

Technical and Bibliographic Notes / Notes techniques et bibliographiques

The Institute has attempted to obtain the best original copy available for filming. Features of this copy which may be bibliographically unique, which may alter any of the images in the reproduction, or which may significantly change the usual method of filming, are checked below.

L'Institut a microfilmé le meilleur exemplaire qu'il lui a été possible de se procurer. Les détails de cet exemplaire qui sont peut-être uniques du point de vue bibliographique, qui peuvent modifier une image reproduite, ou qui peuvent exiger une modification dans la méthode normale de filmage sont indiqués ci-dessous.

- Coloured covers/  
Couverture de couleur
- Covers damaged/  
Couverture endommagée
- Covers restored and/or laminated/  
Couverture restaurée et/ou pelliculée
- Cover title missing/  
Le titre de couverture manque
- Coloured maps/  
Cartes géographiques en couleur
- Coloured ink (i.e. other than blue or black)/  
Encre de couleur (i.e. autre que bleue ou noire)
- Coloured plates and/or illustrations/  
Planches et/ou illustrations en couleur
- Bound with other material/  
Relié avec d'autres documents
- Tight binding may cause shadows or distortion along interior margin/  
La reliure serrée peut causer de l'ombre ou de la distorsion le long de la marge intérieure
- Blank leaves added during restoration may appear within the text. Whenever possible, these have been omitted from filming/  
Il se peut que certaines pages blanches ajoutées lors d'une restauration apparaissent dans le texte, mais, lorsque cela était possible, ces pages n'ont pas été filmées.
- Additional comments:/  
Commentaires supplémentaires:

- Coloured pages/  
Pages de couleur
- Pages damaged/  
Pages endommagées
- Pages restored and/or laminated/  
Pages restaurées et/ou pelliculées
- Pages discoloured, stained or foxed/  
Pages décolorées, tachetées ou piquées
- Pages detached/  
Pages détachées
- Showthrough/  
Transparence
- Quality of print varies/  
Qualité inégale de l'impression
- Continuous pagination/  
Pagination continue
- Includes index(es)/  
Comprend un (des) index
- Title on header taken from:/  
Le titre de l'en-tête provient:
- Title page of issue/  
Page de titre de la livraison
- Caption of issue/  
Titre de départ de la livraison
- Masthead/  
Générique (périodiques) de la livraison

This item is filmed at the reduction ratio checked below/  
Ce document est filmé au taux de réduction indiqué ci-dessous.

10X	12X	14X	16X	18X	20X	22X	24X	26X	28X	30X	32X
									✓		



Vol. VIII.

TORONTO, CANADA, APRIL, 1896.

No. 4.

**ALPHA RUBBER CO. (Ltd.)**  
**MONTREAL Canada**  
**P. O. Box 28**

MANUFACTURERS  
 ...OF...

**FINE RUBBER GOODS**

FOR  
**DRUGGISTS AND STATIONERS**

We carry in Canada a full line  
 of Druggists Rubber Sundries

**OUR REVISED PRICE LIST IS NOW OUT.**

**BUNTIN, GILLIES & CO.**  
**Hamilton, Ont.**

**FOUNTAIN PENS**

In large variety.

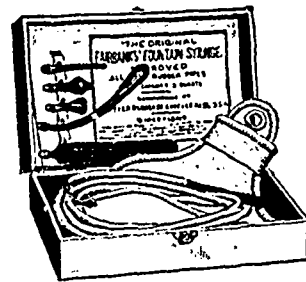
**ALL THE BEST MAKES.**

WIRT'S . . . CAW'S . . .  
 HOLLAND'S . . . BLAIR'S

And the great \$2.00 (Retail) Pen . . .  
 THE "BRITANNIA"

The word "TYRIAN" on Rubber Goods a guarantee of their quality.

THE ORIGINAL  
**Fairbanks' Fountain Syringe**



FOR SALE BY ALL DRUGGISTS

SIX HARD RUBBER TUBES

Under our trade mark "TYRIAN" we manufacture a full line of Druggists' rubber goods. Write for catalogue

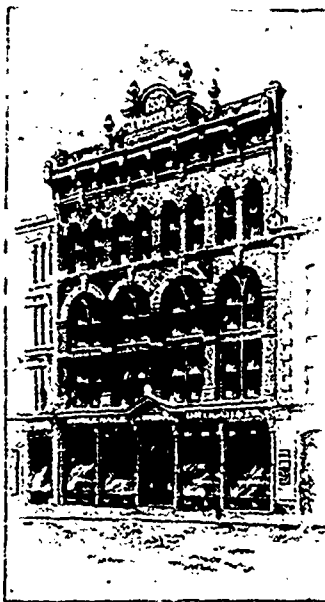
**TYRE RUBBER CO., Andover, Mass., U.S.A.**

**J. WINER & CO'Y,**

(ESTABLISHED 1830)

**Wholesale**

Wholesale School Supplies and Stationery  
 next door.

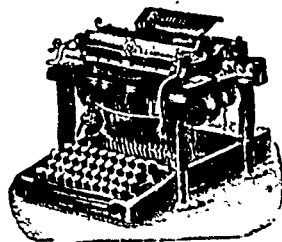


**Druggists**

Special attention given to all goods sent us  
 for enclosure.

**54 and 56 KING ST. EAST, - 43 and 45 MAIN ST. EAST,  
 HAMILTON, ONT.**

# REMINGTON Typewriter



THE  
New  
No. 6

Leads in improvements  
New manifolding device  
Latest spacing mechanism  
Lightest touch—Quickest action

### Proof of Superiority

Over 15,000 manufactured and sold within 18 months

## EDISON MIMEOGRAPH

THE ONLY SATISFACTORY DUPLICATOR

3,000 COPIES FROM PEN PROCESS  
1,500 COPIES FROM TYPEWRITER

◆◆◆◆  
CHEAPER THAN PRINTING  
◆◆◆◆

Circulars and samples of work on application

SPACKMAN & ARCHBALD

45 Adelaide St. E. - Toronto

# EVANS & SONS

(LIMITED)

43 and 45 St. Jean Baptiste St.,  
MONTREAL.

23 Front Street West,  
TORONTO.

BRANCHES IN . . .  
Boston, Mass. - Victoria, B.C.

## Wholesale Druggists

. . . AND . . .

MANUFACTURING

PHARMACEUTICAL CHEMISTS

Druggists' Sundries,  
Proprietary Articles,  
Etc., etc.

The Largest Importers and Ex-  
porters of Drugs in the Dominion.

EVANS SONS & CO., EVANS, LESCHER & WEBB,  
Liverpool, Eng. London, Eng.

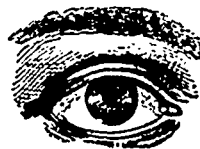


NEW STYLE OF PACKING  
-- HONEYCOMB SPONGES --  
LYMAN, KNOX & CO., TORONTO and MONTREAL

### HEADQUARTERS FOR . . .

Empty Capsules  
Creta Precip. "G.W.N."  
Graesser's Carbolic Acid  
T. & H. Smith & Co.'s Morphine and Salts  
Acetic Acid, Glacial 80°  
White Glycerine D.D. 1260°  
Castor Oil, Pharmaceutical quality  
Finest Norwegian Cod Liver Oil  
In stock and to arrive.

BELLHOUSE, DILLON & CO.,  
30 ST. FRANCIS XAVIER STREET,  
MONTREAL.



## ONTARIO OPTICAL INSTITUTE

Classes in Optics and Refraction commence on the second Tuesday of each month.

The teaching embraces everything necessary for an optician to intelligently and satisfactorily fit spectacles.

Students are welcome to remain until they have grasped the necessary information—and to those passing the examination a handsome diploma is presented gratis.

We claim the only thorough course given in Canada and at least equal to any in America.

The Ontario Optical Institute Diploma is always an evidence of the ability of its possessor to do his work properly.

For further information and recommendations from former students apply to

DR. W. E. HAMILL, M.D.,

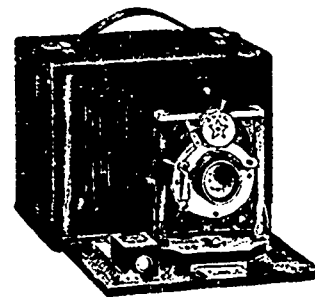
Room 11, Janes' Building,  
King and Yonge Sts., TORONTO.

Specialist in Eye Diseases  
PRINCIPAL.

Advanced and private students received at any time. See announcements in former issues.

### "Snapshots"

# CAMERAS



PREMO B.

If You Want One WRITE US.

Catalogue Free . . .

F. A. Mulholland & Co.,

159 BAY STREET, TORONTO

DEALERS  
... IN

Photographic Supplies  
AND Apparatus

# Canadian Druggist

Devoted to the interests of the General Drug Trade and to the Advancement of Pharmacy.

VOL. VIII.

TORONTO, APRIL, 1896.

No. 4

## Canadian Druggist

WILLIAM J. DYAS, PUBLISHER.

Subscription \$1 per year in advance.

Advertising rates on application.

The CANADIAN DRUGGIST is issued on the 15th of each month, and all matter for insertion should reach us by the 5th of the month.

New advertisements or changes to be addressed

Canadian Druggist,

11½ RICHMOND ST. WEST,

TORONTO, ONT.

### EUROPEAN AGENCIES:

ENGLAND: Aldermay House, 60 Watling Street, London, E. C.

FRANCE: 5 Rue de la Bourse, Paris.

### CONTENTS.

A Mistake Repeated.  
Gratifying Progress.  
An Explanation.  
Notes from the Rank and File of the O.S. of R.D.  
The Friendly List.  
Montreal Retail Drug Association.  
Sundries.  
CORRESPONDENCE.  
Who can Furnish This?  
Appreciated.  
A Timely Suggestion.  
Cod Liver Oil and its Emulsifications.  
TRADE NOTES.  
Montreal Notes.  
Nova Scotia Notes.  
Manitoba Notes.  
British Columbia Notes.  
Newfoundland.  
Pharmaceutical Examinations.  
Do you Want Trade in Mexico and South American Countries?  
How to join the American Pharmaceutical Association.  
American Pharmaceutical Association.  
Decolorized Tincture of Iodine.  
The Princess Beglarion, Medicine Doct r, Universitatis Bernæ.  
Action 'or Damages against a Wholesale Drug House.  
Pharmacy in England.  
EDITORIALS.  
Thoughts and Queries re O.S.R.D.  
Buying in Haste and Repenting at Leisure.  
Nominated for Parliament.  
Photographic Supplies for Druggists.  
Cod Liver Oil Emulsion.  
Palm Oil.  
Incompatibility of New Remedies.  
A Table showing the Result of Triturating certain Substances Together.  
THE SCIENCE OF OPTICS.  
Elementary Anatomy of the Eye.  
ADVERTISING.  
Practical Hints on Advertising.  
Montreal College of Pharmacy.  
FORMULARY.  
PHOTOGRAPHIC NOTES.  
BUSINESS NOTICES.  
MAGAZINES.  
DRUG REPORTS.

### A Mistake Repeated.

The retail druggists of the city of Toronto have had, during the past ten years, ample cause to regret that the College of Pharmacy was in their midst. It would have paid them many times over to have bonused another town to have taken it. It would not necessarily have militated against the usefulness of such an institution to have had it located where there was no possibility of multiplying drug stores, and it would have prevented the existing excessive crowding with which the city of Toronto suffers. The retail druggists of Toronto, prior to the erection of the new building for college purposes in 1886, were prospering, and making money; yet within a period of three years after its erection the influence of oppression and depression was felt. Other causes doubtless contributed to make matters worse than they had formerly been, but the fact must not be lost sight of that the overcrowding was largely responsible for the weakness of trade individually felt.

The city of Montreal has made the same mistake, and is now suffering in the same manner. Before the establishment of a college there, Montreal was a good place for the retail druggist to do business in. To-day even the most sanguine of her best men see prospective danger ahead, and as yet no way to prevent it. The mistake Toronto made has been repeated in Montreal, and will doubtless be repeated by the larger cities in other provinces when colleges are established in them. The familiarity with and fascination for city life induced in the college student during his temporary stay, together with the fact that his training in practical work in the college seems to him to fit him especially for city trade, is the reason why he seeks connection with it. It seems a singular thing that the thoughtful consideration which should be given the chances of a favorable opening for another drug store is lost sight of when a

city location is sought. The honor of being a city pharmacist is apparently so alluring that calculations as to probable prosperity are entirely lost sight of, and he, in turn, is made to feel that the proximity of a college, while it may lend some fame to his location, is sure to lend wings to his trade.

### Gratifying Progress.

We are pleased to be able to state that the work of organization in connection with the Ontario Society of Retail Druggists is meeting with the most gratifying success, and the membership of retail druggists has been largely augmented since our last report. Amongst those who have recently joined are some who, at first, were inclined to throw cold water on the scheme, having doubts as to its feasibility.

Success, however, has brought assurance, and the most sanguine of the promoters of the society are now seeing their anticipations realized, and a membership secured, which, it is to be hoped, will prove lasting and increasing in influence as it grows older. The number of retail druggists now remaining outside is comparatively small, and we confidently believe that ere long they, too, seeing that a unanimity of purpose prevails, will join the ranks, and thus secure to themselves the protection and help which such an organization must confer.

The Executive Committee has issued a circular asking for more money in order to carry on the work so auspiciously begun, and we trust the response will be immediate and liberal. Druggists should remember that this work is being done for them, and must result in an increased and lasting revenue in their business if hearty co-operation is given.

### An Explanation.

In our issue of last month we announced the establishment of a bureau of advertising, which was intended to be of assist-

ance to our readers in a matter of the greatest importance to the live business man, by formulating distinctive lines of advertising as adapted to various localities. We regret to say that the parties to whom this work was entrusted have not met our expectations in the matter, and the system adopted by them did not meet our views. We have decided, therefore, to leave this matter in abeyance for a time. As evidence of the desire for a bureau of the nature described, the numbers of enquiries received from all parts of the Dominion amply testifies, and we only regret the necessity for postponing it for a time.

#### Notes from the Rank and File of the O.S. of R.D.

We are glad to notice the prompt response of members to the circular letter of the secretary sent out April 10th, and by noon of the 13th one hundred replies were received enclosing the amount asked for. Below we give a few of the letters received, showing the ready response and unanimity prevailing.

We are glad to see that you have accomplished so much, and hope that soon your efforts will be crowned with complete success.

Very truly yours,  
ROBERT PHILLIPS & SON.

Fergus.

With best wishes for the ultimate success of our society, I remain,

Yours in patience,  
J. W. HOUSTON.

Toronto.

Allow me to say that I fully appreciate the importance of the work you are engaged in, and the zeal you have displayed in your endeavor to make it a success.

Sincerely yours,  
A. W. GISSING.

Princeton.

You are doing well.

Yours truly,  
C. E. NASMYTHE.

Stratford.

It is a pleasure for us to remit you this small amount, as we have saved more than one dollar since prices have been raised, and sincerely hope you will meet with every success.

Yours truly,  
PEARSALL & KENT.

Port Rowan.

I trust the druggists will see the necessity of responding to the call, for I am satisfied that if we stick together now we will succeed, and if we fail we are hopelessly gone for all time.

Respectfully yours,  
JOHN GAYFER.

Ingersoll.

It affords me the greatest pleasure in the world to enclose you one dollar, and if by paying fifty dollars the thing could be rectified at once I would gladly do so; but, I suppose, in the language of Scripture, "Patience must have her perfect work." Hope you are prospering in your town.

Yours very truly,  
W. H. GILPIN.

Toronto.

Enclosed the necessary greence. "More power to your elbow."

Yours fraternally,  
Durham. R. MACFARLANE, JR.

I never paid a dollar more freely in my life, and would have enclosed five if I had been asked to, although we have never been troubled with cutting here among ourselves. There are three of us here in this small place, and am happy to say that common sense and brotherly love have always reigned among us, but we are feeling the influence for good on the outside, caused by the workings of our society. May you live long and prosper in the good work you have begun for the retail druggists of the Dominion!

Yours truly,  
C. THOMSON.

Tilsonburg.

Hoping that sufficient of the sinews of war may be forthcoming to meet all the requirements for putting the society on a good basis, I am,

Yours sincerely,  
JAS. CLARK.

Renfrew.

Trusting you may secure success in your very laborious undertaking, which I expect would make a Wellington or a Napoleon lose heart, I must confess I admire your pluck when I consider how much work you must perform to procure successful results.

JOHN URQUHART.

Oakville.

Everything is working well in this part, and already I have saved a number of dollars in keeping prices up.

Yours,  
WM. FEAD.

Cannington.

Everything is going on nicely in Peterboro and surrounding places. Wishing you all success, I am,

Yours respectfully,  
W. WALSH.

Peterboro.

I trust every druggist throughout the province will promptly respond, and so help on the good work. It should be very gratifying to every druggist to see the work you have done in so short a time, and I hope they will all back you up with their encouragement and money.

Yours faithfully,  
A. W. MANLEY.

Owen Sound.

I am much pleased at the success so far attained, and which I think is due to

the energy of the officers. Will be pleased to give any assistance, either pecuniary or otherwise, in my power.

N. A. BOSWORTH.

Stratford.

My neighbor and I are both well satisfied with the work done by the association thus far, and cheerfully contribute our mite. Trusting the association may continue to prosper, believe me,

Yours truly,  
R. ROBINSON.

Toronto.

I cheerfully contribute to help carry on the good work.

Yours fraternally,  
E. J. JOHNS.

Stratford.

Push the old chariot along!

Yours sincerely,  
G. W. W. DAVIDSON.

Hamilton.

We feel confident that it will do us two hundred dollars worth of good if we can complete the object for which we are aiming. We feel the cutting of prices in Toronto nearly as much as the Toronto druggists do, being only twenty miles from Toronto, and the G.T.R. issues once a week round trip tickets at single fare, and we will welcome the day when all patents are sold at a standard price, and they will be if we are true to each other.

Yours truly,  
THE MARKHAM DRUG STORE,  
per R.A.W.

Markham.

#### The "Friendly List."

The following is the friendly list up to April 1st, by which it will be seen that nearly all the wholesale trade doing business with druggists have signed the agreement submitted to them:

WHOLESALE DRUGGISTS AND PATENT  
MEDICINE DEALERS.

The Lyman Bros. & Co. (Limited), Toronto.

Elliott & Co., Toronto.

Lyman, Knox & Co., Toronto.

Evans & Sons (Limited), Toronto.

Lyman Sons & Co., Montreal.

Kerry, Watson & Co., Montreal.

Evans & Sons (Limited), Montreal.

Lyman, Knox & Co., Montreal.

J. Winer & Co., Hamilton.

Arch. Wilson & Co., Hamilton.

H. Skinner & Co., Kingston.

The London Drug Co., London.

James A. Kennedy & Co., London.

T. W. Chamberlain & Co., Prescott.

T. B. Barker & Sons, St. John, N.B.

S. McDiarmid, St. John, N.B.

PATENT AND PROPRIETARY MEDICINE  
JOBBER.

Northrop & Lyman Co. (Limited), Toronto.

T. Milburn & Co., Toronto.

F. F. Dalley, Hamilton.

# Protonuclein...

Tablets. (100 3-grain Tablets in bottle) per doz. \$9.00  
 " (1000 3-grain Tablets in bottle) . each 6.75  
 Powder. (1 oz. bottles) . . . . . per doz. 9.00  
 " (8 oz. in bottle) . . . . . each 5.50

**REED & CARNRICK,**  
 30 Wellington St. East, TORONTO.

## Duncan, Flockhart & Co.'s

### Blaud Pill Capsules

Are soft and flexible      Never become oxidized  
 Never become hard      Never vary in strength

These Capsules are put up in 1, 2, and 3-pill sizes, with or without Arsenic, and can be supplied in boxes of 25 or 100 (each). They are prepared by a unique and original process, which entirely overcomes the tendency to hardening which is so common in the Blaud Pills.

**R. L. GIBSON,**  
 30 Wellington St. East,  
**TORONTO.**

## Wampole's

### BEEF, WINE, AND IRON.

In Pint Bottles.....\$5 00 per doz.  
 Winchester (½ Imp. Gal.)..... 2 00 each.  
 Imp. Gallon, in 5 gal. lots, and over 3 50 per gal.

With handsome lithographed labels. Buyer's name prominently printed on same, at the following prices:

¼ Gross lots, and over.....\$60 00 per gross.  
 (Packed in One-Dozen 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.

We invite comparison with other manufacturers, and will cheerfully furnish samples for that purpose.

Your early orders and enquiries solicited through Wholesale Jobbers or direct from us.

**Henry K. Wampole & Co.,**  
 MANUFACTURING PHARMACISTS,  
**Philadelphia, Pa.**

Canadian Branch:

36 and 38 Lombard Street, TORONTO.



SEASON 1896.

BILLINGS, CLAPP, & CO.'S

## IDEAL LEMONADE and ROOT BEER TABLETS

Put up in 10 Cent Bottles

Are the best Tablets we have handled, and have given general satisfaction.

They are to the front again this season.

Price: 85 Cents a dozen or \$10.00 a gross.

### For the Soda Water Fountain.

French, Cave & Co's. Crushed Violet, Red Orange Phosphate, also Tangerette, Lime Phosfizz, Mulford's Pure Grape Juice, Murchison's Acid Phosphate.

### Fresh Stock of

Pep-in Chips and Fruit Chips, Tolu Sugar Plums, Sweet Wheat, After Dinner and Celery Pepsin Gums; Heide's Licorice Pastilles, Chapireau's Cachets, etc.

### Adam's Root Beer Extract

15 and 25 cent bottles.

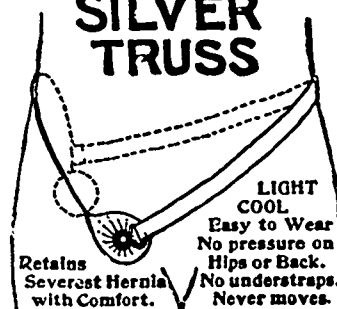
### CANADIAN SPECIALTY CO.

38 Front Street East, Toronto, Ont.

FOR SALE: 1 Kingery Ice Breaker and Shaver combined for counter

FRONT AND BACK VIEW

## AMERICAN SILVER TRUSS



MANUFACTURED BY  
 The Smith Manuf'g Co., - Galt, Ont.

# The Silver Truss

IS A NEW INVENTION,  
 NEW IN PRINCIPLE,  
 NEW IN DESIGN,  
 NEW IN APPLICATION,  
 and the MOST PERFECT KNOWN.

The great success of this Truss in holding with comfort all kinds of hernia, whether adults, youths, or infants, all over Canada, the United States, and Europe, is phenomenal. They have been adopted by leading hospitals, surgeons, and rupture specialists of the United States, and by Westminster and Guy's Hospitals, London, Eng. No greater recommendation could be accorded any appliance than its adoption by the physicians and surgeons comprising the staffs of these hospitals, which rank among the largest and best in the world.

MANUFACTURED BY

THE SMITH MANUF'G CO., GALT, ONT.

PROFIT FROM  
100 to 200  
PER CENT.

EVERY JOBBER  
SELLS  
TANGLEFOOT.



**REGULAR**  
ONE BOX, . . . . 45 cents.  
ONE CASE, . . . . \$4.00.  
(10 Boxes)  
FIVE CASES, . . . . \$3.75.

**"LITTLE"**  
ONE BOX, . . . . 18 cents.  
ONE CASE, . . . . \$2.10.  
(15 Boxes)  
Size, 5 1/2 x 9 inches.

# ..TANGLEFOOT..

SEALED

## STICKY FLY PAPER.

The Difference....

- Some Leaks at the Edges.
- Some Soaks Through the Paper.
- Some Dries After Short Exposure.
- Some Tears Easily in Opening.
- Some Spoils over Winter.
- Some Allows Flies to Escape.

**TANGLEFOOT  
DOES NOT!**

**HOLDERS** are no longer packed with TANGLEFOOT, but are put up separately in boxes of fifty, which job for \$1.00.

G. C. Briggs & Sons, Hamilton.  
 Brayley Sons & Co., Montreal, Que.  
 Dr. E. Morin & Co., Quebec, Que.  
 E. Giroux Frère, Quebec, Que.  
 W. Brunet & Co., Quebec, Que.  
 W. B. MacDonald, Ottawa.

MANUFACTURERS.

J. C. Ayer & Co., Lowell, Mass.  
 Wells, Richardson & Co., Montreal.  
 Scott & Bowne, New York.  
 R. V. Pierce, Buffalo.  
 S. G. Detchon, Toronto.  
 Warner's Safe Cure Co., Rochester.  
 Edmansson, Bates Co., Toronto.  
 J. Gustave Laviolette, Montreal.  
 The Dodds Medicine Co. (Limited), Toronto.  
 The T. A. Slocum Chemical Co. (Limited), Toronto.  
 The Woodward Medicine Co. (Celery King), Toronto.  
 D. Densmore & Co., Toronto.  
 J. A. Gibbons & Co., Toronto.  
 J. H. Sanderson, Richmond Hill.  
 The Balm Medicine Co., Toronto.  
 Radway & Co., Montreal.  
 Allan & Co., Toronto.  
 C. A. Vogeler & Co., Toronto.  
 The Ontario Chemists' Manufacturing Co., Hamilton.  
 Kobo Medicine Co., Toronto.  
 W. Bryers Barkwell, London.  
 E. Millar & Co., Dresden.  
 K. D. C., New Glasgow, N.S.  
 Toronto Pharmacal Co., Toronto.  
 Home Health Medicine Co., Toronto.  
 S. S. Ryckman Medicine Co., Hamilton.

PHARMACEUTICAL PRODUCTS.

Parke, Davis & Co., Detroit and Walkerville.  
 F. Stearns & Co., Detroit and Windsor.  
 Henry K. Wampole & Co., Toronto.

MANUFACTURER'S AGENTS.

Gilmour Bros. & Co., Montreal.  
 Representing { Johnson & Johnson,  
 The Papoid Co.,  
 Upjohn Pill and Granule Co  
 Dr. Bengue.  
 R. L. Gibson, Toronto.  
 Representing { Maltine Manufacturing Co.  
 Reed & Carnrick,  
 N.Y. Pharmacal Association  
 Arlington Chemical Co.,  
 Palisade Manufacturing Co

PERFUMERS.

Seely Manufacturing Co., Windsor.

RUBBER GOODS.

Toronto Rubber Co., Toronto.

Montreal Retail Drug Association.

A well-attended meeting of the Montreal retail druggists of Montreal was held in the college building on March 12th.

The president of the provincial association, Mr. J. Contant, occupied the chair. In an opening address he explained that the meeting had been called to hear a report of the work done by the sister society in Ontario, and also to advance the

cause in their own province. Mr. Pepper, secretary of the Ontario society, in response to a call from the chairman, gave a detailed account of the inception and progress of the society in their province, dealing with the condition of affairs which brought about its formation, its wonderful growth, and the benefits already experienced in many parts. The one point most emphasized by Mr. Pepper was that of co-operation. In this lay our only hope of securing permanent benefit, and this co-operation must be between members of the trade in all parts of the Dominion.

Mr. Gibbard followed, dealing with the subject along the same lines.

Much information as to detail work of the society was brought out in answer to questions asked by various members, all of whom seemed thoroughly interested.

The provincial executive was strengthened by the addition of the following gentlemen: Messrs. E. Roy, W. H. Griffiths, of Sherbrooke, and R. W. Williams, of Three Rivers.

On motion of Mr. H. J. Jackson, seconded by Mr. A. J. Laurance, a vote of thanks was unanimously tendered to Messrs. Gibbard and Pepper for the interest taken and the work done in the formation of the society.

After responses by those gentlemen the meeting broke up, all feeling that a profitable two hours had been spent.

Sundries.

Theodore Ricksecker, manufacturing perfumer, New York City, has made an assignment.

The Pharmacists' Cigar Company, of Detroit, Mich., has been incorporated, with a capital stock of \$25,000. The incorporators are all retail druggists, and the intention is to run it "in the interests of the druggists."

Waubausenc, Ont., wants a resident physician.

IT IS COMING TO THIS.—New York City has a drug store which is strictly a Prescription Pharmacy. No patent medicines or proprietary articles are carried in stock. Patronage of all the leading physicians is accorded this establishment, and ten clerks are kept busy compounding prescriptions. It is said the proprietor of this store cleans up a net profit of \$25,000 annually.—*Ex.*

The Radam Microbe Killer Company failed in its suite in the Assize Court at Toronto against William Radam, of New York, whom they sued for \$5,000 for alleged libel and wrongful tampering with mail. The jury returned a verdict for defendant.

In a recent advertisement of The T. Eaton Co., in one of the daily papers, the

following articles appeared amongst the list of drugs, etc., at reduced prices: Camphoreted Chalk, Borac Acid, Oil of Aniseed, Bland's Pills — and yet some people will purchase from these "thoroughly experienced druggists," as those in charge are called!

SELLING WITHOUT A LICENSE.—The *Renfrew Mercury* has the following, which may prove both interesting and of value to our readers who handle optical goods: "Prof. Chamberlain, an optician, who has occasionally visited Renfrew to do business, did not make a lengthy stay last week. Chief McDermott called on him with a summons to appear before Magistrate McDonald to answer to a charge of selling without a transient trader's license. At first the professor was highly indignant. He would sue the mayor, and chief, and town, if he were detained here. After consulting a legal gentleman, however, he cooled. He visited the chief again, and said that he had done little business this trip, and if not prosecuted would pay all costs and would give a written guarantee that he would not attempt to do business again in Renfrew without taking out a trader's license. After consultation with the magistrate, the chief agreed to this settlement. The professor paid \$2.30 costs.

Advertising Axioms.

BY J. WALTER THOMSON, OF NEW YORK.

"Virtue increases under a weight or burden," and results increase with a comprehensive expenditure of money in good advertising mediums.

"Better late than never." The golden opportunity is still open to him who would enrich himself by judiciously advertising. None other will pay.

"Mind moves matter." Therefore exercise your mind to advertise so as to stir the gray matter of the brains of the people and affect their pocketbooks.

Good goods will sell to good people constantly. Poor goods only once. Don't let people say, "After having praised their wine they sell us vinegar."

"There is no lock but a golden key will open it," except that of the people's pocketbook. First-class ads will do this with golden results. When people think they want a thing they do want it, and they get it.

To be prominent anywhere one must have marked characteristics. So it is with an advertisement in the crowded columns of newspapers and magazines; in order to produce the best result, it must be clear, definite, conspicuous, and fresh. *Is yours of this character?*

Liqueur D'Anthracite is prepared (*Nederl. Tydschr.*) by macerating at 35°C. together, shaking occasionally, 100 grams of coal tar, 200 grams of benzol, and 200 grams of 90 per cent. alcohol.



## Correspondence.

The Editor does not hold himself responsible for the opinions of correspondents. Correspondents must in all cases send name and address, not necessarily for publication.

### Who Can Furnish This?

Editor CANADIAN DRUGGIST:

SIR,—Kindly tell me, through your valued journal, the formula of "Atwood's Jaundice Bitters," and by so doing you will greatly oblige,

Yours truly,  
DRUGGIST.

Moncton, N.B., March 17th, 1896.

### Appreciated.

Editor CANADIAN DRUGGIST:

DEAR SIR,—After having taken the course in optics at the Optical Institute of Canada, I wish to thank you for the opportunity given me to take advantage of it as you did. It came to me in a slack time, and I am sure if the druggists of Ontario knew what a mass of information on this subject could be accumulated in such a short time, and how intelligently it would enable them to handle a profitable "side line," not one of them but would take the course, and "not go it blind" on spectacle fitting hereafter.

Yours respectfully,  
J. H. FLEMING.

### A Timely Suggestion.

Editor CANADIAN DRUGGIST:

DEAR SIR,—During a conversation with Mr. Gibbard, president of the O.S.R.D., I was impressed with the fact that a far greater advance in the co-operation of the manufacturers of proprietary articles has been made than the trade was generally aware of.

The executive, I understand, will, within a few days, issue a new friendly list containing many additions, some of which are of very great importance.

I was also pleased to learn that the number of druggists in the association has been increased to six hundred and sixty-eight, and I am satisfied that if the retailers will adhere loyally to the agreement they have signed and assist the wholesale druggists and manufacturers who are working with them for the general good of the profession the day of triumph is not far distant.

Some important manufacturers have not yet seen their way to join us. This, I think, may be accounted for by the fact that many similar movements undertaken in the United States have signally failed, and I believe that the moment these outsiders are shown that we are all thoroughly in earnest they will join and assist us as far as in their power to gain our end.

My object in writing this letter is to make a suggestion to our retail friends which, if acted upon, I believe will have prompt and beneficial results.

It is this: When the next friendly list reaches them, if each druggist will note the leading manufacturers *not mentioned*,

and at once begin a correspondence with them, not using any threats, but suggesting that they miss their names from the friendly list, and that they think it would be to their interests to join us, the flow of letters of that tenor received by each manufacturer will show most effectually how much in earnest the retailers of this country are, and will, I believe, compel the outside manufacturers to capitulate, even if they only do it in self-defence.

FRIENDLY.

April 1st, 1896.

### Cod Liver Oil and its Emulsification.\*

By P. C. ARKLESTER

The codfish, said the author, appeared at Bergen, Norway, and farther north in the months of January and February, and was then caught in quantities of six to eight millions or more. Later, about March, the fish appeared at Lofoten, where sometimes over eight million were caught. Yet later, the fish went farther north to Finmark, where the catch was quite as large. About sixteen thousand fishermen congregated annually at Lofoten. The fecundity of the codfish was such that it had been estimated that if only one female fish escaped annually, and her eggs safely hatched, the species would be effectually preserved. This fact was less surprising when it was recollected that the ovary of each female fish contains no less than nine million eggs. As soon as possible after capture the fish were brought alive in a specially constructed tank to the shore, where they were sold to the tradesmen and manufacturers, or, what happened very seldom, the oil was extracted by the fishermen themselves on board. There were five varieties of cod-liver oil, namely: (1) That extracted by means of steam, or steam oil; (2) the ordinary medicinal oil, of a light yellow color; (3) the oil of a dark yellow color; (4) the brown medicinal oil; (5) the dark brown oil used by tanners and curriers to soften and preserve leather and skins.

1. In the preparation of steam oil the livers were subjected to the action of steam in pans, pressed and transferred to closed lead cisterns, where the oil was left to deposit stearin and other impurities. After one or two months the clarified oil was bottled. Merchants drew off the oil at as low a temperature as possible, to avoid stearin being afterwards deposited. This oil was almost water-white, and has very little taste or smell. 2. The light yellow oil was prepared by allowing the livers to remain in heaps, when the oil runs out by itself. It was evident that through this exposure to the air, lasting some weeks, the oil got somewhat rancid, and, of course, stronger to the taste and smell than the steam oil. Here, as elsewhere, the difference in the light yellow oils was due to the cleanliness observed and the casks used. Being prepared

\*From a paper read before the Millard Chemists' Assistants' Association.

without heat, this oil contained very little stearin, and would stand a cold temperature better than the steam oil. Makers of high-class oils always kept the oil for some time in ice-houses to allow the stearin and palmitine to deposit. 3 and 4. These were the darker yellow and brown medicinal oils, and were prepared by pressing the livers and subjecting them to a low heat. 5. Currier's oil was obtained by letting the livers ferment, heating and then subjecting to strong pressure.

With regard to the emulsification of cod-liver oil, the author pointed out the many virtues of Irish moss, which contains about 70 per cent. of pectin or vegetable jelly, and had extraordinary powers of emulsification. The only disadvantage in its use was the liability of its solution to ferment under certain conditions; this might be got over by the addition of five per cent. of alcohol to the bulk, or a small quantity of elixir saccharini, which acted as a powerful anti-ferment as well as a sweetening agent. The formula he had found most satisfactory was:

Irish moss (picked)..... 1 drm.  
Cold distilled water..... 5 ozs.

Allow the water to stand on the moss for one hour; then boil for 10 minutes, and strain through muslin, and make up to five ounces. To this, in a bottle, when nearly cold, add:

Cod-liver oil..... 8 ozs.  
Alcohol..... 1 oz.  
Water, to make..... 16 ozs.  
Flavoring..... q.s.

Use a quart bottle, shake the mucilage well round the sides, and then add the whole of the oil, and agitate to form a nucleus; then add half the water, and lastly the alcohol, flavoring, and as much water as required to make up the quantity.

He could not see why such a preparation as an emulsion made by shaking together equal parts of the oil and lime water, and properly flavored, should not come into general use. The two drugs were separately prescribed largely for rickets and spinal diseases in children; also the presence of lime water would certainly help a delicate stomach to bear the oil. To completely mask the odor and taste of cod-liver oil would be worth much gold to any man. He had found oil of wintergreen very useful, though it was not much used in this country. Each of the following three formulae was sufficient for one pint of the finished product:

1  
Oil of wintergreen..... 15 minims.  
Oil of saffras..... 15 "  
2  
Oil of wintergreen..... 20 minims.  
Oil of bitter almonds..... 20 "  
3  
Oil of neroli..... 12 minims.  
Oil of bitter almonds..... 12 "  
Oil of cloves..... 2 "

Oil of lemon appeared to be of little use. Elixir of saccharin, he found, is very useful in bringing out the taste of the flavorings used.—*British and Colonial Druggist.*

Write us for quotations on

**Blue Vitriol**

**Sulphur**

**PARIS GREEN**

**Hellebore**

**Insect Powder**

**Cod Liver Oil**

ARCHDALE WILSON & CO.,

WHOLESALE DRUGGISTS,

HAMILTON, ONT.

**A Demand . . .**

For the undermentioned lines will surely follow the season.

**Citrate of Magnesia**

**White Castile Soap**

"E. & Co."

"SHELL" BRAND

We confidently recommend our brand to you.

Fresh stock arriving, to be followed by another shipment in a month's time.

5 lb. Cans.

3 lb. Bottles.

1 lb. Bottles.

**Bryant's Root Beer**

1896

SPECIAL OFFER.—With an order for one gross we will send free a Metallic Drum Sign attachable to the corner post of your store window. An inducement to the consumer is the offer of dolls. "Stickers" to advertise this offer accompany each box; also a supply of cards.

\$1.50 Per Box (2 doz.). 5% discount in gross lots (with sign).

**EXCELSIOR EGG PRESERVER.**

**ELLIOT & CO.,**

**5 Front Street East, - - Toronto.**

*We Manufacture*

- Envelopes
- Writing Tablets
- School Blanks
- Memo. Books, etc., etc.

And are Headquarters for

ALL KINDS of **STATIONERS' SUPPLIES**

DO YOU WANT THESE GOODS?  
Then write us for prices.

THE W. J. GAGE CO., LTD.  
52-54 Front St. West, - - TORONTO.

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 all report 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.

Order from your wholesale house

AROMA CHEMICAL CO. - TORONTO

The J. STEVENS & SON CO'Y, Ltd.,

145 Wellington St. West, TORONTO.

(Near Union Station.)

- Druggists' Specialties,
- Surgical Dressings,
- Elastic Stockings,
- Clinical Thermometers,
- Glass Importers,
- Trusses and Suspensories
- Medical Batteries,
- Lints and Cottons.
- Abdominal Belts,
- Instruments of all kinds.

Send for quarterly quotations.

### PRICE LIST



**Common Sense Exterminator FOR ROACHES:**  
25c. each, \$1.75 doz.; 50c. each, \$3.75 doz.; \$1.00 each, \$8.00 doz.

**Common Sense Exterminator FOR RATS AND MICE:**  
15c. each, \$1.00 doz.; 25c. each, \$1.75 doz.; 50c. each, \$3.50 doz.; \$1.00 each, \$8.00 doz.

Only infallible remedy known. No smell from Dead Vermin. Not Poisonous to man or beast. Once used always recommended. Sold by Wholesalers at

MONTREAL, TORONTO, and LONDON.

**Common Sense Mfg. Co.,**  
523 King Street West, Toronto.  
Manufacturers of Common Sense Stove Polish, and Common Sense Bicycle Lubricator.

# Teaberry THE STANDARD Tooth Powder.

RECOMMENDED BY DENTISTS.

Write for prices.

ZOPESA CHEMICAL CO.,  
TORONTO.

# "SANITAS" NATURE'S GREAT DISINFECTANT.

Non-Poisonous.  
Does not Stain Linen.

FLUID, OIL, POWDER, &c.

- HOW TO DISINFECT Available for all simple disinfecting purposes.
- HOW TO DISINFECT How to disinfect in cases of the various diseases.
- HOW TO DISINFECT This new disinfectant, as also in every-day life, will be a great help in the disinfection of the house.
- HOW TO DISINFECT THE SANITAS CO., LONDON, ENGLAND.
- HOW TO DISINFECT

A pushing Agent wanted  
in each Canadian City.

# "THE BEST" NURSER...



- EASY SUCTION
- EASILY CLEANSED
- NIPPLE CANNOT COLLAPSE

PREVENTS WIND-COLIC AND  
BOWEL TROUBLES.

EXTRA VALVES (Air Inlet) and "CLING-FAST" Nipples may be had of all wholesale druggists at 35c. per dozen.

"The Best" Nurser \$2.10 per dozen (complete).

St. Louis, Mo.  
"The Best" Nurser is a godsend to babies.  
L. A. TURNBULL, M.D.

**The London Drug Co.,**  
LONDON, ONT.

# Auld Mucilage Co.

MANUFACTURERS OF

All goods Guaranteed



Premium Mucilage  
Lithograms and  
Composition

WRITE FOR QUOTATIONS--

MONTREAL, P.Q.  
759 Craig St.

Wm. Angus, Man.  
Formerly of  
Royal Pulp and Paper Co.



Sold from Halifax to Victoria

BY

- HALIFAX { Brown & Webb, Simson Bros. & Co. Forsyth, Sutcliffe & Co.
- ST. JOHN—T. B. Barker & Sons. D. McDiarmid & Co.
- YARMOUTH—C. C. Richards & Co.
- QUEBEC—
- MONTREAL { Kerry, Watson & Co. Lyman Sons & Co. Evans Sons & Co. Lyman, Knox & Co.
- KINGSTON—Henry Skinner & Co.
- TORONTO { Lyman Bros. & Co. Evans Sons & Co. Northrop & Lyman, T. Milburn & Co. Elliot & Co.
- HAMILTON—Archdale Wilson & Co. J. Winer & Co.
- LONDON—London Drug Co. Jas. A. Kennedy & Co.
- WINNIPEG—Martin, Bole & Wynne Co.
- NEW WESTMINSTER—D. S. Curtis & Co.
- VICTORIA—Langley & Co.
- QUEBEC.—W. Brunet et Cie.

A Perfect Toilet Gem.



The drug trade of Canada will find this one of the most satisfactory articles on the market. The package is convenient and attractive.

Kindly make sure the ARECA NUT TOOTH PASTE offered you is made in WINNIPEG. The genuine is for sale by

- Lyman Bros. & Co., Toronto.
- Elliot & Co., Toronto.
- Evans & Sons, Montreal.
- Lyman, Knox & Co., Montreal.
- Lyman, Sons & Co., Montreal.
- Kerry, Watson & Co., Montreal.
- J. Winer & Co., Hamilton.
- J. A. Kennedy & Co., London, and by

THE  
**MARTIN, BOLE & WYNNE CO.**  
WINNIPEG.

## Trade Notes.

Dr. Casgrain has retired from the drug firm of J. S. Labelle & Co., Windsor, Ont.

The drug store of C. Fairweather, Sussex, N.B., was destroyed by fire, March 12th.

G. E. Frost, of Hampton, N.B., is about opening a new drug store in St. John, N.B.

A. Lemieux, formerly with Gauvreau Frères, is starting a new drug store in Quebec city.

A. B. Stevenson, a former Ontario druggist, has purchased a drug business in Monrovia, California.

H. W. Smith has purchased the drug business of Mrs. Book, Niagara Falls South, and will conduct it as a branch store.

W. H. Pollard, formerly of J. D. Tully's drug store, Lindsay, Ont., is now engaged as manager of Dr. Shier's east end drug store in that place.

H. P. Baird, druggist, Woodstock, N.B., has formed a joint stock company with a capital of \$50,000, to be known as the Baird Co., Limited.

A partnership has been formed between H. F. McLean and G. R. Morrow to carry on drug business at Rossland, B.C., with a branch store at Trail, B.C.

C. A. Wisner, London, Ont., has sold his drug stock to Dr. Spence, who is removing it to Fordwich, Ont. Mr. Wisner will confine himself to the jewelry trade.

W. A. Griffith & Co., Vancouver, B.C., are about removing their drug business to the store at present occupied by Methorell & Co., the latter firm intending to give up business.

We are pleased to learn that Professor Heebner, Dean of the Ontario College of Pharmacy, is recovering from his indisposition, and will be able to resume his duties at the next session of the college.

A. W. Le Patourel, formerly traveller for Archdale Wilson Co., has been appointed agent for Johnson & Johnson's plasters and Andrew Jergen & Co.'s toilet soaps for British Columbia and the Northwest Territories.

John Taylor & Co., proprietors Morse Soap Works, Toronto, have just added to their plant a chemical laboratory for analyzing soaps and the raw materials they use. This firm are now making glycerine from waste soap lyes, as a by-product.

Charles Marin, druggist of St. Cynygonde, Que., has been charged by the Pharmaceutical Association of that province with doing business without having passed the necessary examinations, and for selling poisons without making the proper registration.

An inexpensive and effective advertisement can be had by using Japanese paper napkins, suitably printed, as wrappers for fine goods, such as perfumes, etc. Buntin, Gillies & Co. have a large range of these goods, and offer to send samples to anyone who applies for them.

The latest addition to the line of tablets manufactured by Buntin, Gillies & Co., Hamilton, is their "Golden Fleece," which comes in three sizes, ruled or plain. The tablet contains ninety-six leaves of medium weight linen paper. The cover is royal purple, with title printed in gold. It has a striking appearance, and is a notable addition to the already fine line of tablets shown by this house.

The financial embarrassment of Mr. G. S. Gibbard mentioned in our last month's issue was not due to any failure in the drug business, but the result of a neglect on the part of other interested persons to protect a covenant given some time ago on a deal in real estate. Mr. Gibbard's businesses both on King and College streets are in a prosperous condition, and, notwithstanding the surplus of drug stores, are holding their own and making money for the proprietor.

Buntin, Gillies & Co., Hamilton, are advertising fountain pens in large variety. All the best makers' goods are represented in their stock, and dealers will find that prices are right. Fountain pens are a line which druggists and stationers can handle with good profits. The Britannia pen is one of the leading lines sold by Buntin, Gillies & Co. This pen retails at \$2, the wholesale price being \$1.25, or in lots of one dozen, \$12.

### Montreal Notes.

In response to numerous complaints from all parts of the province with regard to unlicensed persons keeping drug stores, the registrar and secretary, acting under instructions from the Council of the Pharmaceutical Association, has taken action against several parties in Montreal and the eastern townships. In all cases where the defendants confessed judgment the association has asked for leniency from the bench.

Mr. Morrison is busy organizing his committees for the reception of the American Pharmaceutical Association this summer. There is one committee which must get to work at as early a date as possible, and that is the Finance Committee.

### Nova Scotia Notes.

Mr. A. A. Woodill, of Halifax, has opened a drug store in Water street, a few doors north of his old stand.

Mr. J. D. Clarke, formerly with Messrs Crowe Bros., of Truro, has taken charge of the business of Mr. L. R. MacLaren, of Digby.

Mr. L. R. Morse, junior, so well known in his father's drug store in Laurencetown, has graduated at McGill College.

Mr. E. Jenneris' many friends will be pleased to see him at his old post in Sherbrooke.

Mr. Courtney Henry, formerly of Antigonish, who has been in the south for the last year, is returning in good health.

The regular meeting of the executive of the Nova Scotia Pharmaceutical Society was held in the Board of Trade rooms on Monday, the 30th ult. After the regular business of the meeting was concluded, the president announced that Mr. Gibbard, president of the Ontario Society of Retail Druggists, hoped to be here at the annual meeting. The objects of the society were discussed, and the Nova Scotia society can be expected to enter into hearty co-operation with their friends in the west.

### Manitoba Notes.

The newly-elected council for the Pharmaceutical Association of Manitoba held its first meeting Wednesday, the 11th day of March last. There were present Messrs. C. Flexon, J. F. Howard, E. D. Martin, J. C. Gordon, W. Penford, and A. E. Kelly.

The election of officers resulted as follows: President, C. Flexon; vice-president, J. C. Gordon; treasurer, E. D. Martin. The following gentlemen are appointed on the Board of Examiners: B. M. Canniff, Portage la Prairie; A. R. Leonard, Stonewall; W. R. Bartlett, Brandon; L. W. Leithhead, A. Campbell, and W. Penford, Winnipeg.

The spring examinations commenced on the first day of April, continuing for three days. Twenty-three students appeared before the examiners at the sitting, five for the major and eighteen for the minor examinations.

Dr. J. T. Wilson, of Slave Lake, was in Winnipeg last week attending the medical examinations. He is proprietor of the Slave Lake drug store.

Mr. B. M. Canniff, of Portage la Prairie, was in Winnipeg last week.

It is reported that Messrs. A. E. Kelly and C. Dixon have purchased the drug business of Mr. E. L. Knowlton, Winnipeg.

Mr. D. M. Calder, formerly of Medicine Hat, has taken a position in Mr. Joseph Taylor's drug store at Portage la Prairie.

Mr. W. Spiers has gone to Holland, Mon., to take charge of a drug store at that point.

Mr. C. C. Godfrey, who has been clerking for Dr. Cartmell at Glenboro for some time, has taken up his residence in Carberry, where he will manage Mr. A. E. Munson's drug store.

## British Columbia Notes.

British Columbia will answer to the call, and already a strong association is formed in Vancouver on the lines of the Ontario Retail Druggists. Victoria druggists, to a man, have expressed their willingness by signing an agreement the counterpart of the O.R.D. Association, and before this is in print a provincial association will be well under way.

The action of J. N. Woodward in deliberately reducing prices has been severely criticized throughout the province.

Victoria druggists are glad to see Mr. Mallory back again at Mr. C. E. Jones'. We understand he has sold out his interest in the drug firm in Vancouver.

## Newfoundland.

There is no pharmacy law in force in Newfoundland, but there is a pharmaceutical society, or rather, perhaps, it might be termed a druggists' association, which meets generally twice a year to discuss matters pertaining to pharmacy in its business aspect. In St. John's, the capital, there are six drug stores, all well equipped and in the hands of thoroughly competent pharmacists. The oldest druggist in the city is Mr. John McNeil, the proprietor of the store which is known as D. McMurdo & Co. Mr. McNeil served his apprenticeship with Hamilton & Hardie, of Dundee, Scotland, and came to Newfoundland thirty-five years ago, when he commenced as assistant to the firm above mentioned, and afterwards succeeded to the sole ownership of the business. All the other druggists in the city, with but one exception, have been at some time apprentices with Mr. McNeil.

The physicians of St. John's, as a rule, write prescriptions; only one preparing his own medicine. The destructive fire of 1892, which worked such dreadful havoc and was the cause of very heavy losses to many of the business men of St. John's, burned three of its drug stores. All, however, are again in business.

Formerly the supplies of drugs, etc., were procured almost entirely from England; but, of late years, the Canadian drug houses have secured a good share of the trade, through regular trips of their travellers. Business generally shows a marked improvement in Newfoundland, and a feeling of security has taken the place of the "monetary panic" which existed some time ago.

## Pharmaceutical Examinations.

The Board of Examiners for the preliminary examination of students entering the study of pharmacy held their quarterly examinations upon Thursday, April 2nd, in the College of Pharmacy, Montreal, and Laval University, Quebec, when twenty-three candidates presented themselves in Montreal, and three in Quebec,

the following candidates named in order of merit passing, and being entitled to be registered as certified apprentices, namely: Edmore Bernard, J. A. Deardon, J. B. Bisailon, L. J. Meyer, Geo. E. Clerk, F. W. Laidley, and E. Gothier. Mr. J. Frothingham, one of the candidates, passed upon all subjects but Latin, which subject he will require to present himself for at the July examination. The remainder of the candidates were referred back for further study.

The examiners were: Prof. A. Leblond de Brennat and Prof. Isaac Gammell.

The next examination will be held on July 2nd, candidates being required to send their applications to Mr. E. Minor, secretary, at least ten days prior to the date fixed for the examination.

## Do You Want Trade in Mexico and South American Countries?

The Commercial Intelligence Department of the Associated Trade and Industrial Press, 610 13th street, Washington, D.C., has compiled from first sources a list of the leading dealers in drugs and chemicals in Mexico, Central and South American countries, which will be sent on neatly typewritten sheets to any address on receipt of \$1. This is an opportunity at trifling cost to pave the way toward new commercial connections with Spanish America.

## How to Join the American Pharmaceutical Association.

President J. M. Good has announced the following members of the "Special Auxiliary Committee on Membership." Each member has charge of the work of obtaining applications in his own State. If you desire to join the association, apply to your State representative on the committee.

Alabama—E. P. Galt, Selma.

Arizona—Clements L. Eschman, Phoenix.

Arkansas—W. W. Kerr, Russellville.

California—W. M. Scarby, San Francisco, 400 Sutter street.

Canada, Province Ontario—John Lowden, Toronto.

Canada, Province Quebec—G. Lachance, Montreal.

Colorado—Chas. S. Cline, Denver, Nineteenth and Welton streets.

Connecticut—Chas. A. Rapelye, Hartford.

Delaware—John M. Harvey, Wilmington.

District of Columbia—Saml. L. Hilton, Washington.

Florida—Wm. A. Dell, Jacksonville.

Georgia—Henry R. Slack, La Grange.

Idaho—A. O. Ingalls, Murray, Shoshone Company.

Illinois—H. H. Rogers, Kankakee.

Indiana—F. H. Carter, Indianapolis.

Indian Territory—Chas. G. Moore, Eufaula.

Iowa—W. H. Torbert, Dubuque.

Kansas—Mrs. M. O. Miner, Hiawatha.

Kentucky—Addison Dimmitt, Louisville.

Louisiana—L. F. Chalin, New Orleans.

Maine—Edw. A. Hay, Portland.

Maryland—D. M. R. Culbreth, Baltimore.

Massachusetts—F. M. Harris, Worcester.

Michigan—A. S. Parker, Detroit.

Minnesota—Fred. J. Wulling, Minneapolis.

Mississippi—J. C. Means, Natchez.

Missouri—Ambrose Mueller, St. Louis.

Nebraska—A. V. Pease, Fairbury.

Nevada—W. A. Perkins, Virginia City.

New Hampshire—A. C. Preston, Portsmouth.

New Jersey—Geo. W. Parisen, Perth Amboy.

New Mexico—Jas. O. Kinnear, Deming.

New York—C. A. Mayo, New York.

North Carolina—E. V. Zoeller, Tarboro.

North Dakota—H. L. Haussamen, Grafton.

Nova Scotia, New Brunswick, and Prince Edward Island—F. C. Simson, Halifax.

Ohio—Louis C. Hopp, Cleveland, 198 Euclid avenue.

Oklahoma Territory—John E. Sombart, El Reno.

Oregon—Geo. C. Blakely, The Dalles.

Pennsylvania—Wm. McIntyre, 2429 Frankfort avenue, Philadelphia.

Rhode Island—Wm. O. Blanding, Providence.

South Carolina—Oscar E. Thomas, Columbia.

South Dakota—I. H. Keith, Lake Preston.

Tennessee—J. O. Burge, Nashville, Broad and Market streets.

Texas—Thomas R. Keene, Dallas.

Utah—Frank A. Druehl, Salt Lake City, Maine and Third South streets.

Vermont—H. A. Chapin, Brattleboro.

Virginia—John F. Christian, Roanoke.

Washington—Henry E. Holmes, Seattle.

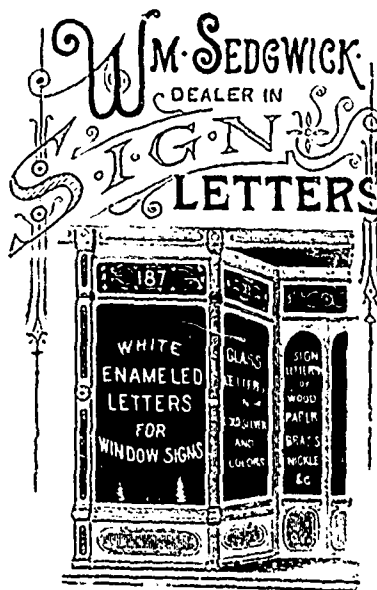
West Virginia—E. L. Boggs, Charleston.

Wisconsin—John R. Drake, Milwaukee.

Wyoming—Dr. Thomas G. Magee, Rawlins.

The Council Committee consists of Dr. H. M. Whelpley (chairman), St. Louis, Missouri; Chas. M. Ford, Denver, Colorado; Geo. W. Voss, Cleveland, Ohio; S. P. Walton, Atlanta, Georgia; Jacob Burghheim, Houston, Texas; and Geo. Kennedy (secretary), Pottsville, Pennsylvania.

The diatoms, single-celled plants of the sea-weed family, are so small that 3,000 of them laid end to end scarcely suffice to cover an inch of space on the rule.



SEND FOR FREE Illustrated PRICE LIST.

It contains illustrations and descriptions of all kinds of

WHITE AND COLORED ENAMELED LETTERS,

Block, Roman, Ornamental, Fancy, Script, etc.

ALSO OF... GLASS LETTERS,

Plain and Embossed Gold, shaded in colors.

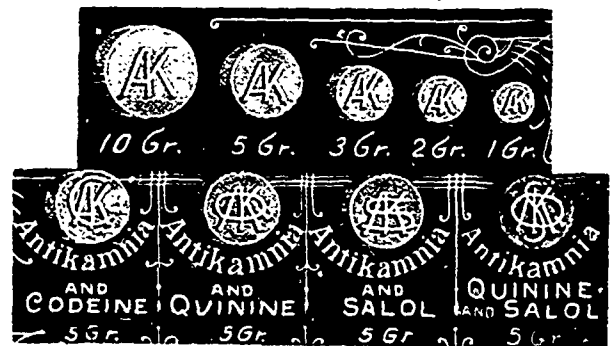
TRANSFER LETTERS AND ORNAMENTS.  
PAINTED BOARD ADVERTISING SIGNS.  
ALUMINUM LETTERS AND FIGURES.  
FRESCO STENCILS A SPECIALTY.

260 CLARK STREET,  
CHICAGO, III.

## Genuine Antikamnia Preparations

### ANTI-KAMNIA POWDERED.

- ANTI-KAMNIA TABLETS, (1 gr., 2 gr., 3 gr., 5 gr. or 10 gr. each.)
- ANTI-KAMNIA and CODEINE TABLETS, (1 1/2 gr. Antikamnia, 1/2 gr. Sulph. Codeine.)
- ANTI-KAMNIA and QUININE TABLETS, (2 1/2 gr. Antikamnia, 2 1/2 gr. Sulph. Quinine.)
- ANTI-KAMNIA and SALOL TABLETS, (2 1/2 gr. Antikamnia, 2 1/2 gr. Salol.)
- ANTI-KAMNIA, QUININE and SALOL TABLETS, (2 gr. Antikamnia, 2 gr. Sulph. Quinine, 1 gr. Salol.)



Without above Menagrams None are Genuine. These preparations are made solely by us and are put up in 1-oz. packages only.

### NEVER IN BULK.

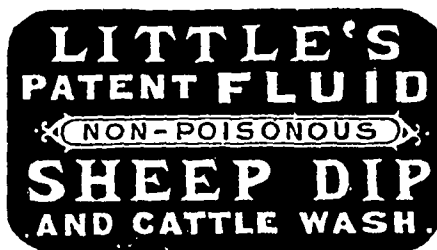
Trade supplied by all jobbing houses in the United States, Canada, Mexico, South and Central America.

British & Colonial Depot, 46 Holborn Viaduct, London, E. C., Eng.

The Antikamnia Chemical Company,

Price List on Application.

ST. LOUIS, MO., U. S. A.



For the Destruction of Ticks, Lice, Mange, and all Insects upon Sheep, Horses, Cattle, Pigs, Dogs, etc.

Superior to Carbolic Acid for Ulcers, Wounds, Sores, etc.

Removes Scurf, Roughness, and Irritation of the Skin, making the coat soft, glossy, and healthy.

Removes the unpleasant smell from Dogs and other animals.

"Little's Sheep Dip and Cattle Wash" is used at the Dominion Experimental Farms at Ottawa and Brandon, at the Ontario Industrial Farm, Guelph, and by all the principal Breeders in the Dominion; and is pronounced to be the cheapest and most effective remedy on the market.

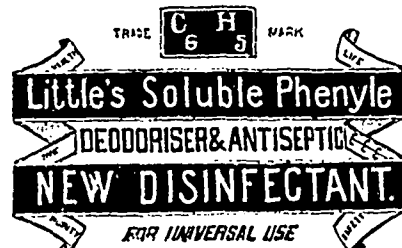
27 17 Gold, Silver, and other Prize Medals have been awarded to "Little's Sheep and Cattle Wash" in all parts of the world.

Sold in large Tins at \$1.00. Is wanted by every Farmer and Breeder in the Dominion.

**ROBERT WIGHTMAN, Druggist, OWEN SOUND, ONT.**

Sole Agent for the Dominion.

To be had from all wholesale druggists in Toronto, Hamilton, and London.



CHEAP, HARMLESS, AND EFFECTIVE

A Highly Concentrated Fluid for Checking and Preventing Contagion from Infectious Diseases.

NON-POISONOUS AND NON-CORROSIVE.

In a test of Disinfectants, undertaken on behalf of the American Government, "Little's Soluble Phenyle" was proved to be the best Disinfectant, being successfully active at 2 per cent., whilst that which ranked second required 7 per cent., and many Disinfectants, at 50 per cent., proved worthless.

"Little's Soluble Phenyle" will destroy the infection of all Fevers and all Contagious and Infectious Diseases, and will neutralize any bad smell whatever, not by disguising it, but by destroying it.

Used in the London and Provincial Hospitals and approved of by the Highest Sanitary Authorities of the day.

The Phenyle has been awarded Gold Medals and Diplomas in all parts of the world.

Sold by all Druggists in 25c. and 50c. Bottles, and \$1.00 Tins.

A 25c. bottle will make four gallons strongest Disinfectant. Is wanted by every Physician, Householder, and Public Institution in the Dominion.

**ROBERT WIGHTMAN, Druggist, OWEN SOUND, ONT.**

Sole Agent for the Dominion.

To be had from all Wholesale Druggists in Montreal, Toronto, Hamilton and London, Ont., and Winnipeg, Man.

**ELLIOT'S "B" PARCHMENT PAPER**

is one of the articles to be considered in the practice of "elegant pharmacy," as it furnishes the finest transparent wrappers for bottles, packages, etc. It must be seen and tried to be appreciated. We send samples.

**ELLIOT'S PARCHMENT POWDER PAPERS**

are the best for hygroscopic powders and all other powders. The following prices show they are the cheapest. Put up in Neat Boxes of 500 Sheets.

No.	Rs.	No.	Rs.
22	For Magnesia and general use,	41	Large Scidlitz, Blue, 6 x 6, \$0.50
	White, 6 x 6, \$0.65	42	Powder Papers, White, 2 1/2 x 4, 25
28	Regular Scidlitz, White, 4 1/2 x 4, 40	43	Powder " " 1 1/2 x 4 1/2, 20
29	Regular " Blue, 4 1/2 x 4, 40	44	Powder " " 2 1/2 x 4 1/2, 25
30	Large " White, 6 x 6, 50	45	Powder " " 1 1/2 x 4 1/2, 25

SEND FOR SAMPLES. Elliot's Parchments are for sale by the leading jobbers. We also make heavy Parchment for Sticky Fly Paper, and Druggists Pure Tin Foil.

A. G. ELLIOT &amp; CO.,

PHILADELPHIA.

If you want to sell the best, handle

**MAJOR'S CEMENT.**

CHEAP, QUICK, AND CERTAIN.

Repairs China, Glassware, Meerschaum, Bric-a-Brac, to put on cloth, corn and bunion plasters; to hold a bandage on a wound or sore finger. 15c., 25c.

Major's Rubber Cement, 2-oz. bottle, or in collapsible tubes, for repairing rubber boots and shoes, bicycle tires, rubber garments, silk umbrellas, etc. 15c.

Major's Leather Cement repairs boots and shoes, garments and umbrellas of all kinds of material except rubber, applied same as on leather goods. 15c.

Major's Liquid Glue repairs furniture, books. 10c.

A. MAJOR CEMENT CO., 461 Pearl Street, N.Y.

ASK DEALERS, OR MAIL PRICE OF BOTTLE.

**TOOTH  
HAIR  
CLOTH  
AND NAIL**

**Brushes..**

NAIL CLEANERS AND EAR SPONGES

FROM

**THE BEST FRENCH MAKERS**

Tooth Brushes from \$3.50 to \$30 per gross.  
Hair Brushes from \$1.25 to \$20 per dozen.

Over one hundred sizes of each in stock, or on the way.

We are headquarters for these goods. (Can send samples to price by mail, or mail range by express.)

IT WILL PAY YOU to write us for quotations

**Meakins & Co.,** MANUFACTURERS AND IMPORTERS OF BRUSHES.  
313 ST. PAUL STREET, MONTREAL.

## Sovereign . . Lime Fruit Juice

Is the Strongest, Purest, and of Finest Flavor

We are the largest refiners of LIME JUICE  
in America, and solicit enquiries.

For Sale in Barrels, Demijohns, and twenty-four ounce Bottles  
by wholesale in

TORONTO, HAMILTON, KINGSTON, AND WINNIPEG

SIMSON BROS. &amp; CO., Wholesale Druggists

HALIFAX, N.S.

**FOR BODY AND BRAIN**

SINCE 30 YEARS ALL EMINENT PHYSICIANS RECOMMEND

**VIN MARIANI**

The original French Coca Wine; most popularly used tonic-stimulant in Hospitals, Public and Religious Institutions everywhere.

Nourishes, Fortifies, Refreshes

Strengthens the entire system; most Agreeable, Effective and Lasting  
Restorative of the Vital Forces.

Every test, strictly on its own merits, proves exceptional reputation.

Palatable as Choicest Old Wines

LAWRENCE A. WILSON &amp; CO., Sole Agents, MONTREAL

**Effect of the French Treaty**

CLARETS AT HALF PRICE

The Bordeaux Claret Company, established at Montreal in view of the French treaty, are now offering the Canadian connoisseur beautiful wines at \$1.00 and \$1.50 per case of 12 large quart bottles. These are equal to any \$6.00 and \$8.00 wines sold on their label. Every swell hotel and club are now handling them, and they are recommended by the best physicians as being perfectly pure and highly adapted for invalids use. Address: BORDEAUX CLARET COMPANY, 30 Hospital Street, Montreal.

**OZONE**

**Ozone Specific** is a valuable non-toxic, non-irritating antiseptic for either internal or external use. Our Ozone, concentrated form, is the most powerful blood purifier and germicide ever produced, and will be found a specific in all forms of Asthma, Bronchitis, Whooping Cough, Croup, Measles, or Diphtheria. For Catarrhal Troubles it will prove invaluable as a tonic and constitutional remedy, and is especially efficient in preventing or combating fermentation of food in the stomach, breaking up the worst forms of Dyspepsia and Sour Stomach.

For dressing Ulcerations of all kinds, preventing suppuration, and assisting towards rapid granulation and healing, Ozone has no equal.

Ozone is also used as a gargle for all manner of Throat Diseases; destroying all fermentation of the tissues brought forth by impregnation of disease germs. No germ life can exist where it is used.

All Druggists should keep this remedy, as it will prove a genuine friend to their customers.

Physicians owe it to themselves to try it.

**OZONE SPECIFIC CO.**

TORONTO, ONT.

## American Pharmaceutical Association.

Below we give the lists of queries submitted by the sections on Scientific Papers and Education and Legislation of the American Pharmaceutical Association for reply at the meeting to be held in Montreal in August:

## SECTION ON SCIENTIFIC PAPERS.

Samuel P. Sadth, Ph.D., Chairman, Philadelphia, Pa.

## QUERIES.

(1) Sanguinaria. The liquid preparations slowly deposit a precipitate upon the sides of the containers. Can a menstruum be devised which will hold permanently in solution the soluble constituents?

(2) Gelatine Capsules. What general rule should be adopted in compounding prescriptions ordering gelatin capsules? When should the ingredients be dispensed in dry powder, and when is it preferable to form them into a mass?

(3) Ichthyol. Ichthyol is now being used internally, dissolved in water and other media. A palatable form of administration is wanted.

(4) Salol and Acetanilid are given usually in powder form. Cannot formulas for therapeutically unobjectionable liquid preparations of the same be devised?

(5) Salicylic Acid. It has been alleged that the synthetical salicylic acid now in the market occasionally shows the presence of salol. Is this statement correct, and, if so, to what extent?

(6) Formalin. A 40 per cent. solution of formaldehyde under that name is attracting much attention as an antiseptic and deodorizer. A good practical formula for its preparation by the retail pharmacists is wanted.

(7) Kamala. It is supposed that resin is the active constituent. Investigation recommended. Is a tincture advisable?

(8) Pyrethrum Carneum.

" Roseum.

" Cinerariæfolium.

} Insect

powder. Can it not be used as a medicine? On what depend their insecticide properties?

(9) Veronica Officinalis is used largely as a house remedy for pectoral complaints and skin diseases. Is there any alkaloid or other active principle in the plant to warrant such use?

(10) Viscum Album (Mistletoe) is used by practitioners to arrest post-partum and other uterine hæmorrhages. Investigation invited.

(11) Pichurim Beans. What are they? Various descriptions of their oils are given by different investigators.

(12) Strophanthus Seeds. A determination of the active principles in the seeds of commerce, their nature, quantity, and method of valuation.

(13) Pareira. Pareira is a valuable diuretic and tonic drug. Buxine has been found in it, but this can hardly be the important principle. What is it?

(14) Rhus. What is the really potent principle of the Rhus group? Is it a

volatile acid, as claimed by Maisch, or is it a substance resembling Cardol?

(15) Tannin. At what season of the year should the tannin drugs be gathered? What relation does the amount of tannin present bear to that of starch? Does the tannin increase as the starch decreases? Or, is this true of some drugs, but not of others?

(16) Cypripedium. There appears to be a poisonous principle, producing effects similar to those of Rhus Toxicodendron, in the glandular hairs of some Cypripediums, particularly C. Spectabile. What is this principle?

(17) Iris. The rhizomes of many species of Iris abound in starch, as the species that furnish the orris root of commerce, but the rhizomes of Iris Versicolor and of the Iris pseudo-acorus do not turn blue with iodine solution. What is the carbohydrate present?

(18) Veratrum. By what means may the rhizomes of Veratrum Album best be distinguished from those of Veratrum Viride? Some method is desirable by means of which this may be done easily and with certainty.

(19) Aconites. The different aconites are very liable to be confounded. In the case of drugs so potent, it is exceedingly important that the structure of each specie liable to be gathered or sold for the officinal should be carefully described. Someone should undertake the task of the thorough investigation of the microscopical structure of all the species.

(20) Pepsin Test. A discussion of the variable results obtained in the tests.

(21) Cottonseed Oil. A review of the tests for its presence as an adulterant in other fixed oils.

## Decolorized Tincture of Iodine.\*

My practical experience, coupled with what research I could make, convinces me that none of the methods given for this preparation is of much worth. Therefore I will only mention the method I use, with a few comments on the so-called decolorized tincture of iodine. The preparation I use is similar in composition to that of the German pharmacopœia and National Formulary. It is as follows:

Iodine .....	g. 20
Sodium hyposulphite.....	" 20
Water, distilled.....	" 20

Dissolve by very gentle heat, cool, and add gradually 15 grams of stronger ammonia, and then 150 grams of deodorized alcohol. After eight days filter in a covered funnel, and preserve for use. The careful addition of the ammonia is necessary to insure success of the preparation.

This preparation contains sodium iodide, ammonium iodate, and sodium tetrathionate. The greater part of the latter salt crystallizes out after mixing the different ingredients, and is separated by filtration. Sodium tetrathionate is an

\* R. C. Dickinson at a meeting of the Georgia Pharmaceutical Association.

unstable salt, and therefore it is separated to the greatest possible extent by the addition of alcohol, in which it is not soluble. This preparation differs from that of the German pharmacopœia in being more ammoniacal and more alcoholic, and from that of the National Formulary in being in every way a more concentrated preparation. It appears that if the ammonia is added all at once, the reaction between the chemicals will not be a smooth one. I find that on standing this preparation does not acquire that decayed-radish-like odor characteristic of some preparations.

## The Princess Beglarion, Medicinæ Doctor, Universitatis Bernæ.

Such is the title of one of the most celebrated princesses of Armenia. The royal lady was not content with her social duties, and some four years ago she went to the University of Berne, where she studied medicine industriously, and in due course graduated as M.D. Since her graduation she has served in the cholera hospitals of Russia, and did such good work as to merit the personal thanks of the Czar. At present she is practising at her father's palace, to which the sick flock from miles around to consult her. She is so fond of her profession that she is devoting a large proportion of her fortune to erecting a hospital on her father's estate. The princess is only twenty-five years old, small, piquante, extremely pretty, and undoubtedly far and away the most interesting "new woman" in Europe.—*British and Colonial Druggist.*

## Resinate of Copper.

By dissolving copper sulphate, 50 parts, in water, 1,000 parts, heating the solution to 100°C., and then adding ordinary resin, 100 parts *résinate de cuivre*, a new veterinary remedy is formed (*Ann. de Met. Vet.*). The resulting product is greenish, and described as insoluble in essential oils or alcohol. To prepare it for use dissolve green or black soap (? soft soap), 100 parts, in any amylic alcohol, 100 parts, and to the warm solution add the resinate, 60 parts.

## The Sponge Market Stiffening.

The shortage in the Cuban supply is having its effect on the price of sponges, which is advancing steadily, and the pronounced tendency to higher prices extends to all the grades, including Nassau, Florida, and Mediterranean. Druggists should increase their retail prices, if they have not already done so.

Antidiabeticum is a synonym for glycosolvol, which is referred to below, and which should not be confounded with anti-diabetin, which has already been described in this journal.



### The Drop in Cocaine.

Somewhat to the astonishment of wholesale druggists, the cocaine manufacturers on March 9th gave notice of a fresh reduction in the price of the anæsthetic, the decline in price on this occasion being a little over 8 per cent.—viz., from 14s. to 12s. 10d. per oz. for hydrochlorate in 100-oz. lots. The increased importation of crude cocaine and the reduced prices at which that product is said to be offered are put forward as reasons for the decline, but there are probably other contributory causes. At any rate, although cocaine is now lower in price than it has been since, in 1884, it first became a commercial article, very little confidence is felt in the stability of the alkaloid. Last year was a most unstable one in the cocaine market, the wholesale quotations having changed on an average once a month.

The cause of this disturbance lay chiefly in the appearance in the market of a new manufacturer, who began by cutting the convention rates, and provoked reprisals. After a sharp contest matters settled down in the autumn to a general price of about 14s. 6d., although the previously existing absolute unanimity among the makers had not survived the shock of the struggle. The general view was that prices would remain pretty low during the present year, but as far as supplies were known to exist in second hands a rather uneventful year was expected. All the wholesale firms are pretty well stocked, and, while it is believed that the article cannot bear much further cutting without becoming unprofitable to the manufacturers, the knowledge that any agreement among the makers to raise the price to an exorbitant figure would bring new manufacturers into the field suffices to preserve the peace of mind of middlemen and consumers.—*Chemist and Druggist.*

### Action for Damages Against a Wholesale Drug House.

The case of Dr. F. R. England against Messrs. Kerry, Watson & Co., wholesale druggists of Montreal, was tried before Mr. Justice Archibald and a special jury. The circumstances of the case are probably well known to most of our readers. Dr. England, who evidently dispensed his own medicine, telephoned to H. H. Dart & Co. for two ounces of bismuth, and received a package marked "Bismuth Trinit, 2 oz." Mrs. England took a dose of from 30 to 40 grains. Shortly afterwards she complained of a pain in her stomach. Dr. England administered emetics, and gave relief. About ten days afterward Mrs. England died, and it was alleged that death was caused by the administration of the drug, and which Dr. England claimed was tartar emetic, which had been supplied in place of bismuth.

Mr. Dart claimed that the drug had been supplied to him as "bismuth" by Kerry, Watson & Co., hence the action taken against the latter firm. The de-

fence submitted that they had never sold the drug under the circumstances referred to, and therefore could not be held responsible for damages caused by a third party. They also claimed that death resulted from natural causes, and causes other than those alleged by the doctor. An analysis of the supposed "bismuth" which Mr. Dart had furnished was found to be tartar emetic. The evidence of the government medical experts, and Drs. Gidwood and Fafard, favored the theory that death had not resulted from poisoning, but from peritonitis and the other complaints mentioned.

The verdict of the jury was that Mrs. England's death had been accelerated, though not to any appreciable extent, by her having taken a dose of tartar emetic in mistake for bismuth, and that Dr. England himself had suffered no pecuniary loss by her death, and that his son had suffered loss to the extent of \$1,000. Judgment was therefore given against Kerry, Watson & Co. for this amount. The case will be appealed.

### Vanilla Extracts.

(1) To 130 grams of vanilla, finely cut, and 1 gram of potassium carbonate, add 100 grams of boiling water, allow to cool, and then add 500 grams of 95 per cent. alcohol, macerate for at least 48 hours and filter. (2) Musk, 0.5 gram; potassium carbonate, 0.5 gram; vanilla beans (cut), 30 grams; boiling water, 120 grams; alcohol, 360 grams. The boiling water is poured over the musk, vanilla, and potassium carbonate, allowed to cool, when the alcohol is added, and the whole allowed to macerate 14 days, when it is filtered.—*Drug. Ztg.*

### Fluid Extracts by Dialysis.

Golaz (*Annal. Pharm.*) proposes to obtain the active constituents of vegetables in their natural condition by extracting them by means of dialysis. To this end he bruises the medicinal plants and places the pulp into a dialyzer surrounded by 90 per cent. alcohol. The tincture thus obtained contains from 34 to 45 per cent. of alcohol, the extra water present being derived solely from the green plant. The author thinks these tinctures, or field extracts, exactly represent the medicinal virtues of the drugs. One part of the finished extract is supposed to represent an equal weight of the herb.

**HIS DESCRIPTION.**—A little boy whose elder sister is much interested in photography, and who gives the family the benefit of many observations about her work, was taken to the court-house to see the end of a certain trial. He came home and told his mother about it. "The judge made a speech to the jury," he said, "and then sent them into a little dark room to develop."—*Boston Transcript.*

### Cycling Proverbs.

Politeness is like a pneumatic tire; there is not much in it, but it eases many a jolt in the journey of life.

A pleasant disposition, like oil in a bicycle bearing, reduces friction and prevents a world of wear and tear.

Ambition is like a bicycle saddle; though much sat upon, it generally manages to be on top.

The work of the world, like a bicycle, would soon stop, were it not for the cranks.

Like a link in a bicycle chain, we may not amount to much individually, but collectively we make the wheels go around.

Life is like a bicycle run; some worry, fret, and scorch along, and soon reach the end, while others take it easy and enjoy themselves as they go.—*American Journal of Photography.*

### Rothschild's Rules.

The elder Baron Rothschild had these rules posted upon the walls of his bank: Skun liquors.

Dare to go forward.

Never be discouraged.

Never tell business lies.

Be polite to everybody.

Employ your time well.

Be prompt in everything.

Pay your debts promptly.

Bear all troubles patiently.

Do not reckon upon chance.

Make no useless acquaintances.

Be brave in the struggle of life.

Maintain your integrity as a sacred thing.

Never appear something more than you are.

Take time to consider, and then decide positively.

Carefully examine into every detail of your business.

"The Non-Hereditary of Inebriety," by Leslie E. Keetley, M.D., LL.D., is the title of a timely volume now in the press of S. C. Griggs & Co. The author endeavors to show that inebriety is a disease, and that it, as well as other diseases, is not hereditary. The work is said to differ from others on inebriety in its application of the doctrines of the variation of species and natural selection to cell life, thus showing the causes and nature of disease, its modern scientific treatment, and the philosophy of immunity to disease in general, and inebriety in particular—all in language within the comprehension of the general reader. The international reputation of the author as an original investigator in matters pertaining to inebriety should make this work of more than ordinary value to scientists, the medical profession, and to all who are, by legislation or otherwise, endeavoring to correct the evils of intemperance.

# About Cough Drops!

Should Druggists handle those lines every Confectioner and Grocer sells?

Should Druggists drive the trade to the Confectioners by limiting their line to the nauseous and old brands that the public are tired of?

Why not carry and push the sale of

## Honey and Horehound Cough Drops

when they sell well, and are sold only to the Drug Trade?

Mr. J. S. Armitage, Paris, Ont., writes:  
"Send another pall of those Honey and Horehound Cough Drops at once. I sold the first pall in only ten days."

It will pay you to use our five and ten-cent sizes of folding cartons to encourage the sale of Cough Drops; and advertise your Cough Syrup on the back of them.

**LAWSON & JONES**

LONDON, CANADA

## Have You

# Somerville's Pepsin Gum?

It is the Gum the others are selling.

It is admitted to be the best Pepsin Gum made in Canada.

Our Carving Set Premium Packages are having a great sale.

**C. R. SOMERVILLE**

LONDON, ONT.

# STEARNS' Wine of Cod Liver Oil

WITH PEPTONATE OF IRON



Is made by combining the active constituents found in Cod Liver Oil with a fine quality of dry wine, in which a proper proportion of peptonate of iron has been previously dissolved. It possesses the alterative properties of the oil combined with the tonic virtues of iron, and is free from the objectionable features of either. The alterative properties of Cod Liver Oil do not reside in its fat, but belong to certain peculiar principles associated therewith found in the oil as well as in the fresh liver.

The United States Dispensatory, in referring to Cod Liver Oil, says: "Some consider it merely a nutritive agent, having the advantage over other oleaginous substances of a readier entrance into the system, and more easy assimilation. But we cannot agree with this opinion. The probability appears to us to be that in consequence of some peculiar principle or principles it contains [italics ours] it exercises a stimulant and alterative influence on the processes of assimilation and nutrition, thereby aiding in the production of healthy tissue."

The peculiar principles spoken of in the Dispensatory were discovered finally by Messrs. Gautier and Mourgues (*Journal de Pharmacie*, March, 1890), who found in the oil certain active constituents which, after testing thoroughly on animals, they believe to be the substances which account for the peculiar tonic action of Cod Liver Oil, which distinguishes it from all other oils and fats. Bouillot (Abstract of Thesis read at the French Academie des Sciences, Nov. 15th, 1892) has confirmed these researches and demonstrated the presence of these organic bodies in the fresh liver of the cod in much larger quantities. The secret of the value of Cod Liver Oil is therefore due to the presence of certain principles found in the fresh liver of the cod, which have been taken up by the oil.

Stearns' Wine of Cod Liver Oil is an original and elegant preparation which contains the alkaloids and other active principles to be found in one-fourth its volume of pure Cod Liver Oil, as well as four grains of peptonate of iron to each fluid ounce. The wine, being entirely free from the oily or fatty matter of Cod Liver Oil, is pleasant to the taste, and therefore valuable whenever Cod Liver Oil and Iron are indicated.

NOTE.—It is most important that *STEARNS'* be always specified when Wine of Cod Liver Oil with Peptonate of Iron is desired, for the use of our name is the only means of insuring protection to the patient, the physician, or ourselves.

Stearns' Wine of Cod Liver Oil with Peptonate of Iron received a special award for excellence at the World's Columbian Exposition.

Sold in full 16 oz. bottles at \$8.00 per dozen by all jobbers, or may be ordered from

**FREDERICK STEARNS & CO.**

Manufacturing Pharmacists,

WINDSOR, ONT.

DETROIT, Mich.

LONDON, Eng.

NEW YORK CITY.

# The Lyman Bros. & Co. Limited TORONTO, ONT.

A FULL RANGE OF

## Handsome Perfume Atomizers

FROM \$2.00 PER DOZ. TO \$4.50 EACH.

Well Worth Inspection.



NEW FORM



## Lightning Fly Paper

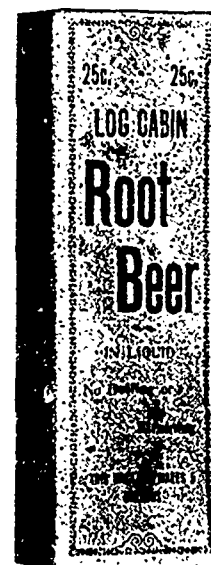
FORTY YEARS IN THE MARKET.

10c. size, 6 pieces in packet, 50 pkt. in box  
5c. " 3 " " 100 "

Made direct by Percolation from Roots, Barks, etc.,  
and not artificially from Flavoring Extracts.

## Log Cabin Root Beer

10c. Size—1 doz. 75c., 3 doz. at \$8.40 per gross, and 1 gross \$ 8.00.  
25c. " —1 " \$1.75, 3 " \$20.00 " " 1 " \$19.00.



JUST ARRIVED:

New Lot Sponges.

Perfumes.

Chamois Skins.

**INSECT POWDER—Our Own—Specially Pure.**

## Pharmacy in England.

Resignation of Mr. G. F. Schacht—Hobbles of Pharmacists—Liquid Oxygen and Air Syrup of the British Pharmacopœia—Sanitas and its Developments.

(From Our Own Correspondent.)

It is a serious loss to the Pharmaceutical Society that Mr. G. F. Schacht has felt compelled to resign his seat on the council. His reason is that having now no connection with either the wholesale or retail trade, he could hardly be said to represent any section of pharmacists on the council; but the real reason is that he feels the strain too much on a constitution that has never been very robust. Mr. Schacht's name will be known for many years in the future, as in the past, in association with certain elegant forms of administering bismuth. His *liquor bismuthi* was the original preparation of which the pharmacopœial liquor is but an imitation, and not the best. The secret of the superiority of his preparation was the particular care exercised in obtaining the bismuth free from tellurium and other contaminations. For some years, however, Mr. Schacht has disposed of all interest in and connection with the firm of Giles, Schacht & Co., of Bristol, and retired from pharmacy. His deep interest in educational and other matters prevented his severing all connection with pharmaceutical affairs, and he retained his seat on the council, where he was one of the most striking personalities, and his sterling merits were recognized by all his colleagues. He was also a member of the Research laboratory committee, but does not appear to have exerted his full powers in the direction of practical pharmaceutical research so much as he probably could have done. The glamor of the aconitine investigation was too much for a seasoned practical pharmacist to resist. But the fact was that Mr. Schacht regarded the Research laboratory training as more important in the higher education of pharmacists than the results of the investigation itself. Eminent free from fads and petty jealousy, Mr. Schacht leaves the council bearing universal regrets with him, and the unanimous feeling in pharmacy is that it is impossible to adequately fill the vacancy thus created.

The annual election is bound to cause a little more excitement than usual, as there are more candidates than vacancies. But interest principally centres on the subject of presidency, and everyone is asking if Mr. Carteighe—the perennial president—will accept re-election. It is an open secret that he was within an ace of refusing re-election last year when his colleagues declined to follow his advice in the Dunstan-Paul episode over the aconitine controversy. But this matter has been definitely shelved, and there seems no reason why Mr. Carteighe should decline the honor, if his colleagues for the thirteenth time elect him—which they will in all probability do.

"Pharmacists' hobbies" is an interesting subject that the *British and Colonial*

*Druggist* has started in its special issue this week. Several prominent English pharmacists are allowed to descant on the beauties of their hobbies, or recreations. Swimming, golf, volunteering, yachting, philately, entomology, and art appear to have their advocates; but if a little wider field had been selected, there would have been no difficulty in including alpine climbing, fox-hunting, salmon-fishing, covert-shooting, etc., whilst photography, herbarium collecting, and fossil collecting have many pharmaceutical devotees.

Liquid oxygen and air will soon appear as commercial articles, and of more practical utility than has hitherto seemed probable. Professor Dewar has improved his process so that small quantities of the liquid can be made as a lecture experiment with apparatus that is neither complicated nor expensive. But Dr. Hampson's patent is being taken up by Brin's Oxygen Company, in London, and a practical use for the same in the refrigerating business is talked about. Dr. Hampson's method with oxygen is to subject it to a pressure of 1800 pounds to the square inch, and then allow a portion to expand, when it reduces the temperature of the surrounding compressed gas. By repeated expansion and reduction he reached 180°C., when the oxygen was liquefied and dropped from the apparatus at the rate of about 7 c.c. in four minutes. No cooling agent was employed, but when liquefaction of air is desired liquid carbonic acid was employed to reach the temperature of 192°C. It is said that Professor Dewar is sanguine that he will yet obtain hydrogen as a liquid and handle it as he has oxygen, but the cost will be enormous, and the temperature will have to be got down very near to absolute zero—273 C.

The last article on the revision of the Pharmacopœia, in the series that have been published by the *Pharmaceutical Journal*, deals with syrups. It is by far the most practical in suggested improvements of the whole series, and is really a most useful contribution. As I have had to severely criticize some of the discrepancies in the other articles, I am only too pleased to admit the general excellence shown in this treatment of such an important subject as the syrups of the Pharmacopœia. The points about storage of syrups are too often forgotten, and much of the difficulty that occurs would be obviated if proper attention were paid to filling dry bottles with the cold syrup almost to the neck, well corking, and preserving in a dark, cool place. I do not care for washed French chalk as a filtering medium, and its superiority over good kaolin is doubtful. Cold percolation, as an alternative process for making simple syrup, has one recommendation that the author does not mention; it can be arranged so that it produces the syrup without any attention—almost automatically, as it were. The suggested alteration for making syrup of orange is, possibly, good, but

no method is given for making the concentrated infusion, or soluble essence. The proposed formula is: Soluble essence of bitter orange, 1 dram; concentrated infusion of orange peel, 2 drams; simple syrup, up to 8 fluid ounces. If this syrup were improved on the lines suggested, the deletion of *Syr. auranti flor.* might safely be advocated. The formula for syrup of iodide of iron, as given in the article, is a distinct advance on the present British Pharmacopœia; but it might just as well be worked out so that the pharmacist might make his 1-7 liquor, and only mix off with the syrup as required. One can hardly understand the paradox that this formula, as advocated, contains hypophosphorous acid, and yet, at the end, tests are recommended to be given so as to preclude the use of this acid. *Syr. ferri subchlor.* is one of the half-dozen still-born preparations introduced into the 1890 British Pharmacopœia addendum. Its proposed deletion in the new edition is sufficient comment on its value. *Syr. hemidermi* and *Syr. mori* can also be removed, to make room, without much fear of complaint. *Syr. papaveris* is very prone to ferment, and the only remedy usually made use of in this country is to add rectified spirit. Squire's method of dissolving the sugar in the concentrated infusion without driving off the spirit is the best plan.

The Sanitas Company, Limited, under the able managership of the inventor, Mr. C. T. Kingzett, F.I.C., F.C.S., have made a new departure, and are now supplying all kinds of disinfectants and several specialties and chemicals. Hydrogen peroxide was always a favorite subject with the manager, and he is producing it now in large quantities. Sulphur fumigating candles and drain testers are novelties that have nothing to do with Sanitas; but, as there is money in their manufacture and their sales can be pushed at the same time as that of Sanitas, the company is wisely advised in extending its trade. It is quite on the cards, I hear, that soon a very large extension will be made, and a great number of the chemicals manufactured that, at present, are a sort of specialty of only a few manufacturers. Nor are they neglecting their main article, as a new work on "How to Disinfect" has been issued by the company, which treats very thoroughly with the value of Sanitas as a disinfectant, detergent, germicide, and antiseptic. Some of their new appliances are both elegant and ingenious, and are largely stocked by all British chemists.

Carissin in a glucoside which has been isolated from the bark of the *Carissa ovata*, variety *stolonifera*. It has many resemblances to strophanthin, and is described as a poisonous, bitter substance, producing nausea and headache. So far, it has only been produced in an amorphous condition.

## Canadian Druggist

WILLIAM J. DYAS, Editor and Publisher.

APRIL 15TH, 1896.

### Thoughts and Queries re O.S.R.D.

Are you a member of it? Are you willing to give a few dollars out of the money it has already saved you to promote its prosperity? If not, and you permit it to fail, what are you going to do? You cannot sell out under the demoralizing influence of cutting. You cannot give your profit away and have it. If you are going to cut to win, you will have to cut the throat of your neighboring druggists' trade in order to do it. Is such a prospective condition to your liking? Do you want the savor of your name to stink in the nostrils of your confrères? Are you so lost to all instincts of honor and so void of ethical principles that you could prospectively entertain such a denouncement with any degree of comfort? On the other hand, have you thought out your future prospects and how they can be enhanced? Times are not merely changing, but they have changed; and you may have to change your method, but not your principle of business conduct. You may not be entirely satisfied with your business on an even keel, but you may rest assured you would do much less so off it. Does it not encourage you to note how readily the manufacturers of remedies you sell have signed an agreement to assist in protecting your trade? The proportion of manufacturers who have signed is greater than the proportion of retailers. Are you less interested than they? The power so far exercised to secure submission has been exerted by the wholesale druggists, who are a unit in this matter. It has been generally conceded by wholesalers and manufacturers that the essence of power lies with the retailers, and that when they are united their power and influence will settle the matter. Do not be misled into believing the damaging stories you may hear. They are manufactured for a purpose, but not to aid you. Have you confidence in your fellow-druggists in your own town. Druggists are not cutters at heart, and even should your neighbors have started to cut they can be persuaded to desist. You are more concerned in the success of your confrères than are your customers. They will bait you both, and profit by any misunderstanding they can produce between you. The success of the society now

formed depends more upon the moral support you give it and the friendly co-operation of druggist with druggist than upon the financial strength supplied it. Both are necessary, however, and should be cheerfully given. If you have not given either or both in the past, do so now, as your business future will largely depend upon it.

### Buying in Haste and Repenting at Leisure.

Those druggists who were persuaded into buying a stock of L. R. Harrison & Co.'s perfumes must have been ready to bless themselves when they saw the advertisements of two Toronto departmental stores, announcing that the representative of that firm, Mr. Jas. Gould, would be in their store selling their perfume at "39 cents an ounce, regular price 75 cents." In their eager anxiety for something new, some druggists fail to stop and think with whom they are dealing, and whether they are not merely advertising a maker's goods in order to enable them to sell large bills to the "cutters." It would be wise to wait until such goods are advertised in the trade journal, as an indication that it is the trade which will handle the goods, and for whose good will the management is catering. The *best* and *most reliable* firms advertise, because they are in touch with the trade. Look through our advertising columns when you desire to know who to buy from.

### Nominated for Parliament.

At a meeting of the Conservative electors of the St. Lawrence Division, Montreal, Mr. Henry R. Gray, the well-known druggist of St. Lawrence Main street, was, after the first ballot, unanimously nominated as a candidate for the House of Commons for that district. A deputation appointed by the meeting waited on Mr. Gray subsequently, but were unable to persuade him to accept the nomination, his numerous business engagements preventing him from accepting. Should he have accepted the nomination, we believe his chances of election were excellent. A man held in the highest esteem by all classes and nationalities, and who has proved himself a capable legislator in matters pertaining to the welfare of the citizens of Montreal and the Province of Quebec, there is no doubt that he would have received the enthusiastic support, not only of the Conserva-

tive party, but also of others who recognize ability and integrity above the mere claims of party.

We cannot but regret Mr. Gray's decision for two reasons. In the first place, as a representative druggist Mr. Gray stands at the head of his profession, and if in Parliament might, and probably would before long, be able to do much for the advancement of pharmaceutical legislation. And, again, we regret it from the fact that our legislatures are at present too much in the hands of office-seekers and mediocre lawyers, and are wanting in the class of men essential to make them the representative councils that they should be. While there are some excellent business men amongst them, still the proportion is so small that business principles as applied to legislation become lost sight of in the mass of matter under consideration.

### Photographic Supplies for Druggists.

With the advent of spring, the amateur photographer will be looking forward to an early resumption of his favorite pastime and the replenishing of his stock of necessities for the work. To the enterprising druggist this may mean a source of additional revenue, if he will take advantage of it. It is much more convenient, as a rule, and certainly more desirable, to have the numerous preparations mixed by a druggist who thoroughly understands the nature and properties of chemicals than by a photographer who, although he may be an expert at the mechanical part of his business, has not the knowledge which fits him for the more delicate parts—the manufacture of the various preparations used in the art. These have, for the most part, been purchased from the general dealer in these goods. The increasing interest, however, which is taken in this fascinating work by amateurs renders it desirable that druggists should at all times have a small stock of supplies, not only in the line of chemicals, but also a few appliances, to meet the demand, which, if not already existent in his locality, can be readily cultivated.

Since our first advocacy of this special line for the drug trade many druggists who had hitherto held aloof from it have put in stocks, and are, in most cases, meeting with considerable success in making it a paying branch of their business, besides acquiring a taste for an art which, in itself, is a source of pleasure as well as profit. The "kodak fiend" is everywhere to be found; and if druggists would share in the profits attendant on this branch, they should cultivate it by keeping a supply of the goods necessary to fill any orders; and, in many cases, it would be very desirable to have a "dark room" for the use of the roving amateur.

- - OFFICE OF - -

**Dominion Dyewood & Chemical Co.**

SOLE AGENTS IN CANADA FOR

**Farbenfabriken vorm. Friedr. Bayer & Co.**

ELBERFELD, GERMANY.

**LEGAL WARNING.**

TORONTO, APRIL 2ND, 1896.

DEAR SIRS—

We find that Paracetphenetidin, even Acetanilid and Antifebrin, are now imported under the name of Phenacetine. We, therefore, beg to again call your attention to the fact that the FARBENFABRIKEN VORM. FRIEDR. BAYER & Co., Elberfeld, Germany, are the sole owners of the trade mark "PHENACETINE," which is registered under the Trade Mark and Design Act, on December 4th, 1888, at Ottawa, and they only are entitled to make use of that trade mark. We, therefore, caution everyone against selling Phenacetine under that name which is not manufactured by the Farbenfabriken, and we will, without further notice, prosecute all parties infringing the said trade mark, under 49 Vict., chap. 63, sec. 17.

Besides this, the buyers have the guarantee for a pure, genuine make if they are supplied with the Phenacetine by us, the sole agents of the Farbenfabriken for this country. The products sold by infringers mostly contain Antifebrin and similar impurities, which may be very destructive to the human organism.

(Sgd.) **Dominion Dyewood & Chemical Co.**

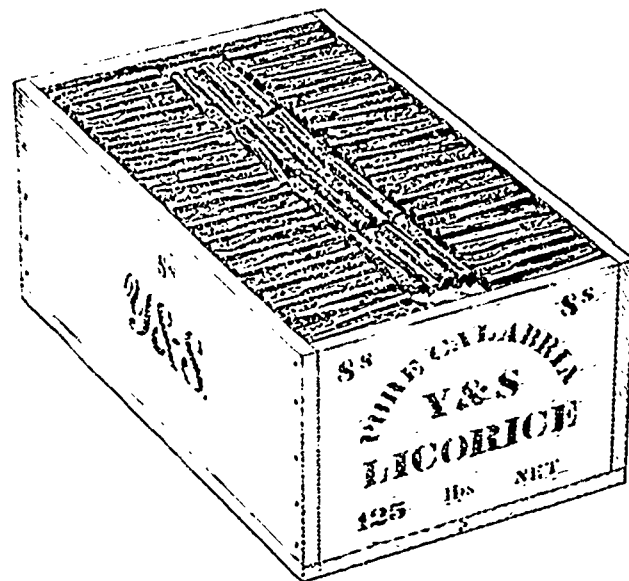
Sole Agents in Canada.

THE FOLLOWING PHARMACEUTICAL PRODUCTS ARE MANUFACTURED  
BY THE FARBENFABRIKEN VORMALS FRIEDR. BAYER & CO.:

Phenacetine-Bayer,	Piperazine-Bayer.	Sulfonal-Bayer.
Salicylic Acid.	Antinonnin.	Tannigen.
Losophan.	Salophen.	Somatose.
	Lycetol.	Aristol.
		Trional.
		Sodium-Salicylate.

# Retail Duggists

© WE put up our Y & S Licorice in cases of 125, 50 and 25 lbs. bulk (loose, in leaves), 4's, 6's, 8's, 12's, and 16's to pound. Will sell rapidly if displayed prominently in your show windows, and will insure you large profits.



WE ARE ALSO MANUFACTURERS OF

Acme Licorice Pellets . . . . .

Y & S Licorice Lozenges . . . . .

Tar Licorice and Tolu Wafers .. and ..

Pure Penny Stick

If you cannot get the above at your jobbers, please address us as below :

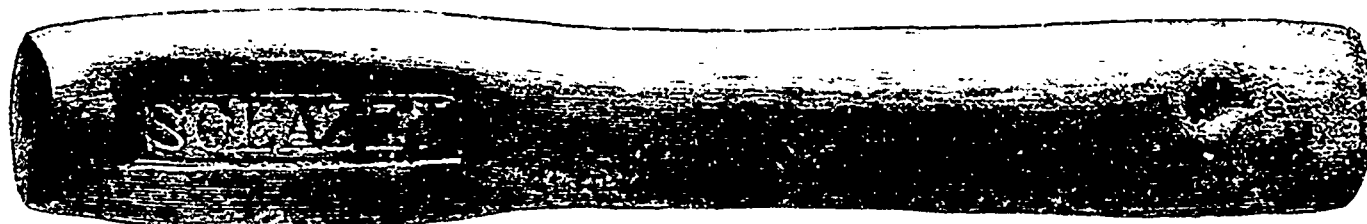
## YOUNG & SMYLLIE

Brooklyn, N.Y., U.S.A.

# “Solazzi”

THE CHEMISTS' BRAND

# Liquorice Juice



### The Testimony of “The Lancet”

The following is from “The Lancet” of March 30th, 1895 :

“The above brand has long been known to be of standard purity. We found the specimen to be completely soluble in water, and entirely free from impurities of any kind. It is, therefore, well adapted for the pharmaceutical purpose for which it is so useful, while as a popular demulcent it is both safe and reliable.”

Recommended also by “The British Medical Journal,” “Health,” “The Chemist and Druggist,” “Food and Sanitation.”



**ASK FOR SHOWCARDS AND HANDBILLS.**

## Cod-Liver Oil Emulsions.\*

By PROFESSOR GAY (Montpellier University).

Cod-liver oil emulsions, the use of which has become general, have their origin in the old form of emulsive syrups with a cod-liver oil basin, but the objection which caused the latter to fall into disuse is avoided. These syrups, although satisfactorily disguising the taste and smell, only contained about 8.5 per cent. of oil. Emulsions as now prepared are intended to disguise the appearance, taste, and smell of the oil, and to contain, as a rule, 50 per cent. of the active ingredients; they also serve for administering such remedies as phosphates, hypophosphites, arseniates, creosote, eucalyptol, etc., when their association with cod-liver oil is desired. Numerous processes have been proposed for the preparation of cod-liver oil emulsion. The main object of this paper is to discover a formula which can be used extemporaneously, and, in addition, fulfil other necessary conditions. We will first discuss the conditions which should be fulfilled by a formula for an emulsion, as we now understand it.

(1) *Simplicity, no Special Form of Apparatus being Needed.*—All commercial formulae have their good points. It has been shown that a prolonged and energetic pounding—which is ensured by using mechanical beaters, or Merier's beater with its three-jointed pestles—ensures the stability of the emulsion by favoring the perfect division of the fatty body, but a pharmacist's working formula should only require the use of a mortar.

(2) *Use of the Usual and Unobjectionable Emulsifying Agents.*—The most popular agents can be grouped as follows:

## (a) USUAL EMULSIFYING AGENTS.

*Gum Acacia.*

*Gum Tragacanth.*—Acacia emulsions are more stable if tragacanth is used as well.

*Gum and Starch.*—The combination is useless.

*Glycerin.*

*Glycerin and Gum.*

*Geatin* (white gelatin or Irish moss).

*Yolk of Egg.*

*Condensed Milk.*

*Saponin.*

## (b) DIGESTIVE FERMENTS OR THEIR PRODUCTS.

*Malt Extract.*—The preparation of the U.S. Pharmacopœia should not be used, as it is only the dextrin and maltose contained in this extract which are of service, the diastase being no use at all.

*Pancreatin.*

*Peptone.*

## (c) ALKALINE SUBSTANCES.

*Sodium Carbonate.*

*Lime Water.*

*Glycerin and Lime* (prescribed by many practitioners).

*Saccharated Lime.*

\*Translated from the *Repertoire de Pharmacie.*

With regard to the above emulsifying agents, the use of saponin or quillia does not seem free from danger; malt extract, condensed milk, and other agents are not generally used, whilst alkaline substances answer in special cases. I prefer to use gums.

(3) *Stability of the Emulsion.*—Absolute stability is impossible; even the best makes require to be shaken before taking; still, separation should be slow, and brisk agitation should cause perfect re-emulsification. This result is easily arrived at by means of gums.

(4) *Greater Strength.*—Fifty per cent. is the usual standard. This leaves a sufficient margin for alteration in the emulsifying agent, and, if necessary, in the other remedies.

(5) *Suitable Correctives.*—Although it is difficult to disguise the odor, the taste is more easily masked, but the acrid sensation in the throat is seldom entirely suppressed. Two classes of correctives are used:

## (a) SWEETENING CORRECTIVES.

Sugar, glycerin, and various syrups have often been combined with the oil with good results. Stout has recommended ammoniated liquorice, using 50 to 60 grammes to each litre of oil. Saccharin may, perhaps, be looked upon as the most powerful corrective. Its intense sweetness overcomes the taste of the oil. The proportion used varies from 0.05 to 0.2 grammes per litre. M. Eisenhitz has proposed to dissolve it in its own weight of acetic ether previous to introducing it into the oil. But as the question arises whether it is advisable to give saccharin in long-repeated doses, especially to children or to invalids whose digestive organs are weak, it is, perhaps, better to confine ourselves to sugar and liquorice.

## (b) AROMATIC CORRECTIVES.

The combination of various essences with the oil is a well-known plan. Bitter almond, citron, neroli, eucalyptus, mint, canella wintergreen, aniseed, sassafras, vanilla, and roasted coffee are looked upon as the most efficacious, whether used alone or variously combined. The use of a perfumed spirit is, in my opinion, still more efficacious, cognac, rum, and kirsch can be recommended. Robinson has proposed using a ten per cent. solution of chloroform in alcohol in the proportion of 4 grammes to 30 of oil, whilst Foster recommends 10 drops of ether to each tablespoonful of oil. Care should be taken not to use essences exclusively, as they are apt to fatigue the stomach.

(6) *Sufficiently Lengthy Preservation.*—To guarantee indefinite keeping properties, as manufacturers are in the habit of doing, is useless, as such a condition of things can only be arrived at by the excessive addition of preservatives, such as glycerin, spirits, and essences. The use of glycerin is recommended by many authors and specialists in the quadruple capacity of emulsifying agent, by reasons of its

viscosity, and of sweetening, preservative, and analeptic agent. The last effect does not seem certain, seeing that the nutrient properties of glycerin have been disputed. With regard to its emulsifying power, is not its viscosity balanced by its high density? I prefer to exclude it from a general formula. It will suffice for our purpose, since the preparation is made extemporaneously, if its keeping qualities can be guaranteed for the time necessary to use up such quantities as the pharmacist may be able to sell, say, one to two litres.

The formula which I propose fulfils the foregoing requirements satisfactorily, and the simplicity of the process in particular excels all others. Two forms of it have been worked out in response to the different tastes of patients and physicians: first, a creamy emulsion having a mixture of acacia and tragacanth as the emulsifying base, and a stable consistency which only allows of a very slight aqueous separation at the bottom, even after standing for a long time; secondly, a liquid emulsion, having a basis of acacia and liquid consistency, which soon separates into two layers, easily mixed by being shaken when taken.

## A. CREAMY COD LIVER OIL EMULSION.

Cod-liver oil.....	500 grammes
Finely sifted sugar.....	190 "
Powdered gum acacia.....	5 "
Powdered gum tragacanth.....	5 "
Coffee infusion.....	200 "
Rum or kirsch.....	100 "

Mix the sugar and gums in a mortar; weigh the oil and cold coffee infusion into the bottle which will contain the emulsion, and shake until mixed. Pour into the mortar, at the same time constantly stirring, sufficient of the mixture to make a semi-liquid; weigh the spirit and add it to the mixture of oil and coffee remaining in the bottle; shake and mix with the emulsion by degrees.

## B. LIQUID COD-LIVER OIL EMULSION.

The creamy emulsion can be modified so as to form the liquid emulsion by replacing the tragacanth by the same quantity of acacia. The corrective chosen in these typical formulae imparts a color of *café au lait* to the emulsions, in which the odor and especially the taste are conveniently disguised. But in this particular the formula can be modified *ad lib.* Various remedies can also be introduced.

(7) *Change of Correctives.*—First, the spirit can be omitted and the quantity of coffee infusion increased to 300 grammes; in this case the coffee no longer suffices to cover the taste of the oil, and it becomes necessary to such an essence as bitter almonds dissolved in the oil to the extent of 20 or 30 drops per kilogramme. Secondly, one of the essences previously mentioned can be substituted for the coffee itself, by dissolving previously in the cod-liver oil; the infusion of coffee is then replaced by water or an aromatic water. Thirdly, a more intense sweetness is obtained by mixing 30 grammes of glycerin with the aqueous vehicle.



(8) *Addition of Other Remedies.*—First, in the aqueous vehicle, hypophosphite of sodium or calcium, phosphoglycerate of sodium or calcium (in the last instance the alcohol had better be omitted), alkaline, iodide, sodium, arseniate, soluble salts of iron, etc., can be dissolved. Hypophosphites and iodides cause a disagreeable taste, in addition to that of the oil; the addition of a strongly-flavored corrective is then necessary, such as bitter almond, alone, or associated with coffee or kirsch, eucalyptus essence, etc.

Secondly, 300 grammes of lime-water can be substituted for the aqueous vehicle; in this case the liquid emulsion formula will suffice, the lime-water itself having an emulsive action, which makes up for the absence of the tragacanth: still, the stability of the emulsion will be increased by mixing the oil and lime-water in the mortar instead of the bottle, the water being gradually mixed with the oil by trituration. A strong aromatic corrective will still be necessary.

Thirdly, such remedies as creosote, guaiacol, eucalyptol, iodine mercuric iodide, iodoform, etc., which are insoluble in water, can be dissolved in the cod-liver oil if the extent of the solubilities be remembered. In support of the foregoing I will give, in conclusion, an example of an emulsion to which commonly occurring remedies have been added:

CREAMY EMULSION OF COD-LIVER OIL AND HYPOPHOSPHITES.

Cod-liver oil.....	500 grammes.
Essence of bitter almonds ...	20 drops.
Essence of wintergreen.....	20 "
Finely sifted sugar.....	190 grammes.
Powdered acacia.....	5 "
Powdered tragacanth.....	5 "
Distilled water.....	285 "
Calcium hypophosphite.....	10 "
Sodium hypophosphite.....	5 "

Dissolve the essences in the oil, the salts in the water, and proceed as before.  
—*Pharmaceutical Journal.*

Palm Oil.

By J. H. RAYNER & Co., Liverpool.

Palm oil is a semi-solid body, one of that important and well-marked group of organic compounds in which are included all oils, fats, and greases, whether animal, vegetable, or mineral. It is prepared from the fruit of the oil palm, *Elveis Guineensis*, and imported to Europe from numerous seaports and river mouths on the west coast of Africa, chiefly between Bathurst on the north and St. Paul de Loanda on the southwest coast, a seaboard of 3,000 miles. The writer has also handled a small shipment of extremely fine palm oil grown in the Brazils, which, though sold at the high price of £40 per ton, never led to any further import, and for all practical purposes the world need hardly expect to draw any important supply of oil from any region except that part of the African continent mentioned above. The fruit of the palm somewhat resembles an enormous fir

cone, containing a large number of drupes about the size of a chestnut, with a thin red outer skin, and an oily pulp, with a hard nut in the centre, the whole bearing a resemblance to an enlarged hawthorn berry. The fruit is bruised and boiled by the natives, and the resulting oil is then skimmed off, and bartered by them with the European traders. By cracking the nuts are obtained what are known as palm-nut kernels, which were at one period considered useless, and it said that the first consignment of them to Liverpool was disposed of in the Mersey; but numerous palm kernel crushing mills are now established in Liverpool, Hamburg, Marseilles, and various other towns, and palm kernel oil is now an important competitor with coconut oil in the manufacture of soap, while the residue, ground into meal and cake, is also a valuable item as food for stock. Following the abolition of the African slave trade came the development of a produce trade, of which palm oil was in those days the most considerable and valuable portion, and by 1871 the import had reached 15,000 tons, largely imported in sailing ships of 200 to 1,200 tons burden; but nearly the whole business of carrying African produce is now done by steamers, the main portion of them coming to Liverpool, whence the contents are distributed to the country and outports, while there is also a German line to Hamburg and some French trade to Havre and Marseilles.

Palm oil, like the other bodies which form the group, is, roughly speaking, divisible into two main constituents, *oleine and stearine*—the liquid and the solid. It was first used in the place of tallow in the manufacture of soap, but the large proportion of stearine in the oil soon brought it into favor with candle manufacturers, whose chemists were at that period searching for products to compete with wax and tallow, and found what they wanted in palm oil, of which, at the present time, they are the largest consumers. Mention should also be made of the presence of glycerine in palm oil; and the enormous development of the glycerine trade of late years for manufacturing explosives of all kinds has not been without influence in stimulating a demand for the oil.

In earlier years the price of palm oil ranged round an average of about £30 and £40 per ton, rising to £50 and over when the Crimean war cut off the supply of Russian tallow. The discovery and development of mineral oil and stearine in America, and latterly Russia, has completely revolutionized the grease trade, refined petroleum competing directly as an illuminant with stearine candles, while candles themselves are now largely made from paraffin scale, the stearitic ingredient of mineral oil. In 1886 the price of palm oil sank below £20 per ton. The average price of good oil the last ten years has been rather over £20 per ton, and the total import to Europe may be about 60,000 to 70,000 tons or more annually.

The best soft oil comes from Lagos, the hardest stearine oil from the Congo, between these are quite fifty or sixty named imports differing in color in various shades of yellow, red, orange, and brown, and varying in impurity from 1 to 20 per cent., according to the care bestowed on preparation, and in hardness or softness with from about 10 to about 70 per cent. of stearine. We leave it to geologists, or horticulturists, to decide how far the latter is determined by the nature of the soil.—*Oils, Colors, and Drysalteries.*

Three Good Business Hints.

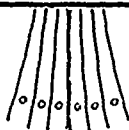
Lloyd's Commercial Guide gives the following advice to its readers: Never sign a paper without reading it; and if, after reading, you do not understand it, have it thoroughly explained before you put a signature to it. It is best to get some third person, who is not interested in the matter at all, to explain the meaning of what is not clear, or to point out words that may have two meanings in the document. Always make a memorandum in your little book of any contract you undertake for money or any agreement to work. It saves much trouble to keep a memorandum book and put down the dates when you either pay or receive money. Whenever money passes on account, set it down. If any money or thing of value goes through your hands, give a receipt for it and make a memorandum. Your receipt settles the amount that passes, and that cannot be disputed. When you pass it to a third party, get a receipt and keep it. This form is as important in the transfer of income, trust money, or valuables among your own family as with other persons.

Never allow a person to do any service for you without first agreeing upon the cost to you. This rule, strictly adhered to, will save you many annoyances.

Incompatibility of New Remedies.

Merck points out that trichloride of iodine is decomposed by alcohol and partially by water; the aqueous solution liberates iodine from iodides; ammonia added to it forms the explosive iodide of nitrogen; reducing agents liberate the iodine; and many organic bodies, among others the fatty oils and alcohol, decompose it. Hydroxylamine hydrochlorate is very unstable, and readily forms explosive mixtures; it is a powerful reducing agent; alkalis liberate the base, which is unstable and explosive. Formalin is incompatible with ammonia, the alkaline bisulphites, and reduces alkaline metallic solutions, and gelatin becomes insoluble through its action. Iodophenin is decomposed by water, liberating iodine. As it readily parts with its iodine, it should not be mixed with any body which has a strong affinity for that metalloïd.—*Journ. de Pharm.*

# A Few Reasons



why every druggist should handle our

# Aromatic Cascara

S. & M.

## Our Specialties . . .

Aromatic Cascara  
 Bitter Cascara  
 Vitalic Hypophosphites  
 Calisaya Cordial  
 Syr. Trifolium Co.  
 Apodyna

Bindschedler's Phenacetin  
 and Phenazone  
 (Antipyrin)

1. It is quite palatable.
2. One minim represents one grain of prime three-year-old Cascara bark.
3. Its small dose—10 to 30 min. We guarantee that it contains no foreign laxative or cathartic.
4. The price is reasonable, and consistent with purity and accuracy.
5. It is the most economical Cascara on the market.



Write us for sample by mail



MANUFACTURED BY

# Scott & MacMillan

MANUFACTURING PHARMACISTS

14 and 16 Mincing Lane, Toronto, Can.

Manufacturers of

. . . . Perfumes  
 . . . . Toilet Waters  
 etc., etc.

Agents for

Andrew Jergens Toilet  
 and Medicated Soaps

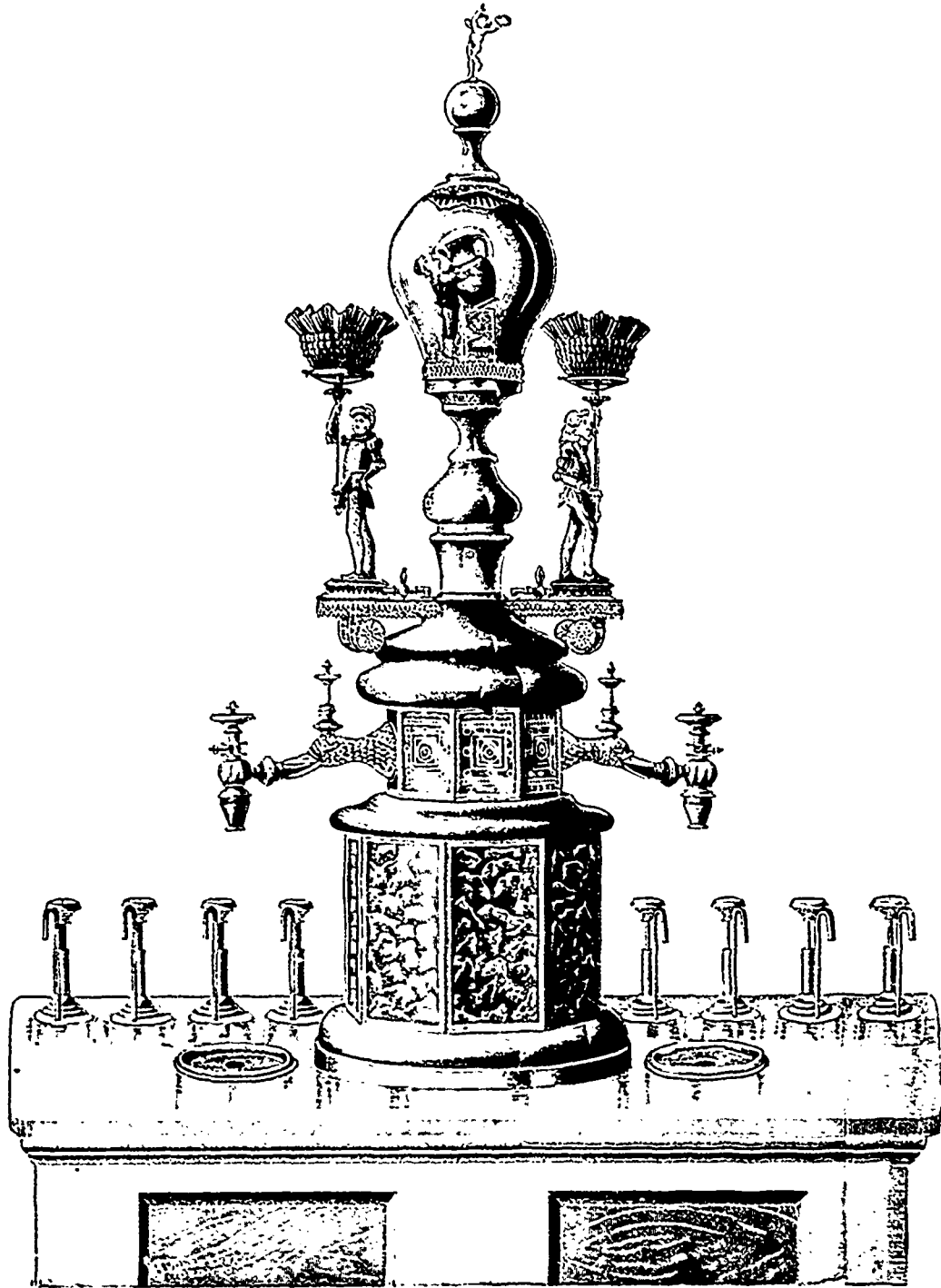
CANADIAN DRUGGIST.

# The Fletcher Mfg. Co., = Toronto =

MANUFACTURERS OF

**Soda Fountains, Generators, Cylinders, Freezers, etc.**

MANY NEW DESIGNS IN MARBLE AND COUNTER APPARATUS.



OUR NEW CATALOGUE FOR 1896 NOW READY. MAILED ON APPLICATION.

"THE VISITOR," New this Season.

Patent Pneumatic Syrup Jars fitted to our counter apparatus. Make the handiest and best thing ever invented for Druggists' use. Quality unsurpassed. Prices reasonable. Terms easy. Fountains exchanged.

DEALERS IN PURE FRUIT JUICES CONTAINING NO ADULTERATION.

FLAVORING EXTRACTS, COLORS, ETC.

FACTORY: 440 AND 442 YONGE STREET, TORONTO

# PUFFER'S

## Onyx and Marble Soda Water Apparatus

Our designs for 1896 are handsomer than ever.

If you want a Soda Fountain which works easy, wears well, and keeps its fine finish, buy

**Puffer's  
New Style  
Apparatus**  
with  
SLIDING SYRUP CANS

Prices Reasonable  
Terms Easy

LIBERAL ALLOW-  
ANCE FOR OLD AP-  
PARATUS IN EX-  
CHANGE.



Our SLIDING SYRUP  
CANS are the best in use

Our COOLERS the  
most substantial and effect-  
ive.

Our INSIDE FIT-  
TINGS the most practi-  
cal and complete.

ILLUSTRATED  
CATALOGUE  
Mailed free on request

**Extracts  
Flavors  
Fruit Juices**

Of the best quality  
at lowest prices.

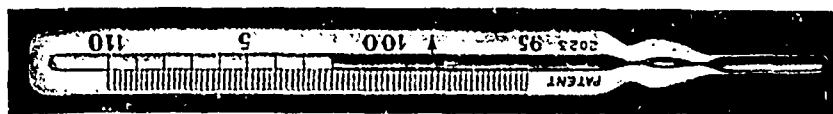
Branches :

39 and 41 CENTRE STREET, NEW YORK  
264 FIFTH AVENUE, CHICAGO  
1800 MAGAZINE STREET, NEW ORLEANS

**A. D. PUFFER & SONS**  
38 to 48 Portland St.  
BOSTON, MASS.

"THE LANCET," "BRITISH MEDICAL JOURNAL," and "THE OPTICIAN,"  
strongly recommend

**DENTON'S** New Patent "Acme" Lens-  
Front Clinical Thermometer



STILL MORE EASY TO READ.  
INDEX AND SCALE IN THE SAME PLANE.  
WILL NOT ROLL.  
INDELIBLE ENGRAVING.

WHOLESALE ONLY AT

25a Hatton Garden, London, England.

WE KNOW THAT ♦♦♦♦

**Baby's Own Soap**

Is cut for advertising purposes, but you make a great mistake  
in not keeping it, as it carries trade with it.



**Ox Gall Stain Soap**

An attractive package, tin-foil and carton, 1/2 doz. in box. A  
most wonderful preparation for removing stains of paint and  
grease from carpets, clothes, etc., and restoring their natural  
color.

The Albert Toilet Soap Co. MAKERS AND SELLERS. Montreal.

**CONFIDENCE** in the merits of the goods you sell is an important  
element of success.

**Johnston's Fluid Beef**

Can always be sold with the most absolute guarantee that it is the best Beef preparation.

We will back you up in this statement to the fullest extent.

The JOHNSTON FLUID BEEF CO., - MONTREAL.

**BORINE**

ANTISEPTIC, NON-TOXIC, FOR EXTERNAL  
AND PROPHYLACTIC, NON-IRRITANT, AND INTERNAL USE.

**FORMULA.**—Borine is composed of the  
active constituents of *styrax benzoin*, *gaultheria*  
*procumbens*, *spiraea ulmaria*, *solidago odora*,  
*humulus virginica*, the steroylenes of *thymus*  
*serpyllum*, *eucalyptus globulus*, *mentha arven-*  
*sis*, with boracic acid.

• Borine possesses a fragrant odor and a very  
agreeable pungent taste. It mixes with water  
in all proportions, and is compatible with most of  
the preparations of the pharmacopoeia. It does

not injure or stain the most delicate fabric, and  
is therefore useful as a general disinfectant.

Borine is highly recommended as a Mouth  
Wash, as a Gargle, Spray or Lotion in inflammations  
of the throat, nose and mucous membrane;  
for Inhalation in croup, diphtheria and whooping  
cough; as a soothing and antiseptic application to  
wounds, burns, etc., and internally as a sedative,  
antifermentative and carminative in digestive  
troubles and in intestinal disorders.

SEND FOR LITERATURE & SAMPLES BORINE CHEMICAL CO. N.Y.

**QUEEN CASTOR OIL**  
ABSOLUTELY TASTELESS

QUEEN CASTOR OIL is prepared from the purest English  
Castor Oil by separating the disagreeable and nauseating  
principles without changing its medicinal action. These prin-  
ciples are extracted by an improved process and are not

corrected up by added flavors. QUEEN CASTOR OIL possesses  
the same medicinal properties as the ordinary Castor Oil, with  
the advantage that it is pleasant both in taste and odor, does  
not become rancid, and is devoid of all glyfac action.

SEND FOR SAMPLES. QUEEN CASTOR OIL CO. BORINE CHEMICAL CO. N.Y. SOLE AGENTS.

**RUBBER  
GOODS**

AT RIGHT PRICES

OUR LINE OF

ENEMAS, TUBING, FOUNTAINS,  
ATOMIZERS, is very complete and  
prices right. Buyers can effect great  
saving by placing orders with us.

SURE-SELLING SPECIALTIES:

CARSON'S BITTERS

PECTORIA

SILVER CREAM

ALLAN'S COUGH CANDIES  
1/2 gross Box at \$1 per Box.

SOAP BARK

In 5c. Packages, 1/2 gross Box, \$1  
per Box.

Full lines of Sundries.

Mail orders promptly executed

**ALLAN & CO.**

132 BAY ST., TORONTO

A PERFECT TEA

**MONSOON TEA**

FINEST IN THE WORLD.  
From Tea Plant to Tea Cup in its Native Purity.

PACKED BY THE GROWERS  
And sold in the original packages, 1/2 lb., 1lb. and  
5 lb. caddies.

If your grocer has none, tell him to order from  
**STEEL, HAYTER & CO.**  
11 and 13 Front Street East, Toronto

**WATCH  
THIS  
SPACE**

TRADE supplied by the WHOLESAL DRUGGISTS.

If, however, your wholesale druggist has not  
our preparations in stock, order direct.

**Borine Chemical Company**

21 WEST 23rd STREET

NEW YORK

A Table Showing the Result of Triturating Certain Substances Together.

E. A. RUDDIMAN, PH.M., M.D., VANDERBILT UNIVERSITY.

Certain solid substances when triturated together produce liquids, sometimes due to the formation of new compounds, sometimes forming hygroscopic mixtures. Following is a table for ready reference showing whether any two substances mentioned therein will, when rubbed together, form a liquid or not. In the experiments equal weights of the two chemicals were taken. Unless the mixture showed some appearance of becoming sticky or liquid within a few minutes the result was put down as a powder.

Abbreviations: P. = Dry Powder. L. = Liquid. D.P. = Damp Powder. P.M. = Pasty Mass.

1 = Some authorities state that a liquid or pasty mass results, but in the experience of the writer such is not the case. On rubbing antipyrin with chloral hydrate a very slight stickiness was noticed at first, but this quickly disappeared on continued rubbing.

2 = Liquefies on standing. 3 = Dries on standing.

4 = Carbolic acid in a damp atmosphere absorbs enough moisture to liquefy. Perhaps some of the results are due to this property, and also to the heat produced in the trituration.

5 = Resin, when powdered alone and rubbed hard, has a tendency to make an adhesive mass; but unless the agent with which it was triturated exerted some influence, the result was put down as a dry powder.

	Acetanilid.	Antipyrin.	Beta-Naphthol.	Camphor.	Camphor Monobromated.	Chloral Hydrate.	Exalgin.	Menthol.	Methacetin.	Naphthalin.	Phenacetin.	Phenol. <sub>4</sub>	Pyrogallol.	Resin. <sub>5</sub>	Resorcin.	Salicylic Acid.	Salol.	Sodium Salicylate.	Thymol.	Urethane.
Acetanilid.....	P	P <sup>1</sup>	P	P	P	Dp <sup>3</sup>	P	P	P	P	P	L	P	P	Dp <sup>2</sup>	P	P	P	L	P
Antipyrin.....	P <sup>1</sup>	P	L	P	P	P <sup>1</sup>	P	P	P	P	P	L	PM <sup>3</sup>	P	PM <sup>2</sup>	P <sup>1</sup>	Dp <sup>3</sup>	P <sup>1</sup>	L	L
Beta-Naphthol.....	P	L	P	L	P	P	L	L	P	P	P	L	P	P	P	P	P	P	P	L
Camphor.....	P	P	L	P	P	L	P	L	P	P	P	L	L	P	L	P	L	P	L	L
Camphor Monobromated.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	P	P	L	P	L	P
Chloral Hydrate.....	Dp <sup>3</sup>	P <sup>1</sup>	P	L	L	P	L	L	L	P	L	L	P	P	P	P	L	P	L	L
Exalgin.....	P	P	L	P	P	L	P	L	P	P	P	L	L	P	L	L	L	P	L	L
Menthol.....	P	P	L	L	P	L	L	P	P	P	P	L	L	L	L	P	P	P	L	L
Methacetin.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	Dp <sup>3</sup>	P	P	P	P	P
Naphthalin.....	P	P	P	P	P	P	P	P	P	P	P	L	P	P	P	P	L	P	P	P
Phenacetin.....	P	P	P	P	P	L	P	P	P	P	P	L	P	P	P	P <sup>1</sup>	P	P	P	P
Phenol <sub>4</sub> .....	L	L	L	L	L	L	L	L	L	L	L	P	L	L	L	P	L	P	L	L
Pyrogallol.....	P	PM <sup>2</sup>	P	L	P	P	L	L	P	P	P	L	P	P	P	P	P	P	P	L
Resin <sub>5</sub> .....	P	P	P	P	P	P	P	L	P	P	P	L	P	P	P	P	PM	P	PM	PM
Resorcin.....	Dp <sup>2</sup>	PM <sup>2</sup>	P	L	P	P	L	L	Dp <sup>3</sup>	P	P	L	P	P	P	P	P	P	P	L
Salicylic Acid.....	P	P <sup>1</sup>	P	P	P	P	L	P	P	P	P <sup>1</sup>	P	P	P	P	P	P	P	P	L
Salol.....	P	Dp <sup>3</sup>	P	L	L	L	L	P	P	L	P	L	P	PM	P	P	P	P	L	L
Sodium Salicylate.....	P	P <sup>1</sup>	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P
Thymol.....	L	L	P	L	L	L	L	L	P	P	P	L	P	PM	P	P	L	P	P	L
Urethane.....	P	L	L	L	P	L	L	L	P	P	P	L	L	PM	L	L	L	P	L	P

### The Privileges of Travellers.

Lord Hampden, the new Governor of New South Wales, attended the commercial travellers' annual banquet in Sydney recently. In the course of his speech he said:

"I can only tell you that the most paramount feeling in my mind at the present moment is one of agreeable surprise in finding myself in such exclusive company. (Laughter.) I may have had ambitions at times, I may have dreamt dreams, I may have thought it might be my lot some day to entertain or be entertained by great men; but never have I supposed that I should find myself the honored guest at an association of commercial travellers. I have always associated commercial travellers in my own mind with the best room in the inn—(laughter) the room with the best accommodation, from which the public were judiciously and carefully excluded. (laughter)—the room where the chops were more succulent and the punch was better brewed than in any other place; and I remember that once upon a time a timid host informed me, when I asked him to admit me into that secret chamber, that it was as much as his living was worth, because he would be boycotted if he did so. Therefore, you may imagine my pleasant surprise at being your honored guest this evening."—*Ex.*

### Medicated Granules.

By M. MANSIER.

A short time since this novel form of exhibiting medicines was introduced to the notice of therapists, and seemed to please both doctors and patients, not because the use of the granules was more convenient than that of preparations of the old "armamentarium," but because they represented a pharmaceutical novelty. The granules are obtained by saturating specially broken sugar with medicated solutions, and allowing the solvent to evaporate. As far as is possible, the liquid used to make the solution should have as its base alcohol, ether, or chloroform, so as not to dissolve the sugar. Then to reduce this to the granular form it must be gently triturated in a marble mortar so as to avoid the formation of powder, and afterwards sifted through a metallic sieve of five meshes to the centimetre. The sugar from this first sifting is now freed from adherent sugar dust by means of a sieve, either of hair or covered with gauze such as is used for surgical dressings, with about twelve meshes to the centimetre.

As a typical example of such granular medicaments, I will now give the method of producing "granulated kola" (kola granulée), which is at present very much in vogue on the continent: Take a hydroalcoholic extract of kola, 7.50 grammes, granulated sugar, 150 grammes. Dissolve the extract in half its weight of alcohol at 60° by means of a water bath; pour the solution on the granulated sugar placed

in a marble mortar, mix well by means of a stirring rod, place on a thin sheet of paper, and dry between 20° and 30° C., taking care to separate from time to time the adhering masses of granules. When dry, preserve in wide-mouthed bottles. Each teaspoonful of these granules weighs 4 grammes, and contains 0.20 gramme of extract. Not only medicinal extracts, but almost any medicine can be made to lend itself to this way of preparation. The glycerophosphates of the alkali metals being very soluble in water, but only very slightly so in alcohol, may be dissolved in their weight of water, and then an equal quantity of alcohol at 60°, added before pouring over the sugar. As for the glycerophosphate of lime, now so much prescribed, this is rather insoluble in water (1-15); a way out of this difficulty is, however, found in dissolving the salt (previously mixed with twice its weight of alcohol at 60°) with the aid of lactic acid. When this is done a solution is certainly formed, but it is not of glycerophosphate of lime, but consists of lactate of lime and free phosphoglyceric acid.—(*Répertoire*).—*Pharmaceutical Journal*.

### Mistura Ferri Composita A Wrinkle.

Dissolve the sugar with the iron sulphate instead of mixing it with the myrrh and potassium carbonate. This seems a very little trifle to take notice of, and yet it is surprising what a difference "little trifles" sometimes make. Dear old Redwood used to tell us that sugar was unfriendly to emulsions; and, acting on that hint, the writer tried a little departure from the letter of the law, on the lines above named. The result justified the experiment. The emulsion of myrrh, pot. carb., and rose water was more easily formed, and more milky without the sugar; and not a little irritation in future was saved. To get a really good emulsion, the myrrh (nice, oily pieces) should be rubbed hard with the alkali till it becomes not only pulverulent, but pasty, before adding any rose water. When that is done, the emulsion can (when diluted) be safely strained through coarse muslin, to remove bits of bark, etc. If not too late, the Pharmacopœia revisers might take note of this.—*W. Johnston, in Pharmaceutical Journal*.

### To Preserve Thick Extracts.

Add gradually a few drops of glycerine to the surface of the extract in the container. Four drops—an insignificant quantity so far as the medicinal action of the extract is concerned—is said to prevent for a long time the drying of the extract even at a temperature of 24-27° C.

For preserving dry extracts, Schacherl calls attention to a process proposed by Kremel, who uses gum arabic in place of sugar of milk. He dries the thickened extract with a dense solution of the requisite quantity of gum arabic on the

water-bath; restores the prescribed weight, if necessary, by the addition of powdered gum, and stores the finished product in the form of dry powder. Thus prepared, the dry extracts are said to keep unchanged for a long time without massing in clumps.—*Bulletin of Pharmacy*.

### The Reason They Fail.

The man who purchases an article for one dollar and sells it for ten cents advance may delude himself in the belief that he made ten per cent. on the transaction, but such is not the case. Rent, taxes, insurance, interest on investment, wear and tear, travelling, bookkeeping, stationery, and other miscellaneous expenses, must be deducted from that ten cents. We know quite a number of men doing a small business on the ten per cent. basis who wonder why they are always hard up. These are the men who fail without knowing just why.—*The Furture Journal*.

### The Incompatibles of Chloride of Lime.

Professor Jorissen gives an account of some experiments on the incompatibilities of this body, amongst which the chief are the following, on account of the dangers of explosion: Glycerin (unless diluted with water), fats, oils, and essences, iodides, and ammonium chloride. In the latter case there is some danger of nitrogen chloride being formed.—*Journal de Pharmacie d'Anvers*.

### Look Pleasant.

The clerk should remember that he is engaged to perform certain duties, and he should discharge them to the best of his ability, cheerfully, ungrudgingly. Do not cultivate a brusque, uncivil manner, or carry a sullen face. They displease and insult customers, and are not just to your employer. If you think your work is too hard, that you are imposed upon, have a frank explanation with "the boss" and secure a readjustment of the matter, or, if this fails, seek another situation. So long as you are engaged and on duty look pleasant.—*Era*.

A crystalline compound of ferrous chloride and nitric oxide has been obtained by V. Thomas by introducing the gas into an ethereal solution of ferrous chloride, when the liquid turns black and leaves a syrupy substance on evaporating off the ether. After this has stood for some time it becomes crystalline. The crystals have the following composition:  $\text{FeCl}_2 \cdot \text{NO} \cdot 2\text{H}_2\text{O}$ . On evaporating the solution at 60° to 100° the compound is obtained free from water. The salt containing water of crystallization occurs in well-formed black crystals; the anhydrous salt forms small, yellow-colored crystals. Ferrocyanide of potassium produces a white precipitate with the solution.—*Apoth Zeit. Jah.*

# A Clear Crystal Glass



Capacity : One-Half Gallon.

## PITCHER FREE

Containing the equivalent of five boxes of Pepsin Tutti Frutti. It is also packed with an assortment of half Pepsin and half regular Tutti Frutti. Order early from your wholesaler. Send postal card for new advertising signs for your window.

**Adams & Sons Co.,**

11 and 13 Jarvis Street,  
TORONTO.

1873.

1896.

# Montreal Optical Company

6185 Notre Dame St.,  
MONTREAL.

60 Yonge St.,  
TORONTO.

SOLE AGENTS IN CANADA FOR

## THE AMERICAN OPTICAL COMPANY,

The goods manufactured by the American Optical Co. are universally acknowledged to be the finest that can be produced.

SOUTHBRIDGE, MASS.

Next class in Optics at the Optical Institute  
of Canada, APRIL 18th.



W.A.GILL & Co. COLUMBUS, OHIO, U.S.A

PLAIN, LACQUERED **BOXES** AND DECORATED

MAKE THE BEST SEAMLESS TIN

• IN THE MARKET •

For sale at Manufacturers' Prices by the leading whole sale druggists and druggists' sundrymen throughout Canada. Complete Illustrated Price List free on Application

**JOSEPH E. SEAGRAM**

Waterloo, Ontario.

MANUFACTURER OF

**ALCOHOL**

*Pure Spirits*

*Rye and Malt Whiskies*

"OLD TIMES" AND "WHITE WHEAT"



A POOR WHEEL is like a poor horse—it costs more than its worth to keep it.

In the **Monarch**

the necessity of repair has been reduced to a minimum. Its strength, lightness, and beauty make it a marvel of modern mechanical skill.

The **Monarch** IS UNDOUBTEDLY KING OF WHEELS

A wheel that you can depend upon in any emergency. Made in four models—\$80 and \$100. The "Defiance"—made in eight models—\$40, \$50, \$60 and \$75. Send for the Monarch book.

Monarch Cycle Mfg. Co., Chicago, Ill. 83 Heald Street, New York. 9 and 11 Front Street, San Francisco.

Canadian Branch:

6 and 8 Adelaide St. W., Toronto.

P. R. WRIGHT, Proprietor.

The Best Bicycle is None too Good For You.

**RIDE A STEARNS**

WHEREVER ONE TURNS HE FINDS A STEARNS.

AMERICAN RATTAN CO. TORONTO, ONT. CANADIAN SELLING AGENTS.

THE OLDEST - THE BEST



Trade supplied by all leading Drug Houses in the Dominion.

# LIVE DRUGGISTS

KEEP ON HAND

# Dr. Campbell's Safe Arsenic Complexion Wafers...

AND

# FOULD'S MEDICATED ARSENIC COMPLEXION SOAP

THE ONLY REAL BEAUTIFIER OF THE COMPLEXION, SKIN, AND FORM



H. B. FOULD  
SOLE PROPRIETOR  
214 Sixth Ave., NEW YORK.

The LYMAN BROS. & CO.  
CANADIAN AGENTS  
71 Front St. E., Toronto, Ont.

# The Science of Optics.

BY LIONEL LAURANCE,  
Principal of the Optical Institute of Canada.

[Entered according to Act of Parliament of Canada, in the year 1896, by Lionel Laurance, at the Department of Agriculture.]

In Fig. 13 X, the converging power of the convex being counteracted by the diverging of the concave lens, parallel rays

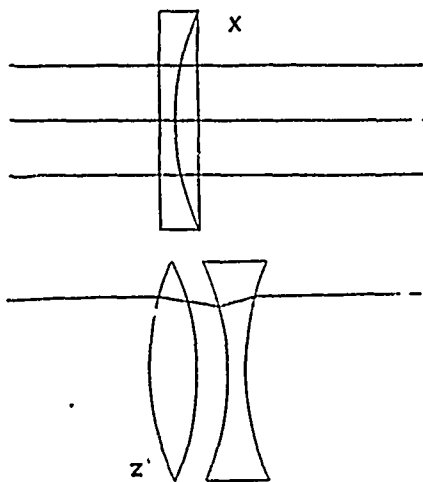


FIG. 13.

of light are parallel after passing through them, the two lenses having the same radius of curvature. In Z is shown the passage of a ray refracted by a convex and a concave lens.

Parallel rays passing through a lens formed of two segments of a sphere of 10-inch radius are refracted so that they come to a real or positive focus 10 inches behind the lens; this is the focal distance. The lens is numbered according to its focal length, and the focus made 10 inches behind it is called the principal focus.

The image formed at the real or positive focus is a real image; it is smaller than the object, and inverted (see Fig. 14), as the rays from the various points of the object after refraction cross each other before forming the picture. The shorter the focal length of the lens, the smaller, sharper, and clearer is the picture.

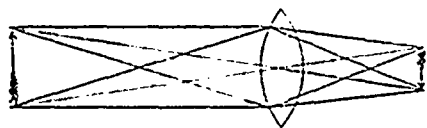


FIG. 14.

Then rays from a distance of 20 feet or more, that is, parallel rays, are brought to a focus at 10 inches behind a 10-inch lens; but if they come from points situated nearer than 20 feet, being then divergent rays, some of the refractive power of the lens is expended in making them parallel before it can converge them, so that the focus of divergent rays refracted by a convex lens is further behind it than its principal focus. If the rays diverge from a distance double the focal distance in front of a convex lens, the focus will be the same distance behind it.

The nearer the object is to the lens, the more divergent are the rays, and the

further back behind the lens is the focus. The point at which divergent rays from a point are focussed as a point (see Fig. 15) is termed a conjugate focus, as the

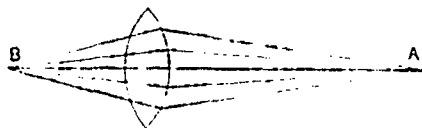


FIG. 15.

two points are interchangeable. In Fig. 15 the divergent rays from A are brought to a focus at B, divergent rays from B are focussed at A.

If the rays are divergent from a point situated just so far in front of the lens as the focal distance, say, they are from 10 inches in front of a 10-inch lens, then the refractive power is just sufficient to render them parallel when they emerge from the lens after refraction. In Fig. 16

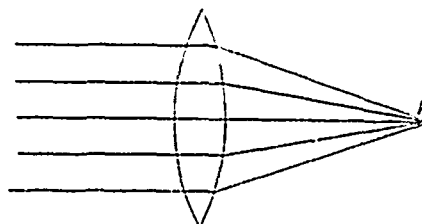


FIG. 16.

the rays from A at a distance equal to the focal length of the lens are rendered parallel, just as parallel rays would be refracted to A.

If the rays are very divergent from a point nearer than the focal distance, say, they are from an object situated 9 inches in front of a 10-inch lens, then the refractive power of the lens will not be sufficient to render them even parallel. After refraction the rays will emerge from the lens divergent, although much less so than when incident. If the eye be behind the lens the rays can be projected backwards, making what is called a virtual image of the object. In Fig. 17 the rays

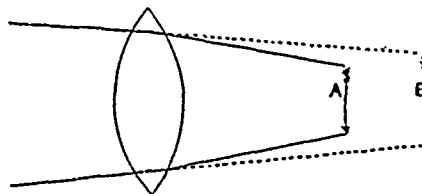


FIG. 17.

from A, placed 9 inches in front of a 10-inch convex lens, are refracted, and the virtual image B is formed on the same side of the lens as A. This image is upright, apparently larger and farther away than the object A. This explains why a convex lens magnifies an object brought within its focal length, such object being seen under a greater angle.

Note that any convex lens does exactly the same amount of refracting whether the incident rays be parallel, divergent, or very divergent.

A concave lens refracts rays outwards, and, therefore, can have no real focus; it has, however, a virtual or negative focus on the same side of the lens as the object, formed by projecting backward the rays in the direction they took after refraction by the lens. The image formed is virtual; it is upright, and apparently smaller and nearer than the object. In Fig. 18 the rays from A, the object, are bent outwards by the lens, and the image B, being seen under a smaller angle, is

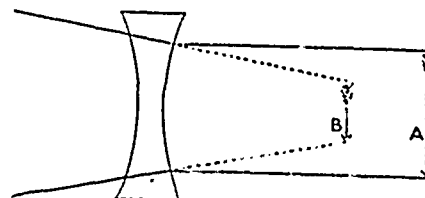


FIG. 18.

diminished in size, and apparently nearer than A. This is equally true if the rays refracted by a concave lens be parallel or divergent before refraction; but if the latter, the image is smaller than if the rays were parallel.

The optical centre of a lens is that point through which rays pass without being refracted, so that they emerge from the lens in the same direction as they entered it. The optical centre lies on the principal axis at a point that divides the axis in the ratio of the radii of curvature. All rays that do not pass through the optical centre are bent from their previous course to an extent dependent upon their distance from that centre; the farther away, the more they are bent.

The ray passing through the centre of the lens from the centre of the object is the axial ray; it suffers no refraction, and it is on this, the principal axis, that the principal focus of the lens is made. As, however, rays from luminous points are incident to the lens at every part of its anterior surface, some one ray must be incident in a direction perpendicular to the surface at every point on the surface of the lens. Such rays are the secondary axes, and the

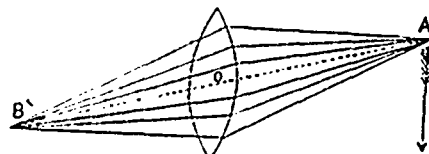


FIG. 19.

foci formed on them are secondary foci. They cross the principal axis at the optical centre of the lens, and pass through with little or no deviation. In Fig. 19 the rays from the point A are incident to the lens, and are focussed to the point B. The dotted line AB, being perpendicular to the surface at the point of incidence, passes through O, the optical centre, and emerges from the lens without any, or with very

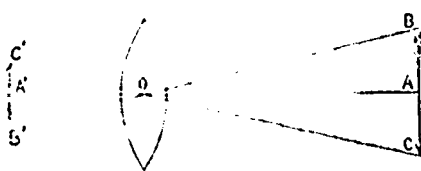


FIG. 20.

little, deviation. In Fig. 20 the secondary axes *BB* and *CC* cross the principal axis *AA* at *O*, the optical centre of the lens.

The principal focus only is considered in calculating the refractive power of a lens.

Convex lenses converge rays transmitted by them; they are called positive because they have a real focus, and are also called plus (sign +), because they increase the refractive power of the eye.

Concave lenses diverge rays transmitted by them; they are called negative because they have no real, but only a negative focus, and are also called minus (sign -) because they decrease the refractive power of the eye.

In order to know the number of a convex lens, it is merely necessary to measure with a yard stick the distance at which a focus is obtained of light entering a doorway or window that is situated twenty feet or more away. On a piece of white paper fastened to the wall a clear inverted image of the view outside the door or window can be obtained if the number of the lens be not higher than 24. Weaker lenses are difficult to focus, especially if the light be dull. The stronger the lens the more the rays will be refracted, and therefore the sooner they will meet, and so the shorter is the focal length. The weaker the lens the greater the focal distance. The picture thrown on to the screen will be sharp only at the exact focal distance of the lens; when it is held nearer or further away than this exact distance the image is indistinct. The stronger the lens, the smaller and sharper is the picture.

The inch or old system of numeration is based on the fact that a double convex lens formed of two segments of a sphere of 1 inch radius refracts parallel rays of light so as to bring them to a focus at one inch; this lens is the unit or standard of the inch system. A lens that has one-half this power refracts rays only to one-half this extent, and so brings them to a focus at two inches. A lens with  $\frac{1}{10}$  the power of the unit bends the rays only enough to bring them to a focus at ten inches. Oculists and opticians mark such lenses as  $\frac{1}{2}$  or  $\frac{1}{10}$ , but in the trade they are called No. 2 convex or No. 20 convex, and so with all the other numbers.

The concaves are similarly numbered according to the radius of their curvature. The amount of refraction outwards in any concave lens is sufficient to render parallel the inwardly refracted rays of the corresponding convex No. (see Fig. 13). A No. 20 concave bends the rays outwards to exactly the same extent as No. 20 convex bends them inwards; so, to-

gether, their united refraction amounts to nothing.

To add together, that is, to find the strength of, two convex lenses, say, Nos. 24 and 10, as the refractive power of the one has to be added to the refractive power of the other, proceed thus:

$$\left(+\frac{1}{24}\right) + \left(+\frac{1}{10}\right) = \frac{10}{240} + \frac{24}{240} = \frac{34}{240} = \frac{1}{7}$$

(about),

so these two lenses together make a  $\frac{1}{7}$ , or, as generally called, a No. 7 convex. The small fraction need not be considered.

To add together two lenses of opposite refraction, for instance, No. 12 concave and No. 15 convex (here the concave is the stronger, so the result must be concave), proceed thus:

$$\left(+\frac{1}{15}\right) + \left(-\frac{1}{12}\right) = \frac{12}{180} - \frac{15}{180} = -\frac{3}{180} = -\frac{1}{60}$$

and the two together are therefore equal to a No. 60 concave.

To add, say, No. 20 concave and No. 10 convex, here the convex is the stronger, so the result is convex:

$$\left(+\frac{1}{10}\right) + \left(-\frac{1}{20}\right) = \frac{20}{200} - \frac{10}{200} = +\frac{10}{200} = +\frac{1}{20}$$

therefore the two combined equal No. 20 convex.

For quick working all that is necessary is, when both lenses are convex or both concave, to divide the multiple by the sum of the two numbers.

For instance, Nos. 20 and 10, then

$$\begin{aligned} 20 \times 10 &= 200 \\ 20 + 10 &= 30 \\ 30 \overline{)200} & 6 \end{aligned}$$

If one number is convex and the other is concave, then divide the multiple by the difference. For instance, Nos. 30 concave and 10 convex:

$$\begin{aligned} 30 \times 10 &= 300 \\ 30 - 10 &= 20 \\ 20 \overline{)300} & 15 \end{aligned}$$

as of the original numbers the convex was the stronger.

The new scale of numeration is very much more simple. It is called the dioptric (dia, through; opto, to see), which means refractive. In this system, instead of measuring the focal length, which is the result of the refraction of a lens, the refraction itself is measured, and the unit is a diopter (sign D). The diopter of refraction is the quantity of converging power in a convex lens that is sufficient to bend rays of light that are parallel before entering the lens to a focus one metre behind it.

A metre (sign M) is a French measure of length equal to 39.37 inches English or American. For general purposes, it is sufficiently close to calculate forty inches as equal to one metre. If 1D of refraction makes a focus of parallel rays at forty inches, then 2D will refract just double as much, and the focus will be found at twenty inches; a 4D convex lens having four times the refractive power of 1D will retract the light sufficiently to make the focus ten inches, and so on through the scale.

In connection with diopters it is customary to use the sign + for convex and

- for concave, and this should be noted, as often oculists merely put the sign + or -, and the number of the lens without adding the sign D; therefore, when you read +4 it should be taken as meaning four diopters, whereas 4 Cx should be understood as representing a four-inch convex lens.

To find the strength of two or more lenses combined by the dioptric system is particularly easy. It is merely necessary to add or subtract, and the result is + or -, according to which is the higher or stronger number. For example:

$$\begin{aligned} +2 \text{ and } +4 &= +6 \\ +4 \text{ and } -3 &= +1 \\ -5 \text{ and } +3 &= -2 \\ -5 \text{ and } -2 &= -7 \\ +3 \text{ and } -3 &= 0 \end{aligned}$$

Now as +1D refracts parallel rays so that they focus at 40 inches, it is plain that it is equal to a No. 40 convex lens of the old system; a +2D equals a No. 20, and a +40D lens is the same as a 1 inch convex lens.

To translate the number of a lens of the one scale into that of the other, the rules are as follows:

To turn inches into diopters multiply the refractive power by 40; thus a No. 5 equals 8D, as

$$5 \times 16 = 80 = 8D$$

To turn diopters into inches: Divide the refractive power by 40; thus, 10D equals a No. 4, as

$$10 \div 40 = \frac{1}{4} = 1 \text{ inch, or a No. 4.}$$

But a more simple method of converting lenses of either scale into that of the other is to divide 40 by the known number. For instance, you wish to know what is the equivalent of a 5D lens in the inch system; then  $40 \div 5 = 8$ , so 5D is the same as an 8-inch lens, or an 8D equals a 5-inch. In making this division there is often a small fraction left over, as many numbers will not divide evenly into 40; these fractions need not be considered, but the next nearest number must be taken; thus 3D equals No. 13 inch. The rule is that if the number will not go exactly into 40, divide it into 39, or the nearest possible number to the one or the other. For instance, 3.50D = No. 11, 3.25D = No. 12, 4.50 = No. 9.

In the same way, if the inch number be known, divide it into 40 to get the dioptric measurement; thus No. 16 equals 2.50D, as  $40 \div 16$  goes 2.50 times; No. 12 equals 3.25D, as  $40 \div 12$  gives 3.25 (about); a No. 2½-inch goes 16 times into 40, so that it is equal to a 16D.

It must be noted also that the fractions of inches are always expressed as vulgar fractions, as 2½ inch, while fractions of diopters are invariably expressed in decimals, as 6.50D. The mere putting of a decimal fraction denotes that the lens required is of the dioptric scale, this system being entirely based on decimal calculations.

By dividing into 40, the number of a dioptric lens, you also get the focal length of that lens in inches. If the focal length

# BUY Adams' Root Beer

## NELSON'S SODA FOUNTS and SUPPLIES

458 Parliament Street

TORONTO



THE QUEEN PORTABLE FOUNT.

Patented May 22nd, 1894.

MR. TOOGOOD, of Prince Albert, writes: "As I have closed the season for the Fount, I thought I would write you a few lines and let you know how I panned out. My cash sales were \$203.00. The cost of my Fount and materials to run the drinks from it, \$100.00, therefore, I made Fount clear and \$103.00 over and above all costs, or otherwise sixty-five per cent. on my investment, or, in other words, \$103.00 and the Fount."

Toronto, March 5th, 1896.  
MR. NELSON:

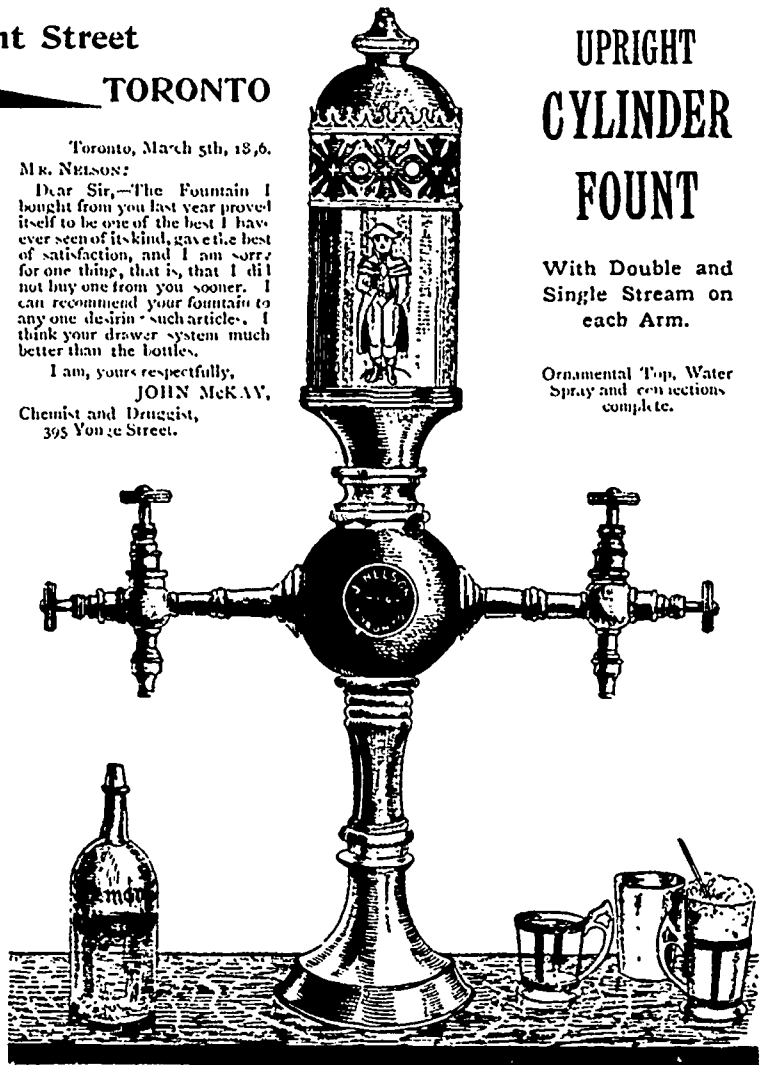
Dear Sir,—The Fountain I bought from you last year proved itself to be one of the best I have ever seen of its kind, gave the best of satisfaction, and I am sorry for one thing, that is, that I did not buy one from you sooner. I can recommend your fountain to any one desiring such article. I think your drawer system much better than the bottles.

I am, yours respectfully,  
JOHN McKAY,  
Chemist and Druggist,  
395 Yonge Street.

### UPRIGHT CYLINDER FOUNT

With Double and  
Single Stream on  
each Arm.

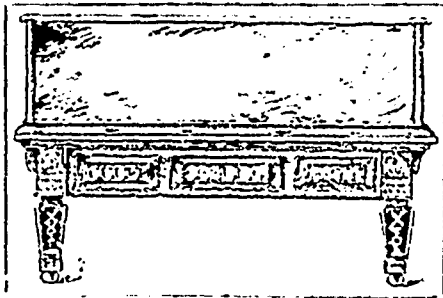
Ornamental Top, Water  
Spray and connections  
complete.



LUCANIA A.

# W. Millichamp, Sons & Co.

MANUFACTURERS OF  
**SHOW  
CASES**  
And all  
Interior  
Woodwork  
**FITTINGS**

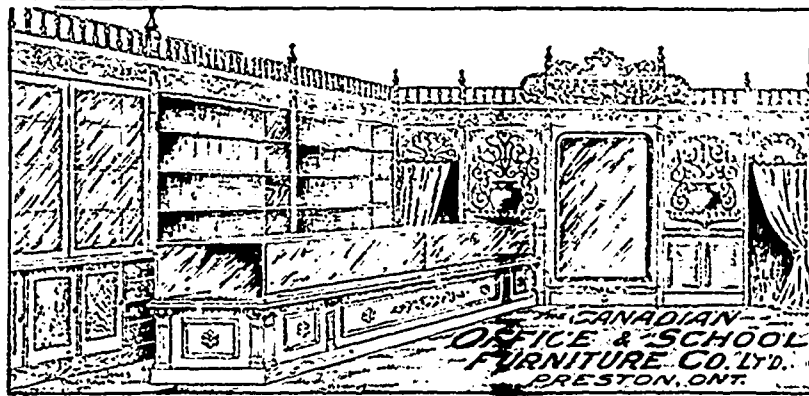


*Special  
New  
Designs*  
  
*Best  
Workmanship*

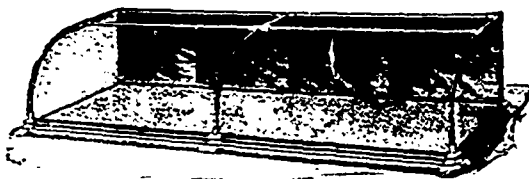
**Cigar Cases with Patented Moistening Trays.  
Sponge Cases.**

Send for Catalogue.

**234 1/2 Yonge Street, Toronto.**



## C. Schack & Co....



Manufacturers of  
**SHOW CASES**  
STORE AND OFFICE  
**FITTINGS**

Choice Designs in  
CHERRY, OAK, WALNUT and MAHOGANY. ©

FIRST-CLASS WORKMANSHIP.  
LOWEST PRICES.

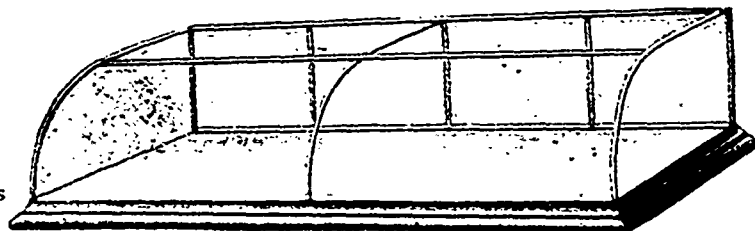
Special Attention Given to Fitting Drug Stores

Estimates and Designs  
Furnished on Application.

21-23 Alice Street, - - TORONTO.

## LONDON SHOW CASE WORKS

Manufacturers of  
**SHOW  
CASES**  
Of all kinds  
FOR



**COUNTERS, WALLS, OR DISPENSARIES.**

SHOP FIXTURES ♦ COUNTERS ♦ TABLES ♦ SHELVING ♦ MIRRORS, Etc.

Send for Catalogue  
and Price List

**237 King Street,  
LONDON, ONT.**

Deafness	Absolutely Cured	Head Noises
Deafness	in 24 hours	Head Noises
Deafness	by using one bottle of "Auraline Essence,"	Head Noises
Deafness	the Great Indian Discovery	Head Noises
Deafness	Millions of Sufferers Cured	Head Noises
Deafness	after all else had failed.	Head Noises
Deafness	Why remain deaf when a cure awaits you?	Head Noises
Deafness	Avoid the use of instruments and other injurious appliances.	Head Noises
Deafness	Send 2/6 to the	Head Noises
Deafness	MACKAY Remydy Co., 14 High Holborn	Head Noises
Deafness	LONDON	Head Noises

## GERMAN ARMY PILE REMEDY

Each One Dollar Package Contains

**Liquid, Ointment,  
and Pills.**

GOOD SELLER.  
GOOD MARGINS.  
WELL ADVERTISED.

**THE ONLY CURE FOR PILES**

Write us to mention in your daily or weekly papers that GERMAN ARMY PILE REMEDY may be procured from you.

**The KESSLER DRUG CO.**  
Canadian Agency Toronto



For information and free Handbook write to MUNN & CO., 361 Broadway, New York. Oldest bureau for securing patents in America. Every patent taken out by us is right before the public by a notice given free of charge in the Scientific American. Largest circulation of any scientific paper in the world. Splendidly illustrated. No intelligent man should be without it. Weekly, \$2.00 a year; \$1.00 a month. Address MUNN & CO., Publishers, 361 Broadway, New York City.

is required in centimetres or millimetres, then divide the number into 100 for the former, into 1,000 for the latter.  $2\frac{1}{2}$  centimetres or 25 millimetres equals 1 inch; therefore a 5D lens has a focal length of 8 inches, 20 centimetres or 200 millimetres. By dividing the focal length in inches into 40 you get the refractive power of the lens. If the focal length is known in millimetres, divide into 1,000 to get the refractive power. Thus the focal length of a lens is 200 millimetres; then  $\frac{1,000}{200} = 5D$ .

The inch in various countries differs, so that the number of a foreign (not English or American) made lens numbered in inches is different from the home-made article. The French inch is longer than the English, and it only takes 37 of them to make a metre, while nearly 40 English are required. A No. 18 lens of French make is about equivalent to a No. 20 English or American. The dioptric scale is, however, the same the whole world over.

The only measurement of refraction is by diopters, that must be remembered. You cannot measure refraction by inches, nor can you measure focal length by diopters. So many diopters represent so much bending power of the lens; so many inches or centimetres focal length represent the distance behind the lens at which the focus is obtained.

The employment of the dioptric scale of measurement and the thorough grasping of the fact that a certain number of diopters means a certain quantity of refraction facilitates in an extraordinary degree the comprehension of defects of sight and the proper correction by lenses.

A convex or positive lens is known by the following tests:

(1) It is thicker in the centre than at the edges.

(2) It magnifies when the object of within its focal length.

(3) It gives a positive focus, so that a real image of a bright picture, such as a candle flame, a doorway or a window, can be obtained by it and thrown on to a screen.

(4) If an object distant a few feet be looked at through the lens and the latter moved, then the object will appear to move in the contrary direction.

A concave or negative lens is known by the following tests, which are exactly the contrary of those that prove a convex lens:

(1) It is thinner in the centre than at the edges.

(2) It diminishes objects looked at it through it.

(3) It has no real focus, so no image can be got on a screen. It has only a negative focus, and gives only a virtual image by projecting the rays backwards.

(4) When moved in any direction, an object seen through it appears to move in the same direction as the lens.

If a lens made of plain glass be held in front of the eye, the rays from an object

looked at are perpendicular to the surface of the lens; there is no refraction, the object looks exactly the same as if no piece of glass were held between it and the eye, and if the lens be moved the object remains stationary. This test of lenses by moving them in front of the eye and noting whether the object looked at moves in a contrary or in the same direction as the lens is by far the simplest and most perfect method of distinguishing between convex and concave lenses, and is practically the only one when the glass is very weak. It is sometimes rather hard for beginners to perceive the direction of the movement, but a little practice soon overcomes that difficulty.

The lens must not be moved backwards and forwards—that only confuses; it must be held between the first finger and thumb, about eight inches in front of the eye, and moved directly downwards by one clear movement. The object looked at should be a thin, horizontal line, such as a shelf. When the lens has been moved down, you will be looking at the horizontal line through the extreme upper part of the lens, and will be able to see, at the same time, the line on either side of the lens (see Fig. 21). If the part or

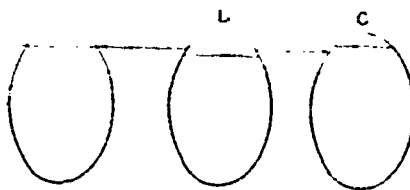


FIG. 21.

the line seen through the lens be continuous with the parts seen outside, the lens is a plano, as in A, Fig. 21. If the part of the line seen through the lens is lower than the other parts, the lens is concave, as in B, Fig. 21. If the part of the line seen through the lens is higher than the other parts, the lens is convex, as in C, Fig. 21. The lens should not be held too close to the eye; as then you cannot see on either side of the glass. If, however, the lens be a strong convex, it must be brought closer, or you will not be able to see through it at all; but in such cases the movement is so very decided that there is no difficulty in deciding as to the positive or negative refraction. It should be noted that the deviation of the object is always in the direction of the apices of the prisms of which the lens is practically formed.

If a strong convex lens be looked through when held a certain distance away greater than its focal length; for instance, if a 5-inch convex lens be held 10 inches in front of the eye, the rays of light passing through it will have come to a focus and crossed in the air, and will, therefore, enter the eye divergent, so that the movement of the object when the lens is moved will be the same as that of a concave lens.

You will not, however, be liable to make a mistake in such a case, as the

thickness of the lens in the centre alone will show its kind of refraction without any special test, besides which the object is seen inverted, the rays of light having crossed before entering the eye.

You will find it of the greatest convenience to get an analyzing card, as in Fig. 22. It consists of a sheet of white

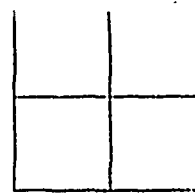


FIG. 22.

cardboard about 2 ft. square, with a clean cross formed of black lines,  $\frac{1}{4}$ -inch wide, running straight across it vertically and horizontally. This should be employed for all testing and neutralizing of lenses of every description. It is equally good for sphericals, cylinders, or prisms, and for analyzing, neutralizing, centering, etc. It is best used at a distance of about 10 ft.

By the displacement of the horizontal line on the analyzing card when the lens is moved vertically downwards, it is easy to neutralize and learn the number of an unknown lens. First, note if it be convex or concave. If it be concave, put over it a convex as near the number as you can judge; then move the two lenses together, and, if the movement be still that of a concave, the neutralizing convex is not strong enough, and you must try a stronger convex lens. If with the first neutralizing lens you try you find the movement of the two combined to be that of a convex, the neutralizing convex lens is too strong, and you must try a weaker one. By reducing or increasing the strength of the neutralizer, you will presently find that convex lens which, when placed over the concave, will cause absolutely no displacement of the line when the two together are moved; they will act as plain glass (refer to Fig. 13). The number of the neutralized concave is the same as that of the neutralizing convex. To find the number of an unknown convex lens, the neutralizing must, of course, be done with concave lenses.

When the lens is very strong, say, more than 5D, it is difficult to get an absolute neutralization; there will always be some slight movement in the peripheral (outside) portion of the lenses, although near the centre there will be practically none when the proper neutralizer is applied; anyhow, the latter will cause decidedly less movement than either the next stronger or the next weaker lens, so that you cannot fail to learn the right number.

This failure to get complete neutralization with strong lenses is due to spherical aberration, or, more likely perhaps, for the following reason.

A substance very like vanillin has been obtained, but only in very minute quantity, from essential oil of cloves.

## Advertising.

### Practical Hints on Advertising.

Copyright, 1895, CHARLES AUSTIN BATES.

It is facts that people want. I have heard a merchant say: "Oh, it don't pay to advertise, because people don't believe the ads. Mr. So-and-so always lies in his ads, and people measure us by his standard.

He was wrong, of course. People soon find out the truth-telling place, and trade gravitates that way with absolute certainty.

Tell something—tell it true, and in the best papers—and it will pay every time.

\* \* \* \*

Some way or other, it always happens that the judicious advertiser succeeds.

Judicious means many things.

Some men better never advertise. Some things better never be advertised. Men who are not honest—who do not keep their promises—whose advertisements mislead, and whose stores disappoint—they had better let advertising alone.

\* \* \* \*

There is a man in New York—a furniture dealer—who says that he never expects to sell to the same man twice. He uses all means to get the best of the deal the first time. Makes all the profit he can on the first sale, because he knows that the buyer will never come back—that he will discover the cheat.

Now, it wouldn't pay that man to advertise, and he knows it, and he doesn't advertise.

But a fairly honest business, conducted by a man who keeps pretty near to the letter of truth, it will always pay to advertise.

\* \* \* \*

Most business men are careless in their statements. They have become so used to writing "biggest," "grandest," "greatest," "best," that they can only think in superlatives.

They mean to be honest—probably are. They are merely careless, and failure is the price of carelessness in advertising: may be not absolute failure, but something very short of success.

\* \* \* \*

Every advertisement should have careful consideration. All the discrepancies should be eliminated—no careless statements allowed.

If you can't take time to attend to your advertising carefully, better cut it down. Cut off the parasites. Cut off novelties—programmes. Cut off the paper to whom you "give a hundred, just to get rid of it—to keep it quiet." Cut off the paper that is too cheap to be good.

A good advertisement in the best paper will do more good—more in proportion to price—than anything else you can do.

A good advertisement of good goods in a good paper will always pay.

Always.

In most newspapers there is a dead level of advertising excellence, or rather lack of excellence. The advertisements are generally about the same degree of badness. Probably in every town there are two or three advertisers who secure distinct prominence for their announcements by giving them a little attention and infusing into them a little life and interest.

\* \* \* \*

A man doesn't have to get his head very far above the sea of mediocrity to command wide attention. Nine cases in ten, when a man says that advertising doesn't pay, he has arrived at this conclusion, because he has expected the newspaper to do it all. If he were to neglect his show window and his store front as he neglects his advertising space, he would have still other complaints to make about business in general. If the window were never washed and the display of goods never changed, he would not expect many people to stop and lose themselves in an ecstasy of admiration; and yet he does seem to expect just this sort of thing for an old moss-covered advertisement.

\* \* \* \*

There is nothing magical about advertising. It is one of the tools of trade, just as a chisel is a tool of carpentry. The man who handles the chisel properly can do many useful things with it. If he is careless and awkward he is likely to cut himself.

It's the same way with advertising.

\* \* \* \*

Anyone who looks through the advertising columns of the average newspaper cannot help seeing that much of the money that is paid for advertising in them is wasted.

The money is wasted, not because the space is not good, but because it is not utilized to good advantage. The space is as fertile as the richest bottom land, and it would yield immense crops of business if it were only cultivated properly. There is no use in expecting the impossible. The age of miracles is past. The age of mystery about advertising is rapidly passing. The time is coming when all business men will think of their advertising in the same common-sense way that they think of the rest of their business.

\* \* \* \*

Advertising is amenable to good business rules. The trouble is that people have gotten into the habit of saying that advertising is uncertain—that you cannot tell anything about it, and that it is a very mysterious thing altogether. This sort of talk may be expected from the publishers of various advertising "schemes." It is to their advantage to have advertising to be considered more or less of a gamble, because advertising in such media is a gamble, and a very unsafe one at that. Compared to it, a "bunco" game is an innocent, joyous amusement.

\* \* \* \*

Newspaper advertising is certain if it is properly done. It is as certain as any

other business transaction. Everything in business has to be done right, or it will not pay. Buying advertising is as certain as buying carpets, coffee, or coal. You can lose money in doing either.

\* \* \* \*

I do not think much of the alleged humorous cuts that are used more or less all over the country—the ones which run to puns and "cuteness." They may attract attention, but attracting attention isn't the best an ad can do. A comic cut is not convincing. It does not tell anything or prove anything about the man or the goods advertised.

### Montreal College of Pharmacy.

The closing sessional examinations of the Montreal College of Pharmacy were held on Friday and following days. The results of these examinations will be added to those obtained at the Christmas examinations, and students obtaining the highest marks on the combined examinations will receive the prizes allotted to the different subjects. The preliminary examination for students entering the study of pharmacy took place on Thursday, April 2nd, in the cities of Montreal and Quebec, candidates being required to give notice to the secretary ten days prior to the date of examination. The major and minor examinations will be held on April 14th and following days in the Montreal College of Pharmacy.

### Montreal College of Pharmacy.

The combined session examinations of December and March of students attending the Montreal College of Pharmacy for the session of 1895-96, which closed on March 31st, resulted as follows, the names of the successful students who have passed being given in order of merit, namely:

Botany—J. G. Gillespie, A. Lebeau, W. Frothingham Roach, J. H. Charbonneau, C. M. DuGay, A. P. Fortin.

Materia Medica, French junior class—Henri St. George, P. G. Mount, H. Genereau, J. B. T. Biron, W. Barolet, J. E. P. Lemieux, Louis Fortin, J. V. Murray, A. J. Lapointe, Gaston St. Jacques, C. M. DuGay, T. E. Gagner.

English senior class—W. A. Smallwood, R. J. Lunny, W. Frothingham Roach, D. R. O'Neil, James Frackum.

Chemistry, English junior class—W. A. Smallwood, R. H. D. Benn, and G. H. Voss, equal; F. J. Lemaistre.

Chemistry, French senior class—None of the students in this department obtained the requisite marks to pass.

ALUMINIUM SOLDER.—The following has been recently recommended: Aluminium 1 part, 10 per cent. phos. tin 1 part, zinc 11 parts, tin 29 parts. It is said to fulfil the requirements demanded so perfectly that it is now generally adopted both in this country and Europe.

**"St. AUGUSTINE"**  
Registered at Ottawa.

Our "St. Augustine" (Registered) is the perfect wine for communion or invalids. Your wine merchant can supply you at \$4.50 a case, one dozen quarts. See that you get the genuine article. All good articles counterfeited. See that our name is on label and capsule.

Our "St. Augustine" (Registered), of 1891 vintage, a choice sweet, mild wine, and equal to imported wines at double the price.

**J. S. HAMILTON & CO.**  
BRANTFORD

Sole Agents for Canada for the Pelee Island Wine Company

**A DRUGGIST'S SPECIALTY.**

**Curtis & Son's  
Yankee Brand  
Pure Spruce Gum**

Is meeting with the success  
its high qualities merit.

A TRIAL ORDER SOLICITED.

**CURTIS & SON**  
PORTLAND, ME., U.S.A.

M'COLLOM'S

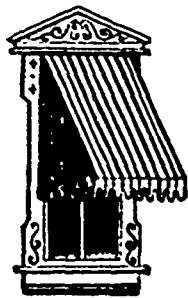
**Rheumatic  
Repellent**

By intrinsic merit has obtained extensive sale in Canada and the United States as the most reliable cure known for rheumatism, as it not only relieves, but also thoroughly removes the cause from the system. It is neatly put up in \$1.00 bottles, taken with good effect on the liver, kidneys and blood, and has been in successful use over twenty years.

Many druggists to whom we are under great obligation express much satisfaction in handling this reliable remedy.

Sold by Wholesale Firms of Montreal, Toronto, Hamilton, London, Winnipeg, and by Retail Druggists generally.

**Awnings**  
AND  
**Window Shades**



FOR  
**HOUSES, OFFICES,  
AND STORES**

Made by experienced workmen, and of the best materials, at prices as low as is consistent with good work and materials.

ESTIMATES FURNISHED.

**Wm. Bartlett,**  
16 Adelaide St. West,  
TORONTO.

**Fine Fruit Tablets**



**ENGLISH FORMULA  
TABLETS**

Have been our specialty and have been a success. Packed in elegant Flint Glass Jars, large glass stopper, the finest package in the Dominion. Also in round jars, similar to English, but made two inches shorter to fit the ordinary shelf. A large variety. List of flavors and prices on application.

**G. J. HAMILTON  
& SONS,**  
PICTOU, N.S.



**Gray's**

**CASTOR-FLUID**  
For the hair.

**DENTAL PEARLINE**  
An excellent antiseptic tooth wash.

**SULPHUR PASTILLES**  
For burning in diphtheritic cases.

**SAPONACEOUS DENTIFRICE**  
An excellent antiseptic dentifrice.

**These Specialties**

All of which have been well advertised, more particularly the "Castor-Fluid," may be obtained at all the wholesale houses at Manufacturer's price.

**HENRY R. GRAY**

ESTABLISHED 1859.

Pharmaceutical Chemist

22 St. Lawrence Main Street

(Cor. of Lagacheiere)

**MONTREAL**

**Levy & Co.**

**Printers**

Druggists' Labels,  
Supplies, etc.

A SPECIALTY.

Toronto, Ont.



**THE UNIVERSAL GRANDALL  
NO. 3**

**Just Out**

WRITING IN SIGHT,  
INTERCHANGEABLE TYPE,  
PERMANENT ALIGNMENT.

THE LATEST IMPROVEMENTS!  
WHAT MORE CAN YOU ASK?

Write for catalogue.

**THE GRAND MACHINE CO.**  
GROTON, N.Y.

**BRAYLEY, SONS & CO.**

Wholesale Patent Medicines

43 and 45 William Street, - MONTREAL.

OUR SPECIALTIES:

**TURKISH DYES.**

**DR. WILSON'S HERBINE BITTERS.**

Sole Proprietors of the following:

- Dow's Sturgeon Oil Liniment
- Gray's Anodyne Liniment
- Dr. Wilson's Antibilious Pills
- Dr. Wilson's Persian Salve
- Dr. Wilson's Itch Ointment
- Dr. Wilson's Sarsaparillian Elixir
- French Magnetic Oil
- Dr. Wilson's Worm Lozenges
- Dr. Wilson's Pulmonary Cherry Balsam
- Dr. Wilson's Cramp and Pain Reliever
- Dr. Wilson's Dead Shot Worm Sticks
- Nurse Wilson's Soothing Syrup
- Clark Derby's Condition Powders
- Wright's Vermifuge
- Robert's Eye Water
- Hurd's Hair Vitalizer
- Dr. Howard's Quinine Wine
- Dr. Howard's Beef, Iron and Wine
- Strong's Summer Cure
- Dr. Howard's Cod Liver Oil Emulsion



JUST PLAIN TOBACCO OF THE HIGHEST GRADE

FLAVOR AND FRAGRANCE UNEQUALLED

FORTIER'S

Cigars and Cigarettes

GIVE BEST OF SATISFACTION AND WILL INCREASE YOUR SALES.

We Sell to most Druggists But we are anxious to Sell to you

WRITE TO-DAY FOR A SAMPLE ORDER

- Lafayette** Cigars and Cigarettes 5 cents
- Creme de la Creme** Cigars and Cigarettes 10 cents
- Royal Turkish** Cigarettes 15 cents
- Sonadora** Cigars and Cigarettes 15 cents

Greme de la Greme Gigar Co. MONTREAL.

"Mist" COUGH LOZENGES

SELL ON SIGHT GOOD PROFIT . .

10cts.

THE KEY MEDICINE COMPANY, 395 YONGE STREET, TORONTO.

"DUNRAVEN" 10c.

"F. & S." 5c.

These are both very high-class Cigars.

Fraser & Stirton, LONDON, Ont. Send for Sample Order.



Show Case Display. Box Davis' Fly Poison Felts 24 packages. 4 Felts in each package. 5c. per package.

FREE To Every Druggist in Canada Till May 1st

WE offer to the trade free till May 1st, One Show Case Display Box, containing twenty 5-cent packages of Davis' Fly Felts, to every purchaser of three boxes, at the reduced price of \$6.75, making \$15 worth of Fly Felts cost but \$5.75.

This is the best special offer we have yet made to the trade. We are prepared for an unusually large demand, but it would be wise to order early. The sale of Davis' Fly Felts has increased very rapidly in all parts of Canada, and is now of great proportions. Order through your regular suppliers; our business is done exclusively through the wholesale trade. If supplier has not our special offer in stock, write us, and we will see you fully supplied. The following well-known and reliable wholesale dealers will be pleased to book orders for special offer:

- Victoria, B.C., Landley & Company.
- London, Ont., J. A. Kennedy & Co.
- London, Ont., London Drug Co.
- Hamilton, J. Winer & Co.
- Toronto, Ont., Northrop & Lyman Co.
- Toronto, Ont., T. Millura & Co.
- Toronto, Ont., Elliot & Co.
- Lyman Bros. & Co.
- Montreal, Que., Lyman Sons & Co.
- Brayley Sons & Co.
- St. John, N.B., T. B. Barker & Son.
- The Canadian Drug Co.

Halifax, N.S., Brown & Webb.

POWELL & DAVIS COMPANY - - CHATHAM, ONT.

Wine of the Extract of Cod Liver

Sold by all first-class Chemists and Druggists

CHEVRIER

General Depot:—PARIS, 21, Faubourg Montmartre, 21

This Wine of the Extract of Cod Liver, prepared by M. CHEVRIER, a first-class Chemist of Paris, possesses at the same time the active principles of Cod Liver Oil and the therapeutic properties of alcoholic preparations. It is valuable to persons whose stomach cannot retain fatty substances. Its effect, like that of Cod Liver Oil, is invaluable in Scrofula, Rickets, Anæmia, Chlorosis, Bronchitis, and all diseases of the Chest.

Wine of the Extract of Cod Liver with Creosote

General Depot:—PARIS, 21, Faubourg Montmartre, 21

CHEVRIER

Sold by all first-class Chemists and Druggists

The beech-tree Creosote checks the destructive work of Pulmonary Consumption, as it diminishes expectoration, strengthens the appetite, reduces the fever, and suppresses perspiration. Its effect, combined with Cod Liver Oil, makes the Wine of the Extract of Cod Liver with Creosote an excellent remedy against pronounced or threatened Consumption.

# Formulary.

## ELIXIR OF SALICYLIC ACID COMPOUND.

The following formula has been recommended by H. W. Preissler, Ph.G., in a paper read before the Kentucky Pharmaceutical Association :

Salicylic acid.....gr.	640
Sodium bicarbonate.....	480
Glycerin.....fl. oz.	4
Water.....	4
Potassium iodide.....g.	256
Fld. ext. cimifuga.....fl. dr.	4
Fld. ext. gelsemium.....	2
Compound spirit orange.....	1
Alcohol.....fl. oz.	4
Syrup.....enough to make	16

## MALTED COD-LIVER OIL EMULSION.

Cod-liver oil.....	8 ounces
Extract of malt.....	8 "
Yolks of eggs.....	two
Tragacanth gum, powdered.....	16 grains
Hot water.....	1 dram
Essence of lemon.....	10 minims
Essence of bitter almond.....	10 "

Weigh the extract in a half-pint graduate and add the warm water to thin it, stirring quickly. Beat up the two yolks in a mortar with the powdered tragacanth and add the oil and extract alternately; lastly, the flavoring essences, which may be varied to suit the taste.

## COMPOUND CHARCOAL POWDER.

The following combinations are in vogue :

	Parts.
1.—Charcoal.....	2
Calcined magnesia.....	2
Bismuth salicylate.....	3
Oil anise.....	1
Teaspoonful just before each meal, or shortly after.	
2.—Charcoal.....	25
Powdered quassia.....	4
Magnesia carbonate.....	4
Teaspoonful several times a day.	
3.—Charcoal.....	4
Calcined magnesia.....	4
Bismuth sub-carbonate.....	1
Powdered anise.....	2
Sodium bicarbonate.....	3
Teaspoonful half an hour after each meal.	
4.—Charcoal.....	5
Powdered peppermint.....	5
Powdered coriander.....	5
Powdered senna.....	1
Teaspoonful shortly after meals.	

—*Southern Journal of Pharmacy.*

## EMULSION OF TURPENTINE.

A writer in the *Apothecary* has recommended the following method :

Oil.....	fl. ʒss
Tragacanth.....	ʒss
Syrup.....	ʒj
Water, enough to make.....	fl. ʒij

## VIAU'S MOUTH WASH.

	Drams.
Salicylic acid.....	1
Chloroform.....	10
Tincture of benzoin.....	10
Tincture of cinnamon.....	10
Alcohol (aromatic).....	130

—*Pharm. Centralth.*

## SOAP POWDER.

	Parts.
Calcined soda.....	1,500
Powdered soap (ordinary washing).....	250
Powdered borax.....	250

—*Druggisten Zeitung.*

## CREAMY EMULSION OF COD-LIVER OIL.

Cod-liver oil, 500 parts; finely sifted sugar, 190 parts; powdered gum acacia, 5 parts; powdered gum tragacanth, 5 parts; infusion of coffee, 200 parts; rum or kirsch, 100 parts (*Méd. Mod.*). Mix the sugar and the gums in a mortar, and in the bottle which is to contain the emulsion shake together the oil and the cold infusion of coffee. Pour sufficient of this liquid into the mortar to make a paste, emulsify thoroughly, add the rum to the liquid remaining in the bottle, and gradually mix with the emulsion in the mortar.—*Pharmaceutical Journal.*

## SODIUM IODIDE IN PILLS.

According to R. van Gool (*Journ. de Pharm. d'Anvers*), sodium iodide can be easily and quickly made into pills by adopting the following formula: Sodium iodide (anhydrous), 4 gm.; powdered sugar, 40 mgm.; distilled water, 1 gm.; starch powder, 60 mgm. Triturate the iodide and sugar together, add the water, then the starch, and incorporate thoroughly. The pasty mass is covered with starch powder, and left awhile, then rolled whilst still soft. They should be dried by rolling them in a slightly warmed capsule, and, finally, sugar-coated.—*Pharmaceutical Journal.*

## FERTILIZER FOR GARDENS.

	Parts.
Ammonium sulphate.....	10
Sodium nitrate.....	15
Ammonium phosphate.....	30
Potassium nitrate.....	45

## FERTILIZER FOR LAWNS.

	Parts.
Potassium nitrate.....	30
Sodium nitrate.....	30
Calcium sulphate.....	30
Calcium superphosphate.....	30

## FERTILIZER FOR FRUIT TREES.

	Parts.
Potassium chloride.....	100
Potassium nitrate.....	500
Potassium phosphate.....	570

This total amount of 1,170 grams to be used for one tree.—*Rev. Chem. Ind.*

## FRENCH BLACKING (JACQUARD'S).

	Parts by Weight.
Freshly calcined animal charcoal.....	750
Muriatic acid.....	250
Treacle.....	1000
Prussian blue.....	30
Indian lake.....	30
Olive oil.....	500
	2,560

Treat the charcoal with the acid, stir in the finely ground Prussian blue and Indian lake, then the olive oil, and finally

the treacle. The olive oil may be replaced by a cheaper one. The blacking made from spent charcoal from sugar refineries goes mouldy.—*Oils, Colors, and Drysalteries.*

## VARNISH FOR VIOLINS, ETC.

	Parts.
Mastic in tears.....	10
Dammar soft white.....	5
Colored turps.....	100
Raw linseed oil.....	5

It is made as follows: A layer of ground glass is placed in a wide-bottomed flask, then the 100 parts of the colored turps, then the mastic, and the two left in contact together for several hours, with frequent shaking. The dammar is then added, which takes another twenty-four hours for solution. In winter each period will require to be extended to thirty hours. The oil is then added, and well incorporated with the varnish by frequent shaking. After standing for another fifteen hours in diffused daylight, the whole is filtered through a cotton cloth. The varnish is greatly improved by keeping from six to eight months before use. The red coloring matters are sandalwood deep (*Calliatour*), dragon's blood; and gamboge for the yellow, mixtures of the three giving any desired tint.—*Oils, Colors, and Drysalteries.*

## A TONIC GLYCERIDE.

The following formula for a quinine and iron tonic will not upset the stomach in dyspeptic conditions :

R. Quinine sulphate.....	2 parts.
Distilled water.....	} Of each a sufficiency.
Diluted sulphuric acid.....	
Liquid ammonia B.P.....	
Lactic acid.....	2 parts.
Calcium lactophosphate.....	6 "
Iron lactate.....	3 "
Hot distilled water.....	12 "
Warm glycerine.....	175 "

Dissolve the quinine sulphate with a sufficiency of the dilute acid and water, precipitate with the ammonia, and wash the precipitate. Dissolve precipitated quinine in the lactic acid and add to the glycerine; proceed to dissolve the iron lactate and calcium lacto-phosphate in the hot distilled water, add to the glycerine, and filter. Each dram contains :

Quinine lactate.....	ʒ gr.
Iron lactate.....	1 gr.
Calcium lactophosphate.....	2½ grs.

The solution is of a bright straw color, with a pleasant, non-metallic, bitter taste, keeps well, and deposits no sediment on standing.

The dose for children under ten is two to three teaspoonfuls daily; for adults the dose is one tablespoonful in water thrice daily, after meals.—*British and Colonial Druggist.*

## FERRUM PEPTONATUM LIQUIDUM.

*The Monit. de la Ph.* gives the following formula for this popular preparation: (1) Five grams of peptone (dry) are dissolved

in a mixture of 50 grams each of glycerin and bitter almond water; to this are added 6 grams of solution of ferric chloride (1.26 sp. gr.) and 25 grams of water. Filter and keep cool.

(2) The "Peptonate de fer Jallet" is obtained by dissolving five grams of dry peptone in 50 grams of water with addition of 12 grams of solution of ferric chloride (1.26 sp. gr.): the precipitate formed is redissolved by the addition of 55 grams of a 10 per cent. solution of ammonium chloride, adding further 75 grams of glycerin, and water sufficient to make 200 cc.

(3) Egg albumen, 10 grams (dry), are dissolved in 150 grams of water, and 0.5 gram of pepsin added. The mixture is allowed to stand 24 hours at 40° C., when 90 grams of liquor ferri oxychlor. (1.047 sp. gr.) are added with 30 grams of syrup and 550 grams of water. The entire mixture is heated to 90° to 95° C. On cooling, 100 grams of alcohol or brandy are added with sufficient water to make 1,000 grams, when, after standing eight days, the clear fluid is drawn off.—*Phar. Era.*

## Photographic Notes

**A HINT FOR AMATEUR PHOTOGRAPHERS.**—The Belgian Photography Association Bulletin gives the following formula for absorbing the yellow-green rays on isochromatic plates, and preventing the "photographic halo" which is the despair of amateurs; the preparations which are usually put on the backs of plates being insufficient:

Collodion, 2 cc., p. 100..	100 grams
Erythrosine.....	0.3 grams
Aurantia .....	0.3 grams
Castor oil.....	2 c.c.

Can be washed off after finishing.

YELLOW screens for iso work may be made, according to M. Leon Vidal, by fixing an unexposed plate, washing well and drying, and then immersing for some minutes in a 1 per cent. solution of picric acid to which sufficient ammonia has been added to make it smell faintly, and then drying.

**PYROCATECHIN AS A DEVELOPER.**—Now that pyrocatechin is being produced on a commercial scale, says a writer in the *Photogram*, it might be worth while to give it a fair trial as a developer. In appearance it is not unlike hydroquinone, and is very soluble in water, alcohol, and ether. In constitution it is isomeric with hydroquinone and resorcin, being the 1,2, or ortho-dioxybenzene. It is said to possess the following advantages as a developer: (1) Pyrocatechin gives the negatives the delicacy of pyrogallie acid. (2) The solution only alters very slowly on exposure to air, its permanency being superior to that of hydroquinone, eikonogen, etc. (3) The color of the negative is very favorable to printing, which

proceeds more rapidly than with other developers. It gives brilliant prints without any hardness. (4) The developer does not fog the plates, nor does it act on the fingers. (5) Its actual price is equal to, if not less than, that of the products actually employed as developers, the same bath being capable of developing a considerable number of plates.

The following are the principal formulas:

### Solution A.

Water.....	1 oz.
Sodium sulphite .....	20 gr.
Pyrocatechin.....	10 "

### Solution B.

Water.....	1 oz.
Potassium carbonate .....	100 gr.

For use in ordinary rapid exposures in a good light take one part A, one part B, one part water. For very under-exposed plates take one part A and two parts B. For plates that have had a timed exposure the following one-solution developer is recommended:

Water .....	2 oz.
Sodium sulphite .....	25 gr.
Sodium carbonate .....	50 "
Pyrocatechin.....	10 "

To bring out contrasts a 2 per cent. solution of boric acid is recommended instead of bromide.

**COLORED BROMIDES.**—The *Bulletin de la Société Française de Photographie* gives the following formulae, which are said to produce prints of all colors. The prints are lightly developed by means of eikonogen, fixed, washed, and placed in a solution of

	Parts.
Nitrate of lead.....	4
Red prussiate of potash.....	6
Water.....	100

which bleaches the image. It may then be toned as follows:

	Parts.
Brown.—Schlippe's salt .....	10
Ammonia.....	5
Water.....	150
Yellow.—Neutral chromate of potash .....	4
Water.....	100
Green.—Perchloride of iron.....	1
Water.....	10
Red.—Chloride of copper.....	1
Water.....	10
Nickel green.—Chloride of nickel.....	1
Water.....	10
Orange.—Bichloride of mercury.....	3
Iodide of potassium.....	4½
Water.....	10

—*Photographic Beacon.*

### BEITZKY'S REDUCER.—

Potassium ferric oxalate.....	150 grains.
Sodium sulphate.....	120 "
Water.....	5 ounces.

Dissolve and add

Oxalic acid.....	10 grains.
------------------	------------

Shake until the solution turns green, then pour off the clear solution and dissolve and add

Hypo.....	100 grains.
Water.....	5 ounces.

This reducer can be used immediately after fixing, or after the negative has been dried. It keeps well, and may be used

over and over until it turns yellow.—*American Journal of Photography.*

### Photographic Silver Residues.

I have often wondered what my brother chemists, those who dabble in photography, do with their residues. Do they allow them to run waste down the sink? Surely not.

No doubt the depreciation of silver, to the extent almost of 50 per cent., has made it for the ordinary amateur and professional scarcely worth the while to save residues, but to the chemist this should not apply. In our case there is no necessity to allow any part of the metal to filter through the hands of the "refiner."

Well, what would you do with them? The answer is simply a statement of fact, that for some years the writer has seldom had occasion to buy argent nit.; that caustic points and sticks of silver nitrate and potassium are not very difficult to make, and that a well-known and saleable specialty such as "marking ink" will absorb the greater part of the supply and afford a profitable channel for its disposal.

My method may be open to objection, as, perhaps, more extravagant than need be; but to avoid several operations I prefer to "fix out" everything containing silver bromide or chloride. Waste printing-out paper and prints, films, dry-plates, and the like, are all fixed in old but not exhausted hypo baths, rinsed in water, rinsings and bath then being emptied into a tub which is devoted to residues.

The precipitations of a 20-gallon tubful of old fixing baths is an easy, but rather malodorous business. Drop in a lot of scrap sheet zinc, which will cause a precipitate of metallic silver to fall; this must be collected on a linen filter, washed and dried. There will be a large amount of sulphur present, which is to be driven off by heat, the remainder being dissolved in nitric acid, or reduced in a crucible with borax. As a rule, it will be sufficient to dissolve the residue in nitric acid, dilute, filter (any gold present will remain as a grayish powder, and should be saved), evaporate and crystallize; dissolve once more, evaporate and recrystallize.

Or, without further preamble, convert the solution of silver nitrate into oxalate by precipitation with oxalate of potash, and we get a salt very suitable for making a really good permanent ink. Other uses will, no doubt, be found for the salt; the main point is, throw nothing away.

Toning baths are not in themselves much worth the saving; unless large quantities are used they may, as a rule, be merely turned into the residue tub. The gray powder filtered out as above, when any quantity has accumulated, should be, after washing, dissolved in nitro-muriatic acids, and converted once more into gold chloride.

In place of the zinc may be used, as more convenient, sulphurated potash.

# THE ALE AND STOUT

OF

## JOHN LABATT

LONDON

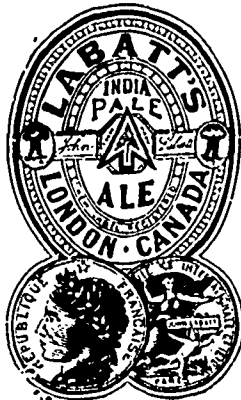
### ARE PURE AND WHOLESOME

Recommended by testimonials  
of Four Eminent Chemists.  
**TEN GOLD, SILVER and  
BRONZE MEDALS.**  
HIGHEST AWARDS on this  
Continent wherever exhibited.

MONTREAL—P. L. N. Beaudry, 127 De-  
Lorimier Avenue.

TORONTO—J. Good & Co., Yonge Street.

ST. JOHN, N.B.—F. Smith, 24 Water Street



# Royal Oil Co.

## Toronto

Offer the following special lines  
to the Drug Trade:

- XX Petrolatum, in 50 lb. tubs, 7c. per lb.
- “ “ in 25 lb. tubs, 7½c. “
- White Petrolatum, in 25 lb. and 50 lb. tubs  
18c. per lb.
- Benzine, 5 gal. tins, 20c. per gal.
- Extra Gasoline, 5 gal. tins, 25c. per gal.
- Sewing Machine Oil, 5 gal. tins, 60c. per gal.
- Sewing Machine Oil, in 2 oz. bottles, \$5.00  
per gross.
- Royal Hoof Ointment, in 1 lb. tins, 24 tins  
to case, \$3.50 per case.
- Raw Linseed Oil, by the barrel, 55c. per  
gal. delivered.
- Raw Linseed Oil, in 5 gal. tins, 58c. per  
gal. f.o.b. Toronto.
- Boiled Linseed Oil, by the barrel, 58c. per  
gal. delivered.
- Boiled Linseed Oil, in 5 gal. tins, 61c. per  
gal. f.o.b. Toronto.
- Pure Neatsfoot Oil, in 5 gal. tins, 90c. per  
gal.
- Olive Oil, Union Salad, 5 gal. tins, 90c.  
per gal.
- Olive Oil, for table, Pure Italian, \$2.00  
per gal.
- Sperm Oil, pure, in 5 gal. tins, \$2 per gal.
- Castor Oil, Calcutta, cases, 6½c. per lb.
- “ “ 5 gal. tins, 7c. per lb.
- “ French, 5 gal. tins, 7½c. per lb.
- Sperm Candles, 36 lbs. to case, 10½c. per lb.
- Paraffine “ “ “ 11½c. per lb.
- Spirits Turpentine, pure, by the barrel, 46c.  
per gal. delivered.
- Spirits Turpentine, pure, in 5 gallon tins,  
49c. per gal. f.o.b. Toronto.
- Wood Jacket, 5 gal. cans, 50c. each.

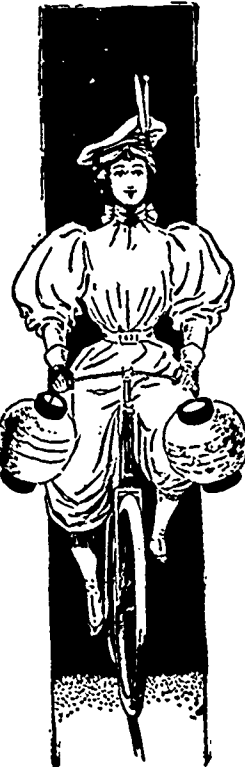
The paper upon which  
this is printed was  
made by . . . . .

**The E. B. EDDY Co.,**  
Limited, of HULL,

Who exclusively  
supply  
this newspaper.

## Are You Satisfied?

**DOES YOUR ADVERTISING PAY  
AS WELL AS IT OUGHT TO PAY?**



You are spending a certain amount of money for advertising, and the space you use costs you just as much whether you fill it with effective matter or with something that is without force.

No business man in America can attend to his own advertising as well as I can attend to it for him, with his assistance and under his direction. When he employs me he is getting the benefit of another brain. It may not be as good as his, but it is trained in one particular direction. It is the brain of a specialist, of a man who has made advertising his life-study and his life-work. If he uses it, he will at least get new ideas; he will get thoughts that come from the outside of his business—from the standpoint of the buying public.

I am thoroughly in earnest about my business. I believe I can be of profitable service to any business man. If he will co-operate with me, I am sure that I can reduce his advertising expenditure more than enough to pay for my services, and at the same time produce better results. That is what I believe. That is what I have done for others.

The following list gives an approximate idea of my charges:

Letter of criticism and advice to retailers, \$10; letter of advice in other lines, \$25; trade paper ads, \$5 each and more; magazine ads, \$5 to \$50 each; illustrated retail ads, 13 for \$20.

Write to me about anything in advertising.

**Charles Austin Bates,**

Plans, Advice, Writing, and Illustrating for Advertisers,  
VANDERBILT BUILDING, NEW YORK CITY.

**WE GUARANTEE PURE GOODS  
WE GUARANTEE PROMPT SHIPMENT  
WE GUARANTEE PERFECT SATIS-  
FACTION**

We are the largest producers and manufac-  
turers of Canadian oil, and the largest im-  
porters of American oil in Canada.

*Your orders will be appreciated.*

**ROYAL OIL COMPANY**  
Toronto  
GEO. ANDERSON *Manager*

... MOST WONDERFUL DISCOVERY OF THE AGE. ...

# Excelsior Egg Preserver

It is no pickle; you simply treat the eggs with **Preserver**. After treating lay them away in a cool, dry place, in a box. The idea is to lay down a supply when eggs are cheap.

The **Preserver**, used according to our directions, will stop all decay of the animal matter of the shell, and, at the same time, seals every pore of the shell, which will keep the yolk in the centre of egg, where it is always found in fresh eggs, as the air cannot escape, nor can it work in, and we guarantee the egg to be as fresh in one year as the day it was treated. It costs less than one cent per dozen to lay them down, and a child can do it, it requires no skill. **Preserver** will be appreciated by all your customers.



FOR SALE BY ALL WHOLESALE DRUGGISTS.

Manufactured by . . . .

Canadian Depot . . .

P.O. Box 93,  
HAMILTON, ONT.

**EXCELSIOR MANUFACTURING CO.,**

6344 CHAMPLAIN AVE.,  
CHICAGO, ILL.

FACT

# DEAD

SURE

## THE POOREST MAN ON EARTH

CAN BE CURED OF

## THE TOBACCO HABIT

BY OUR METHOD

We offer by mail a Remedy that will FREE EVERY SLAVE to Tobacco in ten days

Read the strongest endorsement ever given any remedy, and if you are not fully satisfied write for leaflet containing over 6,000 testimonials.

**UNITED STATES HEALTH REPORTS** (Official Endorsement, June 19, 1895, page 10.)

"In the interest of the masses for whom these Reports are compiled, the United States Health Reports have examined and investigated many preparations having for their object the cure of the tobacco habit, but among them all we have no hesitancy in giving the editorial and official endorsement of these Reports to the remedy known as **Uncle Sam's Tobacco Cure**, manufactured by the Keystone Remedy Co., at 217 LaSalle Street, Chicago. We have demonstrated by personal tests that this antidote positively destroys the taste and desire for tobacco in ten days, leaving the system in a perfectly healthy condition, and the person using the same forever free from the habit.

"In the light of our examinations and tests of **Uncle Sam's Tobacco Cure**, we are but performing a duty we owe the public when we endorse the same, and stamp it as the crowning achievement of the nineteenth century in the way of destroying a habit as disgusting as it is common (for only \$1.00), hence we earnestly advise you to write them for particulars."

**For Sale by all Wholesale Druggists**

A more than sufficient quantity is added to the tubful of liquid, and when the precipitate has formed and settled decant as much of the clear fluid as possible, and add more baths, until the mass of sulphide is worth the further treatment; when this happens scoop it out on to a linen filter, thoroughly drain and dry, and proceed as before.—*D.D., in British and Colonial Druggist.*

### Are They Roentgen Rays?

Years ago, when the writer dabbled somewhat in amateur photography, he observed that, when his plate-holders containing dry plates were exposed to direct sunlight, fogging was the result. It was then supposed that the plate-holders must have been defective; but since the discovery of the new rays by Roentgen, it occurred to the writer that the effects observed may have been due to these rays in the sunlight; so it was determined to subject the matter to the test of experiment. Accordingly, the plate-holder of a Corona camera, whose slides are of hard rubber, and another holder, having a pasteboard slide, were taken for experiments. In one experiment, two copper pennies and a small brass key were fastened to the surface of one of the slides, beneath which was placed an ordinary dry plate, one of Seeds. The margin of the plate-holder was covered with black paper, to guard against the possible fogging by leakage of light, and the holder was exposed for two hours to direct sunlight. On development, there was a very distinct shadow picture of the pennies and key.

Further experiments showed that similar shadow pictures could be taken through two thicknesses of ordinary pasteboard, and through sheets of vulcanized rubber, 1 millimetre in thickness, but opaque to the eye. This was accomplished by means of gas and kerosene light, as well as by sunlight, though, of course, in these cases longer exposure was required than when direct sunlight was employed. Various experiments, however, showed that the rays did not agree in their properties with the "X" rays of Roentgen. They can be reflected and refracted, and they penetrated only with the greatest difficulty a sheet of black paper. They are probably only the ordinary actinic rays, which have a power, heretofore unsuspected, of penetrating certain substances opaque to the visual rays. The facts, however, are of great practical importance to manufacturers and dealers in dry plates, and to those engaged in the photographic art generally.—*Edson S. Bastin, in American Journal of Pharmacy, March, 1896.*

Gallobromol, which was recommended some few years ago by Lapen in neurasthenic conditions in place of the alkalide bromides, is now recommended by Stein in nervous affections of a spastic character as a sedative.

## Business Notices.

As the design of the CANADIAN DRUGGIST is to benefit mutually all interested in the business, we would request all parties ordering goods or making purchases of any description from houses advertising with us to mention in their letter that such advertisement was noticed in the CANADIAN DRUGGIST.

The attention of Druggists and others who may be interested in the articles advertised in this journal is called to the special consideration of the Business Notices.

Have you placed your order for Wilson's Fly Pads?

JAMES W. TUFTS, Boston, Mass., has issued an edition of 125,000 copies of an advance catalogue of soda water fountains, etc. Druggists contemplating the purchase of a fountain can obtain a complete catalogue containing some very elegant designs by dropping a card to the above address.

We are requested to state that the Woodward Medicine Co., whose name appears in the friendly list, represents Celery King only. Another firm of somewhat similar name are not as yet among our friends. Members of the society would do well to distinguish between these two firms, in spite of any representation to the contrary.

MESSRS. POWELL & DAVIS Co., the manufacturers of the well-known Davis Fly Felts, report having booked orders for an immense number of their special offer sets—3 boxes Fly Felts and display box at reduced price of \$6.75, as per their advertisement. It will be well for druggists to send in their orders for special offer at once, as Powell & Davis will discontinue shipping out these special offers on the 20th of April.

In the interest of antiseptic purity and suffering humanity a good tooth brush and Borine applied night and morning afford a greater safeguard against many diseases than many people are aware. In infancy, the painful dentition dependent upon commencing teething with fretfulness and dribbling, or "drooling," a solution of Borine will prove to be soothing and refreshing. In gingivitis or inflamed gums, as a detergent, hardness, and preservative, Borine is of the greatest benefit. Borine will not harm the dentine or injure the most delicate epithelium. It will remove tartar and all acrid accumulations by dissolving, not by bleaching. As it possesses no toxic or irritating qualities, Borine can be used as an internal antiseptic in the treatment of gastro-intestinal troubles, "summer diarrhoea" of children, in doses of ten to twenty drops in a wine glass of water.

Free.

The Powell & Davis Co., Chatham, offer free till May 1st the above shown display, but containing twenty Davis' Fly Felts Packages, free to every druggist in Canada. See advertisement page 80b.

### Sell Only the Best.

Remember that your customers are discriminative, that they appreciate a good article and resent the purchase of a poor one. Nothing is more annoying than to get a sheet of imperfect, sticky fly paper, one that has leaked out at the edges, or one where the sticky has soaked through the paper, or perhaps one that cannot be opened without tearing the paper; flies are preferable.

Don't sell your customers any such if you value their good will; you run no risk selling them tanglefoot.

### Photography.

Those druggists who handle photographic supplies, either for sale to amateurs or professional photographers, or for their own use, are directed to the advertisement of F. A. Mulholland & Co., on second page of cover in this issue. For some time many photo-supply dealers had the impression that to sell these goods to the druggist was antagonizing the regular photographer, but it has been shown that, instead of doing this, it has materially increased the interest taken in photography, and proved a help to the "regular," who can now obtain small quantities of goods, when not justified in sending a large order direct to the dealer.

### Difference in the Action of Pepsin and Pancreatin in Digestion.

Dr. Gombault (*Gaz. des Hop.*) says that extensive experience has proven that pepsin is indicated only in a very small number of cases of indigestion. If there be an insufficiency of ptyalin in the saliva starchy substances will reach the stomach without being digested; pepsin will have no effect on it, while pancreatin completely saccharifies it.

There is, of course, no advantage in giving pepsin in this class of cases. Much better employ pancreatic diastase now that it has been so skillfully prepared by Frederick Stearns & Co., of Windsor, Ont., and offered in the form of a delicious cordial, called essence of diastase Stearns, and in pilloids called diastase Stearns.

### Wine of Cod Liver Oil.

A. B. Griffiths, Ph.D., F.R.S. (Edin.), F.C.S., says: "I have made an examination of Stearns' Wine of Cod Liver Oil with Peptonate of Iron. It is an excellent preparation, and contains the leucomaines, alkaloids, or active principles of cod-liver oil with peptonate of iron. The alkaloids of cod liver oil were first isolated by my friend, Professor Armand Gautier, of Paris; and they are not the products of decomposition, as some writers (who know very little about the animal alkaloids) assert, but occur in the fresh liver of the cod, being produced by living cells—in other words, they are true leucomaines. There is no doubt that the alka-

loids of cod-liver oil are the active principles, as the percentages of iodine and bromine present in the oil are extremely small, and some oils, especially those that are light-colored, contain none of these elements. At most there is but 0.000322 per cent. of iodine present, a quantity which is too small to be of practical benefit. The same may be said of the bromine."

**Responsibility for Untoward Action.**

With the characteristic pithy and trenchant utterance which "hews to the line, letting the chips fall where they may," and which marks all of his sayings, Dr. Frank Kraft, 57 Bell avenue, Cleveland, Ohio, Professor of Materia Medica, Cleveland Medical College, writes: "The professional market seems to be filled with substitutes for the original and ever-favorite antikamnia; all warranted to do what the antikamnia has succeeded, by hard work and expenditure of much money, in establishing; all of these nefarious products masking under some name partly modelled after the antikamnia pattern, beginning with an A, and warranted to still pain, etc., etc., are base imitations of antikamnia. They may be, and perhaps are, coal-tar products, but they cannot take the place of antikamnia; this was the first product, and made a success because of its merit; hence the host of imitators. Insist upon getting the original antikamnia, and caution your druggist that if he practises any substitution you will not only decline further to deal with him, but hold him personally responsible for any untoward action of his substituted remedy."—*Medical Bulletin, Philadelphia.*

**Cod Liver Oil Report.**

From JOH. RYE HOLMBOE, Tromsø, Norway.

February 25th, 1896.

Summary of official statistics up till February 24th:

	Fish caught (thousands)			Cod liver oil (Hecl.)		
	1894	1895	1896	1894	1895	1896
Lofoten	4109	2805	1000	1924	845	270
Winter fish	5554	2365	1317	3574	1170	549
Total	9663	5170	2317	5508	2015	819

Winter fisheries at Vesteraalen and Senjen extremely poor. Fish scarce, weather stormy.

Lofoten: Last report: weather fair, but catch poor.

Southern districts: No fishing commenced.

Condition: No improvement. Quotation cannot be given. My last price for best non-freezing has been 160 sh. If this week does not show a decided improvement at Lofoten, price will exceed 200 sh.

Firm offers wired on demand.

March 3rd, 1896.

Summary of official statistics up till March 2nd:

	Fish caught (thousands)			Cod-liver oil (Hecl.)		
	1894	1895	1896	1894	1895	1896
Lofoten	5200	5000	1200	2713	1061	400
Winter fish	5371	4083	1623	3801	1738	661
Total	10571	9083	2823	6514	2802	1061

Southern districts very poor. Livers getting leaner everywhere.

Lofoten and winter fisheries: Nothing done last week. Weather now fair, and we may look for a better result of this week.

Price gone up above 200 sh. as anticipated. 210 marks freely offered from Hamburg. I am now booking small orders at 205 sh.

March 10th, 1896.

Summary of official statistics up till March 9th:

	Fish caught (thousands)				Cod liver oil (Hecl.)			
	Average	1894	1895	1896	Average	1894	1895	1896
Lofoten	6200	9200	11500	2600	3612	4460	3713	901
Other districts	—	5271	4100	1883	—	0	1785	76
Total	—	14471	15600	4483	—	3612	5498	1630

The figures are now getting alarming. Production of cod-liver oil up till date amounts to one-fifth of 1894 and one-quarter of 1895. Weather has been fair last week, but fish appear to be scarce everywhere and livers very lean.

Market quite excited. No price can be quoted. I doubt there would be sellers to-day at 220 sh. I am prepared to make firm offers by wire binding twenty-four hours. Please state quantity desired when wiring for offers.

**PARTIES DESIRING A DRUG BUSINESS IN**

Southern California will do well to correspond with T. W. LOMB, Druggists Broker, 131 North Union Ave., Los Angeles, California. References: All Wholesale Druggists, Citizens Bank, Broadway Bank, Los Angeles, California, and the California Board of Pharmacy.

**SODA WATER FOUNTAIN FOR SALE.**

TUFT'S outfit, complete and in good order. One counter apparatus with two draft tubes. Four mineral water tubes and twelve syringes; about eight feet high, and one of the handsomest in Canada. Copper generator and two copper cylinders. Ice cream cabinet, and everything complete. Very cheap. Apply R. FERRALL, Galt.

**"Surf" Sea Salt**

is a new 15c. pkg., put up in 1 doz. 5 lb. pkgs. per case. Price, \$1; per gross (12 cases) \$11. Wholesale houses sell it. Pkg. is a new patent cardboard one, and handsomely printed. Sales of first week in Toronto 120 cases. The salt is clear as glass and of a size that dissolves readily. It never gets damp, and contains no dirt or grit. Analyzed 99.98 per cent. pure salt. You can work up a good salt trade if you try. Why not do it?

TORONTO SALT WORKS, Toronto, Importers.

**WANTS, FOR SALE, ETC.**

Advertisements under the head of Business Wanted, Situations Wanted, Situation Vacant, Business for Sale, etc., will be inserted once free of charge. Answers must not be sent in care of this office unless postage stamps are forwarded to re-mail replies.

**SITUATIONS WANTED.**

**SITUATION WANTED AS DRUGGIST'S ASSISTANT.** 3 1/2 years' experience, junior examinations, good dispenser, best of references, salary moderate. Address, D. E. REID, West Huntingdon, Ont.

**DRUGGIST, JUNIOR GRADUATE O.C.P.,** FOUR years' experience, best references. Address, Box 54, Elora.

**FOR ALE.**

**DRUG BUSINESS IN MANITOBA FOR SALE.** A profitable drug and stationery business doing about five thousand a year, in lively town, twelve hundred population, stock twenty-five hundred. Terms \$1,000 cash; balance six and twelve months secured. Dispensing done for three physicians. Prices have never been cut. bona-fide purchaser may make application to the undersigned, but no communications will be considered unless \$1,000 cash is forthcoming. Address, THE MARTIN, BOLT & WYNNER Co., Wholesale Druggists, Winnipeg.

**DRUG BUSINESS FOR SALE IN A PROGRESSIVE town,** good location and stand. For particulars address, "Chemist," care of James A. Kennedy & Co., London, Ont.

**A NICE CLEAN STOCK OF DRUGS AND Stationery.** Invoice about \$1,000. Good opening for beginner. One of the best towns in the North-West Territories. Terms easy. Address, Box 271, Whitewood, Assa., N.W.T.

**BUSINESS WANTED.**

**DRUG BUSINESS WANTED IN LIVE TOWN** in Ontario. All correspondence strictly confidential. Address with particulars, A. F. GLENNON, Box 273, Petrolia, Ont.

**We are offering in lots to Suit Customers, Barrels, Kegs, or Parcels . . .**

- Blue Vitriol Xtal,
- Blue Vitriol Granulated,
- Powdered Hellebore,
- Carbonate of Copper,
- Insect Powder,
- Copperas,
- Moth Camphor — Balls, Blocks, or Powder,
- Paris Green,
- Sulphur Sublimed,
- Sulphur Roll,
- Alum Xtal,
- Alum Powdered.

SEND US YOUR ORDERS.

ASK FOR QUOTATIONS.

**JAMES A. KENNEDY & CO.,**

WHOLESALE DRUGGISTS,

342 Richmond St., - LONDON.



# Ave Maria

The latest Aristocratic, Fascinating Perfume is creating a  
furore in the hearts of American Society.

## Up-to-date Ideas in Perfumes

Pay

**SEND IN YOUR ORDER. EASILY SOLD.**  
**SATISFACTION GUARANTEED.**

One Oz. Glass Str. Bottle, 2 in Box, \$4.80  
" " Screw Top " 1 " " 5.00  
Two " " " " 1 " " 8.00

**NOT SOLD IN BULK**

Send for Catalogue

## Seely Manufacturing Co.

DETROIT, MICH. WINDOR ONT.

### CANADIAN DRUGGIST PRICES CURRENT

Corrected to April 10th, 1896.

The quotations given represent average prices 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.

ALCOHOL, gal.....	\$4 37	\$4 65
Methyl.....	1 90	2 00
ALLSPICE, lb.....	13	15
Pow, dered, lb.....	15	17
ALON oz.....	40	45
ANODYNE, Hoffman's bot., lbs...	50	55
ARROWROOT, Bermuda, lb.....	50	55
St. Vincent, lb.....	15	18
BAL'AM, Fir, lb.....	40	45
Copaiba, lb.....	65	75
Peru, lb.....	3 75	4 00
Tolu, can or less, lb.....	95	1 00
BAK, Barberrry, lb.....	22	25
Bayberry, lb.....	15	18
Buckthorn, lb.....	15	17
Canella, lb.....	15	17
Cascara, Sagrada.....	25	30
Cascarilla, select, lb.....	18	20
Cassa, in mats, lb.....	18	20
Cinchona, red, lb.....	60	65
Powdered, lb.....	65	70
Yellow, lb.....	35	40
Pale, lb.....	40	45
Elm, selected, lb.....	18	20
Ground, lb.....	17	20
Powdered, lb.....	20	25
Hemlock, crushed, lb.....	18	20
Oak, white, crushed lb.....	15	17
Orange peel, bitter, lb.....	15	16
Prickly ash, lb.....	35	40
Sassafras, lb.....	15	16
Soap (quillaya), lb.....	13	15
Wild cherry, lb.....	13	15
BEANS, Calabar, lb.....	45	50
Tonka, lb.....	1 50	2 75
Vanilla, lb.....	8 00	8 50
BERRIES, Cubeb, sifted, lb.....	30	35
powdered, lb.....	35	40
Juniper, lb.....	7	10
Ground, lb.....	12	14
Prickly ash, lb.....	40	45
BUDS, Balm of Gilead, lb.....	55	60
Cassa, lb.....	25	30
BUTTER, Cacao, lb.....	75	80
CAMPHOR, lb.....	85	90
CANTHARIDES, Russian, lb.....	1 40	1 50
Powdered, lb.....	1 50	1 60
CAPSICUM, lb.....	25	30

Powdered, lb.....	\$ 30	35
CARBON, Bisulphide, lb.....	17	18
CARMINE, No. 40, oz.....	40	50
CASTOR, Fibre, lb.....	20 00	20 00
CHALK, French, powdered, lb...	10	12
Precip., see Calcium, lb.....	10	12
Prepared, lb.....	5	6
CHARCOAL, Animal, powd., lb...	4	5
Willow, powdered, lb.....	20	25
CLOVE, lb.....	16	17
Powdered, lb.....	17	18
COCHINEAL, S.G., lb.....	40	45
COLLODION, lb.....	75	80
Cantharidal, lb.....	2 50	2 75
CONFECTION, Senna, lb.....	40	45
Creosote, Wood, lb.....	2 00	2 50
CUTTLEFISH BONE, lb.....	25	30
DENTRINE, lb.....	10	12
DOVER'S POWDER, lb.....	1 50	1 60
ERGOT, Spanish, lb.....	75	80
Powdered, lb.....	90	1 00
Ergotin, Keith's, oz.....	2 00	2 10
EXTRACT, Logwood, bulk, lb....	13	14
Pounds, lb.....	14	17
FLOWERS, Arnica, lb.....	15	20
Calendula, lb.....	55	60
Chamomile, Roman, lb.....	25	30
German, lb.....	40	45
Elder, lb.....	20	22
Lavender, lb.....	12	15
Rose, red, French, lb.....	1 60	2 00
Rosemary, lb.....	25	30
Saffron, American, lb.....	65	70
Spanish, Val'a, oz.....	1 00	1 25
GELATINE, Cooper's, lb.....	75	80
French, white, lb.....	35	40
GLYCERINE, lb.....	22	25
GUARANA, lb.....	200	2 25
Powdered, lb.....	2 25	2 50
GUM ALOES, Cape, lb.....	18	20
Barbadoes, lb.....	30	50
Socotrine, lb.....	65	70
Asafetida, lb.....	40	45
Arabic, 1st, lb.....	65	70
Powdered, lb.....	75	85
Sifted sorts, lb.....	40	45
Sorts, lb.....	25	30
Benzoin, lb.....	50	1 00
Catechu, Black, lb.....	9	20
Gamboge, powdered, lb.....	1 20	1 25
Guaiac, lb.....	50	1 00
Powdered, lb.....	90	95
Kino, true, lb.....	2 00	2 25

Myrrh, lb.....	\$ 45	\$ 48
Powdered, lb.....	55	60
Opium, lb.....	3 80	4 00
Powdered, lb.....	5 50	5 75
Scammony, pure Resin, lb.....	12 50	13 00
Shellac, lb.....	40	45
Bleached, lb.....	45	50
Spruce, true, lb.....	30	35
Tragacanth, flake, 1st, lb.....	75	80
Powdered, lb.....	1 00	1 10
Sorts, lb.....	45	65
Thus, lb.....	5	10
HERB, Althea, lb.....	27	30
Bitterwort, lb.....	36	40
Burdock, lb.....	16	18
Boneset, ozs, lb.....	15	17
Catnip, ozs, lb.....	17	20
Chiretta, lb.....	25	30
Coltsfoot, lb.....	20	38
Feverfew, ozs, lb.....	53	55
Grindelia robusta, lb.....	45	50
Horehound, ozs., lb.....	18	20
Jaborandi, lb.....	45	50
Lemon Balm, lb.....	38	40
Liverwort, German, lb.....	38	40
Lobelia, ozs, lb.....	15	20
Motherwort, ozs., lb.....	20	22
Mullein, German, lb.....	17	20
Pennyroyal, ozs., lb.....	18	20
Peppermint, ozs., lb.....	21	22
Rue, ozs., lb.....	30	35
Sage, ozs., lb.....	18	20
Spearmint, lb.....	21	25
Thyme, ozs., lb.....	18	20
Tansy, ozs., lb.....	15	18
Wormwood, oz.....	20	22
Yerba Santa, lb.....	38	44
HONEY, lb.....	13	15
HOPS, fresh, lb.....	20	25
INDIGO, Madras, lb.....	75	80
INSECT POWDER, lb.....	30	32
ISINGLASS, Brazil, lb.....	2 00	2 10
Russian, true, lb.....	6 00	6 50
LEAF, Aconite, lb.....	25	30
Bay, lb.....	18	20
Belladonna, lb.....	25	30
Buchu, long, lb.....	50	55
Short, lb.....	25	27
Coca, lb.....	35	40
Digitalis, lb.....	15	20
Eucalyptus, lb.....	18	20
Hyoscyamus.....	20	25
Matico, lb.....	70	75



Senna, Alexandria, lb	25	\$ 30
"    Tinnevely, lb	15	25
Stramonium, lb	20	25
Uva Ursi, lb	15	18
LEUCIS, Swedish, doz	1 00	1 10
LICORICE, Solazzi	45	50
"    Pignatelli	35	40
"    Grasso	30	35
"    V & S—Sticks, 6 to 1 lb., per lb.	27	30
"    "    Purity, 100 sticks in box	75	75
"    "    Purity, 200 sticks in box	1 50	1 50
"    "    Acme Pellets, 5 lb. tins	2 00	2 00
"    "    Lozenges, 5 lb. tins	2 00	2 00
"    "    Tar, Licorice, and Tolu, 5 lb. tins	2 00	2 00
LUPULIN, oz.	30	35
LYCOPodium, lb	70	80
MACC, lb.	1 25	1 25
MANNA, lb	1 60	1 75
Moss, Iceland, lb	9	10
"    Irish, lb	12	13
MUSK, Tonquin, oz	46 00	50 00
NUTGALLS, lb.	21	25
"    Powdered, lb.	25	30
NUTMEGS, lb.	1 00	1 10
NUX VOMICA, lb.	10	12
"    Powdered, lb.	25	27
OAKUM, lb.	12	15
OINTMENT, Merc., lb. 1/2 ind 1/2.	70	75
"    Citrine, lb.	45	50
PARALDEHYDE, oz.	20	22
PEPPER, black, lb.	12	13
"    Powdered, lb.	15	16
PRICH, black, lb.	3	4
"    Bergundy, true, lb.	10	12
PLASTER, Calcined, hbl. cash.	25	3 25
"    Adhesive, yd.	12	13
"    Belladonna, lb	65	70
"    Galbanum Comp., lb.	80	85
"    Lead, lb.	25	30
POPPY HEADS, per 100.	1 00	1 10
ROSIN, Common, lb.	2 1/2	3
"    White, lb.	3 1/2	4
RESORCIN, white, oz.	25	30
ROCHELLE SALT, lb.	28	30
ROOF, Aconite, lb.	22	25
"    Althea, cut, lb.	30	35
"    Belladonna, lb.	25	30
"    Blood, lb.	15	16
"    Bitter, lb.	27	30
"    Blackberry, lb.	15	18
"    Burdock, crushed, lb	18	20
"    Calamus, sliced, white, lb	20	25
"    Canada Snake, lb	30	35
"    Cohosh, black, lb.	15	20
"    Colchicum, lb	40	45
"    Columbo, lb.	20	22
"    Powdered, lb.	25	30
"    Cocksfoot, lb	38	40
"    Comfrey, crushed, lb.	20	25
"    Curcuma, powdered, lb.	13	14
"    Dandelion, lb.	15	18
"    Elecampane, lb.	15	20
"    Galangal, lb.	15	18
"    Gelsemium, lb.	22	25
"    Gentian or Genitan, lb.	9	10
"    Ground, lb.	10	12
"    Powdered, lb.	13	15
"    Ginger, African, lb.	18	20
"    Po., lb.	20	22
"    Jamaica, blehd, lb.	27	30
"    Po., lb.	30	35
"    Ginseng, lb.	4 50	4 75
"    Golden Seal, lb.	75	80
"    Gold Thread, lb.	90	95
"    Hellebore, white, powd., lb	12	15
"    Indian Hemp	18	20
"    Ipecac, lb.	1 75	2 00
"    Powdered, lb.	2 00	2 25
"    Jalap, lb.	55	60
"    Powdered, lb.	60	65
"    Kava Kava, lb.	40	90
"    Licorice, lb.	12	15
"    Powdered, lb.	13	15
"    Mandrake, lb.	13	18
"    Masterwort, lb	16	40
"    Orris, Florentine, lb.	30	35
"    Powdered, lb	40	45
"    Pareira Brava, true, lb.	40	45
"    Pink, lb	40	45
"    Parsley, lb.	30	35
"    Pleurisy, lb.	20	25
"    Poke, lb.	15	18

Queen of the Meadow, lb.	\$ 18	\$ 20
Rhatany, lb	20	30
Rhubarb, lb	75	2 50
Sarsaparilla, Hond, lb.	40	45
"    Cut, lb.	50	55
Senega, lb.	55	65
Squill, lb	13	15
Stillingia, lb.	22	25
"    Powdered, lb.	25	27
"    Unicorn, lb.	38	40
Valerian, English, lb. true.	20	25
Virginia, Snake, lb	40	45
Yellow Dock, lb.	15	18
RUM, Bay, gal.	2 50	2 75
"    Essence, lb.	3 00	3 25
SACCHARIN, oz.	1 25	1 50
SEED, Anise, Italian, sifted, lb.	13	15
"    Star, lb.	35	40
"    Burdock, lb.	30	35
"    Canary, bag or less, lb.	5	6
"    Caraway, lb.	10	13
"    Cardamom, lb	1 25	1 50
"    Celery	25	30
"    Colchicum	50	60
"    Coriander, lb.	10	12
"    Cumin, lb.	15	20
"    Fennel, lb.	15	17
"    Fenugreek, powdered, lb.	7	9
"    Flax, cleaned, lb.	3 1/2	4
"    Ground, lb.	4	5
"    Hemp, lb.	5	6
"    Mustard, white, lb.	11	12
"    Powdered, lb	15	20
"    Pumpkin	25	30
"    Quince, lb.	65	70
"    Rape, lb.	8	9
"    Strophanthus, oz.	50	55
"    Worm, lb.	22	25
SEDLITZ MIXTURE, lb.	25	30
SOAP, Castile, Mottled, pure, lb.	10	12
"    White, Conti's, lb.	15	16
"    Powdered, lb	25	40
"    Green (Sapo Viridis), lb.	25	25
SPERMACEIN, lb.	65	70
TURPENTINE, Chian, oz.	75	80
"    Venice, lb	10	12
WAX, White, lb.	50	75
"    Yellow	40	45
WOOD, Guaiac, rasped	5	6
"    Quassia chips, lb.	10	12
"    Red Saunders, ground, lb.	5	6
"    Santal, ground, lb.	5	6

CHEMICALS.

ACID, Acetic, lb.	12	13
"    Glacial, lb	45	50
"    Benzoic, English, oz.	20	25
"    German, oz.	10	12
"    Boracic, lb.	13	14
"    Carbolic Crystals, lb.	28	30
"    Calvert's No. 1, lb	2 10	2 15
"    No. 2, lb.	1 35	1 40
"    Citric, lb.	45	50
"    Gallic, oz.	10	12
"    Hydrobromic, diluted, lb.	30	35
"    Hydrocyanic, diluted, oz. bottles	1 50	1 60
"    Lactic, concentrated, oz.	22	25
"    Muriatic, lb	3	5
"    Chem. pure, lb.	18	20
"    Nitric, lb.	10 1/2	13
"    Chem. pure, lb.	25	30
"    Oleic, purified, lb.	75	80
"    Oxalic, lb.	12	13
"    Phosphoric, glacial, lb.	1 00	1 10
"    Dilute, lb.	13	17
"    Pyrogallic, oz.	30	35
"    Salicylic, white, lb.	1 00	1 10
"    Sulphuric, carboy, lb.	2 1/2	2 1/2
"    Bottles, lb.	5	6
"    Chem. pure, lb.	18	20
"    Tannic, lb.	80	85
"    Tartaric, powdered, lb.	38	40
ACETANILID, lb.	75	80
ACONITINE, grain.	4	5
ALUM, cryst., lb.	1 1/2	3
"    Powdered, lb.	3	4
AMMONIA, Liquor, lb., .880.	10	12
AMMONIUM, Bromide, lb.	80	85
"    Carbonate, lb.	14	15
"    Iodide, oz.	35	40
"    Nitrate, crystals, lb.	40	45
"    Muriate, lb.	12	16

Valerianate, oz.	\$ 55	\$ 60
AMYL, Nitrite, oz.	16	18
ANTHRACIN, oz.	85	00
ANTIKAMINIA	1 30	1 35
ANTIPYRIN, oz.	1 10	1 20
ARISTOL, oz.	1 85	2 00
ARSENIC, Donovan's sol., lb.	25	30
"    Fowler's sol., lb.	10	13
"    Iodide, oz.	50	55
"    White, lb.	6	7
ATROPINE, Sulp. in 1/4 ozs. 80c., oz.	6 00	6 25
BISMUTH, Ammonia-citrate, oz.	35	40
"    Iodide, oz.	50	55
"    Salicylate, oz.	20	25
"    Subcarbonate, lb.	1 80	2 00
"    Subnitrate, lb.	1 50	1 60
BORAX, lb.	7	8
"    Powdered, lb.	8	9
BROMINE, oz.	8	13
CADMIUM, Bromide, oz.	20	25
"    Iodide, oz.	45	50
CAFFEINE, oz.	55	60
"    Citrate, oz.	55	60
CALCIUM, Hypophosphite, lb.	1 50	1 60
"    Iodide, oz.	95	1 00
"    Phosphate, precip., lb.	35	38
"    Sulphide, oz.	5	6
CARIUM, Oxalate, oz.	10	12
CHINIDINE, oz.	15	18
CHLORAL, Hydrate, lb.	1 25	1 30
"    Croton, oz.	75	80
CHLOROFORM, lb.	60	1 90
CINCHONINE, sulphate, oz.	25	30
CINCHONIDINE, Sulph., oz.	15	20
COCAINE, Mur., oz.	5 50	6 50
CODEIA, 1/2 oz.	70	75
COLLODION, lb.	65	70
COPPER, Sulph., (Blue Vitriol) lb.	6	7
"    Iodide, oz.	65	70
COPPERAS, lb.	1	3
DIURETIN, oz.	1 60	1 65
ETHER, Acetic, lb.	75	80
"    Sulphuric, lb.	40	50
EXALGINE, oz.	1 00	1 10
HYOSCYAMINE, Sulp., crystals, gr.	25	30
IODINE, lb.	4 75	5 50
IODIFORM, lb.	6 00	7 00
IODOL, oz.	1 40	1 50
IRON, by Hydrogen	80	85
"    Carbonate, Precip., lb.	15	16
"    Sacch., lb.	30	35
"    Chloride, lb.	45	55
"    Sol., lb.	13	16
"    Citrate, U.S.P., lb.	90	1 00
"    And Ammon., lb.	70	75
"    And Quinine, lb.	1 50	3 00
"    Quin. and Stry., oz.	18	30
"    And Strychnine, oz.	13	15
"    Dialyzed, Solution, lb.	50	55
"    Ferrocyanide, lb.	55	60
"    Hypophosphites, oz.	25	30
"    Iodide, oz.	40	45
"    Syrup, lb.	40	45
"    Lactate, oz.	5	6
"    Pernitrate, solution, lb.	15	16
"    Phosphate scales, lb.	1 25	1 30
"    Sulphate, pure, lb.	7	9
"    Eviscated, lb.	8	10
"    And Potass. Tartrate, lb.	80	85
"    And Ammon Tartrate, lb.	80	85
LEAD, Acetate, white, lb.	13	15
"    Carbonate, lb.	7	8
"    Iodide, oz.	35	40
"    Red, lb.	7	9
LIME, Chlorinated, bulk, lb.	4	5
"    In packages, lb.	6	7
LITHIUM, Bromide, oz.	30	35
"    Carbonate, oz.	30	35
"    Citrate, oz.	25	30
"    Iodide, oz.	50	55
"    Salic ate, oz.	35	40
MAGNESIUM, Calc., lb.	55	60
"    Carbonate, lb.	18	20
"    Citrate, gran., lb.	35	40
"    Sulph. (Epsom salt), lb.	1 1/2	3
MANGANESE, Black Oxide, lb.	5	7
MENTHOL, oz.	55	66
MERCURY, lb.	75	80
"    Ammon (White Precip.)	1 25	1 30
"    Chloride, Corrosive, lb.	85	90
"    Calomel, lb.	1 00	1 10
"    With Chalk, lb.	60	65

March 16th, 1896.  
Production of cod-liver oil up till  
March 15th:

Year.	Lofoten.	Other distr.	Total.
1896	2090	1766	3856
95	6467	2242	8709
94	5360	3960	9320
93	12845		
92	5000		
91	3700		
90	6880		
89	4203	1887—95,	6263
88	9089	hl., against 1896,	
87	2822	2090 hl.	

Reports from the fishing grounds are anything but encouraging. At the outside districts fishing has been pretty fair lately, but the oil works situated there are small, and cannot nearly make up for the enormous deficiency at Lofoten. To-day 225 sh. is nominally quoted, but there are hardly sellers at that price.

If this week does not show a marked change at Lofoten, we may look for enormous prices.

March 23rd, 1896.  
Production of cod liver oil up till  
March 23rd:

Year.	Lofoten.	Other distr.	Total.
1896	3968	2393	6361
95	9149	3037	12186
94	6770	5035	11805
93	15528		
92	6600		
91	8754		
90	12270		
89	5546	1887—95,	9575
88	13520	hl., against 1896,	
87	8044	3968 hl.	

At Lofoten the fishing continues poor. Fish scarce, and the time is now passed when any improvement may be expected.

From Finmarken favorable prospects have been reported, but all the fishermen staying at Lofoten. Very little will be done at Finmarken till after Lent.

The market has been somewhat easier last week. Foreign importers have apparently filled their most urgent demands, and now await the final result of the Lofoten fishery—even at the risk of having to yield to still higher prices later on. Norwegian exporters seem to be quietly looking forward to the market resuming its former firmness, when the actual deficiency shall be generally known.

Kosotoxin, derived from kouso, is described by Leichtewring (*Apoth. Zeit.*) as a yellowish amorphous powder soluble in alcohol, ether, and chloroform. It is a powerful muscle poison, but with little influence on the central nervous system.

## Magazines.

The first magazine article on Cuba appears in the *Peterson Magazine* for April. This article treats the subject of the Cuban Revolution with clearness and comprehension, giving not only an outline of the present campaign, but presenting a great deal of general information concerning the people of the brave little island, combined with personal experiences in Cuba of natives and visitors. The illustrations in this article were made especially for the *Peterson Magazine* in Cuba.

The readers of *The Youth's Companion* have a liberal allowance of the good things appropriate to the season in the Easter number just received. Each week's issue has of late made a surprising display of excellence, and the Easter number is good enough to satisfy the paper's readers for a whole month. The calendar promises, however, that there will be four other issues during April. Felix L. Oswald, M.D., a wide-awake physician who has long studied the tendency of the phenomenal growth of the population in cities, gives "Cities of the Future," a realistic picture of a twentieth century city, in the Easter number of *The Youth's Companion*. Doctor Oswald draws a fair conclusion, stating that the development of this country's population can be calculated as accurately as the drift of clouds and winds by our weather bureau. Myron B. Gibson and Mary E. Mitchell both contribute stories of exceptional quality. Timely and concise editorials, "Justice to Congress," "Belligerent Rights and Neutrality," "Gold Fields, Old and New," and "Current Topics," give the more thoughtful readers of *The Companion* a page of unusual value. Gen. Nelson A. Miles is announced to write an article on "How I Served My Apprenticeship as a Soldier" for the week following the Easter number.

Abraham Lincoln and Robert E. Lee are the subjects of two new and interesting articles in *The Peterson Magazine* for March. The Lincoln matter is contributed by Mr. Frank B. Carpenter, the painter of the celebrated picture, "The Proclamation of Emancipation." The nature of this series of articles and the "Short Life" of Robert E. Lee will be reminiscent, as well as biographical, for both writers were intimately associated with the men whose careers they chronicle. Numerous portraits accompany these articles, and the fact that they are of simultaneous publication in the one magazine render them of noteworthy interest.

For beautiful portraits of prominent people, *The Peterson Magazine* for March excels. "People Talked About," "Among the Players," and "The Musical World," are three departments especially attractive in this respect.

An article on American Art and the National Academy, with reproduction

from famous paintings by native artists, is a feature of *The Peterson Magazine* for March.

The March number of *The Delineator* is called the great spring number, and is especially valuable and interesting because of the early forecast it contains of spring and summer styles and materials for ladies, misses, and children. The first of a series of articles on current events of interest to women, by Mrs. Frederick Rhineland Jones, appears in this number. Mrs. Oliver Bell Bunce contributes an instructive article on perfumes and other toilet preparations; Lucia Gilbert Runkle brings to the discussion of literature as a profession for women the authority of acknowledged celebrity as a writer. "Mam Julie," an amusing and pathetic dialect sketch of southern life, introduces a new writer to readers of this magazine. Other features include the second paper on the care of the teeth, Edna Witherspoon's tea-table chat, Sara Miller Kirby's kindergarten paper, etc.

Subscription price of *The Delineator*, \$1 per year, or 15 cents per single copy. The Delineator Publishing Co. of Toronto, Limited, Toronto, Ont., 33 Richmond street west.

"THE PLEASURES OF OUTDOOR LIFE."—Birds, insects, ferns, mosses, plants, flowers, stars, planets, etc., are all delightfully written about by the most talented writers in *The Observer*, Portland, Conn. This popular magazine has been greatly enlarged and improved, yet the price is only ten cents a single copy, one dollar a year, as heretofore. Young people, as well as old, will be interested in the attractive pages of this magazine. It is a valuable opening to the wonderland of outdoor life, which, strange to say, is unnoticed by the greater part of mankind.

CURRENT HISTORY.—In these days the events and policies of all nations are so interdependent and interlinked that, without a general knowledge of the world's recent history, it is impossible to have a fair appreciation of that of our own land; while, to estimate properly the events of to-day, we must keep in mind what has occurred in the recent past. Those who desire to keep in touch with the progress of the world in every department of human knowledge and affairs can easily do so if they have at hand *Current History*. Four times in each year this publication presents its readers with a remarkably accurate and interesting history of all important incidents in every part of the world. With the present number (4th quarter, 1895) six years of history are completed.

MISS ALCOTT'S LIFE STORY.—Louisa M. Alcott is said to reveal herself in a most interesting way in a number of letters (written to five little girls) which are to appear in the April *Ladies' Home Journal*. These letters were written during the busiest period of Miss Alcott's life, and present a pen picture of the

Iodide, Proto, oz.....	\$ 35	\$ 0	Iodide, oz.....	\$ 40	\$ 43	Geranium, oz.....	\$ 1 75	\$ 1 80			
Bin., oz.....	25	30	Salicylate, lb.....	1 75	1 80	Rose, lb.....	3 20	3 50			
Oxide, Red, lb.....	1 15	1 20	Sulphate, lb.....	2	5	Juniper berries (English), lb...	4 50	5 00			
Pill (Blue Mass), lb.....	70	75	Sulphite, lb.....	8	10	Wood, lb.....	70	75			
MILK SUGAR, powdered, lb...	30	35	SOMNIF, oz.....	85	00	Lavender, Chiris. Fleur, lb...	3 00	3 50			
MORPHINE, Acetate, oz.....	1 05	1 70	SPIRIT NITRE, lb.....	35	65	Garden, lb.....	1 50	1 75			
Muriate, oz.....	1 05	1 70	STRONTIUM, Nitrate, lb.....	18	20	Lemon, lb.....	1 75	1 80			
Sulphate, oz.....	1 75	1 80	STRYCHNINE, crystals, oz.....	80	85	Lemongrass, lb.....	1 50	1 60			
PERLIN, Saccharated, oz.....	35	40	SULFONAL, oz.....	40	42	Mustard, Essential, oz.....	60	65			
PHENACETINE, oz.....	40	42	SULPHUR, Flowers of, lb.....	2 1	4	Neroli, oz.....	4 25	4 50			
PILOCARPINE, Muriate, grain...	35	38	Pure precipitated, lb.....	13	20	Orange, lb.....	2 75	3 00			
PIPERIN, oz.....	1 00	1 10	TARTAR EMEIC, lb.....	50	55	Sweet, lb.....	2 75	3 00			
PHOSPHORUS, lb.....	00	1 10	THYMOI. (Thymic acid), oz.....	55	60	Origanum, lb.....	65	70			
POTASSA, Caustic, white, lb...	60	65	VERATRINE, oz.....	2 00	2 10	Patchouli, oz.....	80	85			
POTASSIUM, Acetate, lb.....	35	40	ZINC, Acetate, lb.....	70	75	Pennyroyal, lb.....	2 50	2 75			
Bicarbonate, lb.....	15	17	Carbonate lb.....	25	30	Peppermint, lb.....	3 00	3 25			
Bichromate, lb.....	14	15	Chloride, granular, oz.....	13	15	Pimento, lb.....	2 00	2 75			
Bitrat (Cream Tart.), lb.....	29	30	Iodide, oz.....	60	65	Rhodium, oz.....	80	85			
Bromide, lb.....	65	70	Oxide, lb.....	13	60	Rose, oz.....	7 50	11 00			
Carbonate, lb.....	12	13	Sulphate, lb.....	9	11	Rosemary, lb.....	70	75			
Chlorate, Eng., lb.....	18	20	Valerianate, oz.....	25	30	Rue, oz.....	25	30			
Powdered, lb.....	20	22	ESSENTIAL OILS.								
Citrate, lb.....	70	75	Oil, Almond, bitter, oz.....	75	80	Sandalwood, lb.....	5 50	7 50			
Cyanide, lb.....	40	50	Sweet, lb.....	50	60	Sassafras, lb.....	75	80			
Hypophosphites, oz.....	10	12	Amber, crude, lb.....	40	45	Savin, lb.....	1 60	1 75			
Iodide, lb.....	4 00	4 10	Rec't, lb.....	60	65	Spear-mint, lb.....	3 75	4 00			
Nitrate, gran, lb.....	8	10	Anise, lb.....	3 00	3 25	Spruce, lb.....	65	70			
Permanganate, lb.....	40	45	Bay, oz.....	50	60	Tansy, lb.....	4 25	4 50			
Prussiate, Red, lb.....	50	55	Bergamot, lb.....	3 75	4 00	Thyme, white, lb.....	1 80	1 90			
Yellow, lb.....	32	35	Cade, lb.....	90	1 00	Wintergreen, lb.....	2 75	3 00			
And Sod. Tartrate, lb.....	25	30	Cajuput, lb.....	1 00	1 70	Wormseed, lb.....	3 50	3 75			
Sulphuret, lb.....	25	30	Capsicum, oz.....	60	65	Wormwood, lb.....	4 25	4 50			
PROPYLAMINE, oz.....	35	46	Caraway, lb.....	2 75	3 00	FIXED OILS.					
QUININE, Sulph, bulk.....	35	38	Cassia, lb.....	3 30	3 50	CASTOR, lb.....	\$	10			
Oz., oz.....	38	42	Cedar.....	55	85	COD LIVER, N.F., gal.....	2 00	2 10			
QUINIDINE, Sulphate, oz., oz..	16	20	Cinnamon, Ceylon, oz.....	2 75	3 00	Norwegian, gal.....	300	3 25			
SALICIN, lb.....	75	4 00	Citronelle, lb.....	80	85	COTTONSEED, gal.....	1 10	1 20			
SANTONIS, oz.....	20	22	Clove, lb.....	1 10	1 20	LARD, gal.....	90	1 00			
SILVER, Nitrate, cryst, oz.....	90	1 00	Copaiba, lb.....	1 75	2 00	LINSEED, boiled, gal.....	62	65			
Fused, oz.....	1 00	1 10	Croton, lb.....	1 50	1 75	Raw, gal.....	60	62			
SODIUM, Acetate, lb.....	30	35	Cubeb, lb.....	2 50	3 00	NEATSFOOT, gal.....	1 20	1 30			
Bicarbonate, kgs., lb.....	2 75	3 00	Cumin, lb.....	5 50	6 00	OLIVE, gal.....	1 20	1 25			
Bromide, lb.....	65	70	Eucalyptus, lb.....	1 50	1 75	Salad, gal.....	2 50	2 60			
Carbonate, lb.....	3	6	Fenne, lb.....	1 60	1 75	PALM, lb.....	12	13			
Hypophosphite, oz.....	10	12									
Hyposulphite, lb.....	3	6									

author drawn by her own master hand. In these she talks with singular frankness of herself, her work, her aims, her home, her spiritual belief, and of the influence that directed her to literature. She never saw any of her five correspondents, but their youthful frankness, intense interest in all her writings, and their love for the author and for the characters of her creations, impelled her to turn aside from her work and cares to find diversion in chats with such eagerly enthusiastic, admiring, and sympathetic friends. Miss Alcott's first letter is dated 1872, and the others were written at intervals up to within a short time of her death.

FRANK LESLIE'S PLEASANT HOURS FOR BOYS AND GIRLS.—The opening chapters of a new serial story by Horatio Alger, jr., are given in the April number of *Frank Leslie's Pleasant Hours for Boys and Girls*. It is called "Gerald's Mission," and was written especially for this bright magazine. A girl's serial, entitled "An American Princess," by Evelyn Raymond, also begins in the April number, which contains several other attractive features. There are short stories by Sophie Swett, William Murray Graydon, Judith Spencer, Lieutenant Thomas H. Wilson, and Lurana W. Sheldon; an interesting paper on the methods of work of Thomas W. Knox, Frances Hodgson Burnett, William O. Stoddard, and Noah

Brooks, in the series, "Favorite Story-writers for Young People," by Frank Lee Farnell; the second paper on "Young People of the White House," by Joanna R. Nicholls; the editor's valuable talks on the new books for boys and girls; several illustrated poems, some prize puzzles, and many pictures. It is altogether an excellent number.

## Drug Reports.

### Canada.

Business during the past month has been much interfered with by severe storms of snow and wind that have paralyzed travel. The cities have suffered temporarily by railroads being blocked, but people in the country will suffer by roads being impassable for some time. Heavy goods have stiffened up in price, and those that are affected by heavy freight will continue until new supplies come forward on the opening of navigation. Blue vitriol promises to be very high, five cents being asked for large quantities already, and the season not near at hand for using it. Paris green still creeps up, and is worth from 17c. to 20c. Insect powder also maintains the advance: pure powder cannot be sold at a profit less than 25c. to 30c. Bismuths

are stiffening. Quinine, opium, and glycerine are gradually increasing in value. The Canadian agent of Roger & Gullet are putting Roger & Gullet perfumes on the rebate plan. Kootenay Cure has been reduced by the makers to \$1 per bottle. Anyone, we understand, can get credit for any in stock from their wholesaler. The retailers, we hear, are acting up to their agreement by insisting on outside dealers shipping goods through wholesalers only. We are glad of this information, as it is necessary in maintaining manufacturers' advertised prices.

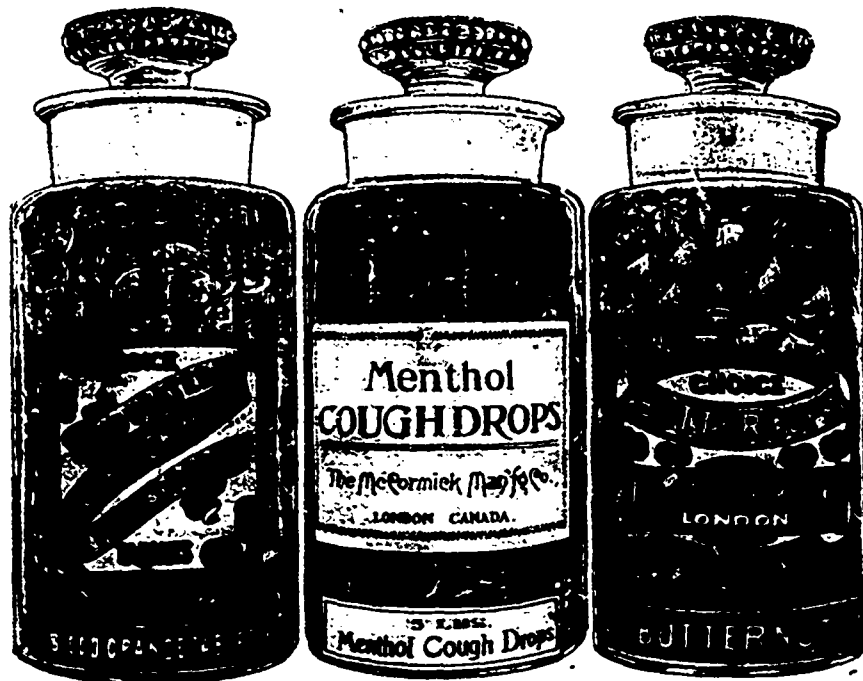
### England.

London, March 27th, 1896.  
There has been some activity in the markets during the past month, although the demand has not been so good as might be expected. Gum arabic has risen considerably on the Sudan campaign. Norwegian cod liver oil is steadily advancing, and Newfoundland oil is following suit. Opium and its alkaloids are appreciably dearer this month. Oils of cassia, aniseed, and caraway are also dearer. There has been a slight decline in jalap, but ipecacuanha is harder. Carbolic, citric, and tartaric acids have all enjoyed distinct advances, but there are signs that prices will soon be giving way somewhat.

**The McCORMICK MANUFACTURING COMPANY (LIMITED)**  
**DRUGGISTS' SPECIALTIES**

**Fruit Tablets**

- Lime Fruit
- Horehound
- Tutti Frutti
- Blood Orange
- Lemon
- Ginger
- Cherry
- Raspberry
- Apricot
- Strawberry
- Acidulated
- Chocolate
- Rose
- Musk
- Pineapple
- Nectarines
- Black Currant
- Pear
- Butter Scotch
- Catawba



**Buttercups**

- Walnut
- Almond
- Filbert
- ...
- Hickory
- Butternut
- Cocanut
- ...
- Pistachio
- Pomegranate
- Smyrna
- ...
- Persico
- Orleans
- Violet

*The Greatest Remedy Known for  
 the Cure of COLDS, HOARSE-  
 NESS, SORE THROAT, Etc.*

**LONDON**

**CANADA**



**"ROUGH ON RATS"**

**THE GREATEST INSECT AND BUG DESTROYER ON EARTH**



**SOLD ALL AROUND THE WORLD.**

Is used by all civilized nations, and is the most extensively advertised and has the largest sale of any article of its kind on the face of the globe.

**CLEARs OUT**

- Rats, Mice, Ants,**
- Hen Lice, Sparrows,**
- Skunks, Squirrels,**
- Weasels, Jack Rabbits,**
- Moles, Gophers, etc.**



**CLEANS OUT**

- Flies, Water Bugs,**
- Roaches, Beetles,**
- Insects, Chipmunks,**
- Moths, Potato Bugs,**
- Gophers, etc.**

*Gone where the Woodbine Twineth.*

"Rough on Rats" pays the retailer 100 per cent., and is the most extensively advertised article in the world. It is now "the" staple with the trade and public in United States, Canada, Mexico, Central and South America, Great Britain, France, Germany, Africa, Australia, India, East and West Indies, etc., etc. Sells the world around.

No loss by breakage or evaporation. Will keep a thousand years in any climate. Always does the work.  
 Lowest prices of its kind. Pays better than any other.

**LOOK OUT FOR  
 IMITATIONS.**



**SEND FOR  
 Advertising Books,  
 Chromos, Music, Etc.**



**E. S. WELLS, CHEMIST, 710-712 Grand St. JERSEY CITY, N.J., U.S.A.**

# Taka - Diastase

## A Powerful Starch-Digestant.

Acts more vigorously on starch than does pepsin  
on proteids.

---

**Pepsin is  
of no value**

In the digestion of starchy foods

For the relief of Amylaceous Dyspepsia

## Taka- Diastase

---

If you will cut out and send in the attached coupon we shall be very glad to forward you by return mail our literature upon the subject, accompanied by REPORTS OF CASES.

---

PARKE, DAVIS & COMPANY,

WALKERVILLE, ONTARIO.

GENTLEMEN:—Please send me detailed information upon Taka-Diastase, with Reports of Cases.

Name.....

Street and No.....

City.....

[Canadian Druggist.]

Province.....