

EDMUND F. NEWCOMBE,
General Counsel.

Ottawa, June 2nd, 1938.

CHILLIWACK MEDICAL SOCIETY

The Chilliwack Medical Society met Doctors Cleveland, Huggard and Thomas on August 1st at the commencement of their tour through the northern interior. Following dinner, presided over by Dr. R. McCaffrey, Dr. Huggard gave a talk on Surgery of the Gall-Bladder. Dr. Cleveland spoke on the common medicaments in use in the treatment of diseases of the skin and their indications. Both papers elicited helpful discussion and the speakers were accorded the warm thanks of the Chilliwack men.

Vancouver General Hospital

CHRONIC THYROIDITIS WITH REPORT OF A CASE

C. A. McLaughlin, M.D.

Inflammation of the thyroid gland is a rather rare occurrence, and at the Massachusetts General Hospital Thyroid Clinic only 1% of cases are so classed. Chronic thyroiditis is even yet more rare, the following case being the only one on the pathological records at the Vancouver General Hospital. Thyroiditis may be classed as acute, subacute or chronic, suppurative or non-suppurative. The term strumitis is limited to inflammatory conditions in a thyroid that has been previously pathological. Chronic thyroiditis seems to be in a separate class of disease entities and one of which the etiology is not known. It is with the latter type of case that we shall deal.

Chronic thyroiditis is not an end stage of acute thyroiditis; at least, no cases of the latter have been known to continue on to the chronic stage. Many theories as to its etiology have been brought forward. Some authors have thought it to be tuberculosis, others luetic, but the consensus of opinion now seems to be that it is a systemic and generalized infection possibly originating in the upper respiratory passages, teeth, tonsils. In this respect an interesting case was reported in which a normally situated thyroid and an anatomically unconnected aberrant gland were removed from the same patient, the pathological report being identical, *i.e.*, Riedel's Struma. This was taken to indicate that there was probably some general etiological factor from the blood stream acting on both glands. Investigators have injected experimental animals with tubercle bacilli and spirochætes in unsuccessful attempts to reproduce the disease.

Chronic thyroiditis is generally divided into two types: (a) chronic fibrous, ligneous or Riedel type, and (2) chronic lymphoid or Hashimoto's type. While these were at first considered to be two distinct types, latterly some workers have thrown considerable doubt on this. Ewing suggests that Hashimoto's type is merely an early form of Riedel's struma. Graham, after carefully comparing the two types, concludes that they are separate entities, and points out that the average age of paients with Hashimoto's type is greater than the average of those with Riedel's thyroiditis, and also that the former is universally bilateral while 50% of the latter are unilateral.

Riedel's Struma or Chronic Ligneous Thyroiditis.

Riedel first reported his three cases in 1896. Clinically and at operation he thought these to be malignant, but their subsequent course did not bear out this diagnosis. Search of the literature reveals 90 cases reported with this diagnosis.

Symptoms and Course.—The clinical course is gradual and progressive and may lead to death from pressure symptoms if not relieved. The patient, however, usually consults her doctor relatively early because of the enlarged, tender swelling and pressure symptoms. In Graham's series the average duration of symptoms was 7.3 months.

Besides the tender swelling, dysphagia, dyspnœa, hoarseness and aphonia are common complaints, as well as accepted headaches dure to involvement of the upper cervical nerves. Later on in the disease myxœdema or other signs of hypothyroidism may appear and this is a distinguishing point in that malignancies do not produce hypofunction of the thyroid. Means states that hyperfunction is never found. Patients often show evidence of thyroid deficiency postoperatively and require thyroid therapy. Riedel's type is unilateral in 50% of cases.

Pathology.—The thyroid becomes enlarged, tender and stony hard in consistency and gradually becomes changed into hard fibrous tissue. The process may be briefly described as an active sclerosing with extension into the neighbouring structures of the neck (except the skin) which may thus make subtotal thyroidectomy very difficult if not impossible. One case is reported where extension up to the base of the skull occurred. The parenchyma

may be almost completely replaced by fibrosis and varying degrees of hypothyroidism is not uncommon.

Diagnosis.—The chief difficulty in diagnosis, of course, is from malignancy. The age of the patient often aids here. Lymph glands are never involfed in chronic thyroiditis, but they are not necessarily involfed in carcinoma either. The Glasgow clinicians (see below) suggest biopsy, if in doubt, before a clinical trial with X-radiation or radium therapy.

Chronic Lymphoid or Hashimoto Type of Thyroiditis.—In 1912 Hashimoto published a report on four cases of chronic thyroiditis that varied in a number of ways, both pathologically and clinically, from Riedel's type. In 1936 Lee collected 36 cases from the literature that he classified as Hashimoto's type. Thus it would appear that this is a rarer type that Riedel's. However, in Means' series of 12 cases of chronic thyroiditis he classifies them all as Hashimoto's type.

In the largest series of 38 cases, 37 of these were females with ages varying between 15 and 75, but with an average aye slightly higher than in Riedel's type, *i.e.*, 45-55 years.

Symptoms and Course.—This is very similar to the preceding type, with the following exceptions: The disease is insidious and progressive but of slightly longer duration. The average period of symptoms before consulting a doctor was 14.4 months. Besides this, there is usually a temperature, a leucocytosis, present, which is rare in Riedel's type.

Pathology.—Here both the gross and microscopic differ from Riedel's struma. There is an enlarged tender gland but it does not have the stony hardness of the previous type. While there is infiltration of the capsule it does not involve the surrounding structures of the neck and thus presents an easier surgical problem.

The microscopic picture is one of very extensive lymphoid infiltration with lymph follicles present, many of which may have active germ centres. Along with this process there is atrophy of the parenchyma of the gland.

Diagnosis.—The diagnosis here is not so apt to be confused with carcinoma, because of the difference in relative hardness. Temperature and leucocytosis are also aids, but a final diagnosis is not justifiable without microscopic examination.

Treatment.—The treatment of both types is the same and most authorities recommend subtotal thyroidectomy where this is possible. Although results with this type of treatment are good and a permanent cure is usually obtained, cases have been reported of recurrences necessitating further surgical procedures. Dr. G. Fahrni states that lately he has been removing only the isthmus of the gland with good results. Renton, Charteris and Heggie of Glasgow report a series of five cases treated with radium, with good results in all cases. Three of these cases were diagnosed by biopsy and two on clinical evidence only. They suggest that a therapeutic trial of radium will establish a diagnosis in 10-14 days with regression in size of the gland and clinical symptoms. Crile states that "when a clinical diagnosis can be made, roentgen therapy is the preferred treatment.

Report of a Case.

The following case is reported as interesting in that the clinical symptoms probably resemble most closely Hashimoto's type, whereas the pathological picture is of Riedel's struma. It also shows some of the difficulties and complications of surgery in these cases.

History: Miss P. S., Canadian, age 23. Admitted Feb. 22, 1939.

Entrance Complaints: (1) Nervousness, (2) loss of weght, (3) palpitation, (4) headaches, all over a period of 7-8 months; (5) tender lump in throat and neck, 2 months.

History of Present Illness: At 6 years of age patient had "a goitre" for which her physician prescribed rest and "iodine tablets." Since then has had no related trouble until last summer, when her friends noticed a change in her. She became nervous, restless, and began to lose weight in spite of the fact that she has always been of the "thin type," never weighing more than 100 pounds (Height 5 ft. 4 in.) She was also troubled with a "pounding heart" and a peculiar type of headache beginning in the back of the neck and radiating into the occipital and at times the temporal regions. These were of short duration and occurred usually just after rising in the morning. Chiropractic adjustments failed to relieve these.

Seven to eight weeks previous to admission she first noticed a tender swelling in the

neck. After some procrastination she consulted her physician. Because of the inflammatory characteristics heat was applied without much effect. A B.M.R. was taken, which showed a rate of +28 and patient was admitted to hospital for preoperative preparation.

Functional Inquiry:

Head and neck—Headaches as above. Eyes and ears, negative; no exophthalmos. Goitre at 6 years of age regressed under treatment and she had no further trouble until present illness.

Respiratory—Negative, with exception of slight dyspnœa.

Alimentary—No particular dysphagia except "slight constant pressure" on neck. Appetite good. No indigestion, but lately has complained of pain in epigastrium after meals. Bowels tend to be constipated.

Cardiovascular—Has noticed "pounding of heart" for past few months and also that she tires very easily after minor exertion. Slight dyspnœa. No œdema.

G.U.—Menses began at 13. Twenty-eight-day cycle usually lasting 5 days, with mild dysmenorrhœa lasting first few hours only. For past two months cycle has been only 21 days. No nocturia or dysuria.

Neurological—Patient says she is much more nervous than usual, tires easily and often gets "crying spells."

Examination:

T., P., R., 99°, 115, 20. A thin, fair-haired, excitable young girl, quite restless in bed; appears to have lost some weight.

Head and neck—Eyes: Pupils equal, react to L. and A.; no exophthalmos or lid lag. Ears, nose and throat: Negative. Neck: There is a diffuse firm rubbery enlargement of the thyroid which is quite tender on palpation, particularly the right lobe. No bruit detected. Skin freely moveable over it.

Respiratory—Lungs clear throughout.

Cardiovascular—Heart: Normal in shape and position; no murmur; no irregularities. B.P., 130/80. Pulse: Rapid but regular, good volume and tension, rate 115.

Abdomen—Negative.

Skin and Extremities—Skin moist and elastic; slight tremor to extended hand.

Laboratory—B.M.R., +28. Urinalysis, negative. R.B.C. 3,080,000, Hb. 60%. Unfortunately there is no record of white cell count. X-ray: Chest. Heart, slightly enlarged to right. Lungs: A few calcified nodules in right and left second zones; "slight increased density shown at apices in relation to thoracic inlet possibly due to enlarged thyroid."

Progress.—Patient was put on high carbohydrate diet, sedatives, digitalis grs. I b.i.d. and Lugols m X t.i.d. For two weeks she showed very little improvement, pulse running 95-120 and temperature ranging between 99-100. However, during the third week temperature and pulse dropped to practically normal and thyroidectomy was performed on March 17, 1939.

Operation.—Dr. G. E. Sheldon performed a subtotal thyroidectomy under avertin gas anæsthesia. Moderate difficulty was experienced in freeing the gland, although it did not appear to grossly involve the surrounding tissues. It was firm in consistency, pale in color and gave a rubbery sensation on incision. Penrose drain inserted and wound closed in layers.

Pathological report—

Macroscopic: "Specimen consists of 3 pieces of thyroid tissue weighing in aggregate 20 grams. They are very pale, extremely firm, and on section present a compact, rather fibrotic, homogenous cut surface; the firmness and pallor suggesting a possible thyroiditis."

Microscopic: "A great many sections were taken through various portions of the thyroid gland and they show, as the most outstanding feature, a massive diffuse lymphocytic infiltration and accompanying fibrosis, which has markedly compressed the acinar structures, practically none of which contain colloid material, and their lining epithelium appears definitely but moderately hyperplastic. Scattered throughout are moderately frequent tubercle-like formations, fairly well circumscribed and consisting of generally quite large, irregular giant cell formations and epithelial cells. There is no cascation in any of

the sections examined and these are probably so-called 'pseudo' tubercles that are occasionally seen in this condition, *i.e.*, Riedel's struma or chronic ligneous thyroiditis."

Diagnosis: Riedel's struma (chronic ligneous or woody thyroiditis.)

Post-operative Course—The temperature and pulse returned to normal on 5-6 day. Patient complained of considerable headache and aching pain in the back of neck. She also complained of periodic tingling sensations in extremities, particularly right arm and leg, and on one occasion complained of a brief crampy spasm of the right hand. She was discharged on the 15th post-operative day, feeling quite well.

After discharge patient developed typical attacks of tetany with positive Chrostek's sign and carpopedal spasms (Trousseau's sign) which were particularly aggravated by menstruation. High calcium and low phosphorus diet, calcium gluconate by mouth and parathormone therapy was instituted. While considerable improvement occurred to date there are still some signs of parathyroid deficiency.

SUMMARY.

The literature on chronic thyroiditis is briefly reviewed. Reports were found on 138 cases, 90 of which were Riedel's type.

An interesting case is reported that shows clinical features of both types, *i.e.*, Riedel's and Hashimoto's.

Recent claims for roentgen and radium therapy may offer some advantages over surgery in view of technical difficulties in the latter procedure.

REFERENCES:

Means, J. H.—Thyroid and its diseases.
Renton, J. M., Charteris, A. A., and Heggie, J. F.—B. J. S., July, 1938.
Ewing—Neoplastic Diseases.
Fahrni, Gordon S.—Personal communication.
Boyd, Wm.—Surgical Pathology. 1933.
Christopher F.—Textbook of Surgery. 1936.
Joll, C. A.—Diseases of Thyroid Gland. 1932.
Jaffe, R. H.—Chronic Thyroiditis. J. A. M. A., vol. 108, Jan., 1937.
Bremzier, A. G.—Thyroiditis accompanied by Hyperthyroidism. Annals of Surg., Jan., 1927.

St. Paul's Hospital

A CASE OF ADENO-CARCINOMA OF THE OVARY EXHIBITING RETROGRESSIVE CHANGES IN PERITONEAL IMPLANTS FOLLOWING LAPAROTOMY

DR. H. A. ROBERTSON

The patient, a housewife, aged 44 years old, nullipara, of English birth and parentage, was admitted to St. Paul's Hospital in June, 1938, with a tentative diagnosis of cyst of right ovary and fibromyomata uteri.

Complaints and Present Illness: On admission patient complained of: (1) Burning, dragging pain in right iliac fossa and lower back, three months' duration; (2) enlargement of abdomen, more especially for three months and to a lesser extent for one year; (3) menorrhagia and metrorrhagia, three months; (4) general weakness and malaise. Menstrual irregularity became more and more marked just before admission, the period averaging two weeks' duration after an interval of only two weeks.

Past history was essentially negative, except for usual childhood diseases. There was no previous hospitalization.

Physical examination revealed a somewhat emaciated, pale brunette, appearing more than stated age owing to a definitely cyanotic tint of the complexion, apparently due to abdominal compression. The temperature was 99.4; pulse 102; respirations 20. Heart and

lungs were negative. B.P. 122/70. Hgb. 89%; R.B.C. 4,640,000; W.B.C. 15,900; Pmn. 85%; L. Lymphs. 13%; Monos. 2%. Bleeding time 2¼ mins.; coagulation time 3 mins. Abdominally a firm mass could be palpated, extending from the pelvis prominently into the mid-epigastrium, rather more to the right side. Vaginally this large mass found to be differentiated from the uterus, which, however, was also enlarged and knobby and extremely fixed low down in the pelvis. X-rays: A flat plate of abdomen demonstrated increased density in right lower abdomen with gas displacement to left but no evidence of calcification or sharply circumscribed mass. Urinalysis was essentially negative, although considerable urgency from pressure had been complained of.

Operation—June 11th, 1938. Under avertin and ether anæsthesia abdomen was opened through a low right paramedian incision, subsequently extended upwards to the xiphoid cartilage on account of the extreme size and solidity of the ovarian tumour encountered. A considerable amount of clear, straw-coloured fluid was aspirated from the peritoneal cavity. The tumour was freed from numerous adhesions to the parietal peritoneum, omentum and transverse colon and removed with double ligation of the pedicle. The anterior parietal peritoneum was extremely thickened, congested and nodular in places where it had been in apposition with the tumour. In addition to the primary tumour there were three smaller parovarian cysts on the right side, one of which the size of a tennis ball, lay between the folds of the broad ligament. The uterus was found enlarged to the size of a two and one-half months' pregnancy, and studded with several very firm intramural fibroids. The left ovary, size of a small orange, contained many small cystic nodules, which grossly resembled the exterior of the primary tumour. All of these structures were left undisturbed *in situ* as, following removal of tumour, patient showed signs of collapse, the pulse rising to over 160. The long abdominal wound was hurriedly closed after ligation of numerous points of adhesion.

Pathological Report.—Gross: Mass about the size of a football, which has a nodular, irregular appearance. On section contains a large amount of mucinous material. Remainder of the tissue is very soft and apparently degenerating. Other sections which are more solid have a somewhat fatty appearance, of the nature of fatty degeneration. There are several cavities filled with clear, mucinous material. Walls of these cavities are very hæmorrhagic.

Microscopic: Sections taken from various portions of this tumour show it to be almost a solid mass of carcinoma. There is a considerable amount of mucoid secretion filling pseudo acini, lined by columnar and very irregularly shaped epithelial cells, and in many places formation of definite papillary projections into the lumen, in other places solid epithelial proliferation. There is a very marked anaplasia of the cells, many mitotic figures, and the tumour is exceedingly vascular. This is a papillary adeno-carcinoma of the ovary which has arisen from a papillary cyst adenoma. There are extensive areas of necrosis present.—Dr. A .Y. McNair.

Course.—Following blood transfusion 500 cc. on the day of operation patient made uneventful recovery, being afebrile after third post-operative day, and quickly losing the cyanotic or cachetic appearance previously noted. Roentgen therapy was advised after completion of wound healing but refused. Menstruation resumed a 28/5 cycle, being very moderate in amount, but some backache persisted owing to the weight and size of the uterus which still tightly packed the pelvis. Ten months later, April, 1939, patient presented herself again for operation and was readmitted to St. Paul's Hospital.

Operation—April 24th, 1939. Under ether anæsthesia a left paramedian incision was made and on exploring the pelvis and upper abdomen no visible or palpable trace of recurrence of malignancy was found and the areas where adhesions had existed were entirely clear. The left ovary had retrogressed to a normal size and consistency. The smaller cysts previously noted on the right side had completely disappeared. The uterus, which was now the size of a three-months' pregnancy, was removed supra-vaginally with coring out of the cervix. Pathologically uterus showed large intramural fibromyomata with no evidence of malignancy. The post-operative course was again uneventful and afebrile from the fourth day, and patient now appears and feels perfectly well.

Comment.—The apparent retrogression of peritoneal and other implants in cases similar to the above following laparotomy has been described by several writers[1], occurring as inexplicably as the improvement that follows laparotomy in tuberculous peritonitis. Ewing[2] states that: "This favorable outcome occurs almost exclusively with structures which are of a comparatively low degree of malignancy." The usual reference[3] is to pheudomyxoma peritonei, serous cystadenoma, or pseudomucinous cystadenoma. The present case would appear to be unusual in presenting on the contrary large proportions of solid adeno-carcinoma of considerable vascularity and apparent activity.

REFERENCES:

1. Curtis, Bumm, Troschel, T. Freund, E. Fraenkel, Pfannenstiel, Olshausen.
2. Ewing: Neoplastic Diseases. W. B. Saunders Company, Philadelphia, 1928. Ed. 3.
3. James Robert Goodall, Nelson Surgery, Vol. 7. Cysts and Tumours of the Ovary.

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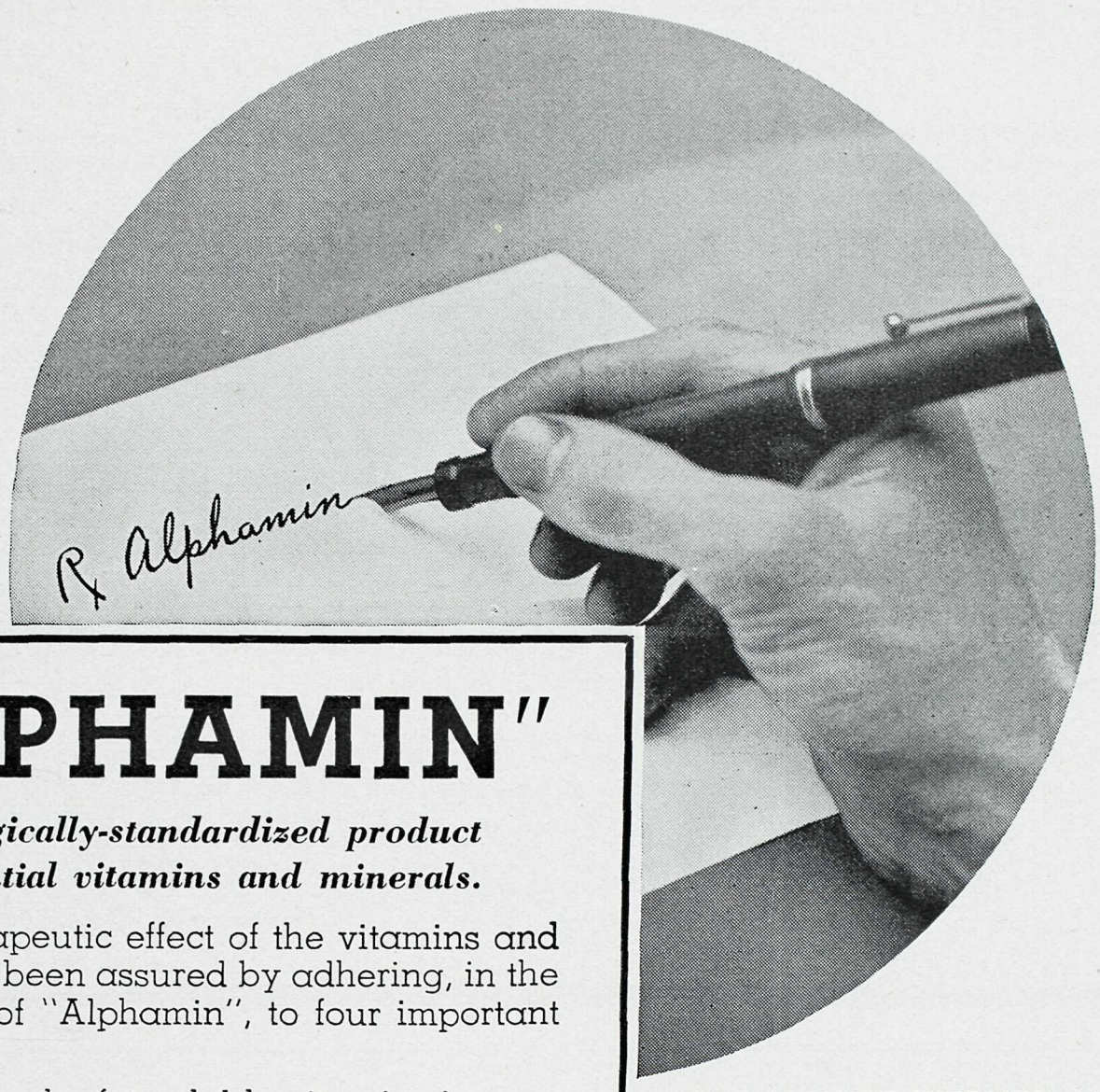

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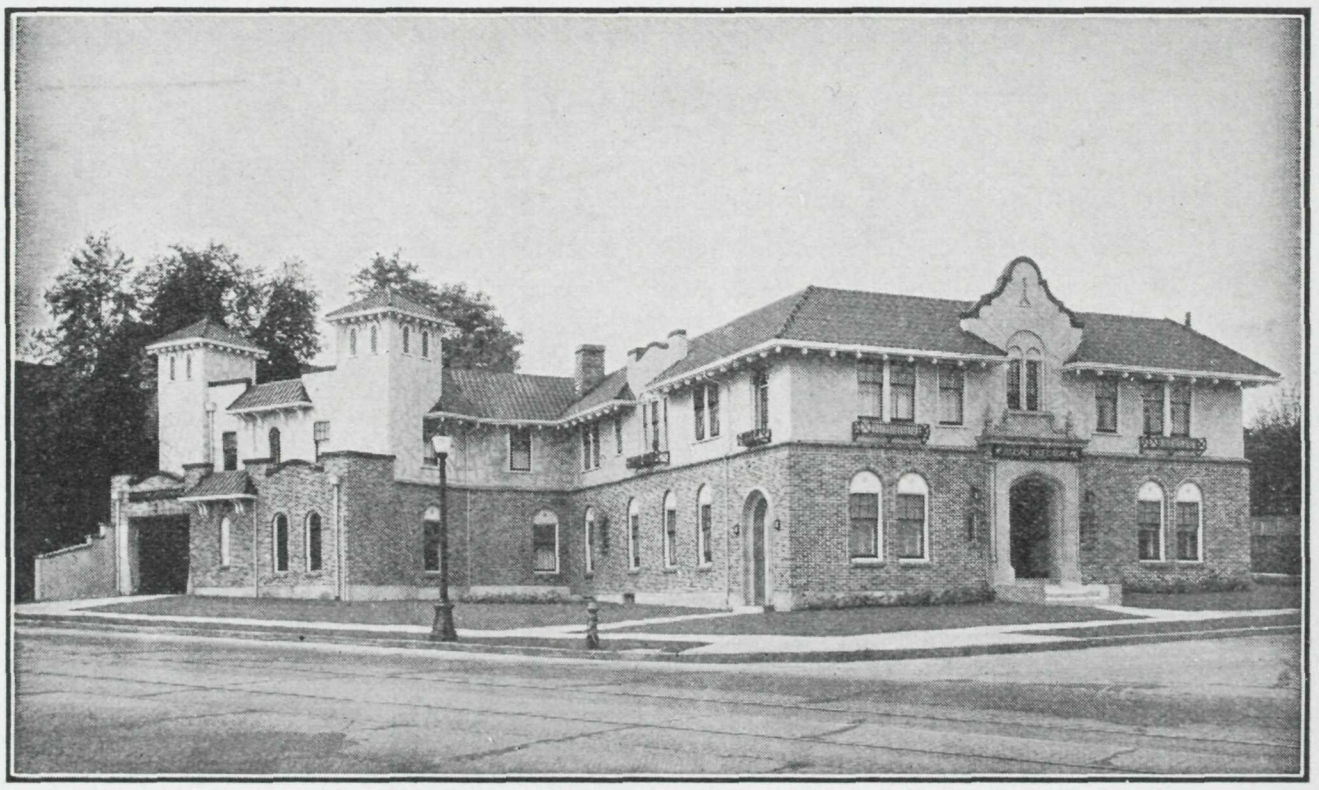

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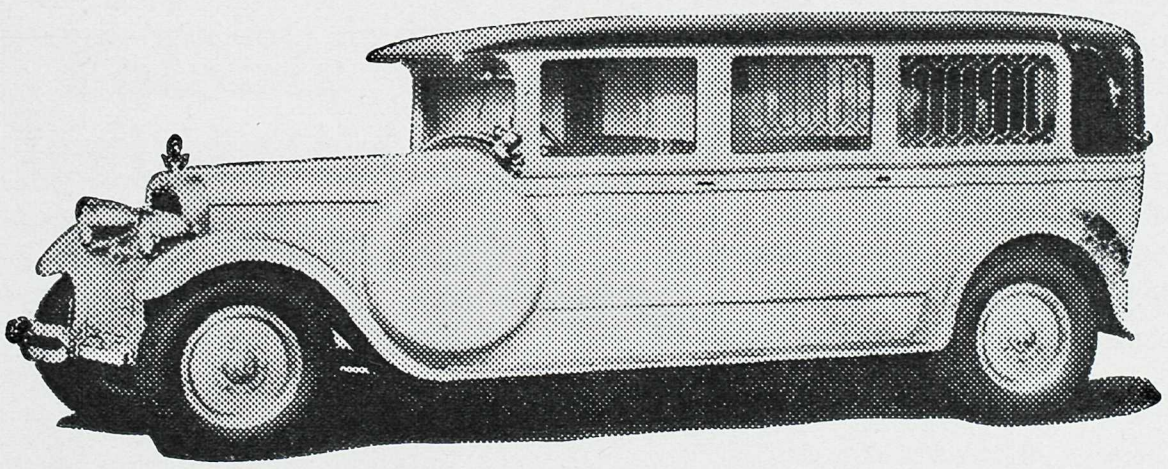

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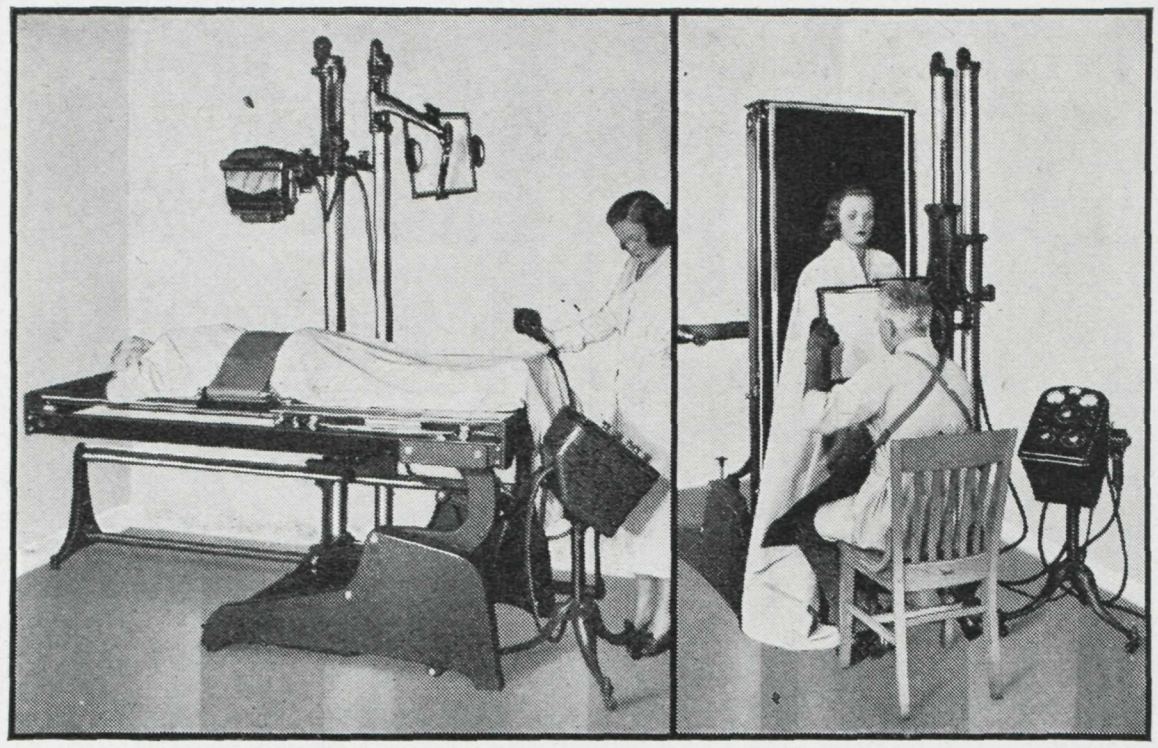

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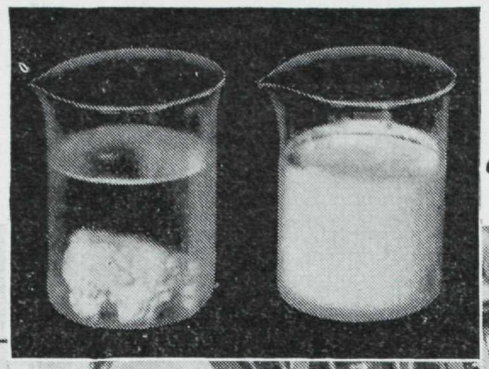

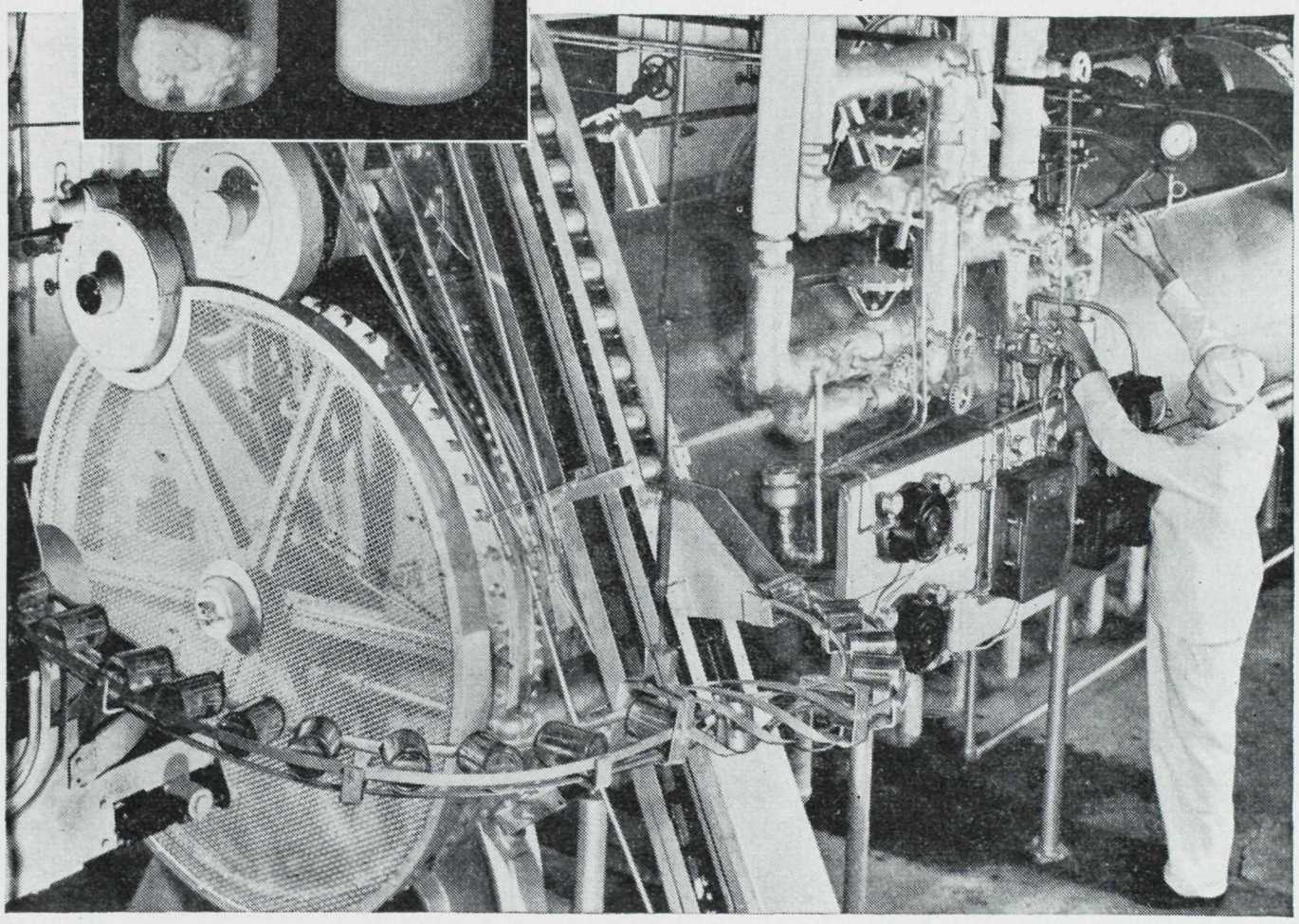

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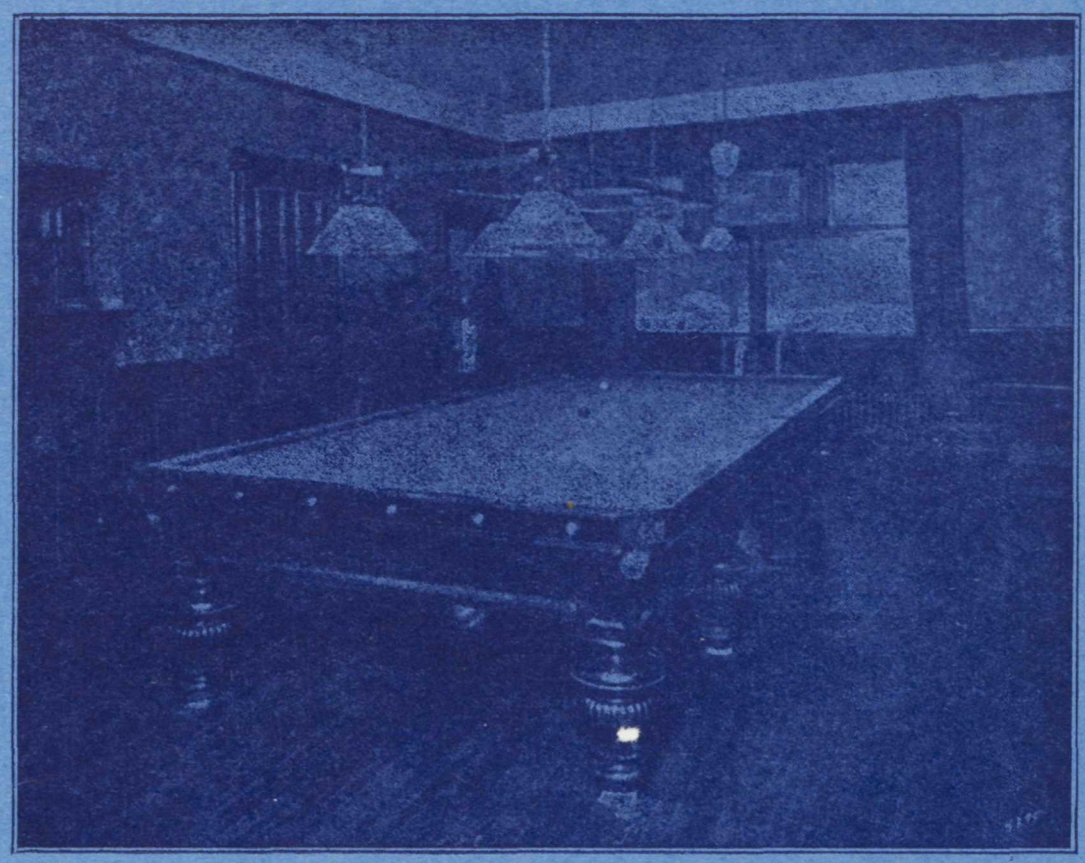

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