

*The Official Organ of the Provincial Hospital Associations*

\$300  
PER  
ANNUM

# The HOSPITAL MEDICAL *and* NURSING WORLD

CONTINUING THE HOSPITAL WORLD

50¢  
PER  
COPY

## Contents.

### EDITORIAL

Page

Hospital Questionnaire . . . . .	37
Ontario Hospital Association . . . . .	44

### ORIGINAL CONTRIBUTION

Hospital Information Department, M. T. McEachern, M.D. . .	50
--	----

## *A Sedative or a Tonic?*

Most cases of neurasthenia and "nervous break-down" result from physical debility. They require, not a sedative, but a tonic.

## Compound Syrup of Hypophosphites "FELLOWS"

has proved its efficacy in thousands of cases of this kind. It is a real tonic, not merely a "whip." It promotes nutrition and vital energy, and thus controls nervous irritability.

*Write for samples and literature*

**FELLOWS MEDICAL MANUFACTURING CO., Inc.**  
26 Christopher Street, New York, N. Y.

*Published in the interests of Hospitals  
& the Medical & Nursing Professions.*

# 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 defense against pronounced cases of

# HALITOSIS

**Lambert Pharmacal Company**

263-265 Adelaide Street West,

Toronto

## *D&G Sutures* are flexible

in all three varieties

The Non-Boilable Grade  
of Kalmerid Catgut  
is extremely flexible



Send for interesting new booklet of complete information

**DAVIS & GECK, INC.**  
*Surgical Sutures Exclusively*

211-221 Duffield Street - Brooklyn, N.Y., U.S.A.



**THE LONGYEAR BELT IS THE LATEST INVENTION FOR SUPPORT  
IN CASES OF FLOATING KIDNEY AND PROLAPSE  
OF THE STOMACH**

It consists of a well-made belt, a large soft pad and a strong spring. The pad placed inside at the bottom of the belt and held securely in place by the broad spring, raises and holds firmly, but without discomfort, the abdominal organs.

This belt gives splendid results, and the principle readily appeals to the medical profession.

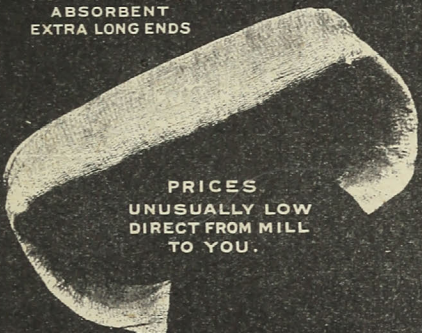
**Price \$12.00**

**THE J. F. HARTZ CO., LIMITED**  
PHYSICIANS' SUPPLIES

TORONTO MONTREAL

**Swiss  
Hospital Pads**

QUALITIES:~  
SOFT  
NON-IRRITATING  
ABSORBENT  
EXTRA LONG ENDS



PRICES  
UNUSUALLY LOW  
DIRECT FROM MILL  
TO YOU.

**Puritan Mills  
Swiss Textile Co.**  
1133 BROADWAY, NEW YORK, N.Y.  
MILLS - ASSONET, MASS.

**Nurses and Dietitians  
Wanted**

**GRADUATE NURSES AND DIETITIANS** wanted. Many excellent paying hospital positions now open in almost every State in the United States. Supt. of Nurses, Asst. Supt., Surgical, General Duty, Night Supervisor, Anesthetists, Industrial, Public Health, School Nurses, Dietitians. Write for free book now—to-day. It tells all about the work this organization is doing for nurses and dietitians everywhere. Aznoe's Central Registry for Nurses, 30 North Michigan Avenue, Chicago, Ill.

## SEMOLINA AULD REEKIE

The attention of the Medical Profession is called to

### Auld Reekie Semolina

(Trade-mark Registered)

This is a product that is ideal for use in the sick-room. It is *pure, wholesome, easily digested* and *highly nutritious*. It can be used in the making of puddings, soups and in many other attractive forms for use by those convalescing from illness. Procurable at all principal grocers or direct from

**The British Agencies**  
Company  
TORONTO

## SANITARY RUG RENOVATION

After contagious disease in a household, all rugs and floor coverings should be removed and thoroughly renovated.

The attention of physicians is called to the fact that we make a specialty of this work, calling for a rug or carpet, and returning it in two days. Every rug entrusted to our care is done thoroughly, without any damage to the finest Persian texture.

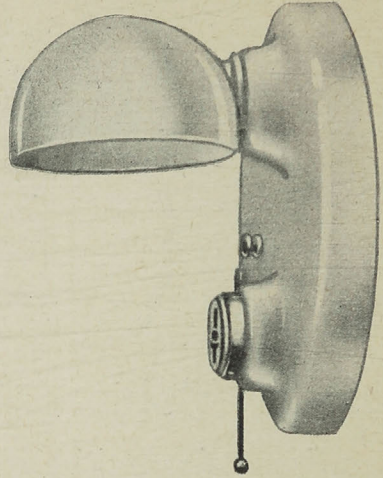
We have already a number of physicians as satisfied customers.

### THE BARRACK ORIENTAL RUG RENOVATING CO.

C. N. Barrack, Proprietor

20-22 Duke Street - Toronto

*We invite our customers to call and watch the process of rugs being cleaned.*



## AGLITE

ALL GLASS

AGLITE is unequalled for wards, corridors or bathroom illumination. Its all-glass construction makes it sanitary and easily cleaned. Its white finish is quite in keeping with hospital surroundings.

### NOSHADOWLITE

FOR OPERATING ROOMS

This light was designed in conjunction with several well-known surgeons. It enables the surgeon to work speedily and accurately. Noshadowlite is used in such well-known institutions as the Mayo Brothers Clinic at Rochester, Minn., and the Toronto General Hospital.

*We will be glad to send descriptive folder showing lighting tests and designs.*

**Tallman Brass & Metal Limited**  
HAMILTON, ONT.



## Its strength and purity never vary

THE complete confidence of physicians and surgeons in the antiseptic and germicidal qualities of "Lysol" Disinfectant has made it the acknowledged standard. Substitutes and low-priced products do not have the absolute uniformity and unvarying chemical purity so essential for hospital requirements.

We re-distill even the purest cresol now obtainable. We exercise scientific control over the methods used in blending the various ingredients. "Lysol" Disinfectant is not only unfailingly uniform and chemically pure, but also highly concentrated and alkali-free.

### Bulk sizes for hospital use

For hospital use, we supply "Lysol" Disinfectant in single gallons, five gallons, ten gallons and fifty-gallon steel drums. These sizes of "Lysol" Disinfectant are sold only to hospitals and similar institutions.

For special prices to hospitals, write to Harold F. Ritchie & Co., Ltd.

Canadian Agents:  
**HAROLD F. RITCHIE & CO., LTD.**  
 10 McCaul St., Toronto

Manufactured by  
**LYSOL, INC.**

635 Greenwich Street - New York City

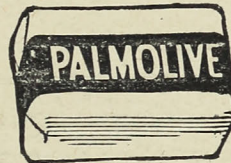
**Lysol**  
 Disinfectant  
 Reg. U.S. Pat. Off.

## Soap and Wounds

*During the war some French and English surgeons made interesting experiments, using soap instead of antiseptic in the treatment of wounds, with the result, as they state, "that we are now using more soap and less of the antiseptics."*

This indicates to the physician that he recommend to the public that ordinary wounds, scratches, cuts, etc., be given a thorough washing with hot water and a good toilet soap, instead of the general use by the public of the much advertised antiseptics. When the wound is severe enough for an antiseptic, it should be brought to the attention of the physician.

It has been found that a good toilet soap is as good as, if not better, for this purpose, than the special brands of so-called antiseptic or germicidal soaps.



PALMOLIVE presents all the characteristics of the ideal toilet soap:

- It is made from vegetable oils exclusively.
- It has a thorough, detergent action, with a profuse, creamy lather.
- It can be used frequently without rendering even the tenderest skin brittle or overdry.
- It contains no rancid animal fats.
- It contains no dye or artificial coloring. The olive green color is due to the oils used in its manufacture.
- It is a milled soap, containing no free caustic alkali and no excess of unsaponified oil.
- It cleanses thoroughly without causing irritation or reddening of the integument.

We suggest that you try PALMOLIVE yourself before recommending it to your patients.

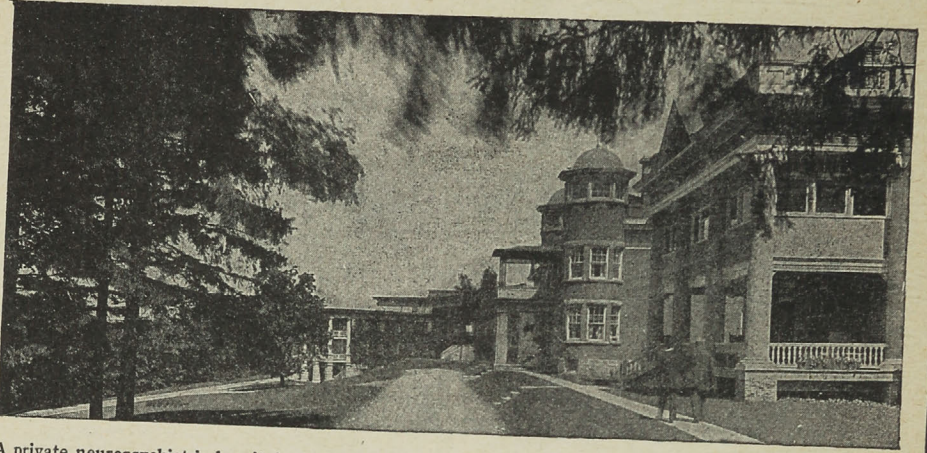
*A packet containing twelve small cakes— a size convenient to carry in your case— will be sent you gratis upon receipt of request.*

**The Palmolive Company  
 of Canada, Limited**

TORONTO - ONTARIO - CANADA

# 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. C. B. Farrar, Medical Superintendent, Guelph, Ontario.



## Mark all Hospital Linen!

EVERY article of hospital and personal wear is liable to loss or misuse unless properly marked. For identifying sheets, pillow cases, towels, uniforms, etc., there is nothing so easy to use, economical and permanent as CASH'S WOVEN NAMES. Sew them into everything that washes.

3 dozen \$1.50      9 dozen \$2.50  
6 dozen \$2.00      12 dozen \$3.00

Write for Style Sheet and Samples,  
or send in a Trial Order now.

**J. & J. CASH, INC.**

4 Grier Street      Belleville, Ont.

### Cash's Woven Names



*"Deliciously  
Fragrant"*

CHASE & SANBORN'S

**SEAL BRAND COFFEE**

SOLD ONLY IN  
½ lb. 1 lb. and 2 lb. Tins

50

# ® OVALTINE ®

## AND PHOSPHORUS ADMINISTRATION

IT IS GENERALLY AGREED THAT THE MOST SATISFACTORY MEANS OF EXHIBITING PHOSPHORUS IS BY NATURAL FOODS RICH IN PHOSPHATIDES.

"Ovaltine," the Tonic Food Beverage, is made from ripe barley malt, creamy milk and fresh eggs—all rich in assimilable organic phosphorus bodies—by a special process of extraction and concentration which presents these principles in undiminished activity and in a form which ensures prompt and complete absorption.

"Ovaltine" is a great help in those cases where it is essential to arrest tissue waste and to counterbalance excessive loss of phosphorus such as certain neurasthenic and general debilitated conditions, pulmonary tuberculosis, etc. "Ovaltine" is characterised by being of definite therapeutic value, by being convenient and palatable, and by being reasonable in price.

SUPPLIED BY ALL DRUGGISTS. SPECIALLY LOW PRICES ARE QUOTED TO HOSPITALS AND KINDRED INSTITUTIONS ON DIRECT APPLICATION TO TORONTO OFFICE.

**A. WANDER LIMITED, LONDON, Eng.**

Works: Kings Langley, Eng.

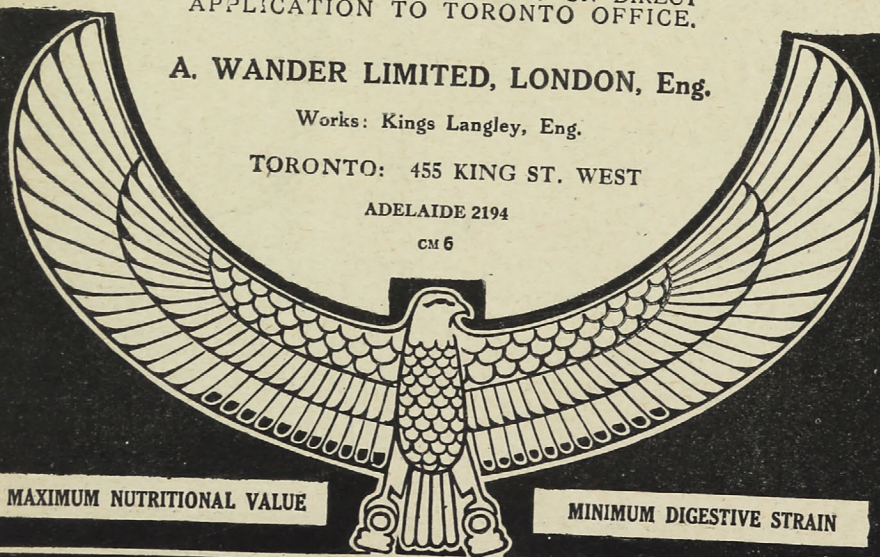
TORONTO: 455 KING ST. WEST

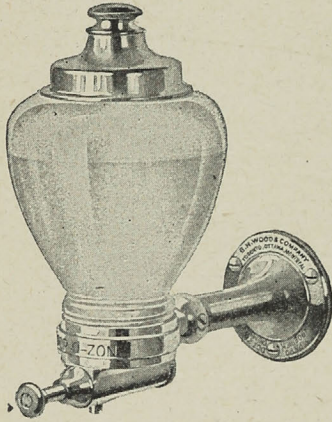
ADELAIDE 2194

CM 6

MAXIMUM NUTRITIONAL VALUE

MINIMUM DIGESTIVE STRAIN





## For Hospitals and Surgeons

The SOP-O-ZON Liquid Soap Dispenser is ideal for use in Institutions and Physicians' Surgeries. It is cleanly, economical and most attractive.

We also supply Liquid Soap made from the best oils obtainable that are non-irritant to the most delicate skin.

*For further particulars write*

**G. H. WOOD AND COMPANY**  
28 Wellington St. E., Toronto, Canada  
Branches:- MONTREAL OTTAWA



## ICE BILLS are RELICS of the PAST

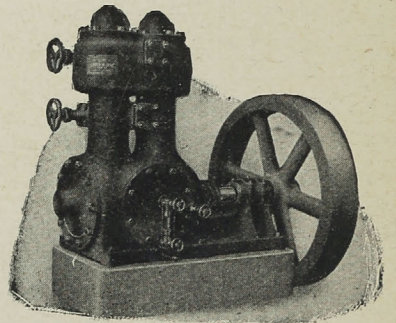
TO USERS OF *York* Mechanical  
Refrigeration

Ice bills and the worries that go with the iced refrigerator are soon forgotten by the Hospital Staff whose refrigeration is produced by a York Mechanical Refrigerating System.

The constant, low temperature produced by Mechanical Refrigeration preserves the foodstuffs placed in the refrigerator in prime condition. York Machines also manufacture economically, the necessary ice for institutional use.

*Write us for information and prices*

**CANADIAN ICE MACHINE COMPANY, LTD.**  
TORONTO MONTREAL WINNIPEG VANCOUVER







# Recommend KOTEX to your patients— for these reasons

First, from the standpoint of better health. Kotex is a thoroughly reliable hygienic product. Made under the best sanitary conditions. Its use is a protection

Second, because Kotex insures the protection and physical comfort which helps make women efficient. It is first aid in the fight physicians are waging against periodic disability.

The reason?—Kotex has amazing powers of absorption. It absorbs, instantly, 16 times its own weight in moisture. It is 5 times as absorbent as the usual cotton pad.

A physician of highest standing has made a thorough study of Kotex in the relation to the better health of women. He has written a book which we want to send you.

Your name and address on the coupon will bring a copy of the book by return mail. A sample of Kotex will come with it. That you may know exactly what Kotex is, how it is made, why you want to recommend it to patients.

K O T E X

*Obtainable everywhere at drug and department stores. Comes in sealed packages of 12. 2 thicknesses—Kotex-Regular, Kotex-Super.*

CELLUCOTTON PRODUCTS CO.	
166 W. Jackson Blvd., Chicago	
Please send me your Medical Book on Kotex and the sample.	
Name.....	.....
Address.....	.....
City .....	.....
Province.....	.....H.W. 8-24

**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>l</sup> MOUNEYRAT, Villeneuve-la-Garenne (France).  
 SOLE AGENTS FOR CANADA: ROUGIER Frères, 210 Lemoine St., MONTREAL.

**Electrically  
 Lighted Surgical  
 Instruments**

**The Ninth Edition  
 of our Catalogue**

describes and illustrates our complete line of instruments, designed both for the work of the specialist and of the general practitioner. A copy will be mailed upon request.

*"E. S. I. Co." Instruments equipped with genuine  
 "E. S. I. Co." TUNGSTEN LAMPS*

are indispensable for accurate diagnosis. These lamps give maximum illumination with a minimum increase in temperature. Be sure the lamps in your instruments are genuine "E. S. I. Co." lamps.

We shall be pleased to mail a Lamp Sheet on request so you can specify lamps by our numbers, and avoid any possibility of not getting the proper lamps.

**Electro Surgical Instrument Company**  
 Rochester, N. Y.

**Hygienic Paper Specialties**

*We are manufacturers of the following items and would be pleased to send you samples on request.*

SPUTUM CUP REFILLS  
 POCKET SPUTUM CUPS  
 PAPER NAPKINS  
 PAPER DRINKING CUPS

PAPER CUSPIDORS  
 PAPER TOWELS  
 PAPER TABLECLOTHS  
 TONGUE DEPRESSORS

**Stone & Forsyth Co.**

67 Kingston St.

Boston, Mass., U.S.A.

## ECONOMICAL

It takes very little "Poliflor" to give floors a brilliant and lasting polish, and it dries quickly. It contains no benzine or gasoline. Wherever "Poliflor" is used there is an appearance of brightness and cleanliness. Specially packed in 5 lb. pails for use in hospitals and similar institutions.

**Poliflor**  
FLOOR and  
FURNITURE  
WAX

*Write for samples and prices*



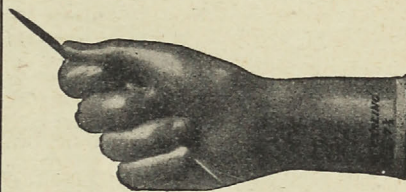
Made and guaranteed by  
**THE NUGGET POLISH COMPANY LIMITED**  
102 Amherst St., Montreal

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



Standard for Homes, Hospitals  
and Institutions

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



ana



Just as indispensable in a Hospital  
as  
Light and Heat

*If it  
will  
shine*



*We make  
a polish  
for it*

HAMILTON

## FESS OIL BURNERS

in all sizes and types of boilers from the small house boiler to the largest steam plant have demonstrated, during the last ten years, the efficiency, cleanliness and economy of burning oil with properly designed installations and equipment.

MEDICAL MEN should investigate the new  
**FESS AUTOMATIC OIL BURNER**  
for household use—a marvel of simplicity and dependability.

*Write or phone for list of hospitals and other institutions and homes now burning oil. See it in operation.*

### FESS OIL BURNERS OF CANADA

LIMITED

*Oil Combustion Engineers*

*Established 1913*

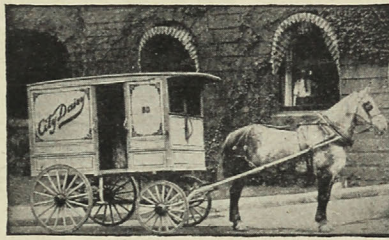
47 King Street West  
323 Beaver Hall Hill

- -  
- -

Toronto  
Montreal

Our "Certified Milk" is produced at City Dairy Farms, New Lowell, Ont. under supervision of Dept. of Health (Toronto)

For years our leading physicians have prescribed it for delicate babies and invalids.



*We have a yellow wagon on every street—every morning.*

*City Dairy*

TRINITY 2040

## IDEAL FOR HOSPITALS

The attention of Hospital Superintendents and Physicians is called to

**REFINITE**  
RIVAL OF THE CLOUDS  
TRADE MARK

### Nature's Water Softener

In the hospital, Refinite Soft Water makes for the highest economy in the Laundry Department, doubling the life of the linens and preventing the formation of scale in the boilers.

The following Canadian hospitals have thus far been equipped with the Refinite System:

MISERICORDIA HOSPITAL	- - -	Edmonton, Alta.
SASKATCHEWAN SANATORIUM	- - -	Fort Qu'Appelle, Sask.
SASKATCHEWAN PROVINCIAL HOSPITAL	- - -	Battleford, Sask.
PROVIDENCE HOSPITAL	- - -	Moose Jaw, Sask.
REGINA GENERAL HOSPITAL	- - -	Regina, Sask.
WEYBURN MENTAL HOSPITAL	- - -	Weyburn, Sask.
WILLETT HOSPITAL	- - -	Paris, Ont.

*We will promptly furnish all desired information*

**THE REFINITE CO. OF CANADA, LTD.**  
INCORPORATED

Continental Life Building - - Toronto

TRADE  
**IMPERVO**  
MARK

## Waterproof Material

CONTAINS NO RUBBER - WILL NOT DETERIORATE

CAN BE EASILY CLEANED OR STEAM STERILIZED

*Wears longer - Costs less than rubber*

*Write to our Canadian Agents for descriptive circular and price list*

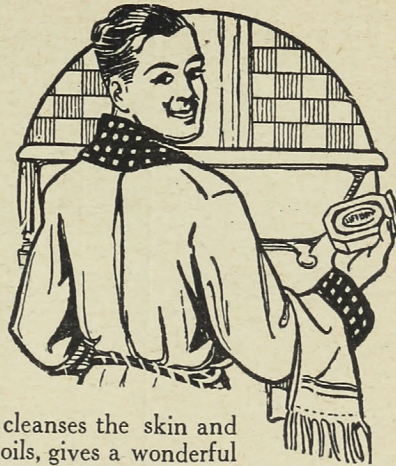
The J. F. Hartz Co., Ltd.  
Toronto  
Can.

E. A. Armstrong IMPERVO Co.  
Watertown, Mass.  
U. S. A.

J. H. Chapman  
Montreal  
Can.

**Invaluable to Both  
Hospital Staff  
and Patients**

**LIFEBUOY  
HEALTH SOAP**



With its cleanly odour,—its pure velvety lather, Lifebuoy Soap is a necessity that gives the pleasure of a luxury. It performs a double duty:—It thoroughly cleanses the skin and with the aid of its antiseptic and vegetable oils, gives a wonderful healing and tonic effect to the body. For washing all garments that touch the skin, the rich creamy lather from Lifebuoy Soap will produce the most satisfying results.

*Grocery stores everywhere sell it*

**Lever Brothers Limited**  
Toronto

**MERCUROSAL SUBJECTED  
TO PHYSIOLOGICAL TEST**

AFTER every practicable chemical test has shown Mercurosal,\* the new anti-syphilitic mercury compound, to be satisfactory, this product is subjected to a test for toxicity on rabbits of standard weight, these animals having been found to yield more definite data than others.

Mercurosal in solution is introduced into the marginal vein of the rabbit's ear at a carefully controlled rate—very slowly depending on the size of the animal. The optimum rate of injection has been determined by numerous experiments, and is an important item in the test.

Our investigators will not pass



any batch of Mercurosal that will prove fatal to a 2- to 4-kilo rabbit in a dose of less than 40 to 80 milligrams. The standard is a minimum of 20 to 30 milligrams per kilo.

The margin of safety is impressive. Calculated on the basis of weight alone a toxic dose of Mercurosal for a man weighing 65 kilos (150 lbs.) would be 1.3 gms. or 13 times the recommended intravenous dose.

By means of the chemical tests we determine the purity of Mercurosal, and from that might be judged its relative freedom from toxicity; nevertheless the physiologic toxicity test is invariably performed as an added precaution.

\*Disodiumhydroxymercurisalicicyloxyacetate. Contains about 43.5% of mercury in organic combination. Relatively non-toxic and non-irritating. Adapted for intravenous and intramuscular administration in the treatment of syphilis.

**PARKE, DAVIS & COMPANY**

**Ingram  
&  
Bell  
LIMITED  
TORONTO**



Our Sundry Catalog  
awaits your request

## Hospital Supplies

*Sole Agents for*  
BRAMHALL DEANE  
HIGH PRESSURE STERILIZERS  
WAPPLER TRANSFORMERS  
*and*  
HIGH FREQUENCY APPARATUS

### *Our Specialties:*

*Manufacturers of*  
HYPODERMIC TABLETS  
COMPRESSED TABLETS  
ELIXIRS, OINTMENTS, Etc.  
FULL LINE OF DRUGS

A postal requesting quotations  
will receive immediate attention

## An Ideal Equipment for Hospitals



What could be more suitable for the entertainment of convalescing patients in a hospital, for the amusement of the inmates of a Home for Incurables or the kiddies in the Sick Children's Hospital or even for the Nurses' Residence than

### A RADIO EQUIPMENT ?

The Radio is no longer in the experimental stage, but has reached a point approaching perfection. We can equip institutions with any make of Receiving Set desired and will guarantee good reception under any normal conditions.

*Full particulars and prices quoted on application*

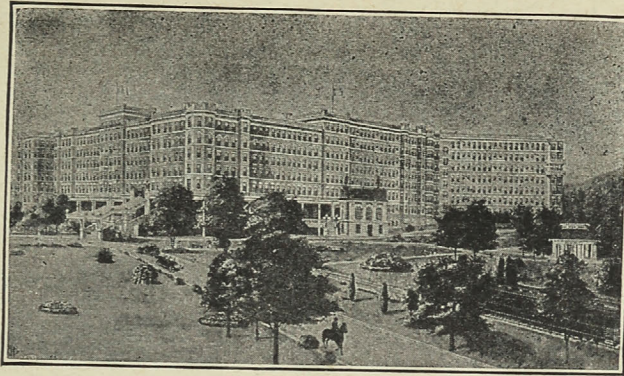
## **GIBSON RADIO SUPPLY**

*Canada's Largest Radio Store*

104 King Street West

Toronto, Ont.





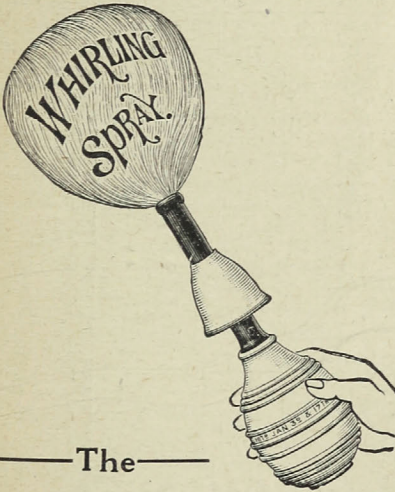
**DISEASES** in many instances can be averted. The application of preventive measures will often "nip trouble in the bud." Symptoms, properly handled, **YIELD TO** indicated remedial agents. In a large number of cases drugs are not essential. The stimulation of elimination by such a means as nature's remedy,

## PLUTO WATER

is all that is necessary to re-establish normal physiologic function.

Samples and literature to the medical profession on request to the  
**FRENCH LICK SPRINGS HOTEL COMPANY, French Lick, Indiana**

For All Douching Purposes—



—The—  
**Marvel Whirling Spray Syringe**

**MARVEL COMPANY**  
25 West 45th Street - New York

Canadian Distributors: Messrs. MacLean, Benn & Nelson, Ltd. 489 St. Paul St. W. Montreal, Can.

**F. & R.'s  
GENUINE  
GLUTEN FLOUR**

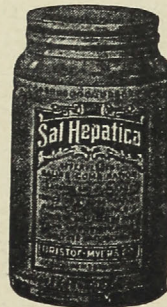
Guaranteed to comply in all respects to standard requirements of the U. S. Department of Agriculture.

Manufactured by  
**THE FARWELL & RHINES CO.**  
Watertown, N. Y., U. S. A.

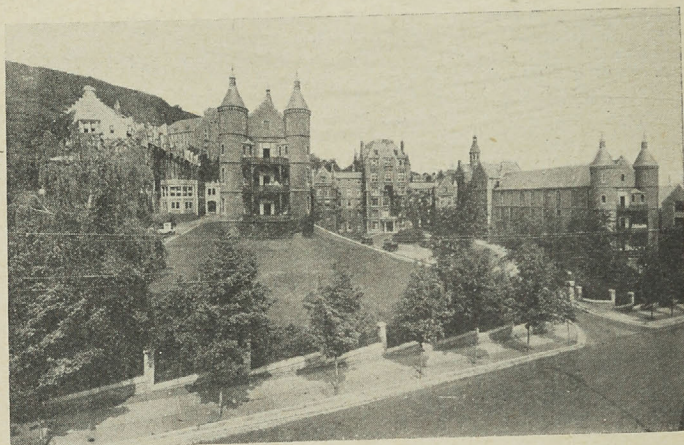
**Sal Hepatica**  
THE  
STANDARD SALINE  
LAXATIVE

Samples on request

**Bristol-Myers Co.**  
NEW YORK



# OTIS-FENSOM ELEVATORS



ROYAL VICTORIA HOSPITAL, MONTREAL, QUE.

IN recognition of the importance to hospitals of the Otis-Fensom "micro drive" elevator, a "micro drive" passenger car has been installed in the medical wing of the Royal Victoria Hospital, Montreal.

The "micro drive" insures an unfailing accuracy of landing, thereby eliminating, entirely, tripping or bumping in the handling of patients; saves time and power; reduces maintenance costs; and does not require a skilled operator. It is an exclusive Otis-Fensom feature.

**OTIS-FENSOM ELEVATOR COMPANY**  
LIMITED  
TORONTO

# THE HOSPITAL, MEDICAL AND NURSING WORLD

## TORONTO, CANADA

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

---

---

VOL. XXVI

TORONTO, AUGUST, 1921

No. 2

---

---

## Editorial

---

### Hospital Questionnaire

Under instruction of the executive committee of the Ontario Hospital Association the secretary queried the Ontario hospitals on several points, which we reproduce with a summary of replies thereto.

1. "Are you satisfied with the Government grants to hospitals? If not, what suggestions have you to make?" Thirteen hospitals replied "yea." Nineteen replied in the negative. A hospital in the north complained that the Government grant to it is very small. In former years it received \$1.50 per day for all patients who were paying \$10.50 per week or less, excepting for children under one year. The present year it received but fifty cents per day. Workmen's Compensation Board insist on saying that this hospital receives fifty cents per day government grant for their patients. This is not so. The W.C.B. pays \$14.00 a week for their patients, that is, for those that they do not find some kind of an excuse not to pay for at all. They pay \$5.00 for an

operation, which doesn't begin to cover the cost in many instances. This hospital complains that it does not fare as well at the hands of the W.C.B. as it does at the hands of the ordinary private ward patients who pay for themselves.

A central Ontario hospital would like the grant to be increased to seventy-five cents a day. Another is not satisfied because the grant does not cover the cost of maintenance by nearly half; a substantial increase is desired. An eastern hospital considers the grant satisfactory except in the case of infants in maternity hospitals, where twenty-five cents a day should be granted.

Another Eastern hospital says that frequently, through no fault of the patient or hospital, patients remain over 120 days and then only seven cents a day is allowed. So long as no other means can be provided for such patients surely the full grant should be allowed. The Kingston General Hospital agrees with this contention.

One of the sanatoriums wish the grant to them of seventy-five cents daily raised to \$1.10. A Toronto hospital suggests seventy-five cents and given all the time the patient is in hospital.

A young city in the western peninsula claims that it is impossible for any hospital to care for its patients at \$1.50 per day (civic allowance) and fifty cents daily from the government. Both grants should be increased. The complainant adds: "Hospital year ends September 30, and it seems unfair that we should wait until February to get the grant that was earned on September 30. Most hospitals are hard up, and it is a hardship to wait for four months, after we have waited a full year."

A small northern hospital points out that increase of taxes and higher costs of living make things too hard to be satisfied with the present government grant.

The Women's Hospital, Toronto, would join other hospitals in asking the government for an increased grant. It feels that the per diem allowance per adult should be allowed for infants from birth during their hospital stay.

The Sick Children's Hospital authorities say:

1. The allowance of fifty cents a day for public ward patients should not cease at the end of 120 days, to be replaced by the ten cent rate. The cost to the hospital is certainly not decreased after 120 days.

2. In a hospital of our calibre the proper allowance should be made for the X-ray service to the public ward patients.

3. Laboratory services should be recognized and a grant made.

An Ottawa Sisters' hospital says: "This hospital deals with destitute mothers and unfortunate women and their babies. The grant does not nearly cover the time (nine months) they are kept by us."

A hospital on the shore of Lake Huron sends a list of government spendings on mines and fisheries and says it does not think the grant from the government adequate when we consider the control they keep on institutions. "What we are willing to pay for things gives some idea of the value we attach to them."

The Toronto Orthopedic Hospital suggests a minimum grant of \$1.00 per day—to include babies.

The superintendent of the Hamilton Sanitarium suggests that \$2.50 a day be the joint municipal and government grant—borne equally.

The spokesman for the Englehart Hospital, Petrolia, says: "The reduction of the provincial grant from \$1.50 to fifty cents per day after the hospital has been in existence for ten years is too drastic. The overhead expenses in the smaller hospitals are much greater in proportion to those of the larger hospitals. A distinction should be made (if practicable). The reduction made in the eleventh year, at a time when we were making a special effort to extend our services more freely for public patients to municipalities throughout the county was particularly severe."

2. Are you satisfied with the provincial law in residency? If not, please give suggestions. Fourteen hospitals answered "Yes," seventeen, "No." Summing up the negative replies:

The law should be more clearly defined. Definite responsibility should be undertaken by someone—preferably the provincial officer. . . . The wording of the law is obscure . . . . The present laws do not throw enough responsibility on the city and county. Too much responsibility is placed on a few philanthropic and well-disposed citizens. . . . We are obliged to hospitalize people from whom we cannot get payment and no claim can be made to forcing governments . . . . The law should be adjusted for those termed "indigent" (Sec. 31); also for such persons as wander about from county to county but do not remain long enough to become residents. . . . This law should be carefully revised so that there can be no injustice to municipality or individual

. . . The only solution is to adopt the same clause as was put in the Sick Children's Hospital bill last session, leaving the final decision to the county judge . . . In respect to residency it is our conviction that it should not be less than six months before a patient becomes a charge upon the city, and something more to substantiate the claim than the mere verbal statement of the patient. . . . The municipality seems to want to take advantage of the least little point to be relieved of any responsibility . . . unless an order on the authority of the municipality comes with the patient that municipality is not responsible. . . . The residency law is unsatisfactory—a patient is admitted claiming to be a resident of a certain municipality; the reeve is at once notified. In ten to fourteen days, very often after the discharge of the patient a letter from the reeve disclaims all responsibility. . . . A short time ago a patient sent to this hospital by a municipality, required complete X-ray and laboratory examinations, an operation and attention for some time by a special nurse. The municipality refused to pay more than \$1.50 a day. Municipalities should pay their just amounts for the upkeep of a hospital which places within their reach the most modern methods of treatment. . . . This residency law seems definitely framed with the idea of escaping responsibility. The law should be clearly defined and the inspector of hospitals have power to enforce it. A three months' residence would be fair for an average case; though where the patient may be in a sanatorium several years some municipalities would favor a longer residence. Where the patient has not lived for the last six months in a municipality, his main-

tenance might be equally divided among the different municipalities in which he has lived during the last three years.

On this residency clause the Collingwood General and Marine Hospital writes: "We were in favor of the law on residency until the recent decision of Judge Vance in Collingwood Hospital vs. the Township of Vespra. This has practically nullified the clause; hence the need of having it clarified and made proof against what his honor termed the 'legal mind.' As it stands urban municipalities are in grave danger. Our town council has laid the judgment of the judge before the Attorney-General with the request that the law be amended."

St. Joseph's Hospital, London, suffers from the law, since they cannot conscientiously turn anyone needy away, but cannot claim remuneration from the city if the patient be a stranger. As a remedy—repeal the law.

3. Is the care of the aged and infirm a burden to your hospital? Have you suggestions regarding improved methods of care for these?

Fourteen hospitals reply "No." Nineteen answer "Yes." The Noes say: There should be homes for old people. . . . It is a burden, a great burden. . . . There is no other place for these old folks except the jail. We urge a home for them. . . . There is never a year that we do not lose one or two thousand dollars revenue. . . . We have two such patients who have been with us almost one year and we cannot collect one cent. . . . A home should be provided in every organized district. . . . If these aged infirm live in a city it can be compelled to establish a house of industry. . . . There is urgent need of a



reception hospital for young children, mentally and physically defective, without hope of improvement and incapable of receiving any instruction. We have six such. We are constantly refusing admission to mental defectives. There is no other place but Orillia. . . . Sufferers from tuberculosis are a very great source of trouble to the smaller hospitals. In the public wards there is a very grave danger and they disturb and upset other patients. . . . One remedy would be a government home for the aged poor.

4. Have you Health and Laboratory centres in connection with your hospital? Do you believe that at least one of such centres should be established in every county with government aid for the same?

Answers: Several answer "No" to first query and "Yes" to the second. Several hospitals within easy distance of the provincial health laboratories satisfactorily utilize their services. Certain larger hospitals have laboratories but do not act as health centres. One has a district nursing service which is much appreciated by the people but carried on at a loss. One answerer says she does not think a laboratory would be a great benefit to a small hospital. Another says "our hospital is too small to really warrant this expense at present." Several hospitals have baby clinics. The Sick Children's Hospital, Toronto, has the closest association with the City Health Department, and probably the most extensive laboratory accommodation and activity for children's diseases. Nicholl's Hospital, Peterborough, has both a venereal clinic and a provincial branch laboratory. . . . These must come with a full time medical health officer. The reporter

from St. Joseph's Hospital, Sudbury, writes that there is great need of such centres everywhere. The Sudbury district has not even a contagious house for patients with communicable diseases.

Dr. Holbrook of the Mountain Sanatorium says that if the advance of scientific medicine is to be brought within reach of the citizens of the province, the practising physicians everywhere will have to be trained to make use of laboratory and X-ray facilities, especially for diagnosis. These centres should be manned by a full time staff.

The physician would send his patients to the centre to have the case worked over as he indicates. When the work is completed, the patient with reports would return to him when he could intelligently advise his patient as to treatment.

### **Ontario Hospital Association**

The first meeting of this Association was held in February at the Toronto Academy of Medicine. The business was mainly routine, the main item being the passing of the Constitution and By-laws as follows:

#### *Name*

The name of the corporation shall be the Ontario Hospital Association, hereinafter referred to as "The Association."

#### *Objects*

The objects of this Association shall be:

1. To study, consider, and discuss (a) the construction, equipment and administration of hospitals, (b) the care of the sick and injured in hospitals, and (c) such other matters as may be related to the hospital as a factor in Public Health.

2. To study the subject of the education and training of nurses; and to advise regarding rules, regulations, or laws relating to the same.

3. To consider, discuss and make recommendations relating to the organization and work of the visiting and interne staffs of hospitals.

4. To consider, discuss or initiate legislative measures affecting the interests of hospitals and hospital work, and to take such steps as may be deemed necessary.

The membership of the Association shall be:

#### *Institutional*

Any hospital or sanitarium in the province of Ontario may be entitled to membership subject to the following:

Applications for institutional membership shall be addressed to the secretary in writing, signed by a duly authorized representative of the hospital. The applicant shall become a member upon receiving approval and upon the payment of annual dues as follows:

Hospitals of fifty beds or less . . . . . \$ 5.00

Hospitals of over fifty beds . . . . . 10.00

Hospitals paying a fee to this Association may appoint a representative to this Association.

#### *Individual*

1. Superintendents, Superintendents of Training Schools, Superintendents of Nurses, their assistants or other heads of departments of hospitals in Ontario who comply with the requirements of sub-section 3.

2. Trustees, Secretaries of Trust Boards, Members of Medical Staffs, Architects, Consulting En-

gineers, and others interested in hospital work who comply with the requirements of sub-section 3.

3. All applicants for membership must be (1) approved by the Committee on Membership, (2) be elected by a majority vote of those present, at any session of the Board, (3) pay an annual fee of \$5.00.

4. Honorary membership may be conferred from time to time on persons who have rendered distinguished service or who have rendered valuable assistance in any branch of hospital work, by a unanimous vote at any general meeting, the name having been recommended by the Board of Directors. Honorary membership may not be conferred on more than two persons at any general meeting.

#### *Voting*

1. Voting for the election of the officers and Board of Directors shall be by ballot; voting on other questions shall be conducted as determined by the presiding officer.

2. Each member shall be entitled to one vote, both in Association and in section meetings:

#### *Board of Directors*

1. The affairs of the Association shall be managed by a Board of Directors consisting of an honorary president; a president, a 1st vice-president; a 2nd vice-president; a secretary-treasurer, and eight directors.

2. The Board of Directors shall be elected yearly at the annual general meeting of the Association.

#### *Committees*

The Board of Directors shall appoint a Membership Committee to deal with the credentials of appli-

cants for membership; and such other committees as are found necessary or desirable may be appointed as may be determined by the Board of Directors or a meeting of the Association.

### *Sections*

1. Upon approval of the members in general meeting, any group of members interested in a special branch of hospital service may form a section to be known as "The \_\_\_\_\_ Section of the Ontario Hospital Association."

2. No action may be taken in the name of the Association by any section without the approval of the Board of Directors, or of a meeting of the Association.

3. A report of all meetings of Sections must be sent to the president and secretary of the Association and kept on file by the latter.

### *Meetings*

1. General or special meetings shall be held at such time and place as may be determined by the Board of Directors, there being at least one general meeting in each year.

2. Upon request in writing by twenty-five or more members, the Board of Directors shall convene a general or special meeting; and if upon such request the Board of Directors do not forthwith convene such meeting within twenty-one days of the receipt of the request, the members so requesting may themselves convene a meeting of the Association.

3. At least seven days' notice in writing of any general meeting, specifying the place, day and the hour of the meeting, and in case of special busi-

ness, the general nature shall be given to the members. The non-receipt of such notice by any representative shall not invalidate the proceedings at any meeting.

*Quorum*

Fifteen members personally present shall form a quorum at any general or special meeting of the Association.

*Amendments*

Any article of this Constitution may be amended at any meeting by a two-thirds vote by members present and voting.

# The Hospital, Medical, and Nursing World

(Continuing the Hospital World)

Toronto, Canada

The official organ of The Provincial Hospital Associations

## 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.

C. K. Clarke, M.D., LL.D., Medical Director of the Canadian National Committee for Mental Hygiene, Toronto.

Helen MacMurphy, 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

H. E. Webster, Esq., Superintendent, The Royal Victoria Hospital, Montreal.

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

J. E. Byers, M.D., Superintendent, Laurentian Sanatorium, 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.

A. Fisher, M.D., Superintendent, Calgary General Hospital, Calgary.

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

### SASKATCHEWAN

J. G. Wright, M.D., C.M., Regina.  
M. R. 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.

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.

**HOSPITAL INFORMATION DEPARTMENT**

UNDER THE CHARGE OF MALCOLM T. McEACHERN, M.D.,  
C.M., ASSOCIATE DIRECTOR AMERICAN COLLEGE  
OF SURGEONS.

*Question:* We are endeavoring to keep an accurate record of Gross and Net Death Rates in our hospital. I would like to have information as to what is really meant by the term, "Institutional Deaths."

RECORD LIBRARIAN.

*Answer:* C. J. Cummings, Esq., Superintendent, General Hospital, Tacoma, Washington, recently answered this question as follows:

The only basis of discussion of hospital deaths with a view of concise classification which I can find is a classification of hospital deaths into non-institutional, meaning deaths occurring within forty-eight hours after admission, and institutional deaths with an attempt to calculate a net death rate and a gross death rate.

My very first conclusion in studying this classification has been that it is going to be a tremendous difficulty to arrive at any hard and fast lines of division into classes, because of the many factors concerned in the outcome of any given case. There will be little question in the mind of anybody as to the wisdom and justice of classifying the patient who arrives at the hospital dead as a non-institutional death, nor will there be much difference of opinion about the classification of most patients dying shortly after admission, say within a few hours. There is still a third group, such as exophthalmic goitre in extremes, the cancer of the stomach in the terminal stage, practically moribund cases of general peritonitis; all of these have their death warrant signed before they come to the hospital.

AN "INSTITUTIONAL DEATH."

Certainly an institutional death should be defined as one which might have been prevented or in which the mortality risk might be reduced by the facilities of hospital or scientific skill of the attending physician or surgeon. In other words, the hospital does not want to bear the responsibilities or the odium of a death in which it had no part in the treatment or management, but in any case in which the hospital might in any way, no matter how slight the degree, do something, giving reasonable hope of increasing the chances of recovery should



be classed as an institutional death, because there is a responsibility here.

Our great difficulty in classifying cases will come in the border-line zone between the patient who is brought in dead and the average run of hospital cases where the present-day mortality runs one to ten or twenty per cent. Let us consider the crushing injury that enters the hospital in frightful shock. This man may go right down and die within six, or certainly within forty-eight hours, unless the most advanced surgical skill and every possible hospital facility is brought to bear on his case. Certainly both surgical skill and hospital equipment have a responsibility in this type of case, and even though they represent injuries that will almost invariably give us deaths within the first forty-eight hours, they should unquestionably be classified as institutional deaths. What about the infant mortality in congenital syphilis? Eclampsia death of the mother? Diabetic coma? An extra uterine pregnancy? And poison cases? All of these types of emergency cases, in fact, stand in the position of the ultimate test of the efficiency of both hospital and surgeon, and may well serve as a basis for the classification of both hospital and doctor as excellent or mediocre.

Here comes another very important fact bearing upon the borderline as well as the average case, namely, the number of physicians and surgeons on a staff, and the quality of their training. A closed surgical staff with six to twelve of the most highly-trained, best-equipped men in the community will certainly save more of the borderline and handicapped patients than will a promiscuous open staff which includes any doctor holding a state license. This same sort of staff will unquestionably have fewer deaths and a lower morbidity.

I am cognizant that mortality is not the full test of operative skill or efficiency. Almost any doctor who is ordinarily clean, can with the aid and supervision of the modern hospital operating room and with a head nurse standing over him, get his patient out of the operating room and out of the hospital alive; but, unless the right thing has been well done, this patient will either be no better or worse for his operation. This question of morbidity is beside the subject; but has a tremendous importance.

I would therefore conclude, first that there is a certain group of deaths for which a hospital is in no way responsible, and in which no amount of hospital perfection can change the

**HOSPITAL INFORMATION DEPARTMENT**

UNDER THE CHARGE OF MALCOLM T. McEACHERN, M.D.,  
C.M., ASSOCIATE DIRECTOR AMERICAN COLLEGE  
OF SURGEONS.

*Question:* We are endeavoring to keep an accurate record of Gross and Net Death Rates in our hospital. I would like to have information as to what is really meant by the term, "Institutional Deaths."

RECORD LIBRARIAN.

*Answer:* C. J. Cummings, Esq., Superintendent, General Hospital, Tacoma, Washington, recently answered this question as follows:

The only basis of discussion of hospital deaths with a view of concise classification which I can find is a classification of hospital deaths into non-institutional, meaning deaths occurring within forty-eight hours after admission, and institutional deaths with an attempt to calculate a net death rate and a gross death rate.

My very first conclusion in studying this classification has been that it is going to be a tremendous difficulty to arrive at any hard and fast lines of division into classes, because of the many factors concerned in the outcome of any given case. There will be little question in the mind of anybody as to the wisdom and justice of classifying the patient who arrives at the hospital dead as a non-institutional death, nor will there be much difference of opinion about the classification of most patients dying shortly after admission, say within a few hours. There is still a third group, such as exophthalmic goitre in extremes, the cancer of the stomach in the terminal stage, practically moribund cases of general peritonitis; all of these have their death warrant signed before they come to the hospital.

AN "INSTITUTIONAL DEATH."

Certainly an institutional death should be defined as one which might have been prevented or in which the mortality risk might be reduced by the facilities of hospital or scientific skill of the attending physician or surgeon. In other words, the hospital does not want to bear the responsibilities or the odium of a death in which it had no part in the treatment or management, but in any case in which the hospital might in any way, no matter how slight the degree, do something, giving reasonable hope of increasing the chances of recovery should

be classed as an institutional death, because there is a responsibility here.

Our great difficulty in classifying cases will come in the border-line zone between the patient who is brought in dead and the average run of hospital cases where the present-day mortality runs one to ten or twenty per cent. Let us consider the crushing injury that enters the hospital in frightful shock. This man may go right down and die within six, or certainly within forty-eight hours, unless the most advanced surgical skill and every possible hospital facility is brought to bear on his case. Certainly both surgical skill and hospital equipment have a responsibility in this type of case, and even though they represent injuries that will almost invariably give us deaths within the first forty-eight hours, they should unquestionably be classified as institutional deaths. What about the infant mortality in congenital syphilis? Eclampsia death of the mother? Diabetic coma? An extra uterine pregnancy? And poison cases? All of these types of emergency cases, in fact, stand in the position of the ultimate test of the efficiency of both hospital and surgeon, and may well serve as a basis for the classification of both hospital and doctor as excellent or mediocre.

Here comes another very important fact bearing upon the borderline as well as the average case, namely, the number of physicians and surgeons on a staff, and the quality of their training. A closed surgical staff with six to twelve of the most highly-trained, best-equipped men in the community will certainly save more of the borderline and handicapped patients than will a promiscuous open staff which includes any doctor holding a state license. This same sort of staff will unquestionably have fewer deaths and a lower morbidity.

I am cognizant that mortality is not the full test of operative skill or efficiency. Almost any doctor who is ordinarily clean, can with the aid and supervision of the modern hospital operating room and with a head nurse standing over him, get his patient out of the operating room and out of the hospital alive; but, unless the right thing has been well done, this patient will either be no better or worse for his operation. This question of morbidity is beside the subject; but has a tremendous importance.

I would therefore conclude, first that there is a certain group of deaths for which a hospital is in no way responsible, and in which no amount of hospital perfection can change the

fact. Second, that there is a borderline group of bad emergency cases in which only the greatest amount of honesty and fairness on the part of the surgeon and the hospital will properly place the responsibility, and third, that in the vast majority of routine work which may be designated as deliberate surgery, the responsibility is clearly shared by the hospital, and all deaths are institutional deaths.

Editor's Note:

The above explains very clearly the matter under discussion. I do not think we can classify deaths on a basis of time limit after admission. Each one must be considered on its own merits. In certain instances the classification can only be determined after honest debate by the medical staff in regular conference.

Hospitals should give more serious thought to their death rates. Many of them are far too high. Statistics show a range of from ten to sixty per thousand patients. Let each hospital investigate every death occurring therein, just as was carried out in the army).

*Question:* I would like to know if the patient's relatives or friends should be allowed to be present during the operation.  
M.C.

*Answer:* Relatives and friends of the patient should not be present at the operation. It is not in their own best interests or that of the patient and the staff to be present. They do not understand the procedure and frequently misinterpret the object or motive of many of the things that are necessary to be done scientifically for the patient. However, the two main reasons for not allowing this practice are:

First. There is a danger of carrying infection into the operating room by allowing outsiders to be admitted;

Second. Their presence embarrasses the surgeon, the anesthetist and the nurses. These people are more or less continuously under high tension and concentration during the operation. Distraction of such a nature as this will tend to lower the efficiency of this important group, and certainly this is not in the best interests of the patient.

Therefore, do not let relatives or friends be present at the operation, but use a great deal of sympathetic diplomacy in preventing them from being there.

*Question:* The Board of our hospital has been confronted with a request from the Graduate Nurses' Association for the

elimination of the twenty-four hour duty for special nurses engaged in the hospital. For years it has been the custom to have the nurse stay in the room with the patient, day and night, and to allow her four hours off each afternoon. Nurses are recommending the abolishment of this practice and substituting therefor the so-called twelve-hour system. What action should the Board take in this matter?

*Answer:* The twenty-four hour system for special nurses is rapidly disappearing, and in properly managed hospitals to-day it is not allowed. The Board should approve at once of the suggestion by the Graduate Nurses' Association, and should not permit the twenty-four hour system to prevail in their hospital any longer. This system is unfair to the patient and the nurse, both for living and working conditions. The nurse is subjected to fragmentary rest, and carries on under conditions that tend decidedly to lower her efficiency for doing good work, and, most likely, develops a lowered resistance to disease. Under these conditions, therefore, she cannot give her patient the right kind of nursing care. We certainly would not expect this condition to exist in any business or commercial enterprise; hence we should not by any means expect it in so important and serious a work as the care of the sick. The dealing with life when often hanging in the balance is a matter of very grave importance that we cannot regard too seriously.

---

### WHAT CONSTITUTES GOOD HOSPITAL SERVICE TO THE PATIENT

MINNIE GOODNOW, R.N., SUPERINTENDENT OF NURSES,  
CHILDREN'S HOSPITAL, WASHINGTON, D.C.

In these days when hospitals are no longer mainly charitable institutions, but largely devoted to patients who wholly or partly pay for their care, the management of a hospital comes to resemble that of a hotel. Less and less do we devote ourselves to giving succor to the unlucky poor, and more and more adjust our practice to supplying the wants of the man who expects to pay for what he gets.

What then should the patient and his family expect of us? What are legitimate demands?

Doubtless all will agree that the patient has a right to expect, to demand, three things—safety, comfort and a certain amount of consideration for his whims.

## THE SIMPLE REQUIREMENTS.

*Safety* should be axiomatic. It means proper buildings, and sufficient precautions against fire. It means competent physicians and surgeons on the attending staff and on the house staff. It means a sufficient personnel to meet all emergencies.

*Comfort* means (1) good beds; (2) pleasant rooms or wards kept at a proper temperature; (3) good food, properly served; (4) reasonable freedom from noise; (5) competent doctors and nurses in sufficient numbers to give prompt attention.

*Consideration* means courtesy from executives and employees.

*Safety.* No hospital can justify its existence as a life-saving institution if its buildings are not safe against fire, provided with sufficient and easily accessible exits, and with enough fire extinguishers or a sprinkler system. A monthly or bi-monthly fire-drill should be an absolute requirement.

The staff doctors should be competent and ethical. This also should be axiomatic. No hospital can afford to admit to its privileges doctors of less than the accepted standard. A recent court decision maintains that even in an "open" hospital the board has a right to discriminate against doctors if it deems them undesirable. Any patient who enters our doors in reasonably good physical condition has a right—except in very unusual circumstances—to go out as well as, if not better than, he came in. It is the business of the hospital to see that such is the outcome.

A sufficient number of good internes is not an easy thing to provide, depending, as it often does, upon chance. How to regulate the law of supply and demand, what should be the length of service, the salary, etc., are matters which might well be given more study by this association.

For the nursing work of the hospital, the question is at present largely a matter of money, since there appears to be no shortage of either graduates or students. The problem of housekeeping duties which are so often assigned to nurses can be met by the use of extra maids or ward helpers. Whether or not it is met in this way depends upon the opinion of the hospital board as to what constitutes service to the patient.

*Comfort.* Pleasant rooms mean that the hospital must be properly located and correctly built, well furnished and well kept up. Board and superintendent must co-operate to secure these conditions.

Proper heating and ventilation means correct construction and a sufficient and well-managed heating plant. It means control of heat in winter and provision for air-cooling in summer, or at least electric fans. It means more heat at night than is usually provided. (The writer has never been able to see why patients need be overheated in the afternoon and cold at night, nor why a night nurse should be required to heat water in a teakettle).

From the patient's standpoint, the criticisms, which are made of hospitals are about as follows:

First, and chief, the food was not satisfactory.

Second, the hospital was noisy.

Third, (if the patient did not have a special nurse), his calls were not promptly answered.

Fourth, he was wakened for his toilet too early in the morning.

Fifth, there were too many different nurses caring for him.

These five complaints are perhaps the most common ones, and comprehend a very large percentage of criticisms of hospitals. Who shall say that they are not legitimate and reasonable? They are worth considering somewhat in detail.

*Food.* The patient finds food unsatisfactory because (a) it was not hot or not cold; (b) it was not what he liked; (c) (less frequently) it was not attractively served.

It must be conceded that among well people as well as among the sick, complaints about food are extremely common. We seem always to be expecting something which we do not get, and something which we find it hard to define. Experiments have been made with internes and nurses who complained about food; those who complained about food were asked to plan their own menus, being allowed anything within reason; the invariable result was that after a week they ordered almost exactly what had formerly been served them, and in two weeks were tired of it and dropped both the planning and the complaints.

The fact is that what most people want is the sort of food prepared in the way they are accustomed to at home, and that anything else is unsatisfactory. It is not uncommon to find a sick person delighted with some dish brought in by a relative, which to hospital people seems badly made, unappetizing or even unwholesome. Admitting that we cannot supply the patient with his particular brand of home cooking, we can at least copy the method of good hotels and restaurants. We can

employ at least one good cook, to whom we pay a salary sufficient to secure permanence. We can have a dietitian who is competent to plan balanced diets and attractive menus, and who supervises the cooking enough to get results.

If hot food is to arrive hot and cold food cold, there must be proper equipment. The right sort of food containers, insulated against change in temperature (because reheating spoils flavor to some extent), good transportation and proper serving are necessary. The portable steam table, heated by electricity, soapstone slabs or other means, and brought to the bedside or room door, appears to be the best means of giving good food service. Patients like to see and choose, portions may be served large or small as taste and appetite dictate. The first cost may seem large, but hospitals that use this method report a very material saving in food, which soon pays for the equipment.

A few hospitals meet their problem by sending to private patients a menu for the following day and asking them to order ahead. Others give a choice of two meats, two vegetables, etc., supplying according to the laws of probability, as restaurants do.

Dainty service means (1) attractive china and spotless linen, and (2) personal care and attention on the part of the one who serves. The first cost of good china, the bills for breakage and the difficulties of laundry are well known to us all. Thin Syracuse or Greenwood china of a plain stock pattern, a few silver pieces inventoried often enough to prevent theft, and the use of the better grade of paper tray cloths and napkins will help to secure daintiness. Personal attention can be secured only by the selection of the right sort of maids, and the constant admonition of nurses.

The whole matter of food is one of the things which can never be trusted to run itself, but which must be supervised unremittingly.

*Noise*, especially noise which seems unnecessary, is one of the patient's chief annoyances. He feels entitled to quiet. He will put up with a reasonable amount of noise if he thinks it cannot be helped, and if it is of short duration. Otherwise, he complains.

The control of noise is, unfortunately, very largely a matter of location of buildings and of construction. Street noises may be reduced by "Quiet Zone" signs and co-operation from the police; but the original location of the hospital, or a change



in the character of the neighborhood may be the chief factors, and are beyond control. Inside the building, much more can be done. Elevators and stairways should be enclosed, as these are one of the chief sources of complaint. Closing off one end of a corridor often helps materially. The location of utility rooms and of plumbing is all-important. Nurses' stations, especially on private floors, should be in a room or enclosure, so that doctors' consultations and the chattering of special nurses may not penetrate to the patients. Dripping faucets, running tanks and banging doors are matters of upkeep, and should be taken care of by rounds by a competent utility man.

The complaint of calls not being promptly answered is usually met by supplying special nurses. In many cases this is necessary or desirable; in others, it is an unwarranted expense. One excellent hospital, using only graduate nurses, allows a nurse for two patients in daytime and one to five patients at night. No hospital which cares for acute cases should have less than one nurse to three private patients, and one to four or five ward cases. If this number is actually maintained in daytime and one nurse for six to twelve patients supplied at night, there should be little cause for criticism. The business world has discovered that people do not wait patiently longer than four minutes; with sick people, who have less to distract them, three minutes is probably nearer the limit. It is almost entirely a matter of sufficient personnel, properly distributed. Insufficient help seems to the patient inexcusable and probably is. Except during epidemics, it is an open question whether a hospital has a moral right to accept more patients than it can properly care for. Paying patients should not be expected to put up with the amount and quality of service accorded to charity wards; yet that is exactly what many hospitals are supplying. If a hospital needs reorganizing in order to secure sufficient care, by all means reorganize.

There is less excuse for inefficient nurse service than formerly: first, because patients have grown accustomed to paying higher charges; second, because student nurses are somewhat easier to get; and third, because ward helpers can be secured.

Under this head also comes the common complaint of being awakened too early in the morning. There are two remedies for this: first, to transfer some of the night nurse's duties to the day schedule; second, to give the night nurse help when she needs it. One hospital manages the extra help by leaving it

to the discretion of the night supervisor; when she finds that any given ward needs help at any hour of the early morning, she has *carte blanche* to send for the youngest nurse assigned to that ward; this young nurse can take the routine duties, leaving the floor nurse free for the more important tasks; even probationers can thus be utilized, and will gain valuable experience. Nurses as a rule do not dislike the plan, as it merely makes their day begin and end earlier. The day's problems may be met in similar fashion, by getting away from the old-fashioned set hours for duty, and maintaining a more flexible schedule. There is a tradition among superintendents that eight-hour duty should be, as far as possible, an unbroken stretch of time, or at least arranged in two four-hour periods. Student nurses do not share this tradition, but are glad of "broken," even irregular hours, to rest, run down town, or possibly to study! There is no real argument against concentrating nurses, even if it does spoil the schedule.

The complaint that too many nurses care for one patient is a very pertinent one. It is a just cause for annoyance if a patient is cared for by six different nurses in one day; and one excuses the doctor who complains that he cannot get a complete account of how his patient has been because every nurse on that floor seemed to be just going off or just coming on duty.

Careful and full records and proper co-operation lessens this difficulty; but for patients who are especially sensitive in this matter, a special nurse seems to be a necessity.

Much of the criticism of hospitals is a matter of psychology, pure and simple. That intangible something called "atmosphere" is often the thing upon which success or failure depends, more than upon equipment or number of personnel. The superintendent who can create and maintain in his hospital a feeling of friendliness and of service is going to find his hospital popular.

The atmosphere of a hospital emanates from the front office. The attitude of the superintendent and the superintendent of nurses will always be reflected in the employees, down to the last and lowest hireling. If a superintendent looks upon patients chiefly as clinical material or sources of income, and the superintendent of nurses considers them animated Chase dolls or troublesome problems, it is a foregone conclusion that internes, nurses, clerks and servants will agree with them and act accordingly. If, on the other hand, the

executives inculcate by precept and example the idea that patients and their friends are guests of the institution, the whole atmosphere changes; and the patient may not notice the lack of equipment, may wait more patiently for an answer to his signal, or even overlook mistakes, and go home singing the praises of those who helped him back to health.

Watch the working of the popular hotel. The keynote of the place is service. It is paid service, true, but the public gets its money's worth. Why should not a hospital render satisfactory paid service as well as an institution which is organized primarily for money-making?

Watch the successful shop. It renders service and the public pays. It is popular if the public gets its money's worth in quality, promptness and courtesy. The motto of the good salesman, "The customer is always right," could be used to advantage in hospital life.

Salesmen study psychology. Advertisers study psychology. Why not hospital executives and nurses, who deal with human beings at their most sensitive time? Of what avail is a well-organized office if a careless-mannered clerk or an impatient telephone operator antagonizes the patient's friends? To what end is a well-conducted training school if a nurse's discourtesy "riles" the family, or her tactlessness hurts the patient's feelings? If you cannot succeed in making nine-tenths of your patients satisfied or enthusiastic, you must admit that you and your hospital have failed.

Getting the patient's viewpoint is the key to success. This is not easy, but must be striven for. The Golden Rule is ideal, but is not workable without imagination. It is not easy for an overworked executive or nurse to think how it might feel to lie staring at four walls for twenty-four hours a day. A hurried clerk does not always realize the apprehension of the new patient who has for the past ten weeks been screwing up his courage to enter the hospital door. Only a constant iteration of "How would you like it yourself?" "Do unto others—," constant reminding that all comers are guests, and that courtesy always pays, and above all the example of the executives, can assure us of being able to render satisfactory service to the stranger within our gates.

To summarize: Study the patient's psychology. Provide proper and sufficient equipment. Arrange utilities so as to be accessible. Eliminate noise so far as possible. Provide

enough help at the right times. Treat the patient and his friends as your guests. And again, study the patient's psychology.—*The Trained Nurse and Hospital Review.*

### THE NURSING OF COMMUNICABLE DISEASES

HENRY W. BERG, M.D., PHYSICIAN, ISOLATION SERVICE,  
MT. SINAI HOSPITAL; ATTENDING PHYSICIAN,  
WILLARD PARKER HOSPITAL, NEW YORK.

In the last lecture I spoke to you about intubation of the larynx in membranous croup. Suffocation, however, is not the most frequent cause of death in diphtheritic croup. These children are more apt to die of broncho-pneumonia. When I spoke to you on the subject of diphtheria, I told you that the death rate was chiefly due to broncho-pneumonia and dilated heart, the incompetence of the heart causing congestion of the air cells and thus making the condition of the lungs predisposed to the development of broncho-pneumonia. Membranous croup presents difficulties in the diagnosis of broncho-pneumonia. Thus, if you listen with the stethoscope to the breathing of a child with a tube in the larynx you will hear bronchial or tubular breathing transmitted from the tube in the larynx. The child is breathing through the tube. If you listen over a bronchus or the lungs you will get pure bronchial breathing so that it is hard to make a diagnosis of broncho-pneumonia in intubation cases, by auscultation alone. Percussion yields the only reliable diagnostic data. The respiratory frequency, too, is an important point. The normal 25 to 30 respirations a minute are changed to 40-60 a minute. This is an important clinical sign. Cases of broncho-pneumonia are the bane of the doctor's existence and the tube cases would recover in most instances if they did not develop broncho-pneumonia.

In private practice the tube cases recover more frequently than in the hospital, everything else being equal. This is due to the fact that the organisms that infect the larynx and pharynx are bacteria that enter into the lungs and produce pneumonia. These mixed infection bacteria are communicated from one child to another in a croup ward, so that one case is a menace to the others. We have endeavored to isolate these children with broncho-pneumonia and improve conditions. In private practice, too, one does not face the element of cross-

infections from other cases. In hospitals we put the croup cases into a cubicle, with just room enough for bed, table and chair, medication and instruments. The cubicle must be in communication with the outer air because these intubation cases need air more than anything else.

#### PREVENTING CROSS-INFECTION.

In order to prevent spread of infection, the nurse caring for one case of membranous croup with pneumonia should not nurse another case without pneumonia. The nurse must isolate herself. Moreover, if in a private house there is one case of membranous croup, and one case of pneumonia, the same nurse should not nurse both cases. Another nurse should take care of the pneumonia case. In four years I have had twenty-three consecutive cases of intubation of the larynx in private practice. Not one of them died. In private practice, if you intubate early, at least 80 per cent. or more will be cured. In hospital practice, under proper precautions, about 75 per cent. recover in warm weather and about 60 per cent. in the winter time. Extraordinary precautions will, it is hoped, improve this rate of recovery. Such precautions are in the line of preventing mixed and cross infections.

Another important point is that the tubes must be applied absolutely sterile. You might think that as you are operating on mouths rich in diphtheria and other germs, this would be impossible, but you must strive for sterility, and a dirty tube will surely cause broncho-pneumonia. The fingers must be scrubbed in handling the tube. The doctor must scrub his fingers as thoroughly as for a major operation. No gloves should be used as it is necessary to use the bare fingers to feel the vocal chords, etc. The instruments and the gag must be thoroughly sterilized. No gag or tube should be taken from one patient to another without sterilization. New sterile silk must be used for threading the tube. If these directions are followed faithfully, there will be a diminished death rate in intubation cases.

#### DETECTING COMPLICATIONS.

Another point in regard to diphtheria in general—it often complicates other infections, even typhoid fever. Whenever diphtheria is found complicating other conditions (such as scarlet or measles) the diphtheritic lesion must be treated, whether it is angina or croup, just as if it were primary diphtheria. One important point is the dosage of antitoxin in

complicating diphtheria; the dosage should be three times as large because the diphtheria organism lives in harmony with, and aids the malign activity of other organisms. This, as you know, is spoken of as symbiotic activity.

It is customary, especially in hospital practice, to make a Schick test on every case of scarlet fever in the wards. The object of this is to discover whether the case is negative to Schick and thus sufficiently protected against the possibility of diphtheritic infection as a complication of its scarlet fever or whether the Schick test is positive. In the latter case we give a protective dose of antitoxin, about 1,000 units. It is a good custom to isolate the cases with scarlet and diphtheria from the general ward. Give a preventive dose of antitoxin to cases that have come in contact with it even if they have a negative Schick. In such circumstances too, if a case of scarlet complicated by diphtheria is in the ward, together with cases whose Schick, although made, has not yet been determined, the latter group of cases are protected by a protective dose of antitoxin while waiting for the report on the Schick. Such a dose of antitoxin need be but 500 units.

#### SCARLET FEVER.

The chief symptom which appeals to the eye is the redness. This is a directly contagious infectious disease with short incubation period of from two to five days; some consider that seven days is the limit of incubation time. If a case of scarlet appears in a hospital ward, whether in five days or more than that, it is considered that it has positively originated outside of that hospital. Occasionally such cases get in (by accident). The admitting physician may be examining a child for nephritis. Nephritis in children is generally secondary. It is not usually primary, but sometimes a secondary complication to some infectious disease not rarely scarlet fever. A boy of sixteen, for instance, was admitted to the ward of a general hospital with nephritis. I saw him with puffy cheeks and I asked, "When did this boy have scarlet fever?" I was told that he had had no infectious eruptive disease. On examination I found desquamation of the toes and soles of the feet and I asked him if he did not remember having a rash "all over." The boy said he had been running around in the street and had not felt sick, but he had had a mild red eruption, evidently scarlet fever with a complication

of nephritis. He was discharged to be sent to a scarlet fever hospital.

#### SUSPICIOUS CASES.

All examining doctors on medical or surgical services should be careful to at least suspect fever in the post-eruptive stage, or some other primary infectious disease when they are dealing with kidney diseases in children. Nephritis, secondary to non-contagious diseases, is more frequent, but the examination should exclude primary contagions. In regard to initial symptoms: the child begins on the first or second day with a red punctate eruption, frequently preceded by vomiting. There is usually but one attack of vomiting. The mother thinks the child has an "upset" stomach from overeating; but the child would have vomited if it had not eaten anything. This initial vomiting is simply toxic. This is common in children over five; under that age the child frequently in place of the vomiting, has a primary convulsion. Fever is a prominent early initial symptom. If the fever is high there may be delirium. When the vomiting is over the child complains of sore throat. The throat is very red, but do not make a diagnosis of scarlet fever based on a red throat. Many a young doctor has "lost a family" as patients, because he sees a child's throat and says immediately it may be scarlet fever when it is really only tonsillitis. The mother is badly frightened and she loses confidence in that doctor if the subsequent course of the case proves it to have been only tonsillitis. One must be sure before crying "wolf" too often. Mothers are very sensitive to the unwarranted diagnosis of scarlet fever.

#### THE PUNCTATE APPEARANCE.

The skin eruption in this disease is distinctive; first dull, later bright red in color and finely punctate. Finger pressure marks from the fingers of the examiner on the skin are readily seen. But this is not always a distinctive mark of scarlet fever because a light skinned child, when flushed by ordinary fevers, will always show finger pressure very readily, although not so obvious, in these fever cases, on a brunette. It is best to say, when in doubt, that we do not know as yet and that the child must be seen again before saying definitely what is known as to the diagnosis. A nurse surely should not take upon herself the responsibility of a doubtful diagnosis. Do not run where angels fear to move. It is wiser to let the doctor tell what has to be told. If the case be one of scarlet fever,

next morning there will be a red rash of a finely punctate type, looking as if made with the point of a sharp instrument dipped in red color. There are confluent and isolated or discrete areas all over, close together. The rash begins on the neck and face, goes down to the hips, then down the legs. Sometimes the entire rash erupts in a few hours, sometimes in a few days. On the third day, and not before, however, it reaches the dorsum of the foot. In older children it may take three days or more to cover the whole body. The eruption, however, never reaches the dorsum of the feet before the third day. Chronologically this symptom tells you how long the child has been ill. If I find a punctate eruption on the dorsum of the feet, the child has had the rash three days. Often in mild cases the mother will tell you, nevertheless, that the child has been sick only one day.

Another important symptom, which occurs before the rash has gone very far, is the very red tongue with numerous papillae scattered over the surface and edges where the fever coating has disappeared. It resembles a strawberry surface. It is red, with tiny greenish papillae, larger toward the edges of the tongue, smaller towards the centre. Thus very similar to a strawberry "skin" in appearance. The edges are covered early with white scurf above referred to, which later disappears. While this so-called strawberry tongue is very important, there are other conditions that give rise to strawberry tongue so that this sign alone is not sufficient for differential diagnosis. However, strawberry tongue, fever and sore throat are very suspicious indeed, of scarlet fever. Occasionally there are cases which have but slight evidences of an eruption, low temperature and scarcely any angina or throat symptoms. One sign, however, is constant—that is enlargement of the lymph glands throughout the body. This may be great or less in degree. In diphtheria the enlargement is in the lymph glands at the angle of the jaws. In scarlet it is in the anterior triangles of the neck, under the arms, in the groin and under the knees, wherever the lymph glands are palpable. Sometimes the lymph glands become so large in the cervical region that the head is held rigid by the patient because movement causes pain. The neck, thus swollen, resembles that of the well fed and stocky, and is called in France the "cou cardinal" or cardinal's neck. This adenitis is usually suppurative and is serious. The pus organisms enter the lymphatic circulation and form a local abscess which requires



treatment by a competent surgeon. These cases are called suppurative scarlatinal anginas. I tell students not to cut too early in suppurative cou cardinal. Not until one gland breaks into another forming one large abscess "walled off" by healthy tissue.

Sometimes the child has scarlet fever complicated by diphtheritic angina. This must be treated like diphtheria by anti-toxin, et cetera, in addition to the treatment of the scarlet fever.

#### CLASSIFICATION OF TYPES OF SCARLET FEVER.

Some medical books have a peculiar fashion of describing scarlet fever. They speak of severe, medium and mild cases. I prefer to classify uncomplicated scarlet fever as simple scarlatina. There may be more or less severe temperature and angina. These simple cases may, therefore, be severe or mild. Then, there are cases suffering from so much scarlatinal poison that the child is obviously intoxicated by it—some of these have scarcely any temperature or even a subnormal temperature. The head is thrown back in opisthotonos. The child is comatose, hardly conscious, the temperature may be subnormal or very high with the pulse rapid. The child is delirious with other cerebral symptoms and yet the case is not one of meningitis. There are frequent kidney manifestations in these cases causing convulsions. These cases are the toxic scarlatinas. Some of these have so much disorganization of their walls that they break down and cause hemorrhages. Thus, there may be simple toxic and hemorrhagic toxic cases of scarlet fever. In these latter cases the toxins destroy the walls of the capillary vessels and cause petechial and extensive hemorrhages into the mucous and serous membranes and under the skin.

There is another type of case of this disease which is fairly frequent: that is the septic type. This is a simple scarlatina complicated with inflammations due to mixed infection with the pus organisms. Thus cases complicated with pneumonia are septic scarlatinal cases. These groups may overlap each other—the septic may be septic first and the toxemia added later, or toxic cases may develop marked septice-mia due to accentuation of the mixed infections. Scarlet fever is often mild, but there are many severe cases in the toxic group. I recall a young doctor whom I saw on rounds on Friday in the scarlet fever wards. He was a brilliant

young man. On Sunday afternoon I missed him and was told he was very sick in the isolation pavilion. He had a temperature around  $106^{\circ}$  and was not rational, almost from the very beginning of his disease. He died in five days. This was a case of toxic scarlet fever of the foudroyant type. In another case, a student of medicine, the disease was complicated with otitis media. He was very sick. He had a brilliant eruption, but no cerebral symptoms. He was perfectly sane. His temperature, however, averaged  $104^{\circ}$ . He developed severe glomerular nephritis and cardio-vascular lesions. We treated him with an autogenous antistreptococcus serum and he got well. I would rather have a septic case such as this. You have a chance to save the patient, but there is very little chance in a severe toxic case. There is little to be done. We transfused the septic patient, but it was of no obvious use. It was waste of time. Recently, in severe toxic cases, immune blood serum (serum from the blood taken from a case recovered after scarlet fever) has been injected for therapy. One point to be remembered is that you cannot tell when a mild case will be the cause of a very severe infection in another person in whom the disease takes on the toxic character. Nurses should know this and the public should know it, although it is true that there are epidemics in which there is a large proportion of very severe cases, as there are others in which the majority of the cases are mild. My classification of scarlet fever is based upon a long clinical experience of these cases. The classification rests upon essential clinical data. If you can classify the case correctly you have done something to help the patient, because the correct classification, as above, almost assures the correct prognosis. The eruption lasts six days and then begins to fade very rapidly. After ten days the throat, the tongue and the eruption and glandular manifestations disappear. The skin becomes pale and returns almost to the normal color in ordinary cases. If you have not reported the case to the health department previously, the inspector will say that the doctor was mistaken, the case was only tonsillitis he may think, for there is no sign of an eruption. The fault is not in the doctor, but in the inspector. If he waits a few days the skin will begin to desquamate and peel. In scarlet fever the eruption runs its course and the skin is normal as before until desquamation begins. Before desquamation it gets perfectly white. Four days later, about the tenth day ordinarily, it begins to peel

on the delicate parts of the body, such as the wrists and the fingers. It comes off in flakes, often the hands are denuded like the fingers of a glove. The feet undergo such "giant" desquamation more frequently. Such specimens can be preserved in bottles to show students. The desquamation of scarlet fever differs from the scales of other desquamating diseases. When scarlet fever desquamates it leaves a new, healthy skin, whereas peeling eczema leave a swollen edematous skin. The hand of a laborer, accustomed to work with a pickaxe becomes fine and soft, after desquamation of scarlet fever, and he often admires his softened skin which, however, does not last, for him, when he goes back to his work. This soft, perfect skin, after the peeling of scarlet fever, is an important differentiation factor because the diagnosis of scarlet fever in the desquamating stage depends upon it. Among tenement children the parents, in mild cases of scarlet, will say the child has eczema, but when desquamation occurs and shows the skin is left soft and velvety, the doctor can be sure that the case was one of scarlet fever and his diagnosis will be proven correct. In eczema, the skin is harsh, swollen, moist and edematous. After the child has ceased desquamating and has recovered from any complications he may have had, he can be discharged. The nurse must examine him from head to foot. The doctor must look for otitis media and nasal and other discharges and for vaginal discharge in female cases. If there is a suppurative lesion of any kind persisting, the case cannot be discharged with safety, because the infecting organisms are in the discharges. Whatever the scarlatinal organism may be, the case is still infectious. We sometimes keep a child segregated and under observation three months, if necessary, until we are sure he or she is well. One case of hospital scarlatinal vaginitis can infect a whole hospital ward full of children. It is so communicable. I shall speak later of aseptic nursing, to prevent polyinfections, particularly in hospital wards.

#### DIFFERENTIAL DIAGNOSIS.

There are other diseases that desquamate like scarlet, such as dermatitis exfoliativa, known as pityriasis rubra, but the latter has a very long course and does not leave healthy skin behind after desquamation. Within twenty-four hours after desquamation the red eruption appears again. This may go on for two or three months until the patient's strength is gone.

It is an infectious skin disease, but not contagious to any considerable extent. It is a very grave disease, but quite rare. If the physician mistakes it for scarlet, and finds that the eruption recurs in five days after desquamating, and such recurrence is repeated again and again, he will of course change his diagnosis, but lose the confidence of the patient and friends. In dermatitis the glands are slightly swollen. The temperature is high, with constant chills and constant pain in the inflamed skin.

Another disease, scarlatiniform German measles, must be differentiated from scarlet. One kind of German measles resembles scarlet fever; another group resembles measles—morbilliform German measles. It is, however, a mild disease, lasting forty-eight hours or so. The child gets well quickly. Both types of German measles can be recognized early by the enlargement of the posterior cervical glands only, on both sides of the neck. True measles must be differentiated from scarlet fever, although when we come to the subject of measles I shall indicate the points of difference. Briefly, however, it may be stated here that well developed cases of measles differ from scarlet in eruption, throat and mouth symptoms, and tongue appearance; while lymph adenitis is not as common in measles as it is in scarlet fever. The schematic temperature curve of scarlet fever was given in the first lecture, as well as the curve of an uncomplicated case. One of the means of suspecting complications is the fact that the fever curve in such a case is not the regular curve as shown in the first lecture.

In regard to after effects, scarlet fever, even of the mildest type, sometimes leaves crippled hearts for life. In many young adults you find heart involvement, as a result of scarlet fever in childhood. More of this subject in our next lecture.

As to treatment, as far as the nurse is concerned, a very careful temperature chart is necessary, with a graphic chart showing the pulse rate and respiration rate. As we have learned, this disease, being a specific disease, has a typical temperature curve. The initial rise is not very high, then there is a drop, then a series of peaks till it reaches the fastigium, or portion of the curve where it reaches its apex. If there are no complications the toxin begins to abate and the curve gradually drops. The resolution, you have seen to be produced by lysis. Suppose, for instance, instead of going down, it goes higher and the respiration goes up also. That

case is probably complicated by pneumonia. If resolution does not begin by the sixth day, there are complications. The heart, kidneys, lungs or other organs must be examined. The nurse is the guard of the temperate chart. The doctor can glance at the chart and get his suspicion of a complication. He does not want to know from this that the child has meningitis for instance, when the child is lying in opisthotonos. He needs only to be prompted to suspect meningitis and to do lumbar puncture early to prove or disprove it. It is absolutely essential that the nurse make a four-hour temperature record on the chart. It must be carefully done. The child should not have the respiration taken when it is shrieking, but when it is at rest or sleeping. The pulse is taken when the child is quiet. To get this we must get the child's confidence. Hyperpyrexia in scarlet fever is a serious thing, because it produces toxic effects. In the early stages it does not affect the heart as in diphtheria. The curve of the pulse rate follows the temperature curve and dovetails with it as the joints of well-made furniture. If the pulse rate rises higher than the temperature line, you may suspect you have an endocarditis or myocarditis complicating the scarlet fever. A graphic chart recording competent observations is so important that I would rather lose any other part of the equipment. In the ward one does not need to study the fifty cases that are doing well, but one should study carefully the ten cases that are doing badly. If the pulse curve crosses the temperature curve on the chart you know on examination that a myocarditis alone or accompanied by endocarditis is present with consequent danger of permanent valvular disease or death. If the pulse rate and respiration rate go up, even without much rise of temperature, one suspects pneumonia and a physical examination may reveal the truth of it—but more of this when we come to consider the other complications.

In former times they used coal tar antipyretic drugs to bring down the temperature, in hyperpyrexia; we do not do this now; it was equivalent, in many cases, to confirming disaster to the child. Phenacetin, antipyrin, et cetera, give the heart a sudden blow like a hammer stroke. There are better means of reducing temperature. If it is only 103 or under, however, do not interfere. But above 103 give sponge baths. Do not use ice water or even cold water. It may cause convulsions. The proper way is to prepare two bowls, one with

water at 80°, one at 85°. Dip the sponge in the water at 80°, and sponge twice. This is followed by sponging twice with water at 85°. Then wrap the child in a sheet, put a light blanket over, and a good perspiration will follow; as the capillaries expand, the child perspires, the skin is congested, the eruption becomes brilliant and the temperature drops. In severe cases the child is put in a tub bath at 80°, adding enough warmer water to bring it to 90°. While the child is in the bath, the warmer water must be delivered to the bottom of the tub as the warmer water will rise to the top by its own lightness. I therefore pour in the additional warm water through a funnel and a rubber tube attached, extending to the bottom of the tub. These sponge baths and tub baths I have termed "baths of increasing temperature." They are admirable for reducing the hyperpyrexia in all fevers of children. In the children thus treated the shock of cold baths is avoided. In toxic cases where there is an insufficient eruption, if the eruption can be brought out, there follows relief from the toxemia and the congestion of internal organs such as the lungs, the brain, the kidneys, et cetera. A hot bath of 105°, (or 103° in milder cases), is prepared and the child left in it for some three minutes or less. The child is then taken out and wrapped in a warm blanket. In a short time the skin will become very pink and a brilliant eruption will appear. The temperature generally declines. You can "sweat out" the toxin and the temperature will drop for this reason. You must not forget that in the contagious eruptive diseases the disease is not the eruption—it is the infection of the blood that is the disease. The skin is helping all the other emunctories of the body to eliminate the toxins produced by the infection. The kidneys are overworked in the attempt to aid the elimination and sometimes become inflamed. Every cell works to get rid of these poisons. In this effort the papillae of the skin become congested and show the characteristic punctate eruption. As soon as the scarlet eruption covers the body, the patient is improved. This is true in measles and in smallpox also. The skin attempts to extrude the virus. It acts as the defenders of a fortress. The efficiency of its work is measured by the brilliancy of the eruption. Each type of disease calls upon a special microscopical anatomical structure for the extrusion of the toxic materials so that the eruption is characteristic for the specific disease which causes the infection. Measles, for instance, never produces the scarlet

fever eruption; scarlet fever never produces measles. Just as the acorn produces the oak, so measles give rise, in the infected body, to a measles eruption, scarlet to a scarlatina eruption, and so on. This elimination theory of the pathogenesis of the eruptions in the acute eruptive infectious disease has always been to me a very interesting one.—*The Trained Nurse and Hospital Review*.

---

#### GODERICH HOSPITAL PLANS APPROVED BY INSPECTOR

A special meeting of the Board of Governors of Alexandra Marine and General Hospital, Goderich, was called early in May, to hear the report of the Chairman, R. J. Megaw, to the effect that James Govan, Provincial Inspector of Hospitals, had approved the plans for remodelling the property known as "The Maples" as a hospital of twenty-five beds. The cost of remodelling the building is estimated at approximately \$20,000. The board is proceeding with the remodelling programme at once, and has appointed the following Building Committee, to assume full charge of the arrangements: R. J. Megaw (Chairman), Hugh John MacEwen, Dr. A. H. Macklin, B. C. Munnings, Mrs. M. G. Cameron and Mrs. E. McLaughlin.

---

#### GOVERNMENT TO GIVE UP LEASE OF MOWAT MEMORIAL HOSPITAL

Announcement was made on May 7th that the Department of Soldiers' Civil Re-establishment intends terminating its lease of the Mowat Memorial Hospital for Tubercular Patients, Kingston, on the first of August. What will be done with the patients there is not yet stated. There are under 100 patients, and the department considers that the cost of operating the hospital is too high for that number. The Kingston Health Association, which owns the hospital grounds and buildings, will not be able to maintain the place. However, it is hoped that the hospital may become a Provincial institution. It is splendidly equipped, and has been in charge of Dr. Bruce Hopkins.

## Book Reviews

---

*Practical Bacteriology, Blood Work and Animal Parasitology*, including Bacteriological Keys, Zoological Tables and Explanatory Clinical Notes, by E. R. Stitt, A.B., Ph. G., Sc.D., LL.D., Rear Admiral, Medical Corps, and Surgeon General U.S. Navy. Seventh edition, revised and enlarged, with one plate and 202 other illustrations, containing 675 figures. Philadelphia: P. Blakiston's Son & Co., 1012 Walnut Street. Price, \$5.00 net.

Laboratory workers and all those whose work brings them in contact with laboratory work will welcome this latest edition of this little classic. It is doubtful if there is any laboratory text book written in English which is its superior. This new edition, the seventh, contains 132 pages more than the previous edition. A chapter summarizing the subject of nutrition, several new tables, a description of three flocculation tests for syphilis and a description of the Jansky classification of blood groups have been added. There are also several minor additions. The book is to be recommended most highly for medical students and general practitioners, as well as those more closely associated with laboratories, for not only does it describe clearly laboratory methods of all kinds which are useful in clinical medicine, but it also points out clearly the clinical significance of the laboratory findings.

---

*Bandaging*, by A. D. Whiting, M.D., formerly Associate in Surgery at the University of Pennsylvania. Second edition, revised. Philadelphia and London: The W. B. Saunders Company. Canadian Agents: The J. F. Hartz Co., Limited, Toronto. Price, \$1.75 net.

This little work of about 150 pages is a most practical one and excellently illustrated with cuts from actual photographs. It is simply and clearly compiled so that the beginner in bandaging can easily follow the text. For students and nurses it would be especially useful, and for the practitioner who wishes to review his bandaging no more concise volume could be desired.

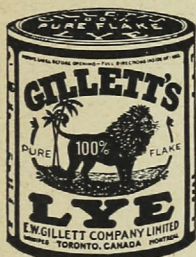


# Hospital Superintendents

Should instruct their  
Nurses and domestics to use

## GILLETT'S PURE FLAKE LYE

for disinfecting sinks, closets and drains. It is also ideal for the cleansing of urinals and bed pans—in fact any vessel that requires disinfecting. Gillett's Flake Lye should always be used for scrubbing hospital bath tubs and operating room floors.

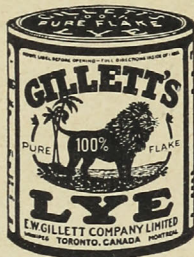


For cleansing and disinfecting, dissolve one tea-spoonful of Gillett's Lye in two gallons of water. The fine crystal flakes dissolve instantly in hot or cold water.

Beware of Imitations

*Made only by*

E. W. GILLETT COMPANY LIMITED  
TORONTO, CANADA  
WINNIPEG 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

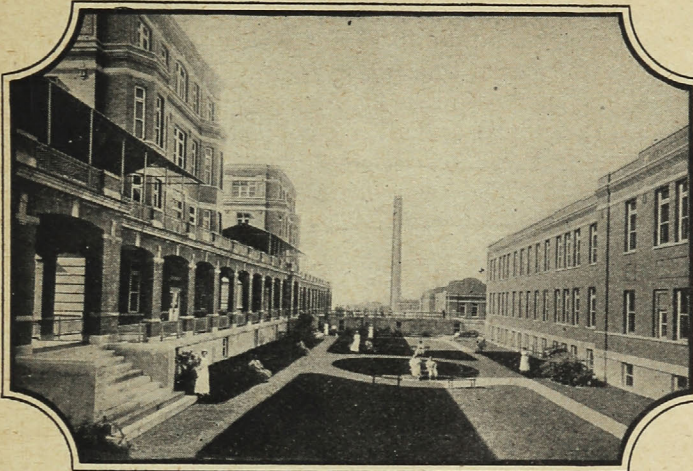
### A SEDATIVE OR A TONIC?

Lauder Brunton, in his "Lectures on the Action of Drugs," relates the case of a famous author who came to him for relief from insomnia. Brunton did not dare to give him bromides, or other similar sedatives, because he was in the midst of an important piece of literary work and drugs of this kind would have blunted his mental acuity. The great therapist decided that the man's nerves were irritable, not because his work was specially racking, but because the man himself was below par, and that if he could be brought up to normal his irritability would disappear. He therefore gave him a nerve tonic, with gratifying results.

Most cases of neurasthenia and so-called "nervous debility" have a physical basis. These patients' physical income is inadequate to the demands of living. They have no reserve, and live from hand to mouth. Hence their nervous irritability. Too often they are given sedatives and hypnotics when in truth they need a tonic—that is to say, a true tonic, not merely a whip but a reconstructant which will supply the body with needed elements and promote nutrition. Thousands of physicians throughout the world have proven the efficacy of Fellows' Compound Syrup of Hypophosphites in conditions of this kind. Brunton's experience illustrates a general therapeutic principle. Fellows' Syrup furnishes an agent for applying the principle.

### HOSPITAL LIGHTING

Perhaps more than any other class of lighting, that of hospitals requires the most careful treatment. Modern science shows that the activities in the hospital are more dependent on good lighting than anything else—lighting that incorporates high intensity and finest quality, soft, white light, free from glare, protecting the eyes of patients and workers. Extreme sanitation, safety and accuracy are requisite features of hospital work and every attention should be given to things that assist the work of doctors and nurses, and help bring about the quick recovery of the patient. Sanitation is the first thought in any hospital, and no room, corridor, closet or kitchen can be kept clean unless it is well lighted. Cleanliness should be an outstanding characteristic of the lighting equipment as well, and this should be of such a form and so constructed as to not easily collect dust. Fixtures without sharp corners, crevices or set screws are easiest to clean and keep clean. Uniformity and even distribution of light, free from bright spots and pronounced shadows, producing a cheerful, pleasing result is important, not only in the wards, but in reception rooms and lobbies, where friends and relatives wait, sometimes under depressing circumstances. The importance of ward lighting cannot be overestimated where every comfort of the patient is desired and where a lighting unit giving a soft, white light and arranged for local illumination near the beds in such a way that the patients' eyes are pro-



Ward building of the great Cincinnati General Hospital—one of the hundreds of institutions where Jell-O is used for its purity, uniform quality and food value. Jell-O tests 85.8% carbohydrates, 12.2% protein, and 2% pure vegetable acid. Its peculiar food value has long been established.



Diet kitchen in the Cincinnati General Hospital. Jell-O is prepared here for the hundreds of patients in the hospital. Jell-O is prepared and served so quickly and easily that it is a very economical food to handle. And the cost is low—particularly when you buy the Institutional Package, the big box for big users.



Miss Eleanor Tierney, Dietitian in Charge, who orders Jell-O for the patients' trays in the Cincinnati General Hospital. Everybody loves the sparkling clarity and sweet fruity flavor of Jell-O

“The Cincinnati General Hospital has used Jell-O (Institutional size) exclusively for the last five years.”

(Signed) A. C. Bachmeyer, M. D.  
Superintendent

The GENESEE PURE FOOD COMPANY of CANADA, Ltd.  
BRIDGEBURG, ONTARIO



tested from strain, gives the best results. The Tallman Brass & Metal Limited, Hamilton, Ontario, large manufacturers of lighting fixtures, have given special consideration to hospital lighting and will freely send to those interested, catalogues, bulletins and full information concerning their patented, brascelite, raylite, algite and vitro-lite fittings recommended for this purpose. These fixtures are all a combination of white glass and white porcelain enamelled metal work, harmonizing perfectly with furnishings and other fittings and insuring absolute sanitation and cleanliness with the utmost lighting efficiency. The marvellous daylight quality of the light produced—its pure, clear, even distribution, soft warm light, without glare, secured by diffusion and reflection, make these units the most suitable and serviceable lighting for modern hospital purposes.

#### AN ALLY OF THE HOSPITALS.

The purity and ready digestibility of gelatine have made it a valuable ally of the sick-room, the hospital, and of physicians and pharmacists. It is the ideal substance, for instance, for medical capsules, and it has long been in universal use for this purpose among druggists.

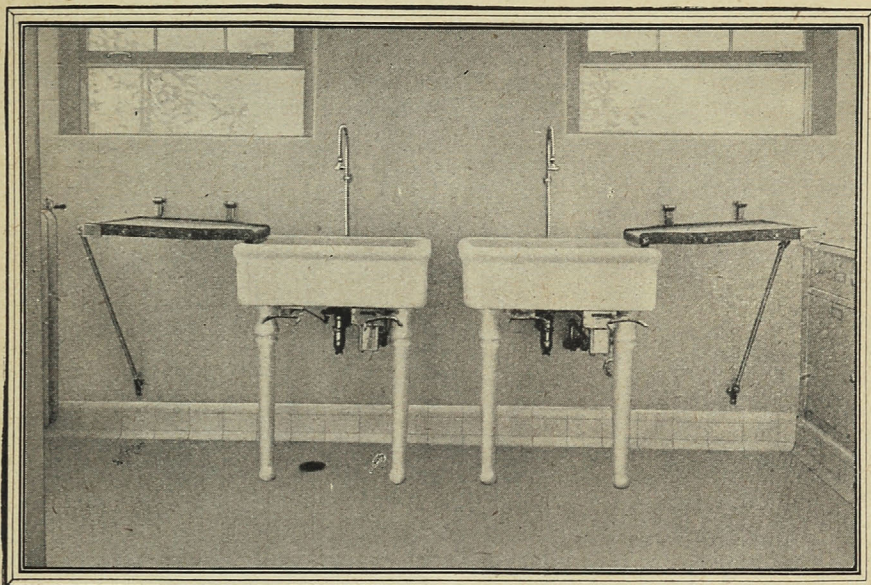
The use of Jell-O by the hospitals has become very widespread. It makes a tempting dish for the sick and the convalescent, as well as for young children and the aged, and it fits perfectly into any prescribed diet, whether liquid, semi-liquid or solid. The Genesee Pure Food Company maintains a staff of women lecturers who travel extensively and address classes of nurses and dietitians on the functions of gelatine in the diet and the best ways of serving Jell-O in hospitals.

Medical circles are at present engaged upon interesting research into the therapeutic properties of Jell-O. The value of feeding it to patients prior to tonsillectomy and other surgical operations in order to increase the coagulability of the blood, is being carefully studied by physicians. Some physicians believe that it also tends to reduce hemorrhage after childbirth.

Sufferers from diabetes, as well as their physicians, will welcome the news that the Genesee Pure Food Company has developed a product known as D-Zerta, which is an appetizing and nutritious dessert, wholly free from sugar, and scientifically correct for the drastic requirements of this class of diet. It is tempting in appearance and agreeable in aroma, and to the palate. Its protein content in jelly form is under two per cent., and it contains neither fat nor carbohydrate. Samples will gladly be furnished to physicians or patients, upon request to the manufacturer. Like Jell-O, it requires no cooking.

#### IDEAL BREAD

Everyone is interested in how bread is made. A metaphorical trip, therefore, through the bakery of the Ideal Bread Company, Limited, a bakery noted for its scrupulous cleanliness



## CONVENIENCE AIDED BY DETAIL REFINEMENT

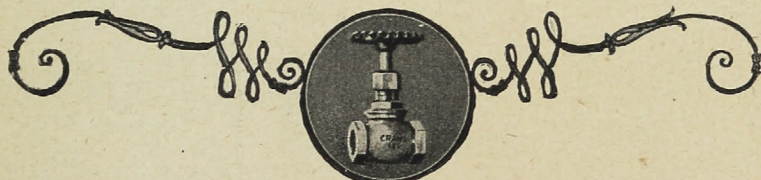
Supplied in specialized types to satisfy all hospital requirements, Crane plumbing fixtures also provide for convenience and durability through thoughtful detail refinements. Crane telescoping legs, for instance, make it possible to install the special sinks pictured here at the height

most convenient for the individual who is to use them. Their pop-up wastes, knee-controlled, are large enough to drain the basins promptly and thoroughly. And the Crane provision of extra strength and security throughout makes them able to withstand even careless and severe usage.

# 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*



*Crane Globe Valve No. 6*

and the excellence of its scientific equipment, will prove interesting.

First we enter the stock-room where materials of known quality and purity are carefully stored. From here the flour is taken and expertly sifted and blended; elevated to the storage bins and weighed, ready for mixing. Next we find the dough mixer, where the different ingredients are mixed with water at the required temperature. After proper fermentation, the dough passes to a machine which automatically weighs off sufficient for each loaf. The loaves are then moulded, carried by automatic conveyors to the panning machine, then placed on racks in the steam proofing room where they remain at a standard temperature for a specified time. The bread then enters the famous "Ideal" Travelling Ovens, where an endless conveyor hearth carries the loaves slowly, with a capacity of 3,000 an hour, through the steam-tight baking chamber. The ovens are equipped with heating and speed controls and side inspection doors permit the progress of baking to be watched. With this equipment *absolute uniformity* of color and evenness of baking is achieved. After baking the bread is automatically conveyed to the packing room without handling, placed in racks and cooled before delivery. Throughout the whole process, the utmost in purity, quality and scientific equipment is in evidence.

#### FACTS OF INTEREST TO PHYSICIANS ABOUT A WELL-KNOWN DISINFECTANT

Any product, to maintain its standing, must conform to two important specifications. The first of these is suitability of product to its intended purpose. The second specification is *purity*. "Lysol" disinfectant is admirably suited to its advocated uses. The antiseptic and germicidal action of "Lysol" is unquestioned. In this respect it is almost standard. But certain other advantages are added to this quality in "Lysol." The dilution used is not irritating to body tissues. A second point of suitability is *uniformity*. Lysol disinfectant is always the same—everywhere and at all times. This assures both the physician and the layman an equality of action that can always be depended upon. The second specification is that of purity. Purity may mean simply that the product fulfills the claims made for it. No mention may be made of disadvantages or of qualifications lacking. Purity should mean a great deal more. Lysol disinfectant is *pure*. This means that it gives clear solutions which are non-irritating and it has a pleasant odor. This purity means a minimum of inert ingredient and a maximum of active cleansing antiseptic constituents. "Lysol" purity means then not simply that "Lysol" is two and a half times as strong as carbolic acid in germicidal action—but it means more—it means that nothing is present to detract from this germicidal action; it means that "Lysol" is all disinfectant and not half water; it means absence of free alkali and consequent irritation.

Demand

PROTECT  
Your Doctor  
and Yourself

# PHILLIPS' Milk of Magnesia

SAY "PHILLIPS" to your druggist, or you may not get the original Milk of Magnesia prescribed by physicians for 50 years.

Refuse imitations of genuine "Phillips"

Each large 50-cent bottle contains full directions and uses.



*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.

## "Build for Service"

*The CHASE HOSPITAL DOLL* and *The CHASE HOSPITAL BABY*, demonstration manikins for teaching the care of children, the sick and injured, are made with infinite care and thought to each detail. "Build for Service", is the policy behind all CHASE PRODUCTS.

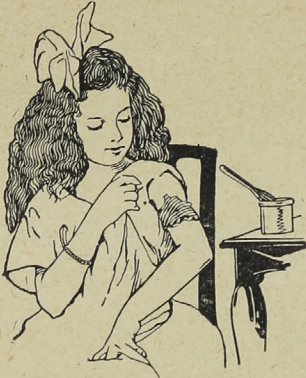
Nothing but the sturdiest material goes into these products; cloth and cotton batting that have been molded into the human form, hard, raised features, flexible joints, naturally formed bodies, heads, arms and legs, that conform to standard measurements. They are covered with durable, waterproof paint. The larger models are equipped with openings, connected with water-tight reservoirs, representing the meatus, auditorius, nasal, urethral, vaginal, and rectal passages.

*The CHASE HOSPITAL DOLL* and *The CHASE HOSPITAL BABY* because of their inherent durability and because they permit such great flexibility and wide latitude in the demonstrations and practise of medical, surgical, and hygienic principles, are in daily use all over the world in Hospitals, Nurses' Training Schools, Home Nursing Classes, Baby Clinics, Mothers' Classes, and by Visiting Nurses and Baby-Welfare Workers. They are standard and necessary equipment.

Let us send you our latest catalogue.

## *The* CHASE HOSPITAL DOLL

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



## 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

*Antiphlogistine*  
TRADE MARK  
"Promotes Osmosis"

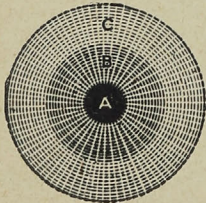
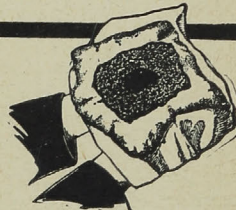
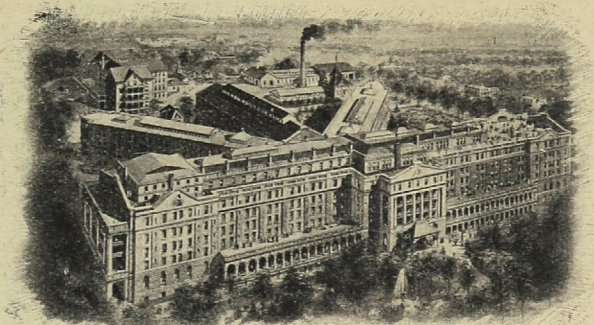


Diagram represents inflamed area. In zone "C" blood is flowing freely through underlying vessels. This forms a current away from the Antiphlogistine, whose liquid contents, therefore, follow the line of least resistance and enter the circulation through the physical process of endosmosis. In zone "A" there is stasis, no current tending to overcome Antiphlogistine's hygroscopic property. The line of least resistance for the liquid exudate is therefore, in the direction of the Antiphlogistine. In obedience to the same law exosmosis is going on in this zone, and the excess of moisture is thus accounted for.



Antiphlogistine poultice after application. Center moist. Periphery virtually dry.





## 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

## CANADIAN LABORATORY SUPPLIES LIMITED

### CANADA'S LEADING LABORATORY SUPPLY HOUSE

LET US QUOTE ON YOUR LABORATORY APPARATUS AND CHEMICAL REQUIREMENTS

**THE FOLLOWING ALWAYS CARRIED IN STOCK:**

PYREX GLASSWARE	WHATMAN'S FILTER PAPER
J. T. BAKER'S CHEMICALS	GENERAL LABORATORY GLASSWARE
FREAS AND THELCO	SILICA AND PORCELAIN WARE
ELECTRIC OVENS AND INCUBATORS	BACTERIOLOGICAL REAGENTS AND CULTURE MEDIA
BARNSTEAD WATER STILL	DR. G. GRUEBLER'S MICRO- SCOPICAL STAINS
MICROSCOPES AND ACCESSORIES	

WHY NOT BUY IN CANADA?

**CANADIAN LABORATORY SUPPLIES, LIMITED**  
439 KING ST. WEST, TORONTO

## Standardized Hospital Charts

**FREE SAMPLES**

We will gladly send you a full set of samples so that you may see how complete and convenient they are.

*Ask for  
"Sample set of Hospital  
Charts."*

LOVELL'S simplified and standardized Hospital Charts can now be supplied for nearly every need—19 different charts and forms.

They have been adopted by a large number of the leading hospitals of the Dominion.

They have many advantages over other forms and *cost you less.*



**The R. J. LOVELL CO., Limited**

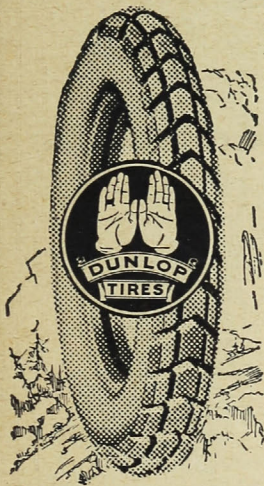
*Manufacturing and Wholesale Stationers*

**"Everything for the Office"**

**144-150 Simcoe St. - Toronto**

*All Goods Guaranteed Satisfactory or Money Refunded*

## THAT DUNLOP "SPARE" GETS LITTLE WORK



Have you noticed the number of big cars with a Traction Cord spare which always looks new? It is new. Scores of car owners tell us that after equipping **Dunlop Cords** all around—including the spare—they have gone a whole season without ever needing to disturb that fifth tire. Hence its new appearance all the time.

This is not an argument for abolishing the extra tire. Rather it is proof that the spare is seldom called into requisition when the complete Tire equipment is **DUNLOP**.

*Is your car "DUNLOP" attired?*

**DUNLOP TIRE & RUBBER GOODS CO., LIMITED**  
**HEAD OFFICE AND FACTORIES: TORONTO**  
 Branches in the Leading Cities

## A Preventative to Flat Foot

The Medical Profession will be gratified to learn that

### **POMEROY SHOCK ABSORBER HEELS**

are about to be manufactured in Canada and will soon be procurable from the principal shoe houses in Toronto and other large cities.

**POMEROY HEELS** are a scientific construction of **LEATHER, RUBBER** and **METAL**, giving the wearer absolute resiliency, removing all jar from the spine, without any danger of slipping on wet pavements. Pomeroy Heels are *not* rubber heels.

Nothing could be more suitable for use by Nurses when on duty, Pomeroy Heels being not only quiet; but relieve that tired feeling from long standing and are unquestionably a preventative to Broken Arches.

**THE INTERNATIONAL SHOE HEEL CORP'N.**  
 64 Wellington St., West, - Toronto

# 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



# Everything in Cotton Goods for the Hospital

## Apparel

Doctors' coats and pants; operating suits; operating gowns and caps; nurses' aprons, caps and operating gowns; orderlies' suits; maids' uniforms; patients' bed gowns; bath robes; ether jackets; pneumonia jackets; leg holders; cooks' coats, pants, aprons and caps, etc.

## Bedding

Bed sheets, sheeting, draw sheets, lehotomy sheets; pillow slips, circular pillow cotton; mattress covers and quilts; pillows, etc.

## Sundries

Towels, bed pan covers, etc.



## MADE IN CANADA

These are all the highest-grade Made-in-Canada goods, and are sold direct to hospitals at very attractive prices.

Samples of materials, description, sizes, and very special prices—"direct to the hospitals"—on request.

# CORBETT-COWLEY

*Limited*

DARLING BUILDING

TORONTO

96 SPADINA AVE.

Successors to HUDSON-PARKER

*Limited*

# Cellucotton

Reg. U.S. Pat. Off

“WHAT makes my Cellucotton dressings harsh and sharp at the edges?” asks one superintendent.

“How do you cut the Cellucotton?”

“We cut it with scissors.”

“Well, that is the reason for the sharp edges.”

Using scissors presses the layers of Cellucotton together until—it has an almost knife-like edge. It is not necessary to use scissors. When handling Cellucotton in large quantities some hospitals

cut it with an electric rotary cutter which plows through the Cellucotton at an enormous rate of speed. But if you have not an electric cutter and use the Cellucotton in moderate quantities, tearing it along a straight edge such as a ruler, will keep it soft, fluffy and comfortable.

Have you had any difficulties with Cellucotton? Let us give you the suggestions of other users, compiled in our Cellucotton Recipe booklet. It will be sent free on request.

*Exclusive Selling Agents*

**LEWIS MANUFACTURING CO.**

**Walpole, Mass.**

*Represented in Canada by*

Gibson, Paterson, Ltd.,	-	Winnipeg
H. L. Brown & Co.	-	Toronto
R. H. Paterson	-	St. John