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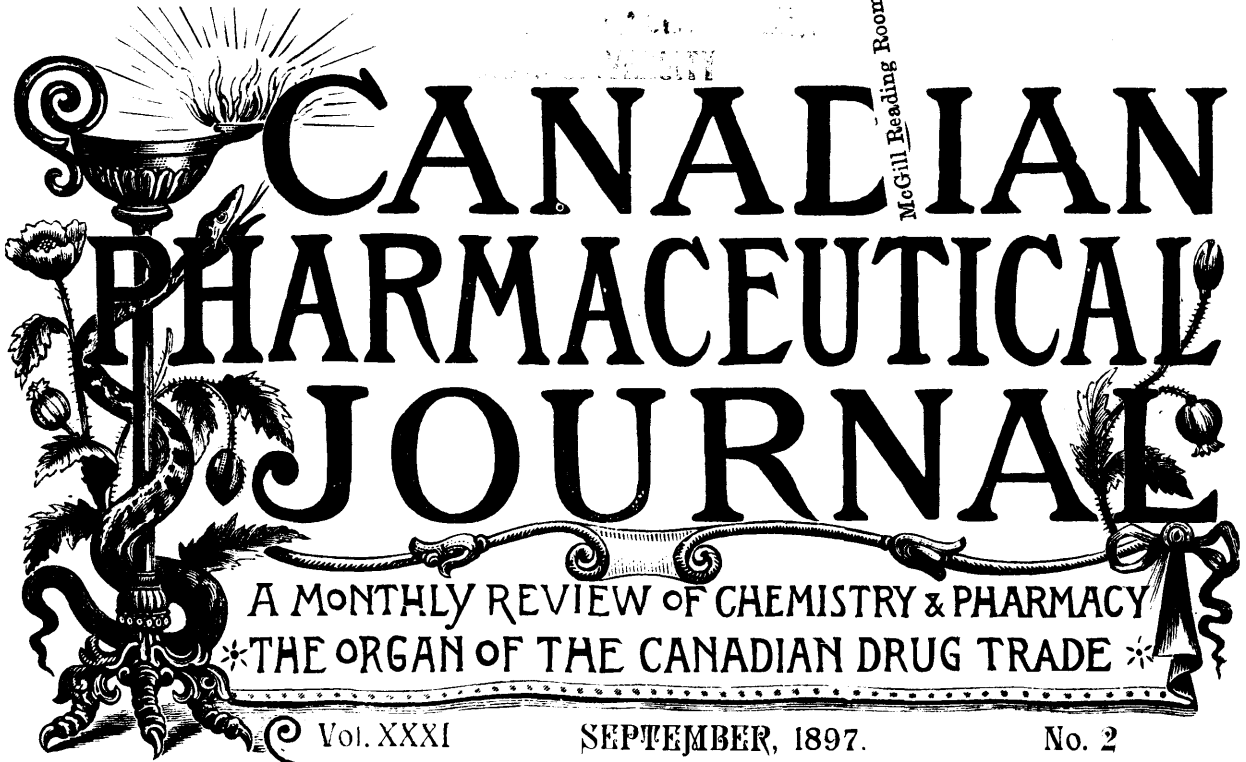
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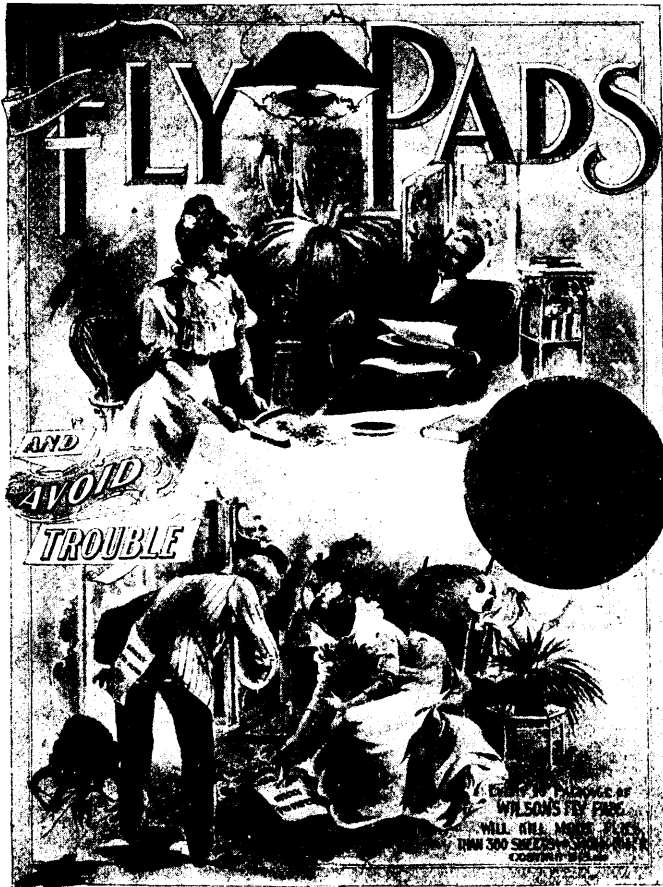
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CANADIAN PHARMACEUTICAL JOURNAL

A MONTHLY REVIEW OF CHEMISTRY & PHARMACY
THE ORGAN OF THE CANADIAN DRUG TRADE

Vol. XXXI SEPTEMBER, 1897. No. 2



Look Out

For the next hot spell. It is almost sure to come and the demand for

FLY PADS

will then be greater than ever.

Two Months

Of the fly season are yet to come and the little pests are more annoying in the fall than in early summer.

Order from any Wholesale Drug House.

Archdale Wilson & Co.

Wholesale Druggists
HAMILTON, ONT.

"Stainless Iodine Ointment."

A great advance in Iodine Preparations.

Does not discolor nor crack the skin.

Is being used by prominent physicians and the Toronto General Hospital.

It is put up in bottles containing 1 oz. each; 12 bottles are placed in an attractive box for counter exhibition.

Price, \$1.80 per doz., Retails at 25c. per bottle.

ORDER THROUGH WHOLESALE DRUGGISTS
OR WRITE

G. BROWN & CO.,

Proprietors

PARKDALE, ONT.

THE UNIQUE LINE OF THE YEAR



THE UNIQUE ASTRINGENT PENCIL

FOR CUTS AND SCRATCHES.

An Everyday Need
An Everyday Seller

If quick sales are what you want

TRY THIS.

Handsome counter card supplied with each order.

All Wholesale Houses keep them.

... SEND FOR SAMPLES TO ...

THE

WINSOR BARKER CO.

LIMITED

50 Adelaide St. W., TORONTO



Baby's



Own



Tablets.



The ideal medicine for children, and are bound to become a household word. They are distinctly a pioneer and have no competitors in the field.

EVERY DRUGGIST SHOULD HAVE THEM. RETAIL AT 25c.

Baby's Own Powder for nursing and toilet, best on the market. Large box. Good seller. 25c.

Electric Pills for Blood and Nerves, Heart and Brain Tonic. 50c.

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Seven Spices. Tablets for all Stomach Troubles. 50c.

Pleasant Powders for Headaches, Monthly Pain, Colds, Neuralgia, etc. 25c.

Write us if your Wholesaler is not stocked.

Note—We do not sell our goods to departmental stores or to cutting concerns, and we will, as in the past, endeavor to protect the interests of the retail druggists.

The Dr. Howard Medicine Co.,

BROCKVILLE, ONT., CAN.

Francis U. Kahle

Sole Agent for the Dominion of Canada
and Great Britain for

D. RANSOM, SON & COMPANY
STANDARD FAMILY MEDICINES

Ransom's Hive (Croup) Syrup and Tolu

for Coughs, Croup, etc.

Trask's Magnetic Ointment

for Inflammation, etc.

Dr. Ransom's King of the Blood

is being introduced in the Dominion of Canada.

This remedy has had an extensive sale throughout United States for the past thirty years.

Being desirous of securing the co-operation of the drug trade on these articles, if you will write for our special offer in advertising it will be well worth your while. This special offer will be open for twenty days only after the issue of this paper. Address

FRANCIS U. KAHLE,

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Grand Trunk Railway System.

The GREAT INTERNATIONAL ROUTE between the EAST and the WEST.

THE ONLY LINE RUNNING FOUR FAST EXPRESS TRAINS DAILY BETWEEN

MONTREAL, TORONTO, NIAGARA FALLS AND CHICAGO.

The Great Scenic and Tourist Route. — The only line affording delightful views of all the principal Cities and points of interest along the picturesque banks of the St. Lawrence River and shores of Lake Ontario.

The only all rail route from the West to Cacouna and Dalhousie, the fashionable Sea side and Sea bathing resorts on the Gulf of the St. Lawrence.

THE ONLY ROUTE TO THE MUSKOKA AND MIDLAND LAKES.

SOLID EXPRESS TRAINS

Steam heated and electric lighted between Montreal and Halifax, via Levis and the Intercolonial Railway, affording passengers a panoramic view of the historic City of Quebec, its fortifications, Wolfe's Cove, the Plains of Abraham, the Isle of Orleans, the Falls of Montmorency, the unsurpassed and mountainous scenery of the Metapedia Valley. The Salmon fishing grounds of the Metapedia and Restigouche Rivers, the Baie de Chaleur and the Laurentian range of the Gaspé Coast.

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MONTREAL

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MONTREAL

Reed & Carnrick's Preparations.

Protonuclein (Powder)

" (Tablets)

Carnrick's Soluble Food, 8 oz.

" " " 16 oz.

Lacto Preparata, 8 oz.

" " " 16 oz.

Lacto-Cereal Food, 8 oz.

" " " 16 oz.

Cordial Analeptine.

Sulpho-Calceine.

Zymocide.

Pancrobrillin (Liquid).

" (Pills).

" (Pills, comp. and tonic).

Corrigent Pills.

Analgesine Tablets.

Cardiene Tablets.

Cholagogue Tablets.

Diureticine Tablets.

Hypnotine Tablets.

Innervatine Tablets.

Kumyss Powder.

Sulphur-Tartrate Tablets.

Velvet Skin Soap.

" " Powder.

Duncan, Flockhart & Co.'s

Blaud's Pill Capsules

ARE SOFT AND FLEXIBLE

NEVER BECOME HARD

NEVER BECOME OXIDIZED

NEVER VARY IN STRENGTH

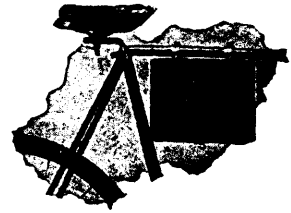
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FOR SALE BY WHOLESALE TRADE.

R. L. GIBSON, General Agent,
88 Wellington Street West, TORONTO.

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\$5.00, \$8.00, \$10.00, \$25.00.

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OF BICYCLING AS PHOTOGRAPHY....



Pocket Kodaks Cartridge Kodaks Bullets and Bulls=Eyes

Are especially adapted to use a-wheel. They use our light-proof Film Cartridges and can therefore be

LOADED IN DAYLIGHT.

They are the lightest and most compact cameras made, and with our perfected bicycle carrying cases are entirely out of the way, yet instantly available for use.

"Bicycle Kodaks" is the title of a little booklet that tells all about them. Free for the asking.

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Kodak Pictures.
\$1,475.00 in Gold.
Send for "Prize Contest"
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EASTMAN KODAK CO.

Rochester, N.Y.

Kindly mention this Journal when writing to Advertisers.

HAEMOFERRUM.

HAEMOFERRUM is a natural proteid compound of iron, aseptically prepared from fresh bullock's blood, and thereby differing entirely from artificial mixtures of albumen or peptone with iron. It is very soluble, of sweet odor, of pleasant taste, neutral in reaction, and is non-styptic, non-irritating and non-constipating. In short, it is haemoglobin, the concentrated active principle of the blood itself, in its best form, viz.: oxyhaemoglobin.

Haemoferrum is offered in Pilloids (each containing 3 grains), a new form of medication of lenticular shape (easily swallowed), being simply the powdered drug enveloped in a transparent, extremely soluble, continuous coating. These pilloids are put up in screw top flasks of 100 each, and are sold at \$6 00 per doz.

• We also offer a Liquid Haemoferrum in the form of a delicious cordial containing in each teaspoonful 6 grains of Haemoferrum. This is put up in 8-oz. bottles and sold at \$8.00 per doz.

We would be pleased to submit samples of Haemoferrum Pilloids and Liquid Haemoferrum to all pharmacists who may desire them (as well as literature on the subject), by mentioning this journal.

FREDERICK STEARNS & CO.

MANUFACTURING PHARMACISTS,

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LONDON, Eng.
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WINDSOR, Ontario

ADAMS'

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Send for new advertising matter to decorate your window and draw trade.

ADAMS & SONS COMPANY, 11 & 13 Jarvis Street,
TORONTO, ONT.

The Wingate Chemical Company

B. E. MCGALE, Manager.

Corner of Notre Dame
and Maple Avenue, Montreal.

PROPRIETORS OF

Stanton's Pain Relief
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Wingate's Dyspepsia Tablets

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Maltine Manufacturing Co.'s Preparations.

MALTINE (Plain).
MALTINE Ferrated.
MALTINE with Cod Liver Oil.
MALTINE with C.L.O. and Hyphos.
MALTINE with Pepsin & Pancreatine

MALTINE with Hypophosphites.
MALTINE with Cascara Sagrada.
MALTINE with Peptones.
MALTINE with Phos. Iron Quinia and
MALTINE WINE. [Strychnia.

MALTINE WINE with Pepsin and
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MALTINE WINE Beef and Iron.
MALTINE with Coca Wine.
MALTO-YERBINE.

New York Pharmacal Association's Preparations

LACTOPEPTINE POWDER (ounce bottles).
 " (¼ lb. bottles).

LACTOPEPTINE ELIXIR. Plain.
 " Iron, Quinia and Strychnia

Lactopeptine Tablets.

Arlington Chemical Company's Preparations.

Beef Peptonoids (Powder).

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Peptonoids Iron and Wine

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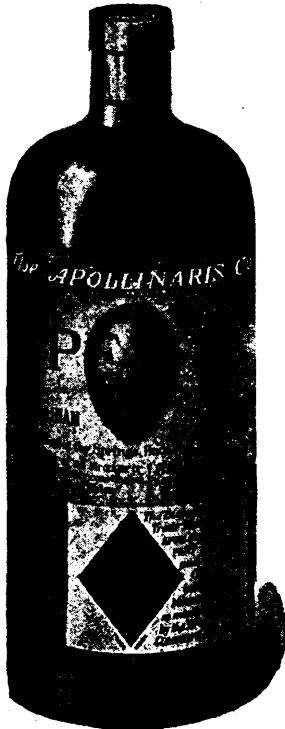
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UNDER EMINENT SCIENTIFIC CONTROL.

"APOLLINARIS"
 THE BEST NATURAL APERIENT WATER



The Prices to **RETAILERS** are as follows:

\$5.50 Case of 25 large glass bottles

\$8.50 " 50 small " "

\$8.50 " 100 glass ¼ bottles

SEE that the Labels bear
 the well-known **RED DIAMOND MARK**
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CANADIAN PHARMACEUTICAL JOURNAL AND PHARMACAL GAZETTE

VOL. XXXI.

TORONTO, SEPTEMBER, 1897.

No. 2

ESTABLISHED 1868.

Canadian Pharmaceutical Journal

—AND—

PHARMACAL GAZETTE

ISSUED MONTHLY.

EDITOR J. E. MORRISON

BUSINESS MANAGER G. E. GIBBARD

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CANADIAN PHARMACEUTICAL JOURNAL
287 King St. West, Toronto, Ont.

THE ANNUAL MEETING.

The secretary's notice for the annual meeting is in the hands of the members of the Ontario Society of Retail Druggists, and it is sincerely to be hoped will receive proper attention. It is not possible for every druggist in the province to attend, but that fact need not operate to prevent the meeting being a success. We recall the meeting of 1895, and remember its successful nature. Now, what is to prevent all those who attended then and are still in the drug business being present on September 8th? Has the business so much improved, and is it now in such a satisfactory condition that those engaged in it have nothing further to do but sit calmly down and enjoy the fruits of their past labors? It is of importance that every druggist should interest himself in this meeting, as we suggested last month; where it is impossible for all to attend, a representative of cities, towns, or districts should be sent. In an arrangement of this nature the share of expense to be borne by each individual would be insignificant. All that was anticipated of the society has not been realized. Still much good has been done, and more benefit will follow if only interest in the organization is kept alive. One matter of importance will claim attention. The manufacturers are working on a plan for securing uni-

formity in the price of patents, and will present the scheme for the society's consideration. The meeting of the manufacturers is called for Tuesday, the 7th, and the Wholesale Jobbers' Association have decided to meet the same day. The members of these associations are fully alive to the situation, and the retailer has an equal interest with them in the object they are endeavoring to attain. Now, we say to every druggist, interest yourself in your own welfare sufficiently to make the meeting a success. Arrange your affairs and come to Toronto on September 8th.

THE VIN MARIANI PROSECUTION.

We referred in last issue to the action which had been taken against the firms of Hooper & Co. and T. Eaton & Co. for the sale of Vin Mariani as an infringement of the Ontario License Law. The matter came up before Magistrate Kingsford for hearing in the Police Court on Aug. 11th. For the prosecution Inspector Hastings swore to the purchase of the wine. Inspector Dexter testified that it could be purchased in saloons, where it was kept as a beverage. Prof. Ellis, of Toronto School of Medicine, had analyzed it, and found 13 per cent. of alcoholic spirit. Prof. Shuttleworth, for the defence, considered it a purely medicinal compound, such as the tinctures of a drug store, and considered the spirit present necessary to preserve the resinous matter from precipitation. A formidable array of medical men testified that they had prescribed the wine in their practice, and looked upon it purely as a medicinal compound, used as a nerve tonic, and not a beverage. The effort made to bring it under the operation of the license law because it was intoxicating in its nature was neatly met by Mr. McLaren suggesting that if such an interpretation held, then all tinctures of the B.P. would have to follow, as they were intoxicant. The instructions sent out by the Hon. Mr. Harcourt to inspectors regarding proprietary preparations was put in in defence, and there being a doubt as to the intention of the Act, the magistrate decided to refer the matter to the Attorney-General's department for a ruling.

On account of the presence of the British scientists in the city, and the time being occupied in entertaining them, the matter has not yet been considered by the Government, but will receive attention in course of a few days.

MEETING OF THE BRITISH ASSOCIATION.

1897 will deserve to find a place in the annals of Canada as a red-letter year. It surely is an epoch marker. In this year passes away forever the old colonial idea, together with the last semblance of dependency. In our progress toward national greatness we have passed another mile-post, to which we can never return, and we assume our proper position in the great empire to which we belong.

"Daughter am I in my mother's house, mistress in my own," was a happy inspiration which expresses the situation in the fullest sense. Canada is the objective point to which is directed more of thought and attention by the motherland than is bestowed on any other part of her domain.

In the very front rank of her great men stands our own Sir Wilfrid Laurier. In the Council of the nation his voice and influence is sufficient to direct the policy of the Empire in her dealings with the colonies. The meeting of the British Association in our midst is another event the importance of which the most clear-sighted of us cannot estimate. Possessing as we do inexhaustible wealth of forest and mine, to say nothing of our agricultural possibilities, it is an absolute necessity that our potentialities be forced upon the attention of the capitalists of the world's metropolis, that such capital may be directed toward developing these great natural advantages.

The brilliant lecture of Prof. Roberts-Austen in Massey Hall on the "Metals of Canada," coming as it does from the Master of the Royal Mint, a man of all men able to speak with authority, did much to open the eyes of the great men assembled to the vastness of our riches. These men will prove powerful witnesses for us in the court of capital when they return, and we may confidently count on great benefit accruing as the result of this Toronto meeting of the association.

SUCCESSFUL MEETINGS.

Such appear to be the order of the day in pharmaceutical circles. From the different points where pharmacists assemble come reports of largely increased attention, more interesting sessions, and greater enjoyment of the social functions which occupy a considerable space on the programmes of these annual gatherings. The British Pharmaceutical Conference has been holding its thirty-fourth annual meeting in the city of Glasgow, Scotland, and whether judged by the brilliancy of the company assembled, the number of members present, or the importance of papers presented, this meeting is quite the equal, if not superior, to any of its predecessors. We have not space for even an abstract of all the papers read.

Word comes to us from Lake Minnetonka that the American Pharmaceutical Association, now in session there, is experiencing one of its most successful gatherings.

A few months ago the Pharmaceutical Association of Quebec held its annual meeting and banquet in Montreal. Both were satisfactory. The latter

particularly surpassed the expectations of its most sanguine promoters. In other provinces, both east and west, reports of similar successful gatherings come to us. Among our neighbors to the south the same condition of affairs prevails, and State Pharmaceutical Associations have experienced a revival of interest in their meetings which augurs well for the profession. Why not Ontario join the procession? The meeting of the O.S.R.D. announced for September 8th, can be made the occasion of an interesting and profitable gathering, if only the members are so disposed.

A PLAIN STATEMENT OF THE CASE.

We clip the following from the *Pharmaceutical Era* of August 19th, and commend it to the attention of manufacturers in Canada. We have given considerable attention to this subject of late, and welcome this plain talk in others:

"But there is one topic, the most significant and important one, which is likely to keep coming to the surface continually at both meetings, but which has been reserved for last mention. It is, shortly, the patent medicine and substitution question. It is undeniable that the retail trade is in an ugly and exasperated frame of mind. It has been forced to sell patent medicines at no profit, on top of which it has been called all manner of names in the public prints, until patience has ceased to be a virtue, and the worm evidences an inclination to turn.

"Retailers are tired of doing business for fun, of working for the sole benefit of proprietors, and getting nothing but slaps and insults for their pains. Manufacturers and jobbers have sacrificed none of their profits on patents, the cost and loss occasioned by cutting have come out of the retailer's pockets, and he is meditating a policy of retaliation. In fact, this policy is even now well in operation, as witness the increase of co-operative manufacturing schemes, the prosperity of non-secrets and the general pushing of home-made substitutes, all of which is perfectly legitimate and business-like, notwithstanding the howls of the 'subsidized press' ament substitution.

"And the proprietors have only themselves to blame for the condition of affairs they find so distressing. If they are wise, and it is not already too late, they will adopt some method whereby retail druggists will become sharers, as once they were, but now are not, in the profits of the proprietary medicine business. The retailer is about come to the point where he will say, do this, or I cease to handle your goods."

A NOTE FROM ABROAD.

Here is some information for we colonials, coming from London, Eng. It was brought out in the evidence pertaining to the unfortunate burning to death of a lady while using a French hair dressing, which in some unaccountable manner caught fire during the operation:

"Quite possible, because, as I say, the smallest

“An Infant Food Approaches Perfection in the Degree in which it Resembles Human Milk.”

“I have at frequent intervals analysed the humanised milk as prepared with the Peptogenic Powder, have made many analyses of milk and of ‘infant foods,’ and have studied the various methods of treating milk for the artificial feeding of infants. As a result of this experience, I feel confirmed in the conviction that the Peptogenic Milk Powder with the method given is the most exact, natural, and practical means at present known of rendering cows’ milk suitable as a comprehensive substitute for woman’s milk.”

Dr. ALBERT R. LEEDS.

“Cows’ milk, modified by the addition of water, cream, and Peptogenic Milk Powder, offers a product containing to the full extent all of the proximate principles present in human breast milk and wholly free from extraneous admixtures. The proportion of solid matter, fat, albuminoids, carbohydrate, and inorganic salts corresponds as closely as one could ask with what is considered as the average chemical composition of mother’s milk, and in this respect the product differs notably from all of the other products examined. Further, the process of modification takes into account the radical difference between cows’ casein and the human casein, and affords a method by which the former can be modified to a closer resemblance to the latter without the addition of any substance that will permanently interfere with the purity of the final product.

“The general resemblance of milk modified by the Peptogenic Milk Powder to the infant’s natural supply is a very striking one.”

Dr. R. H. CHITTENDEN.

“The object to be accomplished in the preparation of cows’ milk is to make it resemble human milk as much as possible in chemical composition and physical properties.

“When properly prepared, the resultant, so-called ‘humanised milk’ [prepared with Peptogenic Powder] presents the albuminoids in a minutely coagulable and digestible form; has an alkaline reaction; contains the proper proportion of salts, milk, sugar and fat; is not bitter in taste, being but partially peptonised, and in appearance as well as chemical composition resembles human milk.”

Dr. LOUIS STARR.

PEPTOGENIC MILK POWDER yields the “perfection” of an infant food. It renders cows’ milk almost identical with human milk.

**FAIRCHILD BROTHERS & FOSTER,
NEW YORK.**

Kindly mention this Journal when writing to Advertisers.

RADNOR WATER.

The Purest and Most Delicious of Natural Table Waters. Fresh and Sparkling from the Canadian Laurentian Hills, specially adapted for use in the sick room, and unequalled as an exquisite dilutant with wines and liquors.

ANALYSIS OF RADNOR SPRING WATER.

By **J. T. DONALD, M.A.**, Professor of Chemistry, Medical Faculty, Bishop's College, Analytical and Consulting Chemist and Assayer.

MONTREAL, June 14, 1894.

"I hereby certify that I have analyzed the sample of Radnor Water received from the Canada Iron Furnace Co., Limited, and find the following results in 10,000 parts of water:

Chloride of Sodium	14.354	Bicarbonate of Sodium ..	1.167
Chloride of Potassium ....	.211	Carbonate of Lime	2.940
Sulphate of Sodium .....	.210	Carbonate of Iron	Traces
Sulphate of Magnesia	1.262	Silica .....	.145
Bromide of Sodium .....	.080		
		In 10,000 parts of water..	20.899

"Purely natural water, brilliant, sparkling, and delicate to the taste."—*The Lancet*, London, Eng.

"Radnor is a most refreshing and palatable mineral water for table use, and mixes well with any wines or spirits. It deserves to take its place in the front rank of table waters."—*The Nursery News and Hospital Review*, London, Eng.

RADNOR WATER CO., - - - MONTREAL and RADNOR, Que.

"Radnor" can be obtained from all leading Druggists, Grocers, and all principal Clubs, Hotels, Restaurants, etc.

Our Mills keep Grinding

And their Product is

Pure Powdered Drugs.

Our Crude Drugs are selected with great care by **EXPERT BUYERS** in the markets of Europe and America.

Druggists

Can rely on the perfection of their pharmaceutical preparations who use our goods.

Put up in $\frac{1}{4}$, $\frac{1}{2}$, 1 and 5-lb. packages.

The Holgate-Fielding Co., Ltd.,
TORONTO, ONT.

Fine Confectionery for Druggists

Stewart's Extra Strong Horehound.
Stewart's Cough Drops have no equal.
Stewart's Floral Tablets.
Stewart's Fine Chocolates in great variety.
Stewart's Medicated Lozenges.

Before placing your orders for goods in this line, send to me for list and prices.

A. J. STEWART

410 Queen St. W., TORONTO.

TEABERRY

FOR
THE **TEETH**

PLEASANT AND HARMLESS
TO USE 25c.

ZOPESA CHEMICAL CO. TORONTO

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spark of electricity given off from the lady's hair might have caused the mischief. I confess I should like to make some experiments in regard to this matter of human electricity. I know a lady who was one evening making her toilet when, looking inside her bodice, she noticed a spark, and proceeded to douche herself with water, imagining that she was on fire. The spark was undoubtedly the result of electricity. But the amount of electricity in individuals varies, and certain conditions of the atmosphere tend to assist its development. In Canada, for instance, where they heat their rooms with stoves, and the air gets very dry, the slightest friction will produce electricity. Two people walking across the carpet will generate so much friction that when they shake hands there will be a mild electric shock. Indoors in winter it is hardly safe to kiss in Canada, lest an electric spark should be produced."

THE INDUSTRIAL EXHIBITION.

Pharmacists visiting the Industrial Exhibition, Toronto, will find a couple of exhibits of interest to them. Near the eastern entrance, in the centre aisle of the ground floor, is located the space occupied by the Beaver Flint Glass Co. This should attract the pharmaceutical visitor, not only by the display made, but also because it represents the only successful industry of the kind in Canada. Through the columns of the Journal it has been introduced to the trade. The company's factory, on the corner of Parliament and Winchester streets, Toronto, has been in operation for about one and a half years, and their success has been most gratifying. Besides an exhibit of a full line of the goods manufactured, such as homeo vials, glass syringes, ointment pots, etc., etc., the company will show the process of manufacture of homeo vials, two workmen being actually engaged in turning out the goods, while two others will give exhibitions of fancy glass blowing and glass spinning. This point should not be missed by any visitor to the fair. The company is not satisfied with past success, but propose adding to their business a full line of prescription ware and bottles of all kinds; such an enterprise should meet with the most liberal patronage from the business men of the Dominion. "Canada first" should be the motto, and here is an opportunity to put it into practice.

Another exhibit of equal interest to pharmacists is to be found in the first balcony, against the north wall, immediately at the landing of the main stairway. This is the exhibit of the Quickcure Company, of Quebec. The preparations of this company have been received with such flattering commendations by the medical profession wherever used that they feel justified in taking advantage of every opportunity to bring it to the notice of the public. The arrangement of their exhibit is tasteful and taking. A visit to their section should be made by every visitor to the grounds. This company have put forth considerable effort, and so far

have been able to protect the retailer in securing a fair profit on their goods. The company is anxious to make the acquaintance of the druggists and invite you to call at their section.

Editorial Notes.

The young man, or the old man either, for that matter, who is establishing a business, cannot afford to give any of his attention, time or money to outside enterprises. To start a pharmacy and to get it into a good paying condition requires the very best efforts of any man who is not a business prodigy. The druggist who wishes to amuse himself with side-shows had best wait until he is in a position where he can afford to lose the larger part of his capital.—*Spatula*.

This paragraph will bear pondering over; there is a lot of wisdom in it.

The City Council of Chicago passed a couple of ordinances at the meeting of July 12, which will have a material influence on departmental stores. The first prohibits the sale of meat and groceries in stores where either dry goods, hardware, jewellery or drugs are kept, and the second deals in a similar manner with liquors, wine, and beer. Now, if the interests of the public require safeguarding in the matter of their food and beverages, how about their medicines? It is generally accepted that the proper handling of these requires skill and care. Can they get such from departmental store employees, whose only recommendation is that they are willing to work for small wages.

Messrs. Michel-Dansac, and Chassagne have patented their process of photographing in colors, and the formula for the different solutions have been published. They are a little complicated, and one is inclined to imagine that whatever may be the value of the process, the formula given are of such a nature that few will be tempted to try the combination. They look somewhat as if contrived to keep any but the patentees from putting them up.

According to H. Beauregard (Acad. des Sciences), ambergris is an intestinal calculus formed in the sperm whale. When first formed it has a very disagreeable odor, but after some years it loses this and acquires the agreeable odor of commercial ambergris, through the agency of a comma bacillus similar to that of cholera.

A NEW FORM OF DIALYSER.—A correspondent of the PHARMACEUTICAL JOURNAL recommends the ordinary porous flower pot as an efficient substitute for the parchment dialyser, as a much larger surface is exposed by which diffusion is more rapid.

Formaldehyde in 10 per cent. solution hardens the gelatine film, if negatives are allowed to stand in it for five or ten minutes after fixing, so says E. A. Wheatley in *Merck's Report*, and that Solio prints soaked in this solution do not frill or stick to the ferrotype in burnishing.

POLISH FOR ALUMINUM VESSELS.—The *Pharmaceutical Era* recommends a solution of 30 gm. of borax in 1 litre of water, to which a few drops of ammonia have been added.

An Australian druggist has patented a new bicycle wheel which is intended to do away with the pneumatic tire.

The New South Wales Pharmacy Bill passed the Legislature of that province and came into force July 1st.

Original Papers.

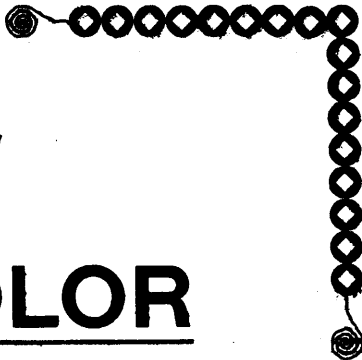
SOME RECOLLECTIONS OF PHARMACY TWENTY YEARS AGO.

I have been asked to give my recollections of pharmacy in this province twenty years ago. Well, my first recollections of pharmacy are in connection with almanacs, and being chased out by irate clerks when on a collecting tour; and the beauties of the brilliantly-colored show bottles which filled my youthful breast with the rash desire to one day be a druggist, a person then considered by the public to be only second in importance to the physician. In due course of time, after mastering sufficient of Caesar's "De Bello Gallico" and Virgil's "Eneid," Euclid, and the other subjects necessary to be admitted within the sacred precincts of the Temple of Pharmacy, I was duly apprenticed to a then well known pharmacist, and with proud mien and exultant heart I started at my first day's work. But, alas, for my youthful aspirations, instead of being inducted into the mysteries of the test-tube and retort, I was handed an ordinary, every-day broom, and told to sweep up and "get a hustle on, too," a rather hard beginning, but I went at it. Then came the cleaning up, washing the mortars and graduates, etc. Like all boys of fifteen, I was slightly green, but not sufficiently so to pay a quarter to be told the great secret of cleaning greasy graduates, which consisted in rubbing them out with sawdust. After that job was finished I was given a No. 12 mortar and a pound of orris root, and was told to "smash it up fine." I smashed it, and the mortar into the bargain. Now, I had been brought up very carefully, and had never heard anyone swear before, but I quickly came to the conclusion that there must be something in the atmosphere of a drug store which conduced to a rapid and vivid flow of language, for, when I gravely informed the head clerk that the orris was smashed and the mortar as well, the lan-

guage used, for variety and force, was simply unequalled, and my youthful sensibilities were shocked. That was my first experience with a pestle and mortar. The presiding genius of the establishment was an individual who did not know much (it was just after the Pharmacy Law had come into force), and he had an idea that no one needed instruction. The result was that in pounding the orris vigorously, I hit the side of the mortar, and away it went.

Another job we apprentices had to do was making mercurial ointment; in those days we made everything, tinctures, syrups, ointments and some of the fluid extracts, but making blue ointment broke our hearts and our backs, too. We used to put up concentrated lye; that was another specimen of elegant pharmacy of those days, and my work in connection with it was to chop out the caustic soda and put it into the tins. It was all right while the soda was hard and dry, but when it became soft and every blow of the axe splashed it over my face and hands, the job got to be a little troublesome, and I was forced to tell the "boss" about it, so he gave me a bottle of olive oil, with instructions to rub it on where the soda fell, but the head clerk, the one with the flow of language, and whose heart was overflowing with love and affection for me, took the bottle away the first chance he got, and I often gaze reminiscently on the little scars on my face and hands and think of those delightful days when I chopped caustic soda out of the drums.

Some time after the orris incident, the "boss" gave me two mortars; each contained a liquid and a solid substance, and I was given strict injunctions about dissolving the solids and not to allow any of the liquid from one to get into the other. When I had them dissolved I told the "boss" about it, and he came to see it himself. Then he poured one into the other, and immediately the whole thing turned a brilliant scarlet. I made up my mind at once that I had made some mistake, and coming so close after the other trouble, I decided that one embryo druggist would be looking for a job before the day was over. But as nothing was said, I calmed my agitation and awaited further developments, and it was only some days after when the precipitate had been carefully dried and was about to be bottled that I found out I had made biniodide of mercury. In those days, although Colleges of Pharmacy were not as common as they are to-day, we did not call on the wholesaler for our preparations; we made everything we required. There were no sugar-coated pills, except a few of Warner's. Parke, Davis & Co., and all the other big manufacturing concerns were yet to come. The standard fluid extracts were those of W. Saunders, of London; elixirs were few and far between, price-cutting and departmental stores were unknown, and there was money to be made in the drug business. Comp. rhubarb, cathartic, carbonate of iron, and Bland's pills, we had to make in five-gross lots, and it gave us little time for loafing when we had to keep up stock of the different lines of goods.



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Dose.—As a laxative to a child one year old, one teaspoonful



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However, after a while, the store, big as it was, got to be too small for my eloquent friend, the head clerk, and myself, so one of us had to look for a job, and I found it shortly after. The clerk here was not quite so fluent in his language when he got excited, but he would have made a good second, as I found it one day when I introduced a novelty, a percolator, which I was using to make some Tr. gentian co. in strict accordance with the B.P., which when my friend noticed it, he forcibly projected the whole arrangement, percolator, gentian and all, through the window into the back yard, at the same time making use of some "languidge," as Bill Nye used to say.

I had a rather rough beginning, but I must say that with the exception of these two, all the druggists and drug clerks I have ever had to associate with were gentlemen.

Clerks nowadays think the examinations are very strict, and that those who passed ten or fifteen years ago had an easy time of it, but although the questions may appear more difficult, they are more practical, and I do not think that the examinations are so severe on minor points. For instance, at my final, one of the questions was to describe the preparation of strychnine. I gave it all correctly, with the exception of precipitating the coloring matter with acetate of lead, and the first thing the chemistry examiner told me was that I had lost 5 points out of 20 for that slip. Examiners are not now so severe on slight errors of that kind, and rightly so.

I often think that if young men only knew the hard work and little pleasure there is in pharmacy, that there would not be so many rushing into the business, and that after all, if they gave half as much time and labor to any other trade or profession, they would be a good deal better off financially at the end of their days.

GLUCOSE AS A PRESERVATIVE OF SYRUP. OF FERROUS IODIDE.

BY F. R. MACY.

*Written for the CANADIAN PHARMACEUTICAL
JOURNAL.*

It would seem from the number of articles which have appeared on the preservation of syrup of iodide of iron that it was a most difficult compound to keep in good condition, I have never found it so, if properly made; but I do not consider the process of the B.P. one that will yield a satisfactory product. The directions to boil the solution of ferrous iodide with two ounces of syrup for ten minutes is simply ridiculous; there would not be any syrup left if making in the ordinary retail quantities. Anyhow, no one follows that part of the direction, the solution being added at once to the syrup, at least by all whom I have questioned on the subject. As for preserving the light-green color which the syrup should have, many expedients have been proposed, such as the addition of hypophosphorous acid, glucose, citric acid, etc. And having noticed a query in the question list sent out by the

scientific section of the A.Ph. A., on the preservative effect of glucose, I determined to experiment on the matter.

1,000 c.c. of syrup of ferrous iodide, U.S.P., was made in 100 c.c. lots, containing 10, 15, 20, 25, and 30 per cent. of the syrup was replaced by glucose; each lot was divided in two, one bottle being placed in a dark cupboard, the other on a store shelf, partly exposed to light, and with each set was placed a bottle of the syrup made in strict accordance with the Pharmacopoeia, and the whole closely watched for changes in appearance.

After four days the strictly pharmacopoeial syrup on the shelf showed a tinge of brown, which gradually increased day by day till the whole quantity showed decomposition. The corresponding bottle kept in the dark, kept but little better; the 10 per cent. glucose syrup in both lots commenced to change color in about a week, while the 15, 20, 25, and 30 per cent. glucose syrups did not turn brown, but a precipitate commenced to form in the two last. I am now investigating the character of this precipitate. I believe that in the presence of glucose the ferrous iodide is decomposed, as in the ordinary syrup, but that the iodine forms a new compound with the glucose and that the iron is precipitated as an oxide. It seems to me that this theory of the action of iodine on glucose has been proposed before, but I cannot put my hands on the article just at present.

I have demonstrated to my own satisfaction that syrup of ferrous iodide may be kept unchanged by the substitution of 20 or 25 per cent. of glucose for the syrup ordered in the Pharmacopoeia.

However, it is not necessary to add glucose or any other preservative to this syrup in order to keep it in perfect condition. All that is necessary is to keep the syrup in the full sunlight. I have employed this expedient for many years, and have never had a batch spoiled. I will not say that you can restore the color of a spoiled batch, but if the color is a nice light green, as it should be, and it is then placed in a window, it will never turn brown, but will keep its green color, or possibly if kept too long will become almost perfectly colorless. It is wonderful that more pharmacists are not acquainted with this simple and most efficacious method of preserving what is generally put down as being a very difficult article to keep. Mr. Cartright was, I think, the first to draw attention to this means of keeping syrup of iodide of iron, in an article which appeared in 1868.

FAITH AND WORKS.

A little Band of Mercy girl says: "I prayed that the bird traps (set by cruel boys) might not catch the birds—and then I prayed that God would prevent the birds from getting into the traps—and then I went and kicked the traps all to pieces."
—*Our Dumb Animals.*

—When you dispute with a fool he is certain to be similarly employed.—*Ex.*

Selected Papers.

HOW TO STUDY PHARMACY.

BY PROF. HERMAN J. LOHMANN.

It may seem strange that one should attempt to give advice on "How to study," but the question has been asked so frequently, accompanied with exclamations somewhat similar to the following:—"I studied thus and so for four or five hours last night and now I do not remember anything of it."

These remarks must be expected, the one great fault being that a great many students expect to learn by simply memorizing a lot of words, without the practical application of the theory presented in the words they are trying to memorize.

We will take pharmacy and pharmaceutical chemistry into consideration. In order to thoroughly comprehend these two branches the student must not feel satisfied with memorizing the processes for the production of the pharmacopoeial preparations, but he ought to make them, even though on a very small scale. Be not satisfied with reading about the characteristics of a drug or preparation without getting it and examining it in order to verify the remarks. If tests for purity be noted, apply them. This will have a two-fold effect. In the first place it will demonstrate whether or not the substance complies with pharmacopoeial requirements, and secondly, whether it does or does not, the tests and results have been studied practically.

In chemistry, when the tests for the determination of metals or their compounds are noted, why not have a number of clean test tubes at hand and then and there apply them practically? In this manner both the reagent and reaction have been firmly impressed upon the student's mind.

Then again we will say tests for the discrimination between a number of salts. We will mention, for instance, the sulphur acids, the discrimination between sulphides, sulphites, hyposulphites and sulphates. It is well in those cases to study the equations, i.e., to reason them out.

Were the reactions produced but once by the student, he would never forget them, and he would forever after be fully prepared to answer any question pertaining to them.

Just so with all the other salts that are liable to be mistaken one for the other. For instance, citrates and tartrates, magnesium sulphate and zinc sulphate. Make the tests and note them.

I have found in my work some difficulty at first in having students comprehend the formation of equations. It is needless to state that it is difficult for one to learn the formation of equations without proper and intelligent explanation.

While studying chemistry, one point that must not be lost sight of is that the student must commit to memory the symbols of the elements and the acids and their combinations, the quantivalence, atomic weight and source of the elements.

For aid in this direction it is well for the student

to make a chart, giving the name, symbol, valence, atomic weight and source.

It is not necessary that a student ponder over his books at all times, but still he can study, and study to great advantage. We will say a person comes into the store and asks for some rochelle salt. These questions ought at once present themselves to the student: What is rochelle salt? How is it prepared? What is the chemical formula? What is the equation for reaction? What impurities is it apt to contain? How can one detect them? What is the dose and effect?

Or if a person wants some boneset; the following questions will naturally present themselves: What is boneset? Its natural order? Its habitat? What parts are used? What is the dose and therapeutic effect?

There then we have the chemistry of the one and the materia medica of the other all in a nutshell, and in case the student can not answer these points to his own satisfaction he should refer to a dispensatory or any other book of reference at the first opportunity. The foregoing holds good not only for students, but for all, no matter whether they are preparing for an examination or have passed all that are required.

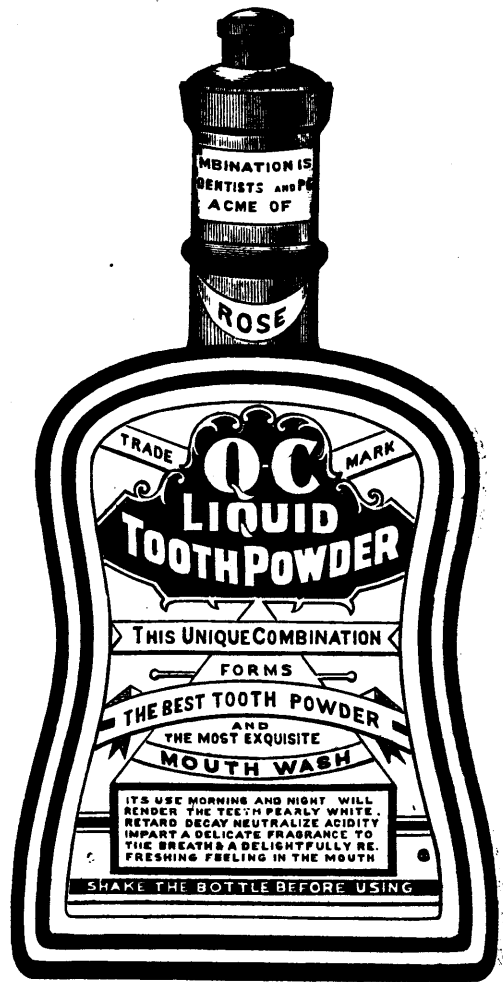
In this manner the old will always remain new and you will then have time to read up on new literature without losing sight of anything studied years ago, and the remarks of the candidates who present themselves at board examinations that they graduated from the college three or four years ago and have forgotten this or that, will be a thing of the past.

As a finale, allow me to state that before a young man begins with his studies let him form a solemn resolution to study only reliable books of reference. Cast the quiz-compend aside. It is the curse of the profession and the ruin of the student's life. What is in a quiz-compend? It is a book containing a conglomeration of words and sentences without sense. The student of such books has not acquired even the rudimentary principles of pharmacy. How can he under those circumstances assume the great responsibilities of a pharmacist? I mean a pharmacist, that he claims to be, and not a dispenser of liquors nor a vendor of patent medicines. It ought to be the aim of every young man who has selected the science of pharmacy as his life's calling to equip himself as thoroughly as means and time will permit with the fullest extent of knowledge, and in this manner attain an honorable standing among his fellow-pharmacists, and not feel content to run along with the masses, feeling satisfied with a very meagre or no knowledge of the science. Therefore abhor the quiz-compend, consult the original works of reliability and apply the theories presented in a practical manner, for you must well bear in mind that the pharmacist of the future must be better equipped than the pharmacist of to-day in order to surmount the difficulties which are arising, and if a person is not up and doing during his days of study he must expect to always lag behind.

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Then, again, make your own preparations and do not buy them. It is owing to this very fact that so many pharmaceutical laboratories are so much of a success to-day. It is because so many are satisfied to buy and pay dearly for U.S.P. preparations simply because they do not want to make them or do not know how to make them. The very idea of a pharmacist buying tinctures, syrups, cerates, etc. Take your price list and compare the actual cost of the ingredients with the cost of the completed preparations. Many students will not take the pains to study seemingly complicated compounds, but, if once understood, they are as easily prepared as any other preparations.—*Druggists' Circular.*

"HUMANIZED" MILK.

Its Composition and Method of Production—Errors to be Avoided—Useful Information on the Various Phases of an Important Subject.

By HAROLD STACEY, Ph.G.

In view of the fact that it has of late frequently been suggested that the pharmacist might with advantage prepare an artificial humanized milk for infants, it seems advisable to briefly review the literature on the subject and suggest working formulae for those pharmacists who care to take up this subject.

CONSTITUENTS OF COW'S AND HUMAN MILK.

In the first place, it is necessary to know the average composition of human milk and that of the cow, the latter of which is to be "humanized." The following table, based on analyses by J. Konig, shows the average composition of the two fluids:

	Human.	Cow.
Water..	87.41	87.17
Casein..	1.03	3.02
Albumen...	1.26	0.53
Fat...	3.78	3.69
Milk-sugar...	6.21	4.88
Ash...	0.31	0.71

The table shows that in order to humanize cow's milk it is necessary to increase the amount of milk-sugar, decrease that of the casein and albumen (these two bodies being usually tabulated together as "casein" or "albuminous constituents"), and at the same time maintain the amount of fat in *statu quo*.

THE PROCESS.

This may be accomplished in two ways, either by removing the casein by means of rennet and adding milk-sugar, or by diluting the milk with water and adding the requisite amount of fat and sugar to the diluted milk. The first method, while yielding a finer product, is not adapted to commercial ends, owing to the length of time necessary for preparation, and to the expense attendant. The process is briefly as follows:

Take one pint of milk, from which the cream has been removed, and add sufficient rennet to precipitate the casein. Remove the curd, and in the whey dissolve 280 grains of milk-sugar, and add this solu-

tion to two pints of new milk, subsequently adding the cream which had been removed. In this way a milk is obtained which has the following composition:

Water.....	87.17
Casein and albumen	2.37
Fat	3.69
Milk-sugar	6.21
Ash.....	0.71

It will be noticed that this resembles very closely human milk in composition, the casein having been reduced one-third and the milk-sugar increased from 4.88 to 6.21 per cent., while the amount of fat has remained unchanged. A simpler and in some ways more satisfactory method of reducing the percentage of casein is by dilution of the milk with water, the diminution in the percentage of fat being afterwards made up by addition of fresh cream or butter. It is claimed that by diluting the milk with water, the diminution in the percentage of fat coagulates in a similar manner to human milk, the coagulum of the latter being looser and more flocculent than that formed from cow's milk under ordinary conditions.

WORKING FORMULAS.

To reduce the content of casein in cow's milk to the same percentage as that of human milk it is necessary to add three parts of water to every five parts of milk. The fat and milk-sugar are naturally diminished, and the requisite percentage must be made up by addition of more milk-sugar and fat. The latter is added either in the form of cream or butter, preferably the latter, owing to its more constant composition. It is readily emulsified by the milk. The following forms a good working formula:

New milk	2 pints
Fresh butter	3 drachms
Milk-sugar	500 grains
Water	19 ounces

Dissolve the milk-sugar in the water and add to the milk and butter previously emulsified. If cream be used the following formula, given by Clague, will be found to work well:

New milk	3 ounces.
Cream	13-4 "
Milk-sugar	11-8 "
Water	18 "

Mix secundum artem.

TO MAKE UP THE DEFICIENCY IN FAT.

Soxhlet objects to the addition of fat to the diluted milk, and suggests that additional milk-sugar be added to make up for the deficiency in fat. He states that milk containing an abnormal amount of fat cannot be sterilized without the fat becoming partially separated, and the state of emulsion so necessary to assimilation being disturbed. All the functions performed by fat are equally well performed by carbohydrate material, and to make up the deficiency in fat an isodynamic amount of milk-sugar must be added to the diluted milk. According to Rubners, 243 parts of milk-sugar are isodynamic with 100 parts of fat, consequently a defi-

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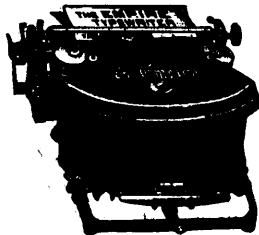
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Packed in ½-gross Cases.

We use a pure Sherry Wine in the manufacture of this article, assuring a delicate flavor, and we guarantee the quality to be equal to any in the market.

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Manufacturing Pharmacists

Canadian Branch:

PHILADELPHIA, Pa.

36 & 38 Lombard Street

TORONTO, Ont.

Kindly mention this Journal when writing to Advertisers.

ciency of 1.32 per cent. of fat may be made good by an addition of 3.19 per cent. of milk-sugar. Soxhlet, therefore, advocates a milk preparation as follows: Prepare a solution of milk-sugar in water of the strength of 12.3 per cent., and to every two parts of milk add one part of this solution. The resulting fluid will have this composition:

Water	85.30
Casein	2.37
Fat	2.46
Milk-sugar.....	9.41
Ash	0.47

Such a milk possesses all the nutritive properties of human milk, is readily prepared, and does away with all troublesome additions. Moreover, it coagulates in a very similar manner to human milk, a matter of the very greatest importance in infant feeding.

MINERAL CONSTITUENTS OF HUMANIZED MILK.

In the preparation of all of these "humanized milks" no mention has yet been made of the mineral constituents. This is of sufficient importance to warrant special attention. Human milk is alkaline to litmus, containing only one-sixth of the amount of lime present in cow's milk, and only about one-third of the amount of acid phosphates. It is very important to correct this excess of acidity and mineral salts in preparing humanized from cow's milk. This may be best accomplished by addition of sodium bicarbonate. This alkali is preferable to lime-water, as cow's milk already contains an excess of lime salts. The amount necessary for neutralization of the excess of acid salts is six grains to the pint. This addition should be made after the process of sterilization. Dr. A. E. Wright has advocated removal of part of the excess of lime salts present in cow's milk on the ground that the coagulum formed is less dense in proportion to the diminution in lime salts present. He advocated the addition to the milk of a small amount of sodium citrate. In the proportion of one part to 200 parts of milk he finds that sodium citrate prevents any coagulation by rennet, and the addition cannot be readily detected by the palate. A much smaller proportion is sufficient to "humanize" cow's milk.

THE OBJECTION TO STARCH.

Attention may be directed here to the fact that certain writers on this subject have advised the addition to these artificial milks of various forms of carbohydrate food, such as oatmeal flour, or decoction arrowroot, barley water, and even meat broths of various kinds. Such additions can only be deprecated, seeing that the saliva of infants does not contain any ferment capable of converting starch into sugar or other assimilable form. Milk-sugar is the only carbohydrate found in the milk of any animal, and if additional carbohydrate food is needed it can best be supplied by increasing the amount of this constituent.

CONDENSED MILK AS INFANTS' FOOD.

A word must be said as to the use of condensed milk for infants' food. For many reasons these

milks are not to be recommended. The processes which they are put through in their manufacture lead to considerable alteration in the character of the fluid. The casein becomes less readily precipitable, and is less readily digested. Changes also occur in the character of the albumen, which is generally coagulated; the percentage of milk-sugar is somewhat reduced, and the fat is thrown out of its emulsified state to a greater or less extent in various brands. As a rule a portion of the fat is removed before concentration. More important than this is the probable destruction of the natural germicidal properties of the fresh milk and of its natural ferment.

The variation in composition is well shown by comparing the results here given of analyses of various brands:

	Water.	Casein.	Fat.	Milk-sugar.	Ash.
1	56.71	13.18	14.13	13.98	2.00
2	55.43	14.00	13.16	14.84	2.53
3	56.01	13.90	14.02	14.06	2.01
4	52.07	14.26	15.06	16.97	2.80
5.....	57.96	8.50	16.02	16.32	2.20
6	51.72	11.09	14.33	19.51	2.75

(These brands were all unsweetened.)

It is impossible, where such variations in composition exist, to give working formulae for humanizing the commercial condensed milk.

THE QUESTION OF STERILIZATION.

Of considerable importance in connection with preparation of humanized milks is the question of sterilization. So much has been written on this subject that more than a summary of the result arrived at is unnecessary. A valuable paper on this subject is that by Dr. Albert Leeds and Professor Conn in the report of the Dairy Commission of the State of New Jersey, for 1892, on the "Preservation of Milk," to which those interested are referred. After what has been said on the subject of condensed milks it will suffice to say that a boiling temperature for sterilizing milk is highly undesirable, and experiments have shown that the most satisfactory method of preserving such milks is by the method of Pasteurization. By keeping the temperature below 70 deg. C. (158 deg. F.) the natural properties of the milk are but little affected, while the above temperature or a few degrees below will suffice to kill all pathogenic organisms likely to be present in milk. Preservatives are not recommended for addition to humanized milk, and in particular the use of formaldehyde to preserve milks intended for infant use should be condemned. This agent, even in minute amounts, has a most injurious action on the mucous membranes, converting them, if the action is constant, into a substance closely resembling leather and setting up severe irritation. Given to infants in milk, its action on the coats of the stomach cannot be other than injurious, even in the minutest amounts, and when used for this purpose may possibly prove to be the forerunner of lifelong dyspepsia.—*American Druggist.*

[In justice to ourselves and Messrs. Parke, Davis & Co., we reprint the following article from last month's issue. The "printer fiend" got in on it his fine artistic hand, and it went to our readers in such a shape as to be scarcely understandable.—Ed.]

A WORLD-FAMED LABORATORY.

WHERE THE INDUSTRIAL ARTS KEEP PACE WITH
MEDICAL PROGRESS.

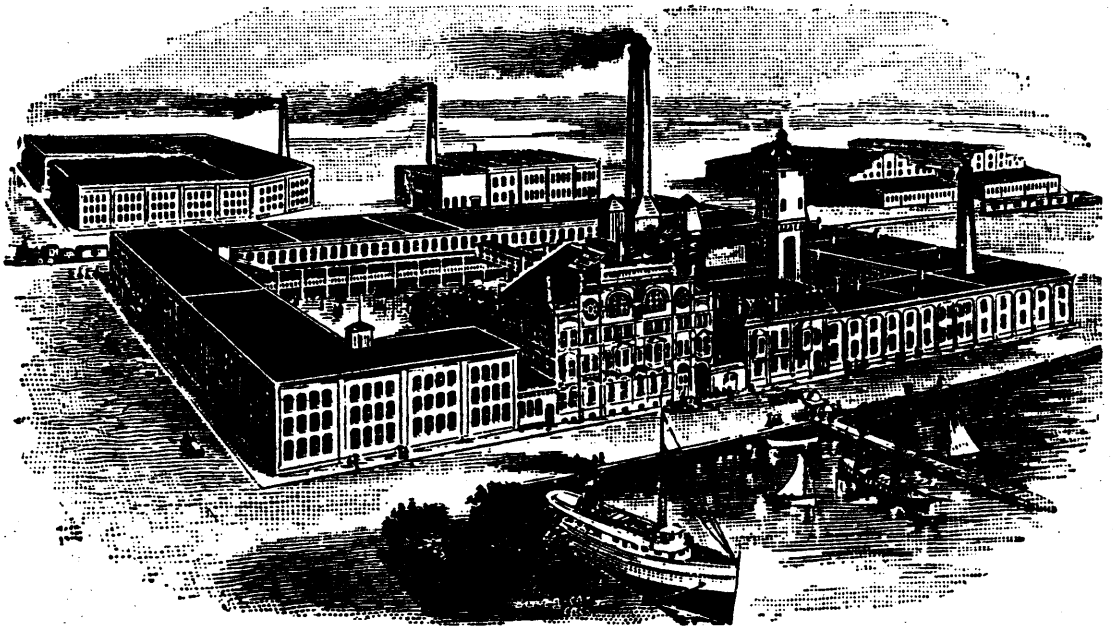
*The Marvellous Growth of the Great House of
Parke, Davis & Co.*

It was Charles Dudley Warner who first had the wit to observe that "cities, like individuals, succeed only by virtue of natural disadvantages." In order to make a "bonny fight" in the struggle for municipal pre-eminence, a town must not owe too much to nature; it should be thrown on its own resources. This has been strikingly exemplified in Chicago, whose wonderful history began in a swamp, and it

they have borne the commercial fame of their mother city to the remotest markets of the earth.

SCIENCE WEDDED TO INDUSTRY.

The various departments of Parke, Davis & Co.'s great atelier, owing to their intrinsic interest, have often been described and illustrated in the pharmaceutical and medical press, hence no exhaustive description will here be attempted. It is sufficient to emphasize the fact that these vast laboratories are distinctly and essentially scientific in method, in spirit, and in result. Their mission is to provide the physician, through the pharmacist, with every known means of combating disease. All the manifold forms of medication, on which the medical practitioner must rely in the supreme emergencies of life and death, are here produced in large quantities—extracts, concentrations, inhalants, hypodermatic tablets, medicinal elixirs, wines, syrups, digestive ferments, pills, capsules, pressed herbs, biological products, such as anti-diphtheritic serum, anti-tetanic serum, toxins, etc., etc.



DETROIT LABORATORY.

is in a large measure true also of the city of Detroit, the original home of the great manufacturing pharmaceutical house of Parke, Davis & Co. When, some thirty years ago, Parke, Davis & Co. began on an humble scale the manufacture of medicinal preparations, then, as now, Detroit possessed the advantage of proximity to the great lakes and a manifest destiny as a lake port, but after all it was only a small city of third or fourth degree, with inferior shipping facilities, remote from the great centres of trade, and with no power of reflecting a metropolitan lustre on its manufacturing enterprises. No one can ever estimate the debt that this prosperous city of our day owes to the energy and capacity of her bold industrial pioneers, who, undaunted by their local disadvantages, have developed by dint of an invincible persistence noble enterprises and vast manufacturing plants. Going forth like Amyas Leigh of old to traffic and to trade,

HOW THEY KEEP ABREAST OF PROGRESS IN MEDICAL SCIENCE.

Catering thus to the needs of a profession which is constantly progressing in the art of preventing, curing, and extinguishing disease, a house like Parke, Davis & Co. must be in constant touch with medical teachers and practitioners; it must be abreast of the very latest discoveries; it must be prepared to furnish new medicinal agencies as fast as they are demanded, and to vouch for their efficacy. To do this they employ a large corps of cultivated, expert, scientific men—bacteriologists, chemists, botanists, microscopists, physicians and practical pharmacists. To guard against adulteration in their supplies of barks, herbs, leaves and roots, or of oils and chemical substances, every known precaution is utilized, and their purchased supplies must run a severe gauntlet of preliminary inspection and analysis. Every manufactured pro-

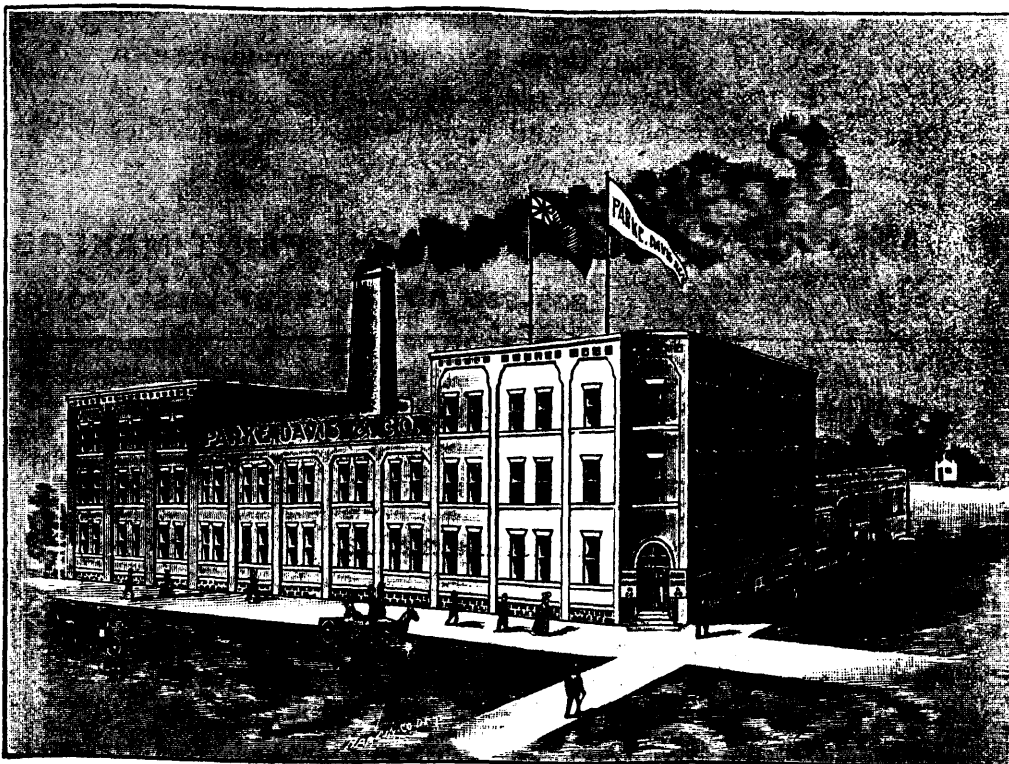
duct is tested by chemical analysis, or by other means which dispel all doubt as to the potency of the remedy. The numerous departments work together smoothly and harmoniously, and throughout the laboratories prevails a wonderful system—the matured perfection of thirty years' experience, which prevents error, ensures accuracy and mitigates friction.

SCIENTIFIC APPARATUS, LIBRARIES, HERBARIUM, ETC.

The scientific staff have at their disposal the best books, instruments, journals, and apparatus obtainable at home or abroad, and in this respect the management have shown a far-sighted liberality, providing facilities for investigation which rival those of the best universities. Their working library comprises the standard journals and books in

and other fields of research in which any great pharmaceutical manufacturing establishment is necessarily interested, theoretically, practically and commercially, but they would also find unusually large and valuable working libraries in these several branches of study, museums of specimens, and splendidly equipped research laboratories, as well as analytical and manufacturing laboratories.

"The manufacture of pharmaceutical preparations truly requires scientific knowledge, brains, trained experts, ample facilities, the best processes, the most perfect organization, system and government, and never-failing watchfulness. It is impossible for anyone who has not paid a good long visit to such an establishment to form any correct conception of its magnitude and the precision with which its numerous details are made to work together toward the most nearly perfect results attainable."



WALKERVILLE LABORATORY.

every modern language on chemistry, botany, materia medica, therapeutics, physiology, pharmacology, bacteriology and kindred sciences. Their herbarium, representing medicinal plants from all parts of the world, includes 29,000 botanical specimens.

The Dean of the Northwestern School of Pharmacy in Chicago, Professor Oscar Oldberg, a distinguished authority, some time ago visited Parke, Davis & Co.'s establishment. The impression this visit produced may be inferred from the language in which he advises all pharmacists to "go and do likewise."

"They would there find not only a large corps of specialists in botany, pharmacognosy, therapeutics, chemistry, pharmacy, pharmacology, bacteriology,

PARKE, DAVIS & CO. AND THE UNIVERSITIES.

A double relationship unites the laboratory with the scientific schools. From the graduates of the latter is recruited the scientific staff which directs the firm's operations. At the present time the University of Toronto, the Montreal College of Pharmacy, Johns Hopkins, Heidelberg, Bonn, and the universities of Michigan and Vermont, are among the institutions of learning whose graduates have found employment in the experimental, analytical and manufacturing departments of Parke, Davis & Co. On the other hand, the practical experience which is acquired in pharmaceutical manufacture enhances any man's value as a preceptor and renders him a desirable addition to a teaching faculty. Parke, Davis & Co.'s employes have

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1/2 THE SECRET, the right proportions

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ADAMS'

Root AND

Ginger Beer.

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The TORONTO PHARMACAL CO., Limited,

136 BAY STREET, TORONTO

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been repeatedly called to honorable posts in the great universities, including the University of Michigan, the New York College of Pharmacy, the Northwestern School of Pharmacy, the University of Chicago, the Hawaiian College at Honolulu, and the Detroit College of Medicine.

A WONDERFUL GROWTH.

During the period of pinching hardship in business and prolonged trade depression, Parke, Davis & Co. have maintained their wonderful career of development. While other firms have been thankful if they could keep their heads above the submerging waters, this house has steadily increased its sales, and enlarged their field of trade, constantly opening new channels of export for their celebrated products.

Parke, Davis & Co. many years ago conceived the commercial possibilities and opportunities which invited them into the Dominion. The high standard adopted for their preparations had opened up vast markets of trade in Great Britain, on the Continent, and in remote Australia; justly they reasoned that the same success would attend their efforts on Canadian soil. They commenced the manufacture of pharmaceutical products in Canada in 1887, in a very modest building, with a mere handful of employes, but owing to the rapid growth of trade more extensive quarters soon became a necessity; accordingly, plans were drawn and contracts let for the erection of what, even at that time, was the largest strictly pharmaceutical laboratory in the Dominion. It has since been found necessary to extend the size of the plant in order to meet the increased demands for the firm's well-known line of pharmaceutical products.

In addition to the manufacturing plants in Detroit, Michigan, and Walkerville, Ontario, Parke, Davis & Co. have also a laboratory for the manufacture of pharmaceutical products in London, England, and they export largely to every part of the world, but most heavily to South America and Australia.

A FINE BACTERIOLOGICAL PLANT.

Among the first to realize the great importance of serum therapy, Parke, Davis & Co. equipped at great expense a laboratory for the production of the various antitoxins—of diphtheria, tetanus, streptococcus, etc. Their diphtheria antitoxin enjoys the enviable distinction of having never caused a fatality or serious casualty of any kind, and in reducing the mortality of this dread disease it has exhibited unusual efficacy. They are now producing on a large scale the only diagnostic agent capable of revealing latent or dormant tuberculosis in cattle—Tuberculin—and their brand is used largely by the Dominion Government. Among the products of this department of their huge business are included also a full line of culture media and microscopical slides of disease germs. In their stables fifty-four horses are under immunizing treatment.

PHYSIOLOGICAL ASSAYS OF POWERFUL DRUGS.

Recognizing the impotence of the chemist when confronted with certain drugs and their preparations unamenable to chemical test—such as ergot, stro-

phanthus, Indian cannabis, digitalis, cantharides—Parke, Davis & Co. founded the first physiological laboratory ever erected by a manufacturer, for the purpose of subjecting to physiological experiment on animals every parcel of such crude drugs and their pharmaceutical preparations. To-day, not an ounce of these drugs leaves their hands in manufactured form without undergoing crucial trial, and their label offers a positive guarantee of medicinal activity.

Such is the high quality of the scientific work which prompts the *Southern Practitioner* to declare:

"With the wealth of resources now at the command of this house for producing and rigorously testing every pharmaceutical product in their catalogue—with an ardent desire to utilize all the agencies which may aid them in realizing their ideals of activity, uniformity and precision—it is idle to suppose that they will falter in their onward march, or relax their hold on their proud distinction as 'the foremost pharmaceutical house in all the world.'"

PHARMACEUTICAL ASSOCIATION, N.W.T.

The Council of the Pharmaceutical Association of the North-West Territories convened in Moose Jaw on August 16th, at its fifth annual session.

This was the first meeting of the newly-elected Council, which Council is chosen by ballot by the registered druggists of the Territories. The first business to be transacted was that of electing officers, which resulted as follows:

President—R. Martin, Regina.

Vice-President—J. G. Templeton, Calgary.

Reg.-Treasurer—A. D. Ferguson, Wolseley.

Auditors—Messrs. Levi Thomson and R. A. Magee, Wolseley.

The registrar-treasurer, Mr. Wm. Bole, of Moose Jaw, submitted his statement for the year ending June 30, 1897, which showed there had been admitted on the register, during the year, four members, two under section II., and two under sub-section A of section XXI. of the Ordinance. That no candidates had presented themselves for examination, that the cash balance on hand was \$293.33, that the election of members of the Council was held in March, resulting in the following members having received the highest number of votes: J. G. Templeton, Calgary; W. G. Pettingell, Regina; Robt. Martin, Regina; A. D. Ferguson, Wolseley, and Wm. Bole, Moose Jaw.

The financial statement of the Auditing Committee, Messrs. Chas. H. Black and John Dawson, of Regina, was submitted and vouched for the correctness of the financial part of the registrar-treasurer's statement.

For the convenience of those living at a distance, and who intend presenting themselves for examination, it was resolved that the examinations, held semi-annually, may be conducted in Calgary, Regina, or Wolseley. Several communications from druggists throughout the Territories, were read, complaining of a number of drug stores being con-

ducted without proper qualifications, and the registrar-treasurer was empowered to take due steps in the matter. The co-operation of druggists throughout the Territories is asked for, in order that due protection may be given to those qualified as laid down in the ordinance; any information received by the registrar-treasurer will be acted upon.

The Council holds its next meeting in Regina.

ONTARIO COLLEGE OF PHARMACY.

SEMI-ANNUAL MEETING.

The regular semi-annual meeting of the Council of the Ontario College of Pharmacy began its first session on Tuesday afternoon, Aug. 3rd.

Eleven districts out of the thirteen in the province were represented by their respective members when President Mackenzie called the meeting to order.

Districts Nos. 3 and 11 having failed to elect members, were unrepresented. It being one of the duties of the Council to fill vacancies when such occur, Mr. A. J. Davis, of Port Perry, was elected for No. 3, and Mr. J. F. Roberts, Parkhill, for No. 11. The Council thus completed consists of seven old and six new members.

The first item of business to receive attention was election of officers for the coming two years. For president, Mr. Henry Watters was nominated by Mr. J. H. Dickey, and seconded by Mr. W. B. Graham. Mr. J. H. Mackenzie was nominated by Mr. A. Turner.

Mr. Mackenzie expressed a desire to have his name withdrawn. Having served his term, he thought the honors should be passed around. Although urged by Mr. Watters to allow his name to go to the Council, Mr. Mackenzie adhered to his decision. His name was withdrawn, and Mr. Watters declared elected.

For vice-president, Mr. W. A. Karn was nominated by Mr. S. Snyder, seconded by Mr. A. Turner. There being no other names presented, Mr. Karn was declared elected.

On the nomination of Messrs. Karn and Dickey, Mr. I. T. Lewis was re-elected registrar-treasurer, salary unchanged.

The newly-elected officers expressed their appreciation of the honor paid and confidence reposed in them by their fellow-members. While promising their best efforts in the discharge of duties devolving upon them, they bespoke the active aid and sympathy of the members.

A special committee, consisting of Messrs. Mackenzie, Turner, Snyder, Watters, and Karn, was appointed to strike the Standing Committees, and the Council adjourned for half an hour to allow them to present their report.

Upon re-assembly of Council they reported the following:

Executive and Finance—Messrs. Snyder, Dickey, Hunter, Curry, Davis, Graham, and Karn. Snyder convener.

Education—Messrs. Mackenzie, Turner, Roberts, McCullough, Snyder, and Hunter. Mackenzie convener.

By-Laws and Legislation—Messrs. Turner, Hargreaves, Dickey, Mackenzie, Graham, and McCullough. Turner convener.

Infringement—Messrs. Karn, Roberts, Davis, Curry, and Hargreaves. Convener, Karn.

On reception of this report, which was adopted without discussion, Council adjourned for the day.

SECOND DAY.

Council resumed at 10.15 a.m., all members present except Mr. Davis, of No. 3; president in the chair. Minutes read and accepted.

A number of communications and petitions were read, and accounts passed. These were referred to the various committees for their consideration.

The following reports were presented: Registrar-treasurer's, auditors', John Roberts' Scholarship Fund, and examiners. The three former were referred to the Executive and Finance Committee, and the latter to Education Committee.

On motion, F. W. Flett and G. A. McCann were appointed scrutineers; James Watt and W. A. Hargreaves auditors for the ensuing two years.

The registrar-treasurer reported for the half year as follows:

Since February 1st, 1897, nine medical men had made application for registration, viz.: S. Stewart, Thamesville; A. H. Macklin, Mildmay; J. A. Hershey, Massey Station; M. C. Black, Paisley; L. C. Bolster, Sturgeon Falls; W. H. Hamilton, Fort William; D. R. King, Newboro; W. Egbert, Milverton; and J. R. McRae, Dungannon.

Sixty-nine applicants for registration as apprentices have been received.

The number of renewals issued since February 1st, 1897, was as follows: 1890, 1; 1891, 2; 1892, 4; 1893, 5; 1894, 14; 1895, 19; 1896, 56; 1897, 712; 1898, 2; besides a number of partial payments for previous years.

The receipts and disbursements for the half year were as follows:

<i>Receipts.</i>	
Cash on hand.....	\$ 8,855 16
Renewal fees.....	\$3,499 00
Less rebates.....	1,348 00
	2,151 00
Apprentice registration....	69 00
M.D. registration.....	36 00
Matriculation fees.....	40 00
Teaching department.....	408 25
Laboratory.....	\$ 230 04
Less purchases.....	102 15
	127 89
Examination fees.....	\$1,220 00
Less expenses.....	385 12
	834 88
Sale of poison books, etc.....	8 82
	\$12,531 00

<i>Disbursements.</i>	
Interest account.....	\$ 210 19
Deposit fees (students).....	575 00
College expenses.....	431 29
Furniture account.....	48 50

Auditors	10 00
Council meeting	294 10
Apparatus and appliances	151 43
Salary account	3,884 38
Supply account	282 92
Postage and petty expenses	61 08
Payment on mortgage account.....	5,000 00
Coal.....	232 50
Water	18 59
Gas.....	46 17
Law expenses	279 16
Infringement account	454 65
Sundries.....	18 50
Balance on hand	511 82

\$12,531 00

The following is the auditors' report, showing the financial position of the College:

STATEMENT OF ASSETS AND LIABILITIES OF THE ONTARIO COLLEGE OF PHARMACY.

Assets.

College building, as per last report	\$33,656 82
Furniture, apparatus, etc, as per statement Feb., 1897, appliances, etc.	\$11,147 91
Globe Furniture Co., chairs	26 50
Plumbing, etc., in chemical laboratory	22 00
	<hr/>
	11,196 41
College lot	5,000 00
Outstanding fees, as near as we can judge.	500 00
Supplies estimated to date	320 00
Poison and liquor books	155 00
Announcement, 1896-7.....	\$10 00
" 1897-98.....	92 50
	<hr/>
	102 50
Cash balance	27 67
Bank balance	339 40
Bank of Commerce special (savings dept.)	144 75
	<hr/>
	\$51,442 55

Liabilities.

Mortgage, the Synod.....	\$ 5,000 00
Interest to date	116 59
Library Fund	62 69
Accounts, sundry	547 83
Examiners, May, 1897.....	398 74
Salary account.....	133 33
To balance	45,183 37
	<hr/>
	\$51,442 55

To balance assets, \$45,183.37.

Auditors: JAMES WATT,
W. A. HARGREAVES.

The report of the John Roberts' Scholarship Fund showed it to be in the following condition:

To statement as per February 1st, 1897.....	\$3,246 72
Canadian Loan & Savings Co., London..	74 85
Interest to May 28th.....	3 22

\$3,324 79

The report of the Board of Examiners was next submitted, and after referring it to the Committee on Education, Council adjourned for lunch.

The Council did not meet in the afternoon, the time being taken up with committee work.

THIRD DAY.

Council resumed on Thursday morning, with all members present, Mr. Davis having arrived immediately after adjournment the previous day.

Notice of motion was given by Mr. Hargreaves, seconded by Mr. Roberts, that at the meeting in February, 1898, they would move an amendment to By-law 7, making the number of standing committees five instead of four, the fifth being a Committee on Commerce.

Messrs. Roberts and Snyder asked permission to withdraw the notice of motion given last meeting that a rebate of three dollars be allowed all members who pay their annual fee before the first of May each year.

The members had a little amusement at Mr. Roberts' expense, when one of their number suggested that "There is no election in sight now." Mr. Roberts' request was granted.

Mr. Karn questioned the Committee on By-Laws and Legislation as to possible additions to Schedule A of Poison List. In this connection he suggested the issuing of a new poison book, containing the Pharmacy Act, with amendments up to date.

Mr. Karn also drew attention to the condition of druggists under the License Act as amended last session of the Local Legislature, and made the important statement that the License Department questioned the right of druggists to sell alcohol, even upon a doctor's order, unless specially licensed to do so.

Réport No. 1 of Committee on By-Laws and Legislation dealt with a number of items of minor importance. One clause, bearing upon the payment of a London druggist's annual fee, was referred back and the balance was adopted without discussion.

Report No. 1 of the Executive and Finance Committee, recommending payment of a number of items, amounting in all to \$529.43, was presented and adopted, after which Council adjourned.

AFTERNOON.

On Council re-assembling, Report No. 1 of Committee on Education was presented and adopted without discussion. Among other things this report recommended that no examination in practical chemistry be held in December. That in the awarding of the John Roberts' scholarship Messrs. H. H. Monkman and F. Smyth were equal, and that the scholarship of \$100 be divided equally between them.

That the following examiners be appointed: Dispensing, W. Murchison, Toronto; prescriptions, A. R. Fraser, Toronto; materia medica, D. S. Sager, Brantford; botany, C. R. Sneath, Toronto; pharmacy, F. T. Harrison, London; chemistry, P. L. Scott, Paris; practical chemistry, W. H. Ellis, Toronto University.

The suggestions offered by Mr. Karn in the forenoon session were taken up, and on motion of Mr. Roberts, seconded by Mr. Karn, a committee composed of Messrs. Walters, Mackenzie, Turner, Hunter, Snyder and the mover, was appointed to take into consideration the advisability of adding

necessary poisons to Schedule A/ also the desirability of issuing a book of revised by-laws, and also to consider the injustice under which we are placed by the present law regarding the sale of alcohol and other fermented liquors, and to report to the Council at this session.

Council adjourned.

FOURTH DAY.

Friday morning Council resumed at 10.50, all members present, except Mr. A. Turner, who had been called home; president in the chair. Report No. 2 of Committee on By-Laws and Legislation was presented. This report contained the committee's recommendation bearing on limited liability company drug stores, and is as follows:

"Re limited companies, we would recommend that in view of the opinion of our solicitors, if possible, the Infringement Committee be instructed to procure a similar action in another part of the province before a different magistrate, in order, if possible, that an opinion may be obtained from the High Court on this issue."

Mr. Karn informed the Council that the Infringement Committee had already acted as suggested, but without success.

Mr. Karn presented the report of the Infringement Committee, which was a lengthy and interesting history of the year's work. We give it in full:

REPORT OF INFRINGEMENT COMMITTEE.

Toronto, Aug. 5th, 1897.

To the President and Members of the Council of the Ontario College of Pharmacy:

Your Committee on Infringements beg leave to submit the following report.

Re communication of Mr. R. W. Elliot, we recommend that the request be granted upon the registrar endorsing the change on the certificate.

Re communication of Mr. R. H. McNally, of Elmwood, the committee are of opinion that fly-pads come under the exemptions recorded in section 24 of the Pharmacy Act so long as the provisions of said section are complied with.

Re communication of W. Bowers, J. P., Thessalon, concerning the conviction of D. A. McAlpine, your committee would recommend that the College proceed to recover the fine.

Your committee have pleasure in reporting that they have used every endeavor to prosecute the fight against all parties who have been infringing upon the rights and privileges of the College. In every instance when any violation of the Act has been discovered we have done our utmost to bring the transgressors to account.

The work of our inspector has upon the whole been eminently satisfactory to the committee, inasmuch as he has at all times shown an earnest disposition to carry out the advice and instructions of the committee. Through him we have visited every portion of the province during the last six months and endeavored to ferret out all violations of a serious nature, and to prosecute them, and in other cases of unconscious minor infringements to adjust the matters in the simplest possible manner, until

now we can assure the Council and members of the College generally that the provisions of the Act are being very well observed in every portion of the province.

Your committee instituted a trip of inspection from Toronto to the eastern portion of the province during February last, a visit to the south and western portion during March, another visit to the east in the first part of April, a trip from Toronto along the north shore as far as Rat Portage lasting from April 27th to June 18th, and a trip through the western and northern portions of Central Ontario during June and July.

The result of the work has been the examination of 144 cases, most of which were cases of arrears of fees. Fifty druggists were interviewed who were over one year in arrears, from among whom we have succeeded in collecting \$310, which would have been difficult to secure in the usual way. Some cases were many years in arrears, and one in particular who paid over fees for 9 years, and who had never been registered on the books of the College.

We found two cases where druggists were conducting business without a graduate in charge, but who promptly complied with the law.

In two instances we found druggists endeavoring to run two stores for one fee, both of which were brought to account.

Your committee have succeeded in securing convictions against seventeen parties for keeping "open shops" and otherwise infringing the Act, from whom we have collected in fines \$280, while three cases are still in abeyance in the matter of payment of fines. The receipts through this source, however, are reduced by \$20 through two moieties.

Following is a list of convictions:

INFRINGEMENT ACCOUNT.

Fines:—	Cr.	
A. B. Carscallen, Enterprise	\$	20 00
Clayton Copeland.....		20 00
W. T. Earl, Athens.....		20 00
R. A. Rappell, Athens		20 00
John P. Foley, Westport		20 00
Edward J. Hart, Westport		20 00
F. H. Pearsall, Port Rowan.....		20 00
C. V. Parke, J.P., Wingham, St. Johnshire, moiety.....		10 00
G. R. Fraser, Thamesville.....		20 00
S. Stewart, M.D., Thamesville.....		20 00
Fred. Canniff, Rat Portage.....		20 00
Michand & Leresque, Smith's Falls, moiety		10 00
Herbert Oliver, Springvale		20 00
James Torrence, Milverton		20 00
D. A. McAlpine, Thessalon..		20 00
*Jas. Fitzgerald, London		20 00

\$280 00

Three other informations have been laid, two of which stand, the other having been withdrawn on payment of back dues in full. Your committee have further to report that the cost of prosecuting this work during the past six months has been large,

*No fine imposed, on condition store be closed, which was done.

amounting to \$734.65, as per following statement:

Travelling expenses.....	\$374 85
Inspector's salary	280 00
Extra law costs	35 00
Analytical work, etc.....	22 80
Chairman's expenses in '96 and '97.....	22 00

\$734 65

While this amount may appear to be large, yet when the amount of territory covered and the results accomplished are taken into consideration, your committee feel satisfied that the money has been well spent. After deducting \$280 in fines and \$310 of long standing fees, our work shows a loss of \$144.65, which we submit is a small outlay when the results of increased protection to the members of the College are considered. Your committee are of opinion that a much larger sum could be spent to advantage along lines that are now under consideration, and it is our hope that the Committee on By-Laws and Legislation will be aggressive in the matter of legislation, in order to strengthen our hands in the work, and secure that protection to the members of the College which they are or should be entitled to under the Act.

Your committee in prosecuting their work have found eleven instances where no diploma was exhibited, as required in section 21 of the Act, and would respectfully warn all such transgressors of their liability as prescribed in section 28, and which it is the intention of your committee to have enforced. We beg further to report the receipt of many enquiries *re* the sale of fly-pads, by unqualified persons, and would here refer them to the opinion expressed in clause 2 of this report. We have also to report many enquiries *re* sale of Paris green, the clause referring to the sale of which seems to be less and less understood as the years roll by. Your committee regrets that they cannot find means of protecting the trade in the sale of such dangerous poison, and refer them for consolation to the latter part of section 21 of the Act, as amended professedly in the public interests, but contrary to the best judgment of the representatives of the College. Your committee beg to urge that all possible additions be speedily made to the poison list, and that new and revised poison books be procured containing full and complete amendments to the Act proper and the by-laws as well. Your committee beg further to press upon the members of the College the necessity of complying with section 22 of the Act, in notifying the registrar of retirement from business, as we find many such cases existing, and which, like other provisions of the Act, must be enforced.

Re the case against the Robert Simpson Co. (Limited), your committee beg to report that after many endeavors and much minor litigation, they have failed in their efforts to secure a judicial interpretation of the Act. The result of the case in its different stages has been thoroughly explained and criticized in portions of the press, which will obviate the necessity of further explanation here. Your committee has done everything in their power, and regret to find themselves confronted with the unfor-

tunate legal fact that without a conviction before a police magistrate we have no power of appeal under our Act or any other Act. Your committee have in their possession communications from Messrs. Edgar & Malone, and Mr. B. B. Osler, giving up the fight, and acknowledging that nothing further can be done, not, however, because we have no case, not, however, because we have been defeated, but simply for the want of legal machinery to properly meet the case. Your committee feels sorely disappointed in this case, and record their surprise that there is no legal means of finding out whether a corporation possesses legal privileges under our Act, that are denied to individual members of the College. Your committee acknowledge that they are powerless to do more in the matter as it now stands, and until the Committee on By-Laws and Legislation supply us with better implements of war in the shape of a new Act, or amendments to the Act, your committee will be reluctantly forced to rest on their oars, so far as the prosecution of the mammoth offenders are concerned. Your committee further are asked to be allowed to continue the service of an officer to prosecute their work, and authority to disburse as usual any funds required.

Your committee beg to record their appreciation of the fast increasing assistance which they are receiving from members of the College in every part of the province in the matter of protecting each other from the infringements of the unqualified, and desire their assistance still further during the ensuing term. The chairman respectfully requests personal letters of information regarding any irregularities that may exist, and when received will have prompt attention.

All of which is respectfully submitted,

W. A. KARN, Chairman.

This report met with due appreciation, the Council congratulating Chairman Karn upon not only the comprehensiveness of the report, but also the energy displayed in carrying out the year's labors.

On motion, Council adjourned.

On re-assembling, report No. 2 of Executive and Finance was presented, recommending, among other items, that \$35 be placed at the disposal of the registrar-treasurer for repairs requested by the Dean, and also that the registrar-treasurer be empowered to procure what assistance might be required by himself or janitor, amount of expense not to exceed \$200. Report adopted.

Mr. Roberts presented the following report of the Special Committee appointed the previous day :

Your Special Committee appointed to report on additions to the poison schedule, the revision of the by-laws, etc., and the restrictions recently placed upon the retail drug trade regarding the sale of alcohol and other fermented liquors, for art and medicinal purposes, recommend that on account of the short time at their disposal to consider these complicated matters, the committee be continued to report at the next session of the Council, or at a special session to be called if deemed advisable.

Respectfully submitted,

J. F. ROBERTS, Chairman.

The suggestion to send a representative to the meeting of the American Pharmaceutical Association met with a cool reception and sudden death. On motion of Messrs. Mackenzie and Hunter, the request was laid on the table.

Ex-President Mackenzie and President Watters were somewhat severe in their strictures on this organization.

On motion of Messrs. Dickey and Hargreaves, the registrar-treasurer was granted two weeks holidays.

After a vote of thanks to the retiring president, Mr. Mackenzie, the Council adjourned, to meet in February, 1898, or at call of president.

MEETING OF THE AMERICAN PHARMACEUTICAL ASSOCIATION.

The annual meeting of the American Pharmaceutical Association opened at the Hotel Lafayette, Minnetonka Beach, on Tuesday, August 24, President J. E. Morrison in the chair. The guests were welcomed by United States Senator Davis, who welcomed the guests in the name of the State of Minnesota and the Twin cities; by Dean Wulling, in the name of the Minnesota pharmacists, and by Mr. J. C. Eliel, Mayor of Minnetonka Beach. The addresses of welcome were replied to by Prof. J. M. Good, after which President Morrison read his annual address, in which he touched upon membership, the sale of spirits by pharmacists, education, and the important question of patented synthetic compounds. The address was referred to a committee composed of Messrs. Ebert, Whelpley, and Thompson, for consideration. After routine business the roll of delegates was called, and the Committee on Nominations, composed of two delegates from each State and Territory in the United States, and also from the Province of Quebec and Manitoba, was named. The president also appointed as Committee on time and place of next meeting, Messrs. Shepherd, Dohme, Kuhn, Miller, and Jacobs. After adjournment the Committee on Nominations met and named the following officers: President, H. M. Whitney, Lawrence, Mass.; 1st Vice-President, G. C. Bartels, Camp Point, Ill.; 2nd Vice-President, W. S. Thompson, Washington, D.C.; 3rd Vice-President, J. A. Miller, Harrisburg, Pa.; Treasurer, S. A. D. Sheppard, Boston; General Secretary, Chas. Caspari, jr., Baltimore; Members of Council for three years, Caswell A. Mayo, New York; W. A. Frost, St. Paul; G. F. Payne, Atlanta, Ga.

The Committee on Time and Place of Next Meeting decided on Baltimore, Md., minority reports to be presented in favor of Omaha and Richmond, Va. The selection of the majority will probably be accepted.

The meetings have been well attended, and every indication points to a most successful meeting. The Minnesota Association and the pharmacists of the Twin cities are unremitting in their efforts to secure the comfort and pleasure of the visitors.

The Chicago druggists also look after the visitors on the way to the meeting, giving a luncheon and reception in their honor in the Great Northern

hotel, at which speeches were made by Mr. Wooten and Mr. Wells, on behalf of the Chicago societies, and by President J. E. Morrison and Prof. Sadtler on behalf of the visitors. Afterwards tally-ho coaches were taken, and the visitors were driven through the parks and around the city. A most enjoyable time was spent during the afternoon, and at 6.30 the depot of the C.M. & St. P. R.R. was reached, and the train taken for Minnetonka.

The Canadian delegates are Henry Willis and J. E. Morrison for the Quebec Pharmaceutical Association, and Chas. Flexon, president of the Manitoba Association.

PRESIDENT'S ADDRESS.

The first question which I desire to take up is that of membership. For several years past our numbers have fluctuated between fifteen hundred and two thousand. The last report of the Membership Committee showed that we had eighteen hundred enrolled in this association. At the same time the secretary of the section on legislation and education in his report stated that there were 51,000 druggists in the United States, and 2,600 in Canada, making a total of 53,000, from which we can draw for our members. The discrepancy thus revealed between our membership and the total number of pharmacists is indeed very striking; and even admitting that 53,000 represents good, bad, and indifferent, and perhaps many who would or should not be deemed desirable as members, there still remains a great field for earnest work in the direction of recruiting our ranks. Five thousand is a moderate estimate to make of what our numbers should be before we can become, as has been suggested, a delegate organization such as the American Medical Association, or before we can hope to wield the influence to which our organization is entitled by reason of the high objects which it has in view.

The securing of new members is a matter which has heretofore been left solely and entirely in the hands of the committee charged with this work. That committee has been unremitting in its efforts, and I know that the chairman and members of the Auxiliary Committee have rendered yeoman service. While, however, expressing my appreciation of the valuable work done by these gentlemen, I will avail myself of the opportunity offered, to state that on the part of the members at large more could and should be done towards increasing our membership. Each member of the association should constitute himself an auxiliary member of the Auxiliary Committee, and should take advantage of every occasion which presents itself for setting out the benefits to be derived from and for enlisting the sympathy and active interest of fellow-pharmacists in our association.

On this question I may apparently differ from those of you who hold that the association should not endeavor to extend its membership, as there may thereby be brought in an undesirable class of members. I will say, however, that though I advocate proselytizing, if I may use the term, to a certain extent, still I am in favor of even greater restrictions than are provided for by our by-laws

at present. It is not possible for non-pharmacists to become members. The signature of one or two members is easily procured. Members—in good faith, be it said—thus thoughtlessly lend themselves to securing a place on our roll for men outside of our profession, who lack all the qualifications necessary for membership, but who feel that it may possibly advance their business interests. One particular case of this nature now presents itself to my mind—a case in which members affixed their signatures to an application without knowing anything whatever of the applicant. Our by-laws should be modified in such a way as to preclude the possibility of such occurrences; and I would suggest that every application be accompanied by a certificate from the secretary of the State Association or Board to the effect that the applicant is a *bona-fide* pharmacist. This is an almost necessary precaution, one which would impose no hardship, would prevent membership being exploited as an advertisement, and would in other respects ultimately result in benefit to the association.

It has been brought to my notice that many valuable papers are presented at the annual meetings of the State Associations by members of this body, and that these papers would be presented at our meetings if the State Associations were not in existence. Among these papers are to be found many worthy of a wider circulation, and of being preserved in more permanent form than that offered by the usual volume of State Association proceedings. I would therefore suggest that an arrangement be entered into with the State Associations, by which we would be permitted to publish these papers in our proceedings, subject to the approval of our Committee on Publication. We would thus secure what is best and most worthy of preservation amongst these papers, and also make our annual proceedings a more complete record of pharmaceutical progress in this country.

The treasurer's report will contain a statement of the number of members who have been delinquent in the payment of their fees, and who will be dropped from the rolls. The number of delinquents has been increased of late years, and it is not difficult to assign the principal reason for this state of affairs. It is due simply to the changed and changing condition of pharmacy. The pharmacist, originally a manufacturer, and a combination of chemist, botanist, and merchant, has allowed the last mentioned to greatly overshadow the others, and has become almost entirely a dealer in patent medicines, toilet articles, soda water, and drugs. The laboratory is not to be found in connection with modern pharmacy. Everything which should be made is bought from the wholesaler or manufacturer. Pharmacy as a profession is apparently a thing of the past, and is now but a trade or mercantile pursuit. But I believe that we are now going through one of the transition stages in the process of evolution which governs all things, and that we will find our present troubles to have been a fire of purification in preparation for a new era in which pharmacy will be differentiated into a profession and a trade. We see evidences of this in

the pharmaceutical journals and the colleges. We find the former devoting a large amount of their space to the matter of advertising and other strictly commercial topics, showing that the mercantile feature is rapidly developing. On the other hand, we find that the colleges are increasing the number and length of their courses. Subjects which some years ago were thought unnecessary or useless are now included in their curricula, and pharmacy by them is regarded as a profession alone.

Can the average individual put into practice his college instruction in chemistry, pharmacy, pharmacognosy, microscopy, etc., and at the same time look sharply after the buying and selling of the thousand and one items which go to make up the stock of the modern pharmacy? Impossible; and a change must come and we must prepare for it. If we desire to follow pharmacy as a trade we must adopt the methods of other trades. We must buy in the cheapest market, sell as cheaply as our neighbor, use printer's ink on every possible occasion and in every possible way, and, in a word, spare no effort to increase our trade. But then we must be prepared to stand the fierce fire of commercial competition, and cannot claim, because we are druggists, any more protection than that given other merchants. As it is now, we have gone outside of our own territory, and invaded that of every other trade, and added their goods to our stock under the name of "side lines." We find cigars, books, stationery, paints and oils, etc., forming the bulk of the stock of many so-called pharmacies; and we find as a rule that the proprietors of these establishments complain of their neighbors selling perfumes and patent medicines. Remedies innumerable have been proposed for the present depressed condition of pharmacy. You cannot control commerce; trade will seek its own channels in spite of laws or obstacles, and as far as I can see there is only one way out—that is, to return to pharmacy proper; devote more attention to the laboratory, cultivate more cordial feelings with the medical profession, and strive for higher ideals. The higher the standard we set up and the closer we approach to it, the greater will be the esteem in which we will be held by the public.

One of the first requisites for the elevation of the profession is more stringent pharmacy laws, and more especially as regards examinations. In this connection I would say that the section of legislation and education will present for our consideration a model pharmacy law.

Now, I wish to draw attention to what I consider a fault in all American pharmaceutical legislation. As far as education is concerned they all begin at the wrong end. By this I mean that no supervision is exercised over students or apprentices in drug stores. It is the almost universal custom to take any boy applying for a position, without any examination as to his mental equipment and general fitness for the profession; and if he does his work reasonably well, he is promoted from errand boy to clerk, and then to dispenser, and after three or four years' service he commences to prepare for his examination, in which, by means of quiz compendia

and other cramming devices, he succeeds. Of course there are exceptions; but I believe that the number of college graduates is out of proportion to the number of young men employed in drug stores. If pharmacy is to become a profession, we must commence with the beginners. We must have a class of men who have acquired a sound foundation upon which to erect the composite structure which we call the science of pharmacy. If the law recognized a class of apprentices and compelled all desiring to study pharmacy to pass an examination in such subjects as arithmetic, history, geography, elementary algebra, and one modern language besides English—either German or French—before a board named by the Board of Pharmacy, and consisting of two or more well-known High school teachers, a superior class of young men would be drawn to the study of pharmacy proper. They would almost invariably become college graduates, and would aim at becoming proficient pharmacists rather than merely passing the board examination. This requirement would also lessen the numbers of clerks and pharmacists and decrease competition, which is one of the greatest evils of the present system.

The delegation to the American Medical Association will bring before you for consideration a most important question, namely: Will the spirits and wines be retained in the next revision of the Pharmacopoeia? There is no necessity for my dilating on the evils of the liquor traffic, and the incalculable amount of injury it has done to American pharmacy. The pharmacists of the United States are at present in a peculiar and humiliating position, for just as long as liquors are sold in pharmacies, even if only on prescriptions, will we be in the eyes of the Government on the same footing as saloon-keepers. It is time that this condition of things were terminated, by the complete abolition of every form of dealing in fermented or spirituous liquors. A great advance in that direction will have been taken when it will be decided to delete all such preparations from the Pharmacopoeia. For my part I believe that the sale of liquors by pharmacists is unnecessary, and is simply the result of a bad habit into which we have allowed the public to fall. In the Province of Quebec pharmacists do not deal in liquors. The physician, when desirous of prescribing stimulants, invariably sends his patient to the grocer; and in all my experience of twenty years as a retail pharmacist, I do not believe I have had to sell a quart of liquor, except during the time I was employed in this country. I am not a temperance crank, but I think that the sale of liquor is degrading to the profession of pharmacy, and is an unmitigated evil. The only excuse which I have heard advanced for the retention of this class of preparations in the Pharmacopoeia is that we have a standard by which to test our goods.

Now, let us examine the reliability of this standard. Under "Spiritus Frumenti" we find that the Pharmacopoeia says: "Its specific gravity should not be more than .930 nor less than .917, corresponding approximately to an alcoholic strength of 45 to 50 per cent. by weight, or 50 to 58 per cent.

by volume"—a rather wide margin. And is the test for impurities any more reliable? Under "Spiritus Vini Galici" we find that "Its specific gravity should not be more than .941 nor less than .935, corresponding approximately to an alcoholic strength of 39 to 47 per cent. by weight, or 46 to 55 per cent. by volume." The tests for fusil oil, etc., are not more definite than under spiritus frumenti. An examination of the tests for wines will show that they are not any more definite. Admitting that the tests are sufficiently exact, I would like to ask, How many pharmacists test their liquor purchases to see if they answer the requirements of the Pharmacopoeia? Furthermore, of what benefit is the standard to us, when the price we have to pay for it is the levelling of the profession of pharmacy in the eyes of the Government, and of the public to that of the saloon-keeper? The price is too great to compensate for any imaginary or even possible or probable advantages. I have only touched upon one phase of the question. The therapeutical aspect is one outside of our province. The strictly pharmaceutical use of wine as a menstruum I have not dealt with, but I consider that the class of wines could be very easily replaced by preparations made of the dilute spirit of the same alcoholic strength.

Another important question which we should take up is that of patent medicinal compounds. During the past ten or twelve years a number of organic compounds, principally of German origin, have been patented and introduced into this country. One peculiarity of these goods is the very high price charged here in comparison with that ruling elsewhere. I give a comparative statement of prices which obtain in the United States and in Canada:

	U.S.	Canada.
Phenacetine	\$1.00	\$0.35
Sulphonal	1.35	0.30
Trional	1.50	1.00
Choral	0.90	0.35
Antipyrine	1.40	1.10

Now, why should the people of the United States be compelled to pay such exorbitant rates as shown here? It is simply due to the Patent Law of this country, which allows a patentee to cover everything within his reach. Patent laws are avowedly designed for the encouragement of inventive genius by guaranteeing to an inventor an adequate return for the trouble and study required for the invention of new appliances, new methods, etc., and it is as much to the United States patent law as to any other cause that this country owes its proud pre-eminence in the manufacturing world. In the matter now under consideration I venture to say that such a contingency was never foreseen by the framers of the law. Nor do I think it was ever intended that the law should have any such results as have come from its application to the invention or discovery of new remedial agents. One of the objects of the law was the encouragement of inventive genius. Has it operated in this case? No; for not a single new synthetic compound has been discovered and brought to completion in this country since the flood of synthetics first began to pour

in. The only result has been the enriching of a few at the cost of the whole country, and as a matter of fact the American people have been paying foreigners millions annually for taking advantage of the privileges granted by the United States patent laws.

Looked at in any light except in that of the German patentee and his American representative, this position of affairs is intolerable, and it is for us to draw the attention of the legislators of this country to the gross iniquity perpetrated upon the sick. Germany is the home of these preparations, but an examination of the German patent law shows that such preparations as those we speak of cannot be patented. The Patent Law of April 7th, 1891, says:

Patente werden erteilt für neue Erfindungen, welche eine gewerbliche Verwertung gestatten. Ausgenommen sind :

Erfindungen, deren Verwertung den Gesetzen oder guten Sitten zuwiderlaufen würde;

2. Erfindungen von Nahrungs-genus und Arzneimitteln, sowie von Stoffen, welche auf chemischem Wege hergestellt werden, soweit die Erfindungen nicht ein bestimmtes Verfahren zur Herstellung der Gegenstände betreffen.

Which freely translated, means that discoveries of foodstuffs or medicinal preparations or bodies which may be prepared by a chemical method cannot be patented, but that the method of preparation of these objects may be.

Now, if German manufacturers cannot patent their products in their own country, why should they be allowed to do so in this.

Turning to France we find that the law of July 5th, 1844, which is still in force, says :

"Ne sont pas susceptibles d'être brevetés les compositions pharmaceutiques ou remèdes de toutes espèces, les dites objets demeurant soumis aux lois et règlements spéciaux sur la matière, et notamment au décret du 18 août, 1810, relative aux remèdes secrets."

"May not be patented, first, pharmaceutical compounds or remedies of every sort, these articles remaining subject to the special laws and regulations on this subject, and particularly to the law of 18th August, 1810, relative to secret remedies."

Again, we find in a recent report of the commission appointed by the French Minister of Public Instruction to prepare a new Pharmacy Act, that they propose the following clause to be added to Article 9, which sets out that none but pharmacists shall sell remedies either compound or simple, used in human or veterinary medicines : Ces médicaments et leur mode de préparation ne pourront faire l'objet d'un brevet d'invention; leur dénomination scientifique ou commerciale tombent dans la domaine publique et ne pourront devenir propriété privative ni constituer à elles seuls une marque de fabrique. Les remèdes secrets restent prohibés."

"These remedies and their method of preparation cannot be made the subject of a patent. Their scientific or commercial names fall into the public domain, and cannot become private property, nor

constitute in themselves a trade mark. Secret remedies remain prohibited."

These quotations require no comment.

If the patentees of these remedies were satisfied with a reasonable profit, we might not complain. Now, it might be claimed that the great expense of advertising and introducing these preparations necessitate high prices; but does it cost more to advertise these goods in this country than it does in Germany or England, or Canada, where the prices are so much lower? And is it not a fact that most of the advertising is free? Do we not see month after month communications in the medical press on the action of the new synthetics in certain affections. This is the most affective kind of advertising, and it is impossible to imagine that the journals in which these articles appear would receive pay for their publication. There is no reason for the high prices charged for these goods, but the knowledge of the patentees that with the process and product patented and the name copyrighted they have an absolute monopoly, and can charge just what they please. What we want is that the patent law be changed on the lines of the German law, which, while safe-guarding the public from extortion, gives ample protection to the patentee. We should demand that products used in medicine should not be patented, and that the names by which they are known in commerce should not be copyrighted. On this subject a resolution was presented and adopted at the last convention, but it did not go far enough. I would therefore suggest that although this work would be within the province of the Committee on National Legislation, a special committee be appointed to undertake and carry on an agitation for the amendment of the United States Patent Law on the lines already indicated. I would also suggest that our delegation to the American Medical Association be instructed to bring this matter before the next convention, and secure an endorsement of that body; that we also secure the co-operation of all the State Associations through their delegates present at this convention.

Lachine, Q., Aug. 15, 1897.

Sir,—The last number of your journal was well gotten up; cover a "daisy." Very truly yours,
J. A. RANSOM.

—Hold on to the truth, for it will serve you well and do you good throughout eternity. Hold on to virtue; it is above all price to you in all times and all places. Hold on to your good character, for it is and always will be your best wealth.

KRYOFINE.

This body is obtained by heating together parphenitidine and methylglycolic acid to 120 or 130 deg. C.; it is white, crystalline, inodorous, and insipid; soluble 1 in 600 of cold water. According to Prof. Eichhorst, of Zurich, it possesses powerful antipyretic and analgesic properties; the dose is .50 gm. (7½grs.)

MEETINGS ANNOUNCED.

The Proprietary Articles Trade Association of Canada is called for the forenoon of September 7th at the Queen's hotel, Toronto.

The Wholesale Drug Jobbers' and Patent Medicine Distributors' Association will meet at the Queen's hotel, Toronto, on Sept. 7th.

The Ontario Society of Retail Druggists will meet at the Ontario College of Pharmacy building, Gerrard street, Toronto, on Sept. 8th, at 2 p.m.

The meeting of the British Medical Association commenced on August the 31st in Montreal, and continued for four days.

As we go to press the American Pharmaceutical Association is meeting at Lake Minnetonka, Wis. This is a summer resort situated between Minneapolis and St. Paul.

The National Wholesale Druggists' Association of the United States meets in Richmond, Va., Oct. 11, 12, 13, and 14.

NEWS ITEMS.

J. C. Courtice, of Havelock, has assigned.

M. E. Shaw & Co., Rockwood, has assigned.

J. T. Abby has opened a branch at Trout Lake, B.C.

Mr. I. Curry, of Toronto, is rusticing in Muskoka.

W. H. Rogers is starting a new business in Ottawa.

O. Anderson is opening a store in Regina, N.-W.T.

D. D. Reid, Port Elgin, has sold out to J. W. Dougherty.

D. L. Tremaine is opening a new business in Halifax, N.S.

F. T. Abey has removed from Revelstoke, B.C., to Ferguson.

Henry Carter, of Sundridge, Ont., has closed out his business.

John Stewart, Cookstown, Ont., has sold out to Dr. A. Mackay.

J. W. M. Hamilton is starting a new business in Neepawa, Man.

A. S. Goodeve, of Chesley, has been succeeded by D. J. Sutherland.

Mr. Wm. Haldenby and family are holidaying at Niagara-on-the-Lake.

The stock of L. R. Maclaren, Digby, N.S., is being offered for sale by tender.

Wm. Anderson, of Otterville, Ont., has been succeeded by M. Anderson.

O. C. S. Stockhouse, Buckingham, Que., lost his place by fire on August 5th.

The Mileta Drug Co., of Mileta, Man., have taken over the business of A. N. Pope.

Ottawa is to have another departmental store, with P. Rochon as proprietary.

TURN THE
BOTTLES
ANY WAY
YOU WILL



Welch's Grape Juice

... IS ...

ALWAYS THE SAME.
ALWAYS CHOICEST CONCORD
GRAPES.

A Ready Seller by the bottle for
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purposes.

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This Grape Juice is the most desirable,
healthful and satisfying drink that can
be dispensed.

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LYMAN SONS CO., MONTREAL. } ONTARIO, QUEBEC.



HOW AND WHERE to get our Remedies.

	PER DOZ.	1 GROSS
Dr. Coderre's Red Pills for Pale and Weak Women.....	\$4.00	\$40.00
In 3 doz. lots, 5 p.c. discount.		
Dr. Coderre's Plasters.....	2.00	20.00
In 3 doz. lots, 5 p.c. discount.		
Dr. Coderre's Purgative Tablets	2.00	20.00
In 3 doz. lots, 5 p.c. discount.		
Dr. Coderre's Injection Powder.	2.00	20.00
In 3 doz. lots, 5 p.c. discount.		

To obtain the 5 per cent. discount, the order must be for not less than 3 dozen of any one of our Remedies. Special price in larger quantities. F. O. B. MONTREAL.

Correspondence Solicited.

N.B.—We will not sell to Price Cutters.

Our remedies are meeting with the greatest success wherever introduced, simply because they are Reliable Specialties. Refuse no sale on them. Get them from your jobber; he has them for you. Or mail your orders to the

Franco-American Chemical Co.,

87 St. Charles Borromeo St.,

Bell Tel. 635

MONTREAL

INDEX OF DISEASES TREATED WITH

PARVULES

The Dose of any Parvule will vary from one to four, according to age or the frequency of administration. For instance, one Parvule every hour, two every two hours, or three every three hours, and so on for adults. For children one three times a day is the minimum dose. It is claimed by many practitioners that small doses, frequently repeated, exert a more salutary effect.

ATONIC DYSPEPSIA. Parv. Nux Vomica.....	1-50 gr.	NAUSEA. Parv. Ipecac.....	1-50 gr.
BILIOUS CONDITIONS. Parv. Calomel.....	1-20 gr.	RETARDED MENSTRUATION. Parv. Ergotine.....	1-10 gr.
BRONCHITIS OF CHILDREN. Parv. Tartar Emetic.....	1-100 gr.	SCROFULA. Parv. Calomel, 1-20 gr.....	Aloin, 1-10 gr.
CONSTIPATION. Parv. Aloin.....	1-10 gr.	SICK HEADACHE. Parv. Nux. Vom.....	1-50 gr.
DIARRHŒA. Parv. Corrosive Sublimate.....	1-100 gr.	SIKNESS OF PREGNANCY. Parv. Belladonna.....	1-20 gr.
EXANTHEMATOUS SKIN DISEASES. Parv. Iodide Arsenic.....	1-100 gr.	SLUGGISH BOWELS. Parv. Podophyllin.....	1-40 gr.
HABITUAL CONSTIPATION. Parv. Podophyllin.....	1-40 gr.	SPERMATORRHOEA. Parv. Phosph.....	1-200 gr.
HYDATID UTERINE GROWTH. Parv. Ergotine.....	1-10 gr.	SUMMER DIARRHŒA. Parv. Mercury with Chalk.....	1-10 gr.
INCONTINENCE OF URINE. Parv. Cantharis.....	1-50 gr.	SYPHILIS. Parv. Calomel.....	1-20 gr.
INFLAMMATORY PROCESS. Parv. Aconite.....	1-20 gr.	SYPHILITIC HEADACHE. Parv. Corrosive Sublimate.....	1-100 gr.
INFLUENZAS. Parv. Iod. Arsenic.....	1-100 gr.	TORPIDITY OF LIVER. Parv. Podophyllin.....	1-40 gr.
ITCHING SKIN ERUPTIONS. Parv. Iod. Arsenic.....	1-100 gr.	UTERINE HEMORRHAGES. Parv. Ergotine.....	1-10 gr.
MUCOUS RECTAL DISCHARGES. Parv. Tannin.....	1-10 gr.	VESICULAR EMPHYSEMA. Parv. Digitalis.....	1-20 gr.

WM. R. WARNER & CO.'S HYPODERMIC TABLETS, QUICKLY SOLUBLE.

We claim (and a candid comparison will convince any one) for our soluble tablets, the following points of superiority, viz: *First*—They are quickly and entirely soluble. *Second*—They are permanent in form and accurate in dose. *Third*—They are safe, and rapid in action.

Soluble Hypodermic Tablets	Soluble Hypodermic Tablets	Soluble Hypodermic Tablets
ACONITINE, Pure Cryst. 1-120 gr...	MORPHINE BIMECONATE, 1-3 gr.	MORPH 1-4, & ATROP, 1-120 gr. No. 10.
APOMORPHINE MURIATE, 1-20 gr.	MORPHINE BIMECONATE, 1-6 gr.	" 1-4, " 1-60 gr. No. 11.
APOMORPHINE MURIATE, $\frac{1}{2}$ gr....	MORPHINE BIMECONATE, 1-8 gr.	" 1-3, " 1-120 gr. No. 12.
APOMORPHINE MURIATE, 1-12 gr.	MORPHINE MURIATE, 1-8 gr.	" 1-2, " 1-150 gr. No. 13.
ATROPINE SULPH. 1-150 and 1-200 gr	MORPHINE MURIATE, 1-6 gr.	" 1-2, " 1-120 gr. No. 14.
ATROPINE SULPH. 1-120 gr.....	MORPHINE NITRATE, 1-6 gr.	" 1-2, " 1-100 gr. No. 15.
COCAINE HYDROCHLOR, 1-8 gr.....	MORPHINE NITRATE, 1-8 gr.	" 1-2, " 1-240 gr. No. 16.
COCAINE HYDROCHLOR, 1-10 gr.....	MORPHINE NITRATE, 1-12 gr.	NITROGLY, 1-50, 1-100, 1-150, 1-200 gr.
CODEINE SULPHATE, 1-8 gr.....	MORPHINE SULPHATE, 1-8 gr.	PILOCARPINE MUR, 1-8, 1-20, 1-5 gr.
CONIINE HYDROBROMATE 1-100 gr	MORPHINE SULPHATE, 1-6 gr.	PILOCARPINE NIT, 1-20, 1-8, 1-4 gr.
CONIINE HYDROBROMATE, 1-60 gr	MORPHINE SULPHATE, 1-4 gr.	SODIUM ARSENIATE, 1-30 gr.
DIGITALINE, Pure, 1-100 gr.....	MORPHINE SULPHATE, 1-3 gr.	STRYCHNINE NITRATE, 1-150 gr.
DIGITALINE, Pure, 1-60 gr.....	MORPHINE SULPHATE, 1-2 gr.	STRYCHNINE NITRATE, 1-100 gr.
DUBOISINE SULPHATE, 1-100 gr....	MORPH. 1-8, & Atrop, 1-200 gr. No. 1.	STRYCHNINE NITRATE, 1-60 gr.
DUBOISINE SULPHATE, 1-60 gr....	" 1-6, " 1-200 gr. No. 2.	STRYCH. SUL. 1-1201-100, 1-60, 1-150gr
ERGOTIN, 1-6 gr.....	" 1-4, " 1-50 gr. No. 3.	STRYCH. SUL. 1-20 gr.
ESERINE SULPHATE, 1-60 gr.....	" 1-4, " 1-100 gr. No. 4.	STRYCH. SUL. 1-50, 1-30 gr.
ESERINE SULPHATE, 1-100 gr.....	" 1-8, " 1-150 gr. No. 5.	STRYCH & ATROP. No. 1, 1-50, 1-150 gr
HYOSCINE HYDROBROM, 1-100 gr.	" 1-8, " 1-100 gr. No. 6.	STRYCH & ATROP. No. 2, 1-30, 1-120 gr
HYOSCYAMINE SULPH. 1-100 gr....	" 1-6, " 1-150 gr. No. 7.	STRYCH & ATROP. No. 3, 1-60, 1-150 gr.
MERCURY CORROSIVE	" 1-6, " 1-120 gr. No. 8.	
CHLORODIN, 1-60, 1-150, 1-40 gr.	" 1-4, " 1-200 gr. No. 9.	

For sale by all Druggists.

WM. R. WARNER & CO.

1228 MARKET ST., PHILADELPHIA.

52 MAIDEN LANE, NEW YORK.

197 RANDOLPH ST., CHICAGO.

ACCURATE ADMINISTRATION OF LITHIA

To make Fresh Sparkling Lithia Water of Definite Strength Dissolve One of

WM. R. WARNER & COMPANY'S

ORIGINAL EFFERVESCENT

LITHIA WATER TABLETS

IN A GLASS OF WATER

EFFICACIOUS, CONVENIENT AND INEXPENSIVE

AN EFFECTUAL REMEDY IN

RHEUMATISM, LITHEMIA, GRAVEL, BRIGHT'S DISEASE, GOUT, ETC. ETC.

IT IS DIURETIC AND ANTACID

Each tablet contains three grains (made also five grains) Citrate of Lithia, so that a Definite quantity of soluble Lithia is administered in a pleasant form, besides the advantage of having fresh water with each dose, presenting a therapeutic value of higher standard than the various Lithia spring waters. This is a scientific preparation of the highest standard.

SUPPLIED BY ALL DRUGGISTS, OR BY MAIL. TAKE NO SUBSTITUTES.

ORIGINAL WITH AND MADE ONLY BY

WM. R. WARNER & Co.

1228 Market St., Philadelphia 197 Randolph St., Chicago 52 Maiden Lane, N.Y.

Superior to Pepsin of the Hog.

INGLUVIN
(FROM THE VENTRICULUS CALLOSUS GALLINACEUS)

A Powder:—Prescribed in the same manner, doses and combinations as Pepsin.

A most potent and reliable remedy for the cure of

Marasmus, Cholera Infantum, Indigestion, Dyspepsia and Sick Stomach

It is superior to the Pepsin preparations, since it acts with more certainty, and effects cures where they fail.

A SPECIFIC FOR VOMITING IN PREGNANCY

In Doses of 10 to 20 Grains.

PRESCRIBED BY THE MOST EMINENT PHYSICIANS IN EUROPE AND AMERICA.

"IN MEDICINA QUALITAS PRIMA GRAVIS EST."

POTENT. RELIABLE. SOLUBLE.

Standard and Officinal Preparations

FOR PHYSICIANS ONLY.

Special Recipes made to order for 3,000 Pills or upwards.

Pil. Cascara Cathartic

(DR. HINKLE)

Each containing

Cascarin.
Aloin, aa ¼ gr.
Podophyllin, 1-6 gr.

Ext. Belladon ½ gr.
Strychnin, 1-60 gr.
Gingerine, ½ gr.

Dose—1 to 2 pills.

Pil. Peristaltic

(WARNER & Co.)

Each containing

Aloin, ¼ gr.
Strychnin, 1-60 gr.

Ext. Bellad, ½ gr.
Ipecac, 1-16 gr.

Dose—1 to 2 pills.

Therapeutics—Cathartic, tonic

40 cts. per hundred

Pil. Peristaltic Comp.

(WARNER & Co.)

Salol, 2 grs.
Ingluvin, ½ gr.
Aloin, 1-10 gr.

Sul. Strych, 1-100 gr.
Ext. Bellad, 1-30 gr.

80 cts. per hundred

Pil. Peristaltic Aperient

(WARNER & Co.)

Aloin, 1-10 gr.
Ext. Bellad, 1-20 gr.

Strych. Sul. 1-100 gr.
Ipecac, 1-30 gr.

40 cts. per hundred

Phenacetin and Quinine

(WARNER & Co.)

Phenacetin, 2½ grs.
Sul. Quinine, 2½ grs.

Therapeutics—Tonic, Antipyretic

\$1.50 per hundred

Pil. Salol Phenacetin

(WARNER & Co.)

Salol, 2½ grs.

Phenacetin, 2½ grs.

Therapeutics—Antipyretic, Analgesic

\$2.00 per hundred

Pil. Sumbul Comp.

(W. R. WARNER & Co.)

R.—Ext. Sumbul, 1 gr.; Ferri Sulph. Ext., 1 gr.;

Asafetida, 2 grs.; Ac. Arsenious, 1-40 gr.

DR. GOODELL:—"I use this pill for nervous and hysterical women who need building up." This pill is used with advantage in neurasthenic conditions, in conjunction with Warner & Co.'s Bromo-Soda, one or two pills taken three times a day.

Price, \$1.00 per hundred

Pil. Chalybeate

(W. R. WARNER & Co.'s FERRUGINOUS PILLS)

3 grains. Dose 1 to 3 pills.

Ferri Sulph. Fe SO₄ } = Ferri Carb. Fe CO₃
Potass. Carb. K₂ CO₃ } = Potass. Sulph. K₂ SO₄

Carbonate of Protoxide of Iron

The above combination, which we have successfully and scientifically put in pill form, produces, when taken into the stomach, Carbonate of Protoxide of Iron (Ferrous Carbonate) in a quickly assimilable condition.

40 cts. per hundred.

Pil. Chalybeate Comp.

(WARNER & Co.)

Same as Pil. Chalybeate, with ½ gr. Ext. Nux Vomica added to each pill to increase the tonic effect.

Dose—1 to 3 pills.

55 cts. per hundred.

Pil. Arthrosia

(WARNER & Co.)

For cure of Rheumatism and Rheumatic Gout.

FORMULA—Acidum Salicylicum; Resina Podophyllum; Quinina; Ext. Colchicum; Ext. Phytolacca; Capsicum.

Almost a specific in Rheumatic and Gouty Affections. Please specify Warner's, and order in original bottles of 100 pills.

60 cts. per hundred.

SOLD BY LEADING DRUGGISTS.

SOLUBLE.

RELIABLE.

PERMANENT.

WILLIAM R. WARNER & CO.'S Soluble Coated Granules

PREPARED ESPECIALLY FOR PRESCRIBING.

The following list comprises formulæ of value to the busy practitioner.

The Coating of the following Granules will Dissolve in 1½ Minutes.

Acid Arsenious.....I-20, I-30, I-50 grs.
Medical properties—Antiperiodic, Alterative.
Dose—1 to 2.

Aconitia.....I-60 gr.
Med. prop.—Nerve Sedative. Dose—1 to 2.

Aloin et Strychnine.
Med. prop.—Tonic, Laxative. Dose—1 to 2.

Aloin et Strych. et Bellad.
Med prop.—Tonic, Laxative. Dose 1 to 2.
Aloin, 1-5 gr.
Strychnine, 1-60 gr.
Ext. Belladon, ½ gr.

Atropine.....I-100 gr.
Med. prop.—Anodyne. Dose—1 to 2.

Atropinæ Sulph.....I-60 gr.
Med. prop.—Anodyne. Dose—1 to 2.

Codeia.....½ gr.
Med. prop.—Anodyne, replacing Morphia without
the usual disagreeable after-effects produced by
the latter.

Corrosive Sublimate, I-12, I-20, I-40
and I-100 gr.
Med. prop.—Mercurial Alterative. Dose—1 to 2.

Digitallin.....I-60 gr.
Med. prop.—Arterial Sedative. Dose—1 to 2.

Elaterium, (Clutterbuck's).....I-10 gr.
Med. prop.—Diuretic, Hydragogue Cathartic.
Dose—1 to 2.

Ext. Ignatia Amara.....½ gr.
Med. prop.—Nerve Sedative. Dose—1 to 2.

Ext. Nuc. Vomica.....½ and ½ gr.
Med prop.—Nerve Stimulant. Dose—1 to 3.

Hyoscyamia.....I-100 gr.
(Crystal Pure Alkaloid.)
Med. prop.—Anodyne, Soporific. Dose—1.

Mercury Proto. Iodid.....½ gr.
Med. prop.—Alterative. Dose—1 to 4.

Mercury Proto. Iodid.....½ gr.
Med. prop.—Alterative. Dose—1 to 2.

Mercury Proto. Iodid.....½ gr.
Med. prop.—Alterative. Dose—2 to 4.

Mercury Iodide Red.....I-16 gr.
Med. prop.—Alterative. Dose—1 to 3.

Morphinæ Sulph.....I-20 gr.
Med. prop.—Anodyne.

Morphinæ Sulph.....I-10 gr.
Med. prop.—Anodyne. Dose—1 to 2.

Morphinæ Sulph.....I-6 and ½ gr.
Med. prop.—Anodyne. Dose—1 to 2.

Morphinæ Sulph.....½ and ½ gr.
Med. prop.—Anodyne. Dose—1 to 2.

Podophyllin.....I-10, I-6, ½, ¼ and ½ gr.
Med. prop.—Cathartic. Dose—1 to 4.

Podophyllin Comp.
Med. prop.—Cathartic and Tonic. Dose—1 to 2.
Podophyllin, ½ gr.
Ext. Hyoscyami, ½ gr.
Ext. Nuc Vomica, 1-16 gr.

Strychnine, I-16, I-20, I-30, I-32, I-40,
I-60 and I-100 gr.
Med. prop.—Nerve Stimulant, Tonic. Dose—1 to 3.

Strychninæ Sulph.....I-32 gr.
Med. prop.—Tonic. Dose—1 to 2.

Veratrinæ Sulph.....I-12 gr.
Med. prop.—Powerful Topical Excitant. Dose—1.

Zinc Phosphide.....I-6 and ½ gr.
Med. prop.—Tonic. Dose—1 to 3.

Canadian Agencies:

LYMAN SONS & CO., Montreal.
LYMAN, KNOX & CO., "
KERRY, WATSON & CO., "
EVANS & SONS, "

BROWN & WEBB, Halifax.
LYMAN BROS. & CO., Toronto.
ELLIOT & CO., "
WINER & CO., Hamilton.

The firm of E. Miller & Co., Dresden, Ont., has been changed to Miller & Wilson.

A. F. C. Herring is closing his business in Rossland and returning to New Westminster, B.C.

The stock and fixtures of the J. G. Smith estate, Halifax, have been sold to G. A. Burbridge.

Mr. P. M. Gordon, of Walkerton, has been spending his holidays in Whitby among old friends.

I. F. Belfry has arranged to continue the business at the corner of King and Bathurst streets, Toronto.

Mr. T. Gibbard manager of Messrs. Lyman Sons & Co., Montreal, spent his holidays in Galt and vicinity.

McAnally & Coleman, of Trail, B.C., have dissolved partnership, and C. A. McAnally continues the business.

Dr. W. L. Smith has removed his stock and fixtures from 338 Spadina avenue, Toronto, and proposes establishing himself in business in London, Ont.

J. C. Hedley, for eighteen years with Messrs. Evans & Sons, as manager and traveller, has purchased the business of Hugh Brown, corner of Parliament street and Wilton avenue, Toronto. Mr. Brown, who has been a victim of rheumatism for a number of years, is forced to seek rest and treatment.

Mr. E. G. Swift, Canadian manager for Messrs. Parke, Davis & Co., Walkerville, was in the city for a short time on his way to attend the meeting of the British Medical Society, which opens in Montreal on August 31st. Messrs. Parke, Davis & Co. have an exhibit of pharmaceutical preparations at the meeting.

EDITOR'S TABLE.

Proceedings of the seventeenth and eighteenth annual meetings of the Missouri Pharmaceutical Association. Besides reports of proceedings, the volume contains the papers read and discussed at meetings.

The annual announcement of the Ontario College of Pharmacy, 18th session.

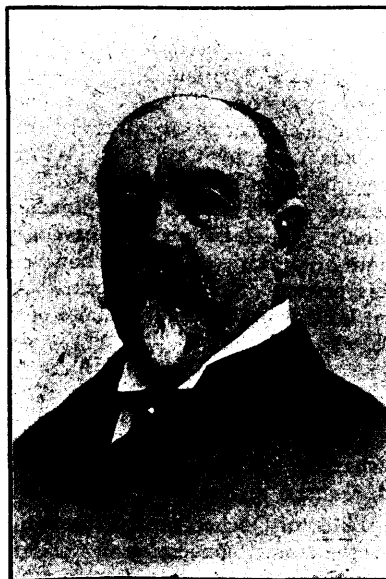
Prospectus of the St. Louis College of Pharmacy, thirty-second annual session.

Extract from Heinrich Haesel's quarterly report on essential oils and fruit essences.

The annual announcement of the School of Pharmacy of North-western University, Chicago.

Annual announcement of the Department of Pharmacy of the Detroit College of Medicine.

The price list of the E. B. Shuttleworth Chemical Co. This is the most complete list of the kind ever issued by a purely Canadian firm, and shows the range of the company's manufacturing Fl. extracts, flavoring extracts, elixirs, liquors, linaments, spirits and ointments of the B. P., sugar and gelatine-coated pills, and tablet triturates.



S. W. BOWNE.

The original of the above portrait is head of the well-known house of Scott & Bowne, proprietors of Scott's Emulsion. Mr. Bowne is a native of New York, where he was born 55 years ago, and has been connected with the firm during his entire business career. Entering it as a young man, when it might be said the business was in its infancy, he has seen it grow and expand from a small beginning, when their emulsion was made by hand-power, until to-day it ranks among the foremost of the great proprietary medicine houses of America. Mr. Bowne has the satisfaction of knowing that the history of the house is the record of his own success in life. The proud position which it occupies to-day is in a large measure the result of his untiring energy and business ability. Mr. Bowne, accompanied by Mrs. Bowne, has been staying in the city at the Queen's for a few days. They are on the return from a two months' trip to the Land of the Setting Sun, during which they reached the shores of world-famed Alaska, where the gold fever is at its meridian height. The twinkle in Mr. Bowne's eyes, and smile which accompanied it, when asked as to how he had managed to escape the contagion, was suggestive of more than the words conveyed in which he replied to the query. Mr. Bowne expressed himself as well pleased with the location of the Canadian factory, and also with the volume of business done here, which, under the careful management of Mr. Fowler, is on the increase. Mr. Bowne took advantage of his stay to see somewhat of our city, and expressed himself as delighted with its pertinings. Particularly noticeable, he says, is the number and uniformity of its charmingly homelike residences, nothing overwhelming in grandeur, but much denoting comfort and prosperity. The streets, too, are striking from their cleanliness and regularity, with their well-kept lawns. Mr. Bowne returned from the West on our own C.P.R., and although an extensive traveller, having been in almost every civilized

country in the world, he unhesitatingly concedes the palm for beauty and grandeur to the Selkirks in British Columbia. Mr. and Mrs. Bowne continued their journey on one of the O. & R. boats down the St. Lawrence through Montreal to the Saguenay, and from there by way of the White Mountains, home to New York.

Mr. Bowne, as his portrait would indicate, is a genial, kindly gentleman, and we have a pleasant recollection of the agreeable half hour chat with him in his private office, New York. Always a busy man, he still has time for a smile of welcome to friends who call.

MONTREAL NOTES.

Dr. Lachapelle has moved to the corner of Ontario and Amherst streets.

Henry Willis, of Quebec, passed through here on his way to the annual convention of the A.Ph.A. at Lake Minnetonka.

John Lewis has returned from his trip to California much benefited by the sojourn in the land of oranges and olives.

Jos. Contant, ex-president of the Pharmaceutical Association, and president of the *Chambre de Commerce*, has been elected as one of the harbor commissioners, replacing L. E. Morin, whose term has expired.

We have repeatedly urged some action with regard to early closing, and lessening of work on Sunday, and we are pleased to hear that the clerks are taking up the matter and will try to bring it to a successful issue.

A. Robert's new store is a gem. Cottonwood fittings, elaborately, yet tastefully, carved, many electric lights, beautifully tiled floor, and all the appurtenances on an equally elegant scale, make it one of the brightest and handsomest stores in the city, and as the site is one of the busiest in the city, Mr. Robert evidently has a bonanza.

The Students' Association gave a very successful moonlight excursion down the river on the 18th. Blaze's orchestra furnished music for the party, and dancing was kept up all evening. Everybody had a "real good time," and hoped to have another before the summer is over. Pres. Gauvin and Mr. Gouin were called on for speeches and responded nobly.

ENGLISH AND CONTINENTAL NEWS.

Mr. Glyn-Jones, secretary of the P.A.T.A., attended the annual meeting of the Grocers' Confederation at Liverpool, and secured the adherence of that body to the programme of the former organization.

Emile Elie Bourquelot has been named professor of pharmacy at the Paris School, in succession to the late Prof. Bourgoïn. M. Bourquelot is noted for his researches on vegetable ferments and their action in plant physiology.

The French Government is experimenting with an X-ray apparatus for the examination of travelers' baggage coming into the country. The apparatus consists of a storage battery, Crook's tube, and a fluoroscope, and the results are said to have been very satisfactory.

The English journals report a case of poisoning by potassium chlorate tablets. A boy 15 years of age used some of the tablets to clear his throat, and becoming ill, his parents sent for a physician, but nothing could be done to save him and he died of syncope a few days after.

On July 10, Prof. Attfield was presented with a handsome album and a magnificent silver tea and coffee service, presented by over a thousand of his old pupils, as a testimonial of the esteem in which he is held by those who studied under him during the thirty-four years he filled the chair of chemistry at the Bloomsbury Square School. Many of the prominent English pharmacists and chemists were present.

AMERICAN NEWS NOTES.

Two prominent druggists of Cincinnati have been arrested for mailing circulars advertising female pills.

The Paris Medicine Co., of St. Louis, has placed an order for one hundred million tablets of one of their preparations.

John Clay, who has been Parke, Davis & Co.'s New York manager for many years, has resigned, owing to ill-health, and has been succeeded by E. W. Fitch.

The Malt Diastase Company is a new concern which has commenced business in New York. Dr. Fitch, formerly of the Maltine Company, and later with Parke, Davis & Co., is manager, and C. Von Egoldstein will be chemist and superintendent.

Miss Cora Dow, of Cincinnati, who already owns four drug stores in that city, is about to open another one in a new office building designed for physicians and dentists' offices. The store will be one of the finest in the city, and, of course, will be a money-maker as are all the investments of this wonderful young woman.

The National Wholesale Druggists' Association will meet in Richmond, Va., October 11 to 14th.

At the annual meeting of the New York State Association, R. E. Smither, of Buffalo, was re-elected president, Dr. Brundage, of Brooklyn, was elected first vice-president; W. Muench, of Syracuse, second vice-president; F. Hirsemen, third vice-president; J. B. Todd, Ithaca, secretary (re-elected); W. B. Fuller, Syracuse, treasurer.

The Maine Association held its annual meeting at Portland on July 7. A very large number of Maine druggists were present, as well as many from Massachusetts and other States. The officers for the incoming year are: F. H. Wilson, Brunswick, president; W. A. Robinson, Auburn, first vice-president; W. F. Norcross, Rockland, second vice-pre-

sident; A. M. Robinson, Bangor, third vice-president; M. L. Porter, Danforth, secretary; G. A. Pacher, Ellsworth, corresponding secretary; C. M. Hay, Portland, local secretary.

Prof. J. F. Babcock, a well-known Boston chemist, died at his home on July 19th. He was born in 1844, and after graduation took up the study of chemistry under Prof. Horsford. He was for several years Professor of Chemistry in the Massachusetts College of Pharmacy, and afterwards in the Boston University. His principal work, however, was done in connection with his duties as State assayer, and as milk inspector for the city of Boston, in the course of which he introduced improved methods of analysis, especially in regard to milk and its adulteration, one of the most important being that now known as Babcock's test, which is almost universally employed by creamery proprietors for rapidly determining the percentage of fat in milk. He was honorary member of the Massachusetts College of Pharmacy, of the Alumni Association, and of the Boston Druggists' Association.

Recent Papers.

AN INVESTIGATION OF THE OFFICIAL PRUNUS VIRGINIANA, to distinguish it from barks collected at other seasons. Grace E. Cooley, *Journal of Pharmacology*.

This investigation was undertaken for the purpose of finding if the microscopical examination of the bark would give any indication of the season at which it was collected. The Pharmacopoeia directs the bark collected in the autumn, and the results of this investigation show that no histological differences can be found between spring and autumn-collected bark. Fischer has shown the change which occurs in the starch of the bark and woods during the year, and it was found with regard to *Prunus serotina*, that in the autumn starch is being stored up in the bark, and reaches its maximum in October, after which it decreases till the end of November, and is entirely absent during the winter, till towards the end of February or early in March, it begins to form again, till in April it again reaches its maximum and again begins to decrease. The presence of starch grains in medullary rays, the base parenchyma, and the chlorophyll bearing cells, would, therefore, indicate that the bark had been collected in either spring or autumn, so that the only reliable test is the determination of the percentage of hydrocyanic acid present. The writer suggests that possibly the percentage of tannin may serve as an index of the time of collection, as it is known that in periods of greatest growth tannin is present in greater amount than usual, and gives the following test: On the surface of distilled water in a watch glass, sprinkle a little of the powdered drug; let it stand ten seconds, and then drop into it one drop of a 1 per cent. solution of ferric chloride. If the bark was collected in the spring, a cloudiness will appear in

the water from the greenish precipitate, which is immediately formed. If the bark was collected in autumn, there will be no noticeable precipitate under twenty seconds.

CORROSIVE SUBLIMATE IN CALOMEL, Lyman F. Kebler (annual meeting of the Penna. Pharm. Asso., per *Amer. Journal of Pharmacy*.)

The writer has examined a great many samples of calomel during the past few years, and has failed to find one which was free from corrosive sublimate, according to the tests of the U.S.P., two samples gave no reaction with silver nitrate, and hydrogen sulphide, but gave a transitional yellow coloration with lime water. From this, the author is of opinion that the U.S.P. tests are too strict, and also that the bulk of the calomel on the market is pure, the most rigid tests showing the presence of not more than one one-hundred-thousandth of 1 per cent. of corrosive sublimate, in all the calomel examined.

NEW REMEDIES.

PREPARATION OF CODEINE BY SYNTHESIS. F. Bayer & Co., Elberfeld, have patented a process by which morphine is converted into codeine by means of diazomethane. An ethereal solution of diazomethane is treated with an equivalent quantity of morphine, preferably in alcohol solution; on heating, nitrogen is given off, and the liquid becomes discolored. The solvent is distilled off, and the residue is treated with dilute alkaline solution, and purified in the usual manner.

NAPHOSALICINE.

According to *Pharm. Centralhalle*, this is a solution of naphthol and salicylic acid in a warm solution of borax. It is recommended as a disinfectant.

CORDOL, OR TRIBROMOSALOL

Is used in neuralgia and rheumatism, in doses of 7 to 30 grs. daily. It is a crystalline powder, insoluble in water, slightly more so in alcohol and ether.

Students' Department.

[In this Department we will publish a series of lectures covering the subjects of Pharmacy, Materia Medica, Chemistry and Botany. Of course they will be condensed, the inference being that the student will supplement these, as he would do ordinary college lectures, by reference to standard works upon each subject.]

RULES TO BE OBSERVED IN RETURNING ANSWERS.

1. Write on one side of the paper only.
2. Leave a margin of about two inches on the left-hand side for corrections, etc.
3. A stamped and addressed envelope must be sent with the answer.
4. Address your replies to the Editor, J. E. Morrison, P.O. Box 683, Montreal, P.Q.

PRIZES.

1st. A copy of Remington's Practice of Pharmacy will be awarded to the student making the highest marks in the competition.

2nd. A copy of Squire's Companion to the British Pharmacopoeia to the second highest.

3rd. A copy of Remsen's Inorganic Chemistry to the third.

QUESTIONS ON LECTURE V.

1. Describe the preparation of liquid extract of liquorice, B.P. What is the principal constituent of liquorice?

2. Give the process for standardization of liquid extract of cinchona. Give reasons for each step in the process.

3. How is liquid extract of hydrastes prepared? What are the alkaloids of this drug?

4. What is the process of the U.S.P. for the preservation of fluid extracts?

5. Why is ammonia used in the preparations of fluid extract of glycerine? Acetic acid in the preparation of fluid extract of conium?

LECTURE No. VI.

FLUID EXTRACTS OF THE U.S.P.—CONTINUED.

	Menstruum.
Ext. Iridis Fluidum	Alcohol
Krameria	{ Glycerine, 10% } Diluted Alcohol
Lappæ	Diluted Alcohol
Leptandræ	Alcohol, 75%
Lobelia	Diluted Alcohol
Lupulini	Alcohol
Matico	Alcohol, 75%
Menispermi	Alcohol, 66 $\frac{2}{3}$ %
Mezerei	Alcohol
Nuc. Vomica	Alcohol, 75%
Paneiræ	"
Phytolacæ Rad.	Alcohol, 60%
Pilocarpi	Diluted Alcohol
Podophylli Fluidum	Alcohol, 80
Pruni Virginianæ (See note)	{ Glycerine, 10% } { Alcohol, 85% }
Quassia	Alcohol, 33 $\frac{1}{3}$ %
Rhamni Purshianæ	Diluted Alcohol
Rhei	Alcohol, 80%
Rhois Glabræ	{ Glycerine, 10% } Diluted Alcohol
Rosæ	"
Rubi	{ Glycerine, 10% } { Alcohol, 66 $\frac{2}{3}$ % }
Rumicis	Diluted Alcohol
Sabinæ	Alcohol
Sanguinaria	{ Alcohol, 75% } { Acetic Acid, 5% }
Sarsaparilla	Alcohol, 33 $\frac{1}{3}$ %
Sarsaparilla Comp.	
Sarsaparilla, 75	"
Glycyrrhiza, 10	"
Sassafras, 10	"
Mezereum, 3	"
Glycerine, 10	"
Scilla	Alcohol, 75%
Scoparii	Diluted Alcohol
Scutellaria	"

Senegæ	{ Alcohol, 75% } { Ammonia Water, 5% }
Sennæ	Diluted Alcohol
Serpentaria	Alcohol, 80%
Spigelia	Diluted Alcohol
Stillingia	"
Stramonii Seminis	Alcohol, 75%
Taraxaci	Diluted Alcohol
Tritici	Alcohol, 25%
Uvæ Ursi	{ Alcohol, 29% with } { Glycerine, 30% }
Valeriana	Alcohol, 75%
Veratri Viridis	Alcohol
Viburni Opuli	Alcohol, 75%
" Prunifolii	"
Xanthoxyli	Alcohol
Zingiberis	Alcohol

Fluid extract of nux vomica is standardized to contain 1 $\frac{1}{2}$ per cent. of total alkaloids.

Fluid extract of wild cherry is prepared by mixing 100 cc. of glycerine with 200 cc. of water, with which 1,000 gms. of the bark in No. 20 powder is moistened and allowed to macerate for 48 hours in a closed percolator; then the menstruum, made in the proportion of 850 cc. of alcohol and 150 cc. of water, is poured on, and percolation continued till exhaustion; separating the first 800 cc. of percolate, and evaporating the remainder to a soft extract in the usual manner.

GLYCERINA, GLYCERITA,
GLYCERINES.

Glycerines is the name given to a class of preparations obtained by solution of the medicinal substance in glycerine, and which have been much employed, as the menstruum offers many advantages over alcohol or water, as it does not evaporate; is a good preservative, and does not become rancid. There are eight glycerines official in the B.P., and six in the U.S.P. The B.P. glycerines are:

Acidi Carbolic	1 part to 4 of Glycerine
" Gallici	"
" Tannici	"
Aluminis	1 part to 5 of Glycerine
Amyli	Starch, 1; Glycerine, 5; Water, 3
Boracis	1 part to 4 of Glycerine

PLUMBI SUBACETATIS.

Made by boiling together lead acetate 5 oz., lead oxide, 3 $\frac{1}{2}$ oz., glycerine, 1 pint, distilled water, 12 $\frac{1}{2}$ oz., for a quarter of an hour, filtering and evaporating till the water is dissipated. This is the only glycerine in the preparation of which a chemical reaction takes place, the two salts combining to form a basic lead acetate.

Tragacanthæ	Tragacanth, 110 grs; Glycerine, 1 oz.; Distilled Water, 75 fd. grs.
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GLYCERITES OF THE U.S.P.

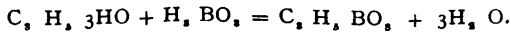
Acidi Carbolic	1 part to 4 of Glycerine
" Tannici	"
Amyli	Starch, 10; Glycerine, 80; Water, 10
Boroglycerini (See note)	Boric Acid, 310; Glycerine to make 1,000

Hydrastis
(See note)
Vitelli

Fresh yolk of egg, 45; Glycerine,
55

Glycerite of Boroglycerine is made by heating 310 gms. of boric acid with 460 gms. of glycerine in a tared porcelain vessel till the mixture has been reduced to 500 gms., then add 500 gms. of glycerine and mix thoroughly.

It is supposed that on heating, the three molecules of H O of the glycerine (C₃ H₈ 3 H O) are replaced by one molecule of the boric radicle, forming borate of glycerol.



Glycerite of Hydrastis is made by percolating 1,000 gms. of the drug with alcohol to exhaustion, adding to the percolate 250 cc. of water and recovering the spirit by distillation, water added to make 500 cc. Allow to stand 24 hours, filter, pass enough water through the filter to make 500 cc. and add glycerine to make 1,000 cc.

Glycerite of Yolk of Egg, introduced by Geo. C. Close, of Brooklyn, as glycerine, is highly recommended as an emulsifying agent for cod liver oil, etc., and has been used for many years in France for that purpose and as an emollient for the skin.

—An honest reputation is within the reach of all men; they obtain it by social virtues and by doing their duty. This kind of reputation, it is true, is neither brilliant nor startling, but it is often the most useful for happiness.

APOTHECARY'S PRAYER.

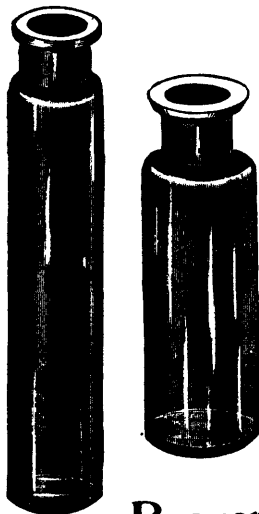
In the office of the College of Pharmacy hangs a quaint picture which was presented to the institution by George F. Seabury. It is an enlarged copy of an old engraving published in London, July 30, 1801, and is entitled "The Apothecary's Prayer." A venerable and rather dilapidated apothecary is kneeling before the throne of Esculapius, and beside him is a huge mortar and pestle. Thus, in substance, runs his prayer:

"O, mighty Esculapius! hear a poor little man overwhelmed with misfortunes; grant, I beseech thee, to send a few smart fevers and some obstinate catarrhs amongst us, or thy humble supplicant must shut up shop—and if it should please thee to throw in a few cramps and agues it would gratefully help thy miserable servant, for on the words of an apothecary, I have scarcely heard the music of mortar these two months. Take notice, also, I beseech thee, of the mournful situation of my neighbor Crape, the undertaker, who suffers considerably by my want of practice, and loses many a job of my cutting out; enable him to bear his misfortunes with philosophy and to look forward with new hope for the tolling of the bell.

"Physic those, I beseech thee, that will not encourage our profession, and blister their evil intentions, viz.: Such as their cursed new-invented water-proof, and may all the coats be eaten by the rats that are so made. But pour down the balm of

"GLASSWARE SPECIAL."

We beg to notify the trade that we are now open to supply our "BEAVER BRAND HOMŒOPATHIC VIALS" at the following prices. Quality guaranteed.



	½ drachm.	1 drachm.	2 drachms.
25 gross lots and over,	60c. per gro.	60c. per gro.	70c. per gro.
10 " " "	60c. " "	65c. " "	75c. " "
Less than 10 gross lots,	65c. " "	70c. " "	80c. " "

Special quotations in 50 and 100 gross lots, and particular attention paid to orders for special sizes; full stock always on hand.

OUR SPECIALTIES

- Homœopathic Vials. Test Tubes
- Screw-cap Vials
- Glass Syringes (All Styles.)
- Ointment Pots
- Chemical Appliances

ALL GOODS GUARANTEED FIRST QUALITY.



Beaver Flint Glass Co., of Toronto, Limited.

Office and Factory:
WINCHESTER & PARLIAMENT STS., TORONTO, CANADA.

Kindly specify our goods when ordering from Wholesale.

Telephone 3110.

Kindly mention this Journal when writing to Advertisers.

Gilead on the overseers of the village and all the friends of Galen."

Mr. Seabury has the original of the antique sketch.—*N. Y. Times.*

A PUBLIC DANGER.

There is no doubt that the steadily-increasing consumption of coca wine is a subject which calls for comment and investigation. Coca wine and other medicated wines are largely sold to people who are considered, and consider themselves, total abstainers. It is not uncommon to hear the mother of a family say: "I never allow my girls to touch stimulants of any kind, but I give them each a glass of coca wine at eleven in the morning, and again at bedtime." Originally coca wine was made from coca leaves, but it is now commonly a solution of the alkaloid in a sweet and usually strong alcoholic wine. According to the Board of Trade regulations, a wine containing a grain of any salt of cocaine in the ounce may be sold without a wine license; this may be the explanation of the frequency with which we see bottles of "coca champagne" exhibited in the windows of the drug stores. Not long ago a physician reported that a patient had suffered very severely from taking a glass of standardized coca wine which he had mistaken for an innocuous beverage. Still more recently we have been furnished with the

case of a man who, thinking to abjure the use of alcoholic stimulants, drank coca wine so freely that he died of delirium tremens. School mistresses, as a rule, have a deep-rooted belief in the efficacy of the popular drug, and give it to their pupils on the slightest provocation, in complete ignorance of the fact that they are establishing a liking not only for alcohol, but for the far more insidious and pernicious poison, cocain. The child who is the innocent victim of cocainism is wayward in disposition, is restless and disturbed at night, and is incapable of prolonged application. The mania for taking narcotic stimulants is widespread, and is a distinct source of danger to the national health. It is difficult to say at present what steps should be taken, but it is obvious that at no distant date some restriction will have to be placed on the sale of coca wine and its congeners.—*British Medical Journal.*

Formula.

Nursery Powder—

Salicylic acid.....	2 parts.
Talcum.....	100 "
Lycopodium.....	100 "
Starch in finest powder	50 "
Zinc oxide c.p.	20 "

Mix intimately by sifting several times.—*National Druggist*, from Seifen, Oehlen and Fett Industrie.

THE MAN WHO SEES THE POINT

The quickest in a business proposition is generally the man who gains the profits.

He's the wide-awake man.

This season we are going to double our last year's record.

We helped the druggist and the druggist helped us.

We can easily do it, because we are making an offer to the druggists that insures it.

We gain the druggists' co-operation, because:

We replace old stock at the end of six months from date of purchase; that protects him against loss.

We have a special plan whereby we, advertise the druggist direct to his physicians.

Both of these plans have realized the best results for our customers. Write us.

H. K. MULFORD, CO.

CHICAGO.

412-420 South 13th St., PHILADELPHIA.

OUR PRODUCT MAY BE SECURED FROM YOUR JOBBERS.

Kindly mention this Journal when writing to Advertisers.

Eau de Quinine—

Alcohol (96 per cent.)	5 1-2 litres.
Water	3 3-4 "
Orange flower water	3 3-4 "
Tinct. tonka	140 gms.
" Benzoin	160 "
" Musk	3 "
" Cinchona	600 "
Glycerine	600 "
Oil of orange	6 "
Oil of lemon	20 "
Oil of bergamot	12 "
Oil of geranium (African)	20 "
Oil of petitgrain	12 "
Oil of lavender	24 "
Oil of orris	1 "

—*Ibid.*

Fau de Cologne (Julich's Platz)—

Alcohol (96 per cent.)	25 litres.
Distilled water	5 "
Oil of Neroli Bigarade	100 gms.
Oil of Neroli, Portugal	100 "
Oil of petitgrain	100 "
Oil of limette	100 "
Oil of cedrat	100 "
Oil of lemon	100 "
Oil of bergamot	100 "
Rosemary	35 "
Lavender	20 "
Enanthic ether	100 m.

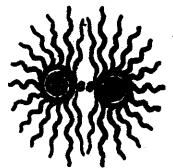
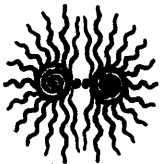
—*Pharm. Post, per Pharm. Era.*

Market Report.

The month under review has witnessed a marked improvement in the conditions which give confidence and promote activity in trade. The settlement of the U.S. and Canadian tariffs lets importers know "where they are at" for a year at least, and although large stocks of goods transferred from the free to the dutiable schedules have in many cases prevented an immediate advance to the dutiable cost, yet such goods are more firmly held, and will go up as time goes on. The sharp rise in grain, wheat particularly, has had a stimulating effect on the prices of other commodities, and the whole mercantile world waits to see whether the advance is due to natural causes, and therefore permanent, or is merely a speculator's evanescent coup. Quinine is still offered sparingly by manufacturers, and prices are firm. Opium—The entire absence of American orders makes a dull, sagging market in Smyrna. Tartaric and citric acids are higher. Castor oil—Calcutta, French, and Italian are much higher, and scarce. Alum, borax, and sulphur are in good demand. Bismuth salts are unchanged. Iodine quiescent. Camphor gradually eases off. Cod

Toilet Papers

The only manufacturers in Canada operating a Paper Mill devoted exclusively to Tissue Papers---consequently sheets of uniform weight and quality and even surface can be relied upon.



The **E. B. Eddy Co'y, Limited**

HULL

MONTREAL

TORONTO

liver oil has a firm undertone, as stocks are not excessive. Nitrate of silver has declined heavily, in sympathy with the white metal. Seidlitz mixture and Rochelle salts are firm. Caustic soda in good demand. Glycerine firmer. Mercurials are likely to ease off later on. Roots and herbs—Mostly dearer, except Gentian, which is declining. Asafoetida in short supply, with large demand in France. Pepper and spices are steady, values well maintained. Canary and hemp seeds are in rather better demand. Oil aniseed is much higher. The Italian Government proposes to stop the exportation of the adulterated oils of lemon, bergamot and orange, 60 per cent. Ol. terebinth, rect., was quite common, and was ruinous to honest dealers. Otto of rose is a small crop, but much came over from last year, and buyers are unwilling to concede an advance. In this article, too, the Bulgarian Government interferes to stop frauds which resulted to the gain of exporters and loss to farmers. Paris green—The season is about over. Linseed has advanced about 25 cents a bushel in Chicago, and linseed oil 10 cents a gallon; here the advance in oil has been 2 cents, but it is expected to go much higher. Spirits of turpentine has been largely bought up by a syndicate, and prices are 2 to 3 cents up. White lead has been marked up in sympathy with pig lead, but it is liable to go higher. Altogether the outlook is much brighter, and buyers will cheerfully pay higher prices when they feel that there is a steady demand for goods.

Our Advertisers.

ATKINSON'S TOOTH PASTE.

Don't forget this old popular favorite in the rush of new things. You can use it and recommend it in safety. Your customers will appreciate your kindness and commend your judgment after using it. The profit is satisfactory. On this page you will find the price to the trade.

JUBILEE STAMPS.

Save your cancelled postage stamps, and communicate with Mr. Adams, Adelaide street, Toronto. If you are a philatelist it will be to your advantage to read his advertisement elsewhere in this issue.

SITUATION WANTED.

By a young man—twenty-three years of age; strictly temperate, and not afraid to work; have had three years' experience in retail in Canada, and sixteen months' in the wholesale drug business in United States; can give very best references from former employers. For further particulars address D.J.S., 187 Porter street, Detroit, Mich.

SETS OF STAMPS FOR SALE.



15 Canada revenues, 10c.; 8 Samoa, 12c.; 5 Newfoundland, 10c.; Labuan Jubilee, 10c.; 14 Roman States, 15c.; 10 Japanese, 8c.; 50 different stamps, 10c.; 100 different stamps, 20c.; 3 Corea, 10c.; 6 South Africa, 10c.; 23 Canada, 15c. All kinds Canada Jubilee stamps bought, also collections, etc.

WM. R. ADAMS, 7 Ann St.,
TORONTO, ONT.



This very popular Dentifrice has a reputation of many years and is now sold by the Wholesale Trade of Canada at \$1.75 per doz.

Telephone 2476.

WM. ANGUS, Manager.
Late of the Royal Pulp & Paper Co.

AULD MUCILAGE CO.

Manufacturers of the Celebrated **Premium Mucilage.**

LITHOGRAM COMPOSITION,
Lithograms Ready for Use.

Printers' Premium Roller Composition.

Please send for quotations.

759 Craig St., - - MONTREAL, P.Q.

Dr. Agnew's Remedies.

FOUR SPLENDID SELLERS.

There are few better selling remedies, and none which give more perfect satisfaction than the preparations known as

Dr. Agnew's Cure for the Heart.

Dr. Agnew's Catarrhal Powder.

Dr. Agnew's Liver Pills.

Dr. Agnew's Ointment.

If you haven't them in stock procure a supply from your wholesaler. They yield a liberal profit, and can be recommended with confidence.

THE Lyman Bros. & Co. LIMITED

TORONTO, - - ONTARIO.

We will be glad to quote all or any of the following goods of **OUR OWN** manufacture :

Acid Hydrobromic.	Ether Sulph. Aenesthetical in $\frac{1}{2}$, $\frac{1}{4}$ and 1 lb. tins.	Pyroxylin.
“ Hypophosphorous.	Gold Chloride (Solution).	Quinine (Alkaloid).
“ Phosphoric.	“ and Sodium Chloride.	“ Bisulphate.
“ Sulphurous.	Iron Arsenias.	“ Hydrochloride.
Ammonia Benzoate.	“ Bromide.	“ Phosphate.
“ Bromide.	“ and Ammon. Tart.	“ Valerianate.
“ Chloride Pure.	“ “ Potassæ Tart.	Silver Chloride.
“ Hydrosulphuret.	“ “ Quinine Citrate, B.P.	“ Nitrate Crystals.
“ Iodide.	“ “ 10% and 4%.	“ Nitrate Fused.
“ Magnes. Phosph.	“ “ Strychnine Citrate.	“ Oxide.
“ Nitrate.	“ “ Strych. & Quin. Cit.	Sodium Acetate.
“ Oxalas.	“ Citrate.	“ Amalgam.
“ Salicylate.	“ Dialysed.	“ Arseniate.
“ Tartrate.	“ Iodide.	“ Benzoate.
Amyle Acetate.	“ Oxalate.	“ Bromide.
“ Butyrate	“ Perchloride.	“ Citrate.
“ Nitrite	“ Phosphate.	“ Iodide.
Antimony Chloride, (Liq.)	“ “ Scales, Soluble	“ Nitrate Pure.
Arsenic Iodide.	“ Sulph. Pure.	“ Oxalate.
“ Tribromide.	“ Sulphide.	“ Salicylate.
Aseptine	Lead Iodide.	“ Sulphocarbolate.
Bismuth et Ammon. Cit. (Liq.)	“ Peroxide.	Strychnine Citrate.
“ Oxalate.	Lithium Benzoate.	“ Nitrate.
“ Oxychloride.	“ Salicylate.	“ Sulphate.
“ Oxy Iodide.	Magnes. Chloride.	Sulphur Iodide.
“ Salicylate.	“ Phosphate.	Tartar Emetic.
“ Subgallate.	Mercuric Cyanide.	Zinc Acetate.
Caffeine Citrate.	“ Iodide.	“ Bromide.
Calcium Sulphide.	“ Salicylate.	“ Carbonate.
Camphor Monobromide.	“ Oxide, Yellow.	“ Iodide.
Copper Bromide.	Mercurous Iodide.	“ Oleate.
“ Carbonate.	“ Nitrate.	“ Sulphate.
“ Chloride.	“ Sulphate.	“ Sulphocarbolate.
“ Cyanide.	Mercury Oleate, 10 and 20%.	
“ Nitrate.	Nitroglycerine Solution.	
“ Oxide.	Potassium Carbonate	
Chloroform Pure, (Equal to any in the market.)	“ Chloride.	
Collodion.	“ Citrate.	
Com. Spirits Nitre.	“ Oxalate.	
Ether Acetic.	“ Nitrate, C.P.	
“ Butyric.	“ Sulphate.	
“ Nitros (Spirits) B.P.	“ Sulphuret.	
“ “ Commercial.	“ Tartrate.	
“ “ Conc. Spirits.		
“ Sulph. 725		

Also a full line of :

Flavouring Extracts.
Elixirs.
Fluid Extracts.
Solid “
Tinctures.
Syrups.
Fluid Hydrastis, Colorless.
Distilled Hamamelis.

The LYMAN BROS. & CO. Limited, TORONTO.

Kindly mention this Journal when writing to Advertisers.

PRICES CURRENT.

CORRECTED TO SEPTEMBER, 1897.

The quotations appended represent average prices in the Toronto and Montreal Markets, for quantities usually purchased by Retail Dealers. Larger parcels may be obtained at lower figures, but quantities smaller than those named will command an advance.

Acetanilid,	lb.	\$o	70	\$o	75
Acid, Acetic,	lb.		10		13
Arsenious, lump	lb.		25		27
Commercial	lb.		10		10
Benzoic, English, (from benzoin,)	oz.		22		25
German,	oz.		9		12
Boric	lb.		11		12
Carbolic, Crystals, super,	lb.		25	2	25
Commercial,	lb.	1	25		30
Crude	gal.		75	1	60
Citric,	lb.		40		45
Gallic,	lb.		90	1	00
Hydrodromic	lb.		30		32
Hydrocyanic,	oz.		12		14
Lactic, concentrated,	lb.	1	10	1	15
Muriatic,	lb.		3 $\frac{1}{2}$		5
chem. pure,	lb.		18		20
Nitric,	lb.		10		14
chem. pure,	lb.		25		27
Oxalic,	lb.		12		13
Phosphoric, syrupy,	lb.		50		60
dilute,	lb.		17		20
Salicylic,	lb.		65		70
Sulphuric,	lb.		2	5	b.
chem. pure,	lb.		16		22
Aromatic,	lb.		50		55
Tannic,	lb.		70		80
Tartaric, powdered,	lb.		40		45
Alcohol, pure, 650. p. by bbl., cash	gal.	4	52		00
by gal.	gal.	4	90	5	00
Methylated,	gal.	2	00		00
Allspice,	lb.		13		15
Powdered	lb.		15		20
Aloin,	oz.		25		30
Alum,	lb.		2 $\frac{1}{2}$		3
Ammonia, Liquor, 880,	lb.		10		12
Aromatic Spirits,	lb.		52		55
Bromide,	lb.		80		85
Carbonate,	lb.		12		14
Chloride, powd.	lb.		10		13
Chloride, pure, powd.	lb.		35		46
Iodide,	lb.	5	75	6	00
Nitrate,	lb.		35		40
Amyl Nitrite,	oz.		15		20
Antipyrine,	oz.	1	10	1	20
Antimony, black, powdered,	lb.		10		13
and potas, tart,	lb.		45		48
Liver	lb.		30		35
Apomorphia,	gr.		4		5
Arrowroot, Bermuda,	lb.		35		40
Jar aica,	lb.		14		15
Aristol,	oz.	1	85	2	00
Arsenic, Donovan's solution,	lb.		22		25
Fowler's solution,	lb.		7		8
White,	lb.		10		10
Atropine Sulphate,	gr.		2 $\frac{1}{2}$		60
Balsam, Canada,	lb.		40		50
Copaiba	lb.		70		75
Peru,	lb.	3	00	3	20
Tolu,	lb.		90		95
Bark, Bayberry, powdered	lb.		15		18
Canella Alba,	lb.		15		18
Cassia,	lb.		15		20
groun	lb.		18		28
Cascara,	lb.		20		22
Cinchona, Red,	lb.		50		60
powdered,	lb.		60		70

DO YOU CARRY

ODOROMA In Stock?

IF NOT, WHY NOT?

ODOROMA

The Perfect Tooth Powder

Has captured the market wherever it has been introduced. If it is a new thing to you, here are a few reasons why you should handle it:

It is cleansing, antiseptic, fragrant, refreshing.

It is perfectly harmless.

It has been analyzed by the most expert chemists, who have all reported in the most favorable terms.

It sells at a glance in the first instance, and on its reputation thereafter.

It yields more profit to the retailer, and to the consumer a greater quantity of the best quality, than any other tooth powder in the world.

REPORT OF EXPERT ANALYSIS.

"Having analyzed and tested 'Odorama,' I find it to be composed of ingredients well known to the dental and medical profession as being the best for cleansing and preserving the teeth. It contains nothing that could in any way be deleterious in its action, and it has my unqualified approval."—W. T. STUART, M.D., C.M., *Professor of Chemistry, Trinity Medical School; Professor of Chemistry, School of Dentistry.*

Order from your Wholesale House.

AROMA CHEMICAL CO., - Toronto

TURKISH DYES
TURKISH DYES
TURKISH DYES

TO THE TRADE

We desire to call the attention of the trade to the above package dyes, which have been on the market for the past nine years. The sales have increased wonderfully in that period, and they have given every satisfaction, both to the retailer and consumer. Every LIVE DRUGGIST handles Turkish Dyes.

Write for Prices, Samples, &c., to

BRAYLEY SONS & COMPANY

MONTREAL

Druggists' Confectionery.

The special attention of Chemists

IS DRAWN TO THE FOLLOWING :

GLYCERINE PASTILLES

Beautifully Bright.

Perfectly Soluble.

Quite Transparent.

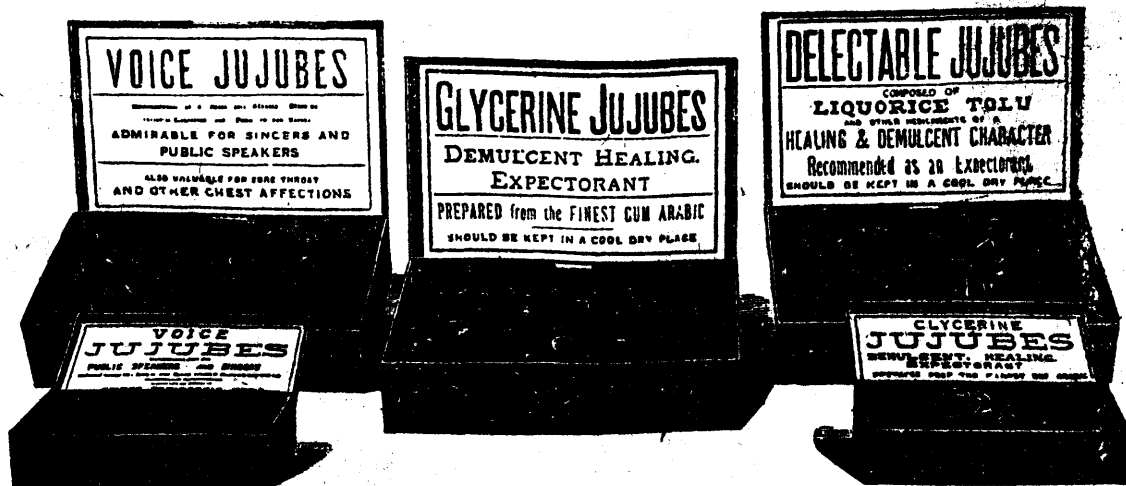
ROBERT GIBSON & SONS

By a process recently discovered, are producing the most charming

GLYCERINE PASTILLES AND JUJUBES

Ever offered to the trade.

PUT UP AND SENT OUT IN 4 LB. GLASS JARS OR DECORATED TINS, AS DESIRED BY CUSTOMERS, AND BOTH FREE.



SAMPLES SENT ON APPLICATION TO THE WORKS.

ROBERT GIBSON & SONS, CARLTON WORKS, MANCHESTER,

AND 1 GLASSHOUSE YARD, ALDERSGATE ST., LONDON, ENGLAND

Kindly mention this Journal when writing to Advertisers.

Bark, Calisaya, yellow,...	..	..	..	lb.	40	50
pale, .. .. .	..	..	..	lb.	35	50
powdered, .. .. .	..	..	..	lb.	40	50
Elm, selected, .. .. .	..	..	..	lb.	20	22
ground .. .. .	..	..	..	lb.	18	22
flour, packets, .. .. .	..	..	..	lb.	28	30
Prickly Ash, .. .. .	..	..	..	lb.	15	17
Sassafras, .. .. .	..	..	..	lb.	15	16
Soap Tree, cut, .. .. .	..	..	..	lb.	13	15
" " grd. .. .. .	..	..	..	lb.	18	20
Wild Cherry, .. .. .	..	..	..	lb.	10	12
Bean, Calabar, .. .. .	..	..	..	lb.	45	50
Tonka, .. .. .	..	..	..	lb.	1 00	2 75
Vanilla, .. .. .	..	..	..	lb.	9 75	11 00
Berry, Cubeb, .. .. .	..	..	..	lb.	0 25	0 30
powdered, .. .. .	..	..	..	lb.	0 30	0 35
Juniper, .. .. .	..	..	..	lb.	6	8
Bismuth, Sub-carbonate, .. .. .	..	..	..	lb.	2 00	2 10
Ammonio-Citrate .. .. .	..	..	..	oz.	40	44
Iodide .. .. .	..	..	..	oz.	50	60
Salicylate .. .. .	..	..	..	oz.	20	25
Sub-Nitrate, .. .. .	..	..	..	lb.	1 75	1 85
Liquor, .. .. .	..	..	..	lb.	35	40
Borax, .. .. .	..	..	..	lb.	6	7
powdered, .. .. .	..	..	..	lb.	7	8
Butter, Cacao, .. .. .	..	..	..	lb.	65	80
Caffeine, .. .. .	..	..	..	oz.	55	65
Citrate, .. .. .	..	..	..	oz.	40	45
Camphor, English, .. .. .	..	..	..	lb.	58	70
American, .. .. .	..	..	..	lb.	58	70
Cantharides, .. .. .	..	..	..	lb.	1 50	1 60
powdered, .. .. .	..	..	..	lb.	1 65	1 75
Capalcum, .. .. .	..	..	..	lb.	22	25
powdered, .. .. .	..	..	..	lb.	25	30
Carbon, Bisulphide, .. .. .	..	..	..	lb.	16	20
Cerium Oxalate, .. .. .	..	..	..	lb.	1 50	1 65
Chalk, French, powdered, .. .. .	..	..	..	lb.	6	10
Precipitated, .. .. .	..	..	..	lb.	10	12
Prepared, .. .. .	..	..	..	lb.	5	6
Chloroform, pure, .. .. .	..	..	..	lb.	1 10	1 20
D. & F. .. .. .	..	..	..	lb.	1 00	2 00
German, .. .. .	..	..	..	lb.	60	65
Chloral hydrate, .. .. .	..	..	..	lb.	1 20	1 25
Cinchonine, Muriate, .. .. .	..	..	..	oz.	15	20
Sulphate, .. .. .	..	..	..	oz.	20	25
Cinchonidia, Sulphate, .. .. .	..	..	..	oz.	20	22
Cloves, .. .. .	..	..	..	lb.	15	17
powdered, .. .. .	..	..	..	lb.	35	40
Cocaine, Mur. .. .. .	..	..	..	oz.	3 50	4 00
Cochineal, S. G., .. .. .	..	..	..	lb.	40	45
Black, .. .. .	..	..	..	lb.	42	45
Codaine, .. .. .	..	..	..	oz.	4 50	4 75
Collodion, .. .. .	..	..	..	lb.	75	80
Confection, Senna, .. .. .	..	..	..	lb.	35	40
Copper, Sulphate, .. .. .	..	..	..	lb.	5 1/2	6
Copperas, .. .. .	..	..	..	lb.	90	00
Cotton, absorbent, .. .. .	..	..	..	lb.	37	70
Cream Tartar, powdered, .. .. .	..	..	..	lb.	25	28
Croton Chloral, .. .. .	..	..	..	oz.	50	56
Creolin, .. .. .	..	..	..	lb.	50	60
Creosote, Wood, .. .. .	..	..	..	lb.	1 00	2 30
Cudbear, .. .. .	..	..	..	lb.	18	20
Cuttle-fish Bone, .. .. .	..	..	..	lb.	20	30
Epsom Salts, see MAGNESIUM SULPH.	..	..	..	..	..	..
Ergot, .. .. .	..	..	..	lb.	40	50
Ether, Acetic, .. .. .	..	..	..	lb.	75	80
Nitrous, Spirits, .. .. .	..	..	..	lb.	35	65
Sulphuric, 72.5. .. .. .	..	..	..	lb.	35	75
Eucalyptol, .. .. .	..	..	..	oz.	16	20
Exalgine, .. .. .	..	..	..	oz.	1 20	1 25
Extract Belladonna, .. .. .	..	..	..	lb.	1 20	2 00
Colocynth, Co. .. .. .	..	..	..	lb.	2 00	2 25
Gentian, .. .. .	..	..	..	lb.	50	56
Hemlock, Ang. .. .. .	..	..	..	lb.	1 25	1 50
Henbane, " .. .. .	..	..	..	lb.	3 50	3 75
Jalap, .. .. .	..	..	..	lb.	2 50	3 00
Logwood, bulk, .. .. .	..	..	..	lb.	13	14
packages, .. .. .	..	..	..	lb.	15	18
Mandrake, .. .. .	..	..	..	lb.	1 75	2 00
Nux Vom. .. .. .	..	..	..	oz.	30	35
Opium, .. .. .	..	..	..	oz.	85	90
Rhubarb, .. .. .	..	..	..	lb.	4 00	5 00
Sarsa. Hond. Co., .. .. .	..	..	..	lb.	1 00	1 20

"SEELY'S"

Holiday Line of Perfumes is as always
"Incomparable."

Sold to Druggists only.



INCENSE BURNER.

We would appreciate your
Christmas order.

Should our representatives
not call regularly, please
notify us that we may
arrange to see you.

Seely Mfg. Co.,

DETROIT Mich.

WINDSOR, Ont.

BOVRIL

UNION IS STRENGTH

And the union of the Best Beef Extracts with the Albumen and Fibrine produces **BOVRIL**, which is therefore infinitely more Strengthening and Nourishing than ordinary Meat Extracts or Home Made Beef Tea, in which these Flesh-forming and Muscle-making properties are almost entirely absent.

This Albumen and Fibrine is obtained by a patented process, by which the lean of the finest Beef is in a sense mechanically digested or reduced to so fine a state of sub-divisions that it is at once assimilated by the system, with the smallest possible expenditure of vital energy; and herein lies the superiority of

BOVRIL

Sold by all first-class Druggists and Grocers.



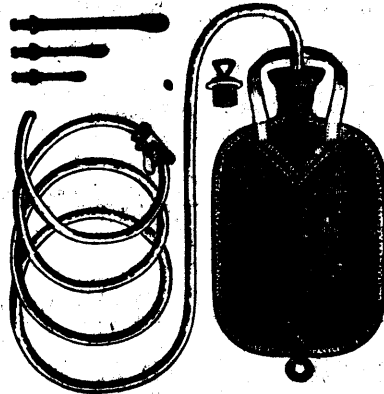
BOVRIL, Limited

27 St. Peter St., MONTREAL

Extract Sarsa. Jam. Co.,	.. .. .	lb.	3 00	3 20
Taraxacum, Ang.,	.. .. .	lb.	70	80
Flowers, Arnica,	.. .. .	lb.	20	22
Chamomile	.. .. .	lb.	20	25
Lavender,	.. .. .	lb.	13	15
Formalin,	.. .. .	lb.	75	80
Fuller's Barth, powd.,	.. .. .	lb.	5	6
Galls,	.. .. .	lb.	21	25
powdered,	.. .. .	lb.	23	25
Gelatine, Cox's 6d.,	.. .. .	doz.	1 20	1 25
French,	.. .. .	lb.	45	60
Glycerine, 30°,	.. .. .	tin or lb.	20	22
Price's,	.. .. .	lb.	70	75
Grains Paradise, powd.	.. .. .	lb.	25	30
Green, Paris,	.. .. .	lb.	14	18
Gum, Aloes, Barb,	.. .. .	lb.	25	40
Aloes, Cape,	.. .. .	lb.	18	20
powdered,	.. .. .	lb.	27	30
Socot,	.. .. .	lb.	45	48
powdered,	.. .. .	lb.	70	75
Arabic, select,	.. .. .	lb.	40	60
powdered,	.. .. .	lb.	0 60	0 90
sorts,	.. .. .	lb.	25	30
powdered,	.. .. .	lb.	40	50
Asafetida,	.. .. .	lb.	40	45
Benzoin,	.. .. .	lb.	30	1 00
Catechu,	.. .. .	lb.	17	18
powdered,	.. .. .	lb.	22	25
Gamboge,	.. .. .	lb.	1 00	1 20
Guaiacum,	.. .. .	lb.	40	1 00
Myrrh,	.. .. .	lb.	40	45
Opium,	.. .. .	lb.	4 10	4 25
powdered,	.. .. .	lb.	5 50	5 75
Scammony, powdered,	.. .. .	lb.	6 00	7 00
Shellac, orange,	.. .. .	lb.	30	38
bleached	.. .. .	lb.	45	50
Storax,	.. .. .	lb.	40	50
Tragacanth, flake,	.. .. .	lb.	85	1 00
common,	.. .. .	lb.	65	75
Herb, Chiretta,	.. .. .	lb.	45	50
Goldthread, in ozs.	.. .. .	lb.	75	90
Horehornd, in ozs.	.. .. .	lb.	18	20
Lobelia,	.. .. .	lb.	18	20
Honey, Canada, best,	.. .. .	lb.	11	13
Hops,	.. .. .	lb.	15	22
Hydrogen Peroxide, C.P., Harvey's, No. 1, doz.	.. .. .	oz.	8 00	
Ichthyol,	.. .. .	oz.	35	45
Indigo, Madras,	.. .. .	lb.	75	80
Insect Powder, pure	.. .. .	lb.	35	38
Iodine, commercial,	.. .. .	lb.	3 75	4 00
Resublimed	.. .. .	lb.	5 00	5 25
Iodol,	.. .. .	oz.	1 40	1 50
Iron, Carbonate, Precipitated,	.. .. .	lb.	13	14
Saccharated,	.. .. .	lb.	35	40
Chloride, solution, B. P.,	.. .. .	lb.	15	18
Citrate and Ammonium,	.. .. .	lb.	65	75
and Quinine, 4 per cent.,	.. .. .	oz.	12	16
" " 10 per cent.,	.. .. .	oz.	14	20
" " 25 per cent.,	.. .. .	oz.	17	25
" Quinine and Strychnine, oz.	.. .. .	oz.	21	00
and Strychnine,	.. .. .	oz.	15	00
Dialyzed, solution,	.. .. .	lb.	50	60
Iodide, Syrup,	.. .. .	lb.	40	45
Pyrophosphate,	.. .. .	lb.	1 00	1 20
Sulphate, pure,	.. .. .	lb.	7	8
Iodoform,	.. .. .	lb.	5 25	5 50
Jalapin,	.. .. .	oz.	65	70
Japonica,	.. .. .	lb.	8	9
Lanoline,	.. .. .	lb.	0 85	1 00
Lead, Acetate, white,	.. .. .	lb.	12	15
Iodide	.. .. .	oz.	30	35
Sub-Acetate, sol.	.. .. .	lb.	10	12
Leaf, Belladonna,	.. .. .	lb.	25	30
Buchu,	.. .. .	lb.	20	25
Coca,	.. .. .	lb.	40	60
Digitalis,	.. .. .	lb.	15	22
Eucalyptus,	.. .. .	lb.	18	20
Hyoscyamus,	.. .. .	lb.	20	28
Jaborandi,	.. .. .	lb.	50	56
Matico,	.. .. .	lb.	75	80
Senna Tinnevely,	.. .. .	lb.	15	25
" India,	.. .. .	lb.	13	17
Stramonium,	.. .. .	lb.	25	30

WE manufacture in Canada a full line of Druggists' sundries in Rubber, including the celebrated "ALPHA" and "OMEGA" Syringes and the "ALPHA" Atomizers.

Our line includes FOUNTAINS, COMBINATIONS, WATER BOTTLES, URINALS, CATHETERS, etc., etc.



We solicit an opportunity to quote upon regular or special lines.

ALPHA RUBBER CO., Ltd.

Head Office, - - - 335 St. Paul St., MONTREAL.
Branch " - - - 1 Front St. East, TORONTO
Factory, - - - HOCHELAGA.

HEADQUARTERS FOR

**Sponges ...
Chamois Skins, etc.**

Our Sponges are purchased direct from the fisheries and comprise amongst others

Mandraka Bath and Honeycomb Sponges....

Forms, Half Forms and Cuts.
Finest goods ever shown in Canada.

BATH SPONGES

in Florida and Abaco Sheep Wool, Nassau, Abaco and Cuba Velvets, and Florida Yellow; Nassau and fine Acklin Reef and Acklin Grass; also superior line in fine Surgical, Zemoka Toilet, and finest SHE Toilet.

CHAMOIS SKINS

American and English, first and second qualities.

CHAMOIS VESTS and PROTECTORS

Send for Catalogue.

Saunders & Evans,

Office and Warerooms:

30 Wellington Street East, TORONTO.

We hope that many of our Ontario friends will visit our city during the progress of the TORONTO INDUSTRIAL EXHIBITION, and to all such we extend a most hearty invitation to make liberal use of the conveniences of our centrally located offices (near cor. of Front & Yonge Sts.), where they will receive courteous attention.

Compound Syrup of White Pine, "E."

Compound Syrup of White Pine and Tar, "E."

The price published in our Handbook is incorrect. Kindly get our corrected figures and order a sample pound or Winchester with your next goods, and make a comparison with the higher priced as well as the cheaper lines being offered. These preparations are excellent for the treatment of Coughs and all bronchial and laryngeal troubles. Quotations for large lots on application.

Pil. Chalybeate Comp. $3\frac{1}{2}$ grs. Pink—Aphrodisiac, Tonic.

B—Pill Chalybeate 3 grs. Acid Arsenious $\frac{1}{40}$ gr.

Ext. Nux Vom. $\frac{1}{2}$ gr. Ext. Damiana $\frac{1}{2}$ gr.

Quoted in our list in bottles of 100, 500, and 1 lb. Prices for larger quantities on application.

Cathartic and Liver Granules . . .

A purely vegetable cathartic. Bottles of 1,000 granules. Dose 1 to 4.

Syrup of Hydriodic Acid, 1%

Alterative and Antipyretic.

Street's Brunswick Black

6 oz. tins, 80c. doz.
 "½-pt." stones, \$1.35 doz.
 Apollinaris pints, \$1.30 doz.

The best stove-pipe or general iron-work varnish made.

ELLIOT & CO., 5 Front St. East,
TORONTO.

Kindly mention this Journal when writing to Advertisers.

"One Minute" Headache Powders

The neatest and most salable package offered. **10c.** (3 Doses)

Will make you customers. - - Send for sample

The Key Medicine Company
395 Yonge Street, TORONTO

COOPER'S Hygienic Perfumed BATH SALT

An entirely new line of Bathing Salt.
Exquisitely perfumed. Sells readily.
Pays a good profit.
2 doz. per case. Can be had from any
Wholesale House.

**Toronto Salt Works, 128 Adelaide Street E.,
TORONTO, ONT.**

Special to Retail Druggists

Common Sense Exterminator

ROACHES AND BED BUGS

Only infallible remedy known. Expressly for the destruction of these, the greatest pests in the world. Once used, always recommended—never fails. Price—25c., \$1.75, 50c., \$3.50, \$1.00, \$8.00 doz.

COMMON SENSE EXTERMINATOR
For Rats and Mice

Free from poison, not dangerous to man or beast. DEAD RATS make no smell, as this preparation eats up flesh and bone before decay sets in. Four sizes—Price, 15c., \$1.00, 25c., \$1.75, 50c., \$3.50, \$1.00, \$8.00 doz. Above goods advertise themselves. Sold by wholesale druggists generally.

Manufactured by **COMMON SENSE MFG. COMPANY**
523 King Street West, TORONTO, Ont.

- Discount Notice -

Harvey's Peroxide of Hydrogen,
all Grades.

10% DISCOUNT AFTER 1st MAY, 1897.

STRENGTH AND PURITY GUARANTEED.

JOHN G. HARVEY,
TODMORDEN, ONT.

Leaf, Uva Ursi,	lb.	12	17
Leeches,	dz.	1 00	1 10
Leptandrin,	oz.	50	60
Lime, Chloride,	lb.	3 1/2	5
packages,	lb.	6	7
Hypophosphite	lb.	1 40	1 50
Phosphate,	lb.	35	38
Sulphite,	lb.	9 1/2	10
Liquorice, Solazzi,	lb.	45	50
Pignatelli,	lb.	35	38
Y. & S. Pellets,	lb.	40	00
" Stick,	lb.	35	00
Other Brands,	lb.	14	35
Lithium, Bromide	oz.	40	44
Carbonaté,	oz.	28	30
Citrate	oz.	25	00
Salicylate	oz.	35	40
Lye, concentrated,	dz.	75	95
Madder, best Dutch,	lb.	12 1/2	14
Magnesia, Carb 1 oz... .. .	lb.	16	18
Calcined,	lb.	50	55
Citrate, gran.,	lb.	40	75
Sulphate,	100 lbs.	1 75	
Manganese, black oxide,	lb.	4 1/2	6
Manna,	lb.	85	1 00
Menthol,	lb.	4 00	4 50
Mercury,	lb.	75	90
Ammoniated,	lb.	1 30	1 40
Bichlor,	lb.	80	90
Biniodide,	lb.	4 00	4 60
Bisulphate,	lb.	1 10	1 15
Chloride,	lb.	90	95
c. Chalk,	lb.	60	65
Nitric Oxide,	lb.	95	1 10
Oleate,	lb.	65	90
Oxide, yellow,	lb.	1 60	1 70
Milk Sugar,	lb.	25	35
Morphia Acet,	oz.	1 75	2 00
Mur,	oz.	1 75	2 00
Sulph,	oz.	1 80	2 00
Moss, Iceland,	lb.	12	13
Irish,	lb.	10	11
Musk, Tonquin, true,	oz.	46 00	48 00
Canton,	oz.	60	70
Naphtha, Wood	pt.	85	90
Naphthol, Beta,	oz.	10	12
Nutmegs,	lb.	90	1 00
Nux Vomica,	lb.	8	10
powdered,	lb.	25	27
Oil, Almond, Bitter,	oz.	45	80
Sweet,	lb.	35	40
Amber, rectified,	lb.	75	80
Anise,	lb.	2 75	3 00
Bergamot,	lb.	3 00	3 25
Caraway,	lb.	3 50	4 00
Cassia,	lb.	2 75	3 00
Castor,	lb.	12	14
Cedar,	lb.	50	90
Citronella,	lb.	1 10	1 25
Cloves,	lb.	1 00	1 10
Cod-liver, N. F.,... .. .	gal.	1 00	1 10
Norwegian,	gal.	1 40	1 60
Cotton Seed,	gal.	80	1 00
Croton,	lb.	1 50	1 60
Cubeb,	lb.	2 20	2 25
Eucalyptus,	lb.	1 25	1 60
Geranium, India,	lb.	3 15	3 20
Hemlock,	lb.	75	80
Juniper wood,	lb.	65	70
Lavender, English,	oz.	2 25	3 00
French, pure,	lb.	3 50	4 00
Garden,	lb.	1 50	3 50
Lemon,	lb.	1 75	2 00
Lemon Grass,	lb.	1 50	1 60
Linseed, Boiled,	9 lb., gal.	51	64
Raw,	gal.	58	61
Male Fern	lb.	2 00	2 50
Neatsfoot,	gal.	1 00	1 10
Neroli, Bigarade.. .. .	oz.	4 25	4 50
Olive, common,	gal.	1 20	1 25
Salad,	gal.	2 40	2 50
Orange,	lb.	2 00	2 75
Origanum,	lb.	65	85

Oil, Pennyroyal,	lb	1 25	1 35	Root, fine trimmed	lb.	2 50	4 50
Peppermint, English,	lb.	16 00	16 50	powdered,	lb.	1 00	2 50
American,	lb.	2 00	2 25	Sarsaparilla, Honduras,	lb.	40	45
Pinus Sylvestris,	oz.	10	12	Jamaica,	lb.	60	65
Rose, Kissanlik,	oz.	9 60	10 00	Sarsaparilla, Mexican,	lb.	16	18
good,	oz.	7 50	8 00	Senega,	lb.	60	65
Rosemary,	lb.	70	75	3quill, white,	lb.	10	12
Sandalwood,	lb.	5 50	7 50	Valerian, English,	lb.	18	20
Sassafras,	lb.	70	80	Salol,	lb.	1 50	1 75
Seal, pale,	gal.	55	60	Sal Soda,	lb.	2	2½
Sperm, Winter Bleached,	gal.	1 20	1 25	by bbl.	lb.	1½	1½
Tansy,	lb.	4 25	4 50	Epsom, by bbl.	100 lb.	1 75	2 00
Union Salad,	gal.	1 00	1 10	Salicin,	lb.	3 00	3 25
Wintergreen,	lb.	2 00	2 25	Santonin,	lb.	3 00	3 25
Ointment, Mercurial,	lb.	70	75	Seed, Anise, Italian,	lb.	13	14
Citrine,	lb.	45	50	Star,	lb.	35	38
Opium.—SEE GUM.				Canary, Sicily,	lb.	3½	4½
Orange Peel,	lb.	16	70	Caraway,	lb.	12	15
Pepsin, Morson's,	oz.	85	90	Cardamon, Malabar,	lb.	1 00	1 20
Saccharated,	lb.	2 50	6 00	decorticated,	lb.	1 50	2 00
Pepper, Black,	lb.	12	14	Celery,	lb.	20	25
powdered,	lb.	12	15	Colchicum, German,	lb.	25	30
White powdered,	lb.	22	25	Coriander,	lb.	10	12
Pill, Blue, Mass,	lb.	70	80	Flax, cleaned, Ontario,	100 lbs.	25	3 75
Pilocarpine, Nitrate,	gr.	10	12	pure ground	lb.	3½	4
Pitch, Black,	bbl.	3 50	3 75	Fenugreek, powdered,	lb.	6	8
Burgundy,	lb.	13	15	Hemp,	lb.	4	4½
Phenacetine,	oz.	40	45	Mustard, white,	lb.	7	8
Phosphorus,	lb.	90	1 00	powdered,	lb.	20	50
Podophyllin,	oz.	40	45	Rape,	lb.	6	7
Poppy Heads,	100	75	90	Saffron, American,	lb.	50	55
Potassa, Caustic, white sticks,	lb.	65	70	Spanish,	oz.	1 25	1 25
Liquor,	lb.	10	12	Sage, ozs.	lb.	18	20
Potassium, Acetate,—granulated	lb.	28	30	Silver, Nitrate,	cash, lb.	6 50	9 00
Bicarbonate,	lb.	17	20	Soap, Castile, mottled,	lb.	10	12
Bichromate,	lb.	14	15	White,	lb.	8	16
Bitartrate (Cream Tartar),	lb.	27	29	Soda, Ash,	keg or cask.	2	2½
Bromide,	lb.	65	70	Caustic,	drum or lb.	3½	5
Carbonate,	lb.	13	15	Sodium, Acetate,	lb.	25	30
Chlorate,	lb.	15	18	Bicar, Howard's,	lb.	16	17
Cyanide, Fused,	lb.	35	45	Newcastle,	keg.	2 75	2 75
Iodide,	lb.	3 50	3 75	Carbonate, crystal,	lb.	1½	3
Nitrate,	lb.	7½	9	Hyposulphite,	lb.	4	6
Permanganate,	lb.	40	45	Salicylate,	lb.	75	90
Prussiate, Red, powdered,	lb.	50	55	Sulphate, Glauber's salt	lb.	1½	3
Yellow,	lb.	30	32	Sponges, Grass	lb.	55	55
and Sodium Tartrate (Rochelle				Reef	lb.	1 50	1 75
Salt)	lb.	29	30	Slate,	lb.	1 00	1 10
Sulphure	lb.	25	27	Sheepswool,	lb.	2 00	2 40
Quassia,	lb.	10	12	Bath, loose, common	lb.	1 75	2 50
Quinine, Howard's,	oz.	30	32	Bath, fine qual.,	100	10 00	40 00
German,	oz.	24	27	Surgeon's	string	1 50	2 50
Resorcin,	oz.	18	20	Turkey	string	3 00	10 00
Rosin, strained,	bbl.	3 00	3 75	Turkey, Cup, fine	each	0 50	1 00
Clear, pale,	bbl.	4 00	4 75	Strychnine, crystals	oz.	0 80	1 10
Root, Aconite,	bulk, lb.	20	22	Sulphonal,	oz.	27	30
Blood, powdered,	lb.	13	15	Sulphur precipitated,	lb.	13	20
Cohosh, Black,	lb.	15	16	sublimed,	lb.	3	4
Colchicum, German,	lb.	40	45	roll,	lb.	2½	3½
Columbo,	lb.	18	20	Tin, Murite, crystals,	lb.	25	28
powdered,	lb.	25	30	foil,	lb.	30	34
Curcuma, ground,	lb.	13	15	Tamarinds,	lb.	13	15
Elecampane,	lb.	12	13	Tar,	bbl.	3 25	3 50
powdered,	lb.	15	17	Barbadoes,	lb.	15	16
Gentian,	lb.	12	13	Terebene,	lb.	60	65
ground,	lb.	13	14	Turpentine, Spirits,	gal.	50	55
powdered,	lb.	14	15	Chian,	oz.	70	75
Ginger, E. I.	lb.	15	18	Venice,	lb.	12½	13
powdered,	lb.	16	20	Veratria	oz.	2 25	2 50
Jamaica,	lb.	24	30	Verdigris,	lb.	30	35
powdered,	lb.	28	30	Wax, White, pure,	lb.	55	75
Golden Seal, powdered,	lb.	40	55	Yellow,	lb.	40	45
Hellebore, White, powdered,	lb.	13	15	Woods, Camwood,	lb.	8½	10
Ipecac,	lb.	2 25	2 50	Fustic, Cuban,	lb.	2½	3
powdered,	lb.	2 50	2 75	Logwood, Campeachy,	lb.	2½	3
Jalap, powdered,	lb.	45	50	Quassia,	lb.	10	12½
Licorice, select,	lb.	12	23	Redwood,	lb.	3½	5
powdered,	lb.	10	12	Zinc, Chloride,	oz.	10	15
Mandrake,	lb.	13	16	Oxide,	lb.	13	60
Orris, Florentine	lb.	25	30	Sulphate, pure,	lb.	9	12
powdered,	lb.	30	35	common,	lb.	6	9
Pink,	lb.	40	45	Valerianate,	oz.	25	28
Rhubarb, E.I.	lb.	60	70	Sulphocarbonate,	lb.	1 00	1 10

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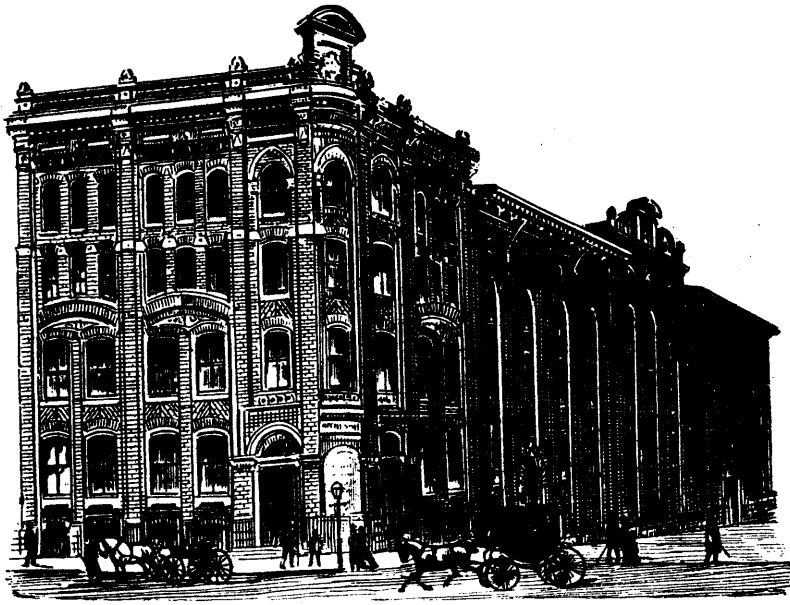
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