H/6916 151-

Che Canadian Journal of Medicine and Surgery

145 COLLEGE ST.

TORONTO, ONT

Vol. XXXVIII

TORONTO, NOVEMBER, 1915

No. 5

CONTENTS

EDITORIALS.

Medical Education			145
Academy of Medicine, Toronto			151
Dr. Charles R. Dickson Honored			153
More Help for Our Soldiers			154

ORIGINAL CONTRIBUTIONS.

President'	's Address,	Aca	ademy	of	Medi-	
cine,	Toronto.	By	Dr.	W.	н. в.	
Aikin	S					157

Some	Re	mark	s on	Men	tal 1	Tygien	e and
t	he	Prev	entio	n of	Ins	sanity.	By
(Cam	pbell	Mey	ers.	M.I)., M.I	R.C.S.,
		T. P					

disabilities, including Injuries Caused	
by Bullets, Shrapnel, High Explo-	
sives, etc., as illustrated by Cases	
Examined before a Medical Board	
at Canadian Headquarters, Shorn-	
cliffe, England. By A. Primrose,	
M.B., C.M., Edin., Lieutenant-Col-	
onel, No. 4 General Hospital (Uni-	
versity of Toronto), Canadian Ex-	
peditionary Force	

173

SYRUPUS HYPOPHOSPHITUM FELLOWS

One of the most efficient, most complete, and best all-round Tonics in the Materia Medica!

FOR FOUR AND A HALF DECADES ITS REPUTATION HAS BEEN CONSTANTLY INCREASING!

Reject Cheap and Inefficient Substitutes
Preparations "Just as Good"

"What the Doctor Ordered"

"An infant food which was to contain no starch, no preservatives, no adulterant of any description—which was to be absolutely sterile, a proportion of cream fats identical with the ideal standard of human milk, and an analysis that coincided with that standard throughout."



"The Food that 'Builds Bonnie Babies"

FILLED ALL THESE REQUIREMENTS

Glaxo is manufactured in New Zealand—the finest dairy country in the world. Composed entirely of the solids of the purest tested milk and cream with added cream and lactose, it is as good as modern science can make it.



Samples on Request

Canadian Office:
418 DOMINION BANK BUILDING, TORONTO

A QUESTION OF NEUTRALITY



Mr. Berlinger: "I understand your firm has been supplying arms to the allies. I had hoped you were strictly neutral, sir!" Mr. Marks: "We are neutral; we supply arms to the Germans, too; also legs to all the world!"

Write A. A. MARKS, 701 Broadway, NEW YORK, N.Y. for "Manual of Artificial Limbs," and read of the many improvements on hand and foot.

INVALID STOUT For Weak Folks

BOOORTRENGTHENING and nourishing qualities, combined with a really acceptable flavor, make Dominion Brewery's Invalid Stout the ideal beverage for convalescents and bilious people. digestible and non-gassy.

Order at any of the dealers

Dominion Brewery Co., LIMITED TORONTO



106 224 Yonge Yonge St.

Canada's Greatest **Drug Stores**

St.

BECAUSE

Y/E fill prescriptions exactly as written---surrounded by every safeguard to assure accuracy and purity. Our prices are moderate and we deliver to all parts of the city.

Substitution by a clerk in our prescription department, or in any other department in our stores--means dismissal.

We have placed our stores on the highest moral plane of any retail drug business in the world---by the removal from sale of all intoxicating liquors, habit-forming drugs, and objectionable merchandise of all descriptions.

We fill (Free of Charge) any prescriptions for children, if from the Physician's judgment the parents are unable to pay for same, provided we receive a written order to this effect from the Physician.

It is our desire to furnish Physicians and their Patients with the most adequate prescription service in the city.

"An Ideal Pen for Physicians"

DOCTOR! How often have you experienced the inconvenience and annoyance of a "leaky pen?"

Is there anything more aggravating than to get your fingers stained with ink when writing a prescription? We have a sure cure for this. The

"JOHN WHYTWARTH"

SCIENTIFIC, NON-LEAKABLE FOUNTAIN PEN

is an antidote against ink-stained fingers, frowns, bad temper and possible profanity.

The John Whytwarth Pen is of first-class British workmanship. It is used by thousands of the most critical writers with entire satisfaction. Numbers of these are physicians of whom many have voluntarily written expressing their pleasure that they have at last found a pen that is satisfactory in every sense of the word.

As Canadian Agents for the British manufacturers, we are anxious that every Doctor should know of, and use this pen. With this object in view, we are offering you this perfect writing instrument at the extremely low figure of (\$2.00) Two Dollars.

Try This Pen Without Obligation to Buy

We will gladly mail a pen to any member of the profession anywhere in the Dominion for *free trial* for ten days, and at the end of that time if not entirely satisfactory, return it to us, and no charge will be made.

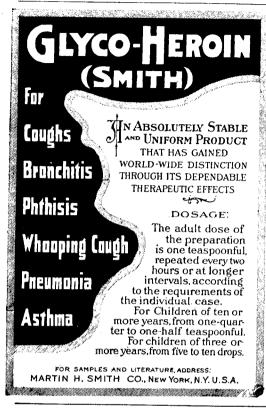
Take advantage of this generous offer by writing us to-day. Please state the kind of nib you prefer.

John Whytwarth's Agency

BELL TELEPHONE BUILDING Room 331. 78 Adelaide Street West

Telephone No. 1138 Adelaide

TORONTO



The Walsh Window Tent

THE illustration shows the Tent in use in a warm room, with the occupant snugly in bed breathing the outside air. The exhaled air, instead of fouling the atmosphere of the room, passes out of the Tent.



Weight twentytwo pounds.

Price ready for use \$12.50

Special prices to Doctors and Hospitals

Agents wanted

J. J. TURNER & SONS

Mfrs. for Canada

Peterborough - Ont

PHYSICIANS CAN REST ASSURED THAT

Brighton Laundry Limited 826 Bloor Street West

(Telephone College 3301) TORONTO

Uses every possible care to conduct their business along strictly sanitary lines. Their building is one of the most up-to-date in Canada, and the machinery used the latest procurable. Every piece of laundry is handled by an expert, and under 10 circumstances do they permit their drivers to remove laundry from a house where there is contagious disease.

The Profession can rely on BRIGHTON LAUNDRY LIMITED in every way.

Established 1911

Phone Main 7219

COLLECTION SPECIALISTS

Toronto, Oct., 1915.

Dear Doctor :-

Why not transfer the worries of collecting old accounts—from one to ten years overdue—to our experienced shoulders?

We have collected a large amount of money for the doctors of Canada.

We have connections, and can make collections in almost every city in Canada, Great Britain and United States.

We make no charge of any kind unless the money is recovered from the debtor, furthermore, accounts collected bear no expense or fee on any uncollected claims received from same client.

Write for rates and references.

Yours for "Good Service"

The Purvis Mercantile Agency

Offices: Hamilton Trust Building 57 Queen St. West

THE NORMYL ASSOCIATION OF THE UNITED STATES

Organized to Carry on Welfare Work and for the Distribution of

NORMYL REMEDY

for the treatment of

Alcoholism and Drug Habituation

A harmless combination of sedative and tonic drugs, widely and successfully used in England during the past twelve years, where, under the cordial endorsement of English physicians, most gratifying results have been obtained in thousands of cases.

The ordinary case requires no detention from business, and complete treatment lasts twenty-four days.

NOT A COMMERCIAL ENTERPRISE

The association aims to be a self-sustainig, philanthropic work. All officers are pledged to draw no profits from the enterprise, which are to be devoted to expanding and enlarging this important welfare work.

All inquiries and correspondence (which will be treated with absolute confidence) should be addressed to

NORMYL ASSOCIATION

110 West Eighty-Second Street

Telephone 6804 Schuyler NEW YORK CITY

Some Bran

For Every Meal

Where you wish to advise whole-wheat foods—

Or establish bran habits ---

Pettijohn's products supply the perfect means. In each the bran comes in dainty combination. The bran is in flake form and efficient. And there's 25 per cent in each.

Fifty dainty foods may be made from these products, so that every meal may include one. You'll find in these the finest bran-flaked products known.

Pettijohns

Two Bran Foods

Pettijohn's Breakfast Food—A soft wheat rolled into luscious flakes, hiding 25 per cent unground bran. A morning dainty liked by everyone. 15c. per package.

Pettijohn's Flour—Fine patent flour mixed with 25 per cent special bran, largely in flake form, To be used like Graham flour in any recipe. 25c. per large package.

The Quaker Oats Ompany

East of Manitoba, Peterborough, Ont. West of Ontario, Saskatoon, Sask.

(1103)

A TRULY SCIENTIFIC SUPPORTING CORSET!

THE semi-elastic bandlets are in exact apposition to the internal broad ligament, and, in position and action, closely simulate the lifting and supporting function of the external and internal



oblique muscles. The inner side-lacing permits exact individual adjustment, each side being independent of

the other, thus providing for inequalities in size and shape.

The mechanical construction is such that the entire weight of support is carried upon the hip bones, thus protecting the kidneys from undue pressure and the spinal column from distortion.

For all forms of PTOSIS.
Invaluable in inoperable FLOATING KIDNEY.
A great help in
ANTEVERSION, RETROVERSION, PROLAPSUS,
HERNIA, ANTE-PARTUM, POST-PARTUM.

The corset acts as a splint to the internal organs and their ligaments, giving them "physiological rest" until they regain their tone.

The elasticity of the bandlets produces a passive massage, reducing fat, correcting the circulation, relieving early adhesions and preventing new ones.

This New Kind of Binder "Stays Put!"

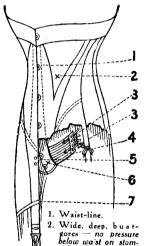
It can't shift. It gives added comfort. It does not bulk the figure, but reduces it. It accomplishes

its purpose without offending the woman's pride of figure. Your patient will wear this corset gladly. Too often she throws your binder aside the minute your back is turned.

It is **inexpensive.** The price of this corset is \$5.00—less than the cost of the cheapest binder; and it's a big value, simply as a **corset**, at \$5, saying nothing of this new supporting feature.

We shall be glad to furnish further information on request.

The Nemo Hygienic-Fashion Institute, 120 East 16th St., New York City U.S.A.



- ach and liver.

 3. Adjustable semi-elastic bind-
- er (oblique musles).
 4. Poupart's ligament.
- 5. Symphysis pubis.
- 6. Curved steels no pressure on bladder.
- 7. Garters attached to semidetached skirt no undue pressure upon abdomen.









Leading Medical Men

Always recommend Pure Wool as the only safe material to wear next the skin

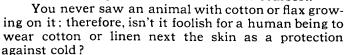


CEETEE UNDERCLOTHING

ALL PURE WOOL - GUARANTEED UNSHRINKABLE MEANS ECONOMY PLUS COMFORT



You cannot beat old Mother Nature—she has given every animal a covering of Wool-Fur-or Hair (all practically the same material) in varying degrees of fineness-wool being the finest and hair the coarsest.



Nature supplies this *wool* covering because it is the best protection against varying atmospheric conditions.

Wool is a strong non-conductor of cold and heat, and absorbs perspiration evenly and rapidly.

CEETEE" is the finest and purest woolen underwear made in the whole world.

Worn by the best people

Sold by the best dealers

In All Sizes, for Men, Women and Children.

Made in Canada from all British material by

THE C. TURNBULL CO. OF GALT, LIMITED

LOOK FOR THE SHEEP ON EVERY GARMENT





























THE SPECIAL ATTENTION OF THE MEDICAL PROFESSION IS CALLED TO



PROTECTU BRAND PAPER TOWELS

made from genuine two process crepe paper. As physicians know, the use of paper towels in the Home, the Hospital and the Factory is a distinct advance in sanitation. What could be more unhealthy in this 20th century than the indiscriminate use by one and all of the same towel, especially when there is danger of contagion? Why should such a risk be incurred when an individual towel can be provided at such trifling cost? Our paper towels are made under the most perfect sanitary conditions, being delivered free of even the appearance of dust. They are put up 150 towels to roll, 50 rolls to the case, so perforated as to be readily detached, and are exceedingly absorbent and soft to the touch.

Doctor, guard the health of your patients by recommending the use of Protectu Brand Paper Towels. 1st Grade Protectu Brand, 2nd Grade Hygienic Brand, 3rd Grade Purity Brand.

The following are some of the other lines which we manufacture, viz :

Outing Sets Crepe Paper Napkins White Cross Toilet Paper

Old Dutch Toilet Paper Traveler's Sanitary Pkg. Children's Hygienic Bibs

Sani-white Paper Napkins Decorative Crepe Rolls Fine Tissue Papers

Interlake Tissue Mills, Limited

MERRITTON AND TORONTO



for Whooping Cough, Spasmodic resolente Croup, Bronchitis, Broncho Pneumonia, Asthma, Sore Throat

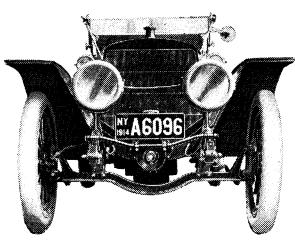
and the bronchial complications incident to Scarlet Fever and Measles.

Vaporized Cresolene is destructive to Diphtheria Facilli and may be advantageously used in connection with the treatment of this disease Cresolene has twice the germicidal value of carbolic acid and is less toxic. The vapor is harmless to the youngest child. The accompanying vaporizer offers a means of easy and prolonged treatment.

Let us send you our descriptive and test booklet which gives liberal sample offer.

THE VAPO-CRESOLENE CO., 62 Cortlandt Street, NEW YORK Canada Montreal, Canada





The North East "Universal" System of Electric Starting and Lighting

can be applied to nearly every make of car now being run in service.

It is simple and reliable, and can be applied by any ordinary garage man in a

short time. It does not interfere with the regular operation of the car or engine.

The Salvation of Your Old Car

It cranks the motor. Lights the lamps. Charges the battery. Saves broken arms and other injuries. | simply press a button.

A woman or child can crank the engine as easily as the strongest man-

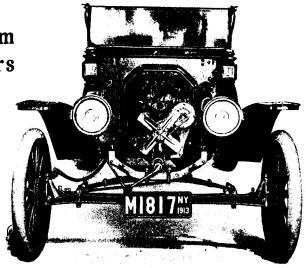
Pressing one button cranks your motor—pressing another lights your lamps.

Send for our Bulletin 33-R.

Special System for Ford Cars

This system can be applied to the Ford in a few hours—it is the original Ford etectric starting and lighting system.

Send for Bulletin 30-R for Ford system.



NORTH EAST ELECTRIC CO., Rochester, N.Y.

THE ADVANTAGES OF CYPRIDOL IN THE TREATMENT OF (1% SOLUTION OF BIN INDIDE OF MERCURY) IN AN ASEPTIC OIL

It exerts a powerful spirochaeticidal effect; may be continued for months without evil results; does not cause gastric or intestinal distress; does not salivate even in good sized dosage.

CYPRIDOL may be given either per os or intra-muscularly

Dr. Ph. Chapelle, PARIS. U.S. Agents, E. Fougera & Co., Inc., New York.

Compact, Authoritative, Practical

Our New Manual of

X-Ray Practice and Technique

Free on Request

G. CRAMER DRYPLATE CO.

St. Louis, Mo

A FOOD TONIC, POSSESSING THE BENEFICIAL PROPERTIES OF BLOOD SERUM AND RICH IN HEMOGLOBIN

BOVININE

Specially indicated in Anemic Conditions. Mal-Nutrition or Mal-Assimilation.
Convalescence.
Diphtheria.
Conditions. Mal-Nutrition or Mal-Assimilation.
Gastric Disturbances, acute or chronic.
Typhoid, Scarlet, and other Fevers.

Irritation or Ulceration of Intestinal Tract.

Consumption and all Wasting Diseases.

Cholera Infantum, and all Infantile Disorders.

Influenza, and Recovery therefrom. Diarrheic and Dysenteric Conditions.
The Puerperal State. Nursing Mothers.
Rectal Feeding, Topical Application, etc.

Write for Sample, also for one of our new Glass (sterilizable) Tongue Depressors.

THE BOVININE COMPANY

75 West Houston Street

NEW YORK CITY

"LIKE A BALL FROM A RIFLED GUN"

describes the sureness and quickness with which

COLCHI-SAL

influences a gouty or chronic rheumatic focus COLCHI-SAL is practically specific in gout. Relieves the pain and reduces the swelling.

SAMPLES and Literature on request

The Anglo-American Pharmaceutical Co., Ltd

U.8 Agents, E. & CO. Inc. New York





THE LATEST ELECTRIC DOCTOR'S SIGN

It is a Night Sign It is a Day Sign

It is Professional It is Dignified It is Attractive

It is Inexpensive to buy

It is Inexpensive to operate
It is Transparent Plate Glass

No lights are visible, all but the wording turns black at night, the lettering stands out absolutely white, and readable at any angle, or distance, burns $\mathbf{8}_{3}^{4}$ Hours at a cost of one cent. In ordering send money order.

Price \$10 complete, ready to turn on switch

The Radiant Sign Company, Limited

357 College St., Toronto

Tycos Ti

Fever Thermometers

ACCURATE—DEPENDABLE—PRACTICAL

Guaranteed against defect of material and work-manship.

Tycos Safety Case

as illustrated prevents loss or breakage. Alcohol in the Safety Case keeps Thermometers sterile. Pigment on the Thermometer is not affected.

½ Minute, \$1.75; 1 Minute, \$1.50; 2 Minute, \$1.25. In plain, hard rubber case, 25c less.

Sold everywhere. If your dealer can't supply you or will not order for you, write us. Ask for Booklet "Sixty Years."



Dr. Regers' How Self-Verifying Sphygmomanometer Cambridge Electrocardiograph How Urinary Glassware

Taylor Instrument Companies

Rochester, N.Y,





THE PARISIAN LAUNDRY 602-610 KING STREET W. TORONTO

TN this day of sanitary requirements many will be interested to know that the Parisian Laundry were the very first to introduce the most sanitary methods of doing laundry work, looking carefully to the health not only of their customers but their employees.

No parcel is allowed to be taken by our drivers from any place where there is an infectious disease of any kind.

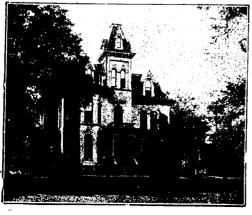
All articles are thoroughly sterilized in the process of washing, and soiled linen does not come in contact with clean linen, being received and delivered in different parts of the building.

THE PARISIAN LAUNDRY CO. OF TORONTO, LIMITED

Phone Adelaide 820

GENITO-URINARY DISEASES. A Vitalizing Tonic to the Reproductive System. Specially Valuable in Prostatic Troubles of Old Men—Irritable Bladder-Cystitis—Urethritis—Pre-Senility. SOOTHING - RELIEVING - RESTORING. DOSE:—One Teaspoonful Four Times a Day. OD CHEM. CO., NEW YORK. Beware of the so-called Elixir Compounds claiming to be "the same thing" or "just as good" if you do not wish to be disappointed.

Sandy Sa



DR. BROUGHTON'S SANITARIUM

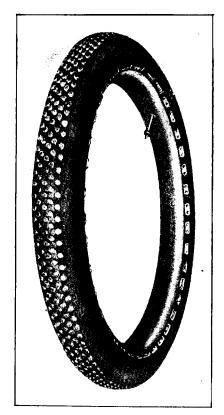
Established 1901

For Opium, Morphine, Cocaine and Other Drug Addictions, including Alcohol and Special Nervous Cases

Methods easy, regular, humane. Good heat, light, water, help, board, etc. Number limited to 44. A well kept home. Address

Dr. Broughton's Sanitarium Dr. G. A. Weirick, Supt.

Phone 536 2007 S. Main St. ROCKFORD, ILL.



WOODWORTH LIGHT WEIGHT TIRE PROTECTORS

For Retreading Worn Tires or Protecting Good Ones

JUST the thing for Fall and Winter running; they protect the tires from injury on the bad roads of Fall and Winter; they prevent having to repair punctures and blow-outs in cold weather and they provide a non-skid that is always in place.

Woodworth Light Weight Protectors fasten to the rim with small hooks which are so shaped that the pressure on the tire causes them to automatically tighten the leather, keeping the covers always perfectly tight. The leather on the inside is finished with special treatment that makes it adhere to the rubber, preventing wear or friction on the tire.

Price 30 x 3—\$6.40 each. 30 x 3½—\$7.50 each less 5% for cash with order delivered to any part of the United States or Canada. Other sizes in proportion. Made for both straight side and clincher tires. Under average conditions these treads will save more than double their cost besides doing away with the punctures and the bother of chains.

Think of the satisfaction of knowing that your tires are safe on any roads and that you are always ready for slippery places.

SEND FOR OUR PROPOSITION

Leather Tire Cover Co., Niagara Falls, N.Y.



ALEXANDER'S BIOLOGIC PRODUCTS

DIPHTHERIA ANTITOXIN

A highly concentrated and refined product.

SMALL-POX VACCINE VIRUS

Guaranteed 100% "takes."

TUBERCULINS (Diagnostic and Therapeutic)

Prepared in accordance with the exact methods prescribed by the originators.

PASTEUR TREATMENT

For the prevention of Rabies. Each dose shipped daily in a vacuum mailing outfit.

SILVER NITRATE SOLUTION

As used for the Crede Preventive Treatment of Ophthalmia Neonatorum.

Price list and literature regarding any of the above will be sent free, upon request. All our products are prepared under U.S. Government License No. 3.

Dr. H. M. Alexander & Company

Biologic Laboratories

MARIETTA, PENNSYLVANIA

SHERMAN'S BACTERINS

Preparations with a Record for RELIABILITY 31 Different Varieties

Typhoid Fever

YIELDS MORE READILY TO

Typhoid Vaccine

than to any other remedy. When given early it often aborts the course of the disease.

Write for Literature.

G. H. SHERMAN, M.D. DETROIT, MICH.

Daily Users of Vaccines use Sherman's,

CHOLL'S Foot-Easer and Arch Supports are anatomically correct. They support the weak or broken down arch with a firm, steady, upward pressure, gradually

restoring the bones to their natural position and giving ease and comfort to the feet. For all foot strains and pains due to weakened arch, prescribe Scholl's Orthopedic Appliances. **DEALERS**

FOR SALE SHOE

AND DRUGGISTS

Send for literatureTODAY The Scholl Mfg.Co. Ltd. 214 King St. E. Toronto

For the Relief of PAIN

the "logical supplanter of opium, and other habit forming drugs" is

No matter how severe or where located pain is promptly and satisfactorily controlled this effective anodyne-and without disturbing the digestion, suppressing the secretion, causing constipation or inducing a drug habit.

This is why Phenalgin has superseded opium and its derivatives for relieving Headaches, Rheumatism, Gout, La Grippe, Headaches, Rheumatism, Gout, La Grippe, Lumbago, Neuralgia, Disorders of the Female, Dysmenorrhea, and Painful Conditions generally.



To thousands of physicians Phenalgin "is the one dependable analgesic -the logical supplanter of opium".

Specify "Phenalgin Pink Top Gapsules".

Samples and interesting information on request

The Etna Chemical Co. 59 Bank Street New York

These trade-mark criascross lines on every package

KIDNEY AND LIVER LES AND OBESITY

Makes delicious everybody.

FARWELL & RHINES, WATERTOWN, Y., U. S. A.

GASTROGEN

TABLETS

Correct

HYPERACIDITY

Sample On Request

Bristol-Myers Co.

Brooklyn, N. Y.



INDEX TO ADVERTISERS

	47 55 12 16 26 27
Denver Chemical Co. 41 Marvel Co. 56 Turnbull Co., C. Davis & Sons, S. 51 Marathon Tire & Rub Etna Chemical Co. 15 ber Co. 57 Fellows Co. Front cover May & Baker, Ltd. Third cover Fougera & Co. 10-11 Merck & Co. Back cover Ferber & Co., Robert 19 Maclure & Langley, Ltd. Back cover Ford Motor Co. 32 Findlay & Co. 41 Normyl Association 57 Fairweathers Limited 49 North-East Electric Co. 9 Farmers Dairy Co. 50 Natural Tread Shoes Co. 26 Farmers Dairy Co. 50 Natural Tread Shoes Co. 26 Wyeth & Bro., John Wellington Garage Winkley Art, Limb Co.	5 11 29 34 51 51 15 488 58 47 11 20 24 58 58

CROOKS GLASS

SUPPLIED

PERCY THE OPTICIAN

6 BLOOR STREET EAST

PHONE NORTH 2824

TORONTO

THE Ideal Electrical Illuminating Outfit for every purpose and use. The most practical and convenient Outfit for Physicians and Surgeons where a good light is required and an advantage in making his emergency calls, to examine and treat the Throat, the Nares, Eye, Ear and many other uses. This Complete Outfit, with all attachments, including Tongue Depresser, Ear Speculum and curved and straight metal attachments for the Mouth, etc., and regular pen light, which carries in the pocket like a fountain pen, also includes three separate light attachments mailed anywhere in receipt of \$3.50.

IDEAL ELECTRICAL SUPPLY CO. 299 BROADWAY, NEW YORK CITY

Corpora Lutea in disorders of the menopause

There is abundant evidence that the ovarian principle, represented in Corpora Lutea, P. D. & Co., is of much value in controlling the complex and annoying symptoms attending the artificial menopause, especially in young women, and in relieving the nervous disturbances incidental to the natural menopause. It has also been successfully used in amenorrhea, dysmenorrhea, chlorosis, menorrhagia, hysteria, neurasthenia, and as an aphrodisiac.

We supply the dried and powdered Corpora Lutea in capsules containing 5 grains each, which is the equivalent of about 30 grains of fresh corpus luteum.

The physician who employs both Corpora Lutea, P. D. & Co., and the average ovarian extract, will discover that there is a marked difference in them therapeutically.

There is a reason for this.

In the preparation of Corpora Lutea, P. D. & Co., only the yellow granular material from fresh ovaries is used, constituting about one-sixth of the whole gland. The remainder is discarded!

We have reports of numerous cases in which Corpora Lutea, P. D. & Co., was used with marked success after other ovarian preparations had failed.

CAPSULES

CORPORA LUTEA (DESICCATED).

Bottles of 50 and 100.

Dose: one capsule to be taken at least an hour before meals; may be increased to two capsules pro re nata.

WRITE FOR LITERATURE.

Walkerville, Ontario,

Parke, Davis & Co.





Most cases of persistent hemorrhage may be controlled by the hypodermatic injection of COAGULOSE, which is much more active (whether injected or applied locally as a styptic to bleeding surfaces)

than the blood serum* whence it is produced. COAGULOSE is readily available, easily applied, and apparently non-toxic. It retains its power for at least two years, whereas the natural blood serum very soon becomes inert.

INDICATIONS FOR COAGULOSE.

All cases of hemorrhage due to defective clotting of the blood, as seen in purpura, hemorrhage of the new-born, nasal hemorrhage, hemorrhage from gastric or duodenal ulcer, pulmonary hemorrhage, hemorrhage during and after prostatectomy, hemorrhage from the kidney pelvis, hemorrhage from the bladder, uterine hemorrhage, and hemorrhages after turbinectomies and tonsillectomies.

We standardize every lot of COAGULOSE by determining the rapidity with which sera and solutions of precipitated sera at comparable concentrations cause coagulation of citrated blood plasma. COAGULOSE is rigidly tested for solubility. We guarantee the purity and sterility of COAGULOSE.

Supplied in 15-Cc. glass bulbs.

LET US SEND YOU LITERATURE ON COAGULOSE.

Parke, Davis & Co.

^{*}COAGULOSE is a sterile, soluble, anhydrous powder, obtained by precipitating normal blood serum. It contains the fibrin ferment necessary for clotting the blood and is readily soluble in cold water at concentrations two or three times that of the original serum.

FERBER'S Soluble Elastic Gelatine Capsules

are of British manufacture. They are readily soluble and of the most absolute purity, the ingredients being dispensed with the greatest accuracy. Physicians are asked to kindly specify "FERBER'S" on their prescriptions,

In Canada, as in the other Colonies of Great Britain (including Australia and India), Robert Ferber, & Co.'s goods are meeting with steadily increased demand, necessitating the Firm moving into new and larger premises in many cities. The Firm recently opened a Branch in New York and Chicago.

ROBERT FERBER & CO.

98-104 Oakley Street, Westminster Bridge Road, London, S.E., England. Stevenson Buildings, 110 Church Street, Toronto, Canada.

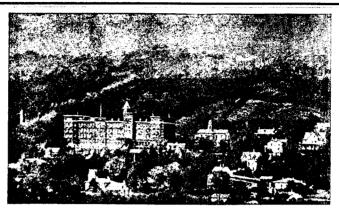
Physicians will find that when a mother is nursing her own baby, she could give it daily at the age of eight to nine months a bottle of thin gruel the child has been reared on Robinson's "Patent" Barley to the above age, Groats and milk should be given alternately with the Barley, as it tends to promote bone and muscle. The Medical Profession can prescribe

Robinson's "Patent" Groats

with utmost confidence. For the invalid and aged it will be found particularly beneficial, a bowl of gruel taken at bed-time promoting sleep.

A booklet with sample will be promptly mailed to any Physician requesting the same.

MAGOR, SON & CO., LIMITED, Canadian Agents
403 St. Paul St., Montreal
30 Church St., Toronto



THE JACKSON HEALTH RESORT

Dansville, Livingston County, New York

THE MANAGEMENT OF THIS INSTITUTION of INTERNATIONAL REPUTATION invites investigation by the physicians of Canada to the advantages it offers in the way of location, beautiful scenery, climatic conditions, the purity of its water and to the general character of its administration with reference to the best modern therapeutic measures for the treatment of chronic invalids, especially for those needing the REGIMEN of a WELL-CONDUCTED HEALTH RESORT. The story cannot be told in an advertisement.

Please Write for Descriptive Literature and Prices

PHYSICIANS KNOW

that a great many ailments are due to Auto-Intoxication, directly attributable to chronic constipation. It is a well-known fact that, after a time, cathartics loose their effect, necessitating resort to mechanical means to give relief. The particular attention of the profession is called to the beneficial results from the use of

THE J. B. L. CASCADE

It is an appliance for the administration of the internal bath, a rubber bag on which the patient sits, a pipette (controlled by a faucet) passing into the rectum, the patient's own weight forcing the water into the bowel and flushing out the descending colon. A great many of the medical profession have given **The Cascade** their endorsement, stating that the principle involved is correct, its use quite harmless and yet immediately effective. It is suitable for both sexes, adults and children. With reasonable care, **The Cascade** should last indefinitely, but is guaranteed for two years, so far as workmanship and material are concerned.

THE CASCADE is obtainable from

CHAS. A. TYRRELL, M.D., 280 COLLEGE ST., TORONTO

PRICE, COMPLETE, \$10.00

Usual Discount to Physicians

In Dysmenorrhea, Colic, Spasm, etc.

Arrests and prevents abortion Serviceable in congestive Headache, Nervous and Hysterical Disturbances connected with Dysmenorrhea

> A safe and powerful antispasmodic free from opiates, is palatable and improves the digestion

R



Sig.—

.One or two teaspoonfuls as required

John Wyeth & Brother

PHILADELPHIA

LYMANS, Limited, Montreal.

Factors and Distributors for Canada



Supplied in 11-ounce bottles only—never in bulk.

Samples and literature sent upon request.

Prescribe original bottle to avoid substitution.

In ANY form of DEVITALIZATION prescribe

Pepto-Mangan (Gude)

Especially useful in

ANEMIA of All Varieties:

CHLOROSIS: AMENORRHEA:

BRIGHT'S DISEASE: CHOREA:

TUBERCULOSIS: RICKETS: RHEUMATISM: MALARIA:

MALNUTRITION: CONVALESCENCE: As a GENERAL SYSTEMIC TONIC

After LA GRIPPE, TYPHOID, Etc.

DOSE: One tablespoonful after each meal.

Children in proportion.

M. J. BREITENBACH COMPANY New York, U. S. A.

Our Bacteriological Wall Chart or our Differential Diagnosis Chart will be sent to any Physician upon request.

>HAYDEN'S

THE ORIGINAL VIBURNUM COMPOUND

"The Reason Why Results Follow" is a brochure presenting incontrovertible evidence by recognized authorities of the efficiency of Hayden's Viburnum Compound as well as the medicinal value and therapeutic activity of the principal drugs used in its compounding. Let us send it to you.

In the treatment of MENORRHAGIA where no organic defect is evident, Hayden's Viburnum Compound is particularly serviceable and while imparting tone and stimulating contraction, unlike Ergot, it is more lasting in its effect, and free from the dangers of this and similar acting drugs.

Administer H.V.C. in teaspoonful doses t. i. d. in hot water. A trial will convince you and on request we will send you samples of the original H.V.C, and brochure "The Reason Why Results Follow."

NEW YORK PHARMACEUTICAL COMPANY

In Skin Diseases due to faulty elimination—R Hayden's Uric Solvent two tenspoonsful t. i. d. or as indicated.

BEDFORD SPRINGS,

BEDFORD, MASS.

THREE EPOCH-MAKING DIS-COVERIES REGARDING EMETINE



- 1. It is a Specific for Amebic Dysentery
- 2. It Cures True Amebic Pyorrhea
- 3. It arrests Hemorrhage

Concerning no other known drug can three such definite and positive statements be made.

However, disappointment and failure in its use often result from employing impure and inferior preparations. We have

been supplying this drug to the profession for years, and have established an unequaled reputation for the quality and purity of our preparations. Therefore, SPECIFY "EMETINE, ABBOTT," FOR RESULTS.

Emetine (Abbott) Products, for use in Pyorrhea

Our BOREMETINE, containing ½ percent solution of Emetine Hydrochloride, is the indicated antiseptic and amebicide for oral use in pyorrhea.

Our GELEMETINE, a delightful cinnamon-flavored jelly, containing $\frac{1}{10}$ percent Emetine Hydrochloride, should be used to arrest early pyorrhea and prevent recurrences.

Packages and Prices

Emetine Hydrochloride, gr. ½, in Sterile Ampules Per dozen boxes of six cach	L.ZO
Boremetine, per dozen ½ ounce bottles. In less than ½ dozen lots, per bottle. Gelemetine, per dozen 2-ounce collapsible tubes. In less than ½ dozen lots, per tube.	.90 7.50

Send for Our General Literature on Emetine and its Uses

These items, as well as all our products, may be obtained through the general channels of trade, on prescription or by purchase, or direct—Home Office or Branches.

THE ABBOTT LABORATORIES

|The Abbott Alkaloidal Company|

Ravenswood - - CHICAGO

Seattle San Francisco Los Angeles New York



Toronto Bombay

"The Ground Gripper" SURGICAL SHOE

SHOE that takes the place of mechanical appliances or artificial supports, such as plates or steel shanks, commonly called "props for the feet" which are so rigid and unyielding that they weaken instead of strengthen the muscles of the feet.

Write us for testimonial and surgical book on these shoes.

SOLE AGENTS

H. &. C. Blachford

LIMITED

286-288 Yonge St. Toronto

GOOD INVESTMENTS

Experience in investing money shows that SECURITY is the first consideration. Our

Guaranteed Investments Paying 5 Per Cent.

are secured by first mortgage on improved property and by the capital and reserve of this Corporation.

Inquiries solicited.

TORONTO GENERAL TRUSTS CORPORATION

After Crisis—Rapid Recovery.

After professional skill has succeeded in carrying the patient over the crisis of a serious illness, a short course of 'Wincarnis' will promote a speedy convalescence and a rapid return to health. After illness—particularly after Influenza—'Wincarnis' is especially valuable, as it can be easily administered, and is readily assimilated by even the most debilitated stomach.

WINCARNIS

The use of 'Wincarnis' is also indicated in cases of Anæmia, Debility, Nervous Disorders, and in all "Run-down" conditions. 'Wincarnis' is an elegant combination of Choice Wine, Extract of Meat, and Extract of Malt—all of the highest character. It is warmly recommended by over 10,000 Doctors. 'Wincarnis' is prepared by COLEMAN. & Co., LTD., 'Wincarnis' Works, Norwich, England.

A Pint Bottle Free to Doctors.

A pint bottle will be sent free to Doctors upon application to

F. S. BALL, 67 Portland Street, Toronto

"An Ounce of Prevention is Worth a Pound of Cure"

But with every care

ACCIDENTS AND SICKNESS

will occur

DOCTOR-WHY TAKE CHANCES OF LOSS OF INCOME BY REASON OF ACCIDENT AND SICK-NESS, WHEN YOU CAN BE AMPLY PROTECTED

A GOOD PRESCRIPTION

An Insurance Policy

The General Accident Assurance Company HEAD OFFICE—Continental Life Building, Toronto

PELEG HOWLAND, ESQ., President JNO. J. DURANCE, Manager

Phone Gerrard 3266

Private Funeral Chapel

Johnson & Co. FUNERAL DIRECTORS

934 Gerrard St. E.

NO CONNECTION WITH ANY OTHER BURIAL FIRM

15 Years' Experience

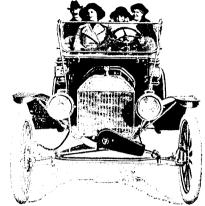
Embalmers' Diploma

MADE-IN-CANADA

No Labor

No Danger

No Inconvenience



MADE-IN-CANADA

Strictly Mechanical

> Easily Attached

Always Responds

To all FORD OWNERS STOP CRANKING

Equip your Car with a PERFECTION SELF-STARTER

Don't Get Out in Front Start your Car from the Seat -\$25 COMPLETE Lo.b. HAMILTON Can be Installed by any Mechanic in one to two hours--Write us NOW

FEATURES—Is Perfectly Designed to look as well as it works—Constructed of Canadian Materials—Void of any danger often caused by backfire

THE PERFECTION AUTO STARTER CO.

HAMILTON, ONTARIO

Comfort and Good Feet versus Fashion and Deformity

The attention of the Medical Profession in Canada is called to

"Natural Tread" Shoes



These shoes have already received the endorsement of a large number of Doctors as being scientifically built and a successful means of avoiding and curing corns, bunions, callous, weak arches, flat feet, and many aches and pains associated with the Nervous System, and which are caused by continuous and unnatural pressure on the ligaments and muscles of the foot through wearing unsuitable footwear. So much so, that we are now fitting the nurses of Toronto's largest hospital, after the merits of "NATURAL TREAD" Shoes were carefully looked into and proven by the Superintendent of Nurses. These Shoes are (1) "Made in Canada." (2) They will give strength through natural muscle action. (3) They are perfectly flexible and foot shape, straight inside line, and with a fitting of the arch that no other shoe has. (4) They are made in one quality in various leathers. We positively refuse to sell unless we can fit the patient anatomically correct.

The most careful attention is given to patients referred to us by Physicians, as we aim to work in conjunct on with the Profession and worthily earn their support.

Perfect fitting by mail guaranteed.

NATURAL TREAD SHOES Limited - 329 Yonge St., Toronto



SCIENTIFIC INVESTIGATION

has proven that extreme precaution must be exercised against infection in the operating room, and yet, in their anaemic and weakened condition patients are often exposed to the multitude of infectious germs from unclean beds. Such well-known hospitals as the Wellesley, and the Western of Toronto, City Hospital of Hamilton, General of Sault Ste. Marie, General of Montreal are cleaned with the Invincible Electric Vacuum Cleaner.

The INVINCIBLE ELECTRIC Vacuum Cleaner is to the sick room what the Sterilizer and disinfectants are to the operating room. Noiseless in operation, efficient in cleaning, easy to manipulate. Cleans mattresses and pillows equally as well as walfs and floors. Acraies and purities.

Write for price and catalogue

The Invincible Renovator Mfg. Company, Limited street Toronto, ont.

INCREASED OPPORTUNITIES

FOR

Post-Graduate Medical Work in Chicago

The Chicago Policlinic and The Chicago Post-Graduate School have affiliated and are now able to offer greatly increased opportunities and facilities for systematic post-graduate work. These institutions are conducted as a single school, one ticket admitting the holder to the joint work of both institutions, and the schedules of clinics and didactic instruction are so arranged that anyone wishing to pursue special lines will find all day work in the specialty. Personal instruction is given in all departments, including laboratory work and operative work on the cadaver. For details write either

The Chicago Policlinic

M. L. Harris, Secretary Dept. C, 219 West Chicago Avenue

ΩE

The Post-Graduate Medical School of Chicago

Emil Ries, Secretary
Dept. C, 2400 South Dearborn Street

GLYCO-THYMOLINE

AS A SURGICAL DRESSING

Treated with Glyco Thymoline in a French Military Hospital.

Moroccan trooper wounded by bursting shell at the battle of the Aisne, September, 1914.

Wound first cleaned with Hydrogen Peroxide and then swabbed with full strength Glyco-Thymoline. The orifice was covered with a compress of gauze saturated with a 25% solution of Glyco-Thymoline and covered with cotton and oiled silk. Dressing changed every six hours.

The wound after three weeks treatment with Glyco-Thymoline showing method of syringing out wound with Glyco-Thymoline.

Note gradual closing.

After nine weeks treatment with Glyco-Thymoline. Note that complete cicatrisation has taken place.



Sample to any Physician returning this Advertisement with his

KRESS & OWEN COMPANY, 361-363 PEARL STREET, NEW YORK

The Medical Profession in Toronto and its vicinity are asked to note particularly that I am prepared to furnish at any hour, night or day,

Sterile Dressings for Surgical and Obstetrical Cases

including Obstetrical Pads (large or small), Bed Pads, Umbilical Dress-ings, Abdominal Binders, Leggings, Towels, Sponges of all kinds, Folded Gauze, Tube Gauze, and Combined Dressing, in fact any sterile supplies needed.

All of my Dressings are Guaranteed

Orders received from or through Physicians or Surgeons will receive immediate attention.

Miss J. M. Mackedie

Suite 14, Elms Court Apartments

27 Irwin Avenue

TORONTO

Phone North 226

An Open Letter to the Medical Profession

It gives me great pleasure to announce that I have recently installed entirely new and most efficient instruments and machinery for grinding Ophthalmic lenses and making glasses. Eight years' experience, together with the latest scientific equipment, places me in a position to fill your prescriptions with the greatest accuracy. On these points, Experience, Ability and Efficiency, I appeal to you for a portion of your R work, assuring you that your patients will receive my best service.

JOHN L. RAWBON

Dispensing Optician, 23 Leader Lane

Telephone 575 Main

Late with W. J. Kettles

A GARAGE WHERE PHYSICIANS' CARS RECEIVE PARTICULAR ATTENTION

It is a well known fact that in the past Physicians' cars have not received the care they should have in public Garages. We, therefore, call the particular attention of the Medical Profession in Toronto to

THE WELLINGTON GARAGE

85-87 Wellington Street West

(Just east of York Street)

TORONTO

NOW UNDER ENTIRELY NEW MANAGEMENT

The Wellington Garage is a large, well lighted, heated and ventilated building, centrally located. It was recently taken over by a firm who propose to conduct a high class establishment on liberal though business-like methods. Floor space for the accommodation of large and small cars at nominal rates, with a special monthly charge including garaging, washing and polishing, and if desired, daily delivery. We have first-class mechanics for repair work and guarantee an honest hour's work for every hour charged. Physicians are invited to call and examine our Garage.

The Wellington Garage, 85-87 Wellington St. W. TORONTO

E. W. CAMERON, Manager Automobile Expert

Phone Adelaide 3454

ARK 0000 00

The "Allenburys" (MARY) (MEDICATED) Throat Pastilles

Efficient



Palatable

THE local treatment of affections of the throat demands a simple, agreeable and effective method by which, in the exigencies of modern practice, a large variety of drugs may be employed. The "ALLENBURYS" Throat Pastilles are the best means of obtaining the prolonged, continuous, direct action of the desired medicament; they contain accurate amounts of pure drugs and dissolve slowly in the mouth, ensuring the thorough suffusion of the mucous membrane.

The following pastilles are very largely prescribed and have been found from medical experience to be very efficacious.

No. 10. BENZOATED VOICE

Benzoic Acid, gr; Camphor, gr; Aniseed Oil, etc.

No. 12. MENTHOL, EUCALYPTUS AND RED GUM

Menthol, 1/20 gr; Eucalyptus Oil, 1 minim; Red Gum, 2 grs.

No. 28. COMPOUND GUAIACUM

Guaiacum, 1 gr; Chlorate of Potash, 2 grs; Red Gum, 2 grs.

No. 45. MENTHOL AND RHATANY

Menthol, 1/20 gr; Extract of Rhatany, 2 grs.

No. 71. ANTISEPTIC LIQUORICE

Menthol, Benzoic Acid, Eucalyptus Oil āā 1/60 gr; Thymol, 1/120 gr; Bromide of Ammonium, 1 gr; Extract of Liquorice. 5 grs.

No. 72. CHLORIDE OF AMMONIUM AND MENTHOL

Chloride of Ammonium, 2 grs; Menthol, 1/20 gr.

A full size package of either of the above with a complete list free to medical men upon request.

THE ALLEN & HANBURYS COMPANY. LIMITED TORONTO, CANADA NIAGARA FALLS, N.Y.

Chloroform ___



FAC-SIMILE
OF
LABEL NOW
IN
USE.



CHLOROFORM

DUNCAN'S PURE

BRITISH ETHYLIC ALCOHOL

DUNCAN, FLOCKHART & Go., EDINBURGH & LONDON.

NOTE.—This, which is prepared entirely from British Ethylic Alcohol, is the only Chloroform which we supply as

Duncan's Pure, S.G.1.490.

To be kept Cool, and not exposed to a Strong Light.

POISON.

PRACTICALLY NON-DECOMPOSABLE under any circumstances

N.B.—We can only guarantee Chloroform to be of our manufacture when it is supplied in bottles bearing our label, and having the stoppers scaled with one of our trade mark stamps.

Our Chloroform is put up in 2 oz., 1-4, 1-2, 1, 2, 4 and 7 lb. Bottles, and may be ordered

DUNCAN, FLOCKHART & CO.,

Physicians should avoid substitution by prescribing original packages

through any Wholesale Drug House in Canada.

Manufacturing Chemists,
EDINBURGH, SCOTLAND

Vaginal Douche Tablets Duncan (IN GLASS CYLINDERS OF 12 TABLETS)

No. 1

| R Alum Sulph | 30 grains | 30 grains | 21 grains | ONE Tablet to be dissolved in a pint of hot water for each application. Decolorant and astringent; rapidly soluble in bot water; most convenient form or preparation of a douche for treatment of leucorther and kindred troubles.

| No. 2 | R Zinci Salphocarbolat | 30 grains | 30 gra

DUNCAN, FLOCKHART & CO.

EDINBURGH and LONDON

Canada Agency: 88 Wellington St. West, Toronto





The Storm Binder and Abdominal Supporter

ADAPTED TO USE OF MEN, WOMEN, CHILDREN AND BABILS
For Hernia, Obesity, High and Low Operations, Ptosis,
Pregnancy, Relaxed Sacro-iliac Articulations,
Pertussis, Floating Kidney, etc.







Special Kidney Belt.

Inguinal Hernia Modification

No Whalebones, No Rubber Elastic, Washable as Underwear

Send for new folder and testimonials of physicians. General mail orders filled at Philadelphia only—within 24 bours.

KATHERINE L. STORM, M.D.

1541 Diamond St., Philadelphia, Pa.

The Winkley Artificial Limb Co-

Largest Manufactory of Artificial Legs in the World

INVENTORS AND MANUFACTURERS OF THE

Latest Improved Patent Adjustable Double Slip Socket

ARTIFICIAL LEG

WARRANTED NOT TO CHAFE THE STUMP

Perfect Fit Guaranteed

leaving home. Hundreds of our Slip Socket Legs now being worn in Canada. United States Government Manufacturers. Illustrated Catalogue Sent Free. No Duty or Tariff Charges on Artificial Limbs.

LIMBS ENTER CANADA FREE OF DUTY

MINNEAPOLIS, MINN., U.S.A.

1326-30 WASHINGTON AVE. NORTH

Protonuclein

in

Inoperable Growth

in the genito-urinary tract—as elsewhere—offers the best form of treatment. And logically it should also be used after radical removal of cancerous growths—for the value of **PROTONUCLEIN** is to be found in its power to vitalize the leucocyte, augment tissue resistance, and thus more nearly equalize the balance between disease and health.

PROTONUCLEIN is a physiological product of glandular origin

—a simple preservation of cellular elements-

Samples and literature may be had by addressing

REED and CARNRICK

42-46 Germania Avenue, Jersey City, N.J.

The Canadian Iournal of Medicine and Surgery

A Journal published mouthly in the interests of Medicine and Surgery

Vol. XXXVIII, TORONTO, NOVEMBER, 1915

No. 5

Editorials

MEDICAL EDUCATION

No nation, no time, no chosen residential suburb, no man-made collection of homes, can ever be free from illness (and other deviations from normal) requiring the assistance of skilled medical attention. There must always be physicians, and it is to the best interests of the laity to provide excellent means for their Many of the heaviest expenses of the education. state are due to crime, idiocy and other features that are traceable to disease, and any economist will grant that living expenses would be greatly reduced if a wide modern eugenic and prophylactic movement were to take place. Living, then, being made comfortable for the masses, the physician's charges would be within reach of all, and he himself could occupy his proper place in society, educating his family rightly without fearing a yearly deficit. because his patients would always pay their bills.

The "man in the street" is just as much concerned in medical education as the physician. He

may need a physician—his son may become one. Any steps, therefore, taken to inform the public how to choose a good physician, how comprehensive his education should be, what his position, duties and limitations shall be, should be made the work of an investigating committee composed partly of laymen and partly of medical men. It cannot be denied that the war spirit has brought physicians and the mass of the people into closer friendship than ever, and now, when medical men are heading the lists for valor under fire, when there are so many needed at home to take the place of the absent, it is a telling stroke to remodel the plan of medical education, and determine its scope, its support by the government to the universities in building colleges, and how many, if any, "pathy" schools shall be regarded as really having any status or even a right to exist under the law.

The Government is tardy in this respect. We take giant strides, as a rule, in these new countries, where press, cable and wireless put us in a position to adopt at once any new measures formed by the older civilized nations. About two years ago, when Toronto General Hospital was opened, Premier Whitney, in his opening address, stated before one of the largest audiences ever collected in Toronto of people interested directly or indirectly in medicine, that the Cabinet intended to appoint in the near future a Commission to study carefully and report to the Government upon the whole subject of medical education. This caused a hope to glow brightly for

a while that all the wrangling among the sectional schools would be settled firmly by a parental oversight from a fair-minded body. It also suggested the thought that no amount of foolish lobbying, "caucusing" committees, or wasting of members' time would have any weight with the august body to be chosen as the Commission. Silence ensued, however, on the part of the Government for the long period of nearly two years. The various professional medical journals touched on the subject from time to time, but with no avail.

Suddenly, however, the appointment of Mr. Justice Hodgins, of the Supreme Court of Ontario, gladdened all those who have looked and hoped for the problems to be settled. It is now expected that the subject will be carefully, diligently and intelligently studied from every viewpoint, in justice and moderation, and that before too long a period elapses the report returned by the Commissioner will be presented and promptly acted upon by the Government.

Various bodies of nurses, dentists, and others coming into public life at a later date than the last legislation have asked for Government recognition, but in vain. Now, however, it is hoped that the limit of school formations is ended, that no new group can arise and say they do something that heals the body, even in part. The human frame has been pretty well covered by this time, beginning with the opticians and ending up with chiropodists.

Some healers demand incorporation and licensing on the ground that doing so protects the public

from being imposed upon by others. It might be said by the osteopath, "Give me a license, or my patients may make a mistake, go to a masseuse, and be bruised in the wrong place." The laity do not need quite so much protection. If they do not use their common sense, they should suffer for it. These misnamed schools in so many words say, "License us so that we may charge a large fee as specialists without fear of criticism from the Allopaths." They, students of a part of the body only, ask license so that they may at least act independently of or on an equal footing with the general practitioner.

The nurse, acquainted thoroughly as she with the mechanical means of cure, such enemata, douches, binders and other care of the patient's body, never does these on her own responsibility. That would be a flagrant violation of all that she has been taught. The patient does not come to her for diagnosis and treatment. The physician sends her to the patient to give the medicine and treatments he has ordered. is a nurse and as such is at the command of the physician. As the true nurse is a handmaiden only to the physician, let her be put in a class by herself in this matter of legislation; classified, too, in such a manner that only a woman who has proved herself competent to care for a reasonable number of groups of disease, such as obstetrical cases, surgical cases, medical and contagious diseases, can have the legal status of nurse and command her remuneration. The nurse is taught constantly to look up to and obey

the physician. No such precepts are embodied in the teaching of the osteopath, who studies only a small part of the body and its functions, or of the quacks who approach the patient to heal, without any knowledge at all of the chemical or other changes going on in the human system. The man with toothache makes his own diagnosis and applies to the dentist, who performs a cure by mechanical means, in which, if he needs assistance, such as a general anesthetic or treatment of sepsis, he calls a regular practitioner.

But those persons who are not thoroughly versed in all the normal and pathological conditions of the body, those who take a "get-rich-quick" course in one mechanical or mental method of healing disease. should be bound under strict conditions. They should not be allowed to receive patients for treatment. is true that there are some people so constituted that they frame ills for their own enjoyment, and finding no relief, since they want none, from the hands of those physicians who pierce their mask of deceit. they finally dip their flag to some scion of a new or peculiar sect so that they may be considered miracles in a class that cannot be refuted. It is also true that the exponents of some of these cults have effected cures through their good luck in the simpler conditions where only mild interference, or none, is necessary. But when a man is really ill, from some disease such as pernicious anemia, he cannot be cured by osteopathy. When he suffers from tetanus or diphtheria, prayer alone cannot cure him. When a woman's generative organs are disturbing her whole nervous system, simple refraction and glasses will not cure the pain in her eyes. The licensing, therefore, of those so-called schools of mechanical art should be restricted so that the patient on going to such an office should be surrounded at once with sufficient knowledge to determine where he is, and just how far this sort of "practitioner" can help him.

Certain types of "schools" should be eliminated at once in a new fair country like this, since they do not contribute to the general weal. There are always a few people who want to be gulled, and there are always a few willing to undertake the job. If tolerated at all the basis of classification for license should be, "Are these men performing any duty in the relief of pain, the banishment of disease, or the general campaign for public health?"—Are they sufficiently versed in a general knowledge of the body to know whether they are injuring one part in treating the other? What guarantee has the public that they will not undertake to treat illnesses entirely outside of their limits? What is the length and breadth of their curriculum? Taking for granted that they have the natural disposition, the perseverance and preliminary education which grand old Hippocrates demands as essentials for a physician, it should be demanded of them that they undertake the whole study of medicine.

The man needed all over the world to-day by the sick is the diagnostician. That art can only be acquired by the regular five years' course of study

demanded ere the student is granted the license to practise.

The Judges of the Supreme Court acquire in their long career a keen knowledge of medicine in its relation to the community. They can study the close relations between physicians and their families. They appreciate better than others how disease warps the judgment, not only of the sufferer, but of his family, at times. We feel that the cause of medical education is in good hands when Mr. Justice Hodgins sits as Commissioner for the Government. We know that all right-minded people will give him every assistance in opening records and otherwise facilitating his research.

ACADEMY OF MEDICINE, TORONTO

The opening meeting of the Academy of Medicine, Toronto, took place in the Mining Building, University of Toronto, on October 5th. The new President—Dr. W. H. B. Aikins—occupied the Chair, and Dr. J. H. Elliott acted as Honorary Secretary. The meeting was one of the most successful opening meetings ever held, the attendance being splendid. The number present proved the urgent necessity for a new Academy Building, something which all the Fellows hope will be realized ere long.

The programme was exceedingly interesting, particularly the Presidential Address, which we reproduce in this issue, and the Address by Dr. W. P. Manton. Detroit.

After the formal Minutes had been read and

adopted, Dr. H. B. Anderson read the Report of the Patriotic Relief Committee, followed by Dr. Powell, who presented the Report of the Hospital Supplies Committee.

The Presidential Address was full of interest and only too short, the reason for this being a little excessive modesty on the part of Dr. Aikins and consideration for the guest of the evening. Dr. J. H. Elliott formally presented two books from Sir William Osler, the books being Jenner's "Inquiry into the Causes and Effects of the Variolae Vaccine," London, 1798, and Rhazes' "Liber Nonus ad Almansoren," Venice, 1490. The Academy of Medicine is certainly under a debt of gratitude to Sir William Osler for this further contribution. Sir William has always been, and, we trust, will continue to be, a warm friend of the Academy. The subject of Dr. Manton's address was "Marriage Rites and Obstetric Practices among Ancient Romans" (with lantern demonstration). We only regret that we have not the opportunity of publishing Dr. Manton's address in full.

Dr. Aikins gave a delightful reception to the Fellows at his residence on Bloor Street after the meeting.

We trust that the meetings of the Academy for the current winter will be equally successful to that of the opening meeting on October 5th. The President and Programme Committee having devoted a great deal of time to preparing a goodly bill of fare for the Fellows throughout the winter months, we bespeak for Dr. Aikins the hearty support of all.

DR. CHARLES R. DICKSON, HONORED

At the annual meeting of the American Electro-Therapeutic Association, held at Atlantic City, N.J., September 14-16, 1915, by the unanimous vote of the Association, Dr. Charles R. Dickson, of 192 Bloor Street West, Toronto, was elected an Honorary Fellow with all of the privileges of an active member, the first time this distinction has ever been conferred upon a Canadian. Only eminent practitioners of medicine in good standing, or eminent electrical experts in good standing, are eligible for honorary fellowship. The active membership consists of regularly qualified practitioners of medicine or surgery, who are graduates of recognized colleges, and who must also be members of their respective local and national medical societies before being admitted to the American Electro-Therapeutic Association.

Many of the most widely known electrical scientists—Tessla, D'Arsonval, Thomson, and others equally distinguished—are on the honorary list, which is restricted to fifty in number. Almost every civilized country is represented.

Doctor Dickson was President of the Association in 1898, was its official representative at the International Electrical Congress in 1904 at St. Louis, Mo., and is now a member of its Board of Trustees. The doctor is Consultant in Electricity to Toronto General Hospital, and has been a member of its staff since 1889, when he organized its first Department of Electro-Therapeutics.

MORE HELP FOR OUR SOLDIERS

THE Academy of Medicine, Toronto, in conjunction with the Ontario Medical Association, have begun a work which will doubtless be followed up at once, or has already been, by the medical profession in the other parts of the Dominion. Kindness, patience, brainwork, endurance, forethought, are some of the essential features of the task it has set itself. cardinal point is the after-care of the wounded, in sharp contrast to a period within our memories. when any wounded soldier became a school teacher, or flagman at a crossing, legless or armless, as the case might be. The plan suggested is to form a Reception Hospital, where the men will be treated temporarily, then classified, before distribution to general hospitals, sanitaria for tuberculosis, institutions for nervous cases, convalescing homes, etc., according to the necessities of the individual case. Preferably this clearing-house would be in a city or in the country near a city, where the services of a staff of doctors representing different special departments would be available.

The convalescent institutions should be in familiar surroundings, and not too far from the men's families, so as to banish excitement and drown the nervousness produced by life under a constant cannonade, as well as to produce a benign psychic effect through hearing English spoken all the time and seeing no foreign ways, foods or gestures.

The equipment will include good nursing, baths, massage, electrical treatment, gymnastics, and introduction to some of the trades for those not fitted

to return to their old occupations. The whole atmosphere will be surcharged with hope, otherwise extreme depression would be expected. But there will be steps taken soon to also put the wounded in touch with the Pension Department at Ottawa. Not so much does the true soldier mourn over his own lot as of his dependent family. This was beautifully expressed in the "Little Gray Home in the West," that was never successfully dethroned by "Tipperary." To assuage this anxiety in the minds of the fighting men, the physicians a year ago banded themselves together to give free care to the needy families of the soldiers now at the front.

Feeling has run so high in every Canadian heart that we feel sure no person will take an unfair advantage of the men who are so generously devoting their time to the soldiers as the doctors. Not only did many go, but they took their sons with them, while those who stay behind have their ear to the ground all the time for news to give them new ways of helping. Doctors and soldiers have been mates since time began, but never at any time or in any nation have the best qualities that manhood can afford been displayed so cheerfully. Over two hundred physicians in Toronto alone are engaged in treating the soldiers' families, while over sixty-six chemists have been supplying the drugs free for those cases.

We commend this noble work of establishing a clearing-house for the convalescent soldiers to every patriotic mind, and we doff the hat to the men who thought out the scheme.

Canadian Iournal of Medicine and Surgery

Editors

Burgery:

N. A. POWELL, M.D., C.M., Professor of Medical Jurisprudence, Medical Department, Univer-sity of Toronto; Senior Assistant Surgeon in charge, Shield's Emergency Hospital.

Clinical Surgery :

ALEX. PRIMROSH, M. B., C.M., Edinburgh University; Associate Professor of Clinical Surgery, Toronto University; Secretary Medical Faculty, Toronto University; Surgeon Toronto General Hospital; and Herbert A. Bruck, M.D., F.R. C.S., Eng., Surgeon, Toronto General Hospital.

Orthopedic Surgery:

Orthopedir Burgery:

B. E. McKenzie, B. A., M.D., Toronto; Surgeon to the Toronto Orthopedic Hospital; ex. President of the American Orthopedic Association; and H. P. H. Gallowar, M.D., Orthopedic Surgeon, Winnipeg General Hospital; Lecturer in Orthopedic Surgery, Manitoba Medical College; Member of The American Orthopedic Association. W. E. Gallir, M.D., Associate Surgeon, Hospital for Sick Children, Toronto.

Militia and Naval Medical Bernices

and Ambulance :

J. T. FOTHERINGHAM, M.D., Lieutenant-Colonel, Army Medical Corps, Associate Professor of Medicine and Clinical Medicine, University of Toronto; Ass cate C llaborator Giras J. Copp. M.D., C.M., Hon. Sec. Provincial Council of Ontario, St. John Ambulance Association.

Medical Jurisprudence and Coxicology:

ARTHUR JUKES JOHNSON, M.B., M.R.C S. Eng. Coroner for the City of Toronto; Surgeon Toronto Railway Co., Toronto; W. A. Young, M.D., L.R.C.P., Lond., Ex-President of the American Medical Editors' Association; Associate Coroner, City of Toronto.

Miss AMY A. ARMOUR, R.N., Superintendent, New Rochelle Hospital, New Roche le, N.Y.; A. K. HAYWOOD, M.B., Toronto, M.R.C.S., L.R.C.P., London, Assistant Medical Superintendent Toronto General Hospital.

Bedintrica .

ALLYN BAINES, M.D., Toronto: Associate Professor Pediatrics, University of Toronto; Physician, Hospital for Sick Children; A. R. GORDON, M.D., Toronto; Senior Medical Assistant, Toronto General Hospital; HELEN MACMURCHY, M.D., Toronto.

Medicine .

W. J. Wilson, M.D., Toronto, Physician, Toronto Western Hospital; J. H. ELLIOTT, M.D., Assoc ate Medicine and Clinical Medicine, University of Toronto; W. H. Pepler, M.D., Junior Medical Assistant, St. Michael's Hospital; and A. J. Harrington, M.D., M.R.C.S., Eng., Toronto.

Clinical Medicine :

HILLICAL TREDUCTURE:

ALEXANDER MOPHEDRAN, M.D., Professor of Medicine and Clinical Medicine, Toronto University; Physician, Toronto General Hospital; LEWELLYS F. BARKER, M.D., Professor of Medicine, Johns Hopkins University, Baltimore, Md. H. B. ANDRUSON, M.D., Toronto; Associate Professor of Clinical Medicine, University of Toronto.

Mental and Nervous Biscases :

N. H. BERMER, M.D., Mimico Insane Asylum; CAMPBELL MEYERS, M.D., M.R.C.S., L.R.C.P. (London, Eng.), Private H spital, Deer Park, Toronto.

Cynecology and Obstetrics :

Guneralngy and Obstetrics:

B. P. Watson, M. D., Edin., F.R.C.S., Edin.;
Professor of Gynecology and Obstetrics, University of Toronto; Gynecologist and Obstetrician, Toronto General Hospital; Gro.
T. McKrough, M.D., M.R.C.S., Eng., Chatham, Ont.; C. F. Moorr, M.D., Toronto; and A. C. Handrick, M.A., M.B., F.R.C.S. Edin., Demonstrator in Gynecology, University of Toronto; Assistant Gynecologist, Toronto General Hospital. Toronto General Hospital.

Vathology :

J. J. MACRENZIE, B.A., M.B., Professor of Pathology and Bacteriology, University of Toronto.

Ophthalmologu:

J. M. MACCALLUM, M.D., Toronto, Senior Assistant Eye Department, Toronto General Hospital; O-culist and Aurist Victoria Hospital for Sick Children, Toronto.

Nose, Chroat and Ear:

PERRY G. GOLDSMITH, M.D., 84 Carlton St., Toronto, Laryngologist and Aurist, Provincial Annual Ear, Nose and Throat Department, Toronto General Hospital.

Bermatology :

D. King Smith M.B. Tor., Toronto; Demonstrator in Pathology, Toronto General Hospital

Managing Editor :

W. A. YOUNG, M.D., L.R.C.P. (London, Eng.), Toronto, Ont.

Address all Communications, Correspondence, Books, Matter regarding Advertising, and make all Cheques, Drafts and Post-Office Orders payable to "The Canadian Journal of Medicine and Surgery," 145 College Street, Toronto, Canada.

Doctors will confer a favor by sending news, reports and papers of interest from any section of the country. Individual experience and theories are also solicited. Contributors must kindly remember that all papers, reports, correspondence, etc., must be in our hands by the first of the month previous to publication.

Reprints supplied at Net Cost

Original Contributions

PRESIDENTS' ADDRESS, ACADEMY OF MEDICINE, TORONTO

By Dr. W. H. B. Aikins.

The Medical Profession and the War-The Cancer Problem.

AT a time like the present, when such momentous events are happening day by day on the Continent of Europe, and the destinies of the nations of the world are trembling in the balance. most of us find it extremely difficult to concentrate our minds on any subject which is not directly or indirectly connected with the war. This is not to be wondered at when we consider that it is by far the most terrible conflict recorded in history. the result of which will influence the future course of events throughout the whole of the civilized world. The state of things in Europe has been recently very vividly brought home to us in Canada, owing to the fact that so many of us have already lost those near and dear to us on the battlefield or in that great tragedy of the sea, the sinking of the Lusitania; but we rejoice to know that our soldiers have worthily upheld the traditions of our race, and that this country has reason to be proud of her sons.

In no previous war has the medical profession, not only of the British Islands, but also of the Overseas Dominions, played such an important part, and there was everywhere a prompt response to the demand of the Army for civilian surgeons to supplement the work of those belonging to the service. Many of the senior students in the various medical schools also volunteered for employment as dressers.

As you all know, the response from those of our profession in Toronto has been most gratifying. The Army Medical Ser-

vice of the First Contingent took many of the Fellows, and with the subsequent contingents, Clearing Hospital and University of Toronto Base Hospital, there has been an increasing depletion of our ranks. Sixty-one Fellows of the Academy of Medicine are now on active service. The medical student body of Toronto University has not been behind in their response to the call. Of the undergraduates in medicine, 6 officers and 88 men have gone, while there are 252 men serving from the graduate body of the Faculty of Medicine.

You will remember that very soon after the beginning of the war the Fellows of the Academy of Medicine pledged themselves as a patriotic duty to undertake, without charge, the professional care of the needy dependents of any men serving with the Allied armies during the war now going on; and you have this evening listened to the report of the Patriotic Relief Committee, and can realize how well and truly that pledge has been implemented by the Fellows of the Academy. From the report of the Hospital Supplies Committee you have also learned how very active the Fellows have been in this matter.

From all parts of the country came offers from private individuals of accommodation for invalid soldiers and sailors, and of large country houses to be used as convalescent homes for the sick and wounded. Australia, New Zealand, South Africa, India, and our own Dominion of Canada, have given splendid and magnificent assistance in hospital equipment and personnel, and in the sermon preached by the Archbishop of Canterbury, at St. Paul's Cathedral, on August 4th, the anniversary of the declaration of war, he says that, "the temper of the whole of the British Empire has been worthily reflected by medicine. A firm resolution to endure to the end and a hope for the victory of the right are displayed in the hearty co-operation between our citizens in all parts of the world in the medical conduct of the war." The United States has also done much to help in the treatment of our wounded soldiers, and has made generous contributions in the shape of hospital equipment and personnel.

The war can scarcely fail to have a more or less arresting effect upon medica; progress in some directions, in view of the fact that in all the countries concerned so many men engaged

in medical investigation and research have, at any rate for the time being, been called away from their work. The interruption to the exchange of scientific data is also a serious obstacle to progress. Many medical meetings which were to have been held during the present year have been postponed. The next International Medical Congress, which was arranged to meet in Munich in 1917, has suspended the work of organization. and in the Deutsche Medizinische Wochenschrift there is an editorial to the effect that it is probable that the feelings of hatred excited by the war will not have died out by that time. so that it would be difficult to welcome representatives of the countries now fighting Germany with any degree of cordiality. In fact Germany seems to be preparing for isolation from the external medical world, and it is announced that the German scientists have commenced a campaign against all medical words of English, French or Russian origin, and that a committee is to be formed for the purpose of framing a purely German medical nomenclature.

This isolation from the rest of the world may not be an unmixed evil if the opinion expressed by Dr. Greely in the Boston Medical and Surgical Journal of September 10th, 1914, is correct, namely, that in Germany the scientific side of medicine is over-developed, whilst the human side is greatly neglected.

The sublime ignorance of the facts in regard to the origin of the war shown in the extraordinary manifesto issued towards the end of last year by the German Intellectuals, including such names as the late Prof. Ehrlich, some of the assertions in which are in direct opposition to the statements contained in the German White Book, cannot fail to discredit German science. Can we ever trust the German scientists again?

Soon after the beginning of the war we began to realize how dependent we were upon Germany for the supply of certain drugs, in the manufacture of which she had acquired a monopoly. These included a large number of extremely valuable drugs, which had displaced many of the older remedies, such as the whole range of synthetic drugs, analgesics, antipyretics, alkaloids, salicylates and potash salts. The fact that Germany possessed a monopoly in the manufacture of aniline dyes has caused a very considerable inconvenience. The manu-

facture of many of these products had originated in Britain, but had afterwards been applied by German manufacturers. One of the chief difficulties in manufacturing them ourselves was that hitherto Germany had had an exclusive supply of the raw material required. There has since been considerable progress in the manufacture of the products formerly supplied by Germany, but there are still many difficulties to overcome before this industry is established on a satisfactory basis.

It is sometimes asked if war offers any compensations for the harm it undoubtedly does in hindering the advance of science? Much has already been learnt in regard to the proper treatment of septic wounds, and as to efficacy of inoculation in the prevention of the diseases which have in previous wars caused more deaths than the actual battles themselves. The vigorous efforts taken in Serbia by the British and American doctors have been so successful that typhus, relapsing fever, cholera and smallpox are now almost stamped out, and so far the health of our troops in France, in England, and at home has been extraordinarily good.

At the end of the first year of the war it may be said that the value of the medical work in the Army cannot be too highly estimated, and the practical absence of epidemic disease and efficient sanitary organization has meant a gain of innumerable lives to the allied armies. The heroism of the troops in battle has been equalled by that shown in the hospitals, and the wounded have been attended with courage, assiduity and success, often under the most trying circumstances. Very warm tributes have been paid to the courage and professional efficacy of the Medical Corps by the highest military and political authorities. They all agree that the medical men have rendered most heroic services, and that their courage and devotion is beyond all praise.

I quote the following paragraph from the Daily Mail, which ameared soon after the battle of Neuve Chapelle:—"A bright page in the story of British heroism in the battle of Neuve Chapelle is the conduct of the doctors. As always, they distinguished themselves by their fearlessness under fire and their gallantry. Their losses were heavy, for they exposed themselves without thought of danger."

Amongst the results of the war which are of special interest to us in Ontario is the establishment of medical reciprocity between Ontario and Great Britain. This became necessary on account of the necessity for those holding the license of the College of Physicians and Surgeons of Ontario to go with the Canadian Contingents to Great Britain and France, and there-The Council of the Colfore to work under the War Office. lege passed the enabling legislation in December last, the Lieutenant-Governor subsequently giving the Royal Assent. In the Lancet of September 4th a notice appears from the Registrar-General of the Council of Medical Education and Registration of the United Kingdom, containing the following paragraph:-"That any person holding the license or membership of the College of Physicians and Surgeons of Ontario, granted after examination in medicine, surgery and midwifery, together with a license to practise in that province, shall be entitled to register in the Colonial list of the Medical Register, providing he satisfied the Registrar regarding the other particulars set forth in Part II. of the Medical Act, 1886. Degrees in medicine granted by the Queen's University, the Western University and the University of Toronto may so be registered as additional titles, provided they are registered in Ontario."

It has been assumed by some that this war is likely to result in an enormous amount of more or less permanent nervous and mental suffering and incapacitation amongst the soldiers, but although there is no doubt that a certain number of them become unneryed by the horrors of the battlefield, time has shown that a large proportion of these recover after rest and suitable treat-In an address recently given by Lord Bryce, he states that the effect of the fighting on thousands of our men has been to sober them, to stir their deepest thoughts, and inspire them with an urgent desire for a more idealistic basis of living, and he holds that the spectacles of millions of men abandoning home, family, ambition and money, and laying down life for a principle is so glorious as to transfigure the pictures of mangled bodies and human beings gasping in the dark struggle against He believes that one of the eventual results of the war will be the great decrease in the amount of mental instability, and that people will return to a simpler life, partly from choice and partly from necessity.

Another fact of importance which we may here mention is that neurasthenia and other neurotic conditions are apparently becoming much less common, in spite of the anxiety and strain resulting from the war. This is not difficult to understand, as the experience of most people who have been accustomed to the treatment of nervous conditions indicates that it is not so much the great tragedies of life which are apt to upset the equilibrium of the nervous system, but small daily worries persisting for long periods of time, and above all lack of occupation and interest in life.

This war is certainly affecting the Fellows from a pecuniary point of view, in that many people who have been accustomed to employ physicians and to pay the ordinary fees can no longer afford to do so. The extent to which the war has affected the medical profession in this respect varies in individual cases, but there certainly seems to be no doubt that consultants and specialists are suffering more than the general practitioners, who in a few cases are benefiting more or less, due to so many of their colleagues having taken up military work of some kind.

Now as to the progress of the Academy since the last regular meeting was held, I may say that 27 new men have been elected, so that, counting in the 61 who are at present overseas, the total number of resident Fellows is 404, non-resident Fellows 42, life Fellows 5 and honorary Fellows 4, making a total of 455. Ten additional names will be submitted at the next Council meeting for election, and it is our earnest hope that before the close of this Academy year the total fellowship may come up to the 500 mark by the adhesion of a number of very able men in Toronto who have signified their desire to join with us.

SOME REMARKS ON MENTAL HYGIENE AND THE PREVENTION OF INSANITY

By Campbell Meyers, M.D., M.R.C.S., Eng., L.R.C.P., Lond.

The Provincial Inspector of Prisons and Public Charities states in his latest report that on October 31st, 1914, exclusive of the insane patients in the Homewood Sanitarium, at Guelph, there were in the Hospitals for the Insane of the Province of The total population of this Ontario, 5,986 insane persons. Province, as shown by the last census, is 2,519,907. Hence one person in every 420 of the entire population of Ontario is certified insane. Moreover, the number of patients in the Hospitals for the Insane is greater than the number in the General Hospitals of the Province. The Provincial Inspector of General Hospitals and Charitable Institutions states in his last annual report that on September 30th, 1914, the number under treatment in these institutions was 4,654. Hence 1,332 more patients were under treatment at this period in the Hospitals for the Insane than there were under treatment from all other diseases in all the hospitals of this Province, including the sanatoria for consumptives. This fact alone clearly indicates the importance and magnitude of the subject. The cost to the Province for the maintenance and capital expenditure of the Hospitals for the Insane in 1914 was \$1,704,699.48, being about one-sixth of the total provincial income.

This appalling and ever-increasing number of insane is surely a subject for careful consideration, and renders the prevention of insanity one of the most important of the humane and economic problems which are before the people of this Province to-day. While a large proportion of the number of admissions to Hospitals for the Insane are now discharged as more or less completely recovered, there still remain in these hospitals a large proportion in whom the sunlight of reason, and all enjoyment of life, is forever gone—a vegetative existence in which often apparent physical health is combined with a single defect which produces a result sadder than death. Had the development of insanity been averted, the havoc wrought by

the storm of the developed attack on the brains of these individuals would never have been experienced, and the mental integrity never affected.

The mental suffering in insanity, especially during the early stages of the attack, has been justly said to be unequalled by that of any other disease to which humanity is heir. Nor is the suffering borne by the patient alone, since the relatives and friends must bear a profound grief—often over a prolonged period—when their sympathies and their powerlessness to afford either comfort or assistance makes them devoutly hope, for the patient's own sake, that the physical remains of life itself might be removed.

From an economic point of view the loss to the state is tremendous. The expense of treatment and maintenance is great, extending as it does for some of these patients for over fifty years. More important still, however, is the loss to the state of the individual's capabilities for good and useful work, in whatever walk of life he may have previously occupied—a loss which, morally, mentally and financially, it is impossible to estimate. If these facts only had to be considered, the question of the prevention of insanity would merit the most careful thought by all classes of the community.

Much more serious, however, than the appalling number of certified insane at present under treatment in the provincial hospitals is the fact that at least an equal number is each day steadily progressing towards the boundary line of insanity or passing completely over it, while practically no effort is being made to prevent this dire calamity. In other words, instead of the proportion of one to four hundred and twenty, as stated above, as being confined in the hospitals for the insane, there are at least another one in four hundred and twenty of our population who are daily nearing the same disaster without a single hand being extended to help them. (It is to be noted moreover, that neither the number of the insane in the other provincial institutions, nor the large number of insane in this province who are not there confined, are considered in this connection.)

While the treatment of the insane has advanced by leaps and bounds during the past twenty-five years, no real assistance has been offered to prevent the full development of the disease, and once this has taken place, no matter how skilful the medical aid may be, the restoration to mental health is, at best, liable to be only more or less complete. True, the hospitals for the insane have opened their doors to voluntary patients, but the fact remains that, with rare exceptions, the patients will not decide to enter into these surroundings and associations—a decision, moreover, which is perfectly natural—until the onward progress of their disease leaves no alternative and they simply drift onwards with the irresistible current to the inevitable whirlpool. It is, therefore, clear that if success in treatment is to be obtained for those liable to develop insanity, it must be in different surroundings and with different methods and associations than those in which the insane are treated.

Can insanity be prevented?

The answer is an emphatic affirmative in a very large proportion of the patients. How can this result be best accomplished? The answer here is by two methods, which may be described as (1) General and (2) Special. The former relating to general mental hygiene in the development of the individual, and the latter relating to the active treatment of the patient when symptoms of his condition are beginning to develop.

The General methods to be employed for the prevention of insanity comprise the upbringing of the child, especially in regard to its moral development; a wise degree of education, which comprises the avoidance of over-education in unsuitable subjects; a close observance of the laws of eugenics, especially the intermarriage of those exhibiting any mental weakness, or pronounced nervous affection, either in themselves or their forebears; the avoidance of alcohol; the prevention of syphilis (the two latter being especially prone to produce insanity); the cultivation of sound physical health and development by out-of-door sports; and the avoidance of pampering and self-indulgence, which are so prevalent in this twentieth century: in short, by the development of those qualities, both physical and moral, which tend to the promotion of the best possible health, in accordance with the rules of mental and physical hygiene.

The Special methods are applicable to the earlier stage of the developing disease, and include the steps necessary to obtain proper medical treatment for the condition. In order to explain how prevention is best accomplished at this stage it is necessary to state briefly, and in a very general way, what class of insanity is most amenable to prevention, and then, what symptoms are to be found which indicate a danger of the full development of the disease.

It must be clearly understood that insanity rarely begins suddenly in ordinary life. The early symptoms in many cases are overlooked, or ascribed to other and especially physical causes, so that in those cases where the outbreak of active insanity is thought to have been sudden, a careful examination of the preceding nervous symptoms would clearly show that, in the large majority of such cases, the disease had been coming on, not only for weeks, but more often for months. Moreover, the advance of modern medical science enables a competent physician to foretell the outbreak of insanity often for weeks in advance, with at least as much certainty as that of any other form of disease. From this it will be readily understood that the outbreak of insanity is often preceded for weeks or months by symptoms which are commonly described as nervous, and the patient during this period is suffering from so-called neurasthenia, or nervous exhaustion. This by no means implies that all patients suffering from neurasthenia do, or will have, an attack of insanity. On the contrary, it is only when this diagnosis has been made that the fear of such a result may be considered, depending entirely, as it does, on the nature, the intensity, and the grouping of the symptoms. In other words, while neurasthenia frequently exists without any actual danger of insanity, insanity is rarely present in ordinary life without preceding neurasthenic symptoms, often of long duration. (An exception is found in the present war, where the mental strain and the shock of shell fire, etc., has been so great that mental derangement is often sudden in its onset.) It must also be carefully remembered that once insanity is fully developed it is too late for preventive measures, and that treatment in a hospital for the insane becomes generally imperative. Hence, treatment in an early state, when the symptoms are those of nervous exhaustion, not only will, in the majority of cases, avert a developing insanity, but thus also obviate entirely the necessity for asylum treatment. Again, there is no doubt that the

strain on the mental faculties of an individual who is obliged to pass through an attack of insanity, is liable to leave him—even when discharged as recovered—with more or less mental deterioration, so that he would be considered "not the man that he was." This unfortunate result would also have been obviated had the development into insanity been prevented by early treatment.

It must not be overlooked that insanity is a definite disease, having its origin in the higher centres of the brain, which is the chief organ of the nervous system, and that its location here is liable, especially in the early stages of the disease, to influence any or all of the functions of the various internal organs, since these depend primarily upon the nervous system for their proper performance. This explains how the various physical processes, such as menstruation, digestion—both in the stomach and intestines—the secretions, and the action of any or of all internal organs, may be affected when their centres in the nervous system become impaired in their functions, as is so often observed in neurasthenia.

As to the class of insanity most amenable to prevention, it can fortunately be stated that one of the most frequent and important forms of this disease belong to this category, viz.: that functional form which occurs in adult life, among persons who have previously enjoyed good mental health, and have already accomplished a fair share of life's work in proportion to their age, and in whom the symptoms usually follow such causes as overwork with anxiety, intense mental strain under adverse circumstances, or some pronounced nervous shock. That this form of insanity can be prevented in 75 per cent. of all the cases, when treatment is commenced sufficiently early, has already been clearly demonstrated by a practical experience of many years which were devoted to this purpose.

Before discussing the various symptoms it should be clearly understood that the symptoms of which a patient complains in neurasthenia are always as real to him as those of any ordinary physical disease. Because we often cannot see or locate any visible cause externally for the symptoms, we have become prone to doubt their existence. The prevalent conceptions of any pronounced illness have for so long been associated with pallor,

weakness, emaciation, and other physical signs in the patient, that it has been a natural mistake, when judging only from the possible lack of external physical signs of disease, to consider that all the symptoms of a neurasthenic are voluntarily intensified or even imaginary. Were the truth recognized, it would be seen that many of these patients struggled long to overcome their symptoms, but were unable to do so. It is this lack of knowledge, conjoined with a hasty conclusion, which is apt to lead many to think that the patient could do differently if he chose, or be quite well if he only believed it. If these persons would only consider that they themselves may one day be obliged to pass through the same ordeal as many unfortunates are doing in every quarter of the world to-day, the injustice and the unkindness of this view would be at once apparent to them-no one is immune. Moreover, in the discussion of the symptoms which follow, it is assumed that the patient has previously enjoyed good mental health, and the grouping of the symptoms here given, whilst purely arbitrary, is intended to indicate how their symptoms, when untreated, may become gradually intensified from a comparatively simple nervous affection in the early stages to a most pronounced disturbance of the functions of the brain—a fully developed insanity.

The symptoms, of which only a limited number may be mentioned here, comprise—especially in the early stages—complaints of disturbances of the various physical processes, such as are mentioned above, of which functional disturbances of the generative system in women and the digestive system in man, are the most frequent offenders. These symptoms may be accompanied in their onset by noticeably nervous symptoms. which latter, unfortunately, in the past have been too often regarded as "reflex" in their origin from the physical disturbances, instead of being recognized as definite evidence of the general nervous condition. As the disease advances, the nervous symptoms gradually become more evident: sleeplessness develops, and this is often attended by disturbing or horrible dreams, the patient awakens tired and unrefreshed in the morning, even after a fair night's sleep. Undue irritability is often present, with a decided tendency to worry over trifles, loss of confidence, and marked indecision—the simplest questions

being solved only after much difficulty and hesitation; an inability to concentrate the mind for any length of time without an undue effort, which is followed by intense fatigue; reading an ordinary article, as in a newspaper, may be difficult, and the patient cannot remember or enjoy what he reads; the emotional equilibrium is easily upset, so that a strong man will shed tears without any apparent adequate cause; the lack of confidence in himself may extend to his surroundings, so that his sense of security is lacking, and fears of various kinds arise, such as the fear of being alone, or in the dark, or in open places, etc., these fears being as real to the patient, on account of his condition, as though some immediate danger were actually present; any mental effort may be commenced in good form, but rapid exhaustion follows; a lack of interest gradually develops in the usual affairs of life, and he becomes increasingly introspective; depression may now appear, at first slight and only occasionally, being easily shaken off, but later it returns with greater force, and the patient is only able to rid himself of it by a stronger voluntary effort; the courage, brightness, energy and optimism, which had characterized the individual previously, are now steadily diminishing, and he gradually begins to feel doubtful about his recovery; the ordinary affairs of life no longer interest him as they did formerly; his intellect is as clear as ever, but he is unable to sustain any prolonged intellectual effort; the daily work, which hitherto had been done cheerfully, now becomes an ever-increasing drudge, and finally is no longer pos-The patient realizes all these changes, and does his best to rid himself of them, especially with the help of friendly advice, but he can only do so temporarily, as they constantly return with increased force.

It must be here noted that the above symptoms have all increased gradually in their intensity, and may have occupied months of time from their onset to this stage of the disease.

All these symptoms, which are termed psychical, indicate a diminished resistance and a disturbance of function of the higher centres of the brain, and are just as characteristic of a disturbance of the cells in these centres as a yellowish discoloration of the skin is of a certain disturbance of the cells of the liver. Efficient treatment at this stage of the disease would result in the recovery of 80 per cent. of the patients.

If we now suppose the disease has not been efficiently treated, and that in its onward progress all the symptoms have steadily become intensified, what will be the next stage? The sleep has become less and less, until the patient often believes he gets little or none; the inability to concentrate the mind has increased to such an extent that the simplest duties are performed only with difficulty; the depression has become more marked and constant, so that while the patient may be induced to smile from time to time, the hearty laugh of former times is no longer heard; he is more discouraged about his prospect of recovery, and, owing to his inability to work, he fears his usefulness in life has passed, and that he will become a burden to his friends. At this time thoughts of self-destruction flash across his mind, but are promptly dismissed from ethical or moral reasons. While discouraged about his recovery, he still clings to the hope of getting better, and desires to do so. At this stage his disease has become much more serious, and the outlook for the prevention of an attack of insanity much less bright than It may safely be predicted, however, that treatment would still save 50 per cent. of these patients.

If we pursue the onward course of the disease still further into another stage, we find that the inability to concentrate the mind has led to a state of habitual distraction; the discouragement has become more intense and the futility of trying to prolong his existence is ever present with him; at this time thoughts of suicide as the best means of escape from his trouble are constantly with him, and he is unable to rid himself of them; they steadily assume a more definite form and either a deliberate attempt to take his own life is made, or on a sudden impulse he ends the scene. Should this not occur, or have been unsuccessful, the symptoms grow steadily more marked; he finds that all interest in his family has disappeared, his entire thoughts being centred on his own misfortune, which is steadily becoming greater; the fears he had earlier in regard to external objects gradually extend to imaginary evils, and he is terrified by them; he asks himself why this great misfortune has come upon him, and tells himself it must be for some great evil which he has done which has caused God, and all his friends, to desert him; or he may hear a voice in the stillness of the night telling

him of dreadful things about to happen to himself, such as being burned in a fiery furnace, or suffering some horrible torture, etc., the reality of which to the patient is often very evident from his actions.

During this stage the patient has passed over the boundary line of insanity, and even the friends can no longer conceal the truth from themselves, and they awaken to the dreadful reality that his disease has so far progressed that treatment in a hospital for the insane is often the only alternative which remains.

As the above symptoms are different from those of ordinary physical disease, so must the treatment be different, if it is to be successful. The first essential is to remove the patient from the surroundings in which his trouble developed, and to place him under the charge of a physician in whom he is entitled to have confidence. If the patient remains in his own home, or his usual surroundings, the pernicious influences which induced his disease still remain to produce further irritation and thus counteract the benefit of his treatment. Moreover, in a patient's own home, where he or she has been accustomed to direct, it is doubly difficult to give up everything to follow the prescribed course of treatment. Again, the visits of friends in the home, be such either social or business friends, disturbs the necessary mental quietude of the patient, and these friends may often suggest, in all kindness, other remedies or other plans of treatment which, from their disturbing effect on the patient, are often most harmful to his progress. Again, a home is not provided with the facilities required for successful treatment, and these can only be had in a hospital devoted to the purpose. A most frequent mistake is made by taking half-measures, which are nearly always failures, and a more severe stage of the disease has to be contended with, owing to the time which has been wasted and the further discouragement to the patient which has ensued. It is much better in this, as in other affairs of everyday life, to make a business of it and succeed. It is often suggested that as the patient is only nervous a little rest and change is all that is required. While much depends, of course, on the symptoms at the time, it is always well to remember how the disease may progress, and be governed accordingly.

The nursing of these patients is most important, and requires a long experience with these conditions to be really efficient. The problem of being nursed by a near relative is often present, but of this it may be said that however serviceable such might be in a patient suffering from an ordinary physical illness, the result here is usually unsuccessful, owing to the special type of disease; and the nurse often breaks herself down without having in any way improved the patient's condition. Hence, removal from home is usually imperative if the disease is at all severe, and once this has been done, it is better to keep the patient out of touch with it (except to know that the family are well) until he has made some decided progress on his way to recovery.

Once the patients find themselves in surroundings in which they have confidence, where every detail of their treatment is carefully planned for them without any effort to decide for themselves, and where the knowledge of such conditions on the part of the attending physician assures every confidence in him, they will at once experience relief from their symptoms, and will be only too willing to carry out all treatment, feeling assured that they will soon return home fully restored to health.

[At the meeting of the Ontario Medical Association, held in Peterborough, May 25th-28th, 1915, the following resolution was moved by Dr. Meyers and seconded by Dr. Hamilton: "That this Association desires to place itself on record in favor of active steps being taken immediately for the prevention of insanity by the establishment of separate Neurological Wards in general hospitals, especially in those hospitals in which clinical teaching is given." Carried.—ED.]

DISABILITIES.

Including Injuries Caused by Bullets, Shrapnel, High Explosives, &c., as Illustrated by Cases Examined before a Medical Board at Canadian Headquarters, Shorncliffe, England *

BY A. PRIMROSE, M.B., C.M., EDIN., Lieutenant-Colonel, No. 4 General Hospital (University of Toronto), Canadian Expeditionary Force.

(Continued from October issue.)

- 8. Defective Vision: Deafness.—Several men had been found unfit for duty because of defective vision, chiefly myopia and astigmatism. Most of these had a high degree of myopia, in one eye only, the result in most instances of a slight strabismus. Such men are incapacitated for shooting and must therefore be considered unfit to go into action. Deafness is obviously a great handicap to a soldier and where at all marked the man is absolutely unfit for service. One man was very deaf and told us he was unable to hear the words of command.
- 9. There were other conditions such as epilepsy, chronic alcoholism, and lateral curvature of the spine, of which we had examples. One man had a most exaggerated degree of lateral curvature with fixed deformity, rendering him absolutely unfit for duty. The epileptic is obviously unable to serve at the front. He is a source of danger to his comrades and at any moment may become quite incapable of looking after himself.

A study of all these conditions emphasizes the importance of adhering absolutely to Army Regulations in the Recruiting Office. Many of the conditions enumerated in the above list are examples of the failure to comply with these regulations on the part of the Medical Examiner at the time of enlistment. We note these conditions in order to urge that more care should be exercised in this particular. Men who are thus physically unfit and who are permitted to enlist have a miserable existence for weeks or months until finally they are compelled to relinquish

^{*}Submitted to the Director of Medical Service Canadian Contingents, and approved, August 23rd, 1915.

the effort to continue their duties. Few of these men ever reach the front, they are a source of expense to the country, and have served no useful function. Many of them have done themselves permanent injury in the attempt. It is therefore obvious that, in the interest of the individual and of the country he seeks to serve, such cases should be rejected at the recruiting office.

We shall now proceed to deal with disability arising primarily as a result of injuries received while in action.

1. Gas Poisoning.—There were 96 cases before us. We saw no recent cases; they, with, I think, no exception, were men who had been poisoned at Ypres on the 23rd or 25th of April, i.e., three months after having been subjected to the fumes. As far as our observation goes it would seem that while the Germans inflicted serious damage on our troops during those few days in the latter part of April, they never succeeded again in their diabolical effort to gain ground by this contemptible method of poisoning men. Prompt measures were taken to protect our men against the influence of gas, and these efforts seem to have been wholly successful, so that it seems certain that no further injury will be caused by such means. It is true that some cases of short exposure to the influence of gas have occurred since April, but the effects of these have been very evanescent. Regarding the more serious effects of gas we learn that not a few cases proved fatal soon after exposure or within the first few days. In our Board work we had to deal with many cases of serious poisoning who had passed the initial danger but were still suffering from symptoms more or less distressing. Shortness of breath was complained of on exertion, or, at times. coming on apart from exertion, the man occasionally waking at These men usually complained also of night with dyspnea. excessive secretion with expectoration particularly in the The physical signs on examining the chest were morning. practically negative and it was remarkable that one was never able to detect by this means any serious lesion in the lung. Next in order came marked gastric irritability, evidenced by the fact that the man was unable to retain any solid food. Many of these cases were able to take milk and soups, but the

moment they took solid food of any description they vomited. Occasionally we were told that the man would vomit in the morning only, this occurring immediately upon his first meal for the day, no matter what type of food was taken, but that he had no trouble with dinner or supper provided he took fluids.

Over a period of weeks in many cases there had been no improvement. We also got a history in several instances of hemorrhage from the bowel with diarrhea and hematuria in the early stages.

The problem which thus far we are unable to solve is whether or not the damage done to the gastro-intestinal tract or to the respiratory organs is permanent. These men continue to have symptoms three months after the exposure to the gas, and occasionally with little or no tendency to improve. We have no previous experience of such cases to go upon and we are therefore quite unable to determine whether the damage done is permanent or not.

The cases of gas poisoning frequently were victims of other injuries, suffering possibly from nervous shock or from wounds.

- 2. Exposure to Cold and Wet in the Trenches.—This, as we have seen was sometimes the cause of lighting up a latent pulmonary tuberculosis or again it induced rheumatism, sciatica, etc. Frost bite of the feet was observed in a number of instances; the exact nature of this is not quite evident. The men in cold weather were standing in water, wearing boots and putties, the feet and legs were soaked. This, as we know from reports from the front sometimes induced extensive gangrene resulting in the loss of the foot or leg. We saw the minor effects in those who had recovered after a superficial ulceration such as would result from frost bite and often the characteristic painful and congested cicatrix was producing marked disability.
- 3. Nervous Shock.—Men exposed in the trenches to heavy shell fire are inevitably exposed to nerve strain and the effect produced varies within wide limitations. Occasionally there is a somewhat sudden and complete breakdown with results which continue for months. At other times a man may come

through all this nervous strain and possibly receive serious wounds without any appreciable collapse of this nature. Some men who suffered in a severe degree appear to be complete They are usually very emotional and may break down Tremor is always a as they are telling their experiences. characteristic symptom. The hearts' action is rapid, the pulse being from 100 to 120 per minute. The knee jerks are markedly exaggerated—insomnia, anorexia, and a constant feeling of fatigue are common. The man is wholly unable for sustained effort of any kind, his memory is frequently defective and he is obviously worried and apprehensive. These men should have every consideration and should be provided with a suitable environment to ensure recovery. A period of months must elapse before a man who has severe symptoms is fit to assume duty again and occasionally years may elapse before recovery. is therefore difficult to arrive at a conclusion in endeavoring to predict how soon the individual case will be physically fit for duty. We are told by those at the front that the tendency is to send these men into action too soon, the result being a second breakdown under much less strain than at the first. pression is that many cases of the exaggerated type will never be fit for active service during the present war.

4. Head Injuries.—(a) Injuries to special senses. was impaired by various types of injury. There were twentysix cases of loss of one eye in most instances enucleation had to be performed and subsequent to the injury because of the extensive damage which had been inflicted. Then again injuries by bullets or shrapnel in the neighborhood of the eyeball not infrequently resulted in separation of the retina or hemorrhages causing permanent impairment of vision. Deafness.results from the effect of high explosives, the drum may be perforated and resulting otitis media may cause serious trouble. The auditory nerve is also affected in many instances and thus Affections of Speech. This permanent damage may be done. gives us some most interesting conditions of which perhaps stammering is the most remarkable. For example, a man of twenty-two was in the trenches when a shell knocked a portion of the parapet over on top of him. He was buried under debris

and rendered unconscious. He wakes up some two days afterwards in the hospital at Rouen. He had a flesh wound of the right leg caused by shrapnel, but this healed readily. seen by us two months after the injury his mentality was perfeet, he could read and understand readily all that was said to him, but he had largely lost the power of continuous articulate speech. His effort to say "Yes," in reply to a question, for example, would be accompanied by irregular contraction of various muscles. He jerks his head spasmodically, his arms twitch and he slaps his thigh until finally he succeeds in pronouncing the word which comes out in a final spasmodic fashion. If it is a sentence, then after he manages to pronounce the first word the whole sentence comes rapidly one word succeeding the other with great speed. The difficulty seems to be in getting the initial word. It would seem as if when the motor centre for speech is stimulated there were an overflow of stimuli to the centres controlling movements of the head, neck and arms resulting in irregular muscular contraction. Numerous instances of less marked stammering were observed from similar injuries and one learns on inquiry that it is quite a common occurrence as the result of injuries in action. In the cases observed it is obvious that improvement takes place slowly, but the prospect of final complete recovery is good.

Fracture of the Skull.—We had a few examples of this, but judging from our experience one would conclude that practically all cases in which a bullet perforates the cranium and brain result fatally.

(To be continued.)

Militia and Naval Medical Services and Ambulance

Dr. Colling, College Street, is now attached to No. 9 Stationary Hospital, R.A.M.C.

Major (Dr.) F. W. E. Wilson, of Niagara Falls, is still at Shorneliffe, as D. A. D. M. S. of the Canadian Training Division.

Capt. (Dr.) Magwood, of Toronto, has been added to the Unit, No. 2 Casualty Clearing Hospital, now known as the C. A. M. C. This hospital was recently moved over to "somewhere in France."

No. 4 General Hospital (University of Toronto Base Hospital) left England on October 10th for "somewhere in the Mediterranean."

Dr. Oswald C. J. Withrow, who has joined the 81st Battalion as medical officer, will be a decided acquisition to the newest of Toronto's units, as in addition to a ripe medical and surgical experience, he has been for two years with the 10th Field Ambulance. Before becoming attached to that branch of the service he served in the 96th Lake Superior Regiment.

LIEUT.-Col. Dr. H. A. Bruce returned to Toronto on October 8th, after spending several months in the different Canadian War Hospitals, including the Duchess of Connaught Hospital at Cliveden; Shorncliffe; No. 2 Canadian Stationary Hospital at Le Touquet, France; No. 3 (McGill) General Hospital at Camiers; and No. 1 Hospital near Etaples. Dr. Bruce speaks in the highest terms of these hospitals and, when away, had the pleasure of meeting Major Dr. J. T. Clark, Capt. Dr. Pentecost, Capt. Dr. Wood, Capt. Dr. McEwen, all of Toronto;

Major Dr. Elliott, of Cobourg, Ont.; Col. J. T. Fotheringham, of Toronto; Col. Dr. Foster, of Ottawa; Lieut.-Col. W. D. Mc-Pherson, of Toronto; Major Dr. E. P. Hardy, Captains P. G. Brown, Jeffs, Jeffrey, J. J. Fraser, and many others.

FORTY TORONTO DOCTORS FOR ACTIVE SERVICE

TORONTO General Hospital is losing a large part of its medical staff by the transference of its senior house surgeons to the R.A.M.C. for overseas. Forty doctors from the Toronto division have been selected by Lieut.-Col. F. W. Marlow for the Royal Army Medical Corps in England, and these have been ordered to prepare to leave at once.

The list includes:—Lieutenants C. C. McIntyre, A. R. Riddell, S. A. Walker, S. M. Dale, P. J. Harris and G. A. McLarty, all A.M.C. men and senior house surgeons, Toronto General Hospital. Lieut. E. H. McVicar, A.M.C., and St. Michael's Hospital. Dr. R. R. Young, Toronto Western Hospital, and Dr. C. E. Wilson, of Muskoka Hospital, also selected. Other doctors selected are: - Lieut. A. B. Mofatt, acting medical officer for artillery; Lieut. J. Cunningham, Camp Hospital staff; Lieut. P. P. Rogers, 21 Lindsay Avenue, Toronto; Dr. V. E. Cartwright, Gravenhurst Hospital; Lieut. G. Carleton, 154 Danforth Avenue; Lieut. F. L. Thompson, 11 Farnham Avenue; Dr. D. A. Warren, Hamilton; Lieut. R. Home, 674 Spadina Avenue; Dr. T. R. Phipps, 1394 Queen Street West: Lieut. A. M. Murray, 576 Danforth Avenue; Dr. W. A. Me-Leod, Elmsdale, Ont.; Drs. H. C. Sutton, Port Credit; J. W. Wheeler, Cornwall; A. W. Nixon, Georgetown; A. G. Wallace, Thessalon; E. Bryceson, 62 St. Clair West; J. J. Hurley, 6 Dundonald Street; W. S. Grimshay, 462 Avenue Road; H. C. Moyle, Burlington, Ont.; W. B. Seaton, Clifford and Toronto; M. D. Kyle, Fergus, Ont.; W. E. Dean, 337 Palmerston Boulevard; N. N. Ferguson, 1253 Dundas Street; W. W. Conise, 496 Spadina Avenue; G. Cooper, Charlton, Ont.; Capt. M. H. Embury, Allandale; Lieuts. D. M. Kilgour, 152 Carlton Street; A. M. Robb. 181 Perth Avenue; F. A. Ross, Barrie.

AN IDEAL RESORT FOR CONVALESCENT PATIENTS

Physicians have frequent opportunities of referring those convalescing from illness to a resort where they can quickly recover their old-time vigor and enjoy an almost ideal climate, Such a resort is Virginia Hot 2,500 feet above sca level. Springs, just one night out of New York. The management have spent a huge sum of money on this choice spot in "Old Virginny," and are anxious that the Canadian medical profession should continue to refer cases there, as they have done in years gone by. The Homestead Hotel is one of the handsomest houses in America. It is built of solid brick, containing 500 guest rooms, with many parlor suites and 300 private baths. It is spacious, dignified, quiet and restful, with magnificent mountain views on every side. It is no exaggeration to say that Hot Springs means the Homestead Hotel. The Company owns 5,000 acres surrounding the hotel, so that physicians can understand that their patients have every opportunity of enjoying outdoor life and regaining thereby their normal strength.

The dominant factor making Hot Springs world-famous is the cure in which the climate as well as the water assist. The waters are conducted by gravity to the bathhouse and distributed fresh from the ground to the bathing apartments on different floors without loss of heat or its increase by artificial means, and fully charged with all their gases and other health-giving qualities. At none of the celebrated places in Europe, and at no other springs in America, is the temperature prescribed for hot baths that at which the water actually emerges from the earth in the natural springs.

The springs are beneficial, not only for bathing, but for drinking. Besides the hot springs, the effects of which as drinking waters are pronounced, there are magnesia, sulphur. and soda springs within the grounds, and alum water from a spring not far distant. The water from the soda spring comes strong and clear from the ground at a uniform temperature of 74 degrees. Physicians should address for full information H. Albert, Esq., Hot Springs, Va., U.S

LISTERINE

A safe, non-poisonous, unirritating antiseptic solution

in that after the evaporation of its volatile constituents—thyme, eucalyptus, mentha, gaultheria and ethyl alcohol—a film of boracic and benzoic acids remains upon the surface to which Listerine has been applied, affording more prolonged antiseptic protection.

LISTERINE is a trustworthy surgical dressing; it has no injurious effect upon the tissues in which the healing process is going on.

treatment of abnormal conditions of the mucosa and forms a suitable wash, gargle or douche in catarrhal conditions of the nose and throat.

relief in fermentative dyspepsia and is largely prescribed, with excellent results, in the various forms of diarrhoea occurring in infants and adults.

LISTERINE literature, including special pamphlets upon Disorders of Digestion and Respiratory Diseases, may be had, by physicians, upon application to

LAMBERT PHARMACAL COMPANY 2101 Locust Street St. Louis, Mo.

A MODERNLY EQUIPPED OPERATING ROOM

Surgeons who prefer to send their eases to a private hospital should bear in mind that the operating room, at the Lynhurst Hospital, 100 Yorkville Avenue, Toronto, has been recently re-equipped and is to-day one of the most modern in the Province. The surgeon will find there everything necessary for the most intricate case, the room being in charge of one of the most competent of graduate nurses. The Lynhurst to-day enjoys the confidence of a large proportion of the Toronto profession.

OPEN WINDOWS NOT AS GOOD AS WALSH WINDOW TENTS

Eighty per cent. of all body energy is lost through the skin by the radiation and conduction of its heat. At a freezing temperature it requires the oxidation, or use, of two and one-half times as much food to keep the body up to its normal temperature, as it does at summer heat. (Howell's Physiology, pages 861 to 864, or any other physiology.)

You go to bed with the windows open, the outside temperature fairly warm, with bed covering accordingly, and are awakened before morning to find it blowing and freezing. These sudden changes are dangerous, for if the body temperature is suddenly reduced resistance to disease is lowered and germs that are ever present in the digestive and respiratory tracts multiply and get beyond control. The Walsh Window Tent affords ample protection from these sudden changes and drops in temperature which are responsible for colds and pneumonia. For prices see page iv.

AN IDEAL CAR FOR PHYSICIANS

THE Canadian Regal Motor Co., Ltd., of Berlin, Ont., are making a car that should appeal very strongly to the automobile lovers of Canada.

Their Four-28 model in touring car or roadster at \$875 is particularly fine value. This car has the appearance, construction and material of a high-grade automobile.

The design betrays none of the characteristics of the cheaply built car, and it does reveal that abundance of detail and superior finish that are typical in the higher priced cars.

This sturdy Canadian-made car has an aluminum crank case and long 5-inch stroke motor, which puts this four-28 Regal absolutely alone in its class, and the motor-buying public are quick to appreciate the flexibility, power strength and lightness that these two features give this car.

The equipment is very complete—one-man top, electric starting and lighting, demountable rims with one extra, including tire-carrier and straps, 106-inch wheelbase.

Mercurialized Serum

An Important Advance in the Administration of Mercury for Treatment of Cerebral and Systemic Syphilis

In cerebral syphilis the spirochetes are located in the cerebrospinal system and are unaffected by the intravenous or other use of the usual antisyphilitics. Dr. C. M. Byrnes, of Johns Hopkins University, reports that Mercurialized Serum may be administered intraspinally without corrosive action and with specific action on the spirochetes.

In systemic syphilis Dr. Loyd Thompson recommends

Mercurialized Serum intravenously.

(Journal American Medical Association, Dec. 19, 1914, p. 2182; May 1, 1915, p. 1471; Mulford Digest, May, 1915.)

Mercurialized Serum Mulford is furnished: FOR INTRASPINAL USE

No. 1.—In 30 c.c. ampuls containing 1.3 mg. (1-50 gr.) Mercuric Chloride in normal serum and physiologic salt solution, with special sterilized rubber tubing and intraspinal needle.

No. 2.—In 30 c.c. ampuls containing 2.6 mg. (1-25 gr.) Mercuric Chloride in normal serum and physiologic salt solution, with special sterilized rubber tubing and intraspinal needle.

No. 3.—Hospital Size Packages, contain ten 30 c.c. ampuls, each containing 1.3 mg. (1-50 gr.) Mercuric Chloride in normal serum and physiologic salt solution, with sterile tubing and intraspinal needle.

No. 4.—Hospital Size Packages, contain ten 30 c.c. ampuls, each containing 2.6 mg. (1-25 gr.) Mercuric Chloride in normal serum and physiologic salt solution, with sterile tubing and intraspinal needle.

FOR INTRAVENOUS USE

No. 5.—In sterile glass syringe, graduated in fourths, with sterile needle, containing 22 mg. (1-3 gr.) Mercuric Chloride in 8 c.c. normal serum. Each one-fourth graduation of the syringe contains 5.5 mg. (1-12 gr.) Mercuric Chloride and represents the usual dose.

No. 6—Hospital Size Packages, contain ten graduated sterile glass syringes with needle, each containing 22 mg. (1-3 gr.) Mercuric Chloride in normal serum.

H. K. MULFORD CO., Philadelphia, U.S.A.

Manufacturing and Biological Chemists

New York Chicago St. Louis Atlanta

New Orleans
Minneapolis
London: 119 High Holborn

Kansas City San Francisco Seattle Toronto



Illustration of ampul package for gravity method of intraspinal injection and sterile syringe for intravenous use.

xxxviii Canadian Journal of Medicine and Surgery.

The Canadian Regal Motor Co., Ltd., also make a de Luxe eight-cylindered car to sell at \$1,650, and a Standard Four at \$1,350.

IMPROVED EASYON TIRE CHAINS

THE Leather Tire Goods Company of Niagara Falls, N.Y., announce that they are now making deliveries of their 1916 Easyon Chains, which have been improved in several respects. The new chains have a metal fastener for attaching to the spokes which is absolutely unbreakable and is covered with leather so that it cannot injure the paint. The cross chain, where it comes in contact with the middle of the tire, is smoothly rounded so that it cannot injure the rubber and the chain portion, being made entirely of welded links, is unbreakable under any condition.



Most automobile owners carry chains with them only in order that they may be sure they will not get stuck on the road. Easyon Chains are especially valuable for such persons, for they can be applied in a moment, even when stuck in the mud or snow, and will give excellent traction on any sort of road surfaces. They also have the advantage of be-

ing more durable than ordinary chains and it costs less and is much easier to renew the cross members.

Easyon Chains are packed a set of 8 in a bag, 4 for each rear wheel. They are made in two sizes: small size which fits tires up to 4 inches, cost \$3.20 per set; large size, which fits tires from 4 to $5\frac{1}{2}$ inches, inclusive, sells at \$4.00 per set. The chains will be delivered, parcel post, at these prices to any part of the United States or Canada.

POULTICES SHOULD BE STERILE

Prof. George Howard Hoxie, of the University of Kansas, in his most excellent book on "Symptomatic and Regional Therapeutics," states, under the heading of localized inflammation, that "the danger of infection should ever be in mind in applying a poultice, for the maceration incident to the poultice favors infection, even if in ordinary circumstances one might consider the area germ-proof."

It is thus noted how important, then, it is, in the employment of a poultice for the relief of pain and inflammation, that a sterile and trustworthy product be applied. Inasmuch as poultices are a means of producing hyperemia by the use of heat, and in so far as they do this better than by other means,

OF UNDOUBTED FOOD VALUE

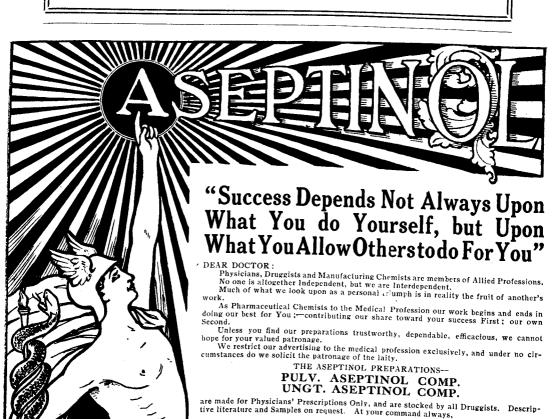
The attention of the Medical Profession of Canada is called to

CANADA-FIRST CONDENSED MILK

as an ideal food for the sick-room. In food value this milk exceeds that of the majority of similar products. The Laboratory of the Inland Revenue Department in a recent report certifies that CAN-ADA-FIRST CONDENSED MILK showed Total Solids 69.27, Ash 1.57 and Fat 8.23, a splendid showing when compared with other brands. Physicians will therefore realize how suitable this Canadian product is for use by invalids during convalescence, for the old whose digestion is impaired, and for babies whose growth and development depend upon the caloric value of the nourishment administered.

The manufacturers will greatly appreciate the assistance of the Medical Profession in introducing this milk for family and hospital use.

AYLMER CONDENSED MILK CO., Limited



The ASEPTINOL MFG. CO., Baltimore, Md.

it is interesting to observe that in the belief of Prof. Hoxie "the clay poultices, known best in the form of Antiphlogistine, are the best to employ, as they are sterile and clean."

THE PHYSICIAN'S DUTY

Physicians are becoming more and more impressed with the value of prophylactic measures. Therefore, to instruct patients of the gentler sex in hygienic and sanitary principles and procedures is both duty and a privilege.

It is a fact, often not entirely appreciated even by physicians, that the vaginal douche, properly employed, should be used frequently, even in the absence of any abnormal condition. Despite the opinions sometimes expressed that frequent douching is not advisable, that the natural secretions being sufficiently germicidal should be allowed to remain, etc., it is a matter of common knowledge and experience among women of any degree of refinement that proper toilet of the vaginal tract is as valuable, necessary and indispensable as the use of the toothbrush.

The proper use of the Marvel Whirling Spray Syringe is not only instrumental in the treatment of diseased conditions, but is also of great value as a prophylaetic measure.

BORDEN'S MILK

Physicians will be gratified to know that, in prescribing Borden's milk, they have the best interests of their patients at heart, as proven by the following analysis:

	Per cent.
Fat	9.50
Albuminoids (Protein)	7.84
Milk Sugar	•
Cane Sugar	
Lactic Acid	
Carbohydrates	53.67
Saline Matter (Ash)	1.68
Water	
,	•
	100.00

FRENCH LICK SPRINGS

THE European war has made it impossible for Americans to go abroad for hydro-therapeutic treatment. In consequence the spas of this country will be patronized hereafter more than they have been before, and Americans will be happily disappointed to learn that they can receive the same kind of treatment in this country as they have been used to getting in France, Germany and Austria.

The Spatula is Mightier Than the Sword—

especially when wielded by the Physician, in Pneumonia, for example, to spread on previously verified and properly heated



"About five per cent, of all physicians still adhere to the theory that pneumonia being a so-called self limited disease, admits of no active treatment, but requires only good nursing and patient watchfulness. The other ninety-five per cent,, out of their individual and collective experiences, are convinced that, with prompt treatment of the right kind, pneumonia can be often greatly lessened in its severity, shortened in its course, or (as some affirm) actually aborted. We are of the opinion that about seventy-five per cent, of the physicians believe there is no single or similar remeasal measure which equals Antiphlogistine in its prompt effectiveness in the treatment of this disease."

(From Pneumonia Booklet sent on request)

(From Pneumonia Booklet sent on request)

Physicians should WRITE "Antiphlogistine" to AVOID "substitutes."

"There's Only One Antiphlogistine."

THE DENVER CHEMICAL MFG. COMPANY

MONTREAL.

ARE YOU SATISFIED WITH 3%?

We can sell you exceptionally

Well Secured Mortgages

On Improved Toronto Property Yielding

15% PER ANNUM

Telephone or write our Mortgage Department

FINDLAY & COMPANY

REAL ESTATE AND MORTGAGE BROKERS

Cor. Bloor Street and Dovercourt Road TORONTO

COLLEGE 734

One of the best known spas in America is the French Lick Springs, where the water possesses virtues equal to those of the great Continental spas. In addition to the excellence of the medical attendance, the sojourner at French Lick is certain of delightful hotel surroundings and most pleasant environments. French Lick, in addition to its other attractions, is the home of Pluto Water.

DR. BROUGHTON'S SANITARIUM

This Institution is at Rockford, Ill., and is for the accommodation of patients suffering from opium, morphine, cocaine and other drug addictions, including alcohol and special nervous cases. The methods used are easy, regular and humane. As the number of patients is limited to 44; each one can and does receive individual attention.

HYPERTROPHIED PROSTATE ARRESTED

INCREASED urinary frequency, chiefly nocturnal in character, is the earliest and most frequently encountered symptom of enlarged prostate. Many cases of hypertrophied prostate might never develop beyond this point if sammetto was administered as a prophylactic, and the discomfort of rising two or three times at night to urinate, to say nothing of entering upon a catheter life, might be avoided.

This is especially in the chronic prostatic hyperplasia which we find in old men always associated with chronic vesical catarrh, that sammetto gives the most brilliant results. Numbers of cases can be recited in which the use of sammetto alone has not only relieved the vesical irritability, but has seemingly reduced the hypertrophy of the prostate and enabled the patient to dispense with catheterization and micturate unassisted for the first time in years.

WYETH'S HYDRAS

THE busy practitioner will find Wyeth's Hydras of considerable value in the treatment of dysmenorrhea, colic spasm, and as an anodyne to relieve the pains caused by diseases of the female sexual organs. It is a powerful antispasmodic, though safe; it contains no opiate or any of the habit-forming drugs, and can be administered freely in variable doses without risk of any danger.

Hydras is the result of extended clinical experiments, a well-balanced formula of Viburnum opulus, Helonias, Hydrastis, Scutellaria and Cornus, dissolved in a palatable solution and aromatized. Various physicians have demonstrated fully the claims made and especially in the dysmenorrhea of young girls

The Proper Feeding of Nerve and Blood-cells

Significant Findings of the Professor of the Physiological Department, Tulane University, Louisiana.

Seldom has the practising physician received a more important lead from the physiologist than in the case of Professor Mann's recent researches in protein metabolism. (See articles in *The Lancet* for October 19th, 1912, and January 24th, 1914.)

In that large group of diseases connected with "starvation" of the nerve and blood-cells—such as, for example, an aemia, neurasthenia, neuritis, the debility induced by feverish states, etc.—these researches provide a sound scien-

tific basis for a mode of treatment which is, by general consent, easy of a doption, agreeable to the patient, and free from any risk of danger ordisappointment.

Briefly, the author of the

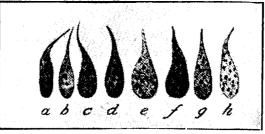
above mentioned papers has demonstrated to the eye, by microscopic examination, the improvement produced in the blood and nerve-cells, etc., by the administration of phosphorised albumin; Sanatogen being selected for the purpose on account of its excellent clinical record, superior purity, and high phosphorus content.

The earlier paper deals with blood tests made not only on a large series of frogs, including an adequate number of controls, but also on the investigator's own blood and that of six of his medical students. In the author's own words:—

"It is evident that Sanatogen acts as a strong stimulus so far as the recuperative powers of the blood are concerned. . . . The most notable change in my own blood films was the marked increase in nuclear metabolism."

The second paper describes the increased vitality in the nerve-cells and fibres obtained by the use of Sanatogen. The accompanying illustration shows this most markedly, and the author definitely states that, after the administration of San-

atogen, "a building up process goes on i n t h e nerves." Nor is the improvement limited to the nerve and blood-cells: it affects in a pronounced manner, and in a remark-



NUCLEI OF EPENDYMA CELLS

a, b and c are unfed; d is three hours after feeding, e and f 12 hours, g 24 hours, and h 68 hours after feeding

ably short time, every cell in the body which counts for health purposes. The effects of Sanatogen are, in fact, extraordinary, and would be almost incredible were not such irrefutable scientific evidence forthcoming. Indeed, the author tells us himself that "the questions involved are so important that he submitted his slides to a colleague, who, after a careful examination, agreed with his findings."

The practical value of these findings is self-evident to the earnest student of everyday medicine.

THE SANATOGEN COMPANY, 12 CHENIES ST., LONDON, W.C.

And at New York, Sydney, Cape Town, Shanghai and Moscow Factories at London and Penzance, Cornwall, England. due to some mechanical difficulty, as anteflexion or of a congestive character, of suppressed menses due to exposure to cold, etc. In the frequent headaches, in the nervous and hysterical disturbances of dysmenorrhea, etc., it affords relief. The palatability of Hydras makes it acceptable to the patient with impaired digestion, and will serve to correct the digestive disorders.

A VALUABLE ADJUNCT IN TREATMENT

The attention of the readers of *The Journal* is called to the advertisement of Chas. A. Tyrell, M.D., of 280 College Street, Toronto, manufacturer of The Cascade. Physicians are well aware of the fact how ineffective some drugs are in the treatment of obstinate chronic constipation, and how necessary it is to resort to relief by mechanical interference. The Cascade is a very simple but most effective way of relieving this condition, especially in old people. It thoroughly lavages the descending colon, producing a rapid, complete and painless evacuation.

PHENALGIN IN LEPROSY

Dr. A. L. Bardwin, of Calcutta, India, recently wrote: "For the past two years or more I have been using your Phenalgin in my prescriptions for fever, rheumatism and leprosy, the last of which I make a specialty, having made a life study of the disease. I have found Phenalgin a very valuable adjunct to my specific for leprosy, which is practically a species of Multiple Neuritis, in which 'pain,' hyperesthesia, anesthesia, 'hyperemia,' 'congestion,' and gangrene, 'the moist variety,' are some of the chief features."

STIMULATES THE DIGESTION

Careful investigation of the action of Bovinine shows that it acts, primarily, by stimulating the digestive and absorptive processes, and by imparting tonicity to the whole nervous system. The hepatic and the various secretory functions are increased, and a more substantial assimilation of nutriment follows as a natural sequence, and it gives to the system every element required to properly sustain it. In other words, proper balance between waste and repair is brought about.

THE PNEUMONIA CONVALESCENT

WHILE the course and progress of acute lobar pneumonia is short, sharp, and decisive, the impression made upon the general vitality is often profound, and apparently out of proportion to the duration of the disease. Even the robust, sthenic

MILK-BORNE DISEASES

There are no instances of Infectious Diseases arising from the use of Gail Borden Eagle Brand Condensed Milk. It contains NO BACTERIA that produce Infection. In epidemics many dangers to infants can be avoided by the use of



Gail Borelen EAGLE CONDENSED MILK



THE ORIGINAL

THE PHYSICIAN WILL FIND IN "EAGLE BRAND" THE MEANS OF LESSENING THE DEATH RATE IN OUTBREAKS OF INFANTILE DISEASES. This result is due to the modern and sanitary methods of production and manufacture strictly enforced by the Borden Company.

Write to-day for Samples, Analysis, Feeding Charts in any language, also our 50-page book," Baby's Welfare."

BORDEN MILK COMPANY, LTD., MONTREAL "Leaders of Quality"

Branch Office

2 Arcade Bldg., Vancouver, B.C.

Contains Medicinal Properties of
ASPARAGUS, CORN SILK, TRITICUM AND KAVA KAVA
SODIUM SALICYLAT AND P. TASSIUM ACETATE

TWO GRAINS EACH TO THE DRAHM

Waterbury's ASPARAGUS COMPOUND

Empllient

(DIURETIC)

Sedative

INDICATED IN

Genito-Urinary Diseases

Cystitis

Prostatitis

Urethritis

Albuminuria of Pregnancy

Etc.

WATERBURY CHEMICAL COMPANY, Limited 62 JOHN STREET, TORONTO, CAN.

Des Moines, Iowa, U.S.A., Home Office

New York City, U.S.A., 37 Pearl St.

patient is likely to emerge from the defervescent period with an embarrassed heart and general prostration. In such cases the convalescent should be closely watched and the heart and general vitality should be strengthened and supported, and this is especially true as applied to the patient who was more or less devitalized before the invasion of the disease. For the purpose indicated, strychnia is a veritable prop upon which the embarrassed heart and circulation can lean for strength and support. As a general revitalizing agent is also needed at this time, it is an excellent plan to order Pepto-Mangan (Gude). to which should be added the appropriate dose of strychnia. according to age, condition and indications. As a general tonic and bracer to the circulation, nervous system and the organism generally, this combination cannot be surpassed.

GLYCO-THYMOLINE FOR COLDS

At this season of the year the crop of "colds" becomes very numerous.

One of the first efforts of the physician aims at relieving the congestion of the nasal mucous membrane and bringing some degree of comfort to his patient.

Glyco-Thymoline in a 25 per cent. solution, used in connection with the K. & O. Nasal Douche, not only cleanses the nasal passages of the mucous secretions but also reduces the congestion by its exosmotic action, thereby giving the patient a degree of comfort that will be thoroughly appreciated.

PEPTENZYME ELIXIR

Many times have I swallowed a wineglassful of highly-vaunted elixirs of pepsin or pancreatin, and nary a thing did it do for me, except sometimes produce nausea. It had no effect whatever on the lazy stomach for whose relief it was engulfed. Just here I wish to say that, in a discussion as to digestives, I hold one preparation to be all right in this line, and never yet has it failed me as a real digestive. I refer to Peptenzyme Elixir, since this article is not simply one of the supposed digestive agents, but it contains the enzymes and ferments of every gland entering into stomach, intestinal, salivary or splenic digestion. Peptenzyme gives results—that has been proven time and again—and it has well been termed "The Perfect Digestant."

AT THE FRONT

Stands—Penheroin in the treatment of all coughs. Each drachm dose contains:—

Terpine Hydrate gr. 1 Heroin Hydrochlor, gr. 40

In a basis of Essence of Canadian Pine.

A happy combination—expectorant, diuretic, sedative and demulcent, without the clogging effect of preparations of Morphia.

Combined with Creosote at the request of specialists in Phthisis, it has proved invaluable after long trials in large Institutions. It quickly relieves the irritating cough.

Full Particulars from our sole Agent for Canada.

MERVYN E. VANZANT

732 YONGE STREET

TORONTO

OPPENHEIMER SON & CO., LTD.

179 Queen Victoria Street LONDON, E.C.

BRITISH HOUSE ENTIRELY SINCE FOUNDATION

PRUNOIDS

An exceptionally efficient laxative that produces its effects by stimulating and promoting physiologic processes of the intestines without exciting excessive peristalsis.

Employed with conspicuous results in Chronic Constipation, since Prunoids do not cause griping nor reactionary constipation.

DOSE---One to three tablets at bedtime as required.

SENG

An aromatic preparation of **Panax** (**Ginseng**) of well proven utility for stimulating the secretory glands of the stomach and duodenum.

Successfully administered in Functional Digestive Disorders, During Convalescence, and whenever the flow of the gastro-intestinal fluids is retarded or deficient.

DOSE---One to two teaspoonfuls shortly before or during each meal.

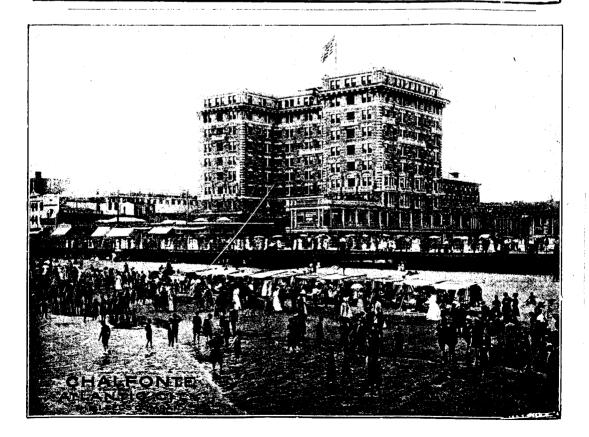
CACTINA PILLETS

A true cardiac tonic prepared from Cereus Grandiflorus.

Useful and effective in Tachycardia, Palpitation,
Tobacco Heart, Arrhythmia, and all Functional
Diseases of the Heart where the heart's action
needs supporting, strengthening or regulating.

DOSE---One to three Pillets three times a day.

SULTAN DRUG COMPANY, St. Louis, Mo.



"THE OVERCOAT SHOP"

Men's Overcoats

First, the style note, and that is to say that the loose garment is the correct thing for Fall wear.

We are featuring these correct styles in finest London tailored overcoats in the Balmacaan and the new set-in sleeve design.

A wide assortment of specially chosen lines for our own high class trade-finest of English, Irish and Scotch weaves.

Shades, colors and patterns that are as exclusive as they are gentlemanly. All Fall weights.

\$30.00 \$35.00

MEN'S HATS-New blocks in soft hats, Derby Hats and Silk Hats-English, American, French and Italian makes.

Montreal

FAIRWEATHERS LIMITED 84-86 YONGE STREET, TORONTO

Winnipeg

TIRES --- A Price to Fit Every Pocket

Compare the following prices and guaranteed mileage with any other Non-Skid tire on the market:

KELLY-SPRINGFIELD

Size 30 x 3½	Price \$30.80	Guaranteed Miles 8,000	Price per 100 miles 38c.
	FIS	SK	
$30 \times 3\frac{1}{2}$	\$16.55	4,000	40c.



K. & S. AUTO TIRE CO., LIMITED Phone N. 6343.

527 Yonge Street, Toronto, Ont.

ROBERT A. GEORGE & CO.

CLEANERS, PRESSERS, DYERS AND REPAIRERS

wish to announce to the Medical Profession that they have removed from 116 Carlton Street to

110 CARLTON STREET

but a few doors west. The telephone number is North 3267, and Physicians should bear in mind that if, for any reason, they are dissatisfied with their present Valet Service, they should immediately call up the above 'phone, as

ROBERT A. GEORGE & CO. DO NOTHING BUT THE BEST OF WORK.

They have a contract service at the very low figure of \$5.00 a quarter, for which they give each suit or article individual attention, calling for and delivering it free of charge.

Remember the Telephone Number North 3267

DOCTOR!

Why not have your tires repaired by us?

We are in a position to give special attention to Doctors' tires. All of our repairs are made with absolutely new material, new fabrics, cement and gum. We have a steam vulcanizing plant and guarantee every job turned out. Don't forget the name and address of the firm.

Hill Vulcanizing and Rubber Co.

193 Victoria Street, Toronto

Telephone M 2847

PURE MILK

The particular attention of the medical profession is called to

The Purity of Farmers' Dairy Milk

Milk is only accepted from farmers whose cows are in perfect health, and where the cattle are housed and cared for in absolutely sanitary barns, and where cleanliness is the first consideration. (The Farmers' Dairy Co., Limited, supply their producers with the most modern milking pails, free of charge.) All Farmers' Dairy milk is strained and then pasteurized, being exposed to a temperature of 142° for 30 minutes and then cooled to 38°, being immediately bottled in bottles that have been first sterilized under a 40-pound steam pressure. The motto of the Farmers' Dairy Co., Limited, is "Cleanliness First."

Physicians can rest assured that, in prescribing Farmers' Dairy milk they are prescribing the best.

THE FARMERS' DAIRY CO., LIMITED

367 Queen Street West

Phone Adelaide 400

TORONTO

FULL OF QUALITY

NOBLEMEN CIGARS

CLEAR HAVANA CUBAN MADE

Smoked by Connoisseurs

Retailed by all first-class dealers throughout Canada at

2 for 25c.

Makers :

S. DAVIS & SONS

MONTREAL

Limited





Trade and Samples Supplied by Lymans Ltd., Montreal, Canada

PURER THAN FILTERED WATER



is by analysis on a par chemically with distilled water. Service by the yellow waggons insures satisfaction. Try us out for a month.

BELLE EWART ICE CO.
Head Office, 156 Yonge St. Adelaide 750

SAL HEPATICA

The Ideal Saline Lliminant

Eliminant

Rheumatic

Conditions

Bristol-Myers Co. New York





COMFORT AND DURABILITY attained by joining the ranks of Loyal Canadians proudly wearing "Mercury" Canadian. Made Hosiery and Underwear.

"Mercury" quality equals the Highest Grade imported.

Excellent choice for Professional men in Mercury range of Mercerised Lisle, Art Silk, Pure Thread Silk, Silk and Wool Mixtures, and Cashmere Hosiery. Balbriggan, Mercerised, Pure Wool, Silk and Wool Shirts and Drawers and Closed Crotch Combinations.

High Grade Natural Wool Underwear for Men, Women and Children.

Also Variety of Styles in Hosiery for Women and Children.

All "Mercury" Lines are Guaranteed

Mercury Mills Limited

HAMILTON and DUNDAS

Head Office: Hamilton, Ont.

The Medical Profession should remember the special facilities afforded by

The Metropolitan

245 College Street - - Toronto

for all forms of entertainment. This firm make a specialty of large and small

AFTERNOON TEAS, RECEPTIONS, WEDDINGS

The management can cater for any function, either at The Metropolitan or at the Private Home. Menus submitted at any price desired, consistent with absolutely first-class quality and perfect service.

Remember the Phone Number, "COLLEGE 666"

Your Convalescent Surgical Patients



will find the most ideal conditions for their rapid recovery at Grove Park Inn, in the mountains of North Carolina, 2400 feet altitude. The cleanest and most sanitary hotel in the world. Every dish boiled first in soap suds, then in boiling running water, and sterilized with heat when dry. Even the silverware is boiled and sterilized. Normal foods, scientifically prepared, making the food as digestible as dietetic foods usually are. Tubercular persons not received under any circumstances.

The Inn is one and a half miles from the centre of Asheville, a city of 32,000. Finest physicians and surgeons within call. Hydrotherapeutic treatment and massage. Milk and cream from Biltmore Dairies; water from mountain springs. Summer climate most agreeable and exhilarating. Altitude makes it cool. Blankets at night. Mosquitoes unknown. For photographs and full information, call at the office of

MR. NEIL MOONEY, General Agent New York Central Lines, Montreal, Canada; or Mr. FRANK C. FOY, New York Central Lines, Toronto, Canada; or write direct to

GROVE PARK INN SUNSET MOUNTAIN ASHEVILLE, N.C.

INGRAM & BELL

LIMITED TORONTO

Obstetrical Bags

Our Hand Sewn, Best Quality Cowhide Obstetrical Bag with 18-inch copper Sterilizer pulling out at end, two separate compartments, has been giving satisfaction and sells for \$15.00. This is BB.22 in our Sundry Catalogue.

This and other Obstetrical Bags and leather goods listed on pages 22 to 25 of our new Sundry Catalogue. If you have not received your copy, kindly advise us.



Line of Physicians' Office Equipment

IS COMPLETE, UNEXCELLED and GUARANTEED



Irrigating Treatment Examining |

Specialists `

Examining CHAIRS
Treatment CHAIRS

Medicine Instrument CABINETS



le 8 " Craftsman Chair " ith Fountain Cuspidor

Vibrators, Accessories Reception Room Furniture



 $_{Instrument}^{Dressing}$ Stands

Specialties Account Records Extension Brackets



Irrigating Table, Style 138 Irrigating Stand No. 2 You can't afford to buy your equip-



Style 152

work done by experienced mechanics. SEND FOR CATALOG and List No. 2 of Display Samples

ment without investigating our line. All materials carefully selected, and all

PRINCIPAL AGE	NCIES:
110 E. 23d St	
25 South 17th St	

W. D. ALLISON CO., Manufacturers 811 N. Alabama St., Indianapolis, Ind.

Detweiler Bldg......Los Angeles, Cal.



The Peculiar Advantage of the

Marvel "Whirling Spray" Syringe

is that The Marvel. by its Centrifugal action, dilates and flushes the vaginal passage with a volume of whirling fluid, which smooths out the folds and permits the injection to come in contact with

its entire sucface.

The Marvel Company was awarded the Gold Medal, Diploma and Certificate of Approbation by the Societe D'Hygiene de France, at Paris, Oct. 9, 1902.

Metal Garages for Doctors

44 E. 23rd Street, NEW YORK

MARVEL COMPANY

In view of the need by Physicians of a suitable Watertight Building for their Cars, the Profession should remember that I make a specialty of Metal Clad Garages, the equal of which, at the price, cannot be found anywhere in Canada. These buildings are absolutely watertight. They can be equipped with or without flooring, and can be erected ready for service on short notice. If you need a Garage, Doctor, don't forget to see me.

JAMES GOW

Sheet Metal Worker
177 Dundas Street, Toronto

Office Phone - Park. 3587 Residence Phone Coll. 6315

DOCTOR.

When your patients ask you to advise them as to a Nutrient Tonic and Appetizer, kindly remember

X.L. Worcestershire Sauce

In the first place, it is unlike its competitors in being ABSOLUTELY PURE AND FREE FROM ADULTERANTS, something that cannot truthfully be said about somewhat similar products. X.L. Worcestershire Sauce will stimulate the appetite by increasing the secretion of gastric juice and thereby hasten convalescence. Please specify "X.L." when prescribing, in order to secure the genuine article. Remember that this sauce is Canadian made. Procurable from all first-class grocers or from

CARTWRIGHT - LEITH - ROY CO.
Office and Factory 519 King St. West
TORONTO

BARNES' INVALID'S PORT A Tonic Wine of High Quality

When a doctor prescribes a tonic wine, before recommending any particular brand he wants to know that it is a wine of quality. In producing our tonic wine we have taken an old, well-matured port, of delicious flavor, giving it sufficient pure medication, but withal palatable, making a splendid pick-me-up, tonic, or digestive. Our Seven Year Port is same wine without medication. We want every doctor to recommend these wines, a card will bring a sample bottle to you :: :: :: ::

The Ontario Grape Growing & Wine M'f'g Co. ST. CATHARINES, ONT.



MARATHON TIRES

are made on the new method, viz., Single cure wrapped tread, that is, cured with one vulcanization in open heat by live steam; tread and carcass—the entire tire—is cured, just once and by live steam. The advantages of this method are many. Have it explained to you and you will be a convert to the new method. Guaranteed for 5000 miles.

The

Marathon Tire & Rubber Co.

Limited

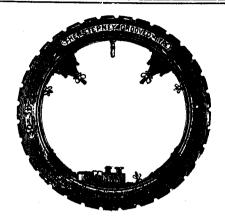
ST. CATHARINES.

ONT.

Toronto Office: 149 Church St.

DOCTOR

You are frequently held up on the road, are you not, from a puncture and usually when you are in the most hurry to attend a case? We have a cure for this and would like to prescribe it for you, to be taken at once. It is



The Stepney Wheel

One dose is all that is necessary, as, once you buy the STEPNEY WHEEL, all symptoms of trouble disappear. The STEPNEY WHEEL can be got in all sizes. Call on us and allow us to explain how quickly it can be equipped to your car.

THE STEPNEY MOTOR WHEEL OF CANADA

120 KING STREET EAST, TORONTO

The Vanderbilt Hotel

THIRTY-FOURTH STREET AT PARK AVENUE

NEW YORK

¥

The Most Conveniently Situated Hotel in New York

AT THE THIRTY-THIRD STREET SUBWAY

WALTON H. MARSHALL

MANAGER

THE NATURAL MINERAL WATER OF

VICHY CÉLESTINS

FRENCH REPUBLIC PROPERTY

DISORDERS of the LIVER GOUT

DIABETES, RHEUMATISM, GRAVEL, ETC.

Beware imitations

Mention the spring "CÉLESTINS"

WHY YOU SHOULD BUY THE LIGHTEST

BISMUTH CARBONATE

"To put the matter in a nutshell, Bismuth Carbonate is merely an internal dusting powder. Its therapeutic value (provided it be pure) is entirely proportional to its fineness. The part of it that is too dense and coarse to cling to the walls of the stomach and other mucous membranes simply passes on and is excreted without doing the patient any harm and just as little good. Its extreme density simply means that more of it will be left in the bottom of the bottle by the nurse or the out-patient; in other words, more good money will go down the sink." (W. MACADIE, Ph.C. in the Hospital Gazette).

FOUR OUNCE OF YOUR BISMUTH CARBONATE EASILY FILL A

"MAY AND BAKER'S"

It is the lightest on the Market and no dearer than other Brands.

KAOLIN MERCK

Send for review of clinical reports

By reason of the great adsorptive powers of Kaolin for bacteria it is being used internally to check the diarrhea of dysentery, of typhoid, and of cholera. Diphtheria bacilli have been removed from the throat by simply swallowing the powder. By insufflating it into the nose the nasal mucous membranes have been freed of streptococci and other bacteria.

Specify KAOLIN MERCK. It answers the strictest requirements of the Pharmacopoeia

MERCK & CO., 26-28 St. Sulpice St., Montreal

The remarkable germicidal power of

JEYES' FLUID

has been proven beyond question. There is no doubt as to its value where a strong non-caustic disinfectant is indicated.

JEYES' FLUID has been employed for many years by the best known Medical authorities and Hospitals throughout Great Britain, and has already a unique reputation among members of the Profession in Canada.

All of the Jeyes' Preparations are obtainable through any large wholesale Drug House in Canada, being also carried in stock by many retail chemists.

Maclure & Langley

Limited

(Canadian Agents for Jeyes' Sanitary Compounds Co. Limited, London)

TORONTO

MONTREAL



The Satisfactory Correction

of the various forms of

INTESTINAL STASIS

that ofttimes tax the skill of the most resourceful practitioner, is measurably hastened by the regular use of

PLUTOWATER

In chronic cases of fecal stagnation it induces natural peristals is without griping or irritation. Cone dedly a superior adir to in the treatment of gout, chronic rheuman. 1, uric ucid diathesis and nephritis.

Samples, clinical data, literature interestingly descriptive of hygienic methods of bottling Pluto and the acknowledged advantages of America's famous Spa, promptly supplied by



FRENCH LICK SPRINGS HOTEL CO.