



# HALITOSIS

(AS DEFINED IN THE CENTURY DICTIONARY)

(Hal-i-to-sis) N. N. L.  
(L. Halitus—Breath ∴ Osis—Offensive)

Offensive breath, whether arising from diseased or neglected condition of the teeth, mouth or nose or caused by disorders of digestion, respiration, the excessive use of tobacco, etc., may be readily overcome by the deodorizing properties of—

## LISTERINE

Listerine is strictly antizymotic, it inhibits alike the acid fermentation of carbohydrates and the alkaline putrefactive processes of mixtures of meat and saliva, retained as debris about the teeth; hence, Listerine is antagonistic to the activating enzymes of fermentation while supplanting disagreeable odors with the fragrance of eucalyptus, thyme, mentha, etc.

Many dental practitioners who advise their patients to use Listerine daily as a mouth-wash, also keep Listerine in an atomizer on the dental bracket readily available for use prior to operations, in self-defence against pronounced cases of

## HALITOSIS

**Lambert Pharmacal Company**

263-265 Adelaide Street West

Toronto

*Ask for*

### EDDY'S Toilet Tissues and Serviettes

When you need a supply of Toilet Tissues and Serviettes it is worth your while to insist upon *Eddy's*.

By doing so you will secure the finest value available. The name "Eddy" on the wrapper is an absolute assurance of sanitary excellence. Look for it when buying.

**THE E. B.  
EDDY  
CO., LIMITED**  
Hull, Canada

## INSURANCE STOCKS

*Are They Profitable*  
?

Fidelity-Phenix Fire Insurance Company

DECLARES

**100% Stock Dividend**

Preferred Accident Insurance Company

DECLARES

**150% Stock Dividend**

The shares of other well established insurance companies offer like opportunities. We shall be glad to furnish information on request.

**The Insurance Investments Limited**

*Specialists on Insurance Stocks*

347 Bay St. - Toronto, Ont.

## IMPORTANT FACTS ABOUT LAXAGRADA

(Hartz)

- It is a genuine Cascara preparation.
- It is made from fully matured and seasoned Cascara Bark.
- It contains all the therapeutic principles of the True Rhamnus Purshiana and none of those of other cathartics.
- It is free from griping principles.
- It is active even when exhibited in small doses.
- It is economical on account of its activity.
- It is pleasant to take.
- It is a true tonic laxative.
- It is a Canadian product produced by Canadian pharmacists

*Manufactured by*

**The J. F. HARTZ CO., Limited**

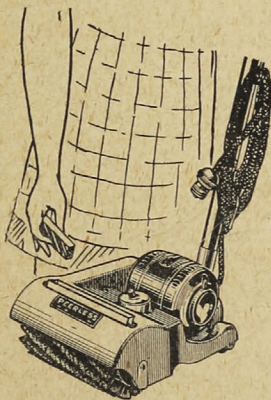
Pharmaceutical Manufacturers

TORONTO

MONTREAL

Ideal for use in an institution  
or household

*Waxes as well as polishes*



**THE PEERLESS ELECTRIC WAXER  
AND POLISHER**

It means beautiful glossy floors and it can be operated by a child. It is a real labor saver.

**BRAUN & BONNICK Limited**  
78 Duchess St. - Toronto

## SAL HEPATICA Laxative and Eliminant

Efficacious in all conditions where intestinal sluggishness arising from functional derangements of the liver and portal circulation is a factor. Sal Hepatica cleans the entire alimentary canal.

*Samples for Clinical Purposes*

**Bristol-Myers Co.**  
New York

# 100% in "bran" is as much a standard as B.P. in "drugs"

As a physician you naturally deal with definite quantities and strengths in your prescriptions. When you prescribe Kellogg's ALL-BRAN to combat faulty elimination you can rely upon the definite results you anticipate being accomplished. You can prescribe with confidence.

For Kellogg's ALL-BRAN is 100% bran—100% effective. Entirely different from part-bran products which may be 50% bran or 25% bran—or more or less. And which, at best, can be but partially effective.

Kellogg's ALL-BRAN prevents as well as relieves constipation in a pleasant manner. It is delicious served with milk or cream and with fruits or honey added. Or it may be used in many kinds of appetizing cookery with corresponding beneficial results.

Sold by grocers everywhere. Served at hotels and restaurants. On dining-cars. Made by Kellogg in London, Ontario.

# Kellogg's

## ALL-BRAN



# RABIES VACCINE

{ Cumming }

~P. D. & CO.~

## *A Safe and Dependable Prophylactic*

**R**ABIES is invariably fatal. For this reason even the most trivial wounds from bites of dogs apparently normal should be treated as if the animals were rabid. After a most thorough cauterization of the wound, Rabies Vaccine (Cumming), P. D. & Co., may be administered without fear of infecting the patient, since this vaccine does not contain the living virus.

Not only is Rabies Vaccine (Cumming), P. D. & Co., harmless, but its administration is no more technical or difficult than an ordinary hypodermic injection. There is no gradation of doses; all the doses are alike.

Rabies Vaccine (Cumming), P. D. & Co., is supplied in packages of seven 2-cc. syringe containers. On receipt of an order we supply a package of seven syringes immediately, and the remaining one or two packages at intervals of four days. The average case of mild or uncertain exposure requires only 14 daily injections. In face wounds or severe lacerations anywhere, 21 doses are necessary.

*The 24-page booklet, "Rabies Vaccine (Cumming)," will be supplied to any physician on request.*

## PARKE, DAVIS & COMPANY

[U. S. License No. 1 for the Manufacture of Biological Products]

RABIES VACCINE (CUMMING), P. D. & CO., HAS BEEN ACCEPTED FOR INCLUSION IN N. N. R. BY THE COUNCIL ON PHARMACY AND CHEMISTRY OF THE AMERICAN MEDICAL ASSOCIATION

### SANITARY IN THE HIGHEST DEGREE

For hospital operating theatre, main entrance, or toilet, there is nothing so sanitary or attractive as tiling on the walls and floors.

We can undertake to do this work whether the job be large or small, and the workmanship is absolutely first class.

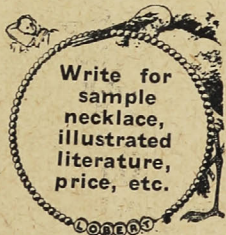
*We solicit a trial*

**Marble & Tiles Limited**  
53 Richmond St. E., Toronto

### NURSERY NAME NECKLACE

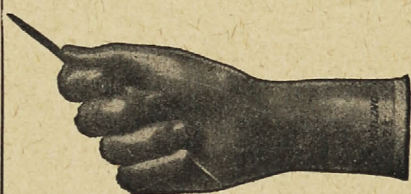
The Modern Baby Identification

A handsome, sanitary baby blue bead necklace, is easily strung with white enamel lettered beads spelling surname, and tied and sealed on baby at birth. Relieves hospital staff and mother from worry and hospital staff from responsibility. Pays its own cost. Adopted by over 1,000 hospitals. Foolproof, rapid, non-irritating, smooth as velvet, sanitary.



Write for sample necklace, illustrated literature, price, etc.

**J. A. DEKNATEL & SON., INC.**  
96-24, 222nd Street  
Queens Village (L.I.) - New York



## Sterling

Surgeons' Gloves have merited the approval of most of the hospitals in Canada and many prominent ones in other British Dominions.

Insist on Gloves branded **STERLING** and insure complete satisfaction as well as utmost economy.

The **STERLING** trademark on Rubber Goods guarantees all that the name implies.

*Pioneers and the largest producers of*

**SEAMLESS RUBBER GLOVES**

*in the British Empire*

**Sterling Rubber Company, Limited**  
GUELPH, CANADA

*"Nobody Knows Like  
Aznoe's"*

Thirty-one years' experience placing nurses in hospitals enables us to give superior service to both nurse and institution.

For well-trained candidates we have excellent openings all over the United States.

*Write for our free booklet and registration blank at once.*

Class A Physicians, Technicians, Dietitians, and Dentists also placed.

*Aznoe's*

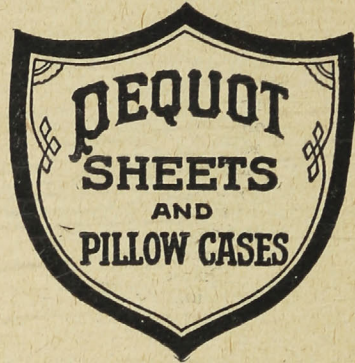
CENTRAL REGISTRY FOR  
NURSES

NATIONAL PHYSICIANS'  
EXCHANGE

30 NORTH MICHIGAN, CHICAGO, ILLINOIS  
Established 1896

*Member of The Chicago Association of Commerce*

**Naumkeag  
Steam Cotton Co.**  
Salem, Mass.



Standard for Homes, Hospitals  
and Institutions

Selling Agents:  
**PARKER, WILDER & CO.**  
Boston and New York

**VIORAY**

HEALTH-GIVING GLASS

*Write now for our Descriptive  
Folder*

**Plate Glass  
and  
White Vitrolite  
Tops**

FOR USE IN OPERATING  
ROOMS—WARDS AND KITCHENS—  
PROTECT YOUR FURNITURE AND EQUIP-  
MENT—EASILY CLEANED  
—SANITARY

THE  
**CONSOLIDATED**

PLATE GLASS COMPANY  
OF CANADA, LIMITED

TORONTO MONTREAL WINNIPEG

**SANITUBES**

*A Venereal Prophylactic*

A venereal problem exists in every community, to a less degree than formerly but still sufficiently evident that caution should not be cast to the winds. This problem has its medical and social aspects.

SANITUBES solve the medical side of the question, scientifically, efficiently and economically.

*Send for free sample and literature*

**THE SANITUBE COMPANY**  
Newport, R.I. - - U.S.A.

and

344 St. Paul St. West  
Montreal, Canada

# Beauty IS Only Skin Deep!

BUT when Don Valley Bricks are used for the facing of buildings the "skin" assumes a

## PERMANENT BEAUTY

Balance up your walls by backing-up, also, with Don Valley Wire Cuts, whose structural value is unsurpassed.

SUCH BUILDINGS AS:

The Toronto General Hospital  
St. Michael's Hospital  
Western Hospital, Toronto, etc.  
are perpetual monuments to Don Valley quality.



THE Don Valley Brick Works  
TORONTO LIMITED

Office—Federal Building

Works—Don Valley



## An Invitation To Physicians

Physicians in good standing are cordially invited to visit the Battle Creek Sanitarium and Hospital at any time for observation and study, or for rest and treatment.

Special clinics for visiting physicians are conducted in connection with the Hospital, Dispensary and various laboratories.

Physicians in good standing are always welcome as guests, and accommodations for those who desire to make a prolonged stay are furnished at a moderate rate. No charge is made to physicians for regular medical examination or treatment. Special rates for treatment and medical attention are also granted dependent members of the physician's family.

An illustrated booklet telling of the Origin, Purposes and Methods of the institution, a copy of the current *Medical Bulletin*, and announcements of clinics, will be sent free upon request.

---

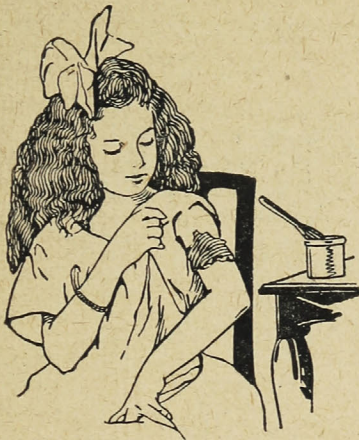
### THE BATTLE CREEK SANITARIUM

Battle Creek

Room 271

Michigan





# Vaccination complications yield to this treatment

**W**HERE the vesicles inflame and deep excavated ulcers result, Antiphlogistine is indicated. Applied hot, it at once increases leucocytosis, because it increases the superficial circulation by detouring the blood through the compensatory venous system.

Next by its hygroscopic property it sets up Osmosis, whereby the fluid exudate of the inflammation is drawn out through the porous membrane of the skin and absorbed by the poultice.

Simultaneously, by endosmotic action, the non-toxic antiseptics of eucalyptus, boric acid and gaultheria in Antiphlogistine are cleansing the affected area.

The bad arm does not manifest until after "the take," so that the antiseptic

action of Antiphlogistine does not annul the efficacy of the vaccine virus.

The use of Antiphlogistine is endorsed by Physicians everywhere as a most valuable aid in all cases of Vaccinal ulceration; Impetigo, Glandular abscess; Septic infection; Erythema; Urticaria, etc.

### *A reparative action both scientific and rational*

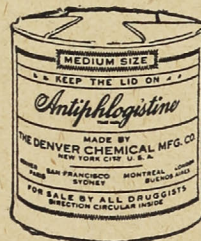
The action of Antiphlogistine in removing the exudate of congestion is both scientific and rational.

Apply like a poultice. Heat a sufficient quantity, place in centre of a gauze square, cover the affected part completely with the Antiphlogistine, and bind snugly with bandage.

The Denver Chemical Mfg. Company  
New York, U. S. A.  
Laboratories: London, Sydney, Berlin, Paris,  
Buenos Aires, Barcelona, Montreal, Mexico City



PRODUCED IN CANADA



# INSTITUTIONAL HEATING



The recovery of a patient depends to a large extent on the **constant temperature** and the **humidity** of the atmosphere in the Ward. That can only be accomplished by the installation of a scientific heating system.

## Purdy Mansell Limited

63 Albert Street  
TORONTO

have for over a quarter of a century made a specialty of **Hospital Heating Installations**. They have furnished many of the most modern institutions in Canada and would like to quote prices to any Board of Trustees in the Dominion intending to rebuild or make additions to their present plant. Their **prices are right**, consistent with first-class workmanship.

# THE HOSPITAL, MEDICAL AND NURSING WORLD

TORONTO, CANADA

A professional journal published in the interests of Hospitals, and  
the Medical and Nursing Professions.

VOL. XXXII

TORONTO, SEPTEMBER, 1927

No. 3

## Editorial

### A Fitting Moment

No more worthy provincial event marked the days of Canada's jubilee celebration than that of laying the corner-stone of the new summer Hospital for Sick Children at Thistletown, York County, on July 4th. Pageants, bands and bonfires, gave joyous ephemeral expression, but here and there through the great Dominion some such permanent memorial as this will endure to mark this national celebration.

The history of hospitals synchronizes with the history of world progress as expressed in all scientific and social findings. The modern hospital expresses the farthest reach of human thought attained concerning human relations. It must be, therefore, continually advancing, enlarging, and re-moulding. No hospital organization can stand still; it must be progressive or decadent.

The Toronto Hospital for Sick Children has evidenced constant advance since its inception, 1875. At that date it was the first of its kind in Canada. Its early history was interwoven with the name of one man, the late John Ross Robertson. He brought it

into being, nursed it through its early years, labored for it, begged for it, lived for it, and bequeathed it as his enduring monument to Toronto.

Progressive to a degree, it has ever and again enlarged its field of work—a fine nurses' residence, Lakeside convalescent home for the summer months, a well-equipped and ably-staffed research laboratory, all these have been of the recent years. And latest—in the July days of jubilee year, the foundation of a large and permanent country annex has been laid, where curative as well as preventive work will be carried on for children physically under normal, and unable to help themselves.

The first building of 112 beds will be ready for occupancy by the early months of 1928, but provision will be made for two anticipated early extensions that will bring the number up to 312 beds. Working in close touch with the mother institution, situate in Toronto's closest downtown area, the new building, with its large grounds and village quietness and freshness, will provide a wonderful convalescent home. Contributions from the Province and the city and a generous three-quarter million from the public have provided funds for the work.

The first and, perhaps, most impressive float in Toronto's Jubilee pageant portrayed "the Child at the Gate," a young lad looking wistfully through the pillared gates of time. It was markedly suggestive of the world's changing attitude toward the child. It is up to us to see that the child shall pass through these gates with buoyant step, strong and clear-visioned, steady and ready to do his part in lifting life to a higher level.

The pageant float and the Thistletown ceremony and the Hospital for Sick Children chord as jubilee notes.

### Need of Convalescent Hospitals

In the present and ever recurring demand to increase hospital accommodation the question presents itself whether the enlargement of the general hospitals is the best way of meeting the necessity.

Attention has been drawn frequently in this journal to the great need of institutions for convalescents and chronics.

An able and thought-provoking paper by Dr. Olive Cameron on this subject was given at the Social Service Conference, held in Toronto, in April last. The writer established beyond question the desirability of establishing such auxiliary hospitals in preference to enlarging the general hospitals as organized to-day. The writer reported certain interesting statistics gathered from the military hospitals, where the days spent by a patient in the general hospital were followed by an equal number of days in a convalescent hospital. In such cases the relapses were practically nil. But when the patient was discharged direct from his bed in the general hospital to home or service, from fifteen to twenty per cent. were returned as relapsed cases.

In a Cleveland hospital and health survey recently made, research results of two thousand discharged patients show six per cent. relapsed, and twelve per cent. endeavoring to convalesce under very adverse conditions. This survey report asserted that there should be at least one convalescent bed for every ten hospital beds.

Economically there is a tremendous argument in the fact that the cost of maintenance is thus reduced from one-third to one-half less. The general hospital is able to evacuate beds quickly when there are only a few cases under treatment; the doctor is able to follow his patient and complete his work; and the pa-

tient receives the special and adjusted treatment not possible, or at least apt to be neglected, in any hospital devoted to the needs of the very sick.

It would be interesting to make a morning round among the general hospitals of a large city, and learn from the authorities how many patients had reached the stage where they could safely and with advantage to themselves be transferred to a convalescent auxiliary; and to calculate the triple advantages,—to the hospital in increased beds, to the patient in curative process, and to the public purse in cutting costs from over thirty to fifty per cent.

We are advancing too rapidly in social science to continue the present ineffective method of discharging enfeebled patients into home conditions into which they are temporarily unfitted to adjust themselves.

Convalescence is a rapidly changing condition, from that of feebleness at its maximum and resistance at its minimum to one of closely approaching physical efficiency; and only a large institution can supply the graduated therapeutical treatment fitted for every stage of recovery.

The various small rest homes and sanitariums that abound are private enterprises usually beyond the reach of the ward patient's pocket-book. Also, they cannot provide in a large way for the gradual adjustment of the patient. Diet, rest, freedom from care, fresh air and sunlight, physical and occupational therapy—all these—demand the facilities of specially equipped institutions.

Some splendid work is being done along this line in the United States; but Canadian hospitals are lacking almost entirely in this arm of hospital service.

# The Hospital, Medical, and Nursing World

(Continuing the Hospital World)

Toronto, Canada

The Official Organ of The Provincial Hospital Associations,  
including The Ontario Hospital Association, The  
Alberta Hospital Association, The British  
Columbia Hospital Association, etc.

## Editors:

John N. E. Brown, M.B., (Tor.). Ex-Sec'y American and Canadian Hospital Associations, Former Supt. Toronto General and Detroit General Hospitals.

W. A. Young, M.D., L.R.C.P. (London, Eng.), Toronto, Ont., Consultant, Toronto Hospital for Incurables.

M. T. MacEachern, M.D., Director-General, Victorian Order of Nurses, Ottawa.

Maude A. Perry, B.S., Supervising Dietitian, Montreal General Hospital.

## Associate Editors:

### ONTARIO

C. J. C. O. Hastings, M.D., Medical Health Officer, City of Toronto.

N. A. Powell, M.D., C.M., late Senior Assistant Surgeon-in-charge, Shields Emergency Hospital, Toronto.

P. H. Bryce, M.D., late Medical Officer, Federal Dept. of Immigration, Ottawa.

Herbert A. Bruce, M.D., F.R.C.S., Founder of Wellesley Hospital, Toronto.

J. H. Holbrook, M.B., Physician-in-chief, Mountain Sanatorium, Hamilton.

R. W. Routley, M.D., Secretary Red Cross Society of Canada. (Ontario Division.)

Helen MacMurchy, B.A., M.D., Late Asst. Inspector of Hospitals of Ontario, Toronto.

J. W. S. McCullough, M.D., Chief Officer of Health for the Province of Ontario, Toronto.

J. H. Elliott, M.D., Asst. Medicine and Clinical Medicine, University of Toronto.

Roy Thomas, M.B., Asst. Surgeon, Emergency Department, Toronto General Hospital.

George D. Porter, M.D., Toronto, Ex-Secretary, Canadian Association for the Prevention of Tuberculosis.

G. Murray Flock, M.B., one time Physician-in-charge, Essex County Sanatorium, Union-on-the-Lake, Kingsville.

C. M. Hincks, B.A., M.B., Assistant Medical Director of the Canadian National Committee for Mental Hygiene, Toronto.

### QUEBEC

Henry G. Baxter, Esq., Assistant Superintendent, The Royal Victoria Hospital, Montreal.

All communications, correspondence, and matter regarding subscriptions and advertisements to be addressed to "The Hospital, Medical, and Nursing World," Toronto, Canada.

Reprints, including Half-tones, etc., Supplied Authors at Net Cost

A. K. Haywood, M.D., Superintendent, Montreal General Hospital, Montreal.

J. E. Byers, M.D., Superintendent, Laurentian Sanitarium, Ste. Agathe des Monts.

### NOVA SCOTIA

W. H. Hattie, Provincial Health Officer, Department of Public Health, Nova Scotia, Halifax.

### MANITOBA

David A. Stewart, M.D., Medical Superintendent, Manitoba Sanatorium for Consumptives, Ninette.

### ALBERTA

T. H. Whitelaw, B.A., M.B., University of Toronto, Medical Officer of Health, Edmonton.

H. R. Smith, M.D., Superintendent, Royal Alexandra Hospital, Edmonton.

### SASKATCHEWAN

J. G. Wright, M.D., C.M., Regina.  
M. E. Bow, M.D., Superintendent, Regina General Hospital, Regina.

### BRITISH COLUMBIA

Arthur G. Price, M.D., Medical Health Officer, City of Victoria, Victoria.

H. C. Wrinch, M.D., Superintendent, Hazelton Hospital, Hazelton.

### GREAT BRITAIN

Conrad Thies, Esq., late Secretary, Royal Free Hospital, London, England.

Donald J. Mackintosh, M.D., M.V.O., Medical Superintendent, Western Infirmary, Glasgow, Scotland.

## Original Contribution

### PROGRESS AND WORK OF HOSPITALS IN CANADA\*

MISS GRACE M. FAIRLEY, SUPERINTENDENT OF NURSES,  
VICTORIA HOSPITAL, LONDON, ONTARIO.

Mr. President, and members of the American Protestant Hospital Association, it is with a very real sense of pleasure that I bring the greetings of the Canadian Nurses' Association to you, but I trust that any impressions I may give on the subject of Canadian hospitals will be accepted by you as personal views, and the result of experience, rather than receiving the endorsement of the organization I have the honor of representing.

Canadian hospitals, as you know, were originally patterned after the British institutions, but, as a result of experience, necessity and national conditions, they have changed, and one now finds the similarities to your institutions in the United States greater than the differences.

Our hospital organizations are also similar; we have provincial hospital associations very closely resembling your state organizations, but we have not got strong and well-developed church associations like the American Protestant Hospital Association and the American Catholic Hospital Association. Probably the reason for this is, that, with the exception of the Catholic institutions, we have not any great number of church hospitals, and the majority of our institutions aim at being non-sectarian.

In the Province of Quebec and Eastern Ontario, where there is a large Catholic population, there are, naturally, a number of Catholic hospitals, and there the non-Catholic hospitals are spoken of as "Protestant Hospitals," although this is a misnomer. The Catholic hospitals, although definitely church organizations, are, as far as the patients are concerned, non-sectarian.

When one realizes that the area of Canada is about 700,000 square miles larger than the United States, and that its population is about one and one-half millions less than that of the State of New York, it is not surprising that its hospitalization, other than in the larger cities, has to meet a very different com-

\*An address delivered at the American Hospital Association Convention held at Atlantic City, N. J.



munity need. Or, taking the Dominion by provinces, organized politically very much as the various states within the Union, there are two provinces, both about 100,000 square miles larger than Texas, and Ontario, which is the province with the largest population, and the greatest number of large cities, is about the same size as Texas, and yet has a population of barely three million. This will give the members of your organization some slight idea of the health problems of Ontario.

Roughly speaking, the hospitals are divided into five groups:

1. The large general hospitals and university hospitals in cities.
2. The small general hospitals in smaller communities.
3. The special hospitals, *i.e.*, (a) tuberculosis sanatoria; (b) communicable diseases hospitals; (c) hospitals for nervous and insane patients; (d) children's hospitals; (e) orthopaedic hospitals—Shriners'; (f) military hospitals.
4. Church hospitals under the direct supervision of the Anglican and United Churches of Canada, and,
5. Red Cross out-post hospitals.

In cities of the size of Montreal, Toronto, Ottawa, Hamilton, London, Kingston, Winnipeg, and Vancouver, we find the general hospitals with a well-balanced mixed service and a bed capacity of from 300 to 900 beds. But undoubtedly the next group—the small general hospitals ranging in size from 25 to 150 beds—represents by far the majority; this can be readily realized from the foregoing figures showing how sparsely populated large areas of land are in all the nine provinces of Canada.

The special hospitals are mostly found in the larger cities, or, as in the case of the tuberculosis sanatoria, at least adjoining, and receiving their patients from the larger cities.

The military hospitals, as time goes on, are becoming centralized round the military districts, the smaller ones being closed by degrees. They are divided into two groups—the active hospitals where discharged men on disability allowance may return for surgical repair work, or medical treatment, and the chronic or mental hospitals.

The Church hospitals, representing the Anglican and United Churches of Canada, and the Salvation Army, are, for the most part, small mission hospitals in various parts of the Dominion, and these meet a very great need in the prairie country and Far North and North-west Territory.

What was known as the W.M.S. Medical Missionary Service in Canada had fourteen hospitals prior to the union of the churches. It may be of interest to your members to know that the beginning of this splendid service was during the 1898

Klondyke Trail. The Rev. Dr. Pringle, D.D., sent out a call to the Church for trained medical nursing help for the miners who were suffering untold distress from cold, pneumonia, typhoid, scurvy and accidents. This began this wonderful Church service in Canada.

These hospitals are situated in British Columbia, Northern Alberta, Manitoba, Saskatchewan and Northern Ontario and have bed accommodation of from three to one hundred beds, but the majority are fifteen and twenty bed hospitals, with a staff usually of two graduate nurses, or one nurse and one evangelist or missionary helper. The reason for selecting any field for hospital construction is the need, and is truly described in the early reports as "W.M.S. Life Saving Stations."

The Methodist Church, prior to the Union, had a group of nine active hospitals doing very much the same work and in the same types of community as in the case of the Presbyterian Church. In fact, the policy of both of these churches has been, and in the case of the United Church of Canada now is, to answer a call from any part of the country where the need arises. In all, there is a bed capacity in these nine hospitals of 230 beds, and in the last report 2,912 patients were treated at a cost varying from a minimum of \$2.58 to a maximum of \$4.62—over \$67,000 was collected in fees from patients. Connected with practically all these hospitals is a dispensary and visiting nurse service. Health education seems to be as essential as medical and nursing, for, in many of these localities, superstition, ignorance and unsanitary living conditions, make the problem of medical and nursing instruction a very great one.

The policy of surrendering these hospitals to the municipality at such time as it is prepared to accept the responsibility is not only a sound one, but is the result largely of our provincial hospital acts which make hospital accommodation and care of the sick a charge upon the municipality. In this way, many hospitals that were established by the Church in pioneer districts are no longer the responsibility of the Church. As these communities developed, they became self-supporting and the church moved on into such districts as medical and hospital help could not be procured, as was the case of the Peace River hospitals recently. This, I think, portrays a very interesting phase of the Church's medical work in Canada.

According to Provinces, these hospitals are now as follows—that is, under the United Church Mission Board: British Columbia, 7; Alberta, 6; Saskatchewan, 3; Manitoba, 5; Northern Ontario, 2. Fourteen of these have accommodation for fifteen or less patients, seven have over fifteen and under fifty, one has sixty-five beds, and one a hundred. Eight of them

have one resident physician in charge, two have two resident doctors and the remainder are dependent on the local doctors for assistance. In several cases, these doctors have both medical and divinity degrees, making their work in the field of great value.

In the small hospitals, there are usually two graduate nurses, or one nurse and a missionary helper.

I wish that time would permit of my describing some of the conditions, and the work of those in charge. To use the word heroic is indescribably inadequate. One typical hospital in Manitoba—an entirely foreign settlement, with a strongly aggressive non-Protestant element; others with mixed populations including those from the various European countries, also Britishers, Indians and French-Canadians report lessening hostility, and in some cases showing a definite interest in the hospital mission.

Canora, in Saskatchewan, which is the largest of the prairie hospitals, and is in the heart of a Jewish settlement, has had great financial support and interest from the citizens of the community.

Wakaw, one of the oldest hospitals, has no lighting plant, and still uses oil lamps, and melted ice-water for drinking and cooking.

*Anglican Church:* The Missionary Society of the Anglican Church has several hospitals doing very much the same type of work as those of the United Church; the most notable being the one at Aklavik, near the Arctic Coast on the Mackenzie River. There are also three under the Columbia Coast Mission; one at Rock Bay, one at Alert Bay, and another at Carriden Bay. They all have qualified doctors and nurses in charge and have a capacity of approximately twenty-five beds.

The Sisters of the Order of St. John the Divine have a hospital with a training school in Toronto, and, although of the Anglican Order, does not come directly under the Church. It is a Women's Surgical and Medical Hospital of sixty-five beds, and the student nurses have an affiliation with the Toronto General and Sick Children's Hospitals for male medical, obstetrics and pædiatric experience. They receive their lectures through the Centralized Course. This is a course of lectures that was established during the war, whereby the student nurses from eleven of the general hospitals in Toronto go to the university for their theoretical lectures.

The Salvation Army has several maternity hospitals and social service centres in the larger cities, notably Halifax, Montreal, Toronto, London and Vancouver. As far as I know, Windsor is the only city in which the Army has a general hos-

pital. It has a bed capacity for a hundred and two patients and also a recognized training school. As the work of the Salvation Army is international, I do not need to dwell on it. Suffice it to say that the service it renders both socially and medically for the unmarried mother is beyond recognition. In these maternity hospitals we also have semi-private and private pavilions.

The Red Cross outpost hospitals and health centres, of which there are thirty-six in Canada, representing 193 beds and thirty-two cots, with sixty-one graduate nurses, like the Church hospitals, are situated in the more isolated localities. The establishment of these health centres is as a rule brought about by a request from a community to the Red Cross Society for such a service. This usually means that there is no church or other hospital within reach, or, to quote the official report, "in a district lacking the existence of medical nursing or hospital service," and the Outpost Committee authorizes a survey and, if the community is prepared to assume certain responsibilities, the Red Cross Society then furnishes and mans the institution. These centres vary in size according to district and population from three to fourteen beds and cots, although there are two one-bed hospitals in Manitoba.

I will not touch on the educative work of the Red Cross centres, as this paper has to deal with the work of hospitals; suffice to say that the peace-time programme of the Red Cross Society has demonstrated its great value to the Dominion, if in no other way than the establishing of these truly mission hospitals.

In a few of the large cities, and in most of the small centres, the hospitals are financed by public subscription, augmented by provincial government or municipal grants. There is no standardized type of management. In the remaining large cities, the hospitals are usually municipal institutions with an independent board of trustees. This, as a rule, is more satisfactory than where the city council forms the hospital board, inasmuch as the type of man who is interested in hospitals is not so likely to be influenced by politics.

The development of a sense of responsibility of hospitals as health centres has been very noticeable in the past few years, and has had an undoubted influence with the average layman. It is a great satisfaction to find men and women alike reporting for advice or examination, and appreciating the value of health, and is an outstanding comparison with a decade or two ago when the majority of patients came to hospital when their malady was usually far advanced; and, too often, with a certain amount of dread.

I am glad to report the awaking of responsibility of nursing education for the student nurse on the part of boards of trustees. This probably is in some measure the result of the demands of the registration laws in the various provinces. These demands certainly have strengthened the hands of the officers of schools of nursing, where the trustees may not have realized its importance and significance. For does the average patient not go to hospital for nursing care as well as for diagnosis or medical treatment? In this connection I would like to urge that when an appointment is made on the medical staff of a hospital having a school of nursing, the appointee should clearly understand that one of his duties is giving lectures to the undergraduate nurse. Too often this fact is found out later and is the cause of much and unnecessary irritation.

I should also like to suggest that in the scheme of standardization of hospitals which has done so much towards making the hospital a reliable institution, wherein the laymen can with perfect confidence get medical or surgical advice and treatment, the Class A Certificate be withheld from any hospital not having a Class A school of nursing—what more important equipment can a hospital have than its nursing team? One hears much about the value of records. Of what value are records if they are not true, even if equipment is Class A? And how can we hope to have accurate records, either medical or nursing, if the theoretical training of the nurse is not such as will make her appreciate the importance of detail, whether it be in measuring a specimen, recording the type of vomitus or accurately stating the location of the patient's pain?

I regret to add that too often, to the detriment of nursing education, all sorts of equipment is being installed in hospitals. We also find the other extreme of sound modern equipment being withheld, not realizing the waste of money in nurses' time.

My apologies are presented with the foregoing, as it is a survey of the hospital field rather than a report of progress in Canada which I was asked to prepare.

---

### HOSPITAL MANAGEMENT\*

PROF. D. A. MACGIBBON

At the outset I would like to make it quite clear to the members of these associations that I do not come before them as an expert on hospital administration or management. That would

\*Address before the Hospital Association, Calgary.

be a presumption of which I would not be guilty. But as an economist, I have necessarily become somewhat familiar with the general nature of the advances that have taken place in recent years in the technique of management. The movement is one of very great interest, and it has its application, I believe, to institutions such as hospitals, since it is necessary to recognize that while a hospital may or may not be a profit-making enterprise, the planning, construction and operation of such an institution provides a problem in business management exactly similar to that of an industrial plant.

An industrial plant is a combination of labor and capital organized to produce either commodities or services at a profit. A hospital is also a combination of labor and capital organized to render certain services and may or may not be operated for profit. In this province we have three types of institution—(1) certain special institutions operated directly by the Provincial Government; (2) a large group of public institutions under community control, and (3) quite a number of private institutions operated for private gain. A very rough estimate of the value of physical plant devoted to hospital uses in this province would be well on to \$10,000,000. I have not at hand the figures showing the number of workers employed in hospital institutions in Alberta, but we know that working in conjunction with hospital plant there is a large personnel.

This brings me at once to the problem of organization and management. Management has been defined as "the art and science of preparing, organizing and directing human effort applied to control the forces of nature and to utilize the materials of nature for the benefit of man." It involves all of the elements in the control of business or institutional activities and may be said to be the correlation of the details of operation so that they will work as a harmonious whole towards the desired end. Management is the unseen force that makes the wheels go round in orderly fashion. Management has come to be considered as the greatest single factor necessary to success in business enterprises of this industrial age. As illustrating its importance we may cite the finding of a committee on the elimination of waste in industry appointed by the Federated American Engineering Societies in 1920. This committee investigated intensively six of the great industries of the United States. They reported that fifty per cent. of the responsibility for the admittedly great wastes in these industries must be placed at the door of management.

The great importance of management as a factor in the success of any enterprise has only recently come to be fully understood. There has, of course, always been management or ad-

ministration of some kind, but as the result of a combination of conditions in the last fifteen or twenty years we have had slowly developing new conceptions. We have the rise of self-conscious, definitely thought out methods of control instead of sketchy improvisations in the face of each emergency. I propose to trace briefly the background of this new movement, to state its salient features and to point out what it can offer by way of help to those charged with the management and administration of hospitals.

The foundations of the methods of modern management were laid between 1880 and 1890. Like many another movement, there was behind it the work of a great man, Frederick W. Taylor, an eminent engineer. Taylor did his work in the Midvale Steel Company, of Philadelphia. Later he reorganized a number of the units of the Bethlehem Steel Company. As an example of the type of work that he carried on Taylor once stated that in connection with obtaining the best methods for men to employ in cutting metals he and his associates had made 50,000 recorded experiments. Taylor reduced the duties of management to four cardinal principles; and all recent developments are really an expansion of these four principles. They are:

- (1) The development of a carefully studied technique for each minute element of a man's work, thereby replacing the old rule of thumb methods.

- (2) The careful selection of the best workers for each task, no matter how small, and the training, teaching and developing of them. This was in contrast to hiring a man, casually sticking him in a job, and if he did not make good, firing him and engaging another.

- (3) The development of hearty co-operation between management and personnel in place of open or veiled hostility.

- (4) The division of work into almost equal shares between management and workers, the responsibility resting upon management for every individual step or method in a process.

Taylor's work at the time did not exert the influence that its importance warranted. He called it a system of scientific management, and the word "scientific" created distrust among the hardheaded, conservative, industrial works managers. Nevertheless he was a great pioneer and creator in the movement. Yet many people, it is true, had only a general notion of what he was driving at and not much more.

The significance of Taylor's methods, however, first came to be widely known in 1911, when Louis D. Brandeis, now Mr. Justice Brandeis, of the Supreme Court of the United States, appeared before the Interstate Commerce Commission to op-

pose the application of the railways for certain rate increases. Brandeis charged that the railways were being operated wastefully, and he contended that scientific management would make rate increases unnecessary. Competent evidence submitted showed that the railways could save \$1,000,000 per day by concentrating upon efficiency. You are all aware how unpopular is general increase in freight rates. As the people of the United States did not desire a rate increase, Brandeis' argument received great attention, and the practical results of efficient management were brought home to the public at large in a startling manner. There was a great deal of discussion at this time of the benefits of scientific management, but really not much actual change in the methods of executives.

When the United States entered the war the efficiency movement was making only slow progress. But it was then found necessary to organize the nation from the ground up for war production. Everything gave way to attempts to increase output. Old methods under pressure were scrapped right and left. Plants were enlarged or completely rebuilt. For a great many executives the war became an apprenticeship in the ways of modern management. One feature of the period was the consultant in business, who passed from plant to plant teaching puzzled executives how they could transform their plants into efficient units for turning out war goods. Together with the consultant there developed the use of the inside man, a specialist in management, continually on the pay roll, and continually employed in the study of methods of more efficient production.

Finally, as we know, after the war, came the very disastrous depression of 1920. This was particularly severe in the industrial portions of the United States. It was then discovered that a much greater percentage of failures occurred in businesses operated on the old principles than among those which had adopted and retained newer methods of management. This was the last thing needed to commend the movement to business men. Since 1920 the application of the new methods of management to business has made remarkable progress, not only in the United States, but in Europe, where American methods are now being carefully studied. Even more important, perhaps, the experience of the depression in 1920 allayed a good deal of the suspicions that labor had of the movement as a force dangerous to itself.

This is the background of the modern management movement, and we have its rapid growth not only in business enterprises, but also its introduction into institutional management. On the whole, however, its advance has been much more rapid in business enterprises than among institutions. The explana-



tion is simple. If a business does not maintain its efficiency in comparison with its rivals it is soon left behind and disappears. On the other hand, with an institution, like a hospital, supported partly by community funds, and except in the larger cities, with a partial monopoly of the territory it serves, there is not quite the same pressure to keep up to date in respect to business management. Inefficient administration, under these circumstances, means a higher cost for maintenance than is needful or a poorer quality of service than the circumstances warrant, or, and this is very frequently the case, service is maintained at the expense of unduly long hours or unduly severe labor by the staff. Conditions of inefficient management which have these results are very often difficult to prove, however easily they may be detected. Uniform methods of accountancy permit proper cost comparisons to be made, but service comparisons are difficult to secure.

I come now to the salient features of modern methods of management, and in commending them to the hospital institutions of Alberta no particular criticisms are implied or intended in a specific way. I have no doubt that there are institutions in this province whose administrative methods could scarcely be improved upon. Let me point out that if we may depend upon analogies drawn from various industries there is probably quite a variation in the degree of efficiency achieved between one hospital and another. The Committee on the Elimination of Waste in Industry found that the ratio in efficiency between the best plants visited and the average plants, not the worst, was about one to two and one-half. In the metal trades it was as great as one to four and one-half.

Modern organization rests upon the proper observance and application of a series of fundamental working rules or principles. These fall into two main groups, those connected with the general policy of the organization and development of the plant or institution and those connected with the administrative phases of its management. The primary fundamentals are fourfold: (1) regard to the scope of the enterprise; (2) the establishment of definite lines of supervision; (3) the placing of fixed responsibility, and (4) regard for the personal equation.\* These four rules are important enough to have individual consideration.

(1) Regard for the scope and aim of an institution is most important at the time that the first steps are taken in connection with the enterprise. The size of the institutional plant in relationship to the scope of the service it is expected to give must

\*In preparing this address I have been much indebted to R. H. Lansburgh's excellent work on "Industrial Management."

be carefully studied; the length of life desired for the plant before replacement, the provision for the construction of additional units if likely to be needed, and similar matters all fittingly come within consideration here.

(2) Definite lines of supervision insist upon the necessity of laying down the lines of control which are to be exercised over the personnel. These lines of supervision are also the lines of authority along which orders flow. A lack of definite lines of supervision results in overlapping duties or gaps or both, usually accompanied by friction and recriminations injurious to the morale of the institution.

(3) A corollary to definite lines of supervision and authority is the placing of fixed responsibility. This eliminates gaps. Some one is definitely responsible for each duty. There is no escape if duties have been accurately defined and allocated. Moreover, the more responsibility that can be given to subordinate executives the easier it will be to find substitutes when from time to time these are called upon to assume control temporarily or otherwise.

(4) The fourth rule, regard for the personal equation, is really a very important consideration. You cannot fit round pegs into square holes. It is very frequently necessary to draw the outlines of duties to fit the capability of the assistants that are available rather than merely to define the task and put a person into it. Failure to observe this rule gave the movement a setback in its early days. Elaborate charts of organization were drawn up, and the duties of various posts laid down without much regard for those who were to take over the duties. The results were often very disappointing.

These four rules look to the general framework of modern organization. When we turn from structure to administration we find the development of four rules of administration.

(1) We must have the development of adequate system in the carrying out of duties. Busy executives use to-day the "exception" principle of administration. Recurring events are reduced to a carefully developed system of routine and placed under subordinates. Only the exceptional problem outside of recurring routine comes up to the chief executive for disposal. When he makes a decision in such an instance this serves as a precedent for succeeding cases of the same nature, if there are any. It is only by this method that executives in control of large enterprises are able to secure the time necessary to think out general matters of policy and deal with the more difficult problems of administration.

(2) The establishment of adequate records eliminates guesswork from management. By a regular system of reports, the

chief executive is able to keep in touch with and to supervise the smooth working of established routines. There is one danger here, that of too many reports, too much red tape. A few comprehensive reports without duplications and presented with inflexible regularity will usually give an executive the information he desires. In particular instances he can always call for a special report. An important feature of the general idea of adequate reports is the keeping of them properly filed or bound so that they can be easily referred to when it is desired to call upon past experience to aid in the solution of present problems.

(3) Laying down proper regulations. The establishment of exact rules not only gives a definite concept of duties, but it aids in maintaining morale and discipline by eliminating uncertainty. Again there is a danger to be avoided. Rules should be very carefully considered before being promulgated, and should be carefully drawn to avoid ambiguities. They should be limited in number and not changed unless conditions change. Executives who file a new system of rules every Monday morning reveal the fact that they have not thought their problems through to bedrock, and keep their staffs in a constant state of confusion and irritation.

(4) The executive has two main tasks to perform: (a) the development of policies and of organization to give effect to policies, and (b) that of supervising or administering the organization already installed. The latter ordinarily takes by far the most time, though it is not the most important task. The marks of a weak executive are:

(i) Inability to get rid of problems that come up for decision.

(ii) Snap judgments.

(iii) Desire to keep all the authority for all details within himself.

(iv) Following the path of custom as the line of least resistance and of safety.

This is a general theory of executive control. It recognizes, of course, that organization can be overdone. There are certain things which destroy morale instead of improving it. Such things as too fine a division of authority; too many supervisors; too many subordinates who have no capacity for executive work and who desire to handle their job clerically, passing responsibility on from one to another instead of exercising it.

To my mind the most impressive feature of the whole movement is the painstaking minute thoroughness with which these ideas are being applied. Instead of being merely a counsel of perfection as they were a few years ago, every aspect of the problem of management is being intensively investigated in

the light of these principles. I should like to make this clear by two or three illustrations.

One important factor in the development of a successful service-yielding organization is the physical plant. Hospitals with new and modern buildings have important advantages over those badly housed, and these advantages show quickly in the cost or adequacy of the service. Careful preliminary study precedes the building of an industrial plant, and the same kind of study is required before a hospital is designed and brought into being. This study in the first place involves the precise location of the plant. Not infrequently I have observed that the sites of hospitals seem to have been determined purely on the basis of real estate considerations. Yet if the institution is to give the community the largest measure of service its site should be carefully selected. From the standpoint of effective operation there are many factors to be weighed and balanced against each other. I have seen signs on a street warning traffic that this was a zone of quiet because of hospitals in the vicinity, yet the location of the hospital building itself was a few furlongs away from a railway shunting yard where engines snorted and puffed and noisy shunting went on day and night. Other factors in location are accessibility to employees and to supplies, especially fuel, and, of course, ease in the reception of patients.

Finally, with respect to the location of hospitals in many of the smaller towns. The hospital is usually one of the most important public buildings in the place. It seems a pity that so often the opportunity is missed to select a site of natural beauty where this can be done without sacrificing other advantages. Alert business management to-day fully realizes the importance of a good location. In the case of hospitals the wide use of automobiles by the public makes a wider choice possible than was possible a few years ago.

But attention to location does not exhaust problems that the management must consider in connection with the physical side of the plant. Plant planning means the careful study of layout to meet the precise kind of service to which it will be put. In a hospital we have such problems as the proportions of wards, private rooms, the size of maintenance quarters, heat and power, proper lighting, proper air conditioning, proper elevatorage. In many instances adequate facilities can be installed at the outset as cheaply as any other, but after the building has gone up alterations become a matter of almost prohibitive cost.

Modern factories recognize the dangers of poor air conditions. One company put up a modern industrial plant as it thought, but without giving much study to the subject of ventilation. It had twenty-seven and one-half per cent. of its em-

ployees ill the first two winters. This reminds me that recently a very large new hospital was opened in an eastern city. The building was fireproof, and the floors were not softened in any way, and in a very short time a large number of the staff were suffering from foot trouble. The old system of radiators in front of a window and uneven distribution of warmth is giving place to systems of distribution by ducts, the air being drawn from the outside, washed, humidified and warmed before being distributed. The point I wish to emphasize here is this: when industrial plants find that it pays them in efficiency to give the most careful attention to such details, can there be any question of its importance to hospitals when we consider the nature of the services they hold themselves out to give?

Systems of lighting require, and in industry receive, equal thought and care with a view to the most effective use of natural lighting and to the installation of the best kinds of artificial light. The aim is to eliminate dark halls and corners which evade inspection and easily gather dirt, and to secure an even distribution of light. This is directly related to the depth, height and width of the room and to the size and location of the windows. Windows opening on southern exposures often require special treatment of the glass. As an example of institutional enterprise we note that the school authorities of Birmingham, England, have investigated the hygienic qualities of quartz glass, and have ordered it to be installed in all Birmingham schools. Industrialists know that ribbed glass causes a loss of twice as much light as ordinary glass, but that this is counterbalanced because the rays of light can be refracted and directed more nearly horizontal farther into the interior. Finally, in connection with light, dark grey paints reflect from eighteen to twenty-five per cent. of the light which strikes them, light blues about twenty-five per cent., light greens about forty per cent., and white and very light greys seventy per cent. Paints are mixed to secure the maximum of light without glare.

A second great feature of modern management is the extent to which standardization is carried out. In at least two respects this has its importance to institutions. Standardization of methods is essential to the establishment of performance minimums which are the basis of routine requirements. Otherwise it is impossible to measure the exact time that should be adequate for various duties. It is also necessary to establish standards of staff efficiency. Standardization is also of great importance in the purchase of supplies. It simplifies co-operative purchasing, relieves the purchasing agent, and lightens the task of inventories. During the war the pressure for output was so great that manufacturers co-operated to produce standard

sizes. Here are two or three instances: 206 styles of bed springs were reduced to 28, 2,800 kinds of laboratory apparatus were reduced to 1,400, 20 styles of water bottles to 5.

I believe that if associations such as these set to work to study equipment and how much it could be standardized, they would achieve results that would mean easier administration and less expense. I understand that some steps have already been taken along these lines.

I should like to refer also to the change that has come over the policies that govern the handling of personnel. Modern industry tends to hold the chief executive directly responsible for the handling of personnel. "The extent of institutional morale may best be measured by the degree of co-operation that is extended to the management by the staff during the ordinary routine of operations." To-day every effort is being made to create and arouse the interest of the workers in their work. Where professional interests are in question the task is undoubtedly easier than in industrial enterprises. But apart from the professional personnel of a hospital the smooth operation of the institution is wonderfully helped by the genuine co-operation of the maintenance staff.

Labor problems are often exceedingly difficult to handle, and frequently in public institutions they do not receive the attention they deserve. The community is often more careless of the welfare of its institutional employees than are private employers. It is not altogether a question of wages, but much more often a question of conditions and hours of labor. I venture the assertion that many hospital workers suffer from very long hours of duty. Let me point out that in England during the war, where all trade union restrictions were waived for the time being in the interests of output, it was discovered in many instances that very long hours defeated their purpose. Shorter hours led to greater efficiency. If industrial plants find it worth while to study carefully the conditions of labor institutions will make no mistake in following their lead.

May I add that the penalty for failure to make conditions for nurses in training or other staff reasonably attractive is inevitably a failure to draw the kind of material into the work that is most desired. In the long run this does the community a disservice.

I shall not touch upon the problems of accountancy control, since you have already had a paper upon that subject, except to say that it aims at showing the exact condition of an institution and of controlling expenditures at every point. The modern policy of hand-to-mouth buying of supplies rests upon the fact

that one of the most potent causes of business loss in 1920 was found to be overstocked store rooms.

The object of my paper has not been to criticize or to provide cut and dried answers to technical questions in administration or management. Rather I have tried to sketch broadly modern developments in this field, and to suggest the kind of problems that must be faced and thought about by institutional executives if they wish their institutions to provide a maximum of service with a minimum of energy expended.

Finally I would like to observe that I have noticed that discussions on problems of this kind often fail to strike home because executives excuse themselves on the ground that everything possible has been done so far as their own institution is concerned. Investigation and comparison are the only ways by which such a fact can be demonstrated. Associations such as these can encourage healthy institutional rivalry in the use of methods of efficiency. Secondly, very often a reason given is that many of the principles of modern management are not applicable to small hospitals. May I point out that economically hospitals are not illustrations of the advantages of large scale enterprises. All of the technical advantages of the best methods can be achieved within a relatively small institution, if it is well-planned, well-maintained and well-administered. Upon hospital boards of management and hospital executives rests the duty of ensuring that the community dollar that goes to hospitals shall be expended to yield the largest possible dividends in service.

 Society Proceedings **THE ONTARIO HOSPITAL ASSOCIATION**

The next meeting of this flourishing association will be held in London, Ontario, on October 20th and 21st. The meeting place will be in the Medical School; and the annual luncheon will be partaken of in the New London Hotel. With an institutional membership already of over ninety and a growing personal membership, there is sure to be a well-attended meeting. Dr. J. H. Holbrook succeeds Dr. Dobbie as chairman of the programme committee. The latter has been, in the main, responsible for the programmes of the last two years, which, indeed, were models. Dr. Dobbie's plan of sending out a questionnaire to ascertain what subjects the members wished discussed was a very happy one, and, perhaps, the membership committee could not do better than to adopt this same plan for the coming meeting. The beauty of the scheme is that if the members are not suited with the programme they have only themselves to blame.

The success of the association may be accounted for in various ways, but, we believe, the man who deserves the most credit for creating a general interest in the work of the association is Major Moncrieff, who was twice made president of the association. His visits to the various hospitals, his attendance on the various executive meetings, his great influence with the Government, his energy, his fine executive ability, these, along with his other virtues of mind and heart, made him an ideal officer, and the dynamic he gave the association, the momentum he created, will be felt for many a year. His enthusiasm was caught by the chairmen and members of the various committees; so along with Dr. Dobbie's skill in programme making, Secretary Routley's patient and persistent appeals to the hospitals for support and Dr. Ferguson's most valuable support in advice and counsel and words of tongue and pen—all, with the valuable assistance of several other workers, whose efforts were equally loyal and earnest, contributed to make this association the premier one (we believe) in the whole Dominion.

It was disappointing that the bill which the association fathered to secure extra government assistance was turned down, and replaced by one which proposed to cut off government aid.



But thanks to the sharp efforts of members of the executive this second bill did not go through. The matter will not rest here. While certain of the larger hospitals—particularly one of the well known, large Toronto hospitals which has been very generously treated by the Government—may be lukewarm to the proposal to secure larger help from the Government, the remaining representatives of the various provincial hospitals propose to show the Government how necessary and wise it is to give the hospitals the extra assistance they seek.

Below are the committees which propose to make the coming convention the best ever held:—

*Programme:* J. H. Holbrook, W. J. Dobbie, Miss McP. Dickson, John Ferguson, and the Secretary.

*Legislative:* John Ferguson, D. E. Robertson, W. F. Langrill, W. J. Dobbie, A. C. Galbraith, C. J. Decker, J. H. Holbrook, J. M. Godfrey, R. F. McLaughlin, R. H. Cameron, and F. W. Routley.

*Nursing:* Miss Dickson, Miss Tate, Miss Whiting, Miss McKee, and Miss Reid.

*Membership:* R. F. Armstrong, D. E. Robertson, G. Clegg and the Secretary.

*Publicity:* A. C. Galbraith, Miss Munn, W. Dobbie, J. Brown, J. Ferguson, and F. Routley.

Mr. A. C. Galbraith, of the Western Hospital, Toronto, one of the Vice-presidents, has been asked to take charge, owing to the unavoidable absence of the president. He is leaving no stone unturned in his endeavors to make the association more than ever a real asset to each and every hospital in the Province.

The secretary, who has been the king pin of the organization, demands an especial eulogy. He has been granted by the executive permission to employ a full-time assistant to help him; and the publicity committee have been authorized to secure commercial exhibits for the coming meeting. It has been decided to increase the institutional membership slightly in order to meet the expected extra expenditure. It is good to know that at the date of the last executive meeting there were one thousand dollars in the treasury.

We hope that, at the coming meeting, steps will be taken to call an all-Canadian hospital congress and to support the movement for a pan-international congress, which we have for several years been advocating.

We trust, too, that many of the hospitals, even before the meeting, will take the simple step recommended at the last meeting of naming one of their surgical wards or operating-rooms after Lister, whose centennial has been so enthusiastically

observed, not only throughout the empire, but through a great part of the medical world.

We hope all our readers will remember: the place—*London*; the date—October 20th and 21st.

## Hospital Items

### APPROVED STANDARD HOSPITALS IN CANADA

#### ALBERTA

##### *100 or more beds*

Calgary General Hospital, Calgary.  
Edmonton General Hospital, Edmonton.  
Holy Cross Hospital, Calgary.  
Medicine Hat General Hospital, Medicine Hat.  
Misericordia Hospital, Edmonton.  
Royal Alexandra Hospital, Edmonton.  
University of Alberta Hospital, Edmonton.

##### *50 to 100 beds*

Brett Hospital, Banff.  
Drumheller Municipal Hospital, Drumheller.  
Lamont Public Hospital, Lamont.

##### *35 to 50 beds*

\*Vegreville General Hospital, Vegreville.

#### BRITISH COLUMBIA

##### *100 or more beds*

Provincial Royal Jubilee Hospital, Victoria.  
\*Royal Columbia Hospital, New Westminster.  
Royal Inland Hospital, Kamloops.  
St. Eugene Hospital, Cranbrook.  
St. Joseph's Hospital, Victoria.  
St. Paul's Hospital, Vancouver.  
Shaughnessy Military Hospital, Vancouver.  
Vancouver General Hospital, Vancouver.

##### *50 to 100 beds*

Queen Victoria Hospital, Revelstoke.

#### MANITOBA

##### *100 or more beds*

Brandon General Hospital, Brandon.  
Children's Hospital, Winnipeg.

- Grace Hospital, Winnipeg.  
King Edward Memorial Hospital, Winnipeg.  
King George Hospital, Winnipeg.  
Misericordia Hospital, Winnipeg.  
St. Boniface Hospital, St. Boniface.  
\*Victoria Hospital, Winnipeg.  
Winnipeg General Hospital, Winnipeg.

## NEW BRUNSWICK

*100 or more beds*

- General Public Hospital, St. John.  
Lancaster Hospital, St. John.  
St. John County Hospital, East St. John.

*50 to 100 beds*

- Chipman Memorial Hospital, St. Stephen.  
Hotel-Dieu Hospital, Campbellton.  
Hotel Dieu Hospital, Chatham.  
\*Hotel Dieu Hospital, St. Basil.  
Maramichi Hospital, Newcastle.  
Moncton Hospital, Moncton.  
Restigouche and Bay Chaleur Soldiers' Memorial Hospital,  
Campbellton.  
St. John Infirmary, St. John.  
Victoria Public Hospital, Fredericton.

*35 to 50 beds*

- L. P. Fisher Memorial Hospital, Woodstock.

## NOVA SCOTIA

*100 or more beds*

- St. Joseph's Hospital, Glace Bay.  
Victoria General Hospital, Halifax.

*50 to 100 beds*

- \*Aberdeen Hospital, New Glasgow.  
Children's Hospital, Halifax.  
Glace Bay General Hospital, Glace Bay.  
Grace Maternity Hospital, Halifax.  
Halifax Infirmary, Halifax.  
Highland View Hospital, Amherst.  
St. Martha's Hospital, Antigonishe.  
Sydney City Hospital, Sydney.  
Yarmouth Hospital, Yarmouth.

## ONTARIO

*100 or more beds*

Brantford General Hospital, Brantford.  
 \*General Hospital, Belleville.  
 General Hospital, Brockville.  
 General Hospital, Sault Ste. Marie.  
 General Hospital, Stratford.  
 General and Marine Hospital, St. Catharines.  
 Grace Hospital, Toronto.  
 Hamilton City Hospital, Hamilton.  
 Hospital for Sick Children, Toronto.  
 Hotel Dieu Hospital, Kingston.  
 Hotel Dieu of St. Joseph, Windsor.  
 Isolation Hospital, Toronto.  
 Kingston General Hospital, Kingston.  
 McKellar General Hospital, Fort William.  
 Ottawa Civic Hospital, Ottawa.  
 Ottawa General Hospital, Ottawa.  
 St. Joseph's Hospital, Hamilton.  
 St. Joseph's Hospital, London.  
 St. Joseph's Hospital, Port Arthur.  
 St. Joseph's Hospital, Sudbury.  
 St. Michael's Hospital, Toronto.  
 St. Vincent de Paul Hospital, Brockville.  
 Salvation Army Grace Hospital, Windsor.  
 Toronto General Hospital, Toronto.  
 Toronto Western Hospital, Toronto.  
 Victoria Hospital, London.  
 Wellesley Hospital, Toronto.

*50 to 100 beds*

General Hospital, Galt.  
 General Hospital, Niagara Falls.  
 General and Marine Hospital, Owen Sound.  
 Nicholls Hospital, Peterboro.  
 Oshawa General Hospital, Oshawa.  
 Public Hospital, Smith's Falls.  
 St. Francis General Hospital, Smith's Falls.  
 St. Joseph's Hospital, Peterboro.  
 \*St. Mary's Hospital, Kitchener.  
 \*Salvation Army Hospital, Ottawa.  
 Women's College Hospital, Toronto.

## PRINCE EDWARD ISLAND

*50 to 100 beds*

Charlottetown Hospital, Charlottetown.

Prince Edward Island Hospital, Charlottetown.  
Prince County Hospital, Summerside.

## QUEBEC

*100 or more beds*

Alexandra Hospital, Montreal.  
Children's Memorial Hospital, Montreal.  
Hopital General St. Vincent de Paul, Sherbrooke.  
Hopital Laval, Quebec.  
Hopital Sainte Justine Pour les Enfants, Montreal.  
Hopital de Precieux Sang, Quebec.  
Hotel Dieu de St. Joseph, Montreal.  
Jeffery Hale Hospital, Quebec.  
L'Hopital Notre-Dame, Montreal.  
LaMisericorde Hospital, Montreal.  
Montreal General Hospital, Centre Division, Montreal.  
Montreal General Hospital, Western Division, Montreal.  
Royal Victoria Hospital and Royal Victoria Montreal  
Maternity Hospital, Montreal.  
\*St. Francois d'Assise Hospital, Quebec.

*50 to 100 beds*

\*Homeopathic Hospital, Montreal.  
Montreal Foundling and Baby Hospital, Montreal.  
St. Joseph's Hospital, Three Rivers.  
Sherbrooke Hospital, Sherbrooke.  
Shriner's Hospitals for Crippled Children, Montreal.

## SASKATCHEWAN

*100 or more beds*

City Hospital, Saskatoon.  
Moose Jaw General Hospital, Moose Jaw.  
Regina Grey Nun's Hospital, Regina.  
St. Paul's Hospital, Saskatoon.

*50 to 100 beds*

Holy Family Hospital, Prince Albert.  
\*Hugh Waddell Memorial Hospital, Canora.  
Notre Dame Hospital, North Battleford.  
Providence Hospital, Moose Jaw.  
\*St. Elizabeth's Hospital, Humboldt.  
Victoria Hospital, Prince Albert.

**WELLESLEY CLINICAL SOCIETY**

At the February meeting of the Wellesley Hospital Clinical Society (of Toronto) Dr. A. S. Moorehead presented a fourteen-year-old boy who, in a coasting accident, seven weeks ago, had been struck by the pointed runner of a sleigh which collided with his own. Seen within an hour, the lad was in great pain, more pronounced in the lower left quadrant; his knees were flexed; his pulse was slow, and his temperature slightly over ninety-six. Morphia was withheld. Rupture of the ascending colon was suspected. Opened up three hours after the accident, the abdomen was found full of blood. Examination of the bowels showed no rupture; but as the pylorus was reached blood was found streaming above it, which led to palpation of the liver; a large rent was felt on the under surface, several inches wide and several inches deep; the edges were held together, however, by a tag. It being impossible to stitch, Dr. Moorehead packed with gauze, which remained in place for seventy-two hours. The pack upon being withdrawn, drainage was instituted and the patient went on to an uninterrupted recovery.

The slow pulse was due to absorption of the bile.

Dr. Moorehead also showed a man, a table waiter, who had for twenty years suffered from rather indefinite trouble with his stomach, accompanied with eructations of gas. The distress had no relation to meals. Had seldom vomited and had never discovered blood in the vomitus or stools. Three or four days before coming to hospital, the patient had been suffering a good deal of abdominal pain—dull and aching; following which it suddenly became extremely acute. One-half a grain of morphia followed by a quarter a little later gave no relief. The pulse was seventy; temperature not taken. The abdomen presented a board-like rigidity; the maximum point of tenderness was over the umbilicus. Operation showed a perforation of the duodenum, the ulcer being found on the anterior aspect, an inch from the pylorus. The abdomen contained contents of the stomach. The opening was closed by two purse-string sutures of silk; the abdomen washed out with saline solution; and two drainage tubes inserted—one at the site of the lesion; the other into the pelvis. The patient was doing well.

In discussion, Dr. Herbert Bruce remarked that a slow pulse was frequently found after such catastrophes. In the case of rupture of the liver, there must have been a great deal of shock, which in part accounted for the slow pulse. Dr. Bruce cited a case of ruptured duodenum in which he had operated within an hour and a half after the accident—the shortest time

in his experience between a rupture and its repair. He agreed with Dr. Moorehead as to the necessity of washing out the abdomen in these cases where the stomachic contents are found in the abdominal cavity. He, however, uses but the one drainage tube—the lower one.

Dr. J. E. Elliott reported briefly a case of rupture of the duodenum, accompanied with slow pulse resulting from shock; he had observed the same phenomenon in cases of obstruction and volvulus.

Dr. Harold Parsons spoke on "Tuberculosis in Children," referring particularly to conditions in the chest. For twenty years he had been doing his utmost to interest people in tuberculosis in childhood and trying to persuade them to change their attitude, more especially in respect to the danger children were in from exposure to tuberculous subjects and to the possibility of infection. Childhood was a most sensitive time to the encroachments of the tubercle bacillus. During the past month, for instance, he had seen five children who had been exposed to infection from nurse-maids. Three of the children were found to have caught the infection; the two others were still under investigation.

Physical examination of children suspected of having incipient tuberculosis was not sufficient. The focus of infection may be so small that it may be overlooked. An X-ray plate of such a case was shown by the speaker which showed a small focus in the pleura and a trail of lymphatic drainage to an enlarged mediastinal gland. There were many of such cases to be found.

In the clinic at the Sick Children's Hospital some 85,000 children had been examined; 53½ per cent. were found infected with tuberculosis.

In examining these children four points were to be kept in mind: a history of exposure; careful physical examination; the tuberculin reaction and an X-ray picture.

In inquiring into the history of exposure, one must remember not only the immediate members of the family; but also members of the whole household. Tuberculosis he regarded not so much a family disease as a household disease.

The signs of mediastinal tuberculosis are those of a lump in the mediastinum. Dr. Parsons passed around a post-mortem specimen of both lungs with an enlarged gland in situ—a horizontal section through lungs and mass, showing the relation the enlarged glands would have in life to the chest wall as to the lungs. Recognition of these enlarged glands by physical examination alone was difficult if they are small. In the advanced cases with large glands one sees dilated veins on the side

of the chest. Dullness is found down the sternum and parasternal region. Pressure signs appear upon the face being turned upward to the ceiling the lungs are drawn up into the narrowed dome of the chest. Auscultation reveals a venous hum—the Eustace Smith sign. Listening over and below the seventh cervical spine one gets broncophony. The mass of posterior tracheal glands conveys the sound directly through the chest wall. This is D'Espine's sign. Of course, one must remember that these signs may occur with enlarged thymus, Hodgkins' disease, lymphatic leukæmia, or a new growth. But these conditions are rare in children, as compared with tuberculosis. An X-ray plate exhibited to the society showed an enlarged thymus which had been detected after a negative tuberculin reaction.

In these cases of mediastinal tuberculosis the tuberculin reaction ought to be tried—unless the patient is suffering from fever. In such case this investigation should be left over until the temperature is normal. If a positive reaction is obtained, the diagnosis is confirmed.

Dr. Parsons then proceeded to show on the screen a number of X-ray plates illustrative of various phases of mediastinal tuberculosis.

This address was listened to with extreme interest.

---

#### GIFT FOR COLLINGWOOD HOSPITAL

At the regular meeting of the Board of Trustees of the General and Marine Hospital, Collingwood, Ont., on April 4th, the announcement was made of a donation of ten thousand dollars towards the erection of a memorial wing. The news was conveyed to the Board by Drs. McFaul and Arthur, who, upon the request of the donor, are withholding the name until plans are prepared and approved. The grateful appreciation of the Board was voiced by the chairman, and the handsome donation formally accepted.

---

#### HOSPITAL BILL DEFAULT TO BE MADE CRIMINAL

Many changes of importance have been embodied in the consolidation of the Hospital and Charitable Institutions Act, which was introduced into the Ontario Legislature on March 24 by the Hon. Lincoln Goldie.

This act replaces the legislation which has been on the statute book since 1914, and one of its main features is to provide that every effort be made to collect their dues from public pa-



tients, according to their ability to pay, before the Government is called upon to provide its statutory per diem grant.

Other important amendments are included. One interesting feature is that the law making it a criminal offense to fraudulently obtain board and lodging at a hotel is copied for hospitals, thus making misrepresentation of one's ability to pay hospital dues a criminal act.

A feature in the old act was the governing of both private and public hospitals by the one legislative provision, but private hospitals will in future come under an entirely separate enactment. Another feature is that lumbermen and other large employers of labor will not in future be held responsible for the illness of their employees, unless such is directly attributable to the period of such employment.

---

### LADY STRATHCONA LEAVES ESTATE OF TWENTY-EIGHT MILLION

Total Assets amounting to \$27,995,171 of which \$562,677 is in Manitoba, constitute the estate of Lady Strathcona and Mount Royal, a copy of whose will was filed for probate in the surrogate court at Winnipeg recently.

The Manitoba estate consists of the Winnipeg property known as Fort Garry Court, Broadway and Main Streets; real estate holdings in St. John's, Selkirk, Emerson and other parts of the province, besides a list of stocks and securities.

The will is dated Nov. 17, 1925, and the Royal Victoria Hospital, Montreal, with a bequest of £25,000, is the only Canadian beneficiary.

---

### LADY MORTIMER CLARK RESIDENCE OPENED

The opening of the Lady Mortimer Clark Residence and the graduation exercises of the Grant Macdonald Training School at the Toronto Hospital for Incurables took place on June 22nd. In the dining-hall of the new residence the nurses were presented with their diplomas and school pins by Miss Mortimer Clark.

Mr. John Firstbrook, president of the board of management of the hospital, acted as chairman during the graduation exercises. To the music played by Mrs. E. A. Dolson, the nurses, in their blue and white uniforms and trim caps, and each wearing flowers presented to them by Miss Mortimer Clark, marched into the hall.

Rev. J. G. Inkster, of Knox Presbyterian Church, conducted the devotional exercises with which the presentation programme opened. Miss E. M. Cook, superintendent of the hospital, read her report of the activities for the past year, outlining the progress made in the hospital, and expressing her appreciation of the new residence, which has accommodation of separate rooms for one hundred nurses. The residence was erected from grants of \$125,000 from both the city and provincial administrations. Representatives of both governments were present, and on behalf of the city His Worship Mayor Foster addressed the graduating class.

The presentation of the school diplomas and pins was made by Miss Mortimer Clark to each of the nurses, and from the alumnae association, Miss Edith Lawson, president of that organization, presented each of the graduates with a hypodermic syringe set.

The Ambrose Kent memorial medal for the highest standing in the final examinations was awarded to Miss Kathleen Tarleton Cuffe, of Peterborough, by Mrs. Ambrose Kent. The award for second place in the class was made to Miss Marie Wilson, of Toronto, and Miss Mortimer Clark presented the successful nurse with the medal. The Mrs. R. B. Hamilton Prize for neatness and general efficiency was awarded to Miss Ivy Clark by Mrs. Hamilton.

The members of the graduating class were: Miss Marie Wilson, Toronto; Miss Greta Marie Kennaley, Mimico; Miss Beatrice Marcelle McNeerney, Toronto; Miss Ivy Clarke, Kirkfield; Miss Kathleen Tarleton Cuffe, of Peterborough.

A reception was held in the new residence following the exercises, and the many guests took the opportunity to inspect the building.

---

## BOOK REVIEWS

*Physicians of the Mayo Clinic and Mayo Foundation with Portraits.* Philadelphia and London. W. B. Saunders Company. Canadian Agents: McAinsh & Co. Limited, Toronto. 1927. Price \$7.75.

This book is a most interesting one to glance through and refer to, after one has read a paper or address produced by a member of the Mayo Clinic. A brief biography is given of each member of the Clinic, and at its side appears a very good photograph of the man himself. It contains probably the most famous collection of short biographical histories of bright scientific medical men extant in the world to-day.

**Powerful Antisymphilitic**  
 More active and better tolerated than 606 and neo-606 (914)

**GALYL**

Adopted by the Civil and Military Hospitals of the Allied Countries

MEDICATION: *Intravenous or intramuscular Injections.*

FRACTIONATED DOSES: 20 to 30 centigr. every 4 days. (12 to 14 injections for a course).  
 MEDIUM DOSES: 30 to 60 centigr. every 6 or 8 days. (8 to 10 injections for a course).

READING MATTER AND SAMPLES: Etabl<sup>m</sup> MOUNEYRAT, Villeneuve-la-Garenne (France).  
 SOLE AGENTS FOR CANADA: ROUGIER Frères, 210 Lemoine St., MONTREAL.

*Pure and Delicious*

# BAKER'S COCOA



Is a most satisfactory beverage. Fine flavor and aroma and it is healthful.

Well made cocoa contains nothing that is harmful and much that is beneficial.

It is practically all nutrition.

*Choice Recipe Book Free.*

**Walter Baker & Co., Limited**

DORCHESTER, MASS.    Established 1780    MONTREAL, CAN.

REGISTERED TRADE-MARK

## NOURISHING IN THE HIGHEST DEGREE

To the doctor, nurse or dietitian cocoa and chocolate offer the ideal food. Delicious in flavor and thereby tempting and attractive to the sick, they are at the same time healthful and nourishing in the highest degree, for, as we widen our knowledge of food values, cocoa and chocolate assume their rightful place as outstanding sources of bodily strength and vigor.

Baron Von Liebig, one of the best-known writers on dietetics, says:

"It is a perfect food, as wholesome as delicious, a beneficent restorer of exhausted powers; but its quality must be good, and it must be carefully prepared. It is highly nourishing and easily digested, and is fitted to repair wasted strength, preserve health and prolong life. It agrees with dry temperaments and convalescents; with mothers who nurse their children; with those whose occupations oblige them to undergo severe mental strains; with public speakers, and with all those who give to work a portion of the time needed for sleep. It soothes both stomach and brain, and for this reason, as well as for others, it is the best friend of those engaged in literary pursuits."

The cocoa and chocolate products manufactured by the House of Walter Baker & Co., Ltd., can safely be recommended as being among the finest that are produced. The quality requirements of this company are so high and so rigidly maintained that their products set a standard in purity and nutritive value.

Many cocoas and chocolates on the market contain foreign substances or have been subjected to the action of chemicals during manufacture. In the preparation of so-called "Dutch cocoas," for instance, the beans are treated with an alkali to bring about the dark color that many consumers believe is the sign of strength in the product. It may be said, once for all, that black cocoa products must be looked upon with suspicion. They contain foreign matters or else they have been maltreated by chemicals during manufacture.

Walter Baker's Breakfast Cocoa, on the other hand, is made by a mechanical process that produces a powder of great fineness, richness and uniformity. Throughout its manufacture the original flavor of the cocoa bean is carefully preserved and the utmost cleanliness is insured.

Dr. H. C. Sawyer, in his valuable little book "Nerve Waste," says of this product:

"Baker's Breakfast Cocoa is a light preparation which can be heartily recommended; it contains only so much fat as can be digested by almost any one, and is peculiar in not cloying or palling after a time, as so many cocoa preparations do. Such a beverage is far more wholesome, and more agreeable, after one becomes used to it, than tea, which is much over-used."

## TURNBULL Push Button Elevators

*Best for  
Hospital Service*

**The Turnbull Elevator Company Limited**

TORONTO

MONTREAL

- WINNIPEG

- VANCOUVER



*The CHASE HOSPITAL DOLL* is over five feet tall, made of finely woven stockinet. Is durable, waterproof and sanitary. It has copper reservoir which has three tubes leading into it, corresponding in location and size to the urethral, vaginal and rectal passages.

Superintendents now using the adult size, as illustrated above, will be glad to know that we make several small models corresponding to a two-month, four-month, one-year and four-year-old baby.

### Things That Others Teach

More things can be taught by *The CHASE HOSPITAL DOLL* and *The CHASE HOSPITAL BABY* than by the use of the human subject. Their physical formation many appurtenances are such, that the hospitals throughout this country and abroad who use them, find that they need put no restriction upon demonstration and practice. With *The CHASE HOSPITAL DOLL* and *The CHASE HOSPITAL BABY*, the theory of teaching is converted into the practical knowledge and manual dexterity obtainable only by actual work.

Among the things being taught daily throughout the world by the use of these manikins in Hospitals, Nurses' Training Schools, Home Nursing Classes, Baby Clinics, Mothers' Classes and by Visiting Nurses and Baby-Welfare Workers are the proper application of all kinds of bandages, trusses, binders, slings, fracture appliances, packs. The internal water-tight reservoir permits the giving of instruction in douching, administering enemata, catheterization, and the application of dressings, and the examination and probing of the ear and nose cavities. They are used to demonstrate positions for major and minor surgical operations, and for gynecological positions, how to prepare the patient for operations and to care for the patient in etherization. They permit instruction in bathing, bed-making, and the feeding of the patient.

Let us send you our latest catalogue which will tell you how *The CHASE HOSPITAL DOLL* and *The CHASE HOSPITAL BABY* are made and exactly how you can use them.

## *The* **CHASE HOSPITAL DOLL**

M. J. CHASE  
24 Park Place  
PAWTUCKET, R.I.

## DRY PLEURITIS

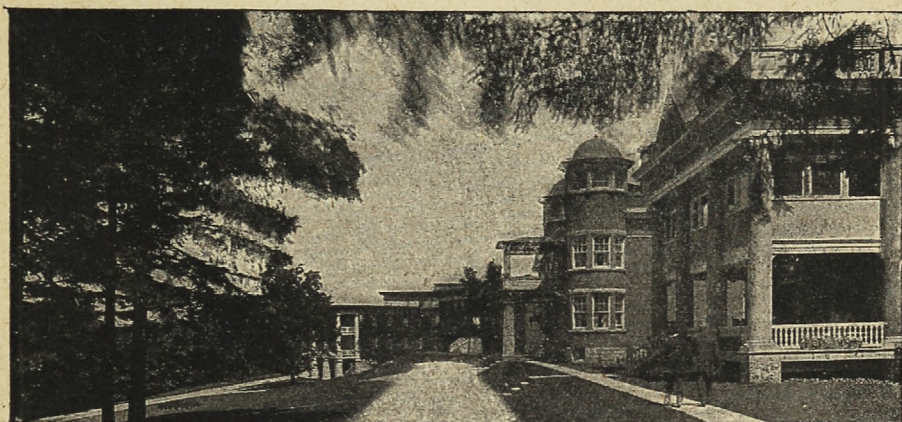
The patient should be kept at rest in bed on a hair mattress until the temperature has been normal for a few days. The room should be well ventilated, the temperature being kept at about 60° F. If the pain is intense, a hypodermic injection of morphine gr. 1/3 (0.02) with atropina gr. 1/150 (0.0004) should be given at once, but the effect of local measures should be tried when the pain is less severe in the first instance. The most effective local measure is poulticing. The first poultice may consist of equal parts of crushed linseed and powdered mustard, linseed alone being used subsequently. If the pain disappears and fluid comes, there is no advantage in continuing with poultices. Or we may use a thick layer of Antiphlogistine or spongopiline. Blisters may be used for chronic pain, but not for the pain of acute pleuritis. Leeching is often very effective. Venesection may be necessary, and as Whitla has pointed out in the acute traumatic form of the disease, often complicated with a fractured rib, there should be no hesitation in drawing off 10 to 20 ounces (300. to 600.) of blood. Strapping is probably the most useful thing for relieving pain once the first acuteness has passed off. It limits movement when properly applied and prevents the rubbing of inflamed surfaces, the one on the other. Broad strips of good adhesive rubber should be applied beyond the sternum on the sound side, and then, whilst the patient holds his breath in forced expiration, applied to the affected side at the seat of the pain, and carried well beyond the vertebral column. In some instances the strapping cannot be borne, either on account of its increasing the pain, or from the fact that, as may happen when pleuritis is a complication of other lung disease such as pulmonary tuberculosis, it has supervened on the side most available for respiration. The amount of relief which may be expected from strapping may be fairly judged by observing the effect of steady firm pressure by the hand on the affected side.—*Arthur Latham, M.D., in the Oxford Index of Therapeutics.*

## CALCIUM AND PHOSPHORUS

The profound physiologic importance of calcium phosphorus, especially in the so-called wasting diseases, is becoming increasingly evident, and the best form of calcium and phosphorus for administration is unquestionably calcium glycerophosphate. Eskay's Neuro Phosphates contain calcium and phosphorus in the form of glycerophosphate, is rapidly absorbed and does not cause gastrointestinal irritation on long-continued use, as do the usual calcium salts. It is manufactured by Smith, Kline & French Co., Philadelphia, Pa.

# HOMewood SANITARIUM

## GUELPH, ONTARIO



A private neuropsychiatric hospital with special facilities for the study of early cases to establish diagnosis and determine prophylactic or treatment indications.

75 acres of woods and lawns with ample provision for out and in-door employments and diversions.

Guelph, reputed as one of the healthiest cities of Canada, is conveniently accessible from Toronto, Montreal, Buffalo and Detroit. Address: Dr. Harvey Clare, Medical Superintendent, Guelph, Ontario.



*BOVININE can be administered in milk, cocoa, water or any non-alcoholic beverage at a temperature under 80 degrees F.*

*To hasten the  
return to normal*

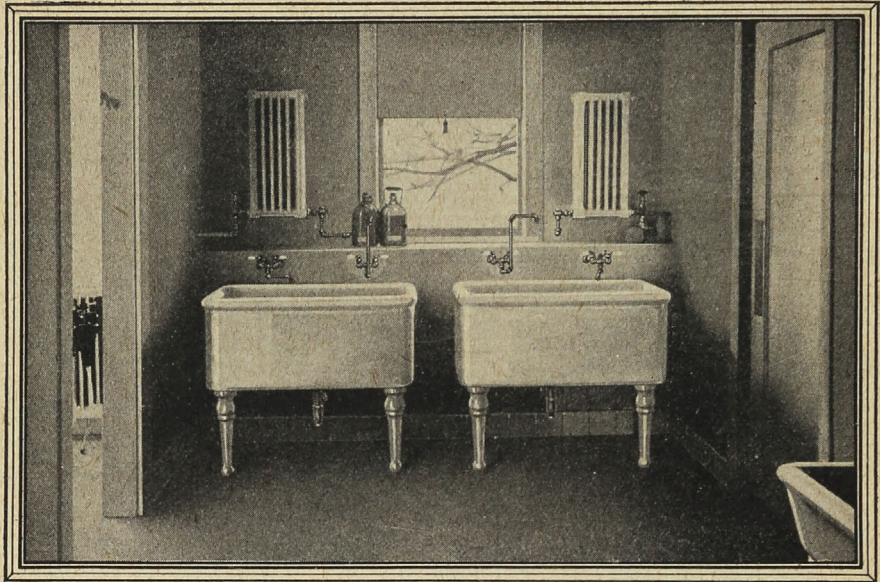
## **BOVININE**

*The Food Tonic*

Nearly fifty years of continuous use has definitely established BOVININE as a valuable therapeutic agent particularly useful in all bacterial infections. This is due to its unusually large content of the substances contained in normal blood serum.

For all cases of convalescence, anemias, undernourishment etc., BOVININE offers a convenient source of easily assimilable nutrition that hastens the return to normal. Samples and literature on request.

**THE BOVININE COMPANY**  
75 West Houston Street - New York City



### CRANE HOSPITAL FIXTURES ARE DESIGNED BY SPECIALISTS

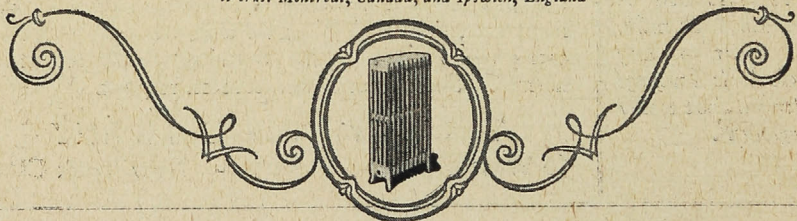
Specially trained engineers design Crane plumbing fixtures for hospitals. Their knowledge of hospital practice and hospital needs is first-hand. Contacts and consultations with hospital authorities all over the country broaden it. There are few Crane fixtures that do not reflect this intimate and accurate knowledge in design and construction.

Leading hospitals and public institutions throughout the Dominion benefit from the practical knowledge embodied in their Crane plumbing fixtures and fittings, heating systems and piping. All carry the Crane guarantee, all evidence the capable work of these Crane specialists. Their experience is always at your disposal. Consult with them freely.

# CRANE

CRANE LIMITED, GENERAL OFFICES: 386 BEAVER HALL SQUARE, MONTREAL  
CRANE-BENNETT, LTD., HEAD OFFICE: 45-51 LEMAN STREET, LONDON, ENG.

*Branches and Sales Offices in 21 Cities in Canada and British Isles  
Works: Montreal, Canada, and Ipswich, England*



*Certo Radiator*





# The Logical Food

## *for Infants*

The most logical food for infants is, of course, breast milk.

In its absence, infant specialists recognize the best substitute to be fresh cow's milk.

Cow's milk, however, requires a very simple modification to make it suit infant requirements.

Mixtures of cow's milk, water, and

### Mead's Dextri-Maltose

have won the approval and confidence of the medical profession in many countries.

Dextri-Maltose is *not* a baby food, but a specially prepared sugar or carbohydrate to be added to diluted cow's milk.

Mead's Celluloid Feeding Calculator, showing formulas of cow's milk, water, and Dextri-Maltose, sent free to the profession on request.



MEAD JOHNSON & COMPANY  
OF CANADA  
LIMITED  
Belleville, Ontario



# Supreme

*in those points which make for the utmost in quality and purity of bakery products.*

You could travel the whole world over and nowhere would you find a bakery more scrupulously clean, more thoroughly and scientifically equipped than the Ideal bakery.

It has kept apace with science and invention. Improvements that add efficiency and further sanitation always find a place with us. The latest addition—the gas-fired travelling ovens—whereby bread is baked to a nicety without the touch of a human hand is the talk of the trade all over Canada.

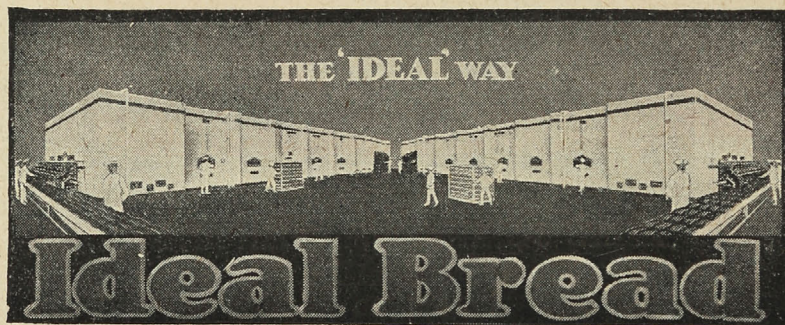
It is merely a further proof of the progressive ideals upon which the Ideal baking business has been based. The same high ideal of equipment as we have of quality; for Ideal Bread is made from the finest ingredients possible to be obtained.

*Knowing this, physicians can confidently recommend Ideal products to their patients.*

## Ideal Bread Company Limited

*The most progressive baking firm in the Dominion*

183-193 Dovercourt Rd., Toronto. Lakeside 4874



## Can You Hope to "Lubricate"

25 feet of intestines with a tablespoonful of oil?

Just try to lubricate the mouth — the mucosa is just the same.

And then coating the walls of the bowel with oil is so undesirable — it is liable to interfere with the digestive processes.

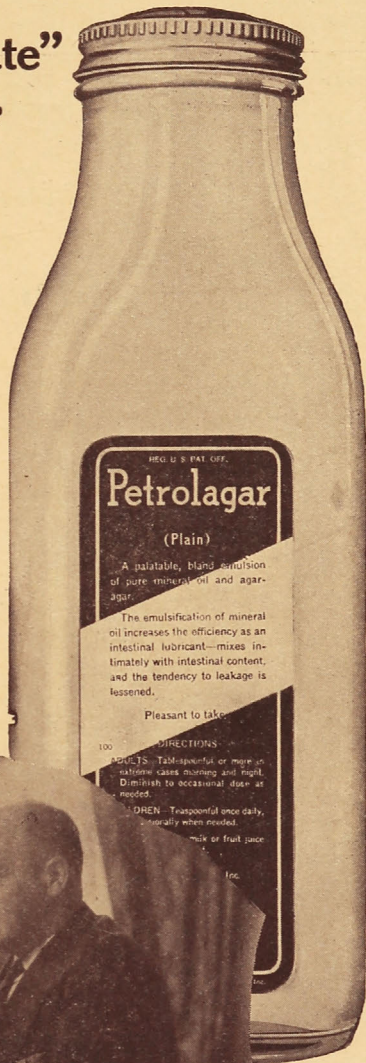
### Petrolagar

does not coat the intestines or the food with a film of oil.

The petrolatum is maintained in its emulsified state by the indigestible emulsifying agent, agar-agar. Mixed with the intestinal content, a yielding, easily moved, fecal mass is produced.

*That is why PETROLAGAR is proving such a valuable aid in restoring "Habit Time."*

Deshell Laboratories of Canada, Ltd.  
245 Carlaw Ave., Toronto, Ontario



# Petrolagar

Reg. U. S. Pat. Off.

# INDISPENSABLE IN A HOSPITAL

There are but few institutions that do not suffer more or less from vermin. For a long period of years

## KEATING'S POWDER

has been successfully used for the extermination of all kinds of vermin, including bugs, fleas, cockroaches, beetles, mosquitoes, flies, wasps, moths in furs, ants and every species of insect.

We feel satisfied that those Hospitals, Asylums and Public Charitable Institutions in Canada that have not as yet used KEATING'S POWDER will find it most effective in getting permanently rid of all pests, not only in the wards, but in and around the baseboards of corridors, kitchen and pantry sinks, storerooms and throughout the cellar. To kill vermin, sprinkle the powder freely where they appear. Dust inside underclothing, sheets and blankets. For flies and mosquitoes, dust on the window ledges and fumigate the room with the powder. *Use dry and keep dry.* KEATING'S POWDER is harmless to everything but insects. It contains no poison. See that every package bears the signature, Thomas Keating, on the red label round the green wrapper. We will gladly supply your Purchasing Agent with liberal samples for trial and whatever literature may be desired.

## THOMAS KEATING LIMITED

Station Mills, Billingshurst, Sussex, England

London Office: 8-10 Colworth Grove, Browning Street, Walworth, S.W. 17

## Harold F. Ritchie & Co., Limited

Toronto

CANADIAN DISTRIBUTORS