

The BULLETIN
OF THE
VANCOUVER MEDICAL
ASSOCIATION

Vol. XII.

APRIL, 1936

No. 7



In This Issue:

GLIMPSES INTO UROLOGY OF THE PAST
AND PRESENT

HEALTH INSURANCE IN ENGLAND

NEWS *and* NOTES

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THE VANCOUVER MEDICAL ASSOCIATION BULLETIN

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VOL. XII.

APRIL, 1936

No. 7

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VANCOUVER HEALTH DEPARTMENT

STATISTICS—FEBRUARY, 1936

Total Population (Estimated)	247,558
Japanese Population (Estimated)	8,055
Chinese Population (Estimated)	7,895
Hindu Population (Estimated)	320

	Number	Rate per 1,000 Population
Total deaths	221	11.3
Japanese deaths	2	3.1
Chinese deaths	9	14.8
Deaths—residents only	194	9.9
Birth registrations—Male, 140; Female, 128	268	13.6

INFANTILE MORTALITY—	February 1936	February 1935
Deaths under one year of age	12	8
Death rate—per 1000 births	44.8	24.9
Stillbirths (not included in above)	8	7

CASES OF COMMUNICABLE DISEASES REPORTED IN THE CITY

	January, 1936		February, 1936		March 1st to 15th, 1936	
	Cases	Deaths	Cases	Deaths	Cases	Deaths
Smallpox	2	1	0	1	0	0
Scarlet Fever	20	0	42	0	21	0
Diphtheria	0	0	0	0	5	1
Chicken Pox	102	0	56	0	23	0
Measles	74	0	68	0	24	0
Rubella	324	0	520	0	554	0
Mumps	485	0	357	0	168	0
Whooping-cough	6	0	32	0	4	0
Typhoid Fever	0	0	2	0	0	0
Undulant Fever	0	0	1	0	0	0
Poliomyelitis	0	0	0	0	0	0
Tuberculosis	50	10	56	11	19	0
Meningitis (Epidemic)	0	0	0	0	0	0
Erysipelas	2	0	1	0	4	0
Encephalitis Lethargica	0	0	0	0	0	0
Paratyphoid Fever	0	0	0	0	0	0

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VANCOUVER MEDICAL ASSOCIATION

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Programme of the 38th Annual Session

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

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

Place of meeting will appear on Agenda.

General Meetings will conform to the following order:

8:00 p.m.—Business as per Agenda.

9:00 p.m.—Paper of the evening.

1935.

October 2nd—GENERAL MEETING.

DR. G. F. STRONG: "Cardiac Pain."

Discussion opened by DR. H. A. DESBRISAY.

DR. A. M. AGNEW: "Vaginal Plastic Surgery."

Discussion opened by DR. J. J. MASON.

October 15th—CLINICAL MEETING.

November 5th—GENERAL MEETING.

DR. J. R. NADEN: "Epiphyseal Injuries."

Discussion opened by DR. F. P. PATTERSON.

DR. J. H. MACDERMOT: "Early Medical History of the B. C. Coast."

November 19th—CLINICAL MEETING.

December 3rd—GENERAL MEETING.

DR. LYALL HODGINS: "Diabetes."

Discussion opened by DR. WALLACE WILSON.

DR. FRANK TURNBULL: "The Early Diagnosis of Brain Tumours."

Discussion opened by DR. F. W. EMMONS.

December 17th—CLINICAL MEETING.

1936.

January 7th—GENERAL MEETING.

DR. WALTER M. PATON: "Tumours of the Head and Neck."

Discussion opened by DR. H. H. PITTS.

DR. B. J. HARRISON: "Roentgenology of Cardiac Diseases."

Discussion opened by DR. G. F. STRONG.

January 14th—CLINICAL MEETING.

February 4th—GENERAL MEETING.

MR. J. W. DEB. FARRIS: "Medico-Legal Problems."

February 18th—CLINICAL MEETING.

March 2nd—OSLER LECTURE.

April 7th—GENERAL MEETING.

DR. C. E. DOLMAN: "Serum Therapy."

Discussion by DR. HOWARD SPOHN AND DR. A. Y. McNAIR.

April 21st—CLINICAL MEETING.

April 28th—ANNUAL MEETING.

EDITOR'S PAGE

We publish in this issue a copy of a letter sent to Dr. H. H. Milburn, President of the British Columbia Medical Association; the letter is self-explanatory, and is published in accordance with the expressed wish of the Executive of the Council of the Canadian Medical Association.

This has been a painful chapter in the history of our relationship with the national association, but it is also a most instructive, and, if we make proper use of it, a most profitable chapter. There is an old Latin saw which translated reads, "The quarrels of lovers are the renewing of love." Certainly, where there is real ground for close intimacy and where there should be union, occasional differences of opinion may have their value. They express the individuality of the different parties to the contract; they draw lines of personality and of personal rights which may not be transgressed, and whose integrity must be preserved if the bonds of union are not to be strained.

The way in which these differences are adjusted is all-important. Where a mistake has been made by one side or the other, only the utmost frankness and candour will remove the unhappy impression caused, and heal the incipient breach of continuity. We must, in this case, express our sincere appreciation of the manner in which this situation was faced by the Canadian Medical Executive. Drs. Bazin and Routley, on their visit here, placed all their cards on the table, were completely frank, and did everything in their power, not only to atone for what they admitted was an injury, but to go further, and give us all the help and constructive advice that they could possibly render. And this later action by the Council further proves their sincere anxiety to close the rift.

But there is much more to it than merely closing up a gap. We must not allow ourselves to be distracted by this episode from the main vital issue. After all, this is merely an episode, and need have no permanency at all—but the permanent and abiding issue is that of union in the profession of medicine in Canada. That is what, at all costs, we must have. No sense of provincial rights, or of wounded dignity, must be allowed to interfere with our progress towards union. We must have it; we must be willing to make sacrifices to ensure it. Of course, we must not lose the substance in grasping at a shadow—but neither must we hesitate to take some legitimate risk, to make legitimate sacrifices, to secure what, perhaps especially now, is essential above all things to us as medical men: a strong national organisation.

We are most decidedly "at the crossroads." Nor have we unlimited time, or freedom from care, to be able in a leisurely manner to choose our path, and to look about us. We are being hustled and beset on all sides, and we must close up the ranks.

So we would do our small part in urging all medical men to think and act, as far as in them lies, in terms of national union. The Canadian Medical Association meets in Victoria this summer. No more fortunate meeting place could have been chosen at this juncture. We should all do our utmost to go, and should go, ready with constructive ideas and outlook, to build a new and greater edifice of medical organisation. For there need be no provincial boundaries here unless we place them and maintain them ourselves, and they will be very dangerous if we do. In the words of the French writer, "Gentlemen, we must hang together, or we shall hang separately."

[COPY]
CANADIAN MEDICAL ASSOCIATION
in affiliation with the
BRITISH MEDICAL ASSOCIATION

184 College Street,
Toronto 2,
March 21, 1936.

Doctor H. H. Milburn,
President, British Columbia Medical Association,
DEAR DOCTOR MILBURN:

The Executive Committee of the Canadian Medical Association met on March 13th and 14th. There will appear in the first available issue of the *Journal* an excerpt of the transactions of the Committee as follows:

*A Minute from the Proceedings of the Executive Committee,
Canadian Medical Association, March 13-14, 1936.*

HEALTH INSURANCE IN BRITISH COLUMBIA

Dr. Bazin reported on his trip to British Columbia with the General Secretary on this and allied matters.

The Executive Committee devoted many hours to a discussion of this problem with especial emphasis upon the relations of the Canadian Medical Association to the British Columbia Medical Association, and particularly in regard to the publication in the February issue of the *Journal*, pages 204-208, of an excerpt from the Minutes of the Executive Committee Meeting of October 31, 1935. The following resolutions being duly moved, and seconded, were passed:

THAT the Executive Committee expresses keen regret for the publication of this excerpt;

THAT the Executive Committee acknowledges full responsibility under the By-Laws for its publication, and whereas the Editor, having accepted personal responsibility for the publication and having expressed profound regrets, desires to join the Executive Committee in apology to the medical profession of British Columbia;

BE IT RESOLVED THAT a copy of this Minute be forwarded to the President of the British Columbia Medical Association and be published in the *Journal*.

This communication is sent to you without delay in order that you may inform your members of the action taken.

Yours faithfully,

(Signed) T. C. ROUTLEY,
General Secretary.

NEWS AND NOTES

ONTARIO MEDICAL ASSOCIATION ANNUAL MEETING

The Annual Meeting of the Ontario Medical Association will be held this year in London on May 26, 27, 28 and 29.

We realize that the distance makes it impossible for many doctors from other provinces to be present, but we assure any who can come of a most cordial welcome.

An outstanding list of scientific speakers have kindly consented to attend and in addition a first-class collection of scientific exhibits has been obtained. Besides this, there will be more and better forms of entertainment.

The local committee on arrangements have as their objective a convention unique in the annals of our Association and every attempt is being made to live up to this slogan.

Full details of the programme will appear in the April issue of the *Canadian Medical Journal*.

* * * *

We are informed that Dr. Grant Fleming has resigned his offices in the Canadian Medical Association.

* * * *

OPEN LETTER

To the Medical Profession of British Columbia,

GENTLEMEN:

As it is impossible to answer each correspondent individually, I wish on behalf of the Health Insurance Commission to thank sincerely the great many who have sent in letters of appreciation and support to the committee.

At the present time we are waiting to see in what final form the Bill will emerge from the Legislature.

I would like to take this opportunity also to say that the income returns we asked for are slow in coming in, but that we are still hoping for a 100% practical demonstration of that co-operation which has been promised.

W. E. AINLEY, *Chairman*.

* * * *

SPECIAL MEETING OF THE VANCOUVER MEDICAL ASSOCIATION

The special meeting of the Vancouver Medical Association, called to consider various economic questions, was held in the Auditorium of the Vancouver General Hospital.

The keen interest of the medical profession in these topics was evidenced by the emergence from their age-long seclusion of many men whose faces are seldom if ever seen at medical gatherings. The topic, of course, was Health Insurance, and since this closely touches every man practising medicine, it is perhaps not to be wondered at that these retiring members of our craft should leave their monastic seclusion for this once. The President, Dr. Vrooman, brought up the matter of the B. C. Telephone Sick Benefits Association.

This Association does not at present take in all the employees of the Association. It takes in all earning over \$150 a month.

Under this scheme the employee receives his salary for 13 weeks, while sick, then half salary for 39 weeks. He also receives half the cost of hospitalization. He also receives half his medical man's bill, and is expected to pay the other half. He has the free choice of any qualified doctor.

The Association has written the Vancouver Medical Association guaranteeing that our bills will be paid in cash within 30 days, and have asked what discount we are willing to make in consideration for cash. The bills are to be based on minimum scale of fees of the Vancouver Medical Association.

About 300 men and their dependents, *i.e.*, 900 to 1000 people, are affected. The scheme includes families as well as wage-earners.

A letter was read by Dr. Clement offering this scale less 25%.

Dr. Vrooman stated that Mr. Mellish, representing this scheme, had stated to him that while this scheme did not at present include those with salaries less than \$150, if the suggestions re Health Insurance are adopted,

of exempting organized schemes, it is hoped to include all gradually.

Other industrial schemes are under consideration on similar bases, and our action as regards this one, it was felt, was fraught with considerable importance in view of possible future developments.

Moved by Dr. W. Ewing that the matter of negotiation regarding this scheme be left in the hands of the Executive.

In answer to questions, it was stated that this scheme would apply to the whole of British Columbia.

Disputed bills would be referred to a committee either of the Vancouver Medical Association or of the College of Physicians and Surgeons.

The scheme includes full general practitioner service, medical, surgical, but not specialist, service.

Dr. Patterson suggested that this scheme should be uniform all over the province. Hence there should be co-operation between the various associations and the B. C. Medical Association or Council, and that any agreements made should be ratified by the Council.

Dr. Patterson thought that if we are asked to give a discount, those with salaries less than \$1800 should be included, since those over \$1800 now pay full fees.

Much discussion centred around the question of specialists. In the end it was decided to ask the Executive to continue negotiations with the B. C. Telephone Employees' Sick Benefit Association.

The question of City Relief was brought up, as the present agreement expires at the end of this month. It was decided to agree to the continuation of the present scheme.

Health Insurance was then discussed.

Dr. H. H. Milburn read letters from Dr. T. C. Routley.

Dr. Patterson expressed the opinion that the medical profession of this province should be guided in any action it may take by the Health Insurance Committee, and act solely under its instructions.

* * * *

A resolution was brought forward by Dr. Wallace Wilson in regard to the addresses of various University professors and lecturers on Health Insurance. This resolution was ordered sent to the Board of Governors of the University, and will appear in the press later.

* * * *

[*"Let Souldiers count their woundes, shepherds their sheep.*

For commonly we see the contrary, that many chuse rather to discourse of any other trade than their own."

Thus says Montaigne, that wise old philosopher, and we think he had much right on his side.

We regret to note that during the last few weeks there has been a regular organised campaign of propaganda emanating from the University of British Columbia in favour of Health Insurance. Several of the men on the staff have been lecturing in every area of the city—in churches and elsewhere—lauding this measure to the skies, and in one way or another enlisting every possible agency in its support.

This is an extremely dangerous thing for the University of British Columbia, and we are glad to see that the attention of the Board of Governors is to be drawn to this danger. If any political party can utilize the teaching staff of the University to further and implement its political aims, we shall sooner or later arrive at an impossible condition of affairs. Every man on the staff has an undeniable right to his own political opinions, and

may as a private citizen give the fullest expression to them; it is quite another thing when University lecture-rooms are used for partisan purposes on an active political issue, and when the fact that the speaker is a professor or lecturer at the University is used as an attraction to audiences outside the University. This is a state of affairs that cannot be allowed to continue—if the University is to maintain its usefulness and its high standards—and we sincerely trust that steps will be taken to take our University out of the sphere of provincial politics, and keep it out.—(Ed.)]

BOOK REVIEW

TEXTBOOK OF ROENTGENOLOGY: Bede J. Michael Harrison, M.B., D.M.R.E. (Cantab), F.A.C.R.; Baltimore, William Wood & Co.; 1936.

The concept of the author of this volume has been to produce in his work a co-related resume of the clinical, pathological and radiological aspects of disease covering the whole field of medicine, both from the diagnostic and therapeutic standpoint. So far as we know this is the first volume on Roentgenology which has been written in Canada. It is further unusual, in that it has stressed the pathological conditions and their relations to the x-ray examination. In carrying out his purpose the author has succeeded to an admirable degree. The literary excellence, clarity of expression, and inclusion of most of the essential details have made a textbook of much value, particularly to the profession at large, and to those members of it who, to a considerable extent, must do their own x-ray work when they are so situated that they cannot immediately have the opinions of an experienced roentgenologist. If any criticism were to be made, it would be that occasionally, in some of the subjects, the clinical and pathological aspects have been stressed too much for a work on roentgenology, and for the importance of the subject under discussion. It is, of course, extremely difficult to include, in a volume of this size, all the information which is necessary to the experienced roentgenologist, since the latter should have a wide clinical and pathological knowledge and be able to meet specialists in all other branches, as far as possible, on their own ground. Moreover, it is almost impossible for a man of wide experience and knowledge to put in words all the finer points and the niceties of judgment of light and shadow in their relation to anatomical and pathological structure which go to make up an accurate differential diagnosis.

We congratulate Dr. Harrison on the result of his efforts, and express our admiration for the energy and initiative required to write a volume of this type and at the same time direct the work of a large hospital laboratory.

—W. A. WHITELAW, M.D.

GLIMPSES INTO UROLOGY OF THE PAST AND PRESENT

By A. W. HUNTER, M.D.

[Osler Lecture, 1936]

Read before Vancouver Medical Association March 3, 1936.

For those who follow the branches of the vigorous tree of medicine, the history of medical thought is not found, as is often and falsely asserted, to be a continuous progress of a constantly ascending line. Many experiments and hesitations have slowed its march from prehistoric times to our own days.

In the prehistoric times, it was a religious offense to dissect a body. In the case of persons who took away any part of a body, they were twice

cursed. So you see it was difficult for a long time for these experimenters to obtain accurate information along anatomical lines.

In the prehistoric ages, medicine and religion were interrelated. Many of the early healers were the educated men of the church, and only in later times were laws passed separating the healers from the church.

Urology was perhaps the very first branch of medicine to emerge from the clouds of ignorance in prehistoric times. This probably came about from the fact that when urination became difficult, painful or impossible, the male being was driven by that desperate necessity which is the mother of invention.

Thus among the ancient Hindus, probably over one thousand years before the birth of Christ, we find the catheter used to relieve the retention of urine; the sound to dilate strictures of the urethra, and the operation of perineal lithotomy fully developed and widely practised. Sucruta's manuscript, giving us the details of the operation of lithotomy, was written about 600 B.C. In two books from the Hindus they refer to Sucruta repeatedly. In describing the body, Sucruta states there are seven elements, the chyle, the blood, the flesh, the fat, the bones, the marrow and the sperm.

In describing the position of the bladder, they state it is placed below the navel, in front of the back, below the kidneys and above the testicles, the anus, the penis and the groin.

The first anatomic chart appeared about 650 A.D.

In speaking of the urinary affections they speak of the urine as watery, sugary, moss-like, sandy, salty, powdery, fatty, seminous and frothy. The conclusions from the descriptions on urines are as follows: "That the patient becomes incurable when the urine resembles honey."

"That gravel is produced when the wind divides the stone into little fragments. If the wind is favourable the gravel comes out with the urine."

"Among male adults, the shock of sexual intercourse gives too great an abundance of vapours. This causes the sperm to be ejaculated. Sometimes the sperm is diverted from the natural passage. It remains in the interior of the penis and testicles and dries there. The result is a seminal calculus which obstructs the passage of urine."

The Hindus' writings describe diabetes—it is called "Pramecha." It was said that the urine and breath were sweet. There was great thirst. The hands and feet were numb and hot. The sufferer was sleepy. The sweet urine attracted insects and ants.

The treatment consisted in giving bituminous substances from various sources evaporated to an oily consistency and allowed to dry for two weeks on cow dung. This is taken at the first day of the new moon with religious ceremony. The disease escapes "to the top or the bottom."

Vague descriptions of rudimentary urinary surgery were found about the time of Caraka and of Sucruta.

Urinary extravasation was described as being present in the scrotum and was treated by sweating. The surgeon incised the scrotum to the left of the raphe and introduced a perforated tube to draw off the urine.

Caraka removed a urethral stone by injection and the use of a hooked instrument. He advised a cystotomy for bladder stone as a last resort. The results were good if the patient lived.

Cystotomy had probably existed before the time of Hippocrates and was taken by the Greeks into Asia at the time of Alexander's wars.

It was in Egypt that the oldest medical book has been discovered. Its authenticity is incontestable. It is a manuscript discovered by Ebers in 1872

near Loughsor. Its height was 30 centimeters and its length 20 meters. It was in a perfect state of preservation and was composed of 100 sheets. It dates from 1553 to 1550 B.C., and deals more with hygiene than medicine. Here and there in the manuscript one finds references to the urinary organs. "Retention of urine" is one of the urological terms mentioned.

The most ancient urological specimen is reported as coming from Egypt and consists of a vesical stone in a prehistoric tomb recovered in 1901 by M. Elliott Smith. It was found in a village of D'Elamrah near Abydos, and existed several centuries before the first king of Egypt lived. According to Professor Petrie, this king ruled 4800 years before the Christian era, so this calculus would have about 7000 years of existence. It was found in the pelvic cavity of a boy between 15 and 16 years of age. It is yellow and has a granular surface. It is composed of concentric lamellæ which break off in layers surrounding the central mass. The central nucleus is of uric acid origin. Other portions of the lamination are found to consist of potassium oxalate and ammonium magnesium phosphate, and Professor M. Shattock in a learned study of this calculus is of the opinion that the hæmatobium of bilharzia has played no part in its formation. Statistics show that 70% of stones in the Orient at present are due to oxalic acid calculi, but the early Egyptians were largely hunters and hence were consumers of meat, while today carbohydrates predominate in the diet of the race.

Mr. Shattock shows a second calculus which was found in a tomb during the second dynasty, that is, about 2000 years later than the first stone. The stone consisted of carbonates, phosphates and oxalates of calcium. It was found near the second lumbar vertebra. The general appearance of this stone is strongly suggestive that it was of renal origin.

Mr. Smith reports a stone being found in the nasal cavity which was similar to a urinary calculus, but it is believed that this had been replaced there, possibly by the embalmer, who was anxious not to have any of the body separated from the main portion of it.

An old Egyptian belief was that if a portion of a dead body was exposed or taken by a living person, the spirit of the dead body would exert a double action over the living person.

To give you an idea of the scarcity of these calculi, Mr. Smith has examined over 9000 mummies and found only two vesical and two renal calculi, including the one of which we have spoken.

This scarcity of vesical calculi among the ancient Egyptians sharply contrasts with the findings of today, where bladder calculi are common, more particularly among the poorer classes and those suffering from infection with the hæmatobium dystoma. And also, today, the Egyptians who are well fed appear to have fewer calculi than the poorer ones.

Another explanation of the rarity of these stones is the fact that probably the poor people never were embalmed and hence their bodies have not been observed.

Among the ancient mummies there were no scars showing cystotomy, while among the more recent mummies examined, scars from cystotomies, suprapubic or perineal, are not infrequent.

The operation for circumcision was very frequently performed and it was thought by our observers to have been for hygienic reasons, but history suggests that it was done for religious reasons.

Compare this view with that held by the Hindus, who also consider the genital organs the centre of life. It was considered a precious offering to Divinity to sacrifice a portion of these organs. Besides, circumcision was

a sign of nobility, and the Pharaohs admitted to their table only those persons who had been circumcised. It would appear, particularly in the descriptions of circumcision, that the early operations were done by priests, and these priests were called Priests of the Double. History does not suggest that these operations were done by medical men.

They had three kinds of doctors at this time, priests and doctors combined, conjurers and sorcerers, and practical healers of the sick.

Herod thus tells us that in Egypt most of these healers were specialists, that is, they were strictly specialists, and each of them attended to a certain portion of the body, and none were entitled to treat other illnesses or several illnesses. Most of these people seem to come from the valley of Eünde.

The early Arabs contended that cystotomies had been performed from the earliest antiquity, but these may only have been stories, as modern documents do not furnish any proof of this opinion. The early methods of performing removal of calculi as practised by the Egyptians has been handed down to us by Prosper Alpin, an Italian doctor of the 16th century. Dr. Prosper Alpin states that he saw in Egypt an Arab doctor by the name of Haly remove several stones from a Turkish commander. The procedure was as follows: he had a cannula of wood which he put inside the urethral meatus. He blew on this and distended the urethra, while an assistant had his finger in the rectum preventing the air passing into the bladder. The assistant would manipulate the stone in the bladder with his finger in the rectum until it engaged the neck of the bladder and entered the urethra, when suddenly the operator would remove the wooden cannula and allow the stone to engage in the urethra, and then would gradually massage it along the passage to the meatus.

The Chinese medical treatise was hard to translate. History shows that seldom was exact information found in the masses of writings. Emperor Chin Nong, in the year 3216 B.C., described one hundred plants used in medicine. The Chinese appeared to have diagnosed from observations of the pulse.

The Chinese describe diabetes. "The thirst is extreme, the emaciation is decided. The appetite is exorbitant. The urine is abundant, colourless and frequent. There are enormous abscesses on the neck, and in a few months the breath is strong, and the skin is dry."

Their greatest remedy was acupuncture, by needles. Their knowledge of medicine was handed down by the monks.

In Asia Minor, the Chaldeans took their cases to the roadside and asked help from the passers-by who had seen similar cases.

The Hebrews have incorporated many hygienic principles in their religious Talmud. They allowed dissection of stillbirths and people condemned to death. They did not perform cystotomies nor is there any mention of catheterisation.

Documents show that Egypt and India were ahead of Greece in this matter.

The period before Hippocrates was not one of advancement. The healers and the church worked together. The patients had to have religious purification by the priests before medical treatment was given.

European medicine begins in the age of Pericles and its scientific advancement centres in the figure of Hippocrates, who gave to Greek medicine its scientific spirit and its ethical ideals. He lived at a time when Athenian democracy had attained its highest point of development. Never, before or since, had so many men of genius appeared in the same narrow limits of

space and time. Hippocrates was born 460 B.C. on the Island of Kos, the seat of a medical school founded by the 17th descendant of Aesculapius. He received his first medical instruction from his father, Hericlide. He studied at Athens, and acquired extensive experience in travel and practice among the cities of Thrace, Thessaly and Macedonia. He died at a ripe old age, variously stated as 85 to 109.

To Hippocrates, medicine owes the art of clinical inspection and observation, and he is, above all, the exemplar of that flexible, critical, and well poised attitude of mind, ever on the lookout for sources of error, which is the very essence of scientific spirit. Thus, instead of attributing disease to the gods, or other fantastic imaginations, like his predecessors, he virtually founded that bedside method which has since been employed with such signal success, even by our internists of today. His humoral pathology attributes all disease to disorders of the fluids of the body, but has long since been discarded in its original form, although some phases of it still survive in the modern theory of serodiagnosis and serotherapy. In treating wounds he states, "The dry state being nearest to the healthy. The wet state being nearest to the diseased." In the Hippocratic oath, where he lays it down "You will not cut for stone," he possibly means that he wished the doctors to be separate from the lithotomists, who were practical operators, rather than that he advised such work to be done by specialists.

The Hippocratic writings were carried to the four corners of the Græco-Roman civilization by the power of the Roman Empire.

In this epoch was born Galen, in the second century of our era. The Gallo-Roman period recognised him as a master. By his diligent work as a practitioner and a writer, Galen attained for himself an eminence that no physician had ever had before. Let us retain his grand precept: "Every alteration of a function corresponds to a lesion of an organ, and reciprocally, every lesion of an organ has as a result an alteration of function." During his period thermal bath resorts were largely exploited.

About the year 1000 medicine in France was described by Richer, a Benedictine monk who was a great reader and admirer of medical books, such as books by Celsus, Fragments from Pliny, Hippocrates, Galen and Scranus. Richer was detailed to write a history of the Gauls. He always put in a medical description wherever possible and so they were handed down to us. Writing on the death of Lothaire, he states, "The king began to suffer from a disease called colic," and he describes it in detail.

During the middle ages, Lanfranc, a great Italian surgeon, was banished from Milan in 1290, and came to Paris. He was credited with the following aphorism and I think it is still worth our attention: "No one can be a good physician if he is ignorant of surgical procedures, and no one can perform operations if he does not know medicine."

The Jewish physicians were popular for a time, as they possessed the secrets of the Arabs, who language they read and thus had copies of the commentaries of Hippocrates and Galen. But then, of a sudden, the Jews were banished and only the monks were authorised to practice the art of healing, and celibacy was imposed upon them.

During the middle ages surgery became decadent, an important reason being that medicine passed into the hands of men of the church and they had a horror of blood. The performance of operations was forbidden them. However, during this time we must mention Lanfranc of Milan, Roger Bacon and Guy for their surgical work. Fernel (1485-1558) is said to have

differentiated gonorrhœa from syphilis. He also described an unmistakable case of appendicitis, followed by autopsy.

There was a period in which the Italian school of medicine at Salernum, near Naples, played an important part in the development of medicine. It gradually fell into discredit, and then the French school seemed to flourish for a time.

In France, the Colot family acquired the technique of lithotomy from the Italian operators in Perugia and kept their technique secret for nearly three hundred years, when Francois Colot (the last of his family) gave it to the world in 1727.

William Cheselden (1688-1752) was the outstanding lithotomist in England. He is said to have once performed his operation in 54 seconds. This brilliant surgeon undoubtedly exerted great influence on his pupil John Hunter.

About this time Ambrose Pare appeared and shed glory on French surgery. He wrote on gonorrhœa, stones and retention of urine. He became an army surgeon. He allowed wounds to heal without cauterising them in boiling oil. In 1551 he revived the use of ligatures in amputations rather than the cautery. This use of ligatures had fallen into disuse from the 13th century.

In describing syphilis, Pare states it was caused by an alteration of the phlegm, and was allowed by the Creator in order to punish man for the great sin of luxury. In treating acute gonorrhœa, the patient drank milk instead of wine, used a hard bed, avoided the company of women, and abstained even from seeing them in paintings.

In the 17th century, Pierre Franco is said to have been the first to perform a suprapubic cystotomy.

In the year 1701, it is recorded that Dr. Fagon, physician to Louis XIV, had a stone removed from his bladder.

As the nineteenth century was the dividing time in urology, let us interject some remarks on anatomy, physiology, and the examination of the urine.

Examination of the urine played an important part in the evolution of urology. In ancient times, the urine was observed grossly. Galen believed pus and blood were the causes of all kidney conditions.

Uroscopy, which became prominent in the middle ages, made the investigation of urine very important. It consisted largely of making observations of the urine as to colour, odour, sediment, and even taste. The result led to deductions and diagnoses that most frequently were imaginary. These practices kept up for several centuries. In the fifteenth century, the College of Physicians and Surgeons of London forbade any physician to prescribe for a patient before having at least questioned the latter concerning the nature of his ailment. However, uroscopy thrived even up to the eighteenth century, when medical schools and parliament condemned the practice. Paracelsus (1491-1541) and his followers insisted on a chemical analysis of the urine.

Helmont of Brussels compared rain water with urine and came to the conclusion that the weights of the urine were as follows: 1016 for an old person, 1024 for a healthy woman, 1030 for an adult, 1042 for a man who had abstained from fluids for several hours.

Boerhaave studied the density of the urine and gave us our mercurial hydrometer. He also stated that any substance found in the urine previously

existed in the blood. Therefore an examination of the urine should reveal an increase or decrease of a certain substance in the blood.

Leibig demonstrated that the acidity of the urine was due to acid phosphate salts. Ruaele in 1773 discovered urea in the urine. Bouchardt and Peligot in 1883 identified glucose with diabetes.

Then came chemical tests for blood, then the quantitative tests of the urine and now the chemical quantitative tests of the blood in their relationship to urological diseases. The biochemical tests have advanced until today their practical application is in daily use.

Today it is hormones. In proven cases of normal pregnancy, an accuracy of 97.3% was obtained by the Aschheim-Zondek test of the urine. In teratomata of the testicle, the urine shows the presence of prolan A and this clinches the diagnosis.

In ancient times, old men were advised to drink the urine of young maidens to help restore their youth. Well, it may still be possible, but not probable, that my prostate and my youth will be preserved.

The progress in anatomy and physiology of the genito-urinary tract was marked by periods of advancement and recession.

Hippocrates, who wrote the first description of the urinary system, spoke of the kidneys as glands "that possess an attractive faculty by virtue of which moisture of drink is separated and descends into the bladder."

The thousand years preceding the sixteenth century marked a great decline in science. Fallopius (1548) rediscovered the Fallopian tubes. Leonardo da Vinci made a set of drawings of the male and female uro-genital organs which are still preserved in Windsor Castle. Copious notes were written in reverse writing to help keep it secretive, probably on account of the dissection laws.

Dionis (1675-1680) wrote in Paris in his description of the kidney, "They are called mammillaries, because they resemble the nipple of a woman's breast; only they shoot out a little to a point where they are perforated, in order to get the urine fall into the basin. The pelvis or basin is a cavity made of the upper end of the ureters which dilates itself in the hollow part of the kidney and then becomes narrower in the form of a funnel, the narrowest part of which marches out of the kidney and makes the beginning of the ureter. Its office is to receive the urine that distils from the nipples."

The great work of Hunter in England did much to stimulate activity in both anatomical and physiological fields. He firmly established the necessity of human cadavers for dissection and was responsible indirectly for the growth of quite a business in "body snatching."

In 1827 Richard Bright showed that many patients with dropsy and albumen in their urine, had diseased kidneys.

The nineteenth century gave us our greatest advances. Carl Ludwig gave us his "filtration theory of urinary secretion." Carl Huber of America gave us the first anatomic dissection of a kidney glomerulus.

There has been much discussion as to the respective functions of the glomeruli and renal tubules. The present opinion adheres to the view that water, and ordinarily some sulphates, phosphates and carbonates, are excreted by the glomeruli, and that the tubules excrete urea, uric acid and perhaps sodium chloride, while they absorb some of the water which has passed out through the glomeruli. Under pathological conditions foreign substances as sugars, peptones, albumen and hæmoglobin are excreted chiefly by the glomeruli, while pigments and poisons are excreted by the renal tubules.

Functional tests were introduced by McLean, Rowntree, Geraghty and many other workers. Today chemistry is playing a major role in increasing our knowledge of kidney function, the combatting of urinary infections, and the prevention of the formation of calculi.

Calculi.—History records that probably the removal of stones was one of the early urological operations. As I have already stated, lithotomy was practiced in ancient times. The first accurate description of perineal lithotomy was recorded by Celsus. The technique of Celsus was followed for about 1400 years, the only modification being in the form or location of the incision or with the introduction of new instruments for extracting the calculus, once the incision was made.”

In the sixteenth century, Rousset described and perfected the suprapubic cystotomy, but the operation was not extensively practiced on account of the ruling of the ancients which forbade the incision of the body of the bladder.

In the eighteenth century, James Douglas of England wrote regarding the advantages of the suprapubic operation, and Cheselden of St. Thomas' Hospital was a great supporter of the suprapubic route, though he also improved the perineal operation.

The crushing of stones, called lithotrity, was known to Ammonius of Alexandria about 230 B.C. It certainly was spoken of in the writings of the Byzantine physicians, and the two Italian physicians, Saulorio and Cinci, in the seventeenth century invented instruments and were famed for crushing stones. Their method, however, was not generally known or employed.

The first successful lithotrity, the crushing of a vesical stone, was performed by Civiale in 1817. He succeeded in establishing a calculus service in the Necker Hospital in Paris. He is reported to have operated upon 2200 patients with calculi, of which 1600 were removed by lithotrity. Later Brodie and Thompson in England employed this method. It remained for Bigelow of Boston to improve the crushing and evacuating apparatus: he called the procedure litholapaxy. Surgeons using the earlier methods had a mortality of 10-23%, but by using Bigelow's method, this was reduced to 2.4%. Many surgeons preferred removal of the calculi by the suprapubic cystotomy. It is interesting to note that at the Massachusetts General Hospital a study was made by Barney in 1919 of all cases operated upon for stone. The mortality was 25% for the suprapubic method and 7.5% in the case of litholapaxies. Today each case must be decided upon its own merits and the surgeon must decide whether a well done suprapubic cystotomy is likely to produce more harm than a poorly done litholapaxy.

Renal calculus is probably the oldest disease of the kidney known to medicine. Hippocrates recommended early hot applications over the kidney, and when swelling occurred, he advised incision down to the kidney and evacuation of the pus. Sometimes calculi were later spontaneously expelled through the incision.

In 1603 Hobson, the British Consul at Venice, was operated upon by Dominicus de Marchetti for stones in his kidney. The surgeon removed several stones, a sinus persisted. Later the patient's wife removed a stone from the wound and the sinus closed.

To Sir Henry Morris of London must be given the credit of first removing a stone from a healthy kidney by nephro-lithotomy in 1881.

The discovery of the Roentgen ray in 1895 aided greatly in the diagnosis of renal calculi.

Heineke in 1879 first employed pyelotomy for the extraction of stones.

Another milestone was added to our science on August 2nd, 1869, at Heidelberg, when Marguerita Kelb, suffering from a urinary fistula following a partial hysterectomy, was operated upon by Gustave Simon. He planned, and prepared, a deliberate operation for removal of her kidney. It was the first premeditated nephrectomy. The patient was cured.

Now let us turn for a time to the advances made in diagnosis. We have shown that the x-ray was quickly adapted as a help in diagnosis, and it has played a very important role in our advancement.

In 1853 Desormeaux was given the title of the Father of Endoscopy. In 1877, Max Nitze of Berlin, working with Beneche, an optician of Vienna, produced what must be termed the "first" cystoscope, in that he employed the cardinal principles of modern cystoscopes—the electric source of illumination, the placing of the source of light close to the field to be examined and the employment of a lens system. Credit must be given to Joseph Leiter, a skilled instrument fabricator, for the making of the cystoscope. In 1887 the Edison electric lamp was added. Albarran introduced his mechanical finger in 1897. Albarran made possible the guiding of ureteral catheters into the ureteral openings. Thus the study of the urine of each kidney was made possible and renal diagnosis and surgery have made great advances. The cystoscopes have been improved until now the Brown-Buerger cystoscope represents the best in the indirect or lens type of instrument.

In 1904, Klose advocated the use of an emulsion of bismuth, injected into the ureter catheter to outline the kidney pelvis. This solution was succeeded by the use of colloidal silver by Voelcker and Von Lichtenberg in 1906. Today we use sodium iodide. To Braasch of the Mayo Clinic, much credit is due for his monograph on pyelography in 1915. Today the kidney pelvis, ureters and bladder may be outlined by retrograde or intravenous pyelography.

The fineness of the x-ray silhouetting picture is such, that today, obstructions to any part of the drainage system can be demonstrated, tuberculous lesions defined, neoplastic intrusions outlined and extravasations determined.

These privileges in diagnosis are not limited to the adult. The cystoscopes have been made smaller until it is possible to cystoscope and pyelograph an infant female of six months of age, while in the male, the limit is a urethra of No. 12 French gauge or larger. As nearly half of the urological lesions in children are congenital, you can appreciate the value of early diagnosis and treatment.

Let us turn once more to the kidney. Mortality in nephrectomy has steadily decreased. Tuberculosis is the most common disease for which the kidney is removed: in 1893, its mortality rate was 28%, and now averages 5%. In kidney tumours, the mortality was 50% in 1909 and now is about 15% or less.

The last few years has seen much work done on deep x-ray therapy. It has been conclusively shown that some renal tumours have been made to disappear by this means. It has been shown that in all neoplastic cases, one should first radiate the tumour mass before proceeding with the operation of removal.

Experience has shown that the retroperitoneal route is much safer than transperitoneal route. Today, we resect portions of horse-shoe kidneys or part of a single kidney.

Nephropexy has been a football in urology. For a time it was largely employed by surgeons but our finer diagnosis has limited the indications.

Plastic operations on the upper ureter and pelvis of the kidney are practised. Herbst and Polkey conclude that of all the plastic operations anastomosis between the ureter and the pelvis has given the best results.

Nephrostomy is being used a great deal in cases of infected kidneys with calculi. After the kidney has been allowed to drain for a time, the surgeon proceeds with the removal of the calculi, or does a nephrectomy.

In more recent years tumours of the ureter have been diagnosed and submitted to surgical treatment. The transplantation of the ureters into the intestines has been developed and relief can now be given to many cases of exstrophy of the bladder.

The bladder is now visible to the urologist through the cystoscope and smaller stones are seen and crushed and evacuated through the urethra. Tumours are fulgurated, ureteral obstructions at the bladder end are relieved by dilatation or fulguration. Prostatic intrusions are demonstrated. Neurological bladder lesions can be diagnosed. The bladder itself can be completely removed and the ureters transplanted in malignancy or ectopia of this organ.

Infections of the urinary tract have been throughout the ages a great problem to the urologist. Experience has shown that infections cannot be cured without good urinary drainage. Hence early diagnosis and relief of obstructions are essential procedures. In tuberculosis of the kidneys, where ulceration has ensued, early nephrectomy is advised. In pyogenic infections good drainage combined with lavage are often effective. In pyelitis Helmholtz has proven the value of making the urine excessively acid by means of a ketogenic diet. It would appear that colon bacilli do not thrive in a pH of 5 to 5.5.

Perinephritic abscess.—Braasch states that there is no evidence of a primary perinephritic abscess, but it is probable that a small solitary cortical or subcapsular abscess was the cause of the perinephritic abscess in each case.

Hunner is of the opinion that foci of infection play an important role in the formation of ureteral strictures.

Infections of the prostate and seminal vesicles are most frequently of gonorrhœal origin, but an increasing number of cases are shown to be due to the colon bacilli, streptococci and staphylococci. Most authorities favour the hæmatogenous route of transmission for these latter infections.

Of venereal diseases we will make brief mention. To discuss them fully would need a paper embracing all fields of medicine.

Syphilis is said to have been brought back to Europe by the sailors of Columbus, and probably came from the West Indies. The treatment has had many improvements, until today with arsphenamine compounds combined with bismuth and mercury preparations, the patient is given a symptomatic cure. Repeated serological tests keep us informed as to any recurrence. Thus late complications can be forestalled.

Gonorrhœa is said to go back to the days of Moses in the fifteenth century B.C. (Leviticus 15:2-3).

Syphilis in China goes back to the Ming dynasty (1368 A.D.) and references to gonorrhœa are attributed to Huang-ti (3000 B.C.).

Hippocrates (300 B.C.) taught "thhat those suffering from tubercles and carnosities in their pipes will get well by suppuration and flow of pus." Galen gave it the name of gonorrhœa. "Clap," a title derived from the

French, probably came from the fact that it was contracted in a *clapier* or brothel. Neisser discovered the gonococcus in 1879.

Thomson for the British and your speaker for the Canadian forces proved independently of each other in 1918 that serological diagnosis of the disease could be shown to coincide with the bacteriological diagnosis in 90 to 95% of cases of urethritis. The test is very useful in the diagnosing of infections in women and in obscure arthritic lesions. The bacteriological tests are so much simpler that they are in general use and more popular.

Vaccines have been made and tried but the fact that a new preparation is periodically sponsored is proof that there is room for improvement.

The treatment of gonorrhœal infection is not specific. We look to the future for specific therapy. In treating strictures, many instruments have been devised, dilators and cutting instruments, and the dictum of William White probably represents the final position of the pendulum when he said, "Dilate if you can, and cut only when you have to."

Much is being tried to cure Neisserian infections with heat and some very promising results have been demonstrated, especially at the Mayo Clinic.

Let us now consider prostatism and prostatic surgery. About the middle of the sixteenth century Nicolo Massa, a Venetian physician, considered that the prostate gland was the cause of obstruction at the neck of the bladder. Early surgical treatment consisted of tunnelling the gland, and this was practised by John Hunter, Chopart, Billroth and others. Part of the prostate gland was first removed in 1832 by Amussat, during a suprapubic lithotomy. Later Belfield and McGill were prominent among the early operators. The perineal route was favoured more by Billroth and other European operators. Fuller of the United States (about 1900) was the first to do a complete suprapubic enucleation, and was followed about the same time by Guiteras in France and Freyer in England. The operation became popular and soon was largely practised. Then came Squier's modification in 1911; from then on many variations have been advocated and recently Lower of Cleveland and Harris of Australia have advocated, and practised successfully, the suprapubic enucleation with primary closure of the wound in the bladder.

Catheter drainage in cases of prostatism, prior to operation, has become almost universal practice.

Young of Baltimore and his pupils adhere to perineal prostatectomy with equally good results.

In the last few years, the pendulum has swung to transurethral resections of the prostate; of this technique I will speak later.

The preoperative preparation of the case of prostatism has become quite as important as the operation itself. All writers stress the importance of slow relief of the back pressure of urine. Time is essential to stabilise the kidneys' function. Dehydration of the patient must be combatted by the copious taking of fluids. The heart function must be carefully estimated, and if possible improved; foci of infection such as carious teeth eliminated. The function of the kidneys is tested by Mosenthal's two-hourly test, by Rountree and Geraghty's phenolsulphonaphthalein dye test and by the urea clearance test of MacLean, the degree of nitrogen retention in the blood by the non protein nitrogen test.

To overcome hæmorrhage at operation and afterwards, some have advocated packing the prostatic fossa with gauze; later conical or round rubber bags have been used, the bag being held by a triangle between the legs of the patient. In the open type of prostatectomy, hæmorrhage was controlled

by sutures, and now Harris advocates suturing the rim and obliterating the prostatic space by remodelling the neck of the bladder. He has been very successful and his technique is gaining favour, especially in Great Britain. Today many urologists advocate vaso-ligation to forestall post-operative epididymitis. The death rate from either procedure is, in the hands of most urologists, between 5 and 10%.

It is an opportune time to mention here the great help that anæsthesia has been to the urologist. It would appear that chemists are endeavouring to give us an ideal local anæsthesia. They have been able to lessen the toxicity and increase the penetrating powers of the drug on the urethral mucosa.

For major operations in urology, the best anæsthesia is the low spinal. The patient is relaxed, the breathing is regular. This makes it easier for the cystoscopist or resectionist to manipulate, more readily and more accurately, his instruments in the limited urethral canal.

Now let us consider endoscopic prostatic resection, sometimes called transurethral prostatic resection. In ancient times, attempts were made to overcome the obstruction by special catheters. All references to these methods were more or less vague and lacked precision. It was not until we come to Ambrose Pare (1510-1590) that we find the description of a definite operative procedure in which a sound with several sharp ridges on its surface, one finger-breadth from the top, was inserted in the urethra and turned this way and that, until the obstruction was overcome.

This period fell into discredit until we come to the modern period, and let us divide it into three eras. In the first era, James Guthrie, an English surgeon, described "the bar at the neck of the bladder" in 1830. This finding was further elaborated by Mercier. These surgeons developed an incising knife, that came out from the end of the sound and cut the obstruction. These instruments were improved, and later, in 1874, Bottini introduced the galvanocautery. This method had the advantage over Mercier's instruments of not producing hæmorrhage, and during the next twenty years it had a considerable vogue. Later Fuller advocated incision and cauterisation by means of the perineal route.

In France, these methods did not become popular, as they were dangerous, and prostatectomy was becoming so advanced and successful that the former methods soon passed into oblivion.

The second era is characterised by the study of the histogenesis and surgical pathology of the prostate obstruction. Albarran in 1900 demonstrated that the obstruction which for a century, ever since the time of Everard Home, has been known as the median lobe of the prostate, was actually no part of the prostate, but a development at the expense of the glands, lying beneath the mucous membrane of the bladder neck. This enlargement has since been known as the subcervical glands of Albarran. During this period, characterised by the study of the surgical pathology of obstructive lesions of the bladder neck, the operation for total enucleation of the obstructing adenomatous prostate was brought to perfection, as is well known, and in this era of conquest, which has extended to our day, the two schools of perineal and suprapubic procedures have flourished, rendering the maximum of accomplishment, as standard procedures which ensure accuracy, safety and low mortality with very efficient final functional results.

The third era is essentially characterised by the many new modalities of the punch operation for prostatic resection and the introduction of electro-surgery in the field of urology.

Hugh Young of Baltimore in 1909 devised his punch operation, and used it mostly on uncomplicated bar types. He claimed that his instrument was designed to remove small obstructions at the prostatic orifice and that this was not an operation for general use.

Edwin Beer in 1910 ushered in the beginning of a completely new era by his successful application of the high frequency current. He had great difficulty in the construction of his instruments. He first used the Oudin current. Later Stevens and Bugbie used similar methods on bladder neck contractures. Then they introduced the D'Arsonval current as suggested by Beer.

In 1914 Luys of Paris relieved obstructions by endoscopic electro-coagulation. Heitz-Boyer in 1919 employed a strong electro-coagulation in hypertrophy of the prostate. In 1918 Braasch endeavoured to overcome the disadvantages of the Young instrument by putting a light at the distal end, and added a tubular knife. Caulk in 1920 developed his instrument, using a cautery punch. Caulk gradually increased the operation on most types of glandular enlargement and really made the urologists alive to the values of resection. In 1925 Kenneth Walker in London brought in a diathermy punch and others added modifications. It remained for M. Stern to put an entirely new aspect on transurethral resection. He used a cutting wire loop, energized by an electric current. It cut well, but hæmostasis was unsatisfactory. It was improved by T. M. Davis and two currents were used, one for cutting and one for fulguration. This made an ideal combination.

McCarthy of New York adapted a resectoscope to his pan-endoscope and it is largely used. Meantime Bumpus improved the Braasch instrument to blanch the tissues before excision by punching, and also provided a fulguration electrode to check hæmorrhage. Periodically improvements in the resectoscopes are being made. Changes in the electric currents have also been made, but still there is room for improvement. Special catheters and hæmostatic bags have been developed to lessen post operative hæmorrhage.

Some internationally known urologists do all their prostatic obstructions by transurethral resection. Equally well-known operators select their cases.

The future alone can speak the final word with reference to the value of transurethral prostatic resection.

[The speaker then gave a pictorial review of the history of urology, illustrating it with some sixty-six slides.]

In conclusion, Mr. President, I wish to thank our Librarian and the American Surgeon General's Library for their help with books. My remarks were a compilation from writers of the past and present.

I have enjoyed reading their histories of the advancement of urology.

I thank you for honouring me with the task of the evening, and as Hippocrates said, "Do you pick up the work where we have finished and medicine will progress."

HEALTH INSURANCE IN ENGLAND

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[We hear much about the wonderful effects of Health Insurance in Great Britain—of the supreme satisfaction with which British doctors regard it. This is another instance of traditional misstatement. A misstatement does not become true because of many repetitions—but this is one of those traditional, legendary, generalisations which are so misleading and

so far from the truth. We publish in this number a review of Health Insurance in England which we think is fair and just, and the opening paragraphs of which, *mutatis mutandis*, might have been written about the situation which at present obtains in B.C.—EDITOR.]

The United States has often followed England in social legislation. This was the case with workmen's compensation, poor laws and many forms of factory legislation. English health insurance is now offered as the next model to be followed. To speed up this step the advocates of insurance are singing the praises of the English system. We are told that it is almost unanimously approved by all whom it affects, that it has solved the problems of medical care that are so sorely disturbing large sections of the public and the medical profession here.

Much light is thrown on the operation of the British health insurance system by a sketch of its origin and an examination of the conditions out of which it arose, the forces responsible for its creation and the objectives it was intended to attain. It is commonly assumed that this country is now in somewhat the same position with similar problems and institutions as those which confronted England when it adopted insurance. It is also *assumed* that the insurance road, if not the only one before us, is at least the one that offers the most satisfactory way to advance.

In 1909, a Royal Commission, which had been studying the English poor law, made its report. It has often been said that the majority, and even more the minority report, of this commission have had a wider influence on subsequent public policies pertaining to the poor than any other official documents ever published. They focused attention on poverty and all means for its relief. They were especially elaborate in their proposals for medical care for the poor. They proposed a great extension of the public health service and laid especial emphasis on preventive measures, both medical and social.

It is significant that although this commission contained many of the ablest representatives of all shades of opinion concerning social policies that no mention was made of insurance in its recommendations. Yet such systems had already existed in neighboring nations for nearly a quarter of a century. On the contrary, the most prominent and most informed members of the commission were among the most determined opponents of the insurance scheme when it was proposed by Lloyd George in 1911.

The Labour Party was growing in strength and was threatening the political power of the Liberals. The Labour Party was demanding the relief of poverty, and it supported many of the measures recommended by the Poor Law Commission.

At this stage, Lloyd George suddenly presented his proposal for health insurance. He said in speaking on the twenty-first anniversary of the law in 1934 that nobody wanted such a law, that it was opposed by nearly every one concerned. This is not altogether accurate. There was one body of people who did want it and who evidently knew very well why they wanted it. This was the body of Liberal politicians, led by Lloyd George, who saw how such a law could sidetrack the recommendations of the Poor Law Commission and take away some of the most valuable political assets of the Labour Party.

He proceeded, as a skilful politician must, to secure the support of as many and as powerful political forces as possible. He promised Labour 9 pence in benefits for 4 pence in contributions in order to gain the support of the unions and provident societies that were expected to be the principal carriers of the insurance. At first he included a death benefit. When the powerful commercial insurance companies threatened to put all of their solicitors into

the field as election agents unless this provision was withdrawn, he promptly omitted it from the bill. In the beginning he practically ignored the physicians. The British Medical Association then undertook a campaign which cost it \$150,000 and succeeded in forcing important modifications in the law. These modifications, it is now admitted, are responsible for the features of which its defenders are most proud.

The arguments in support of the law were adapted to meet the alignment of the forces just described. Great emphasis was laid on the proposed preventive features. Very cleverly, the measure was entitled "Health" Insurance instead of Sickness Insurance, the name by which such measures had always hitherto been designated. Special clauses were inserted providing that any industry in which morbidity was excessive could be punished by an increase in contributions. There were several other provisions that were supposed to emphasize the preventive side. It is significant that almost nothing has been heard of these provisions since the law went into effect. Conditions in medical practice led the physician to look with favour on almost any measure that promised change. A few years earlier the *London Lancet* greatly aroused the medical profession by the publication of a series of articles entitled "The Battle of the Clubs." These clubs had become so highly competitive that many physicians had been reduced almost to starvation, and the service to the patient had been spread out so thin as to be almost valueless. Contract practice of all kinds had had a wide extension, and the British Medical Association published the report of an investigation exposing a mass of evils in this form of practice.

The advocates of health insurance promised that it (health insurance) would abolish clubs and contract practice. *A continuously and emphatically repeated argument was that insurance would improve the general health of the working population.* It was frequently stated that the rapid industrial rise of Germany, which was then worrying English industrialists, was in no small part due to the benefits of insurance in maintaining the labor force of Germany at a high producing standard.

Such were the conditions and alignment of forces very briefly stated at the beginning of health insurance in England. In the past two decades facts and figures have accumulated to prove or to disprove the original contentions of the opposing forces. Experience has created new reactions to the benefits and methods of administration under health insurance. Some have even raised the question as to whether the amount of money spent for health insurance in Great Britain over the past twenty-one years might not have accomplished more toward the health and welfare of the people had it been used in a different way.

Realizing the tendency to follow England in social legislation and maintaining an awareness of the attempts of many persons to secure enactment of social insurance legislation in the United States, it is important that the record of the English health insurance system be examined to determine, if possible, to what extent this measure attained its objectives when tried.

Even its best friends admit that the British system *has failed almost entirely on the preventive side.* It has brought no increase in general health examinations, in immunization or in similar preventive measures, and but very little in early detection of incipient diseases.¹

It has been equally defective in bringing medical relief to the indigent sick. The expenditures for this purpose have increased continuously ever since insurance went into force, and within the last two years the most extensive measures in this direction ever proposed in England have been put

into operation. Some of these are much the same as those proposed by the Royal Poor Law Commission in 1909 and then rejected in favour of insurance.

Contract practice and clubs have been revived and have developed again most of the abuses that existed before insurance.² Indeed, the representatives of public health and preventive medicine are frank to say³ "with regard to medical benefit, under the Act it was frankly a perpetuation of club practice on a vast scale." Morbidity has steadily increased among the insured until today it constitutes one of the most important problems of insurance administration.

The plan has not been found capable of universal application. It did not work in the sparsely settled districts of northern Scotland, which required an entirely different system (Highlands and Islands Service). Yet we are urged to adopt state-wide and even nation-wide plans in this country, with states larger than England, Scotland and Wales combined, and in each of which situations must be met which have at least as great diversities as exist in the British Isles.

What has England gained from health insurance? It would be as foolish to say that there have been no gains as to claim that there are no defects. The most frequently quoted list of its accomplishments are those submitted by the British Medical Association to the Royal Commission on National Health Insurance of 1926.⁴

This list of achievements may well be repeated here:

(a) Large numbers, indeed whole classes of persons, are now receiving a real medical attention which they formerly did not receive at all.

(b) The number of practitioners in proportion to the population in densely populated areas has increased.

(c) The amount and character of the medical attention given is superior to that formerly given in the best of the old clubs, and immensely superior to that given in the great majority of the clubs which are far from the best.

(d) Illness is now coming under skilled observation and treatment at an earlier stage than was formerly the case.

(e) Speaking generally, the work of practitioners has been given a bias towards prevention which was formerly not so marked.

(f) Clinical records have been or are being provided which may be made of great service in relation to medical research and public health.

(g) Co-operation among practitioners is being encouraged to an increasing degree.

(h) There is now a more marked recognition than formerly of the collective responsibility of the profession to the community in respect to all health matters.

When compared with the average level of medical practice in England, prior to the adoption of health insurance, the aforementioned advancements represent a decided improvement. Such a comparison is, of course, the only fair method of evaluation, since to compare methods, quality and quantity of medical services in different countries introduces a large number of variables and markedly dissimilar conditions for which corrections must be made or because of their utter nonuniformity make comparisons impossible.

Such comparisons as can be made between the status of medical practice in England under health insurance and the conditions surrounding the practice of medicine in the United States must be broad and general. It is believed that the following comments are justifiable.

(a) The question is immediately raised as to the sort of "real medical attention" which "whole classes of persons" receive at present. The fact that "large numbers, indeed whole classes of persons" in England formerly did not receive any medical attention indicates a condition which does not

exist in the United States. Almost any change in such a condition would be a gain.

(b) There is at least some question as to whether there is any gain in increasing the "number of practitioners in proportion to the population in densely populated areas." One of the indictments brought against conditions in the United States as an argument for insurance is that the principal medical services are too closely concentrated in densely populated areas.

(c) The comparison here is with the old club service which all observers agree was about as bad as it could be.⁵ Physicians were known as "sixpenny doctors," meaning that they received approximately 12 cents for every "medical act," whether a diagnosis, prescription or a minor operation.

(d) It is undoubtedly true that "illness is now coming under skilled observation and treatment at an earlier stage than was formerly the case." If we are to believe what seem to be credible witnesses, little is done about that illness any further than to observe it. There is continuous criticism that incipient diseases are not detected by the sort of diagnosis which is customary in a large percentage of the panel practices. Moreover, if we are to give any credence whatever to insurance records there is a constant and rapid increase in disabling sicknesses among those who receive this "treatment."

(e) It is difficult to determine just how great a "bias toward prevention" existed in preinsurance practice, but health officials and nearly all observers agree that prevention is one of the weakest phases of insurance practice.

(f) The accumulation of clinical records which are to be of service in relation to medical research and public health seems to be little more than a pious wish. One may search the medical writings of England in vain to find any use of these records "in relation to medical research and public health." The morbidity statistics are so distorted by the influence of certification for cash payments that they are no longer any accurate measure of health. Observers who tried to study insurance records for clinical purposes report that they are much more concerned with dates of certification, numbers of prescriptions and other matters called for in the administration of the scheme in relation to approved societies and various committees than in relation to clinical or pathologic conditions of the patient.⁶

(g) Increasing co-operation among practitioners is rather an indefinite claim, and the only example of this change mentioned in the medical journals is in regard to political activity in defense of their position within the insurance scheme.

(h) Collective responsibility of the medical profession to the public in respect to all health matters is also a generality which would seem to be denied by the frequent complaints of health officers, of the failure of panel physicians to assume any collective responsibility in regard to health measures and general prevention work.

In regard to all these claims, the question may also be raised as to what extent insurance is actually responsible for the more desirable of these changes. The desirable developments listed have taken place in the United States since 1913 without the influence, assistance or intervention of health insurance and apparently to as great an extent as in Great Britain.

(To be continued next issue)

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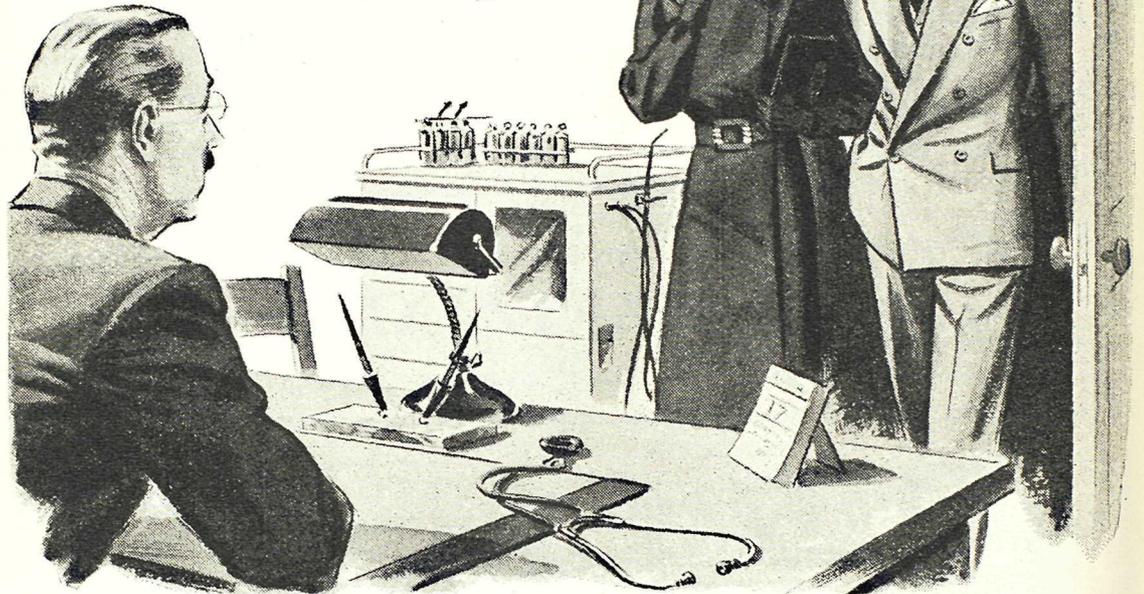


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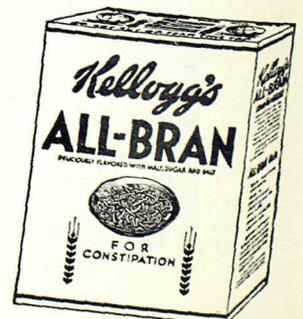
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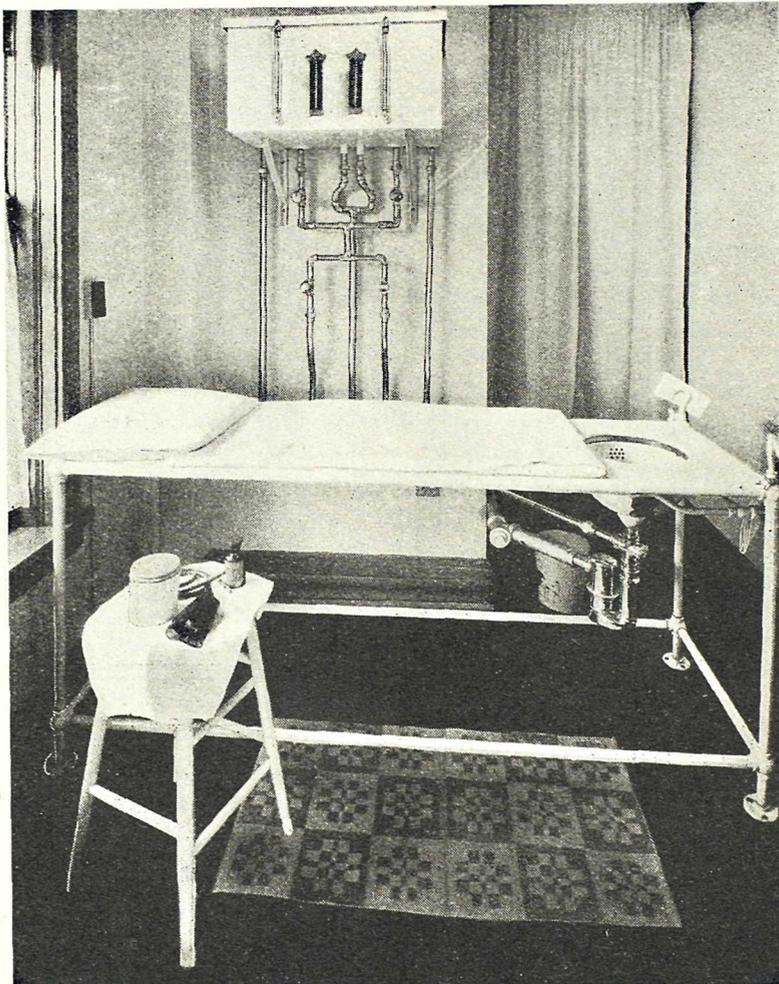
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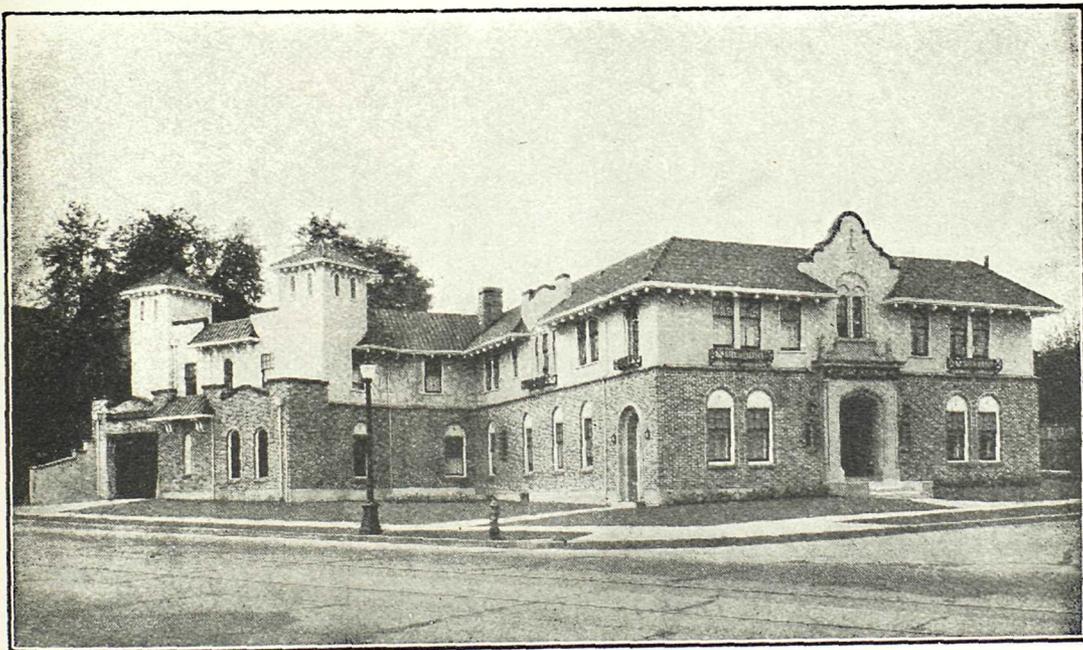
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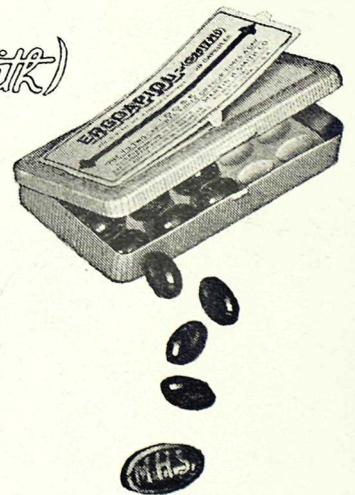
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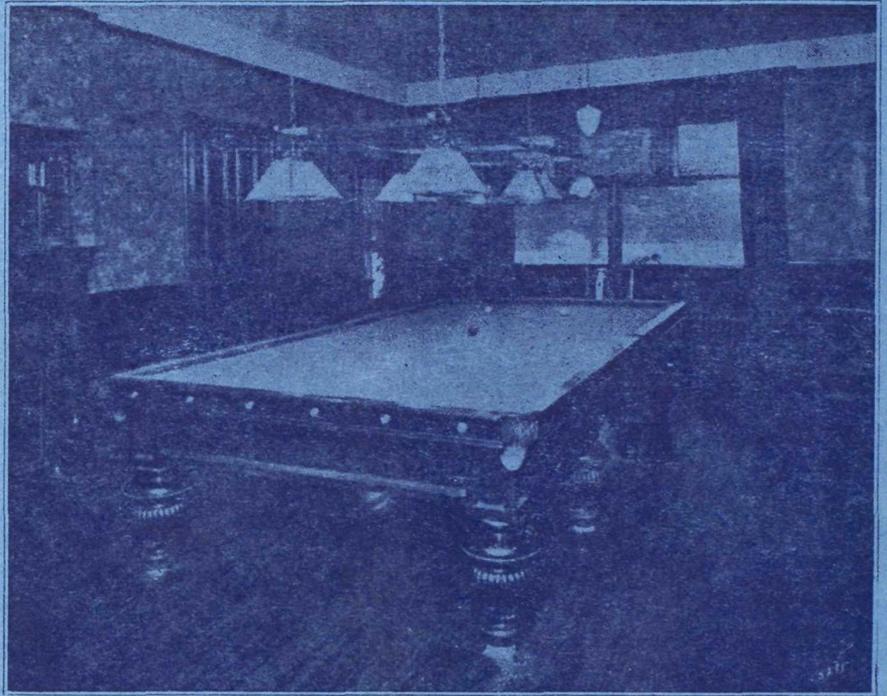
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