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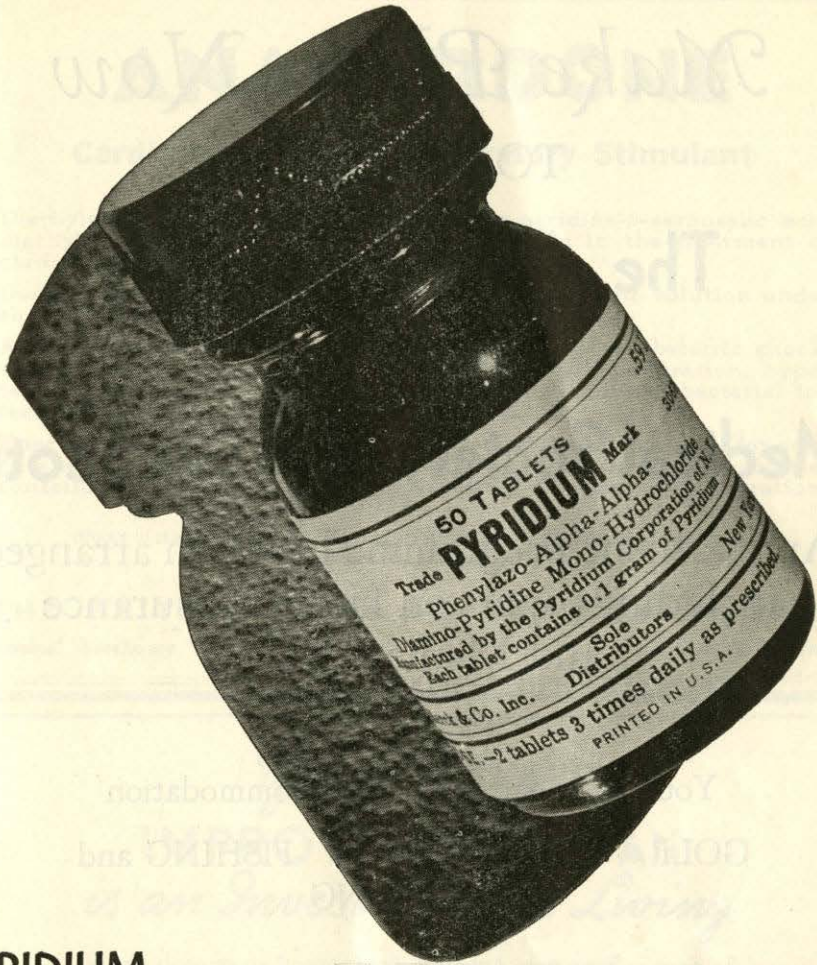
it is so well tolerated that it can be fed even to the three-weeks'-old infant with pyloric stenosis, and yet is richer than fruits, eggs, meats, and vegetables in iron. Even more significant, Pablum has succeeded in raising the haemoglobin of infants in certain cases where an iron-rich vegetable failed. Pablum is an ideal "first solid food." *Mothers appreciate the convenience of Pablum as it needs no cooking. Even a tablespoonful can be prepared simply by adding milk or water of any temperature.*

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# Some Rambling Remarks upon Medical Practice on Chignecto Isthmus Sixty Years Ago

G. C. W. BLISS, M.D.,  
Amherst, N. S.

THE physicians and surgeons of to-day, have many and great advantages over those in practice in the year 1880, when the writer began his professional career in Amherst. The five years previous, had been spent as a student with the late Dr. D. C. Allan, and later at Jefferson Medical College, Phil., then as now, in the front rank of medical schools on this continent, with unlimited opportunity for clinical experience.

The hypodermic syringe, had been in use only a few years, and the clinical thermometer, was just coming into general use, but was not yet self registering, and had to remain under the tongue five minutes and be read before removing.

The principal drug store here, sold window glass, paint and putty, etc., and very few medical prescriptions were dispensed, as practically all the doctors kept their own drugs. No prepared dressings were to be had, not even bandages. Unbleached cotton was bought in six yard lengths, torn in strips of desired width, and firmly rolled ready for emergencies, though most practitioners kept none on hand, and depended upon tearing shirts or sheets, the latter, often taken from a bed at the time, when called for surgical cases. Very few pills other than opii, rhei and cath. co. were to be had. When others were required, the ingredients were mixed in a mortar, rolled on a pill slab, and divided as is now done, when made by hand. Practitioners frequently made their pills as required for each patient, many of them no doubt, like those described to me by an old man as made by a Dr. Wilson of Dorchester, N. B.—"As big as musket balls, faith I had to cut them in four to swallow them." Smallpox vaccine was distributed on ivory points, packed 5 or 10 in a wooden or metal box. Serums were unheard of. Even diphtheria antitoxin did not come until twenty years later. There were of course, no telephones in those days or railway nearer than Moncton, N. B., and not even a daily mail in most sections of the country. Patients were frequently brought to the doctor in ox-carts, such as were used by the original French settlers of Acadia, with two large heavy wheels and a box body. The roads were at times almost impassable with any other vehicle, though the two-wheeled shay was beginning to give place to a four-wheel wagon of various designs.

There were no dentists in Amherst, though one of the doctors afterwards took up this work, and later of course dentists first visited the town at intervals, and eventually settled here. The writer has extracted many hundreds of teeth, and when asked by the anxious victim if he (the Dr.) could "take it out", usually replied "if the tooth would hold on, he would", a remark which is still employed, when a patient occasionally comes for this purpose, at night or on some holiday when dentists are not available.

We had the tallow candle instead of the electric bulb for light, though many oil lamps were in use, with a very evil smelling yellow oil, which soon

smoked up the lamp chimney and required frequent cleaning. I believe my preceptor was the first surgeon here to reduce dislocation of the hip joint by manipulation, without the use of block and tackle, with staples driven in the floor on which the patient was stretched and the joint pulled into place by main strength. Many years later he also successfully operated for appendicitis (ruptured appendix), the first of such operations done in this county, and possibly in Nova Scotia. Chloroform was the anesthetic in general use "Duncan and Flockhart's," not the German variety, even THEN. Doctors kept two or more horses, one usually a good saddle horse, as frequently patients out of town could only be reached on horseback. As abdominal operations were practically unknown, most general practitioners had fair success in the surgery of that day. Fees, as also cost of living were less than half the present prices. Hay averaged \$7.00 per ton; oats, in fair sized lots, 30c. per bushel; straw, about \$3.00 per load; best Springhill coal, \$3.60 per chaldron ( $1\frac{1}{2}$  tons); cord wood lengths, hardwood, \$3.00 per cord. Other commodities were in proportion. At the period under discussion the older the doctor was, the more knowledge he was credited with, while at present the reverse seems to be the case, probably the truth is somewhere between the two extremes. One of my colleagues remarked to me a few days ago upon this very fact, saying we are getting it "coming and going, as when we began practice young doctors were supposed to know very little in comparison with older members in the profession, while now the tendency seems to be the reverse," but why worry, one can always wait until all is over, and then wisely remark "I told you so."

Professional men were often sportsmen, then as now. The (not very late) Dr. Ben Purdy, and Rev. George Townshend, Anglican Clergyman here, frequently went on horseback to River Philip, now called Oxford, and brought home large catches of salmon and trout. This same Dr. Purdy also brought home from Edinburgh, where he spent seven years at the Medical School, a fourteen bore, 32 inch double barrel gun (not a flint lock), which was probably the best and most modern weapon in all the country at that time. This gun, by the way, is still in use, and may be seen at the home of Charles N. Coates, West Amherst. I may say in passing that most of the guns then in use, were converted flint locks, either old military muskets or long barrelled fowling pieces, with an occasional sealing gun with a four foot barrel.

It was customary at this period to render accounts once yearly, though I am under the impression that the legal profession did a little better.

"Though there were giants in those days," both mental and physical **THERE WERE NO TRAINED NURSES.** The oldest, most decrepit female obtainable, was usually sought out as a nurse, and these ancient dames, were generally antagonistic to the doctor in every particular. The patient got no cold water to drink, nor fresh air to breathe, no bath of any kind, and not until after the sacred "ninth day" in maternity cases, for fear they might "ketch cold". The windows were kept tightly closed for the same reason, many panes of window glass were broken out accidentally (??) by these "young doctors", who had imbibed the then "modern doctrine" of hot water and soap, with fresh air and water ad. lib. About this time, the diet of typhoid fever patients was changed from "salts and senna", with "camomile tea" (as a side dish) to meat broths during the day with milk or buttermilk at night for convenience and variety. Such patients were given cold sponges when the temperature was above 103.

It may be unknown to some of you, that cold bathing in typhoid fever particularly, was first practised on this continent during the so-called "American Civil War". An enormous hospital tent containing hundreds of typhoid patients in all stages of the disease, was blown down, and away at night, during a regular tornado with downpour of rain, for hours, near Washington, D.C. At daylight the hospital staff visited the patients in their water soaked cots, expecting to find many dead. To their amazement, none were dead and all were better, with very few delirious. They were not slow to take the hint and cold baths have been on the order board ever since. This fortunate circumstance furnishes the most outstanding and valuable example of a "nature lesson" that I have yet heard of. It would take many pages and much time to give anything like complete details of my subject, but enough has been told to justify a "Hymn of Thanksgiving" for present mercies we enjoy, looking forward hopefully for those yet to come.

---

## ANNUAL DUES

THE perennial travail for the treasurer is at hand. The annual Financial Statement has to be made, and must be completed by the 30th of June.

May I request the cooperation of all our members? A large number have already paid their dues; but the usual laggards are still holding back. The amount of interest on fifteen dollars for three months hardly makes it worth while keeping back payment, and certainly does not make for the betterment of the financial state of the Society. Will those who have not already sent in their annual dues please do so *Statim*.

And another thing,—

The BULLETIN is sent to practically every doctor in the Province. A certain number do not pay any dues. Neither do they pay a subscription to the BULLETIN. If they do not see fit to pay for a membership in the Society, would it be asking too much of them to pay for the BULLETIN? The price is three dollars per year. Not very much for one or two; but when it comes to more than one hundred, it amounts to quite a sum and would help considerably in reducing the cost of publication.

*Come across, fellow doctors.*

W. L. MUIR,  
Treasurer.

# Treatment of the Septic Hand

R. B. EATON, M.D., Amherst, N. S.

PROBABLY no problem is more often encountered in every day general practice than the septic hand. It is a grave economic problem to the workman both in the active stage and in the resultant disabilities that may follow. The condition too often appears trivial and is regarded in the realm of minor surgery. Many serious consequences can be avoided if proper treatment is instituted in the initial stages. It is a condition that requires timely judgment and a thorough anatomical knowledge of the parts involved. Kanel by his intensive study and analysis of hand infections did much to enlighten us on the pathological anatomy. He used injected dyes to demonstrate in detail the varied anatomical spaces. With all due credit to his work, however, these spaces do not form an infallible barrier to the spread of organisms, hence in practice we rarely find infection limited to one space alone (Lake). The late Sir David Wilkie (B.M.J. 1938) in a brief and concise review of the septic hand stressed the great importance of mild passive hyperaemia by the use of Bier's elastic bandage in the early treatment of such infections.

I do not propose anything radically new in this paper, but it is for purpose of review. As Professor Grey Turner was very fond of quoting, "while the message is the same, the audience is constantly changing".

## Treatment

(a) *Prophylactic.* The majority of infections are due to injuries and wounds so that if proper initial treatment can be instituted, many serious consequences can be prevented. Owing to the anatomical complexity of the hand there is a resultant contraction and retraction of the severed structures making it impossible to acquire a perfected degree of sterilization. A preliminary cleansing of the wound should be attempted using ether soap and a suitable antiseptic wash such as *dettol*. All devitalized tissue should be carefully removed. Hydrogen peroxide may be useful by its mechanical action in deep dirty wounds. Foreign bodies are sought for; if metallic in nature, X-ray may be helpful in localization. It is best to leave badly crushed and lacerated wounds open after preliminary cleansing and pack lightly with antiseptic gauze (flavine 1-1000). After several days secondary suture is attempted without the fear of gross infection. Divided structures should be identified by passing a catgut suture through them to prevent retraction and recognition in secondary suture. Punctured wounds present a special problem; one may try sterilization of the track with a needle or probe dipped in carbolic. Probably it is best to rely on suction or Bier's elastic bandage. Prophylactic injections of antitetanic and antigas gangrene sera should be administered in all contaminated wounds.

(b) *Active.* Treatment of the active process depends upon localization of the infection and the type of organisms involved. We should aid the development of immunity by artificial means and if possible kill off or inhibit the growth of the infecting organisms. Next we should determine in what types and when operative intervention is necessary.

1. The fundamental principle of rest is applied to all cases of acute inflammation. Rest tends to limit the spread of infection and is especially useful when the theca is threatened or involved. Proper splintage may be carried out to the inflamed parts by malleable material or plaster slabs, as best suited for the individual case. It should be so adjusted that dressings and baths may be carried out without undue disturbance to the parts.

2. Heat applied in the form of moist saline, boracic or magnesium sulphate compresses is most useful in localization of the infection. Wet dressings should not be continued until the parts become too soggy and oedematous.

3. Bland fluids should be administered freely to promote free excretion of the kidneys, skin and bowels and with the addition of glucose the liver is replenished. Sleep, fresh air and sunshine are useful adjuncts in maintaining metabolism to combat infection.

4. Passive hyperaemia by the use of Bier's elastic bandage is very useful in early cases of spreading lymphangitis. The bandage is applied direct to the skin of the upper arm in such a way that gentle pressure obstructs the superficial veins and lymphatics without producing any blueness or duskiness. This causes a mild lymph stasis in the limb and the secret of successful application is the abolition of pain. If pain is increased, it is too tight and must be reapplied. The bandage may be left on continuously for 24 hours with advantage.

5. Chemotherapy in the form of the sulphonamide group, though still in its experimental stages, has proved a most valuable weapon in combating infection, and is especially applied to certain strains of the streptococcal group. The drug acts by having a bacteriostatic effect on the invading bacteria, thus establishing the patient's power to develop a natural immunity. It should not be administered too soon after the onset of the infection lest the patient's natural immunity has not developed to a sufficient degree; also it should not be continued over too long a period. Many preparations much too numerous to mention are on the market and more recently the sulphonamide and pyridine compound (M.B. 693) seems to be more effective. The drug may be administered orally, intramuscularly or intravenously as indications may arise.

6. Ultra short wave therapy may be of value in superficial and the indolent type of infections exhibiting a brawny induration with little tendency for pus formation.

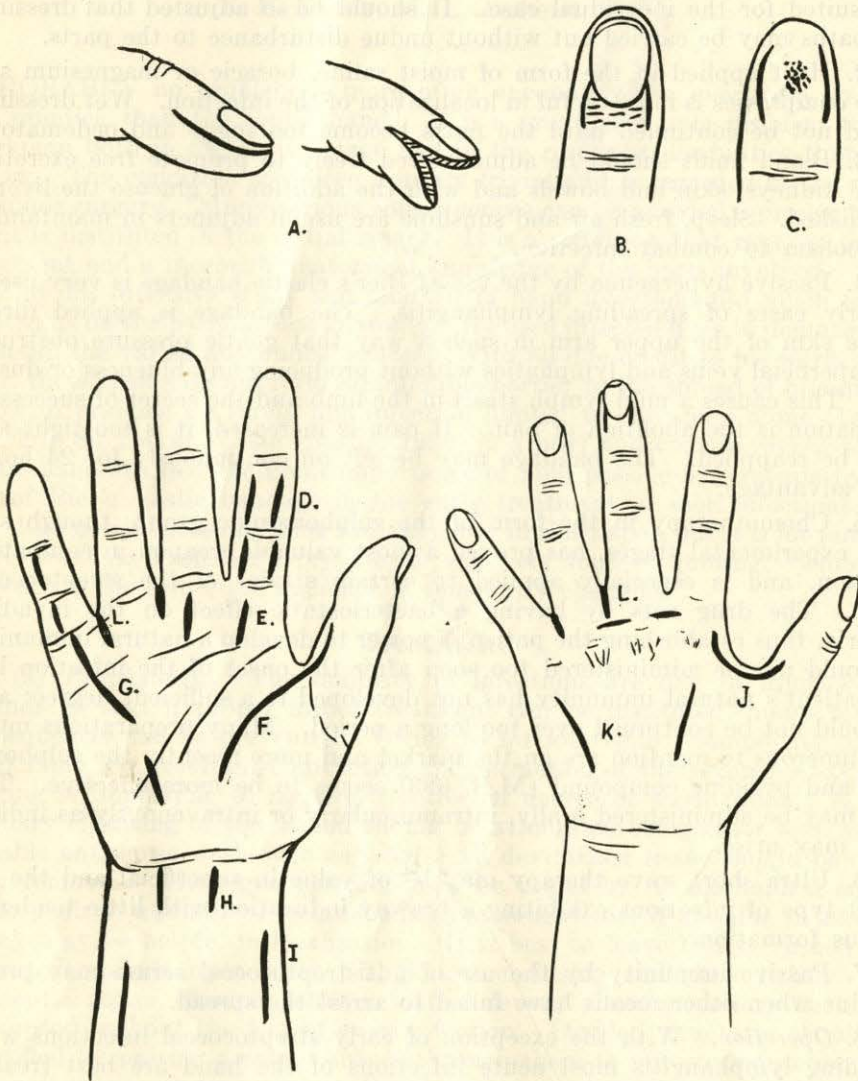
7. Passive immunity by the use of antistreptococcal serum may prove of value when other means have failed to arrest the spread.

8. *Operation.* With the exception of early streptococcal infections with spreading lymphangitis most acute infections of the hand are best treated by energetic surgical intervention as early as possible. In all cases a general anaesthetic is necessary, usually nitrous oxide and oxygen is sufficient.

(a) *Finger pulp infections.* These are opened by an incision skirting  $\frac{1}{8}$  of an inch from the nail margin in a circular fashion, or some prefer the hockey-stick incision. It should not extend proximally nearer than  $\frac{1}{2}$  inch from the terminal interphalangeal crease. Occasionally central pulp infections are met with and here a small transfixion incision is suitable.

(b) *Paronychia infections.* Two lateral incisions are made continuing the lateral nail groove for about  $\frac{1}{4}$  inch. If there is no pus this suffices; if pus

## INCISIONS OF THE HAND



- a. finger pulp infection.
- b. paronychia infection.
- c. central pulp infection.
- d.-e. thecal finger infection.
- f. theca of the thumb (radial bursa).
- g. theca of little finger (ulna bursa).

- h. proximal end of bursae.
- i. Parona's space.
- j. thenar space.
- k. subaponeurotic space.
- l. mid-palmar space.

is present, the flap is turned down and the base of the nail is removed and the wound is packed with paraffin gauze. Intractable cases are best treated by removal of the whole nail.

(c) *Subcutaneous infections.* These are merely incised. In purulent blisters the dead skin is cut away with scissors.

(d) *Thecal infections.* In the intermediate and proximal sections of the digits lateral incisions near the palmar aspect to avoid the inter-digital nerves and vessels are made. The incisions are interrupted, i.e. bridge-fashion leaving the interphalangeal creases intact. This prevents prolapse of the tendons and aids in putting the finger up in a slightly flexed position so that subsequent adhesions can be easily dealt with. If in doubt as to whether the theca is involved or not, dissect carefully down to the theca; if still in doubt, where clinical signs are positive, open. Some hesitate for 24 hours to decide whether suppuration is taking place or not. If the tendon is dull yellow in appearance, it will surely slough and much time is saved by excising it. To prevent retraction of the proximal cut end fix it to the periosteum by a catgut suture until adhesions form. The extension of the theca into the palm may be drained by a median incision as indicated in the diagram. To drain the theca of the thumb an incision is made somewhat on the radial side of the front of the thumb, extending along the inner margin of the thenar eminence to within a thumb's breadth of the anterior annular ligament, but no further, as the motor nerve supply to the thenar muscles may be sacrificed as it crosses the sheath at this point. The short thenar muscles are separated and the tendon of the flexor longus pollicis exposed. The proximal end of the theca is drained in the forearm immediately above the wrist.

The common flexor sheath and its extension to the little finger is drained by incisions along the lateral margins of the proximal phalanges. Pressure is now exerted over the ulna bursa and if pus exudes, an incision is made from the distal palmar crease towards the base of the palm along the centre of the hypothenar eminence inclining towards the radial side. At this point the incision must be limited to avoid the ulna nerve. (The sensory branch is usually sacrificed). The proximal end of the bursa is opened in the wrist above the anterior annular ligament.

Middleton of Edinburgh stresses the importance, after free drainage, of daily active movements of the fingers immersed in a warm saline or mild antiseptic bath. This favors drainage and prevents subsequent adhesions.

(e) *Fascial space infections.* For anatomical reasons the mid-palmar space is best drained via the lumbrical canals. Incisions are made in the appropriate web spaces which are split to the distal flexor crease. Forceps are passed in the direction of the deep spaces until pus is reached. The thenar space is evacuated by an incision parallel to and  $\frac{1}{4}$  of an inch dorsal to the edge of the web of the first intermetacarpal space. Forceps are inserted in front of the adductor muscle of the thumb until pus is reached. Parona's space of the forearm is drained by a median incision  $1\frac{1}{2}$  inches above the styloid process of the ulna passing down to the bone. Sinus forceps are pushed through to the radial side under the flexor tendons and if the radial bursa is involved a counter incision is made on the radial side. In cases of severe infections complete drainage is obtained by passing the forceps from the palmar incisions of the corresponding ulna and radial bursae, rupturing their proximal ends, thus obtaining through and through drainage.

Incisions for the dorsal subaponeurotic space are made between the tendons distally in a transverse direction so that they are kept open by traction of the extensor tendons, thus ensuring good drainage. Alternatively, two incisions may be made along the radial side of the extensor tendons and along the ulna side of the tendons.

(f) Joint infections though rarely involved alone are drained by simple incisions opening up the capsule with the insertion of a thin rubber dam.

(g) Bone infection of the terminal phalanx is indicated by a persistence of the purulent discharge from the wound. Treatment is complete removal of the necrotic bone. Often the diaphysis is completely separated as a sequestrum.

(h) Late results. In very severe and destructive infections of the fingers and hand with resultant disability, plastic operations or well planned amputations may be necessary.

Too often during convalescence these cases lose our attention once the active stage has subsided and stiffness from fibrosis is prone to occur. Apart from necrosis of the tendons and joint involvement, fibrosis of the fascial planes may follow. The earlier drainage is instituted the less the subsequent fibrosis. Massage and passive movements are to some extent useful, but the importance of instructed, active movements cannot be overstressed. The latter being controlled by the patient's will power more rapidly re-educate the involved muscles and tendons. This requires a great deal of time, patience, and perseverance on the part of the patient.

## NOTICE

Royal Victoria Hospital, Montreal,  
F.R.C.S. (Canada).

Special tutorial classes for the Final F.R.C.S.(C.) will be given at the Royal Victoria Hospital, Montreal, from August 28th to October 21st, 1939, consisting of daily lecture demonstrations, ward rounds and surgical pathology.

The course will be given by:

G. G. Miller, M.D., F.R.C.S.(C.)	- - -	Clinical Surgery.
J. C. Luke, M.D., F.R.C.S.(Eng.)	- - -	Abdominal Surgery.
H. S. Morton, F.R.C.S.(Eng. & C.)	- - -	Thoracic Surgery.
H. F. Moseley, M.D., F.R.C.S.(Eng.)	- - -	Orthopaedic Surgery.
A. R. Elvidge, M.D., F.R.C.S.(C.)	- - -	Neurosurgery.
A. B. Hawthorne, M.D., F.A.C.S.	- - -	Urology.
Professor T. R. Waugh, M.D.	- - -	Surgical Pathology.

The fee for the course will be \$100.00.

Further particulars may be obtained from the secretary of the course:

H. S. Morton, F.R.C.S.,  
1374 Sherbrooke St. W.,  
Montreal, Quebec.



# \* Analgesics and Hypnotics as Ordered in Hospital

WILLIAM S. GARDNER, M.D.,

Professor Emeritus of Gynaecology, University of Maryland

(Note: At the request of one of our hospital administrators, this excellent analysis of how hospitals can save or spend money in their pharmacy, is digested from the Maryland Pharmacist and the Canadian Pharmaceutical Journal.)

**A**FTER reading an article by Dr. Fantus on "Economy in Medication" I thought it would be interesting to see what was being prescribed as analgesics and hypnotics at Mercy.

Dr. Fantus states that *acetanilid* is not only the most efficient, but the cheapest analgesic. At Mercy in over one thousand orders, there was not one order for *acetanilid*.

*Acetanilid* was introduced as a competitor of antipyrine which had been put out as the great remedy for the cure of all fevers. The dose of antipyrine was 15 to 20 grains repeated every hour until the fever came down. *Acetanilid* was given in doses of about half of that of antipyrine and repeated in the same way. Dr. Fantus says:—"Acetanilid abhors under the indictment that it causes methemoglobinemia and collapse. This is possibly true when it is used as it formerly was in the full antipyretic dose of seven and one-half grains and when repeated every hour for two or three doses until a great fall of temperature was secured." But the day of the antipyretics is over. No one prescribes anything to directly reduce temperature.

Very good evidence that *acetanilid* is not a very dangerous drug, is the fact that in this town, tons of it have been swallowed in the past forty years in Bromo Seltzer, and the town has not yet been depopulated. It is everybody's remedy for the headache of the cold gray dawn of the morning after.

In other words, it is efficient and is widely used; but the younger doctors have never learned about it. This is largely due to the fact that it is not touted by the present day instructors in therapeutics, the detail men. Its virtues are not sung in the voluminous literature of the manufacturers of proprietary medicines. It costs too little.

*Aspirin* was ordered 49 times alone and 119 times in combination with codeine; in all 168 orders. Not a single order of Acetylsalicylic acid was written. Aspirin Bayer costs 75 cents an ounce. Acetylsalicylic acid costs 13 cents an ounce. This drug in its cheapest form costs four times as much as *acetanilid* and as *aspirin* it costs 23 times as much.

*Codeine* was ordered alone 165 times and with *aspirin* 119 times, making a total of 284 orders for codeine. Except as a constituent of cough mixtures, there is very little excuse for the use of codeine. It is safe, but its safety is in proportion to its inefficiency. My own reaction to it for many years has been that its use to relieve pain was very much like sending a boy to do a man's job. Its index-price cost is 65 times that of *acetanilid* and about four times that of morphine. If the patient has a really severe pain, don't send the boy but send the man—morphine. Relieve the patient and save money.

*Morphine* was ordered 169 times. Morphine is unquestionably the king of pain relievers. When there is severe pain, it should be given promptly

and in a dose sufficiently large to give prompt relief. The order frequently written to repeat the dose if necessary is a bad custom. Very few nurses have had enough experience to judge whether the repetition is necessary. The intern should see the patient and determine whether more morphine is needed.

It is the custom of many surgeons to give a dose of morphine before an anesthetic and another one on partial recovery from the anesthetic. The dose before may make the starting of the anesthetic slightly easier and the dose on reaction may keep the patient more quiet for a time; but the patient immediately after an operation is usually not in pain, but only more or less drunk from the anesthetic. The result following these two doses is nausea and vomiting for the next twenty-four hours. This post-operative nausea is usually attributed to the anesthetic, but in most instances it is due to the morphine.

*Pantopon* was ordered 79 times. *Pantopon* is not an official preparation. It is a mixture of all the alkaloids of opium, but depends for its efficiency as an analgesic on its morphine content which is about 50 per cent. The ordinary dose is one-third of a grain which corresponds to one-sixth of morphine. *Pantopon* costs \$20.00 per ounce; morphine \$12.75 per ounce. But as it takes two ounces of *pantopon* to equal one ounce of morphine, the relative costs are as 40 to 12.75. That is one dose of *pantopon* costs over three times as much as a dose of morphine that would do the same work.

*Phenacetin* was ordered 14 times. The same drug under its chemical name, acetophenetidin, was not mentioned. *Phenacetin* is not so efficient as acetanilid and costs per dose about 21 times as much, or to put it graphically one dollar's worth of acetanilid will furnish as many doses as seven dollar's worth of acetophenetidin, or twenty-one dollar's worth of *phenacetin*.

*Atophan* was ordered 12 times by its proprietary name; by its chemical name *cincophen* not once. *Atophan* costs \$2.75 per ounce; *cincophen* costs 38 cents. They are exactly the same thing.

*Chloral Hydrate* was ordered 60 times, but as two patients got twenty-six of these doses, there were only thirty-four among all the remainder.

Dr. Fantus puts *chloral* first among the hypnotics because of an efficiency index of 97 and an efficiency price index to one. To put the same statement in another way—the cost per dose is the least and the results obtained are the best.

*Luminal* and *phenobarbital* were ordered 239 times. Of these orders 221 were for *luminal*, the proprietary name, and eighteen were for *phenobarbital*, the chemical name. *Luminal* costs \$6.90 per ounce; *phenobarbital* costs 61 cents per ounce. They are exactly the same thing; but *luminal* costs the hospital eleven and one-third times as much as *phenobarbital*.

The barbituric acid compounds are classed both as analgesics and as hypnotics.

As a hypnotic, *phenobarbital* has a dose price index of 8 compared to *chloral hydrate* as 1. As an analgesic it has a dose price index of 45 compared to acetanilid at 1.

Since *luminal* costs eleven and one-third times as much as *phenobarbital*, to get the index cost price of *luminal* multiply the index cost price of *phenobarbital* by eleven and one-third which makes the index cost price of *luminal* 90 as an hypnotic as compared to *chloral* as one. Using the same method, we find that the index cost price of *luminal* as an analgesic is 510 as compared to acetanilid as 1.

In other words, one dollar's worth of chloral hydrate will produce as much sleep as eight dollar's worth of phenobarbital or ninety dollar's worth of luminal.

One dollar's worth of acetanilid will relieve as much pain as forty-five dollar's worth of phenobarbital, or 510 dollar's worth of luminal.

*Amytal* was ordered 23 times and *Sodium Amytal* 25 times. The dose price index of *Amytal* is 17 and that of *Sodium Amytal* is 40.

*Nembutal* was ordered 58 times. It is advertised as a pure hypnotic. The ordinary dose costs three and one-half cents. Five grains of chloral hydrate costs less than two-tenths of a cent.

There is another hypnotic that I have used for years with excellent results. Many post-operative patients during convalescence who are without pain are not able to get to sleep promptly. With supper at five o'clock, by nine-thirty the stomach is empty and the patient restless. She calls for relief. The intern comes along and orders luminal, when what she really needed was a glass of milk and a few crackers. The actual cost of the dose of luminal and the glass of milk are practically the same; but for the patient the milk is far better.

When we see 791 orders out of a little over a thousand, or nearly 80% for codeine, luminal or aspirin, it is apparent that there is an over use of these drugs and a failure to use much more efficient drugs that are very much cheaper.

Who is responsible for this extravagant and illogical system of therapeutics? Primarily the teachers of therapeutics in the medical schools are to blame; but the real responsibility lies with the visiting staff. They are supposed to direct and be responsible for all medication; but when it comes to analgesics and hypnotics the decision as to what to use is too often left to the intern.

To sum up:—The routine prescribing for the relief of pain can be much simplified and made more efficient, and the cost to the hospital very much reduced. As an antineuralgic, acetanilid in 3 grain doses. Pain due to contusions or infections, morphine; as an antirheumatic acetylsalicylic acid; to relieve bronchial irritation, codeine.

As a hypnotic chloral hydrate is the most efficient and the cheapest. The pharmacopeial dose is .5 gm. or 7½ grains. Dr. Fantus thinks that this dose is three times too much, as sleep was produced in nearly 100 per cent. of cases by 2¼ grains. The dose usually ordered at Mercy is 5 grains. There is no hangover the next day.

If you must use a barbituric acid preparation, learn something about barbital which has an efficiency index of 94, the highest of the group and costs less than phenobarbital. If you must have phenobarbital prescribe it under that name, not as luminal.

Within the past hundred years many books on *Materia Medica* and *Therapeutics* have been published. Many pages of them are filled with the laudation of the virtues and uses of drugs that now are as dead as the dodo; but a few things in each book have survived on their merits and will continue to survive. The present generation pays little attention to the books, but gets its knowledge of therapeutics from the persuasive voice of the detail man and from the flood of literature from the manufacturing chemists. While a few of these new drugs will survive, it will be only a matter of time until the vast majority of these wonderful cure alls will be in the same class as the sulphur bag that was worn suspended from the neck to prevent smallpox. A drug is not necessarily good because it is new, and is not necessarily bad because it is old.

# Endotracheal Anaesthesia and Ear, Nose and Throat Surgery

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**S**URELY the most unpleasant operation for any surgeon must be tonsillectomy performed under the usual conditions. He has to sit or stand, according to technique, in an atmosphere sufficiently saturated with ether to keep the patient anaesthetised. This ether-laden air is blown in at one corner of the mouth by the anaesthetist and comes back at each expiration through the gagged-open mouth, full into the face of the surgeon. With an endotracheal tube passed through the nose and fitted with an expiratory valve, the surgeon is spared all this, and the patient receives a smooth anaesthesia through an assured airway, with a full complement of oxygen.

In young children who are to have their tonsils and adenoids removed endotracheal anaesthesia is not so desirable. For one thing it is easier to keep a child anaesthetised with the ordinary gag method: and furthermore the operation is simpler and quicker than in adults, as the tonsils of children are not fibrous and adherent and are removed for other reasons than recurrent tonsillitis. In older children, however, endotracheal anaesthesia may be of advantage, but can be used only where there is no gross hypertrophy of the adenoidal tissues.

Whereas endotracheal anaesthesia is desirable for tonsillectomy, it might almost be described as essential for operations on the nose, where general anaesthesia is required. The tube is passed through the mouth and the post-nasal space is packed off with vaseline gauze. The surgeon can then work, unhindered by the anaesthetist's hands, and with the patient's head in the most suitable position. The lightest possible anaesthesia can thus be maintained. The introduction of the tube and post-nasal packing will add five minutes to the induction of anaesthesia, but this is time well spent, as the patient is now free from the risk of inhaling septic material or blood from the site of operation. The anaesthetic employed may be that of the anaesthetist's choice, gas and oxygen, cyclopropane, or ether and oxygen.

For operations on the mastoid endotracheal anaesthesia is useful. For the radical mastoid operation, which may take up to one and a half hours of operating time, it is very desirable that the lightest possible anaesthesia should be maintained, and this is the surest way of obtaining it. As the face does not have to be covered with a mask, the anaesthetist can spend as long as the surgeon asks, looking for the facial "twitch", without interfering with the course of the anaesthesia. In the acute mastoid following upon or even coincident with a cold, intubation should be avoided, as there is the risk of carrying down with the tube organisms into the trachea, with subsequent post-operative chest complications. This gives the surgeon no reason for blaming the anaesthetist for the complications, should they occur, but he will get the blame anyway!

### *Technique of Intubation.*

There are several methods described for passing the endotracheal tube into the larynx, but they are all modifications of the two chief methods. These are blind intubation and intubation under direct vision.

Magill's tubes are used. One of suitable size is selected and fitted with an endotracheal connection, and the lower two-thirds of the tube are lubricated with a water-soluble lubricant. The nose is sprayed with 20% Cocaine to which an equal quantity of Adrenaline has been added. If this is done during inspiration, some will be carried down as far as the pharynx and larynx. This shrinks the nasal mucous membrane and abolishes pharyngeal and laryngeal reflexes that might interfere with the easy passage of the tube. Anaesthesia is then induced. When the level of anaesthesia is suitable for the introduction of the tube a few breaths of carbon dioxide are given, and the deeper respirations make the blind passage of the tube much easier.

(a) *Blind Intubation.* With the head slightly flexed, the tube is passed into whichever nostril has the better airway. Once inside the nostril the direction of the tube is almost vertically downwards, following the floor of nose, and then forwards toward the larynx. No strength is required for this manoeuvre, and the tube should pass easily. If the anaesthetist listens to the respirations through the tube, he will be able to tell if he is near to the larynx or if he has passed it. He can alter the position of the larynx laterally with his fingers on the patient's neck; or he can increase or decrease the flexion of the head to bring the tube into the right position. If the tube does not pass easily, it is unwise to persist in attempts at blind intubation, as trauma to the tissues is highly undesirable. The laryngoscope should then be used.

(b) *Intubation under Direct Vision.* For this procedure Magill's Laryngoscope and forceps are required. The laryngoscope has a battery in the handle as this is safer than using the electric current, there being no risk of sparking. It has a long spatula blade and the light is at the end. There should be two or three interchangeable blades of different sizes. If the teeth are loose and sparse, they should be counted before and after the procedure, and again before the patient leaves the theatre. The laryngoscope is passed through the mouth over the centre of the dorsum of the tongue until the epiglottis is reached. If the laryngoscope is now lifted up and slightly away from the anaesthetist, the tongue and epiglottis will be pushed forward so that the larynx comes directly into view. The front teeth should not in any circumstances be used as a fulcrum for the leverage of the laryngoscope. The endotracheal tube is now passed between the vocal cords, either from the nose or through the mouth. If it is passed down from the nose, there may be some difficulty in making it advance toward the larynx; in this case the Magill forceps are used to pick up the tube as it lies in the pharynx and direct it between the cords. If the tube is passed through the mouth, it must be protected from obstruction by the teeth by the use of a prop or gag. The anaesthetic apparatus is now connected up with the tube, and any packing around the tube in the pharynx or post-nasal space is put in place.

The anaesthetist need no longer obstruct the field. He can retire to a distance from which he can watch the excursions of the rebreathing bag, and the colour of the blood at the site of operation. His only contact with the patient from now on is a periodic check upon the pulse. Before the endotracheal tube is removed, there should be a return of the cough reflex. This may be hastened by several breaths of carbon dioxide and oxygen.

# \*Seven Years of Leper Work in Angola

W. S. GILCHRIST, M.D., C.M.

## CHAPTER I.

### By Way of Apology.

This is not the record of studied and well-directed efforts but a frank account of the somewhat spasmodic activities of one whose time has been taken up with so many other lines of work that only a small portion of it has been available for devotion to what is undoubtedly one of the greatest medical and public health problems in this part of Africa—the cure and prevention of leprosy.

I once referred to our education of medical "aides" or dispensers here in the Evangelical Missions in Angola, as "training on the run". This term might equally well be applied to the hit-or-miss way in which we have tried to deal with the problem of leprosy as it has presented itself to us during these last seven years at Camundongo. "Jack of all trades and master of none" applies to many of us who are engaged in medical work in Africa. Sick people come to us in great numbers and they *must* be examined and treated. That's why we came to Africa. Our greatest joy is in adding some drop of sweetness to this continent's bitter cup of sickness and in lessening, though it be but little, the black man's great burden of suffering. But to treat any considerable number of patients even tolerably well the mission doctor must have native assistants, and this involves training, and training takes time. To diagnose many of the ills that swarm about our doors demands the use of at least some laboratory methods and procedures, and this, too, means the consumption of another portion of one's much-budgeted time. Surgery is our greatest weapon in our war with Black Magic. Operative work, however, cannot be hurried beyond a certain point and still remain good surgery. It calls for the use of much of our time. The distant villages need and appeal for sub-dispensaries. To teach the workers who shall take charge of these out-posts of healing and later to superintend their efforts when they have begun "village dispensing" we must devote a great many hours and much of our all-too-limited energy. So it is that at Camundongo our leper work has been and continues to be just one of a number of activities in the fields of preventive and curative medicine. It has not been carefully planned or organized, but like Topsy, has just "growed up".

## CHAPTER II.

### Growth.

Looking back after seven years, it seems that some of the reasons for the growth of leper work in the Camundongo area are the following:

I have always believed in the need of carrying medical work to the villages and I have therefore spent much time itinerating especially in the more

distant parts of our field. As I have gone about the villages I have come upon lepers here and there and I have encouraged them to come to the mission for treatment.

During the first few years a free and sufficient supply of chaulmoogra oil was always available thanks to the kindness of the American Branch of the Mission to Lepers, and to the interest of my friend, Dr. H. Stanley Hollenbeck, of the Elende Mission. (Of late, as our numbers of lepers have increased, we have had some difficulty in obtaining an adequate supply of chaulmoogra, and there have been, as a consequence, serious "gaps" in the continuity of the treatment of many of our cases.) The fact that medicine was always available during the early days of the work so that all cases who came to us could be immediately placed under treatment was most important in establishing a good "reputation" for the leper camp.

We have always tried to provide food for our lepers. Undoubtedly a full and attractive diet plays an important part in the cure of leprosy. Often we have been hard put to find funds to buy sufficient corn, beans, cabbage, meat and dried fish (the foods most readily available in this part of Africa) to meet the needs of our ever-increasing numbers of lepers. At times rations have been very low indeed, but always "the jar of meal has not altogether wasted nor has the cruse of oil completely failed".

In the beginning a fine young man, Guilherme Savisapa by name, was secured to head "the camp without the camp". To his patient and kindly care for the physical and spiritual needs of the sufferers much of the success of the work is due.

Not least among the factors that have contributed to the popularity of our leper "camp" has been the "moccasin telegraph". It is surprising how news spreads by word of mouth in Africa. It is said that in the days of the Civil War in the United States the slaves of the southern plantations often knew the results of the latest battle long ere word had been received by their white masters. In the changing Africa of to-day fleet feet and active tongues rival more modern methods of communication. I have often been amazed to find how the word of cures, free food and kind treatment has reached far-distant parts of the country. A short time after we had begun to use intravenous injections of methylene blue in the treatment of leprosy I was passing through a village in quite an isolated part of the bush many kilometres distant from the mission station. In the course of a conversation about our work I heard a "raw" native use a word which seemed new to me. The word was "Zulu". I was puzzled for an instant. Zulu? What could that Umbundu word mean? And then it dawned on me that it was the native adaption of the Portuguese "azul metilene" (methylene blue)!

Early in 1936, Miss Elizabeth MacKenzie, while visiting Camundongo, was conducting Sunday afternoon service at the leper camp. At the conclusion of her characteristically warm and direct appeal to the lepers the question was raised as to how they might show their gratitude for what had been done for them. As a result of that Sunday meeting some eight lepers left on an itinerary of testimony throughout the villages in Bié and in the Luimbi country. They told and showed what the results of care and treatment were and urged their fellow-lepers whom they met to come in to Camundongo. Their story was eagerly heard. One of them, Sabino by name, came to his home village. "Where is Sabino?", he asked. "Oh, Sabino died long ago", they told him. "He was very bad with leprosy. Then he went away and we have

seen no more of him so surely he is long since dead." Then Sabino said, "Look well at me. I am that Sabino who went away to die and now I am almost well!" The itinerary bore fruit. Before long our numbers began to increase rapidly as first one and then another decided to heed the advice of the voluntary messengers from Camundongo and to take a chance on "the white man's medicine". In less than a year more cases were admitted to the "camp" than had been treated during the four and a half years since its inauguration. For financial and other reasons we have not seen fit to encourage any more of these itineraries, but if we were in a position to care for larger numbers of lepers than we have at present I can think of no more effective way of bringing them in.

While in London en route to Canada in the Spring of 1934, contacts were made with the Mission to Lepers, and through the kindness of the general secretary of that great Society, Mr. W. H. P. Anderson (a fellow-bluenose, by the way), a generous grant was secured for our work. This financial aid has been maintained and without it the continuance of the treatment of lepers on anything approaching its present scale would be impossible.

Many kind gifts, some of them truly sacrificial, from friends and relatives in Canada and elsewhere, have helped us over the rough spots when it almost seemed that we should have to close our doors to newcomers. They have also made possible the building of the new leprosarium and the erection of that long-desired adjunct to our work, a home for uninfected children of leper parents.

### CHAPTER III.

#### The Leprosarium.

Folks at home see pictures of the missionary doctor in Africa kneeling by the side of a black patient in the forest. His operating room is the tropical jungle, his assistants wide-eyed children of nature, his equipment the contents of a well-worn black bag. And they are gripped by the romance of pioneer medical missions. Small wonder! Even those of us whose work takes us often to the bush and who know what it is to labour under primitive conditions on the open veldt or in the virgin forest do not find that the romance of it all wears thin with the passing of the years or that the special joys of pioneer work grow cold. Nevertheless there is another side to the picture. Lack of equipment, accommodation and facilities for effective work are real problems to most of us in this part of Africa. There are times when we long for many of the "good things" with which the medical man at home is so richly blessed—the laboratory, the highly skilled specialists, the X-ray and all the other handservants of modern medical science. It was a great day for us, therefore when the new leprosarium was ready and we could move our patients into it. To be sure the roofs were of grass and most of the floors beaten mud. Doors and windows of the patients' houses were merely reed mats. There were few of the things that you would find in such a plant in many other lands. But in the room for injections and treatments there was space to work. There was a corner for a desk and cabinet where records and fyles might be kept. There was a chapel where our *chers pauvres de Dieu* might meet and worship.



## CHAPTER IV.

## (In the Skin Like the Plague of Leprosy)

... Lev. 13.2

There are some who will read this report who would like to ask, "But what is leprosy like?" How does a leper look? For the interest of such I write this chapter.

Most of those who come to us for treatment would not seem to you at first glance to have anything very much the matter with them. You might notice a light copper coloured spot on the forehead or perhaps one or two on the back or arms. In many parts of the country where the disease has apparently made its appearance only recently, I have known natives to have such spots for some time without attaching any importance to them until graver symptoms developed. In other parts, where the disease is more rife and particularly where we have been teaching, preaching and practising the early recognition, treatment and control of the disease, the first tiny spot is at once noted and the diagnosis made. If the spot is not characteristic, so that there is some doubt as to whether it really is leprosy or not, one of our native nurses is often called in to decide the matter.

The most significant fact about the early skin changes in leprosy is that of the diminution of the sensation of light touch. We teach our people to make a tiny pencil of cotton wool and to touch the affected area of skin lightly. If the patient feels nothing when so touched over the area of the "spot", whereas a similar touch on the surrounding healthy skin can be easily felt, it is most significant—so much so that if the patient be in a far-away village where the doctor cannot be easily consulted we recommend that chaulmoogra treatment be commenced at once.

Of course there are other aids to diagnosis. Chief among these is the microscopic examination of stained smears made from a scraping of the mucous membrane of the nose. The bacillus of leprosy may often be found in such a scraping. Both in appearance and in the manner in which it may be stained it is very much like the bacillus of tuberculosis. Indeed the more I see of leprosy the more it seems to me that it is a first cousin of tuberculosis.

Not all cases of leprosy begin with the appearance of spots. Sometimes the first thing that the patient notices is a heaviness and sensation of pin-pricks in the feet or a tingling in the fingers. At the same time there is often a continual lethargy and feeling of drowsiness.

"Owesi wa lua" (an awful laziness) is how many of our lepers describe this early symptom of the disease. (Of course many of us who suffer from this morphean tendency never develop leprosy!)

In other cases—and they are often the most easily cured—the first sign is the appearance of nodules under the skin, the ears, nose, forehead or cheeks. This produces what is sometimes called "the lion-like face".

Now there is nothing very striking about these early signs and symptoms of leprosy and if you should see only this type of patient you might feel that leprosy was not such a terrible disease after all. I have sometimes taken visitors to our village treatment centres where a large proportion of the cases are "early", with only a few spots or slight changes of sensation in the members or a tiny nodule or two about the ears or nose, and my visiting friends have said, "There doesn't seem to be much the matter with these people. Why, they look quite healthy!" On the other hand those who come to the leprosarium and are confronted by forty or fifty men, women and children

with faces terribly mutilated, *sans* toes and fingers, bodies covered with great salient copper-coloured spots, extremities full of blisters and open ulcers, exclaim at once, "What a wonderful work! How splendid it is to be able to save these people from slow death, to cure their sores, to bring new life into their paralyzed hands and feet!!..." True. Some we lose, of course, but many are saved. Hands that have long since forgotten how to grasp the handle of the hoe or hatchet *do* find new strength and life and learn to work again. The lion-face becomes human again. The ulcers heal. Leprosy—even *advanced* leprosy—*can* be cured. . . . But lost fingers cannot be replaced. Deformed feet cannot be made fleet and free again. Here in Africa we know the loss and pain of the "years that the locust hath eaten", and who can restore to the leper the years of active manhood or womanhood which the little rod-like bacilli have taken away. Even in the early cases treatment must be prolonged if permanent results are to be obtained. In the advanced cases much more so. Five years of treatment are not sufficient for many of those in whom the disease has been allowed to run unchecked until nerves are destroyed and limbs mutilated. . . . And so it is that while we seek to find and save the poor, crippled, loathsome, *advanced* leper, we are desperately anxious to reach, to warn and to treat the *early* leper so that the scattered spots may soon become whole again, the tingling fingers may not become twisted and then drop off, the "heavy" feet may become light and whole before they have been lightened by the loss of ulcerated toes.

## CHAPTER V.

### Statistics

In this chapter an effort is made to assemble a few of the facts and figures from our records which may be of interest to the readers of this report. It should be realized that these statistics are not as complete or as well analyzed as they might be. During much of the time covered by these figures I have been absent from Camundongo. During one year we were stationed in Dondi. Another year found us in Canada on furlough. So that many of the records upon which I had to depend were kept by native "boys" untrained for such work. The mixture of "pidgin" Portuguese and Umbundu in their notations as to the condition of patients, results of treatment, etc., is sometimes more entertaining than it is enlightening. However, from a review of our records, such as they are, some interesting facts appear.

Since the first grass hut was built for the first leper in 1931, four hundred and ten lepers have been treated at Camundongo. Of these one hundred and twelve have become very much better or have ceased to show any signs whatsoever of the disease.

During the same period of time some three hundred lepers have been admitted to treatment in ten village centres. Since most of this village work is quite new the number of lepers greatly improved or cured is still relatively small.

Perhaps the most important fact revealed by a survey of our records is also the most discouraging. It is the difficulty experienced in persuading patients to complete the full course of treatments. Discouraging, too, is the fact, revealed by questioning many patients from many parts of the country, of the existence of great numbers of lepers who are not under treatment and are not likely to seek treatment. Some idea of the difficulty of completing the "cure" in the cases which come to us is shown by an examination of the

case records of eighty lepers admitted to the leprosarium during the first few years of its existence.

Of these eighty cases:

- 11 (13.7 per cent) remained with us less than 3 months.
- 13 (16.25 per cent) remained with us from 3 to 6 mos.
- 13 (16.25 per cent) remained with us from 6 mos. to 1 yr.
- 13 (16.25 per cent) remained with us from 1 to 2 years.
- 15 (18.75 per cent) remained with us from 2 to 3 years.
- 15 (18.75 per cent) remained with us from 3 to 4 years.

When it is realized that most cases who come to us need at least three years of treatment it will be seen that these figures are far from satisfactory.

The following analysis of 351 lepers admitted to the leprosarium at Camundongo gives an idea of the condition of our patients when they present themselves for treatment:

A few spots only. Very early cases . . . . .	37 ( 10.5 per cent)
Many spots. No marked paralysis or deformity. No ulcers . . . . .	83 ( 23.6 per cent)
Paralysis of fingers or toes . . . . .	47 ( 13.3 per cent)
Nodular cases. Many with paralysis and ulceration as well . . . . .	41 ( 11.6 per cent)
Ulceration. Loss of toes and digits . . . . .	143 ( 41. per cent)
Total . . . . .	351 (100. per cent)

It will be readily seen from these figures that a great proportion of the cases are already far advanced before they seek treatment or are found and persuaded to accept treatment by us.

Thoroughness of treatment is of great importance. Many of our patients cannot be persuaded to "stick it out". Often, when the beneficial effects of treatment have made themselves felt the patient will go to his or her village to "visit".

The visit is often prolonged and when the patient returns to us the disease is found to have advanced again. The following table indicates the relation of results obtained to total period of treatment and regularity or thoroughness of treatment.

Percentage of prescribed injections received.

Years of Treatment	50 per cent				50-75 per cent				75-100 per cent			
	U	I	A	D	U	I	A	D	U	I	A	D
0-1 year . . . . .	2	1				3			1	26	1	5
1-2 years . . . . .	4	7			1	18		1		24	4	3
2-3 years . . . . .			2			4				3	4	1
3-4 years . . . . .	1					2				1	4	
4-5 years . . . . .	1	1				2		1			5	
Total . . . . .	8	11			1	29		2	1	54	18	9
	Group of 19 cases				Group of 32 cases				Group of 82 cases			

U—unimproved cases.

A—arrested or cured cases.

I—improved cases.

D—Died.

The following table indicates the relation of results obtained to length of period of treatment and thoroughness of treatment in various types of cases.

Received 70 per cent or more of prescribed injections.

Years of Treatment	"Early" cases				Moderately advanced				Advanced cases			
	U	I	A	D	U	I	A	D	U	I	A	D
1 year.....		6	1				7			12	2	5
2 years.....		5	2				8			30	3	4
3 years.....			3							2		1
4-5 years.....							6			4		1
Total.....		11	6				21			48	5	11

Received less than 70 per cent of prescribed injections.

Years of Treatment	"Early" cases				Moderately advanced				Advanced cases			
	U	I	A	D	U	I	A	D	U	I	A	D
1 year.....							1			1		
2 years.....	1	3			1	2			4	4		
3 years.....		2				1						
4-5 years.....					1				1	1		
Total.....	1	5			2	4			6	5		

## CHAPTER VI.

### Vocational Therapy.

It has often been said that "Time is the greatest healer". There is another remedy which is perhaps worthy of an equal place if we consider the whole range of human ills, mental and physical. The medicine is *Work*.

Perhaps during the early years of our work we were not sufficiently aware of the importance of wisely directed manual activities. Certainly we made no effort to teach useful trades and handicrafts to our people.

A man among men and a prince of physicians, Dr. Walter MacLean, has recently made some interesting remarks about the possibility of undesirable effects, in cases of tuberculosis, when intense activity is abruptly succeeded by absolute inaction. The leper who has been fighting to earn a livelihood in the village, when he finds himself in the leprosarium with free food and hut provided for him, tends to do just as little as he possibly can. This inactivity, especially if prolonged, is harmful. On the other hand it is difficult at times to keep the leper usefully employed. True, at almost any time of the year

you can put a hoe into his or her hands and find some soil to be tilled. But many of the hands cannot hold a hoe, and those who *can* begin to think, after a while, "Well, this is not getting me anywhere, I might just as well be cultivating my own fields in my own village." They forget, of course, that if they were in their own villages they would not be receiving the treatment which they so much need. But the African is a child and his mental reactions are most surprising at times. The greatest difficulty, as one might suppose, is encountered with the lepers who have become very much better as a result of treatment. Time begins to hang heavy on their hands. Life in the institution begins to pall. They lack the necessary patience to "stick it out" until the cure is made complete.

For this latter type of patient especially, but by no means for them alone, opportunity and encouragement to learn trades and to engage in interesting and profitable handicrafts is of the greatest therapeutic importance. Not only that, for the ability to make hoes, to tan leather, to weave cloth, etc., makes it easier for the cured leper to get a new start in his own or in another village when he has been discharged from the institution. Indeed it may save him from that fate which is all too common in this part of Africa—selling himself into slavery (to a fellow-black of course) for the sake of a four-dollar hut-tax which he is unable to "raise".

I think our most badly crippled lot are the weavers. Young Kassela has the brightest face of any man in the "camp" but his hands are pretty sorry specimens. Not a whole finger does he own. I really wasn't very serious when I suggested that he learn to weave, but *he* took me seriously—and learned! Who can tell the satisfaction that Cassela finds in making those stumps of fingers do *real work*!

On second thought I realize that the weavers aren't the most deformed group of patients after all. The folks who can't do anything else are the *spinners*. Their job is to "pota" the crude cotton (some of which we grow ourselves), that is to spin it out into thread between thumb and fingers. But what thumbs and fingers! These are mostly old men and women. Somebody who knows the Ovimbundu says "And women! A likely story that! Whoever heard of a woman in the Umbundu country ever trying to 'pota'!" Now, that's just what the leper women said to me when I suggested that they help the men spin thread! Was I crazy! I wonder if all primitive people have such definite ideas of what is man's work and what pertains to woman as do our folks in Angola. A few months after I made the "crazy" suggestion I visited the country of the Esele people and what did I find in the great village of Katanda but all the women "pota"-ing away to beat the band! "Say," I suggested, "Why don't you men help the women out with this job. The *men* do it up in our Umbundu country!" Well they thought I was a funny fellow sure enough. That was the best joke they had heard in a long time! But when I came back to Camundongo I was ready for our women. I was right after all! Women could spin! Hadn't I seen it with my own eyes! So amid much laughter and mockery from the men, the women began to "pota"—and—wonder of wonders! they found that they could!

The blacksmiths are the hearty fellows—just as at home. How they laugh to find how weak they are when they begin to swing the hammer, and how they boast when muscles begin to harden and swell! True, some of their hoes are almost as bad as the ones that come from Europe (apparently there isn't any decent metal to spare there except for very different purposes!),

and some of their hatchets would do a better job in cutting a Canadian spruce than an African ironwood, but they're learning, they're busy, and they're happy!

The carpenters are coming on too. We had only twenty-five dollars to buy tools for them but they're learning to use them well. The doors and windows for the well-children's home were made by the leper carpenters.

If time would permit one might tell of the tanners, the masons, the classes in knitting and all the other activities which we believe are helping to make our "leper camp" not only a place of healing but a stepping-stone to fuller life for those who must bide with us for three or four or five long years.

## CHAPTER VII.

### Difficulties.

When one sees so many advanced cases of leprosy, a menace to all with whom they come in intimate contact, unwilling to accept treatment—or at least the white man's treatment and so many others who, after a few short months of injections at the leprosarium, or in the villages, refuse to continue under treatment, one is inclined to say, "Round them up. Interne them. *Make* them take treatment!" Yet it is certain that greater progress will be made in the war on leprosy by the use of the cannon of kindness and the sword of psychology than by the sepoy's whip.

The difficulty in persuading lepers to stay until they are completely cured is indeed a real one, but progress *is* being made, especially since the development of centres for the treatment of lepers in the villages. Many who for one reason or another refuse to remain in the leprosarium have nevertheless seen, during their stay with us, the beneficial results of medication, and when they leave they seek treatment in the outpost nearest to their homes.

There seem to be three main reasons why so many lepers leave us before they are completely cured:

1. Because the treatment is so tedious. Moderately advanced cases need at least three years of treatment. Many require four or five years to obtain a permanent cure. (We are beginning the *intravenous* use of chaulmoogra oil to supplement or supplant the *intramuscular* injections hitherto used, and we are hopeful that the period of treatment may thus be reduced. Intravenous injections of methylene blue have produced some dramatic results but, on the whole, have not been found effective in reducing the necessary period of treatment.)

Of course this factor of boredom and desire to escape from treatment is not peculiar to lepers nor does it obtain only in Africa. The treatment of Bilharz'ia, for example, occupies as a rule only five weeks. Nevertheless when, after the first two weeks of tartar emetic injections, the painful symptoms have disappeared how difficult it often is to persuade the bilharzia patient that he is not yet cured and that, if he does not finish the whole series of injections, the bladder pain and hemorrhage will return! Anyone who has worked in public health centres at home knows how much patience is required to persuade patients in the venereal clinics, for example, to carry on with the prescribed treatment until they are pronounced well.

2. The pressure from relatives in the villages who say they are being "pushed" for the patient's tax money. This does not apply so much to the leper who has already lost fingers or toes or who is obviously crippled. Again

and again, however, we hear the same story from less advanced cases who are still able to work, "Our relatives are suffering because we have not paid our taxes. We must go and earn the money."

3. The child-like African nature. This is a very real factor and has to be taken into consideration in all our work. "The sword of psychology"—native psychology—every missionary must acquire if he is to fight successfully against either the ills of the body or the enemies of the spirit.

Sekulu Sacaliova of the Luimbi tribe goes down to the old camp site to dig sweet potatoes for himself. When he comes back to the leprosarium he meets Sekulu Chicola, an Ochimbundu by blood. Chicola says, "You know very well you've got no right to go and dig potatoes for yourself. We share and share alike here. When it's time to dig potatoes they are to be dug by all and to be equally divided. Anyway you've got a lot of crust for a good-for-nothing Luimbi!" Now Sacaliova is "mad". He's also scared "If Chicola can talk like that to me", he reasons, "He's got a charm to kill me. I'd better clear out!" The next day he runs away and, meeting another leper some ten miles from the camp says, "Yes, I was getting better. I'll probably die in the village without treatment but I'd rather die than stay where there's a 'lion' like Chicola!"

No institution of any size either at home or in Africa can be a success without discipline, but the missionary and his helpers in Africa must know how to temper justice with mercy and the hot word of righteous indignation with the cooling balm of humour. You wouldn't think that a scolding would mean much to a cripple who feels life creeping back into his deadened fingers and toes and who knows that he is being saved from death. But the African has a one-track mind at times and the "hot words" crowd everything else out of his consciousness. So you must enforce discipline with a frown on one side of your face and a smile on the other. The missionary who does not know how to laugh after he scolds should not come to Africa.

You don't hear grown people at home talk much of homesickness but "ongeva" is a real malady to the African. After some months in the leprosarium many of our patients begin to long for their "own folks" and may leave us for no other reason than the call of home and kindred.

Although the difficulties are many, and try as we may, numbers discontinue treatment long ere they are really cured, yet the losses are not as heavy as would appear at first glance, for many of those who leave us prematurely return before the disease has made any, or much, further advance. Many others, as already stated, are coming to the village leper-dispensers for treatment.

(To be continued.)

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It is to be distinctly understood that the Editors of this Journal do not necessarily subscribe to the views of its contributors, except those which may be expressed in this section.

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## PALLIATION IN RADIATION THERAPY

WHEN a clinician treats a chronic disease of the heart or kidneys or such conditions as diabetes and hypertension, all incurable diseases, and is able to alleviate symptoms and prolong life, he obtains, and justly so, considerable credit. But when a physician is considering radiation therapy almost invariably the question is how many cases are being cured. When it is realized that in any large hospital service at least 75% of the cases are definitely advanced, and sometimes, far advanced when presenting themselves for treatment, it will be readily appreciated that palliation is the greater field in radiation therapy. The palliative effect of radiation is frequently lost sight of and is difficult to show in any statistical study.

In the years to come, through improvement in apparatus and technique, many of the now hopeless cases may be brought within the realm of clinical cure. The number of truly early cases applying for treatment will become more numerous as the result of the gradual education of the public. But at present the value of radiation should be assessed not only by the cases it cures but also by those in which it relieves pain and prolongs life. Splendid palliative results are often obtained. For example:

A far advanced case of cancer of the cervix with severe haemorrhage in a pale undernourished woman. Now, after six months, she is able to do her housework, the haemorrhage has ceased and the pain is relieved. How long this condition will continue it is impossible to say but the temporary improvement has been well worth the effort.

A patient with a transitional cell cancer of the ethmoid region received attention from time to time lived for five years in complete comfort, death being due to another cause.



A young man with a tumour of the vertebrae, who suffered severe pain in his extremities, is now free from symptoms and is able to walk about.

A boy with a fibro-sarcoma of the thigh has had freedom from symptoms for seven years.

Many other examples of palliation in cancer of the breast, rectum, orbit, antra, etc. and deep seated lesions as well could be quoted.

X-ray therapy will as a rule relieve the extreme pain so often associated with a skeletal metastasis. It must be admitted that the results obtained from the practice of sending very advanced cases to the X-ray department is not calculated to reflect much credit on the method of treatment. Physicians realize the hopelessness of a case, but are only too pleased to pass the patient along to some one who must ultimately bear the responsibility for the failure to cure. In many cases the patient is cheered by the thought that some form of treatment is offered him and does not, nor would we have him, realize that his case has gone beyond the stage when more than temporary relief is to be expected. When after a period of palliation death occurs, the friends and relations, who should have been informed by their medical attendant of the prognosis in the first instance, mistakenly consider the treatment a failure or may even feel that it hastened the end. In spite of this, the moral obligation remains and it is our duty to do everything in our power to relieve suffering even at the loss of reputation.

It has long been the opinion of the writer that more might be done in making the last days of the cancer patient comfortable. The free administration of opiates, the relief of superadded infections and the odour arising therefrom and the use of easily assimilated foods are some of the means which can be employed. Unfortunately for the poor these are not available outside of an institution.

S. R. J.

## CASE REPORTS

### Hand-Schüller-Christian Syndrome

The following case is presented primarily on account of its rarity and because it presents all three of the trilogy of symptoms typical of the disease. These are exophthalmus, polyuria and defects of the membranous bones.

J. B. aged 8 years, female. Normal full term child, second of a family of two. There is one brother aged 12, overweight but healthy. Mother and father both alive and well. The patient was perfectly well until the age of two years. At this time it was noticed that the child cried on being handled and investigation revealed that the region involved was the left hip. There was pain on movement and limitation of movement. There was little change in the next few months and then there developed a marked polydipsia and polyuria—the child drinking as much as 5-6 quarts of fluid in 24 hours. Shortly after this the left leg was placed in a P. O. P. spica, but no improvement was noted on its removal 2 months later. About this time there was an area of softening noted over the left parietal region of the skull. Plates of the skull and pelvis were taken at this time. They showed a marked loss of the bony structure of the left ilium. The skull showed a circular area of absorption over the region mentioned above. In the light of present knowledge of this disease these bony defects are considered almost pathognomonic. There was very little change in the condition of the patient for the next year and then it became apparent that the mouth was sore. Examination revealed that the teeth were coming in in a very indiscriminate fashion, deformed and of poor quality. The gum margins were inflamed. Irritability became a feature at this time and the child was quite miserable. The hip continued to be painful and the diabetes insipidus persisted. There was no great change in the next two years, when it was noticed that other areas of the skull showed softening, and there was a beginning exophthalmus of the left eye. Throughout the course of the ensuing three years the disease was noted to be progressing very slowly. The hip condition kept the child in bed. Mentally it was even a little above normal. The exophthalmus increased, and the child became bilaterally deaf. At this time, the child now being about eight, plates were again made of the skull and the pelvis. These showed a marked advance of the disease. The ilium was almost entirely replaced and several large areas were noted in the skull, one particularly in the region of the left orbit. The mouth at this time was so sore that only fluids could be taken, and the teeth were seen to be lying haphazardly over the floor of the mouth. About this time the diabetes insipidus cleared up not to return.

As was mentioned before there was no mental impairment throughout the course of the disease.

The child went progressively down hill and died at the age of nine from intercurrent infection. No autopsy could be obtained.

This case has been presented because it represents such a typical picture of this disease.

Sir John Fraser has written an admirable article on the above condition. He prefers the term Skeletal Lipoid Granulomatosis. His article appeared in *The British Journal of Surgery*, 1936. In it he deals fully with all aspects of the disease.

R. E. PRICE, M.D.,  
Amherst, N. S.

### A Case of Lipoid Nephrosis Treated With Lugol's Iodine

September 1936. Male, age 3. Weight 32 lbs. Family and personal history negative.

Present illness began in September 1936 about two weeks after a rash of a few hours duration. Parents noticed swelling of patient's face and extremities and brought him to my office for examination.

Examination revealed a normally developed child. Temperature was 100, pulse 120 and respirations 22. There were no palpable masses or areas of tenderness on abdominal examination. The skin over the whole body was oedematous, pitting on pressure. Weight was 38 lbs., an increase of 6 lbs. in two weeks.

Urinalysis—Sp. Gv. 1018. Sugar—Negative. Albumen three plus. Microscopic—an occasional R.B.C. and granular cast.

Patient was placed on protein-free diet with restriction of fluids. Within a month his weight increased to 60 lbs. and his urinary output dropped to less than one ounce in 24 hours. Anasarca became so severe that daily multiple incisions about the scrotum, thighs and abdomen became necessary.

By October 15th, 1936, free fluid in abdomen had become so plentiful that paracentesis was performed, yielding 180 oz. of opalescent fluid having a Sp. Gv. of 1.008.

This operation was repeated weekly with approximately the same result each time. The urinary output gradually increased to 5 or 6 oz. daily by January 1937. By this time the anasarca had largely disappeared, but an enormous abdomen requiring weekly paracentesis remained.

The protein content of the diet was gradually increased to heroic proportions without any appreciable effect on the ascites.

From January 1937 to June 1938 a weekly paracentesis was required; the recovery varying from 160 to 250 oz. During this time the urinary output slowly increased to a daily high of 16 oz.

In June 1938 patient was admitted to the V. G. Hospital on Dr. MacKenzie's service where he was under the care of Dr. MacKenzie and Dr. Holland.

The results of laboratory investigations carried out at the V. G. follow: Blood Chemistry normal, with cholesterol 388 mgm.

Kahn Test negative.

Hb. 60%. R.B.Cs. 3,526,000. W.B.Cs. 11,000 with a normal Schilling count.

On June 21 albumen Globulin ratio was 1:3.

Cholesterol 625 mgms.

Serum Albumen ..... 0.85 mgms.

Serum Globulin ..... 2.60 mgms.

Serum Fibronogin ..... 0.50 mgms.

Total Serum Proteins ..... 3.95 mgms.

Examination of fluid withdrawn—opalescent fluid Sp. Gv. 1,008. Albumen 65 mgms. Microscopic—a few mesothelial cells and R.B.Cs.

Urinalysis—Sp. Gv. 1,020. Albumen was over 1,000 mgms. per 100 cc. Numerous granular casts, 5 to 10 pus cells and occasional R.B.C.

During the week of the C.M.A. meeting, patient was examined by Dr. J. C. Meakins of Montreal, who presented this case among others at a clinic at the Nova Scotian Hotel.

Shortly after patient returned home in July, he was given  $\frac{1}{2}$  gr. thyroid extract daily for two weeks. During this time the ascites became worse and it was discontinued.

Early in August, while searching for some information on serum proteins, I found an article in the *New England Journal of Medicine*, Feb. 17th, 1938, by Dr. Elmer Bartells of the Lahey Clinic, on Serum Proteins in Hyperthyroidism.

According to this article the serum protein determinations were below normal in 63% of cases of hyperthyroidism on admission. After ten days preoperative treatment they were below normal in 37%.

An analysis of the determinations given also showed that those patients whose total serum protein was under 6 mgms. on admission (with an average of 5.58) showed an average total serum protein of 6.6 mgms. after ten days preoperative treatment with rest and Lugol's.

Those whose serum protein on admission was over 6 mgms. (with an average of 6.73 mgms.) showed no change after preoperative treatment.

In the hope that the thyroid might exert some control over the permeability of the blood vessels and, therefore, over the serum proteins, the patient was given four minims of Lugol's daily, starting on August 24th.

During the next month there was little difference noted in the patient's ascites. He still required weekly paracentesis. However, during this time his mother noticed an increase in the daily output of urine which reached a high of 45 oz.

On Sept. 24th the dose of Lugol's was increased to six minims daily. Patient required paracentesis on Sept. 30th but has not required one since. His abdomen has not increased beyond its usual size immediately after paracentesis.

This dose of Lugol's was continued until December when it was dropped to two minims daily. Early in January it was discontinued with no apparent ill effects.

I am indebted to Professor Roy Fraser of Mt. Allison University for the following determinations:

On Dec. 17th, 1938,	Serum Albumen.....	3.02 mgms.
	Serum Globulin.....	2.63 mgms.

Total Proteins.....	5.65 mgms.
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Cholesterol.....	292 mgms.
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On Jan. 15th, 1939,	Quantitative estimation of albumen in urine 760 mgms. per 100 ccs.
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On March 22nd, 1939,	Serum Albumen.....	4.03 mgms.
	Serum Globulin.....	2.58 mgms.

Total Proteins.....	6.61 mgms
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Cholesterol.....	420 mgms.
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It will be noted that the total serum protein is above the critical level of 5.5 mgms. below which oedema occurs.

The treatment of this case of Lipoid Nephrosis with Lugol's is purely empirical. Whether the marked improvement was due to the effect the enriched thyroxin may have had on the permeability of the blood vessels enabling them to hold more albumen in the circulation, or to a coincident natural recovery, I cannot say.

Dr. Meakins, after reviewing the result obtained, has very kindly offered to try Lugol's on a number of these cases at the Royal Victoria Hospital, and to let me know his results in due season.

J. A. LANGILLE, M.D.,  
Pugwash, N. S.

### Dagenan M. & B. 693 in the Treatment of Lobar Pneumonia A Report of Ten Cases

#### Case 1.

Mrs. W. A. M., age 50.

*History.* For one week previously had been suffering from influenza with headache, malaise, pain in the back, and vomiting with slight cough. Temperature 101°-103°. On February 12th, 1939, at 2 a.m. she had a chill, followed by a pain in the right lower portion of the chest. When seen at 4 p.m. the patient was complaining of a pain in the chest and cough.

*Examination.* Patient was slightly cyanosed; temperature 104°; pulse 130, respiration 40. There was dullness on percussion over the right lower lobe with restricted movement. On auscultation there was bronchial breathing with crackling rales. At 4 p.m. morphine gr.  $\frac{1}{4}$  was given subcutaneously with 4 tablets M. & B. 693 ( $7\frac{1}{2}$  gr.). At 8 p.m. 4 more tablets were given then 2 tablets q.4 h.

February 13, 1939. 8 a.m. temperature 101°, pulse 112, respiration 28; patient feeling better. 4 p.m. temperature 99°, pulse 100, respiration 24. Morphine gr.  $\frac{1}{8}$  was given subcutaneously during the night.

February 14, 1939. 8 a.m. temperature 98.4°, pulse 80, respiration 18; patient feeling well. Dosage was reduced to one tablet q.4 h. Patient continued to feel well and temperature, pulse and respiration normal. Resolution took place on the sixth day.

The only toxic effect noted was vomiting which ceased when the dosage was reduced to one tablet q.4 h.

#### Case 2.

Mrs. J. B., age 36.

The patient was first seen February 16, 1939, at twelve noon.

*History:* She had not been feeling well the previous day, but had been about her work. About 3 a.m. she had a chill, felt dizzy and weak with a pain in the right lower chest, and cough.

*Examination.* Temperature 104°, pulse 130, respiration 40; coughing. The right lower lobe was restricted in movement, dull on percussion, bronchial breathing and fine rales.

Four M. & B. 693 tablets ( $7\frac{1}{2}$  gr.) were given at twelve noon, repeated at 4 p.m. and thereafter 2 tablets q.4 h.

February 17, 1939. At 10 a.m. the temperature was 101°, pulse 112, respiration 32; patient feeling better.

February 18, 1939. At 10 a.m. the temperature was 97.8°, pulse 70 and respiration 18; patient feeling well, no pain or cough. The dosage was reduced to one tablet q.4 h., thereafter temperature, pulse and respiration continued normal. Resolution took place on the fourth day. The only toxic symptom noted was vomiting which ceased when the dosage was reduced to one tablet q.4 h.

### Case 3.

J. S. C., age 56.

This patient had had pneumonia three times previously. He was first seen on February 17, 1939.

*History.* At 11 a.m. he had a chill with pain in the right lower chest followed by a slight cough.

*Examination.* The temperature was 105°, pulse 140, respiration 44. There was restricted movement over the right lower lobe with dullness on percussion, and diminished breath sounds with fine rales.

At 5 p.m. four tablets M. & B. 693, (7½ gr.) were given, which was repeated at 9 p.m. and thereafter 2 tablets q.4 h.

February 18, 1939. At 10 a.m. the temperature was 102°, pulse 120, respiration 36; patient feeling about the same.

February 19, 1939. At 10 a.m. the temperature was 98.6°, pulse 64, respiration 16; patient feeling well, no pain. The dosage was reduced to one tablet q.4 h. The temperature, pulse and respiration remained normal. Vomiting was distressing until the dosage was reduced to one tablet q.4 h.

### Case 4.

Mrs. N. P., age 46. This patient was first seen February 21, 1939.

*History.* For one week previously she had a cold with cough and expectoration. Two days previously she had a chill with pain in the left lower chest.

*Examination.* The temperature was 103°, pulse 118, respiration 28. There was restricted movement of the left lower chest, dullness on percussion over the left lower lobe; on auscultation bronchial breathing over that lobe.

Four tablets M. & B. 693 (7½ gr.) were given at 4 p.m., which were repeated at 8 p.m. and thereafter two tablets q.4 h.

February 22, 1939. At 9 a.m. the temperature was 101°, pulse 100, respiration 24; patient feeling better.

February 23, 1939. At 3 p.m. the temperature was 98.4°, pulse 72, respiration 18; patient feeling better, no pain. The temperature, pulse and respiration remained normal. Vomiting was noted as in the other cases. Resolution took place on the fifth day.

### Case 5.

J. P., age 7 years.

This patient was first seen on March 10, 1939.

*History.* The patient had a cold for a week; on the morning of March 10, became feverish and complained of a pain in the region of the umbilicus.

*Examination.* The temperature was 104.4°, pulse 150, respiration 38; abdominal examination negative; urine negative; right side of chest was restricted in movement; dullness on percussion over the left lower lobe with bronchial breathing and fine crackling rales.

At 6 p.m. two tablets M. & B. 693 (7½ gr.) were given, which were repeated in four hours, and thereafter 1 tablet q.4 h.

March 11, 1939. At 10 a.m. the temperature was 101°, pulse 138, respiration 32. March 12, 1939. At 2 p.m. the temperature was 98.6°, pulse 80, respiration 20; patient feeling well; no pain. Resolution took place on the fifth day. In this case there was no vomiting.

#### Case 6.

J. C., age 13 years.

This patient was first seen on March 25, 1939.

*History.* Three weeks previously the patient had influenza and was in bed for one week, and in the house for one week following. After this he went back to school. Three days ago he became ill again, and developed fever, cough and expectoration with pain in the right side of the chest. The morning he was seen he coughed up rusty sputum.

*Examination.* The temperature was 103°, pulse 130, respiration 28, dullness over the right lower lobe, bronchial breathing and fine rales.

At 11 a.m. three M. & B. 693 tablets were given, which were repeated in four hours, and thereafter 1½ tablets q.4 h.

March 26, 1939. At 10 a.m. the temperature was 100°, pulse 112, respiration 24. March 27, 1939. At 10 a.m. the temperature was 97.8°, pulse 80, respiration 18; patient feeling well; dose reduced to one tablet q.4 h. He vomited once after taking the first dose, but no nausea or vomiting thereafter.

#### Case 7.

Mr. G. M., age 27.

March 30, 1939. Patient had a chill followed by pain in the left chest. When seen at 8 p.m. the temperature was 103°, pulse 120; respiration 28; dullness and bronchial breathing over left lower lobe; vomiting. Dagenan tablets given in usual dosage.

March 31st, 1939. At 4 p.m. the temperature was 100°, pulse 100, respiration 24. April 1, 1939; at 5 p.m. the temperature was 98.4°, pulse 68, respiration 18; patient feeling better. Tablets reduced to one q.4 h. Resolution took place on the fourth day. In this case the patient was vomiting before medication was started, and did not become worse; stopped the third day.

#### Case 8.

Mr. J. M., age 24.

April 3, 1939. The patient was seen at 5 p.m. He gave a history of having a chill with pain in the left chest two days previously. He was evidently very much distressed. The temperature was 101°, pulse 120, respiration 28; left lower lobe consolidated. Dagenan tablets were given as usual.

April 4, 1939. At 5 p.m. the temperature was 100°, pulse 112, respiration 24. April 5, 1939. At 10 a.m. the temperature was 98.4°, pulse 68, respiration 18; patient feeling much better. Resolution took place on the sixth day. In this case there was no nausea or vomiting.

**Case 9.**

Mr. H. C., age 75.

April 3, 1939. This patient was seen at 10 a.m. He had a chill the day before and was delirious this morning. The temperature was 100.3°, pulse 130, respiration 28; left lower lobe was consolidated. This patient had an enlarged, fibrillating heart. Dagenan tablets were given as usual. On April 4, 1939, at 10 a.m. the temperature was 100°, pulse 120, respiration 24. On April 5, 1939, at 5 p.m. the temperature was 98.4°, pulse 104, respiration 18; patient feeling better. April 7, 1939; resolution took place.

**Case 10.**

Mrs. J. S., age 76.

On April 4, 1939, the patient had a chill at 5 a.m. When seen at 8 a.m. she was coughing and expectorating rusty sputum. She gave a history of having had influenza for a week and had gone out the day before. She was very distressed when first seen; temperature was 103°, pulse 120, respiration 28; left lower lobe consolidated. Dagenan tablets were given. On April 4, 1939, at 4 p.m., the temperature was 102°, pulse 112, respiration 24. On April 5, 1939, at 10 a.m., the temperature was 100°, pulse 90, respiration 22. At 5 p.m., the same day the temperature was 99.4°, pulse 88, respiration 21. On April 6, 1939, at 8.30 a.m. the temperature was 98.4°, pulse 80, respiration 20; at 5 p.m., the same day the temperature was 99°, pulse 80, respiration 20. On April 7, 1939, at 5 p.m. the temperature was 99.8°, pulse 80, respiration 24. On April 8, 1939, at 4 p.m. the temperature was 98.4°, pulse 72, respiration 18. Resolution took place the seventh day. In this case there was no nausea nor vomiting. This patient is a diabetic, discovered last November, with a four plus sugar. She has been controlled by diet. It is interesting to note that during her illness she showed no acidosis, and only a trace of sugar in the urine: no insulin was given.

*Commentary.* From these ten cases, it will be seen that M. & B. 693 is a very important drug in the treatment of lobar pneumonia. Especially is this so in the country, where, far from a laboratory, it is practically impossible to give serum. If a few M. & B. 693 tablets are carried in one's bag, treatment may be instituted as soon as the diagnosis is made. The only disadvantage in using the drug noted in these cases was that of nausea and vomiting. Soda Bicarbonate was given with the drug, but did not seem to influence the nausea.

C. E. STUART, M.D.,  
Parrsboro, N. S.

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**LOCUMS WANTED**

Wanted a locums from the middle of June to the middle of July, salary \$150.00 a month and expenses. Apply to Dr. C. L. MacMillan of Baddeck, Cape Breton.



# Eighty-Sixth Annual Meeting of the Medical Society of Nova Scotia

"THE PINES", DIGBY, JULY 5th and 6th, 1939.

## PROVISIONAL PROGRAMME

### Tuesday, July 4th.

2.00 p.m. Executive meeting, "The Pines".

### Wednesday, July 5th.

- 9.30 a.m. Registration.  
 10.00 a.m. Formalities.  
 10.30 a.m. "Experience of the Farm Security Administration of the Federal Government in the Development of Medical Care Programmes for Low Income Farm Families."  
 DR. R. C. WILLIAMS,  
 United States Public Health Service, Washington, D. C.  
 11.15 a.m. "Medical Relief in the Province of Ontario."  
 DR. T. C. ROUTLEY, General Secretary, Canadian Medical Association, Toronto, Ontario.  
 12.00 Noon Report of Executive.  
 1.00 p.m. Adjournment.  
 2.30 p.m. First business session.  
 5.00 p.m. "Urinary Tract Infections."  
 DR. F. S. PATCH,  
 President-elect, Canadian Medical Association, Montreal, Quebec.  
 5.30 p.m. Adjournment.  
 7.30 p.m. Annual dinner.  
 Address: HON. J. B. M. BAXTER, Chief Justice of New Brunswick.  
 10.00 p.m. Dance.

### Thursday, July 6th.

- 9.00 a.m. Second Business Session.  
 10.00 a.m. Remarks by President and General Secretary of Canadian Medical Association.  
 10.30 a.m. "Coronary Artery Disease."  
 DR. THOMAS A. LEBBETTER, Yarmouth, N. S.  
 11.00 a.m. "Post-operative Thrombosis."  
 DR. L. R. MORSE, Lawrencetown, N. S.  
 11.30 a.m. "Dagenan." DR. J. R. CORSTON, Halifax, N. S.  
 12.00 Noon "Inguinal Hernia, Its Treatment with Special Reference to Fascial Procedures."  
 DR. W. K. HOUSE, New Waterford, N. S.  
 12.30 p.m. Adjournment.  
 2.30 p.m. Annual Golf Tournament or Other Entertainment.

## Halifax City Grit and Guts

Who is this iron man from Cape Breton who romps over mountains in hip rubber boots? What has he got to write letters about? Let him compare his puny effort with mine. Here is what I am *going* to do—when I am seventy.

I am doing a Gasserian ganglionectomy at the Victoria General Hospital at 2.30 p.m. on Jan. 22nd of that year. The thermometer stands at  $-18^{\circ}$ , wind velocity 61 M.P.H. and seven feet of snow on the leve'. Do I start out from my palatial home in my heated Cadillac at 2.23 p.m.?—not I. At 2 a.m. I start in hip rubber boots and snow shoes, an oxygen tank (large size) under each arm and the kitchen stove strapped on my back—and off I go. First down the St. Margaret's Bay road to Ingramport—then straight across country to Windsor (9.23 a.m.)—time out for a glass of hot milk. Taking the road again for Windsor Junction (wind now 72 M.P.H.). Arrive Windsor Junction 11.01 a.m., pause to cool off (1 min. 6 sec.), on again for Dartmouth—arrive breathless 11.06 $\frac{3}{4}$ —22 seconds to get breath—plunge into harbor rubber boots, snow shoes and everything. Arrive on Halifax side 1.49 (head winds and poor swimmer—always was) a little trouble with geese pimples but otherwise 100%. Go to Halifax Club where Jarvis (my valet) awaits with change of clothes—rub down—hot bath—sumptuous lunch. Into my Rolls Royce (the second spare one).

Arrive V. G. Hospital 2.29—operate—9 seconds (they are being done much faster when I am seventy). Patient makes wonderful recovery—back at his desk at 3.30 (same day) and never felt better. After operation do my regular day's work (26 major, 9 minor operations). Dinner at Government House and bridge. Home and to bed at 1 a.m. (a bit tired I will confess). Am I tough—Baby!

1.17 phone rings.—Can you start for Yarmouth right away?—SURE, be there in a jiffy? That seventeen minute rest certainly set me right up.

My wife says I will be nothing but a great big sissy if I take that drink of hot milk at Windsor—she is just sore because I am taking the kitchen stove and staying at the Club for lunch. Jarvis could tell you a lot about my home life.

### REQUEST FOR EARLY NUMBERS OF THE BULLETIN

The Dalhousie Medical Library has not a complete file of the first three volumes of the Nova Scotia Medical Bulletin, and would be very grateful if subscribers would send in any copies which they do not wish to keep.

A request has come for any parts of the first five volumes, 1921-1926. These are needed by one of the many United States medical libraries to which we are indebted for generous gifts. The Dalhousie Medical and Dental Library is a logical repository for duplicate volumes of Canadian medical and dental periodicals, earlier sets of which may be rare and should not be destroyed indiscriminately.

# American Congress on Obstetrics and Gynaecology Committee on Maternal and Infant Welfare

So many requests for further information re the above Congress have come in since the publication of notice of meeting in Cleveland, Ohio, September 11th to 15th (incl.) 1939, that I beg to further trespass on your space and generosity.

**T**HE American Congress on Obstetrics and Gynaecology is sponsored by the American Committee on Maternal Welfare. This committee is composed of member organizations with a representative from each, forming the board. The member organizations include the various national and sectional obstetrical and gynaecological associations, hospital associations, public health organizations, and nursing associations.

The Central Association on Obstetrics and Gynaecology proposed an American Congress on Obstetrics and Gynaecology to study the present day problems on Obstetrics and Gynaecology and their solution. The American Committee on Maternal Welfare was asked to sponsor this Congress. The Congress will be held in Cleveland, Ohio, September 11-15, 1939. The Committee expresses the purpose of the Congress, "To present a program of our present-day medical, nursing and health problems, from a scientific, practical, educational, and economic view-point as far as they relate to human reproduction and maternal neonatal care."

There will be sessions for each professional group in the morning with round table discussions. The afternoon meetings will have papers of general interest to all members attending the Congress. The public will be invited to the evening sessions where there will be speakers of national prominence.

The program for the physicians will include among many others such subjects as pregnancy associated with: thyroid disease, diabetes, tuberculosis, nutritional factors, carcinoma of the female genitive tract, and abortions.

The Congress is not planned as a meeting for specialists in any sense of the word but for all physicians who are interested in the problem of maternal and child welfare. Your committee highly recommends this congress as a week of postgraduate work which should be worth while much more to the physician than the time and expense incurred for the trip. The physicians of this province should be well represented at this Congress.

The membership fee of \$5.00 includes membership in The American Committee on Maternal Welfare and registration in The American Congress on Obstetrics and Gynaecology. Application blanks and further information may be secured from The American Congress on Obstetrics and Gynaecology, 650 Rush Street, Chicago, Illinois.

C. S. M.

## PHYSICIAN WANTED

There is a good opening for a physician to establish himself at Souris, P. E. I. Further information may be had from Dr. A. A. McDonald of that address.

## OBITUARY

### Doctor Willis Bryant Moore

IN the death of Dr. W. B. Moore the medical profession of Nova Scotia mourns the passing of a distinguished citizen and skilful physician. In his eighty-fourth year he was at the reunion of graduates of Dalhousie a few months ago, and in spite of his years seemed one of the youngest among them. He had the honorary membership of the Medical Society of Nova Scotia conferred upon him in July, 1927.

Dr. Moore was a regular attendant at all meetings of both the Valley Medical and Nova Scotia Medical Societies. One could ever depend on his presence and support. To Dr. Moore can be largely attributed the healthy condition of the Valley Medical Society, of which he witnessed the gradual growth from a small society in the county of Kings to its present size and usefulness. He was ever a valued contributor to the interest of the programme by reason of the extensive and unique experience of so many years.

He was for many years a member of the Executive of the Medical Society of Nova Scotia and at one time he was president. He served faithfully and well on many an important committee.

He graduated from Halifax Medical College in 1879, sixty years ago. After graduation he studied in England for two years to further equip himself for his life work. After a short time as ship's surgeon on Atlantic liners and a three year internship as house surgeon in the Victoria General Hospital, he began his extensive practice at Kentville, the place of his birth, and in the county which his father represented as Member of Parliament. Here he became well and favourably known as a skilful and much loved practitioner of the art he loved so well.

He retired from regular and active practice fourteen years ago. He married for his second wife the former Miss Eva Bell Borden who survives his death. His first wife was Miss Mabel DeWolfe, of whom four children are living, including Colonel Hugh Moore of the Royal Army Medical Corps in China, Barry in Montreal, and Norman and Guy at home in Kentville. During the last fourteen years he and his wife have travelled extensively, having encircled the globe three times and by different routes.

Dr. Moore was very versatile. He was a keen observer and student. It is to be hoped that the many notes he has made during his life and especially of the later years will be available for study by his friends. It is to be regretted that a man of his talents was not persuaded to leave behind a record of the early years in medicine dealing as it would with the important era of transition into antiseptic and aseptic surgery.

He was health officer in the Town of Kentville. Here also he was surgeon and physician to the Dominion Atlantic Railway which position he held for many years.

He was particularly well-known for his great fund of humorous stories. When he started off which by usual "By thunder" we knew that an interesting time was ahead. He took a great interest in social affairs and in the affairs of the town. His company was eagerly sought by his numerous friends.

His sprightly, active, and genial personality will be greatly missed not only in his home town but by his medical confreres throughout the province of Nova Scotia and beyond.

He returned to Nova Scotia early in March of this year in failing health. He passed away at the Victoria General Hospital on the 13th of April. The MEDICAL BULLETIN extends its sympathy to Mrs. Moore and the four sons in their sad bereavement.

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The BULLETIN regrets to learn of the death of Dr. A. W. Chisholm which took place at Margaree Harbour on the morning of May 4th. Dr. Chisholm was born in 1867 at Margaree Forks. In his early life he worked with his father on railroad construction, but deciding to study medicine he entered St. Francis Xavier University in 1889. In 1890 he entered Dalhousie University and spent one year there and following that took up the study of medicine in the College of Physicians and Surgeons of Baltimore, Maryland, and after four years study graduated with honours in 1894. Immediately after graduation he returned to his native province and took up his practice at Margaree Forks. Besides his keen interest in his practice Dr. Chisholm entered the field of politics and for eighteen years represented the County of Inverness at Ottawa. He was quite a favourite with other members of the House and quite well known by the different Cabinet ministers. The esteem with which Dr. Chisholm was held, was shown by the very large concourse of people who came from all parts of the County to attend his funeral. It was one of the largest ever to be held in Inverness County. Solemn High Mass in the Church was conducted by the Rev. P. A. LeBlanc, P.P., Cheticamp; Rev. J. A. De-Coste, Friar's Head; Rev. Angus Beaton, P.P., South West Margaree; and Rev. Archie MacLellan, P.P., Broad Cove. The pall bearers were Dr. J. A. Proudfoot, Inverness; Dr. L. J. LeBlanc, Cheticamp; Dr. M. E. McGarry, M.L.A., Margaree Forks; and William D. and Angus J. Chisholm of Margaree Forks and Pleasant Bay, respectively. Dr. Chisholm leaves to mourn his loss, his widow, four daughters, three sons and two brothers.

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Dr. Seymour Archibald of Edmonton, Alberta, aged sixty-three, died suddenly on May 5th after a heart seizure. Dr. Archibald was born in Musquodoboit and was widely known as district medical officer for the Canadian Pacific Railway for forty years and chief medical officer of the Northern Alberta Railways. He served overseas with the Canadian Army Medical Corps as a captain. Dr. Archibald is survived by his widow, two sons and two daughters. Dr. Archibald in 1894-95 attended the Halifax Medical College, which later became a part of Dalhousie Medical School.

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### LOCUMS WANTED

**Locums wanted for a country practice from June 30th for two months. Salary \$150.00 a month with board and car expenses. Apply to the Secretary.**

# Department of the Public Health

## PROVINCE OF NOVA SCOTIA

Office—Metropole Building, Hollis Street, Halifax, N. S.

MINISTER OF HEALTH - - - - HON. F. R. DAVIS, M.D., F.R.C.S., Halifax

Chief Health Officer - - - - -	DR. P. S. CAMPBELL, Halifax.
Divisional Medical Health Officer - - - -	DR. C. J. W. BECKWITH, D.P.H., Sydney.
Divisional Medical Health Officer - - - -	DR. J. J. MACRITCHIE, Halifax.
Divisional Medical Health Officer - - - -	DR. J. S. ROBERTSON, D. P. H., Yarmouth.
Statistician and Epidemiologist - - - -	DR. HAROLD ROBERTSON, D. P. H., Halifax.
Director of Public Health Laboratory - - - -	DR. D. J. MACKENZIE, Halifax.
Pathologist - - - - -	DR. R. P. SMITH, Halifax.
Psychiatrist - - - - -	DR. ELIZA P. BRISON, Halifax.
Sanitary Engineer - - - - -	R. DONALD MCKAY, B.Sc., A.M.E.I.C.
Superintendent Nursing Service - - - -	MISS M. E. MACKENZIE, Reg. N., Halifax.

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### MEDICAL HEALTH OFFICERS FOR CITIES, TOWNS AND COUNTIES

#### ANNAPOLIS COUNTY

Hall, E. B., Bridgetown.  
Braine, L. B. W., Annapolis Royal.  
Kelley, H. E., Middleton (Mepy. & Town).

Murray, R. L., North Sydney  
Townsend, H. J., Louisbourg.  
Gouthro, A. C., Little Bras d'Or Bridge.  
(Co. North Side).

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Cameron, J. J., Antigonish (Mepy).  
MacKinnon, W. F., Antigonish.

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Havey, H. B., Stewiacke.  
Johnston, T. R., Great Village (Mepy).

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Francis, Bernard, Sydney Mines.  
Sutherland, Harvey, Glace Bay.  
McLeod, J. K., Sydney.  
O'Neil, F., Sydney (County, South Side).

#### CUMBERLAND COUNTY

Bliss, G. C. W., Amherst.  
Gilroy, J. R., Oxford.  
Hill, F. L., Parrsboro, (Mepy).  
Cochrane, D. M., River Hebert (Joggins).  
Withrow, R. R., Springhill.  
Stuart, C. E., Parrsboro.

**DIGBY COUNTY**

Belliveau, P. E., Meteghan, (Clare Mepy).  
 DuVernet, Edward, Digby.  
 Rice, F. E., Sandy Cove, (Mepy).

**GUYSBORO COUNTY**

Chisholm, D. N., Port Hawkesbury,  
 (Mulgrave).  
 Sodero, T. C. C., Guysboro (Mepy).  
 Moore, E. F., Canso.  
 Monaghan, T. T., Sherbrooke (St. Mary's  
 Mepy).

**HALIFAX COUNTY**

Morton, A. R., Halifax.  
 Forrest, W. D., Halifax (Mepy).  
 Payzant, H. A., Dartmouth.

**HANTS COUNTY**

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 MacLellan, R. A., Rawdon Gold Mines  
 (East Hants Mepy).  
 Reid, A. R., Windsor, (West Hants Mepy).  
 Shankel, F. R., Windsor, (Hantsport).

**INVERNESS COUNTY**

Chisholm, D. N., Port Hawkesbury.  
 Grant, T. E., Port Hood.  
 Proudfoot, J. A., Inverness.  
 McNeil, A. J., Mabou, (Mepy).

**KINGS COUNTY**

Bishop, B. S., Kentville.  
 Bethune, R. O., Berwick, (Mepy).  
 de Witt, C. E. A., Wolfville.  
 Moreash, R. A., Berwick.

**LUNENBURG COUNTY**

Marcus, S., Bridgewater (Mepy).  
 Donkin, C. A., Bridgewater.  
 Donaldson, G. D., Mahone Bay.  
 Zinck, R. C., Lunenburg.  
 Zwicker, D. W. N., Chester, (Chester  
 Mepy).

**PICTOU COUNTY**

Blackett, A. E., New Glasgow  
 Chisholm, H. D., Springville, (Mepy).  
 Bagnall, P. O., Westville.  
 Crummey, C. B., Trenton.  
 Dunn, G. A., Pictou.  
 Parker, V. H. T., Stellarton.

**QUEENS COUNTY**

Ford, T. R., Liverpool.  
 Smith, J. W., Liverpool, (Mepy).

**RICHMOND COUNTY**

Deveau, G. R., Arichat, (Mepy).

**SHELburne COUNTY**

Corbett, J. R., Clark's Harbour.  
 Fuller, L. O., Shelburne, (Mepy).  
 Dinsmore, J. D., Port Clyde, (Barrington  
 Mepy).  
 Lockwood, T. C., Lockeport.  
 Churchill, L. P., Shelburne, (Mepy).

**VICTORIA COUNTY**

MacMillan, C. L., Baddeck, (Mepy).

**YARMOUTH COUNTY**

Hawkins, Z., South Ohio, (Yarmouth  
 Mepy).  
 Caldwell, R. M., Yarmouth.  
 Lebbetter, T. A., Yarmouth, (Wedgeport).  
 LeBlanc, J. E., West Pubnico, (Argyle  
 Mepy).

Those physicians wishing to make use of the free diagnostic services offered by the Public Health Laboratory, will please address material to Dr. D. J. MacKenzie, Public Health Laboratory, Pathological Institute, Morris Street, Halifax. This free service has reference to the examination of such specimens as will assist in the diagnosis and control of communicable diseases: including Kahn test, Widal test, blood culture, cerebro spinal fluid, gonococci and sputa smears, bacteriological examination of pleural fluid, urine and faeces for tubercle or typhoid, water and milk analysis

In connection with Cancer Control, tumor tissues are examined free. These should be addressed to Dr. R. P. Smith, Pathological Institute, Morris Street, Halifax.

All orders for Vaccines and sera are to be sent to the Department of the Public Health Metropole Building, Halifax.

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**Report on Tissues sectioned and examined at the Provincial Pathological Laboratory, from April 1st., to May 1st., 1939.**

During the month, 221 tissues were sectioned and examined, which with 19 tissues from 10 autopsies, makes a total of 240 tissues for the month.

Tumours, simple.....	41
Tumours, malignant.....	38
Tumours, suspicious of malignancy.....	..
Other conditions.....	142
Tissues from 10 autopsies.....	19
	— 240

Province of Nova Scotia Division of Vital Statistics  
Provisional Monthly Report—March 1939

	March, 1939				Feb., 1939
	Total	Male	Female	Rate	Rate
No. of live births.....	1,318	645	673	28.3	19.6
No. of stillbirths.....	41	26	15	30.2**	34.1**
No. of deaths.....	894	458	436	19.2	13.4
No. of deaths under 1 year of age.....	86	44	42	65.3*	81.5*
No. of deaths from puerperal causes.....	9	...	9	6.8*	4.9*

Causes of Death	Int. List No.	March, 1939				Feb., 1939
		Total	Male	Female	Rate	Rate
Measles.....	7	1	...	1	.....	.....
Scarlet Fever.....	8	...	...	...	.....	4.8
Whooping Cough.....	9	2	2	...	4.3	2.4
Diphtheria.....	10	4	1	3	8.6	2.4
Influenza.....	11	131	56	75	281.5	85.6
Pulmonary Tuberculosis.....	23	44	20	24	94.5	59.5
Other forms of Tuberculosis.....	24-32	4	1	3	8.6	11.9
Cancer and other Malignant tumors.....	45-53	78	37	41	167.6	145.1
Cerebral hemorrhage, thrombosis and embolism.....	{ 82a 82b	30	13	17	64.5	.....
Diseases of the Heart.....	90-95	122	67	55	262.1	228.4
Diseases of the Arteries.....	{ 96, 97 99, 102	77	39	38	165.4	209.3
Pneumonia (all forms).....	107-109	97	51	46	208.4	133.2
Diarrhea and Enteritis under 2 yrs. of age.....	119	2	...	2	.....	.....
Nephritis.....	130-132	42	23	19	90.2	64.2
Diseases of Early Infancy.....	158-161	31	20	11	23.6*	40.1*
Accident.....	176-195	56	37	19	120.3	30.9

\* Rate expressed as number of deaths per 1000 live births.  
\*\*Rate expressed as number of stillbirths per 1000 total births.

Provisional Monthly Report of Births and Deaths March, 1939.

	BIRTHS							DEATHS																				
	Total Births	Live Births				Still Births		Total	All Causes		Maternal Deaths																	
		Total	Legitimate		Illegitimate		Total		M.	F.	M.	F.	M.	F.	Maternal Deaths	Under 1 year of Age	Influenza	Pulmonary Tbc.	Other forms of Tbc.	Cancer	Cere. hem. Embolism Thrombosis	Heart Disease	Disease of the Arteries	Pneumonia All Forms	Diarrhea under 2 years	Nephritis	Diseases of Infancy	Accident
			M.	F.	M.	F.																						
Nova Scotia	1359	1318	600	630	45	43	41	26	15	894	458	436	9	86	131	44	4	78	30	122	77	97	2	2	42	31	56	
Annapolis...	33	31	13	17	1	...	2	2	...	22	12	10	1	1	1	...	...	2	2	4	4	2	...	...	1	1	1	
Antigonish...	39	35	18	15	...	2	4	2	...	19	8	11	...	3	...	...	...	3	3	2	...	...	...	...	3	3	3	
Cape Breton	307	301	133	147	11	10	6	3	3	127	63	64	1	23	19	4	...	12	2	16	12	18	1	1	4	4	4	
Colchester	60	57	23	31	2	1	3	1	2	55	30	25	1	5	11	...	...	3	3	3	6	6	...	1	1	3		
Cumberland	89	84	45	34	4	1	5	3	2	68	37	31	...	10	...	...	6	4	4	9	8	...	13	...	...	...		
Digby.....	31	31	11	15	1	4	...	...	...	21	12	9	...	4	...	...	...	1	1	1	5	5	...	1	1	1		
Guysboro...	28	28	11	16	...	...	...	...	...	23	14	9	...	2	...	...	...	2	2	3	3	4	...	3	...	...	...	
Halifax.....	313	306	142	143	13	8	7	6	1	185	96	89	3	8	13	11	...	18	6	23	10	13	...	9	1	34		
Hants.....	50	49	22	25	1	1	1	1	1	37	22	15	...	2	...	...	...	1	1	6	7	3	...	...	...	...	...	
Inverness...	47	42	25	17	...	2	5	3	2	50	19	31	1	2	2	...	...	4	4	10	1	9	...	6	5	2		
Kings.....	35	35	17	16	...	2	...	...	...	35	16	19	...	3	...	...	...	3	3	6	3	3	...	...	...	...	...	
Lunenburg...	60	57	26	24	3	4	3	2	1	63	38	25	1	9	10	...	...	5	5	11	4	8	...	4	4	2		
Pictou.....	97	96	46	43	5	2	1	...	...	68	36	32	...	5	...	...	...	9	5	11	4	5	...	2	2	4		
Queens.....	22	22	13	9	...	...	...	...	...	20	6	14	...	3	...	...	...	4	4	2	3	2	...	1	1	1		
Richmond...	21	21	7	13	...	1	...	...	...	23	11	12	...	1	...	...	...	1	1	1	...	...	...	...	...	...	...	
Shelburne...	33	32	11	17	1	3	1	...	1	19	7	12	...	1	...	...	...	3	1	5	3	1	1	1	1	1		
Victoria....	14	14	8	6	...	...	...	...	...	17	10	7	...	1	...	...	...	1	1	4	3	3	...	...	1	1		
Yarmouth...	80	77	29	42	3	3	3	3	...	42	21	21	2	3	9	4	...	3	1	4	9	...	...	1	2	1		

Note: These figures are based on the Birth and Death certificates received by the Division of Vital Statistics, Halifax, N. S., up to and including April 10, 1939 and represent the number registered with the Division Registrars during the month of March, 1939.





## FERROCHLOR E.B.S.

Iron is the *oldest* and still one of the most effective treatments for anaemia; but the *most potent form of iron medication* was not definitely known until recently.

In the past, hundreds of organic and inorganic compounds of iron have been tried clinically with widely varying results. This variation of result caused investigators to continue the study of iron absorption in anaemia. Their recent investigations confirmed the previously observed fact that ferrous salts are more readily absorbed than other forms of iron, and that all ingested iron is converted into the ferrous state before absorption. *cf. Journal C.M.A. March '33. Lucas and Henderson.*

*F. Hendrych and K. Klimesch, Arch.*

*Exptl. Path. Pharmakol 178, 178-88, 1935,* regard ferrous chloride as the physiological form of iron. They find that it does not cause chronic poisoning when administered orally, but that ferrous carbonate and ferric citrate cause characteristic liver damage.

But ferrous chloride is unstable and so unpalatable that many patients refuse to continue treatment long enough to raise the haemoglobin to normal.

Former objections to the use of ferrous chloride have been overcome in Ferrochlor E.B.S. which presents ferrous chloride in permanent and palatable form. Each teaspoonful dose of Ferrochlor contains 2 grains of ferrous chloride, equivalent to 30 grains of reduced iron.

*"Ferrochlor E.B.S. builds haemoglobin rapidly."*

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## Personal Interest Notes

**D**R. and Mrs. W. A. Hewat of Lunenburg are visiting New York. Dr. Hewat is taking post-graduate work in that city and he and Mrs. Hewat also plan to take in the World's Fair.

### **Yarmouth Doctor Honoured.**

As a token of esteem members of the Salvage Corps of the Yarmouth Fire Department recently awarded Dr. G. W. T. Farish a certificate of honorary life membership in the Corps. Dr. Farish last year presented a course of first aid to the members of that organization.

### **Toxoid Clinic at Truro.**

During the week of May 7th a toxoid clinic was started at Truro. The clinic was fostered by the Victorian Order of Nurses under the active leadership of its President, Mrs. W. R. Campbell. Dr. F. F. Eaton, town medical health officer, was in charge, assisted by Miss Mary Whidden, Truro school nurse, and Mrs. Evelyn Armstrong and Miss Ruby McCallum, Truro's Victorian Order nurses. The toxoid clinic in Truro will be kept up for sometime and protection against diphtheria offered free of charge to those who are unable to pay for such a service.

Dr. Hugh Martin of North Sydney has returned from New York where he has been taking post-graduate instruction in general surgery at the Koster Clinic.

### **Tuberculosis Survey at North Sydney.**

As the first step in a tubercular survey among high school students more than one hundred pupils in town schools underwent preliminary treatment recently. Sponsored by H. M. Ariadne Chapter of the Imperial Order Daughters of the Empire, public health authorities gave the "patch" test to the students of Grades 10, 11, and 12 to determine whether they have been in contact with tuberculosis. Students will also be given X-ray examinations. This survey is being carried out under the direction of Dr. C. J. W. Beckwith, divisional medical health officer and authority on tuberculosis.

The BULLETIN extends congratulations to Dr. and Mrs. Hugh A. Fraser of Bridgewater on the birth of a daughter, April 22nd; Dr. and Mrs. C. W. Taylor of Halifax on the birth of a son, April 22nd; Dr. and Mrs. C. G. MacKinnon of Bridgewater on the birth of a son, April 22nd, and Dr. and Mrs. J. H. Budd, Cleveland, Ohio, on the birth of a son, April 27th.

Dr. F. J. Granville, son of Mr. and Mrs. J. M. Granville of Halifax, has taken over the practice of the late Dr. G. W. Whitman of Stellarton.

Dr. D. M. MacRae of Halifax is now associated with Dr. R. E. Mathers and Dr. Arthur E. Doull and Dr. A. Ernest Doull. Dr. MacRae completed



- **GASTRIC ACIDITY**  
 Immediate control  
 Prolonged control  
 Localized control
- **ULCER PROTECTING POWER**  
 Maximum
- **GASTRO-INTESTINAL SPASM**  
 Corrected
- **GASTRO-INTESTINAL FUNCTION**  
 Not disturbed
- **TOXIC ALKALOSIS**  
 Absent
- **CLINICAL RESULTS**  
 Excellent

## ... in the treatment of digestive disturbances associated with increased acidity of the stomach ....

In respect to its acid neutralizing and adsorbent qualities, magnesium trisilicate (the active ingredient of "Tricepiol") "far transcends bismuth salts, magnesia, aluminium hydroxide, prepared chalk and other medicaments in these conditions". *Mitch, N. Hydrated magnesium trisilicate in peptic ulceration. Brit. Med. J. I:254-7 (Feb. 8) 1936.*

**No. 937 "TRICEPIOL"** — a palatable preparation containing, in each average teaspoonful, 35 grains of hydrated magnesium trisilicate associated with pectin and glucose.

**No. 938 "TRICEPIOL" COMPOUND** — has a similar basic formula to "Tricepiol" but contains, in addition, 1/500 grain of atropine sulphate and 1/8 grain of phenobarbital per average teaspoonful.

*Available in bottles containing 5 1/2 ounces.*

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a post-graduate course of three years in the eye, ear and nose clinic of the Royal Victoria Hospital of Montreal following his graduation from the Dalhousie Medical School in 1934. He is a son of Dr. D. R. MacRae of Sydney.

Dr. P. S. Campbell of Halifax, Chief Health Officer for the Province, addressed the concluding session at a two day meeting of the Cape Breton Island unit of the Public Health Nursing Service in Sydney recently. Another Haligonian, Miss Margaret MacKenzie, superintendent of the service, presided over the conference.

Dr. W. L. Muir of Halifax addressed the Progressive Club in April on the subject of anaesthesia.

Dr. and Mrs. D. K. Murray of Liverpool have returned from a brief trip to the United States.

Dr. G. A. Winfield of Halifax gave an address before the Council of Social Agencies on the subject of venereal diseases at a meeting held in April.

Dr. E. G. Young, Professor of Biochemistry of Dalhousie Medical School, and Mrs. E. G. Young, left in April for Central Canada where Dr. Young attended a meeting of the American Society of Biological Chemists in Toronto at which he presented a paper and gave a demonstration. Dr. Young also attended the annual meeting of the Council of Canadian Physiological Society meeting in Toronto at the same time, and was present at the Royal Medical Society meeting in Montreal.

#### **Doctor Gets \$20 Weekly; Ban is Cause.**

L. St. G. Stubbs (Ind., Winnipeg) introduced a bill on April 17th in the Manitoba legislature which, if approved, will permit Dr. George Kimel, Viennese eye specialist, to practise in Manitoba. The Jewish physician came to Canada when Austria was taken over by Germany.

A recent resolution of the Manitoba Medical Association ruled against accepting refugee physicians for the medical rolls of the province. Another obstacle is Dr. Kimel's inability to write examinations in English or French. He can write them only in German.

At present Dr. Kimel is grinding eye-glass lenses in Winnipeg, a \$20-a-week job, but fervently hopes to return to his doctoring. The forty-eight year old physician was an officer in the Austrian army during the war and was decorated twice. He has a wife and ten-year old son living with him in Winnipeg.

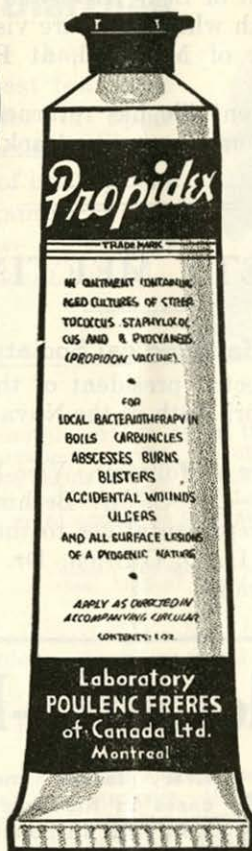
Dr. and Mrs. G. A. Winfield of Halifax have returned from a trip to New York.

#### **Dr. MacKay Awards Prizes to Nurses in Sports Competition.**

Trophies donated by Dr. R. W. M. MacKay, medical superintendent of the Nova Scotia Hospital, Dartmouth, for competition among the nursing staff of the hospital were presented at a dance held at the hospital on April 13th. In making the presentation Dr. MacKay stressed the importance of

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some form of sport in the life of the nurses, and expressed the hope that in the future there would be more entries and even keener competition.

Dr. and Mrs. L. J. Lovett of Bear River and daughter Edith, R.N., are enjoying a holiday in the south where they are visiting Dr. Lovett's brother, Colonel H. A. Lovett, K.C., of Montreal, at Pinehurst, North Carolina.

Dr. J. P. McGrath of Kentville has returned from spending a holiday in the South convalescing from a severe attack of pneumonia.

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## SOCIETY MEETINGS

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### Halifax Medical Society.

Dr. C. E. Kinley was elected president of the Halifax Medical Society at the annual meeting held April 26th at the Nova Scotian Hotel, when about forty-two were present.

Other officers elected were as follows: Vice-President—Dr. D. J. MacKenzie. Secretary-Treasurer—Dr. C. M. Bethune.

Executive members and representatives to the Executive of the Medical Society of Nova Scotia—Dr. H. D. O'Brien, Dr. A. L. Murphy, Dr. A. G. MacLeod and Dr. K. M. Grant.

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# An Acceptable Super-Nourishment



Every family medical advisor meets with cases in his practise where children simply won't eat sufficient substantial food. In consequence their young patients will show signs of anaemia and mal-nutrition. Weight will be below normal, and their resistance will be low.

Ovaltine has been found highly beneficial in such cases. Ovaltine is the concentrated nourishment of fresh milk and eggs and a special barley malt extract, lightly flavoured with cocoa. It is rich in factors of diet the child refuses in foods as ordinarily prepared. And children like it.

# OVALTINE

## TONIC FOOD BEVERAGE

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Factories also in England, Switzerland, France, and the United States.

### Ovaltine Contains These Dietary Factors:

Proteins, Carbohydrates, Calcium, Phosphorus, Iron and Vitamins A, B, D and G.

# RECENT CONFIRMATION

## ... of the Apple Powder Treatment of Diarrhea

Considerable evidence has accumulated during the past few years attesting to the value of apple powder in the prophylaxis and treatment of the diarrheas of infancy and childhood. As an example of the progress being made, we quote from a few of the most recent articles:



"For the general practitioner the apple treatment is a particularly valuable therapeutic agent. In other forms of treatment of diarrhea, the regulation of the quantity of food is a difficult and decisive problem which, in the apple treatment, may be ignored to a great extent as long as adequate amounts are supplied."

*Vollmer, Herman: Apple Treatment of Diarrhea, Medical World, 56:436, July (1938).*

"The raw apple diet and methods based on it hold great promise of supplanting the older, more conventional methods of treating diarrhea."

*Spradlin, M. C.: The Management of Acute Diarrheas of Infancy, Kentucky Medical Journal, 36:181, May (1938).*

"Summary. This work indicates that the addition of apple to milk accomplishes two purposes—the pH is lowered and a soft curd is produced. It seems advisable, then, to use such mixtures (4 to 5 per cent) in infant feeding in cases in which cow's milk is digested with difficulty. This finding is being confirmed by clinical observations."

*Reithel, F. J., and Manville, I. A.: Advantages of Adding Apple to Milk Formulas, Am. J. Dis. Child. 56:237, August (1938).*

"We have had just as good results from this therapy with older children and adults as with infants. This is particularly true with those who have the intestinal upsets commonly known as intestinal influenza."

*Manville, I. A.: Method of Adding Apple to Milk Formulas, Correspondence, Am. J. Dis. Child. 57:167, January (1939).*

Appella Apple Powder (Stearns) is supplied in 7-oz. cans for prescription use and in 1 lb. 4-oz. cans for hospital use.

Literature and clinical sample to physicians on request.

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Adrenal Cortical Extract contains the active principle of the adrenal cortex and has proved useful in the treatment of certain cases of Addison's disease. In the course of extensive research in the Connaught Laboratories on the preparation of Adrenal Cortical Extract, a highly effective product was evolved for clinical use.

## Adrenal Cortical Extract

*Adrenal Cortical Extract is supplied as a sterile solution in 25 cc. vials. It is non-toxic, is free from pressor or depressor substances and is biologically standardized.*

During the preparation of Adrenal Cortical Extract, Epinephrine is obtained as a separate product. This is the active principle of the adrenal medulla and has long been used for many purposes including stimulation of heart action, raising the blood-pressure and relieving attacks of bronchial asthma.

Two preparations of Epinephrine are available from the Connaught Laboratories:

## Epinephrine Hydrochloride Solution (1:1000)

*Every physician is familiar with the use of epinephrine hydrochloride (1:1000). It is supplied by the Connaught Laboratories in 30 cc. rubber-capped vials instead of in corked or stoppered bottles. Thus, individual doses may be readily withdrawn from the vials aseptically without occasioning any deleterious effects upon the solution left in the vials for later use.*

## Epinephrine Hydrochloride Inhalant (1:100)

*Recently considerable success has been secured in the alleviation of attacks of bronchial asthma by spraying into the mouth this more concentrated solution of epinephrine hydrochloride. This solution is supplied in bottles containing 1/5 fl. oz. (approx. 6 cc.), each bottle being provided with a dropper fastened into its stopper so that small amounts of the solution may be transferred for inhalation from an all-glass nebulizer.*

Prices and information relating to the use of these adrenal-gland products will be supplied gladly upon request.

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By a direct influence on the centre, it acts as a most efficient respiratory stimulant, increasing both the depth and the rate of respiration, either under normal conditions or when the centre is depressed by drugs or disease toxins.

Coramine stimulates the heart, leading to an increase in the output of blood; at the same time it tends to cause vascular relaxation, so that, with or without a rise in blood-pressure, the rate and efficiency of the circulation are improved.

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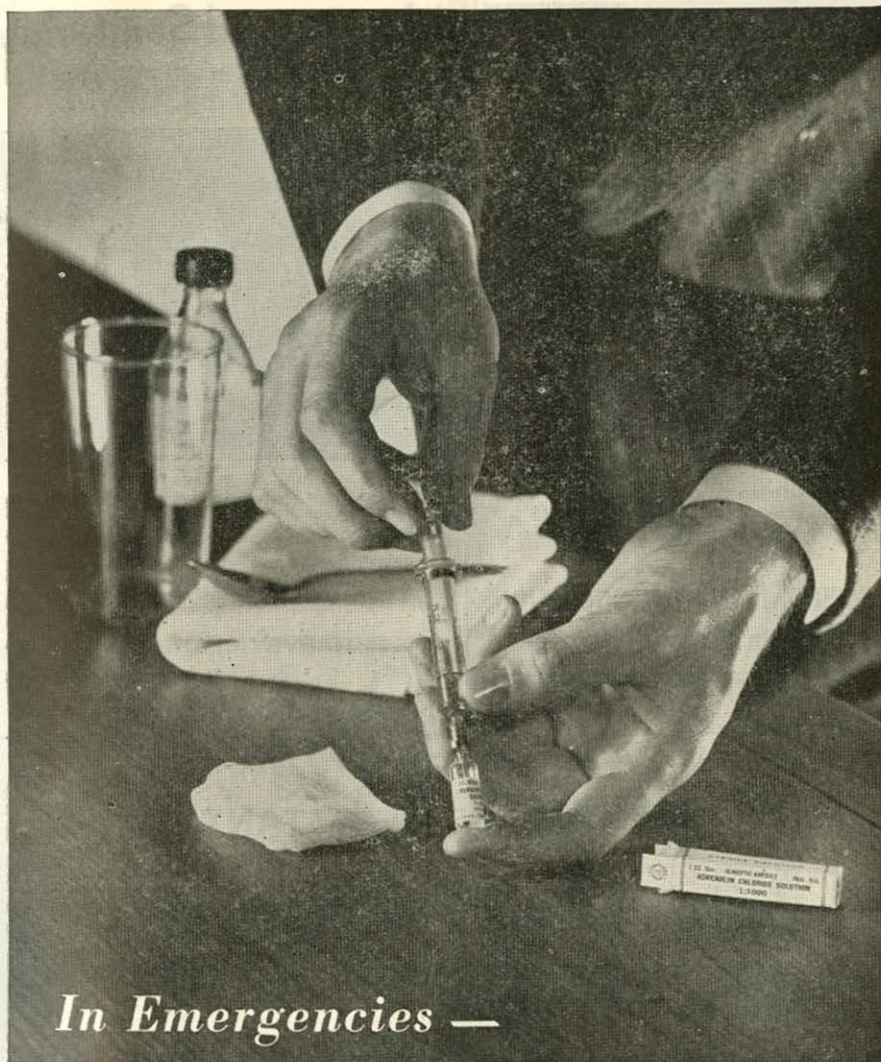
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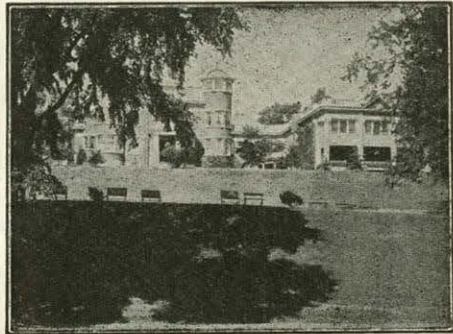
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