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.


Coloured covers/
Couverture de couleur


Covers damaged/
Couverture endommagée


Covers restored and/or laminated/
Couversure restaurée et/ou pelliculée

$\square$
Cover title missing/
Le titre de couverture manque
$\square$ Coloured maps/
Cartes géographiques en couleurColoured 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 ètait possible. ces pages n'ont pas èté filmées.

Additional comments:/
Commentaires supplémentaires:

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



Vol. VIll.
No. 2.

## Special Lines in

CELLULOID, LEATHER, PLUSH and WOOD, TOILET CASES, MANICURE SETS, NECESSARIES, COLLAR AND CUFF SETS, GLOVE and HDKF. SETS.

Our Siyles are DISTINCTIVE, and can only be obtained
Our Travellers will bo on the road carly.
Don't oruer before secing our good values.

## H.A.Nelson \& Sons

 годокто.in Papeteries
Fine Tablets
and Boxed Papers
with Envelopes to match
BUNTIONERY
HAMILTON, ONT.

The word "TYRIAN " on Rubler Goods is a guarantec of
their quality.
Fairbanks' Fountain Syringe


Under our irade mark "TYRIAN" we manufacture a
ull line of Drugsiss rubber goods. Write for catalogue full line of Druggists' rubber goods. Write for catalogue tYRe rubber so., Andorer, Mass, U.S.A:

## J. WINER \& <br> $\mathrm{CO}^{\prime} Y$,

(ESTABLISMIED 1S3O.)

## Wholesale

Wholemale Schuol Sajplies and Statiuncry next door.

## REMINGTON Typewriter <br> 

## EVANSaSONS

(LIMITED)
43 and 45 St. Jean Baptiste St., MONTREAL.
23 Front Street West, TORONTO.

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

## Wholesale Druggisis . . . AND . . .

MANUFACTURING
PHARMACEUTICAL CHEMISTS
Druggists' Sundries, Proprietary Articles, Etc., etc.

The Largest Importers and Exporters of Drugs in the Dominion.

BVANS SONS \& CO., EYANS, LESCAER \& WEBB, Liverpool, Eng. London, Eng.

## crown Peqfilurg

NEW STYT.ES

FINEST GOODS IN THE MARKET TRY A SMALL LINE

SPONGES
S\%OCA NOU CO.MPLETE
LYMAN, KNOX \& CO.
MONTREAL
TORONTO

## Genuing Antikamnia Preparations

ANTLKAMNIA POWDERED.
ANTIKAMIIA TABIETS,


 LETMEAMIEA anl S.II.OL, T,IBI,ETS,
(2!




These preparations nrag mindagolely by us abd are put up (1) 1-07\%. 1माckikex whly:

NEVEIR IN BUSLS.
Trume sumblledivatl jobhing houses in the Tonlted Stases, Canada, Erftish \& Colonial Depot, 46 Eiolborn Viaduct, London, E. C., Eng.

The Antikamnia Chemical Company,

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

ABSOLUTE PURITY GUARANTEED BY USING
T. \& H. Smith's

CHLORORORM PURE
(Answering all recognized purity tests.)
MORPIIINE and SALTS
And Other Fine Chemien!s.

ERO.1T .ILK HHOLESALEE HOUSES THNOUCHOUT CANADA.
T. \& H. SMITH \& CO.

MANUFACTURING CHEMISTS,
Edinburgh, Scotland, and 12 Warship St., London, England.


## $O^{\text {NTARIO }}$ OPTICAL INSTITUTE

Classes in Optics and Refruction commence on the sccond Tuesday of each month.
The teaching cmbraces evergthing necessary for an optician to intelligently and
The teaching embraces cuersthing necessary for an ophician to intelligeatly and
satisfactorily fit sectarles.

and to hose pascing the examinatinn a hand ome diphma is , resented dratic.
We clatm the only thorough course given in Cannda and at least equal to onvin America.
The Ontario Optical Institute Diploma is always an evidence of the abllity of lis possessor to do hls work propeily.

For fursher information and recommendations from former students apply to
DR. W. E. HAMILL. M.D.,
Room 11, Janes' Bullding Speciallst In Eyo Dlseases KIng and Yongo Sts, TORONTO. PRINCIPAL. Advanced and private stucents received at any time. See announcements in former issues.

# Canadian Druggist <br> Devoted to the interests of the General Drug Trade and to the Advancement of Pharmacy. 

Canadian Druggist

WILLIAM J. DYAS, PUBLISHER.
Subscripion $\$ 1$ per year in alvance. ddvertisin, rates on application.
The Cassabeas Decrocost ivinued un the asth of each month, ind all master for insertion should readh us by the sth or the month
New advertienements or chamsen to be adtressed
Canadian Druggist,
$"^{\prime \prime}$ : Recmsonost. West. TORONTO, ONT.

## EUROPEAN AGENCIES:

fivglavil: Aldermary Hance 60 Wating Street, 1.ondon, E.C.

FRANCE: 5 Rue de la Bourse, Paric.

## CONTEENTS.

Hard Work Well Done.
Inother Free Course in Optics to Subscribers to the Casablan Dregeist.
Stand by the President.
A Ilelp for Advertisers.
'Tharmacy Students' Association.
Wholesalers' Meeting,
The Anerican Pharmaceutical Association Meeting.
O.C.P. Annual Dinner.

Montreal Pharmacy Students' Dimer.
Questions and inswers.
The Water Tree.
Pharmacy in England.
Tkade Nores.
Montreal Notes.
Nova Scotia Notes.
Prince Edward Island Notes.
Manitoba Notes.
Colored Films for Show Carhoys.
Sponges.
The Care of Stock Ointments.
Suppositories of Vegetable Exuracts.
Ontario Society of Retail Druggists.
Prof. Iteebner's Illness.
Artificial Wintergreen Oil.
Embtorial.s.
A Departmental Store Transaction.
Unanmous stetion.
A 'rospect for Optics.
The Ontario College of Pharmacy:
Ahar-Agar as a luase in Glycerine Suppositorics.
fine Science of Ortics
Elementary Anatomy of the Eye.
Montreal College of Iharmacy.
Pharmacentica! Association of the Province of Quchec.
Altar of Roses, or Rose Oil.
Medicine Two Centuries Ago.
Foknllarky.
Motogkarhic Noiks.
A Revolution in lhotography.
Snap Shots and the Hand Canera.
Cassia Oil for Clearing Microscopical Objects.
ADvertising.
Practical liats on Advertising.
Commercial Value of an Easy Temper.
The Estimation of Gijcerine.
phakmacieutical. Notes.
Magazines.
Stearns' Beef Juice.
Business Noticre.
Drug Reports.

TORONTO, I•EBRC゙MRY, 1896.

## Hard Work Well Done.

The Executive Committe of the Ontario Society of Retail 1)ruggists has completed its labors in bringing to a consummation an agreement between the retailers, on the ove hand, and the wholesalers, jobbers, and manufacturers, on the other, and now all that remains is for each to put into effect on the 17 th the promise they have made l'ie point has now been reached, which is to test the faithfulness of the respective parties to the agrecment. The test will be made with no little trepidation as to the outcome. All bave not signed from the ranks of the retailers and manufacturers, but a sufficient $n$ :mber have to enable a fair trial to be made. Of the $55^{\circ}$ retailers who have signed, only one has asked to have his name wihdrawn. There is a dis. tinctly manifest desare on the part of all who have signed to give the agreement a fair trial, and we trust no one will hold back when the day comes. The essence of the whole matter simply resolves itsolf into this: Will each risk a temporary loss in the hope of securing a permanent gain, or will the present unprofiable hasis for conducting trade be continued without any hope of future betterment? The president of the Retailers' Society, Mr. Gibbard, has worked most indefatigably in promoting an agreement. He bas visited, to secure organization, Othawa, Montreal, Quebec, Morrisburg, Iroquois, Prescott, Brockville, Kingston, Whitby, Oshawa, Bowmanville, l’ickering, Berlin, London, Walkerville, and Detroit, while Mr. Pepper visited the principal towns in the Niagara district. Early in January Mr. Gibbard visited Montreal, and held a conference with the members of the Montreal society in the board room of the college. The mecting took up matter, appointed a committee to investigate, and, as an evidence of their desire to co-operate with their Ontario confreres, organized a Quebec society on the fifh of the present month, with Mr. Contant
as president and Mr. Tremble as secretary.

The influence of combined action by druggists in the Provinces of Ontario and Quebec has extended to Bitish Columbia, as the retail druggists, particularly of the city of Vancouver, have taken action on similar lines recently to weed out cuttiag.

The issuance of the agreement recently, calling upon all parties to act at once and together on the 17 th, has drawn the attention of these other provinces to the stability of the druggists of Ontaric, and, as the: will maturally be very much influenced by our success or failure, we are, in a measure, placed upon our menle. Ontario's opportunity to make a record for itself is now here. Failure is bound to discredit us and to cheapen our prosinon. Druggists in cities such as '「oronto, Hamilton, Brantford, Stratford, etc., are bow over their scare. They are willing to be broken one way or another, in so far as dread goes, but their judgment to a man, we beleve, is in favor of making a determined effort to have withJrawn from departmenal stores a section of their trade which is used merely for advertising purposes. This can be done only in one was; and every reader knows what that is by this time; if not, think well over what these agreements mean to the houses which control the commerce of the drug trade throughout Canada, and then pledge yourself to stay with them, as far as your minor interest is concerned, as long as they are willing in return to shield you from a condition of things which has even now sapped the vitals of the weaker members of the trade, and which would ere long, if permitted to continue, utterly dishearten those who, through years of unremitting care and attention, built up lucrative businesses. The circular just issued says." The following is our Friendly List "; then follows names of houses every one of which have as much right to pub. lish your name as their friend. If you act with them in this matter, you are; if
not, you are not. The 1 th decides. D. $n$ 't forget the day; be sure to act.

## Another Free Course in Optics to Sub-

 scribers of the "Canadian Druggist."In our isstle of November we ofered a free course in optics to any druggist, prorided no other druggis: in his town handed optical goods. The interest taken in this study, and the apprecation of the offer made, was evidenced by the number of applications received. As all could not be accommodated at that tume. we have decided to make a similar offer for a class commenemg March gth. The only stipulations ate that the applicant must be a druesist in busmess on bis own accoum ; there must be no other graduate of the Optical Insthte of Canada in the town; and the applicant must be a paid subsectiber to the Cusimas Dect. giv.

No charge whatever is made for the course of instration, the only expense inemg the railway fare and board while m the citg. . Do the number of Canvons bevegiser stments in thas chass is limited to four, application for admission should be made at once.

Tae growing interest taken in the study of optics, and the fact that it is a very desi able and profitable side-line for drug. gints to handle, is our object in giveng these free courses.

## Stand by the President.

Those who know whas kind of a man Mr. Gibbard, president of the Society of Druggists, is know well that, as far as it lies in his pewer to promote its welfare and usefulness to the trade, he will evert it. Comparatucly few are aware of the enormous amount of work he has already performed, or the innumerable vesatious difficulties he has had to contend with. The latter are only limited by the number of perplexing complications arising out of an attempt to harmonize so many trade interests. Mr. Gibbard is to be congratulated on preveming any further serious outhreaks, and upon retaining the influence and support of the wholesale trade.

Whatever may be said of the intentions of patent medicine manufacturers and dealers, there is not the slighiest doubt but that the members of the wholesale druy trade are unitediy desirous of standing by the retailers, notwithstanding any assertions to the contary. They are no
more desirous of provoking a cause of complaint on the part of the retail drug. gists than the latter would be to give offence 'o his best customer. Even if they would like to secure some of the trade which large outside houses would be willing to give them, they dare not do so, as the lessons already taught some of the speciaty houses, whose avarice overcame their discretion, has shown them that while 1 some respects the retal trade is not thoroughly banded, it is surficiently welded together 10 assert its power in any special direction in that manner.

Fear of consequences may not be m theory the best band for binding with, Int in practice it works much like the twents-dollar fine for carrying firearms.

There is bat litte doubt that if the retail drus trade will faithfully fall into lane with Mr. Gibbard to protect the interests of its members much can be accom. plished. If every druggist will int do b.ilf his duty for a period of six months, the results will induce the pe:formance of the other half and extricate the trade from its present macertain and unsatisfactory condition.

## A Help for Advertisers.

There is such an uncommon amount of common sense in the "Practical Hints on Advertising," now being published regularly in this paper, that we ask every subscriber to read and think about them. Advertising is the most important part of every business under the sun. There is no question about that. And still it is the most generaily neglected. No man can do business without letting people know mome way or other that he wants their trade. He can stand on top of his store and swing his arms and yell-that is advertising-but he'd better go about it in a surer way.
There is a best way to to everything. There is a best way to advertise. No one plan will fit all cases. The business ought to fit the advertising, and the advertising fit the business.
The "Practical Hints on Advertising" in this paper are from the pen of Mr. Charles Austin Bates, of New York, a man who has had active, actual experience for many gears in all the different kinds of advertismg. Among advertisers generally, big and litte, be is perbaps as well known as any other man in the United States.

What Mr. Bates has to say is marked by phamess and directness. He tells what he knows rather than what he thinks. He strikes reght out from the shoulder, and whenever he sees a sham he hits it. His talks are thoroughly practical. It is pretty safe to say that no man who faithfully follows Mr. Bates' advice will fail to get better results from his advertising. W'e are going to publish these articles thronghout the year.

## Pharmacy Students' Association.

'The students of the Ontario College of [harmacy hase settled down to work after their Ciristmas holidays, and have the largest class which has ever been in attendance. On January oth an associathon was formed and candidates nominated for the various offices. The elections took place lanuary tath, and were the canse of much excitement and good-natured competition. The results are as .ollows: President. A. E. Cox ; Secretary, Robert Mel.cod; treasurer, J. H. Sutherland.

## Wholesalers' Meeting.

## The regular meeting of the Wholesale

 1)rug and l'ropretary Medicine Dealers' Assocation was held at the Royal Hotel, Hamilton, on Tuesday, January ifth. During the session a deputation from the Itamitoon Recail Drug Association, consisting of A. Vucent, president ; Messrs. R. Brierley, W. T. Arnold. W. A. Howell. Join A. Barr, and C. McCullough, took the opportunizy of paying a friendly visit, with the object of showing the friendliness and sympathy of their association toward the jobbers, in their endeavor to better the interests of pharmacy generally.The Wholesale Association were most hospitably entertained by Messrs. J. Winer \& Co. and Archdale, Wilson \& Co.

## The American Pharmaceutical Association Meeting.

A mecting of the Montreal druygists was held January Sth, to make arrangements for the meeting of the American Pharmaceutical Association, to be held in that city in August. Mr. J. H. Chapman presided. The meeting was addressed by Mr. J. E. Morrison, one of the delegates to the meeting held last year at Denver, Colorado. It was re. solved to form a general committee which would be subdivided into finance, reception, and amusement committees, the pharmacemtical Society of the Province of Quebec, and the members of the Council of the Montreal College of Pharmacy; and the followng will comprise the general committee: F. C. Simson, Halifax : R. Giffiths, Sherbooke ; J. E. KOoy, Qucbec; E. B. Shutheworth, C. F. Heebner, I. Lowden, R. Gifford, J. H. Mackenzie,

## Protonuclein...

Tablets. ( 1003 .grain Tablets in hottle) per dor. $\$ 9.00$ ( 10003 3.rnain Tablets in bottle) . each 675
Powder. ( 1 ő. bottles) . . . . . per do\%. f. 00 ( 8 oz in butte) . . . . . each $5.5^{\circ}$

## REED \& CARNRICK,

30 Wellington St. East, TORONTO.

## Duncan, Flockhart \& Co.'s

## Blaud Pill Capsules

Are soft and flexible Never become hard<br>Never become oxidized Never vary in strength

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

## R. L. GIBSON, <br> 3o Wellington St. East,

TORONTO.


BILLINGS, CLAPP \& CO'S (HOSTON)
SLIPPERY ELM TABLETS

In 5 lb . Glass Front Display Tins 뾰ㄴㅡㅛ
Also In Cartoons of 405 -cent Boxes. SAME PRICE.

## COBB'S

Pine Tar Cough Drops
Stamped C.C.C.
In two stringths, Medium and Strong 40 5-cent Packages for \$1.25


VOLLOR'S
Refined IXL Spruce Gum sso One cent iticks, in tin foit.
Banner Spruce Gum GHIt Edgo Spruce Gum

## Elmendorf's Tar Gum

Souder's Chewing Gums
Manufactured by the Royal Remedy and Everact Co., Dayton, O. Fu:l atue
Tolu Sugar Plums, Sweet Wheat, After Dimuer, Celesy, Depsin, eic.
Restuccia's Pure Cream Salad Olive Oil
in one zallon tins.
WRITE FOR PRICE-LIST.
 38 Eront Street Eunt, Turonto, Ont.


## The Testimony of "The Lancet"

The following is from "The Lancet" of March 30th, 1 S95:
"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 impuruies of any kind. It is, therefore, well adapted for the pharmacentical purpose for which it is so useful, while as a popular demulcent it is both safe and reliable."
liecommended also by "The British Medical Journal," "Health," "The Chemist and Druggist," "Food and Sanitation."

## Wampole's

## BEEF, WINE, AND IRON.

In Pint Bottles $\qquad$ .$\$ 500$ per doz.
Winchester (i: Imp. Gal.).......... 200 each. limp. Gallon, in 5 gal. lots, and over 350 per gal.

With handsome lithographer labels. Buyer's name prominently priuted on same, at the following prices:
$\because$ Gross lots, and over.......... 56000 per gross. (1)acked in Une Disen Cises.)

We use a Pure Sherry Wine in the manufacture of this article, aswang a delicate havor, and we guarantec the quality to be equal to any in the market.

We innte comparison whth other manufacturers, and will cheerfull; furnish samples for that purpose.
Your early orders and enquiries solicited through Wholesale Jobbers or direct from us.

## Henry K. Wampole \& Co., <br> Mianufacturing Pharmacists, Philadelphia, Pa.

Canadan Bramsh.

## DR. HAIIR'S ASTHMA CUREE

| Relief | Cure |
| :--- | :--- |
| Quick | Certain |

Dr. Hair's Asthma Cure is a remedy made according to scientifie knowledge that will cure Asthma. Thousands are pemanemil; cured anmall; by this cure. It is a radical, speedy, and sure cute for all forms of dithma. It is for sale by all the leading wholesale drugensts in the Dominion of Canada, to wit: Lyman Brothers $\mathbb{N}$ Co.; Pvans $\mathbb{N}$ Sons Poronto, Om. ; Lyminn Suns \& Cu., Montreal, Quebec Forsyth, Sutelffe © Co., Malifan, Neva Scotia; I. Winer \& Co., Hamiltun, Ont. ; and 'I'. B. Barker \& Suns, St. John, New Brunswick.

A supply of Dr. Hair's pramphlets, and other Asthma literature, also prices and tems, will be sent to any retail druggist on reguest.

All druggists should keep this remedy.
Your carly orders and enfuries solteited through wholesale elrugesis, or direct from us.

None genuine wathout the trade-mark.
Manuactured only by Dr. 1). W. Hair, Cincinatti, O., US..i. Address,

DR. W. 13. HAITR<br>341 West Fourth St., Cincinnati, 0.

## The Harry Lewis DOG SOAP

$\qquad$


MARK.

Beautifully got up, and a Good Seller
$\qquad$

## Whale Oil Soap

In 1lb.boxes, 1 doz. in Case;
In 20.1b. Pails and Barrels

For killing insects on Rose Bushes, Plants. etc.

THE ALBERTT TOILET SOAP CO., Malicris and Scllers MONTREAJ

## CONFIDENCE

 in the merits of the goods you sell is an important clement of succes..
## 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.

## RUBBER GOODS AT RIGHT PRICES

## OUR LINE OF

ENEMAS. TUBING, FOUNTALNS, ATOMIZERS, is vers complete and prices right. Bujers can effect great sasing ly placing orders with as.

## SURE-SELLING SPECIALTIES:

CARSON'S BITTERS PECTORIA
SILVER CREAM
ALLAN'S COUGH CANDIES \& 2ross lion at si per binx.

## SOAP BARK


Fu?l lines of Sundries.
Mail orders promptly executod
ALLAN \& CO.
132 BAY ST., TORONTO

Toronto; H. Watters, Ottawa; J. E. D'Avignon, Windsor; H. Veomans, Belleville ; and Messrs. Morrison, Webb, Nelson, Anderson, Lecours, Giroux, jr., Macalillan, Decary, Morgan, and Carriere of Mentreal. The druguists of Montreal are to be congratulated on the hearty way in which they are taking hold of the arrangements, and our fellow phamacists from the United States may depend on receiving a royal reception.

## O.C.P. Annual Dinner.

The anmual dinner of the fac:lty and graduating class of the Ontario College of Pharmacy was held at the Walker House, in this city; on Froday evening, February ath. The event was in every way a marked success ; the menu was excellem: speeches full of patriotism and abounding in eloquence, songs that would do credit to any assemblage, and enthusiasm which lasted the entire evening. The only thing to mar the whole event was the absence of the honorary pressdent, I'rof. Charles F. Heebner, dean of the college, who, through illness, had been obliged a few days previously to leave for a sanitarium in New York state. Numerous kindly allusions were made during the evening by several of the speakers to the absence of the dean, and hopes expressed for his speedy recovery. The chair was occupied by A. E. Con, president of the class, having on his left Dr. Graham Chambers, and on his right Mr. J. H. Mackenzie, president of the conncil. The other members of the councal in attendance were Messrs. Watters, of Ottawa, and Daniel, of Toronto. Delegates were presem from the School of Science, Toronto School of Medicine, Torono U University (arts), Trinity, and Royal College of Dental Surgeons, all of whom responded to the toast of the "Sister Institutions." Letters of regret were received from Hon. G. W. Ross, Minister of Education ; lE. Muir, secretary Alontreal College of Pharmacy, and from Messrs. Newion H. Brown, II. A. Karn, J. E. D'Avignon, J. F. Roberts, J. Mckee, J. H. Dickey, J. W. Spackman, A. B. Petrie, and Miss Johnston, class ' 95 . Speeches were made by Messrs. Mackenzie, Daniel, Watters, Cochrane, Dr. Chambers, Dr. liotheringham, and others; and songs by Messrs. Archie McFadyen, IW. J. A. Carmahan, and W. S. McKay. The college cry for the occasion was:
" Ethane, Methanc, O.C.P., Ether, Meter, Pharmacy: Monodelphous, Neucleii," Olein, Stearine, Cetaceii."

## Montreal Pharmacy Students' Dinner.

The ammal dimer of the students and faculty of the Montreal College of Pharmacy was hold at the Richelien Hotel, Feb. $5^{\text {th }}$. The affair was an unqualificd success both in point of attendance, enthusiasm, and the speeches delivered.

About one hundred persons 'eere present, the chair being occupied by Mr. I., A. Genest, with Sir William Hongston on his left and Dr. Reed, president of the college, on the righ. Among the other guests were Major Rogers, Mr. E. Muir, Dr. Watson, A. B. J. Moore. J. E. W. Iacours, and E. Morrison. The toast list was disposed of as follows: Quebec Pharmacentical Association, proposed by Mr. I'. (i Mount, and responded to by Mr. J. Contin: College of Pharmacy, M. Roy, responded to by Prof. Watson, Major Rogers, and Sir William II Ingston; Guests, M. J. B. Biron. responded to by J. Ethier: The press,Mr. E. R. Desrosiers, responded to by the representatives present; The Ladies, Mr. Ed. Thivierge.

In his remarks, Sir William Hingston took occasion te refer to the practice of a mmber of physicians in Canada of prescribing patent medicines for their patients. It was a misiake, and greatly injured pharmacs. The highest standing of pharmacy was maintained in France, because physicians refused to accept things that they virtually knew nothing about, and what patent medicines were offered in the country had to pass a govermment test, which was very severe.
Speeches were also made by Dr. Reed. Mr. D. Watson, Mr. J. Contant, and representatives of sister secieties and the press. letters and telegrams of regret were read by the secretary, Mr. E. G. Moum, from President Williams, H. R. Gray, A. 3 Evans, and !rofessors Bemrose and Pfister. Musical selections, vocal and instrumental, given by Messrs. Fisher and Saucier, and Major Rogers, added very much to the plensure of the evening. Altogether, the reunion of '96 was roted a great success, and the college refrain, as follows, was given with great enthusiasm:

$$
\begin{gathered}
\text { "Mow, here's to our own M. C. P. } \\
\text { Iong life to her professors; ; } \\
\text { Md. may exams. no terrors have, } \\
\text { We'll all get thro in April." } \\
\text { Questions and Answers. }
\end{gathered}
$$

Mcl. asks for a formula for starch gloss:
(1) Spermaceti.................. $\mathbf{2}$ oz.

$$
\text { hlard parafin.................. } 3 \text { or. }
$$

Melt together and perfume, if desired. Cut mto blocks of about 2 drams each, and place one in the boiling starch.
(2) Spermaceti

Gum arabic...................... 1 oz
Glycerine .................... $21 / 2$ oz.

Mix. One ounce is added to each 4 ounces of starch while in boiling water.
A.J.E. For wh te liniment use the "lin. terebinthine aceti:um," as gaven in the National Formulary, or the following, which is known as Stoke's liniment:

[^0]
## Oil of turpentine . . . . . . . . . 5 oz. <br> lose water to make.......... i2 oz.

The turpentine and oil of lemon are mixed gradually with the yolk of egg and a little of the water; then add the acetic acid and balance of the water. Put in a bottle, and shake until thoroughly emulsified.

## The Water Tree.

In all the unwatered regions of Aus. tralia are to be fourd "water trees," trees which actually provide a supply of water to those who know where and how to look for it. The most reliable of the water trees are the water mallers, or group of trees, including the Euculyptus mitro. theca, which form a part of the terrible maller scrub. Outside of these, the corrajong, the desert oak, the bloodwood, and several varcties of the acacia, are water-bearing trees.
A correspondent says: "I shall not soon forget $m y$ first introduction to a water tree. I was in the northern territory of South Australia, and I was making my first journey through the desert in company with a friend, who was a wellinformed bushman. It was towards the end of the day, and as we had been detained for several hours, owing to an accident, we had still fifteen miles to travel. The water bag had been drained hours before, and in that dreadful desert our sufferings had already become intolerable. Suddenly my friend plunged his spurs into his weary horse, and dashed away at full gallop towards a tree some fifty yards off, shouting to me to follow.
"Flinging himself from his saddle, he clawed with his fingers the sand at the base of the tree, and presently laid bare one of its spreading roots. This was torn from the earth to the length of about six feet, and, breaking off a plece about a foot and a half long, my companion, signing me to follow his example, applied one end of the piece of root to his parched lips and elevated the other end. I followed suit, and to my indescribable joy a cool, refreshing draught of water rewarded me. The one root amply sufficed for our wants. There were some ten or eleven left-enough to have satis. fied a dozen thirsty men. Some of the water we drained into our water bags. It was clear and coo', but after standing for a few hours I noticed that it became dis-colored.-Sciente Siftings.

Powdered Campuor, prenared as follows, will not again congl - .erate (Der Pharmaceut): Dissolve camphor in one and a hali parts of alcohol, precipitate by the addition of four parts of water. Collect the precipitate and wash with an abundance of water, and dry. By keeping account of the quantity of camphor used, the quantity left in the diluted alcohol can be calculated, and this solution used for making tincture, etc.

## Pharmacy in England.

More about Arxon-The B. P. Liguors-Cafe Lylark or Poptolilzed Milk nnd Colfeo-pol.on In Fly-pancrs and Weed-killer Anmonia Clcaniny Preparations, a Now'Speclalty.

## (liy Ont Own Consermanden.)

A brilliant audicuce assembled hast weck at the Royal Instituion to hear "More abont irgon," from l.ord Rayleigh, See. R.S. The lecture theate is adinirably adaphed for its purpose, aithough Profesoor Dewar always appears uncomfortably cramped when demonstrat ing. The seats are arranged in the semicarcle of a theatre, and upon the same phan, but the siage is represented alto gether inadequately by a square table in the well. Lord Kayleigh is a clear and concise lecturer, with a good command of hanguage and popahar style. It is rather a curious commemary upon the petty jealousy that so largely pervades in professional circles, tinat every effort has been made to indicate hord kayleigh as the actual discoverer of aryon, and to minian. ire the value of Professor R.mmsay's researches. To his honor, be it said that Lord Raykigh has newer commenanced this viev. and has, on every occasion. indicated that all the real hation of isolating and hientifyons the new element was kamsays: and to him the honor is due. The careful work of the hater chamam has now been thormughly demonstrated he the accepance of argon by continental chemists, and its atomic weigh has been redetermined by Lard Rayleigh by an entirely differem methon to that used by Ramsay, and found to the identical. This practically indicates that arson is not a compumil zas. Auain. by means of the determination of the refractice index, it was found that whiht air is 1.000 , argon is .961, and helam .146. Thim nesatioes the allotropec theory of argon being a condensed form of nimogen. The question still :ystating cine msts is, to what position in the periotict haw is argon to be phaced, and further investigation is still re guired before this can be directly settled.

The anonymous contrihutors to the
 thery work umon the reviston of the peparanons and formule of the li.P. Solutrons are the latent chas dealt with, and some practual suzerenons are made, atthough many are omated. It is recommended that the methoi of prequring sigune amm, fort ine deleied. wilh winch cery piarmache will agree: but nothing is sad about the abourdity of baving a
 commercial figuor is .SSo. Vin!er hagurnanmane atat, the ľ.S.I. meliond is pre ferfect to that of the B. P', and the cexraordinary commem is made that, even when prepared nemral, the B.P. bquer an ato urn alkaluse by aboorption of ammonia from the atmonpiere. The diluted preparations of botio this article and dit ammon. dit. fint. should lie omined. Prachtioners can as easily prescribe one dachan of the suronger solution instead of a drachms of the dilute, and there would often be less confusion. The sug-
gested addition of spirit in order to keep the dilute 并. ammon. cif. is, then, quite unnecessary. Hardly enough stress is haid upon the proneness of hif. alropinar sulph. to encourage cryptoganic growth. and for its prevention cimphor water is quite useless. Like boracic acid, camphor seems often to encourage these growihs in ordinary distilled water. Baperience shows that liy. forre acet. fort. is seldom used, and precipitates on keeping. The stability of dig. indras: pochtar is rarely questioned. and the suspested substimtion of hydrochloric acid for the ammonium chloride is certanly not an improvement. Liif. iodi. is susgested to receive the name of pig ment: but most medical men require the pismem made with glicerine, as more readily absorbed Whilst it is truc that tig. marph. acit. is not often comploved, the objection raised to actate of morphine wonld more suitably apply to the hypotermic injection. The brown coloration and depmsit never occur to any extem in the liquor, whist they speedily do $m$ the injection. It is not commercial wisdo:i to recommend lipuor phtassie to be made by dissolving the required amoum of solid potash in water. All the eapense of evaporating down a hifuner futhesk must be incurred in order to redissolve the solid potash. For catem. poraneons production. such an alternative method might be given.

One of the hasesi dieteric preparations is calie aylath. recembe intoduced by Mesirs. Swory ic Moore. It is a combination of esence of coffee and condensed peponized miik. and will provea boon to thone doppeptics and invalids with impaired digwhie functions who have had to forego calf: hat lati. Special care has been taken to thoroughly preserve the aroma and thetor of the freshly samed coffec, and the pre;amation is very suiderior to many of the condened coffe and milk rompounds. The m.lk emphoved is so we.l pepronied tha on diluting and addias an acial hurdy any curds separate, even when left oo stond for some hours, and yet there is not the remoten taste of imberness, whinh is so nauseous a drawback to the home made pephonized milk. Mesurs. S.nory Moore have evidently a firm belief ta the fature of this article. as they have made harge advertismg contracts, and have renew, d their space in ome of the trate jommals from: which they removed all thear advertiving some few jears apo. Apart from thic, they are sending free amples to all the medical men on the reginer -an evcellem bus expronsive mamer of asuridas that a preparation comes under the direct notice of the very chas who can retommend it.
bureng the hast jear or two the limar. macemical Somely has derelou:d almost a feverish anviesy to sweep all pmions into the net of the qualifed chemist, when for years pasi hey hard winked at many of the practices they are now seck. ing to punish. lby legal mandate we are now to be entrusted with the enormons
and orerwhelming responsibility at tach ing to the sale of flypapers! A little while ago, the consemt of one of Her Majesty's judges was sought in order to confine the sale of arsemcal weed-billers in chemists' hands. 'This, no doubt, is all sery right and proper, and we ought to be extremely grateful; but the ioke of the whole thing is that nine out of every ten drugesists do not want to be bothered with these things at all. The West-end chenaists, who balk so largely on the council, would be the very first to decline to sell these arti:les at all; so that we are face to face with the position of the council practically tusing to prohibit their sale.

It is well-known that several West-end chemists regularly decline to sell oxalic acid and other commercial poisons, because. if an accident should happen, and someone intentisnally or inadveriently, took the poison, a thick-headed jury is just as likely as not to censure the sellers, although they may bave been strictly correct and within the law during the whole transaction. Indeet, a good deal of the cant about our wretched Poisons Act is due to this feeling, that the game is not wortio the candle. But the policy thatseeks to pretem others from selling what one does not care to do oneself is not iikely to commend itedf to our legislature, and the comeil of the society is probably paving the way to having the whole of this prosecution business removed out of their hands. For this some of the councillors would be truly thankful. It is mpleas. amt at the best of times, but more so wien the duty has been neglected for wentyenrs.

Cinder the curious title of "exsol," the Chemists bssociation have introduced an improvement on the well-known clously ammonia cleaning liquid. Exsol is more portable, and, one misht almost say; is a combensed for:a of the popuiar houschoold cleaning ammonia. is is a thick jelly of white appearasece, and containing a large percentage of ammonia. It dissolves or mises readily with water, and is a siseful preparation cither for the hath or fon cleaning purposes seneraily. buat just as somp exiract was a yreat indprovement, in the houscwife's view, over sonp, so a powdered form of this cleansing ammonia would prohably catch on. The carbonate of ammonia would, doubsless, form a gnod basis with the admixture of powdered sompand, possility, some horas. This would form the most portable, condensed, and convenient form of clean-ins: ammonia, and would possess admirable cleaning propersies. Of course, a fancifal name strotid be devised and provected. and then small samples shothd be introduced locally; to see with what faror it is received. If the chemist has already a gond trade for a certain specialig, such as a corn cure, coush misture, cte., he wouid fand it probably good besinese to enclose a free sample of suclia new universal cleanms powder with each packet. li is wonderfill what interest the public take in these free samples, and what good results usually follow.

## Extract Ficus

"E. \& CO."

## Syrup of Figs.

This is not a secret temedy, but comraxiwice. The label bears the plain information that each Buat-onnce contains the active pinciples of 125 grains Aleandria Semma. For this reason the physician is able so preseribe it with exactness.
The thatour of sema is completely dinguised by a delicious cortiai, in which the fist thavour redominates. Namea and griping are overcome.

> SHELF FORM - $\quad \$ 3.75$ per doz.
> 16 Oz. BOITLES - $\quad 65$ cents each.
> $\ddagger$ Gall. BOTTLES - $-\$ 3.25$ each.

## Canadian

 Cattle SpiceMany druggists are in the habit of preparing, or having prepared for them, some kind of CoNDITION yOWDEL.
To meet such reguiremens, we lave selected a thoroughly reliable formata, according to which we manufacture such quantitie: as enable us to vell our product, in phace of private formade, at considetably lower cons.
To create a demand is is sohl meter the above popular tithe, and each shipment is accompanied lif a suphly of adichising matter.

100 POUND COTTON BAGS. 1 QUART CARTONS.
Aok for more "Ads." when required.

Effervescing Hydrobromate of

## Caffeine

## and

Bromide of Potassium "E. \& CO."
What more common than lleadache; Overexcrion (mental or physical), Slecplessnens, etc. ? Inthis preparation we offer an eacellent remedy at a price that ensures a laree demand.
10 cem samples comain 2 wo dooce, and the 25 cert size comains twelve full doses.
l:idence is plemiful that sucecs; ottends its in. troluction, provsional upon some attention to its display:

When received we will isate handsome advertising panels.

## ALL OUR SPECIALTIES ARE REMUNERATIVE.

Manufacturers of
PILLS. FLUID EXTRACTS, ETC., AND PHARMACEUTICAL SPECIALTIES.

Elliot \& Co.
TORONTO

MANUFACTURING
PHARMACEUTICAL CHEMISTS
and drug millers.


One of the very Best and Cheapest Rat Poisons on the Market.

NEATLY PUT UP.
SELLS QUICKLY.

## ARCHDALE WILSON \& CO.



T（）RONTO

| We have al |
| :---: |
| $\begin{aligned} & \text { Hot } \\ & \text { Water } \\ & =\text { Bottles } \end{aligned}$ |

which we are offering to the trace at
Vert Lom figures
We can give you a a worquart 75 cents erch．
Price 2ad ajuarsiay diccom：on

For Sale by all Retail Druggists，and Wholesale by the LONDON DRUG COMPANY．

Trace Mare． T8， Kegineted

## TYPKE \＆KING

 －Ieifres＊＊ $\mathrm{S}_{\mathrm{i} \text { iratc．}}$ St．Mary lice． bonjon，bivi

Hypophospaizes a Specialty

Ammonia Mintatismorati，haternanate
 pharact，atha


## Hypophosphites



III Chemicals for Analytical，Photo－ graphic，anil Pyrotechaical purmiet．
applicasiur．

## ALPHA RUBBER CO．，LTD．

 montreal．casada．Baylis Manufacturing Co ．
16 to 30 Nazareth Street， MONTREAL

IMPONTERS OF
Linssed 0il Turpentine Castor Oil Paris Green Glies

Lyman Bros．Co．
（Limited）

## TORONTO，ONT．

## 

## Lyman＇s

## Lightning Fly－Paper

As manufactured and sold by us for forty years，will be brought out this season in a more convenient shape．It will be put up in Octagon－shaped pieces， 0 pieces in a packet，retailing at so cents，and 3 pieces in a package for 5 cents．
Our travellers will soon have sam－ ples and particulars．
It will pay anyone to see these values before phacing their spring orders for fly papers or pads．

## 潾类桜

WE have been making exter－ sive improvements and al． icrations in our warchouse（now just about finisficd），and，at the same time， keep up our record for prompt ship． ment of orders．Under the circum． stances，we would be ghad if our friends would take a leniem view of any errors that may have occurred during that tince．We hope when alterations are completed to be able to give a more effi－ cient service，and be able to show our large stock of sundries in a way that will be more satisfactory to both our－ sclves and customers．

## Trade Notes.

A Melister has opened a new drug store at Alexandrin, Ont.
R. WV. McCarthy, druggist, St. John, N. 13., has been closed under bill of sate.

G: O. Spencer has purchased the drug business of C. 'l'. Nevins, Moncton, N. 1 l .
G. A. Peaker, druggist, 353 Spradina Avenue, Coronto, has made all assignment.

Mr. Joseph Contant has been elected president of the Chamber of Commerce, Montreal.

Rumor says that department stores are shortly to be opened in liatifax, N.S., and Montreal, Que.

James Kilman, druggist, of Newmarket, Grit., has made an assignment ; linblities about \$5,000.
G. J. Little inas sold his drug business, I2Sg Queen street west, Toromto, Om., to A. D. Deverell.
A. H. Allin, lately with 1. R. l.ec, Tcronto, has purchased the druy business of W. K. House, Whitby, Ont.

Hon. James J. Fellows, F.R.C.S.. the originator of Feilows' Compound Sjaur of Hypophosphites, died in I.ondon, lingland, January 2 and.
D. Gibbard, who formerly represented l.yman, Sons \& Co., in Western Ontario, is now warehouse manager, and $W \mathrm{~K}$. Carmichael takes his place on the road.

The firm of Lyman, Sons \& Co, wholesale druggists, Montreal, has been registered as now consisting of Ilenry Leman, Hemry Herbert Igman, and Irthur l.yman.

Hemming liros. \& Co., 76 York street. Poronto, dealers in drus sumetrics, cte. have gone imo liquidation. The company was incorporated in $1 S_{5} 7$, with a capital stock of $\$ 50,000$.

Mr. Frank Benedict, on leaving Messrs. Lyman, Sons \& Complany, Montreal, to take a position with leeming, Miles $N$ Co., was presented hy his fellow employes with a gold locket as a matk of estecni.

The "A.M.C. Medicine Company;" Montreal, has been incorporated witi a capital of $\$ 30,000$, divided into 300 shares. The incorporators are Messrs. William Lovit Hoge, James Nixon, William Thomas Goff, Joseph Wilered Michaud, and Frederick Goodwin, all of the city of Montreal.

Mr. Hemry Miles, who, at the begiming of the year, severed his commection with the drug firm of Lyman, Sons \& Company, has formed a parthership with Messrs. Thomas lecming \& Company, of New lork. The new firm, which will carry on the business of drugeises' specialies, will be kuown under the name of s.eening, Miles \& Company: Premises have been leased at the comer of De Bresoles and Si. Sulpice streets.

The partnership heretofore existing between Thomas Leening, 'Thomas Gil-
mour, and William B. Gilmour, under the stgle and firm name of 'lhomas leemung ※ Co., Montreal, has leen dissolved. A new partnership has been formed between John J. (iilmour, Thomas Gilmour, and Mr. B. Gilmour, under the firm name of (iimour lios. © Co., and will continue at the oid premises, 25 St . Peter street. This represents in Cimada Johnson \& Johnson, Humphreys' Homeo-Medicine Co., and other Linited States and Eurofean frins.

## Montreal Notes.

'lhe l'harmacy Students' Association gare their anmual dinner on Febtuary sth, at the Richelien Hotei. There was a very large attendance. Mr. Cienest presided with martied abilaty, and proposed the usual logal toasts in good style. At the table of honor we noticed Sir William Hingston, M.I). (who, to his credit be it said, was a drut apprentice in the far-off lifices), Mr. Binenczer Muir, Mr. Hemry Miles, Majur A. Moore, Mrofessors lend, Bemrose, l.ecours, l'fister, and Morrison. lethers of regret at mavoidable absence were read by the etficient secretary, Mr. I'. (i. Mount, from leading pharmacists. The specelnes were recelved with much chut. and a most enjoyable evening was spent.

Mr. Mur, the indefatigable secretary and registrar of the lharmacentical Assochation, has been on a voyage of discovery to the eastern townships by order of the connch, and has net with several cases of conlravention of the Pharmacy Act. He also interviewed the gentleman who persomated another gemteman at the last prelimmary cxamination. Setion at law bas already been commenced in this case, and sereral vithers are on the tapis. In the personation case it is hinted there is somethang much more serious involved.

On dit, Wat Mr. Morrison, Messrs. l.yman, Sons iE Co.'s laboratory chemist, has decided to bring out a ne: drug jo.mal to replace the one recemly issued by Messis. J.yman, Sons \& Co., and which is now, since the dissolution of partnership, published and edited by Mr. Henry Miles. The name of the new journat, accoriing to the fharmarien C. $\quad$ madien, is wo be the Pharmatal Ginzollc.
.Ifropes of phamacentical journals, ate they not already too numerous? Nontreal and loronto now produce five, while the different states of the Union are inereasing their numbers daily. Every wholesale house will soon have its organ, : onu it is presumed will give it away gratis and live on the adrertising patronage. I, ct us hope tian trade rivalries will not find expressmon the editorial columms.

Mr. !.. lachance l:as bought out the Tallorchi lharmacy; cormer of St. Andre and Ontario strects He proposes 10 carry it on as a branch.

Messrs. Kerry; Whatson \& Co.'s ammal siedin ride and supper took phace last week. It was given to the employees of the house, about sixty in number. Nr.

David Watson Jr. presided, and a jolly time was spent. The generosity of this old-established firm was much appreciated.

A meetmg of the retail drugesists was held last Wednesday, under the presidency of Mr. I'remble, to take steps to form a Quebec lrovince Association, to protect its members against the absurd cutting rage, which seems to infect everybody during hard times. Nothing very practical resulted, but it will take very little to bring the mass of the druggists together in an association when required.

## Nova Scotia Notes.

## sidnti, c.l:

Mr. Gordon MacGillvary has returned to his home, feeling well pleased with his success at the Pharmaceutical Examinations.

Messrs. Copeland \& Co., have completed and moved into their new store, which is one of the most convenient and well-appointed stores in the lower provinces.
canso.
Mr. Tupper Fostar is again at his post after some months in Halifas, where he passed successfully the examinations before the Board of l'harmacy.

## angigonish.

Mir. J. D. Copeland is now in his element, as the curling season is on, and all the hours he can spend from his store are deroted to " the roaring game."

NEM Gi,asciow.
(i. 13. Sutherland has sold out his business in New (ilasgow to Dessrs. Grant bros., formerly of Stellarton and Westville. We understand Mr. Suhberland intends going into the manufacture of extracts in the United States. New Glasgow will miss him.

STEIARAKON.
Mr. (i. A. Gram has gone from Stellarton to manage the business formerly carried on iss G. 33. Sulterland in New Glasgow.

Mr. J. H. Kavanag!, of I. W. Jackson N Co., New Glasgow, is now in Halifas, assisting Mr. E. I3. Sutcliffe in his new undertaking

ลMแ1EKST.
Anherst boasts of a first-class Curling Clulb, of which Mr. K. C. Fuller is the populat president.

Thuko.
Mr. ]. 1. Clarke, formerly wath Messrs. Crowe liros., is now in Sherbrooke, in charge of the business of Edmund lenner at that place.

Hns.skai.
Messrs. Vorsythe, Sutcliffe it Bo., of Halifan, have purchased the warchouse forme:ly occupied by Messrs. John Siairs S Co., and are transforming it into a wellappointed wholesale druy warehouse.

At the examinations recently held by the Board of Pharmacy in Halifax; the fol. lowing yassed successfully: A. A. Patterson, Halifax : Eduund F.. L. Jenner,

Sherbrooke ; Gordon MacGillvary; Sydney, C.B. : Tupper Foster. Canso; W. F. Melomad, Hallifas.

Mr. W. A. Simson has been holding a chass in pharmary for the last three months, at the close of which he was presented by the members with atn elegath pencil. All the members of Mr. Simson's class were, as usual, successful.

Mr. Prank C. Simson, of Simson, Bros. © Co., has purchased the Pentagon Building, occapied by his firm for the past six years. Thas site has been the location of a drug store for the past lifty years. The old wooden building was burned thirtyseven years ago, when the present magnificent strueture was erected. This building was formerly occupied as three stores, but Mestrs. Smbim. Bros. it Co. have gradually extended their lousiness until it included the whole of these commodions premises.
mancmans.
Mr. S. S. Weare has now become sole propretor of the Medeal Hall at bindesetown, which has been so well managed by him for the las' two years.

## 1akmotris.

Mr. 1. A. Craigs of larm Juth, has heen mayng his ammal visit to his Cddellows ithronghom the province. John is a curler, too:

## 

Mr. A. S. Huchins is moring into his new brick store on the site fately occuped be the one which was burned ia the rece:t liverpool conflagration.

## Prince Edward Island Notes.

Mr. Hooper, druggist, of Souris, has sold his busiams to Messrs. Kedden Bros., of Charintetown. but will himself manage it for the new proprietors.

Messrs. Johnson $\dot{\text { N Johnson, of Char- }}$ lontetown, are about opename a branch of their drug business in Souris, in a build. ing ofposite the store of Messrs. Mathene, Molecan \& Co. Mr. Ferguson, lately in Messis. Johasons: (ateen :arece store, is the manager of the new branch.

Some of the Charlotterown cirnggists bately made an unsuccessfal attempi 10 arrange for the carly closmen of the drug stores during the winter months.

Mr. Huslices, of the Apothecaries Hall Co., is again a candidate for cove honors.

## Manitoba Notes.

Mr. E. D. Martin, of the Martin, Dole \& Wynace Company, Wunizus, is m De:awia visiting trends. Mrs. Martin and childrear accu:npany him.

Mr. II: .I. Withell, of Toromo, for merly in the wholesale drug lusmess, Winnuses. is pavine the Pratric Province a visit. Mirs. Nitchell accompanics him on this occasion.

Mr. A. 'I'. Andrews, of Gladstonc, was in Winnigng last week, where he was called to attend the funcral of his mother, who passed away suddenly afer an illness of sery short duration.

Rose $\&$ Company; a firm composed of Mr. J. 11. Rose and others, have opened a drug store in the premises lately ocenpled by Mr. J. II. Ruse, Winnipecg.

Dr. J. (. Calder, Medicine Hat,N.W.I., has opened out a drug busituess in the premises hately occupied by his brother, Mr. 1). M. Calder.

Mr. Joseph laytor, of Pontage la Prairic, was in Winnipeg a few days ago on business.

Mr. 1. Wright, representing Messrs. 1.yman, Suns i Co., Montre:il, was in Winnijeg last werek on his way to the coast.

Mr. 1). W. Bole, of the Martin, Bole ※ Wyanc Company, Wimnipeg, left last week for lyallorswille, Mehigan, va Duleth. Mis. Role accompanics him.

The ammal general meeting of the Ihamaceutical Association of Alamoba will tre held on the ghth of february, when the reports of officers and examiners will be received.

The drugists throushout the province report busmess dull atter the holday sea son and during the month of Jamary, and collections slow

## Colored Films for Show Carboys.

> Hy T, Matitiv Cialous.
lerchance my experience has been unfortmate: lat though not get out of my teens in the service of pharmacy, 1 have three wanes been a witness of that officinal catastrople, the breakiace of a shom carboy. The danger to whol these emblems of our craft are exposed, and the care regured in their handing, make them a constam sumece of atovicty. But when fack front's ruhless grip has seized on one of them, and three or four sallons or more of a stronzely colored hequid possessed of the misehrefomatines propeities of, say; ammomosulphate of copper, come showermg down on a well laid out wincosw full of costly stock-intrade, there is at stress of eorcommatances whth wheh the capabilities of the Enalish lansuage are wher $y$ inadequate to cople. It would be a vandals act lo suggest that we do whthout then: ; the semtiment that values a grand histone past, and the bubiness vew wheh uses them as a mark of rade identity in the present, alike demand their retemtion.
lately, however, I had to face the question of sumporing rarboys in a position where it was weil minh moposiblate to provide what would stand a mechanical stress of three-quarters of a handredwersht. Attempts were nade to coat the inside of a carboy with a colored film. which would suit the requirements of windos disphay, My experiences are now given in the hope that some

## - Forlorn and chinwrecied hrother,

ferhaps others have solved the problen for themselves; but I decided to rushinto
print when I saw that a chemist in a neighboring cown was obliged to find remge from his diticulty by keeping ant cmper uncolored carboy in his window.
lierst, solutions of shellac and aniline dyes in meth. lated spirit were tried, but the tendency to chip off was found to be an objection. Next, the dyes were tried. dissolved in spirit, and the solution combined with ether and gun-cotton to make a collodion filu. This was partially successful, but the difficulty was to get the film free from rolls and thicknesses.
lastly, gelatin was adopted as a basis, and after some experiments the following formula was found to work well. for a fivegallon carboy:

> Iniline dje............ grs. sr: 10 sat.
> Wishatin (not opapue)... 1 oz.

Soak the gelatin in water, dissolve the dye in warm water, and next add the softconed gelatin and warm till melted, then add the carbolic acid. When the soluton has cooled to about $150^{\circ} \mathrm{F}$., pour it noto the carloy: llace the carioy in a warm position umil it has arquired a temperature of from $90^{\circ} 10100^{\circ} \mathrm{F}$., and then remove; now keep turning it upside down and round about until the gelatin shows signs of setting, then put it on its stand and allow the jelly not adhering to the sides to settle at the bottom. Leave the stopper out for a few hours. If the lirst atcimpt is not a success, it is only necessary to put the carboy into a warm place and try dian. The process is an casy one, and has been applied to half a doken carlogs with case and success.

As to the colors, the following bave been tried: Malachite green, a gond color to work with, and strikingly' like sulphate of copper solution; about 25 grains to 6 ounces is reguired. The color fades somewhat, so that it is well to make it a trifle dark. Metibylence blue, ${ }^{15}$ srains; a rich color, very like ammonio sulphate of copper. Methyl violet, 15 grains, a rich bluish red; can be macke is mary according to the dye used. Terhnically, K. means red, R.R. redder, K.K.K still redder. The blue shades are similarly indicated by the affix $B$. liamineno gives the nicest red of those I have tried, 15 grains. Browns may be got with Bismarck brown; brownish jellow whth tine same dye in smaller proportion, but the colors are not so striking as those named earlier. Methyl orange is wamtens in brightness and transparency.

Of course, if the window is exposed to sun, the filum must be allowed to harden well before being placed in its position. The cariblicacid or some other preservatwe is required to prevent moulds from liguefving the gelatin. The weight of a sax-gallon cabboy is thas reduced from 70 pounds to $10 \%$ pounds, and the ease in handing and safety when in position are great gains. Nothing is sacrificed in ap. pearance, and if you don't tell anybods nobody will know:-Pharmacentical fournal.

## 3 GOOD SELLERS <br> VELROSE <br> SHAVING CREAM SHAVING STICK BARBER'S BAR



PAY YOU WELL. PLEASE YOUR CUSTOMERS ATTRACTIVE COIJNTER ARTICLES

Otder Sample $\frac{1}{2}$ digen from your wholesale house to cone with neat ordet. We supply Samples for free disuribution wilh first orders.
THOS. LEEMING\&CO.
MONTREAL


The great succese of this Truss in holding with comfort all kinds of hernia, whether alalts, wuthe, or infants, all over Canada, the United Siates, and Eurnpe. is phenom. enal. They have been adopted lyy leadiue hovpitaks, Burfeons, and ruphure givecialins
 physicians and surfeons comprising the stafts of these hospitals, which ranh amons the largest and best in the wurld.

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

## LITTLE S PATENTFLUID <br> YNON-POISONOUS) SHEEP DIP and cattle wash

For the Destruction of Ticks, Lice, Mange, and all Insects apon 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.
"I.itte's Sheep Dip and Cattle Wash" is used at the Dominion Experimental larms at Ottava and Brandon, at the Ontario Industrial Farm. (juelph, and by all the principal Breeders in the Dominion: and is pronounced to be the cheapest and most effective remedy on the market.

25 17 (iold, Silver, and other Prize Medals h:we been awarded to " Little's Sheep and Catte Wash" in all parts of the world.

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

## ROBERT WIGHTMAH, Oruggis, OWEN SOUMD, ONT.

Sole Agent for the Dominion.
To be had from all $w$ whesale druggists in Toronto, Hamiton, and London.


In a test of Disinfectants, untertaker, on behalf of the American Government. "Little's Soluble l'henyle" was proved to be the best Disinfectant, being successfully active at 2 per cent., whilst that which ranked sccond requised 7 per cent., and many Disinfectants, at 50 per cent., proved worthless.
"Linle's Soluble Mhengle" will destroy the infection of al] Fevers and all Contagious and Infections Diseases, and will neutralize any bad sumell whatever, net by disguising it, hut by destroying it.

Uscd in the I ondon and Provincial lospitals and approved of by the Ilighest Sanitary Authorities of the day.

The Phenyle has leen awarded Gold Merials and Diplomas in all parts of the world.

Sold by all Druggists in 25c. and 50c. Botiles, and \$2.00 Tins.
A 2jc. Unttle will make four gallons strongest Disinfectant. Is wanted ly every ?hysician, Houscholder, and Public Institution in the Dominion.

## ROBERT WIGHTMMM, Druggist, OWEN SOUMD,OMT.

Sole Agent for the Dominion.
To be had from all Wholesale Druggists in Montreal, Toronto, Mamilton and London, Ont., and Winnipeg, Man.


## ALL KINDS OF <br> $\square$ CRUDE DRUGS.

## FPEDK CRAF maug FREDK. CRAF, merchant.

 вб FENChurch st., LONDON, e.c.Establiched 1836. Prices and camples on application.

## Fine Fruit Tablets



ENCLISH FORMULA TABLETS
llave been our specialty and have been a success. flacked in clegant flint Glass Jars, large glass stopper, the finest package in per, the finest packige in
the Dominion. slso in round jars, similar to lingtish, hut nade two inches shorter to fit the ordinary shelf. A large variety. list of flavors and prices on application.
G. J. HAMILTON \& SOKS,
PICTOU, N.S.


For sale at Mianufacturers' 'lrices by the leading whole sale Urugsists and druggists' sundrymen throughout Canada.
Complete Illumirniant Price Liat free on Application


Cnumdian Erauch:
6 and 8 Adelnide 8t. WY, Toronto. P. In. WRIGET, Propriofor.

## A DRUGGIST'S SPECIALTY.

## Gurtis Son's

Yankee Brand Pure Spruce Gum

In menting with the nuocess: itw hith qumalition morit.

A TRIAL ORDER SOLICITED.
CURTIS \& SON
PORTLAṄD, ME., U.S.A.

Sponges.
By William B. Durk, Philadelphia, Pa.
The sponges are even now popularly regarded as plants, although for many years naturalists have recognized them as members of the animal kingdom, while the investigations of the past 25 years have shown them to be animals of by no means the lowest type. All of the higher animals, including the sponges, are composed of multitudes of cells, each performing its own part in the economy of the individual, and while reproduction by division is frequent in certain groups, all have recourse to specialized cells or eggs for the perpetuation of the species. On account of these differences, all multicellar animals have been collectively termed metazoa, in contradistinction to the single-celled protozoa. There is here a similar relationship to that which exists between the spore-bearing and the seedbearing plants. In an egg-bearing animal there is a specialization of some of the cells of the tissues and parts to form the male and female reproductive elements, just as in the flowering plant there is a similar specialization of the tissues and leaves to form the male and female products and the organs of reproduction, and as the latter, by the union of the sexual elements, form fertile seeds, so in the metazoa the union of the egg, or female element, with the spermatozoon, or male reproductive product, produces a fertile egg.

## the habitat of sponges.

Sponges are all aquatic, are found in the waters of every part of the globe, and in suitable locations may be exceedingly abundant. Su far as known, they are all sedentary animals, constrained, with few exceptions, to pass all but the earliest stages of their existence fastened to the same submerged object to which they become attached in their early youth. The young possess powers of lucomotion, and can seek out new places of abode, but the adults must remain in one place and take whatever of food or fortune the passing currents may bring them. Thus they can only live and flourish where there are floating clouds of microscopical plants and animals, and their spores. These form their staples of subsistence, and must come to them as the rain comes to the plant. They can use for the reception of food only the upper and lateral surfaces of the body, the lower, attached surface being, of course, unavailable for such purposes. To this rule there are some exceptions. For instance, a sand sponge has no base of attachment, and is apparently capable of living with either side uppermost; there are also some wanderers, 'sponges which have broken away from the liase, and, still living, are rolled about on the bottom. Some of the commercial sponges are said to be tough enough to stand this.
$-R e a d$ before the Pennsylvania Pharmaceutical Asso
ciation.

Among those which live near the shores, and in the varied conditions of the shallow water habitats, there is the strangest diversity. Every change of bottom, every change in the surrounding conditions of the current, or the place to which the larva may become attached, has some effect upon their aspect. Thus in the same species we find flattened sheets, irregular lumps and clumps, and branching, bush-like modifications of each of these in every variety, and, finally, vase like shapes, either imperfect and open on one side, or perfect and not wholly without grace of outline.
If we pass from the varied bottom of the shore line to one of uniform character, whether the mud bottoms of the deeper waters of the ocean or those nearer the shore, or the sandy shallows, where the surroundings and conditions of life are more uniform, we find that the sponges inhabiting these localities are remarkable for greater uniformity of shape within the species.
the physiol.ggy of sponges.
The sponges have thousands of minute cavities within the body devoted to performing the functions of digestion. These cavities receive their food from streams of water, circulating through a double system of tubes, ard fowing in through the narrow meshes of a network formed in the outer covering or skin of the body. With this sieve-like structure there is no use for any particular set of external appendages, and no necessity for any fixed symmetry of form. All that the sponge needs is a capability to adapt itself to its surroundings, and the sole requisite of success in obtaining food is the presentation of as much surface as possible, thus securing a large supply of water and accompanying food. Sucla an organism requires a peculiar skeleton, since the internal tubes and minute stomachs would be liable to compression ty the weight of the soft tissues, after the attainment of a certain size, unless some firmer framework was interposed ; we find in most sponges such a supporting skeleton. In some cases this framework is formed by a woren mass of elastic threads, of a horny nature; in others the framework is composed partly of such threads and partly of stiff and unelastic spicules which may be calcareous or siliceous, or, in still other cases, of a network of spicules, united by only a small material of horny or siliceous material.

The same principle of construction runs throughout the whole of the porifera; the skelctons are really networks of scaffolds of spicules, or of threads permeating all parts of the body, in order to support the whole mass and keep open not only the digestive ampulle, but also the numerous tubes for supply and drainage. A skeleton is not, however, an absolute essential in all the nembers of any branch of the animal kingdom; thus there are sponges entirely destitute of spicules or threads, but these are mostly flattened or small vase-like forms, in which the weight is
small in proportion to the strength of the tissues.

## Characteristics of commercial sPONGES.

In the commercial sponges the skeleton is an intricate mass of interwoven clastic, horny threads, as may be seen by slicing one through the middle. This network is permeated by numberless tubes, but these can be reduced into two systems, one leading from the interior outward and the other leading from the external surface toward the interior. The first or internal system is composed of several large trunk tubes, largest exteriorly, but branching and tecoming smaller as we approach the interior. The outer surface of the sponge is ornamented with projecting bunches or ridges of threads. Between these projections there are numerous depressions, the bottoms of which are perforated by openings of medium size, which we can follow as tubes leading into the interior by examination of the cut surface of the section.
These are the tubes of the external system. They often terminate abruptly, but here and there are divided into branches, and we can see that they really diminish in size toward the interior. Not infrequently these tubes may be traced directly into the trunks of the internal system, but in this case their walls are thickly set with the openings of small tubules which lead into systems of tubes diminishing in size internally, and, therefore, belonging to the external system. The dried skeleton looks as if there was no room for fleshy material between the meshes, but the increase in size upon wetting a sponge shows that when in the natural element, and fully expanded, there is plenty of room between the threads for all the organs we have to describe. These sieve-like openings, the superficial hollows, and supply system act as feeders, bringing water loaded with nutriment to the ampullæ or digestive sacs. After digestion, the refuse is passed out of the ampulle into the internal system and thence into the large central trunks, which finally open on the outside of the sponge in large crater-like orifices. In some sponges these two systems of canals are not distinguishable, and there is but one outlet to the ampulle.

THE SKELETON.
One of the most interesting points to the naturalist lies in the history of the skeleton and its elements. This consists of two parts-the thread of binding substance of horn or keratode and the hard mineralized spicule. The form of spicules varies greatly, and affords good systematic characters. Some are pointed at one end, some have both extremities acute, while others may terminate at one or both ends like anchors. They may be smooth or variously knobbed and ornamented. We cannot hope to disentangle the intri. cate relations of the parts in such confused structures as the sponges without studying the history of their development. The
young can always be relied upon to present the observer with simpler or more elementary conditions, and generally help us materially in understanding and translating the adult structures.

## PROCREATION OF SPONGES.

As we have said, the male and female elenents are found within the sponge. After fertilization, the egg undergoes a regular segmentation, and then the two ends of the body become distinguishable, one being composed of smaller cells than the other. These young harwe swim rapidly through the water by means of the cilia, or small hairs, which clothe the exterior, and which can be moved like so many oars, with force and rapidity, at the will of the tiny animal. The smatler end in the lariz of the catcarcous sponge is foremost as the little creature moves aim. lessly about. When it encounters any obsiacle it usually exinibits no ability to back off, but manages, by keepug its cilia in constant motion, to get away hy rolling around the obstruction. At last the embryo settles down, with its mouth below, upon the space to which it is to become attached. The membranes at this end form a sort of sucker, which spreads itself out and enables the animal to exclude the water between it and the surface to which it is being applied. The pressure of the water holds the sponge in its place, and on some smooth spots this may continue to he its only anchorage, but in rougher situations it maturally acquires additional hold by srowing into any cavities or around any projections. On soft, muddy ground, fresh water sponges usually grow upon some small substance, which often is very small, and then the weight of the growing sponge may sink a portion of the stalk into the mud below. This portion then dies, but even when dead it plays its part, and forms an anchor for the whole structure. We cannot imagine an ordinary sponge growing upon a muddy surface unless the water was absolutely still or the mud hard; ctherwise the tiny creature would be suffocated by the sediment. The deep water mud sponges of the sea have, however, grown so long on soft bottoms that they developed a system of threads which, protruding below, penetrate deeply into the mud, and may either serve as anchors or bases of support. The most curious case of this kind occurs in the globular formed sponge, in which the threads form a network below, inclosing small stones and gravel. Thus the animal carries ballast, and, turned bottom up in the water it rights itself immediately. When rolled over by the waves upon the muddy bottoms of Buzzard's Bay, where it occurs, it is always sure to end its gyrations right side up, like a bit of leaded pith.

The spongine are characterized by having the fibers of the skeleton solid, but in places where the water is filled with foating matter they usually have a core of foreign material, a fact which we have previously mentioned. The marketable kind are all of one genus, spongia,
that from which all sponges derive theor common mame. There are only six species, with, however, numerons varreties, which are offered for sale; and, in fact, these may be reduced to three species if one so chooses. Three of the species are from the Mediterramean and the Red Sea, and there from the Jahamas and Florida. Other species of this genus have a very general distribution, but they are all confined to equatorial and temperate zones within an area on either side of the equa. tor, which is limited by the average tem. perature for January of 50 degrees $1:$. The matketable sponges owe their excollence to the closeness, fincoess and resiaithey of the interwoven tibers of the skele:on. The Mediterranean appears to be particulary fayorable to the production of specimens with skeletons possessing those desirable qualities in the greatest perfection. Those from the Red Sea are nexi in ank, while those of our own shores, though corresponding species to species with these and the Mediterrancan forms, are coarser and less durable.. Ameriarn Drunsvist.

## The Care of Stock-Ointments.*

## B. Frane T. Grebs, Pug., San Francico.

If ever there was a subject honeycombed by the pen-scratches of pharmaceutical writers, it is this same one-ointments. When we consider that there are twenty-thrce official ointmen:is, besides sis ceratcs which are of kin , it would seem that so few in the matter of stock could be easily handled. But two ointments are required to be freshly made, yet it is advisable to have as many as pos. sible to be extemporaneously prepared.

To name the list of proposed ointment cases would take almost a page of this journal. It is like remedies for an ailment: the more extended the therapeutic list, the more difficult to handle the trouble. Just so with ointment cases. The majority of U.S.P. formulas cal! for benzoinated lard. This is often im. properly prepared, and, besides, the lard is not what it should be. Experience tells us that it is hazardous to beat the lard of the market to any high temperature. The fact is, it is just as well not even to warm it. The lard carries a certain per cent. of water sometimes, and is often a mixture of oils brought up to the required consistence and melting point by means of some of the stearins. Heat dissipates the water, melting the stearin. In cooling, the latter crystallizes out, and the pharmacist has a hopeless granular product. Jet we shall pass by all this and speak of containers only.

The paper label for stock ointment jars is very probably a thing of the past, for it soon becomes grease-saturated, the leners growing obscurc. The employment of porcelain jars is not advisable, for in time the enamel cracks, admitting the ointment to the porous interior, where it rapidly becomes rancid by oxidation. The glass label fastened on with cement is a failure. If you stram a warm, melted
cerate like resin cerate into the shop jar having a glass label fastened on ly cement, the was melts or softens, and the label either drops off or gets out of line. There seems to be no alternative but to turn in the matter of containers to glass-either blue, opal, amber, or milk-or cryclite ware. Either or all are good. The white wear is neat, yet is quite brittle owing to the large quantity of oxide, usatally zinc, added in order to give the ware an opaque white color. The lettered ware with letters blown in the glass and ground on the face, similar to the reagent boltles, is the best modern achievement. I'his can be improved upon, in the opinion of the writer, for the lettering lacks clearness.
'lo color wih paint the ground surface of the letters is quite a piece of work; besides, the paint is easily worn off. Now, if the manufacturers would only indent these same raised letters, or have indented letters blown in the ware, and fill up the depressed spares or letters with a plastic cement which vould, upon drying, harden like stone, it woukd be all that is desired. Such a paste could be made of glycerin, or lithrage, or any dry pigment massed with varnish, and could be colored a bril. liant yellow, red, or black, as desired. The letters then would be of a contrasting color, and indestructible, besides cap.able of being repaired with new cement when needed. It might be possible to bake the color in, but bardly practicable, for the heating of glass is not a chenp matter, being less easy of accomplish. ment than if the ware were porcelain. Another desideratum would be a cover made of some material that is difficult to break. Every ointment shelf has a few jars without lids--looking in the row like so many soldiers with their caps gone. Pacific Drusisist.

## Suppositoriss of Vegetable Extracts.

The most tiresome suppositories to make are those containing vegetable extracts, requiring, as they do, such careful manipulations and unremitting attention. The usual mode of procedure-consisting in thinning the exract down to a syrupy liquid, and adding this to the meltud cacao butter, kept at as low a temperature as possible-is very well when one's attentionis notdistrartedduring the process: but the continuous stirring necessitated makes the method, at its best, somewhat irksome. The following simple method is recommended: Take a wide-mouthed bottle and fit it with a good cork, or, better, an India-rubber stopper. I'ut the cacao butter into this bottle, warmed on a water-bath until liquefied, and then add the thinned extract or other pledicanment - The whole being shaken shaken vigorously until ready to pour into the molds. It is stated that it is easy to get as much as 5 grains ( 30 ctg .) of extract into a 15 grain ( 1 gm .) suppository in this way, a thing rather hard to do by the usual method.-Southern Journal of Pharmacy:

## About Cough Drops!

Should Druggists hande 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. ${ }^{\text {Armitage, Paris, Ont., writes: }}$
"Send another pail of those Honey and Horehound Cough Drops at once. I sold the flust 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 Cuugh Drops; and advertise your Cough Syrup on the back of them.

## LAWSON \& JONES

LONDON, CANADA.

## Have You



It is the Gum the others are selling.
It is admitted to be the best Pepsin Gum made in Canada.
Our Carving Set Premium Paikages are having a greàt sale.

## C. R. SOMERVILLE

LUNDON, ONT.

## Haris H. Fulger TORONTO.



## SPRING, 1896



The trade is respecifully advised that a strictly first-class line of Staples and Novelties for 1896 is being shown on the road by this house. No old stock to close out. No "Liquidation Bargains" or "Moving Sale," but down to date goods at bottom prices. The following well-known salesmen will represent the house for 1896 .

MR. E. B. AĩDREWS<br>MR. W. E. BLAK.E<br>MR. R. W. EVANS<br>MR. J. L. ANDERSON<br>MR. W. J. ANDERSON<br>MR. J. H. WOOD<br>MR. J. H. GALLAGHER

No pains have heen spared to have them fully equipped, and no merchant can afford to place his orders without first seeing their line.


## HARRIS H. FUDGER

## Wholesale

FANCY GOODS AND WOODENWARE, FIEID SPORTS, WHEELED GOODS, BABY CARRIAGES AND BICYCLES, DRUGGISTS' AND STATIONERS' SUNDRIES,
50 Yonge Street, - Toronto.


## Ontario Society of Retall Druggists.

The following circular has been issued to the retail druggists of Ontario:

Woodstock, Ont.,
February 6th, 1896.
Fehtow Druggists, - The Executive Committes appointed by the Ontario Socie:y of Retail Druggists beg to notify the members of the said society that the arrangement with the wholesale druggists, jobbers, and manufacturers has been consummated, and that on and after the 17 th day of February, isgo, the regnlar tenail arices of patented and proprietary medicines shall prevail.

Feldow Druggists,- The following is our Fro:ndly List. These firms have promised to help us make our profession profitable as well as honorath: Will you reciprocate? Please keep this in sight as a reminder.
The Lyman Bros. \& Co. (L.td.), Toronto. Elliot \& Co.,
Northrop \& L.jman Co. (I.td.),
Lyman, Knox \& Co.,
Edmanson, Bates \& Co.,
J. Winer \& Co.,

Arch. Wilson \& Co.
'I'. Milburn \& Co.,
H. Skinner © Cor.,

Lyman Sons \& Co.,
Kerry, Watson \& Co.,
Evans $\mathbb{\&}$ Sons (Ltì.),
Lyman, Knox \& Co.,
J. Gustave Laviolctte,

Dr. F. Marin \& Co.,
E. Giroux Frere,

1V. Burnet \& Co.,
Brayley Sons \& Co.,
The London Drug Co.,
James $\Lambda$. Kennedy \& Co..
The Dodus Medicine Co. (I,td.), T'oronto.
T. W. Chamherlin \& Co., Prescott.

The T. A. Slocum Chemical Co. (Ltd.), Toronto.
The Woodward Medicine Co., Toronto. D. Densmore \& Co.,

Henry K. Wampole $太$ Co.,
G. A. Gibbons $太$ Co.,

Warner's Safe Cure Co.,
J. H. Sanderson,

Kochester.
The Balm Medicine Co., Richmond Hill.
Gilmeur Bros. \& Co.
Johnson \& Johnson,
The Papoid Co.,
Tpjohn Pill and Granule Co.,
Tor. Bengue,
Radway \& Co.,
Allan \& Co.,
C. A. Vogeler \& Co.,

## WHOLESADF AGREEMENT.

Below is the agreement which has been signed by the wholesale druggists, jobbers, and manufacturers, whose names are on our Friendly List :
"We, the undersigned manufacturers, jobhers, wholesale and retail druggists, agree to do all in our power to abolish the system at present known as the 'cutting' systom, and establish uniform prices
for the retail sale of patent and proprieary medicines.
"And we, the wholesale druggists and manufacturers, agree not to furnish any goods, pamts and oils excepted, to those who persist in selling patent and proprie. tary articles below the regular retail prices, which retail prices, in the case of patent and -roprietary melicines, are to be fixed by manufacturers.
"It being understood that all patent and proprietary medicines he purchased solely through the wholesale druggists and jobbers, and that in the purchase of all drugs, chemicals, dyestuffs, and sundries, they shall at all times have the prefet ince over other dealers.
"It being understood, as part of this agreement, that the retailers shall not substitute in the sale of patent or proprictary medicines.
"The parties bereto agree to do all things in them power to lawfully advance the interests of pharmacs, and it shall not be the spirit or intention of this agreement to do any unlawful act, nor to assist or permit any other person or persons to do any unlawful act, or one prohibited by statute."

RETAIL AGREEMENT.
"We, the retail drugsists of the Province of Outario, agree to buy our patent anc iroprietary medicines solely from whalesale druggists and jobliers, and we further agree to co-operate with each other in every legitimate way to promote our common interests and our profession in general. Also considering the cooperation of the wholesale druggists and jobbers in matters pertaining to our inter. ests, we agree, all things being equal, to give them the preference over other dealers in the purchase of our sundries. We further agree to maintain the prices in. tended by the manufacturers of patent and propretary medicines, and to retail drags, chemicals, and specialties at prices for which they are fairly and usually sold, or, in case of articles other than patent or proprictary, as agreed upon by the majority of the jocal or district associa. tion. And we also further agee, in no case, to substitute in the sale of patent or proprietary articles."

The ahove is the form of agreement that you have signed, and the Executive of the Ontarin Society of Retail Druegists recpuest that you be loyal to it and live up to your contract, and also to be loyal to the mstructions given you by the Executive.

Very truly yours,
G. E. (imbsis,
President.
J. T. I'eprer,

Secretary- Ireasurer.
In addition to the above-named firms, we are informed that Parke, Davis \& Co., of Detroit and Walkerville, Ont., have expressed their willingness to sign the agreement also, provided that manufacturers of pharmaceutical products are included amongst the wholesalers. They have, we understand, insisted on their
agents making an agreement not to self, directly or indirectly, to any departmental stores.-ED.

## Pruf. Heebner's Illness.

Owing to illness, produced by overwork, Prof. Ifecbner, Dean of the Ontario College of l'barmacy, has been ordered by his physician to take a complete rest. The council, at their recent meeting, granted the Dean one month's leave of absence. Te has gone to Dansville, N.Y., to recuperate, and we trust to see him return shortly thoroughly recovered.

His dulies at the college are taken, in the meantime, by Messrs. W. Murchison and M. B. Ashton, both former graduates of the college.

## Artificial Wintergreen 0il.

Thaser gives the following practical method of applying the hydrochloric acid process for the manufacture of synthetic wintergreen oil: Take 505.47 grammes of salicylic acid and 690.85 grammes of methyl alcohol (sp. gr. 0.820); place the alcohol in a wide-mouthed flask, and add portions of the acid until a saturated solution is obtamed.

Make the additions slowly, as all of it wijl not dissolve. Connect the flask with an upright condenser, and beat it on a water bath until the contents are brought to the boiling point, then pass dry hydrochloric acid gas into the hot solution mitil the latter is saturated. Then add about to grammes more of the salicylic acid, again saturate the solution with lydrochloric acid, and repeat the operation until all the salicylic acid has been added, the passage of the hydrochloric acid gas being continued for two hours after the last addition of the acid. It is necessary that the gas be thoroughly drited by being passed first over anhy. drous calcinm chloride, then through three bottles of sulphuric acid, before being conducted into the salicylic acid solution.

The lower oily layer which separates is washed with water until no longer acid to litmus, then distilled from a flask by the aid of live steam, the distillate is freed from excess of water by the use of a separating funnel, and finally dried thoroughly over anhydrous calcium chloride. The product thus obtained is of a slightly yellowish color, has an agreeable odor, and costs go cents to $\$ 1$ per pound, the above quantities yielding 500 grammes of methyl salicylate. Ethyl salicylate, which has a more delicate odor, and a lighter specific gravity, can be prepared in the same way.-American fournal of Pharmacy.

The Leipseiger Nachrichten, Berlin, says that $\mathrm{D}_{1}$. Behring has discovered an anti-cholera serum, and announces that a public demonstration of its properties will be made at an early date.

## Canadian Druggist <br> WILLIAM J. DYAS, Editor and Publisher.

## FEBRELAKI $15 \mathrm{ra} \mathrm{\prime}$, Sgo. <br> A Departmental Store Transaction.

Still another amogance to the drug trade of Toronto, and with it to the drug trade of Canada, has appeared in the development of a full-fedged drug department in the new store of R. Simpson, in this city. Witherto his stock in this line has been confmed mainly to some patent medicines, but now a stock of drugs has been added and a general drug business is being carried on. The source from which he has obtained these goods has been a disturbing question amonyst the retail druggists of the city, and reports and statements have been circulated, some of which have been calculated to cast a reflection on the business methods of one of our most reputable wholesale drug firms. We have made it our business to enquire into the matter, and are in a position to place the facts before our readers-facts which we have groved conclusively to be perfectly correct.

Some time ago, the Lyman bros. $\mathbb{S}$ Co. received one or two orders from a medical supply and sundry house who, we understand, are regular customers of the different wholesale houses of the city. These orders were sent in the usual way, and the first order was filled after assurance had been giren that the goods were to be sold in the regular way, that is, to doctors and druggists. The second orrier aroused some suspicion, but was filled, and rumor being circulated that the departmentalstote was being supplied by this firm, who have travellers employed and do quite a business with a mumber of city and country druggists, other orders in hand were cancelled. A few days later I.jman Bros. \& Co. received, evidently, a part of the same order from a retail drusgist in Yoronto. It was also refused, and a few days later still another order, apparently part of the previous one, came from another source, and it also was refused. It is to be respetted that any report should be circulated which would cast any reflection on a business house without due enquiry having been made as to the correctness of the report, and that any representative of another house should, as has been the case, try to further the spread of any such report. Such a course, under such circumstances, tends to do away with that
confidence that is so necessary for the proper carrying out of the vital project in hand for the protection of the drug trade generally. Messrs. Lyman Bros. 太 Co. were one of the originators of this plan, and we do not wonder the members of the firm feel hurt at the attitude of a portion of the retail and some wholesale druggists in this matter. We might add that the wholesale houses are under no agreement with the retailers, up to the present moment, not to sell anyone, and any action of that kind at present is done independenly by the various houses.

## Unanimous Action.

Wewould remind the trade that nothing can be accomplished towards lessenmg the evile which beset trade except by the hearty cooperation of every retail druggist in Canada. The presence of somuch distrust, jealousy, and selfishness as is exhibited amongst many of the druggists of Toronto, as well as outside of it, is sure to wreck any attempt made to provide a remedy for the existing state of affins, and unless these feelings are put aside,and perfect harmony and unanimity of purpose exist,all the societies or organizations which may be brought into existence will avail nothing. The druggists have been in the past their own enemies, and it has been the treachery within the camp that has done more to bring on the unfortunate state of business as it exists than all the departmental stores put together cculd do.

Heariy co-operation in the present effort to form an association, which, if carried on with vigor, will prove a great boon, is one of the means towards the de. sired end ; the other is a feeling of conf. dence that every man in the trade is will. ing and ready to further the object, and a spirit of trust, and faith in the good intentions of each other, will bring about a state of thing: which will be the means of at least stemming the tide of affairs which threatens the entire demoralization of the drug trade of this country.

We appeal to every lukewarm druggist who is not interesting himself in this battle for his rights, and also those who, through thoughtessness, or otherwise, have lent themselves to the degrading practice of curting prices, to make one good strong effort to save the trade, to bring back a state of affairs which must be eminently more satisfactory to all.

No true pharmacist should, at this junc. ture, hold back from joining an associ.
thon which has for its object the betternent of everyone comnected with the drug trade.

## A Prospect for Optics.

This jounal has repeatedly drawn the attention of atruggists to the fimatacial interest they might derive from a thorough study of the subject of optics. In conversation with one of the leading druggists of the province, recentls, the gentleman referred to asserted his positive conviction that the trade in optical instruments, properly cultivated, could become much more profitable than the handling of patent medicines. He also expressed an opinion with which we heartily concur, and one which we are satisfied the council of our collese will adopt at no distant date, that the establishment of a course of instruction in the college during the summer months, at which graduates who are in business, and who pay ammally to support the institution, could attend at a nominal cost, would do much to make druggists feel that they could get a fair return for their annual outlay, and to incite them to raise to a higher plane a branch of trade which unskilled and inexperienced workmen are to day controlling. Wie are satisfied that while for the present the council has seen fit to defer action, they have done so while mentally considering how it could be brought about.

There is no reason why druggists should not receive a diplomia of qualification directly from their own school; nor is there any why they should not cater to the wants of the eyes as readily as to other portions of the physical cconomy. If good and just reasons can be given why druggists should not embark in this line of trade, we shall be pleased to give them publicity and to cease advocating this cause ; but if not, we must conclude that, it being in the best interest of every retail druggist, we must uphold it.

Potassiumorthodinitrocreosolate is the name of a new antiseptic discoved in Germany, but, as it is intended to be used generally, it is also called adtinoupin. One part of the substance in from 1,500 to 2,000 parts of soapsuds is destructive to all the common parasites injurious to plants. 'east used in brewing remains fresh for a long time when treated with it ; it destroys all bactetia, and yeast can endure a solution as strong as five per cent. of the substance. It is odorless and very cheap.-Scientific Amfrican

## Mok-KonKa

THE ROYAL SILVER AND GOLD FLOWER OF JAPAN

This flowering shrub of the Sunny Kingdom is not unlike our Canadian Lilac in appearance, with its conspicuous spikes of small flowers, yellow on the outside and white within.

The odor of this pleasing flower is quite noticeable throughout the Island during the months of our Autumn. This perfume has had a very ready sale this season.

Put up in 8 oz, botites by

## Scott \& MacMillan

## Toronto

## Cluthe's bankrupt stock of Trusses Shoulder Braces

Druggists if you have any customers wearing or wanting Druggis this make of appliances, now is the time to secure them. We bought the stock, and, as we want to get rid of them quickly, we are offering them at less than half the old prices. We have also the whole stock of Instruments for Deformities, etc., which will likewise be rold cheap.

WRITE FOR PHICES.
DORENWRND ELECTRIC BEL: \& TRUSS COMPANY
171 QUEEN STREET WEST, TORONTO
Manufacturers of Trusses, Electric Belts, Insoles, Abdominal Supporters, Suspensorias, Instruments for

Deformities, Etc., Etc
omprown
Have you TEETHING NECKLETS in Stock? aEtail at so cents. wholesale, 83.00 PER dozen TETA FEW

## Stearns'



AVALUABLE appetizer and palatable nutrio-tonic embodying nearly fifty per cent. of moist albuminoids (proteids), together with the naturally combined inorganic salts and stimulating organic bases of the meat of carefully selected grain-fed cattle, which have been subjected to inspection by United States officials. It is prepared at a low temperature in vacuo, and contains twice as much proteids as any other natural beef juice on the market. It is also rich in hemoglobin, the ironbearing constituent of the blood.

## STEAR S' BEEF JUICE

## Stands Pre=eminent

as a stimulant without reaction, as an accelerator of tissue metabolism, and as a powerful reconstructor. It is of great value in typhoid and other adynamic fevers, anæmia, infantile diseases, nervous exhaustion, insomnia, alcoholism, and in general convalescence.

Sold by all jobhers at $\$ 6$ per doz. or may be ordered direet lrom

## Frederich Steannse CO.

manvercuturimg phamacists
detroit, MICH. - new york WINDSOR, OnG.
LOND,

## Retail Druggists

( $\mathbf{~ W E ~ p u t ~ u p ~ o u r ~ Y \& S ~ L i c o r i c e ~ i n ~}$ cases of 125,50 and 25 lbs. bulk (loose, in leaves), $4^{\prime} \mathrm{s}, 6$ 's, $8^{\prime} \mathrm{s}, 12 \mathrm{~s}$, and 16 's to pound. Will sell rapidly if displayed prominently in your show windows, and will insure you large profits.


WE ARE M.SO MANUFACTURERS OF Tar Licorice and Tolu Wafers ..and.. Pure Penny Stick

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

## YOUNG \& SMYLIE

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

# 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



## UNITED STATES EIEATMET REPORTS (OAcial Endorsement, June 19, 1898, pace 10.)

"In the interest of the masses for whom these dieports are compiled. the United States Ilealth Reports have examined and investigated many preparations hacing for their olject the cure of the tontuces halit, han anom them all we have no lesitancy in giting the editorial and



 when we endorse the some, and ramp, it as the crowning achictement of the nincteenth century in the way of destroying a habit as diagusting
as it is common (for only Sh.OA), hence we carnestly advise you to write them for particulars."

For Sale by all Wholemale Druggists

## The Ontarlo College of Pharmacy.

The regular half.yearly meeting of the Council of the Ontario College of Pharmacy convened in the college buildings, in Toronto, on Tuesdary, the $4^{\text {th }}$ inst., and three following days. The ses. sions were marked by plenty of good solid work, and very little time wasted in unnecessary discussion or useless talking, and, though no startling legislation was enacted, many matters of considerable interest to the college and the trade at large were given consideration.
The financial condition of the institution was naturally the subject of much pardonathe congratulation and satisfaction. The mortsage delt, which, only a few years ago, stood at $\$ 17,000$, is now down to $\$ 12,000$, with $\$ 3,500$ lying in the bank towards the fimal liquidation of the liability, while the floating delt of $\$ 7,500$ has disappeared entirely. Under apy circumstances this might beconsidered a good showing, but it must be further horne in mind that the renewal fees have been reduced 50 per cent. to those who are wise enough to pay up on time. Under these conditions the council were certainly justified in voting themselves the full statutory remuncration provided by the Act.
That financial prosperity has not been secured by parsimony is evident by the high results $o^{\text {b }}$ tained in the examinations, and the enviabie reputation of our college on all hands, of which nothing could be more eloquent than the crowded state of the classes. That position is to be maintained if wise development of resources can accomplish it, and a committee has under its consideration a scheme: for ap. pointing an assistant lecturer in pharmacy. The standard of entry qualification will in due course be raised also, the recommendation of the faculty to make it that of a third.class non-professional departmental certificate having been approved by the council.
A vexed question, which created mach discussion, was that of partnership, fees in branch stores. The result of the controversy is given in the appended report, but the council was sharply divided on, the proint.
The novement which culminated last fall in the formation of the Retail Druggists' Association was endorsed by council, and along the same lines was the cordial approval giten to the proposal of Chairman Karn of the Infringement Committee to prosecute an even more vigorous policy in the future against breakers of the law. All these and many other points noted in the report indicate a healthy progressive spirit in the council, and augur well for the future of the college.
When the council was called 10 order by President Mackenzie, at 2.45 n'clock, on Tuesday afternoon, every menber was in his place.
The minutes of the previous council meeting having been taken as read and
approved, the usual long list of communications was submitted.

Prof. Hecbuer, Dean of the Faculty, applied for a month's leave of absence on account of poor healh, and suggested the mames of Murchison and Astiton to take his place while away. The leave of alsence was granted, and the matter of supplying the dan's place refarred to the Committee on E ucation.

Letters received from the secre. taries of the Industrial Exhibition and Western Far Boards, asking that representatives be appointed to those bodies from the council, were answered by the reclection of Messrs. Mackenzie and Daniel for the Toronto fair. and the selection of Messrs. Shuff and Laurance for London's exhibition.
An application was received from Mr. Lionel laurance for the position of instructor in opnics, should it be decided to add that subject to the college curriculum. Mr. Watters asked if there was any reason for the applicant believing such a step was in contemplation. The president explaned that Mr. Laurance had spoken to him upon the sulject, and he had advised the formal application as a means of bringing the matter properly before the council. He would suggest that a committe be appointed to report thereon. A resolution to that effect was proposed, when Mr. Karn asked it the Pharmacy Act "allowed the council to dabible in this sort of thing." Mr. Whatters declared that the council would be making a mistake in introducing the study of optics. They might just as well teach the best method of cuming glass as to teach optics to their students. He would move that the letter be filed. Upon a vote being taken, the amendment carried, and the letter was accordingly ordered to be filed.

A letter was read from a private detective asking instructions from the council upon which the writer could institute proceedings against the Vinvi Medicine Co. for breach of the Pharmacy Act. The request was not entertained.

Mr. W. A. Karn introduced his motion, of which notice had been given at the August meeting, to amend be-haw fifteen, so tuat the members of the council might receive the full remuncration allowed by the act, viz., $\$ 4$ per diem and five cents a mile milenge, instead of $\$ 3$ and four cents respectively as heretofore. In presenting his motion, Mr. Karn contended that members of council were very meagrely recompersed ior their services, and even at the increased figures would be out of pocket. All other similar institutions paid their directors bether than the O.C.P. The motion carried unanimously without further discussion.
Messrs. Watters and Maclaren moved, according to notice previously given, that in future the college nuedals le awarded to those students only who had received full four years' instruction in the Province of Ontario. In moving this resolution, Mr. Watters explained that this would not
affect medals offered by the faculty or ou side friends. The motion carried nem. con.
The registrar-treasurer then presented his semi-annual report. It showed that 122 apprentices had applied for registration, and 65 renewal fees had been received.
The financial statement showed a most satisfactory condition of aftairs. The receipts, amounting to $\$ 13,549.87$, included junior teaching fees, $\$ 4,789$; senior dito, $\$ 6,049$; renewal fees, $\$ 244$; apprentices registration fees $\$ 122$; matriculation fees, $\$ 218$; deposit fees, $\$ 585$; examination account, $\$ 223.38$; and laboratory account, $\$ 50.54$. The disbursements had been $\$ 5.960 .94$, made up in part of the following items: Interest account. \$342.08 ; council meeting, $\$ 306.09$; office expenses, etc., $\$ 389.09$; bulding account. \$105; printing announcements, $\$ \times 49.60$; law costs, $\$ 135$; gus, water, and coal \$124.43; salary account, $\$ 2.850 .42$; supplies, $\$ 70.0$; apparatus, $\$ 83.83$; Infringement Committee's account, $\$ 298.53$; and paid off mortgaye account, $\$ 1,000$. This left a credit balance for the half year of $\$ 7,588.93$, the amnouncement of which was received with every expression of satisfaction by the council.

The statement of assets and liabilities was as follows:

ASSETS.


The auditors' report attached to the above gave the usual certificate of correctness.
The statement of the John Rolierts Bequest Fund showed a balance of $\$ 3$,210.56 on the credit side.

The examiner's report gave the usual statistics of the last semi-annual examinations.

The dean's report stated that 113 studenis had taken the junior course, and 119 the senior course, which was in each case the largest class in the history of the college. The report stated that in the opinion of the faculty it would be advis -able.to raise the standard of entry:qualif.
cation to that of a third-class non-profes. sional departmental certificate, and also again urged that something definite should be done with a view to arranging for a two years' course of instruction.

The various reports were received and sent to the several standing committees for consideration, after which the councll adjourned.
Wednesday morning's session was very brief, the only business done being the adoption of the following resolution, moved by Messrs. W. A. Karn and D. H. Maclaren: "Whereas the retail druggists of the Province of Ontario have organized a society known as the Ontario Society of Retail Druggists for the purpose of mutual improvement, scientific research, and the genemal welfare of their business, that this council herely express their sympathy with tine same, and pledge their assistance and support in any laudable efforts they may put forth towards the formation of a llominion Association." Very litte discussion preceded the adop. tion of the above, but all the members were evidently in hearty support thereof, and it carred with a unanimous vote. Under the head of enquiries at the afternoon session, Mr. Turner asked if it was the intention to appoint anyone to represent the college at the convention of American druggists at Montreal in August next. The president replied that no request for such appointment had yet been received, but if one reached the council in time it would doubtless receive favorable consideration.

The report of the Committee on Legislation and lby-laws was presented by Mr. Watters, and. having been received, was considered in committee of the whole. The matter of chief interest dealt upon therein was a letter from Messts. Mitchell and Mclean, who had been charged the full registration fees of $\$$ of their drug stores, and whe now appealed agaiust such assessment, contending that they should only be charged upon the original store in full, and that each additional store should be raxed $\$$ fonly, and not $\$_{t}$ each partacr. The comminee reported ahat, according to their interpretation of the act, the full charge on each partner for each store was correct. In the discussion which followed the reading of the clause, however, it became evident that the committe was not unanimous, and the council iself was sharply divided upon the question. Mr. Scolt led the opposition to the report, and championed the cause of "the poor druggist," and Mr. Snyder supported him, urging that legal opinion should be secured upon the point. Mr. Scott moved that the clause be referred isack, claiming that if the act could be construed as the committee had declared it could with equal reason be read the other way, and where there was a doubz is should le given in favor of the druggist. It would be a mistake, and hurdful to them to exact the last pound of nesh. Moreover, if they insisted on collecting they might meet with determined
resistance, and it would be very unfortunate if they became entangled in legal proceedings, in which they mught come out second best.

Mr. Daniel agreed that it would be wise "io go slow." He beleved the contention of one fee for each additional store wins the right and just one.

President Mackenzie thought they need not anticipate trouble, but might let the report stand in the meanume, and discuss opposition when it arose. The act was a personal one, and the only logical interpretation of it was that each partner should pay for each store. Not only was this the right construction, but it was, he was satisfied, in the interests of the trade to construe it thus.

Mr. Watters desired to see the clause pass. It was consistent and desirable, though in some individual cases it might be a hardship.

Mr. Scott replied that the first $\$ 4$ was a personal tax, hut the subsequent fee was a business tax.

Mr. Roberts favored the amendment in deference to the wishes of Messrs. Scott and Sinjder; it would do ne harm to refer the clause back to the committee for further consideration. Mr. Karn thought the council should be able and willung to decide these points for themselves, without constant reference to their solicitors. To his mind the act was perfectly clear, and the committee had properly interpreted it.

Mr. Watters ventured the opinion that the council understood the lharmacy Act better than the lawers, to which the members remarked "Hear, hear!"

The amendment to refer back was then adopted.

Another clause dealt with the matter of a departmemal store drug department manager, who sought registration, and the tegistrar liad declined to grant this without splecial authority from the council. The committec reported that they constdered the case might safely be left to the repistrar to deal with, but Mr. Mackemaie objected that the registrar would only refer to him, as president, ior instruction, and he would prefer the council to pass upon it. This clause, too, was referred back, and the balance of the reyort was passed through committee without change and adopted by council.

It may be here recorded that the committee on deigislation and By-laws preserted a supplementary report on lifiday morning having reference to these two chauses, and that feport simply stated that the committec had nothing further to say upon cither clause, and recommended the adoption of the clauses. Mr. Scott moved in ausendment to strike out clause 12, having reference to the charging of full fees, and in doing so repeated his contentions above reported. Mr. Spackman supported the report. Mr. Dickey asked if it was the intention to charge up arrears. The president replicd that there was no such intention in cases where fees were paid up to date, but from those who were
behind the full fees would be exacted. Messrs. Karn and IVatters endursid this view of the situation, and the anendment was then put, and lost, only Messis. Scolt, Snyder, Damel, and Dickey volng for it. The report was then adopted.

The Executive and Finanze Committe reported through Chairman Macharen when council reassembled on Thursday morning. They recommended the payment of accounts amounting to $\$ 1,065 \cdot 30$, and the depositing of $\$ 2,500$ to the mort gage redemption account in the bank. A letter from an American trade journal asking for the college advertisement was reported on unfavorably, for the reason that the capacity of the college is now overtaxed, and, consequently, no further business is required. The report advised that a circular be issued to the members of the college about April ist, reminding them of the fifty per cent. rebate on all fees paid before May 1 st. The report was adopted without change or material discussion.

At the afternoon session a letter was submitted from The Druggist's Circular, New York, asking for information respecting the women students and graduates of the college for incorporation in an article on women pharmacists, which is alout to appear in that publication. The registrar was instructed to furnish the information sought.

Mr. C. D. Daniel presented the report of the Educational Committee. It opened with the following laudatory preamble: "Your committee have pleasure in reporting the college to be in a condition that must be very gratifying not only to council, but to the druggists at large throughout the province. The very high standard that has been maintained has resulted in elevating the character of the pharmaceutical profession, and made the druggist in reality what heretofore he has only been in name, a pharmacist. The reputation of the college is spreading, and applications are constantly being received from all parts from students anxious to attend our college. The dean and memhers of the faculty bave done their utmost to promote the welfare of the college, and too much camot be said of their effor:s in this direction. We have now the largest class th the history of the college, and the building is being taxed to its utmost enpacity:"

Continuing, the report approved of the gentemen suggested by the dean to take his place during his sick leave, and recommended the grant of $\$ 125$ to meet the expenses of the same. Also of the appomement of 1)r. H. B. Anderson as temporary assistant to 1 r . Fotheringham in his absence, and $\$ 150$ was voled towards the experses attendant thereon. The proposal of the faculty 10 mase the standard of entry qualificirioms was approved, and the necessary legi-h.ation will he sought, though this cannot b. done at the next session of the legislature.

An interesting point was rained by 2 letter from two students who had pre-
sented certificates of educational qualifi. cations signed by a member of the faculty of Otawa College. The act distinctly requires such certificates to be signed by a high school principal or public school inspector, or the matricuiation certificate of any of the universities would of course be sufficient. As the certiticate in question did not fulfil the statutory requirements, the commitee felt compelled to decline them.

In supporting the report. Mr. Watters spoke strongly in favor of the appointment of an assistant lecturer or demonstrator in pharmacy, that the college, with its ever-increasing clientele, might keep in her proud position in the foremost rank. He saw no reason why we students should not receive such a training right in their own college that they would be able in due course to take positions as members of the faculty.

Mr. Mackenzie, while favorable to the proposal to raise the standard of qualification, was doubuful of the support such a move would receive through the profession. Still he thought no harm would come of allowing the report to so as it stood, and thereby eliciting an expression of opinion from the druggists generally.

The report was adopsed unamended.
When the final session opened on Friday Mr. Karn presemed the report of his Committee on lnfringements.

After dealing with two or three maters of detail the report procecded as follows: While the mumber of convictions may appear small in comparison with the expenditure, we beg to call the council's attention to the fact that through this outlay artears of long standing have been collected, amounting in all to over $\$ 100$. No cases have been lost in court. but in some few instances we have failed in conviction on account of the great difficulty experienced in getting a magistrate to act on the case.
Your conmittee deem it advisable to draw the attention of the council to the fact that the work of the Infringement Committee is most difticult, and the question of expense in carrying on the same is criticized from time to time in a most unfair manner, and in view of these facts we recommend that no amoum be specified for the performance of the work.

Your comminee is peepared to carry out the work with due care, and to that degree of efficiency that the past meagre support of the members of the trade has given it.

We realize that such work camot properly be done without that aid and sympathy from the druggists of the province which should charicterize them with respect to the efforts of the Infringement Committec. Every casc, and they are few, that have been brought to the notice of your committee has been promptly and judiciously dealt with, if there:appeared any reasonable prospect of conviction.

Your committee ask the approval of the council to prosecute its work in any direction in the best interests of the col.
lege and would again most respectfully urge the members of this council to interest themselves in the matter of infringements, and promptly report all cases with full particulars to the chairman.
In presenting this report, Chairman Karn spoke warmly upon the importance of the work and the need of more generous and friendly support. He was prepared to work night and day to perfect the machinery, and during the next year he intended to see just how perfect it could be made. His enthusiastic remarks elicited warm applause, and Mr. Karn certainly had no cause to comptam of the outward manifestations of approval. What the practical support of the members may amount to remains to be demonstrated. The report was adupeed.
Considerable discusion occurted over chases in the supplementany repurt of the Executiveand Finance C.ommittec' repont, which made grants to the various demartments, but finally the clauses went dirough as reconmended.
Then came a resolution fremi Mes.rs. Daniel and Waters,apporming a commatee composed of Messrs. Mackeizee, Scott, the mover and seconder, to consider and devise a scheme for the apmointument of an assistant lecturer in phirnocy and to report at the next meetung of council. This was adopted without comment.
Alr. Karn moved that a special grant of $\$ 25$ be made to the janitor of the colloge buildings, in recognition of the scrumulenes attention he gave to his work and the splendid condition of the buildungs. The resolution was unanimouly adoped, and the council adjourned until the second Tuesday in August unless an emergeacy call should issue in the interim.

## Agar-agar as a Base in Glycerin Suppositorles.

## by Fan** G. kinas.

Some months ago, E. Lomuller pub. lished in Il Giornale di Firmacior a formula directing the use of agar-agar in the preparation of glycerin suppositories.
It was claimed that this substance produced a mote satisfactory product than did gelhtin, and. on that account, no doubt, the proposed formula has been reprinted in a number of American and foreign journals. But as no comparison was made between the qualities of the stuppositories made with a agar-agar and with sodium stearate, which is so largely used in this country; the writer decided to investigate the matter.
Agar-agar is a substance obtained from sereral species of alge. It is known, also, as Japanese isinglass. (Sce United States Dispersatory, seventeenth edition, pages 724 and 1638 ).

The formula published was as follows:
Apar.apar.......... 10 grammes.
Distilled water....... 200 cubic centimeters.
Glyecrin............. 200 grammes.
Dissolve the agar-agar in the water by the aid of heat, constantly stirring, add the glycerith, and strain while hot.

Following these directions, the writer prepared a sample of suppositories from the given quantities. The suppositories, therefore, contained 50 per cent. of glycerin. They were very elastic, and had not sufficient firmness to admit of being easily introduced into the rectum. Such an article would hardly be received with much favor by the physicians of this country. A sample of suppositories containing 75 per cent. of glycerin was then made. These were firmer than those containings 50 per cent., and could be used without much difficulty; however, they did not possess the firmness of those made with sodium stearate.
An attempt was made to produce suppositories stronger than 75 per cent., but it was without good results, as the glycerin had a tendency to separate from the mass upon cooling,
In making the suppository mass it was found better to change the manipulation somewhat. The agar-agar was first soaked with cold water, and the latter expressed. After calculatung the amount of water retained, sufficient to supply the proper amount wis added. The glycerin was then addeld, and the whole heated on a water bath until the agar-agar was dissolved, after which the solution was strainced.

The following formula may be used by these directions for a suppository mass containing 75 per cent. of glycerin :


Glycerin ........... 150 grammes.
On account of the smaller quantity of glycerin contained and the elasticity of the mass, I do not consider the product of this method one that could be used to replace the glycerin suppository now in cominon use.
The suppositories made with agar-agar have, however, these advantages: they easily leave the moulds, and are not affected to the same extent by exposure as by those containing sodium stearate.
No experiment was made to ascertain the value of the suppositories made with agar-agar as alaxative.-American Journal of Pharmag:

## Promptness Pays.

Promptness in business always pays. No house ever became unpopular from a custom of filling its orders with dispatch. Prompmess is always noticed and favorably commented upon by the customer, who always fully realizes the importance of his own order and does not pause to think that it is one of hundreds, or perhaps thousands, received by this jobber. The purchaser wants his goods at once,as a general thing, and regards the celerity with which they are delivered as an evidence of the esteem in which he is held by the johber. If delivery is delayed, he is apt to regard it as a slight and is sure in become dissatisfied. Promptness in business always pays.-The Bookkreper.

# The Science of Optics. 

13Y L.1ONEL. L.AURANCE.
Principal of the Optical luctitute of Canada.
WEntered according to Act of Parliament of Canada, in the year 2895, hy Lionel Laurance, at the Departurent of Acriculture.!

## Elementary Anatomy of the Eye.

Besides the extermal muscular system there are inside the globe two internal muscular systems, viz, that of the ciliary and that of the iris.
The ciliary or accommodative muscle is attached to the sclero-corneal margin at one end, and to the choroid at the other, and lies over the ciliary process, to which is is united. It comtains straight or radiate and circular or sphincter fibres. The connective tissue between the muscle proper and the sclerocorneal margin is called the ciliary ligament.

When the muscle is at rest, the tension of the straight fibres (this state of tension being the natural condition) causes the folds of the processes to be more compact, so that the suspensory ligamem of the lens, which lies within these folds, and is corrugated so as to cor espond to them. applies such a strain to the anterior surface of the crystalline Jens, to which it is attached at one end, that this humor is kept flattened. When the straight fibres of the muscle relax their tension, and
sphincter or circular muscle contracts the pupil when the light is intense; the dilator or straight muscle dilates the pupil when the light is dull. When the two are at rest the pupil is of a medium size, which varies in different eyes. The pupil is always larger in artificial than in sumlight. During accommodation the pupil is contracted, and the centre of the iris prorrudes.

The nerves of the eye are that of sensation and those of motion. 'The nerve of sensation, that is, of sight, is the optic nerve, which is enclosed in a sheath con. tinuous with the sclerotic. It enters the eye through a plate called the lamina cribrosa at what is commonly called the blind spot, which is situated rather above and slightly to the nasal side of the exact centre of the back of the eye; it then branches out and becomes pant of the retina. The retina receives the picture of the object looked at, and the optic nerve transmits the sensation to the brain. The optic nerves of the two eyes meet, and cross each other at the optic commissure, so that one mental picture is dernied from

the circular fibres contract, the processes are pulled forward and somewhat straightened, so that the suspensory ligament becomes loosened and thus releases the strain on the crystaline, the front surface of which then springs forward on accoumt of its natural elasticity, making the lens more convex, and, therefore, of more refractive power.
This combined action of the ciliary body and the crystalline lens is termed accommodation, and it is of the umost importance that it be thoroughly understood, as it phays a most important part in the Science of Optics.
In Fig. 3 the black line of the anterior surface of $A$, the crystaline lens, is in the position occupied by it when the eye is at rest ; the dotted line shows its position when the eye is accommodated. Fhe posterior surface does not change its position, but the lens becomes slighty less wide during the performance of this action of accommodation.

The iris is composed of two sets of muscular fibres, as before described, the function of which is to regulate the quantity of light that enters the ege. The
the two retinal images. The fibres from the right of beth optic nerves pass to the right of the brain, and those from the left of each to the left of the brain after meeting at the commissure.
The nerves of motion are :
The sixth nerve, which supplies the external rectus.
The fourth nerve, which supplies the superior oblique.
The third nerve, which supplies, by its various branches and filamems, the internal rectus, the superior and inferior recti, the inferior oblique, the ciliary body, the sphincter fibres of the iris, and all the coats, humors, and tissues of the glote and orbit.
The dilator filures of the iris are sup. plied by what are termed the sympathetic branches of the various nerves.
From the fifth nerve a branch, called the ophthalmic, reaches the eye, and as that nerve principally supplies the teeth, it accounts for the connection, sometimes met with, of bad veeth and painful sight.
The vascular system of the eye and its appendages consist only of the ophthalmic artery The branches that supply
the glole are the long, short, and anterior ciliary, and the central retinal arteries. The latter enters the ejes with the optic nerve at the porus opticus, just in the centre of the blind spot, and spreads out as many filaments within the various lajers of the retina. Each branch of the ophthalmic artery has its corresponding vein. The hyaloid artery, which in the embryo passes through the vitreous to the back of the crystalline, rarely exists after birih.
The front of the eye is anered by a perfectly transparent coat called the conjunctiva, which takes its origin at the margins of the rids, lines the insides of these, and then, folding over, covers the fromt of the sclerotic and cornea. This coat is fairly thick, but the part that covers the cornea consists of one epithelium only. It is of the highest degee of transpurency, so that it does not obituct light eltering the cornea and the whte c at, the s lerotic is seen plainly behond $n$. It set ves as a protector to the eye iself, and prevents dust or insects fromingetung behind the globe. It secietes constantly a mucous that prevents adhesion of the lids and keeps clean the from of the eye. It is thickly intersected with blood vessels, except where it covers the cornea, and it is on this cont, the conjunctiva, that colds and external inflammations locate.
The outer appendages of the eye are:
The orbit, which is the bony socket in which the eye is situated.
The ocular sheath, the membrane lining the orbit.
The eyclids-these are the shutters of the eyes. They help to regulate the guantity of light admitted, or they block it out enturely. They also shade the eyes, and by their closing prevent small oljects from coming into contact with the globe. The angles formed by the upper and lower lids are called the outer and ianer canthus. The apparent size of the eye depends on the palpebral (eyelid) opening.
The eyebrows help to shade ; the bony structure projecting beyond the eyes serves ns a most efficient protector from foreign bodies. The hairs, besides shading, prevent perspiration from the forehead from dropping on to the eyes.

The cyclashes serve as shades, and as protectors from dust and insects. They are curled so that on interlacing when the lids are closed they do not entangle. They are inserted into the margins of the lids.
The lachrymal or tear apparaus consist of the glands, puncts, camals, sac, and masal duct. The lachrymal puncta are small orifices situated on the margins of the upper and lower lids, near the inner canthas; they act as syringes to draw in the moisture secreted by the lachrymal glands, and carry it by way of the canal, the sac, and the nasal duct, into the cavity of the nose. The glands are situated in the palpetral surface of the conjunctiva. When the puncta, or camals, are closed up, or when the secretion is greater than can be carried off by them, there is an over-

extra for this Glass Jar. It contains the equivalent of five boxes of Pepsin Tutti Frutti, and you pay the same as you do when you buy five of the boxes. That's all. There is nothing taken off your usual profit on the gum to help to pay for the jar. You get it free.

Send postal for price-list and new advertising matter for your window. Adams \& Sons Co., II and I3 Jarvis Street, Toronto, Ont.


The Largest, Best, Most Experienced, and Oldest 0ptical Firm in Canada.

BEST GOLD GOODS.
BEST PRESCRIPTION WORK.
 BEST LRNSES.

BEST STERL GOODS.

## Next Class Commences March 9th.

Intending Students please notify at once. The succeeding class will be held at MONTREAL on February 3rd.

CANADIAN DRUGGIST.

## JUST PLAIN TOBACCO OF THE HIGHEST GRADE



## FORTIER'S

## Cigars mal Cigarattes

GIVE BEst of SATISFACIION AND WIt.I. INCkIEASE YOUR Sat.rs

We.Sell to most Drong gists
Hut we are anmions to seft to yon

```
WRITE
```

TO-DAY
Lafayette Creme de la Creme

Cigars and Cigarettes 10 cents
FOR
A
SAMPLE ORDER Royal Turleish

Cigareltıs
15 cents Sonadora

Cigars and $\mathrm{Ci}_{5}$ arettes 15 cents

Greme de la Greme Cigar Co. montheal.

## RADLAUER'S AMTISEPTIC PERLES

Of Pleasant Taste and Fragrance.
Non-Poisonous and strongly Antiseptic.

Thes. Perles closely resemble the sublimates and carbolic acid in their antiseptic action. A preventive of diphtheric infection.

For the rational cleansing and disinfection of the mouth, teeth, pharynx, and especially of the tonsils, and for immediately removing disagreeable odors emanating from the mouth and nose.

A perfect substitute for mouth and teeth washes and gargles. Radlauer's Antiseptic Perles take special effect where swallowing is diffeult in inflammation of the throat and tonsils, catarth of the gums, periostitis dentalis, stomatitis mercurialis, salivation, angina, and thrush.

A few of the "Perles" placed in the mouth dissolve into a strongly antiseptic fluid of agreeable taste, cleanse the mouth and mucous membrane of the pharynx, and immediately remove the fungi, germs, and putrid substance accumulating about the tonsils, thereby preventing any further injury to the teeth.

METHOD OF APPLICATION:
Take 2-4 y'erles, let them disolve slowily in the mouth, and then swallow. Being packed in small and handy uns, Radlauer's Antiseptic Peries can always be carried in the pocket.

## manufactuacd or

S. RADLAUER - Pharmaceutical Chemist BERLIN W., GEPMANY
W.J. DTAs, Toronto. Ont., Wholesale Agent for Canade.

## OZONE

 external use. Our Ozone, concentrated form, is the rest powerful blood muritier and permicide ever produced, and will be found a specific in all forms of Asthma. Ilronchitis, Whooping Cough, Croup, Measles, or forils of Asthma, lironchilis, Whooping Cough, Croup, Measles, or
Diphtheria. lor Catarshal Iroubles it will prove invaluable as a tonic Diphtherin. For Catarshal Iroubles it will prove invaluable as a tonic
and constitutional remedy, and is especially efficient in presenting or combating fermentation of food in the stomach, breaking up the worst forms of Dy:pepsia amd Sour Stomach.

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

Ozone is also used as a gargle for all manner of Ilhroat Diseases; destroying all fermentation of the tisstes brought forth ly inpregnation 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 customert.
Physicians owe it to themselven to try it.

OZONE SPEGIFIC CO.
TORONTO, ONT.


THE KEY MEDICINE COMPANY, 395 Yonge street, toronto.

## Sovereign . . Lime Fruit Juice

Is the Strongest, Parest, and of Finast Flawr
We are the largest refiners of LIME JUICE in America, and solicit enquiries.

For Sale in Barrels, Demijohns, and twenty-four ounce Botles
by wholesale in
toronto, hamilton, kingston, and winnipeg SIMSON BROS. \& CO., Wholesale Druggists

HALIFAX, N.
flow of moisture in the form of tears. The smali red, cone-shaped body next to the inner canthus is called the caruncula. kefraction.
Light radiates from luminous bodies in every direction, and travels by undulations of inconcewable celerity. The lines of propagation of the light are called rays.
That light radiates in every direction is clear from the fact that the most minute luminous body, such as a spark, can be seen at the same time by any number of persons.
$\Lambda$ luminous body is one that is in itself a source of light, as the sun, a candle, etc. An illuminated hody is one that receives and reflects light, but as such a body also radiates light it is in effect luminous, so that any object that is visible may optically be considered a luminous body and a source of light.

A body is rendered luminous by the light emitted from every immeasurably small point on it. The rays diverging from these points travel without deviation so long as they are in the same medium, but on entering any other medium cither rarer or denser than that in which they were previously they are absorbed, reflected, or refracted.
Rays of light proceeding from a luminous point and meeting some body are termed incident to it.
A body is termed transparent if it allows light to pass through it, as air, glass, the eye, etc.
A body is termed opaque if it does not allow light to pass through it, as wood, etc.
Rays incident to an opaque body are reflected or absorbed.
Rays incident to a transparent body are reflected if very oblique, but otherwise pass through the medium.
A medium is termed rare if its conponent particles are far apart, as air.
A medium is termed dense if its component particles are close together, as glass.

A line is called perpendicular when it is at right angies to another line, as $E F$ is perpendicular to GH in Fig. 4.


A ray of light, $E B$, from the air incir dent to a sheet of glass, $G H$, passes through the latter in: a straight line.

A ray of light, $A B$, from the air incident to a sheet of glass, GH, passes through the latter, but is deviated from its course at $B$ in the direction $B C$, and
is again deviated at $C$, on emerging from the glass, in the direction $C D$.

This deviation of a ray of light on passing from one medium to another of different density is called refraction.

The laws of refraction are :
(1) A ray of light passing obliquely from one medium to another of different density is refracted (if the angle of incidence be not too great) at the boundary plane of the two media.
(2) If the ray passes from a rare medium, say air, into a denser medium, say glass, it is refracted towards the perpendicular to the medium at the point of contact.
(j) If the ray passes from a dense medium, such as glass, into a rater medium, such as air, it is refracted away from the perpendicular to the medium at the point of contact.
(4) A ray perpendicular to a medium at the point of contact suffers no refraction, but passes through without de mation.
In Fig. 4 the dotted line $E$ : is the perpendicular to the sheet of glass. The ray $A B$ incident at $B$ is bent, so as to take a direction more nearly approaching that of $E F$, when refracted ly the glass, and on emerging from the denser medium it is bent away from the perpendicular in the direction $C D$; this direction $C D$ is parallel to that of $A B$. If the ray were incident in the direction $E B$, that is to say, perpendicular to or at right angles to the surtace of the refracting body, it wonld pass through straight in the direction $B F$.
Then all rays of light coming from the air and incident to denser media, such as glass or the eye, are refracted towards the perpendicular, unless the angle of incidence is too great for refiaction, in which case they are reflected, or unless they are perpendicular at the point of incidence, in whech case they pass through without deviation.
A simple illustration of the refraction of light is obtained by putiag a stick into a glass of water obliquely, the part of the stick in the water seems to be broken or lient off from the other portion.
The extent of the bending suffered by a ray passing from a rare into a dense nedium varies, and is termed the index of refraction. It is greater in proportion to the density; therefore the denser the medium, the more the ray is refracted.
(To be continuct.)

## Montreal College of Pharmacy.

Examination questions of semi-annual es aminations, held at Montreal College of Pharmacy, December 23 rd, 1895 :
senior materia medica class.

> Exanincr: T. D. Kkeu, M.d.

1. From what sources are medicines obtained? What is organic Materia Medica?
2. How may sulphuric acid be ohtained? Give an account, as to appearance and strength, of the various mixtures of sulphuric acid of the B.P.
3. Give. an account of the official
preparations which contain metallic mercury, strength, and posology. How may these be tested quantitatively?
4. How may bromine be obtained? Assuming sea water $\Delta 1.027$ to contain .007 per cent. of Mg Br . and no other bromide, how much would have to be evaporated to yield 1 fluid ounce of $\mathrm{Br} \Delta 3$ ?
5. How may potas. chlorate be dis. tispuished from nitrate? What precautions are to be observed in dispensing potas. chlorate with other drugs in powder?
6. Name six liquid preparations B.P. containing ammovia or salts of ammonia, with strength and specific gravity.
7. How is liq. ammonia tested for strength and purity? State the purpose of each test. In the case of a solution of ammonia stronger than B.P., on what general principle is the amount of dilution calcul-ted ?
8. How is syr. ferri iod., B.P., made? Describe the appearance of a g'od sample. What is the percentage strength of the official syrup?
9. Name some derivatives of starch, and show how alcohol is related to starch. What starches are ufficial?
10. What ethers are official? What is sulphuric ether of commerce?

FIRST YEAR-MATERIA MEDICA.
Examiner: J. E. W. L.xcouks.

1. Has a certified apprentice the right to put up physicians' prescriptions, and to sell poisons? If so, under what conditions?
2. Give the weight of a litre of dist. water $\left(4^{-} .^{\circ}\right)$ in grammes, and in ounces avoirdupois. How many minims in a litre?
3. (a) A body weighs 120 gr. in air, and in water 95 . What is its specific gravity? (b) One hundred cm .3 of a jiquid weigh 100 grammes and 33 centigrams; what is the specific gravity of the liguid?
4. Sixty degrees above zero centigrade correspond to what degree $F \cdot=176^{\circ}$ is equal to how much $\mathrm{C} \cdot$ ?
5. Four samples of cinchona powder contain, respectively, $2,3,6$, and 8 per cent. of alkaloid; how may they be mixed to obtain a powder containing 5 per cent. atkalond ?
6. At what temperature, approximatively, does evaporation take place with a water bath?
7. Explain the term, "destructive distillation."
8. When may a salt be described as deliquescent?
9. Distinguish between a Simple Solution and a Chemical Solution.
10. Mentien three cases, in which heat is not to be used, in making solutions.

## botany class.

Examiners : J. Beakose, F.C.S., And J. E. Morkison,
I. Give a description of the young cell, its contents, and descrilue the process of cell division.
2. Enumerate the various tissues.
3. Distinguish between the above-mentioned tissues.
4. What are lenticels, where found, and what are their functions?
5. Sketch a transverse section of a phanerogamous leaf, and name the parts.
6. Define the terms prefoliation, cyme, nervation.
i. What do you understand by meristem?
8. What are the functions of the leaf?
9. Give a descriptinn of the apex of the root.
10. How would you distinguish between a subterraneous stem and a root?

CHEMISTRY-SECOND IEAR.
E.xaminer: C. A. Proster.

1. Give formula of following: Disodic orthophosphate, tricalcic orthophosphate. Ammonmagnesic orthophosphate. Monopotassic ortbophosphate. Calcic metaphosphate.
2. (iive the elements in the silver group, with the formulas of their oxidized and hydrogenated compounds, common ones.
3. Berthollet's law, concerning the empirical reactions of acids, bases, salts, the one with the other when in solution.
$\therefore$ Give equation showing the preparation of nitric acid from saltpetre.
4. Principles of volumetric analysis.
5. From a normal solution of nitrate of silver 10 cubic cemtimetres are used to precipitate the chlorine of the chlorides in a half litre of water. How much chlorine was contained in one litre of this water?
6. How much potassium hydrate must be dissolved so that 20 cubic centimetres of the soiution will saturate 0.9 S gramme of $\mathrm{H}_{2} \mathrm{SO}_{4}$ ?
7. What are the ingredients of Feh. ling's liquor? What phenomenon of reduction takes place in it wih glucose?
8. Distinguish between uhtimate and proximate analysis.
9. Fin. 1 the centesimal composition of $\mathrm{C}_{.2} \mathrm{O}_{4} \mathrm{H}_{2}$.

## JUNIOR CHFMISTRY CIASS.

1. A given volume of gas is suljected to variations of temperature and press. ure; what changes will occur? Give ex. amples.
2. Suppose youl have a sheet of tin plate of unequal thickness-how would you find the centre of gravity of the plate?
3. What do ou understand by the terms "heat" and "temperature"?
4. Name the following bodies, and give your reasons for the bames you give to them: $\mathrm{Na}, \mathrm{Cl}, \mathrm{NaCl}, \mathrm{Na}_{2} \mathrm{So}_{n}, \mathrm{Na}_{2} \mathrm{So}_{4}$, $\mathrm{NaOH}, \mathrm{MnO}_{2}, \mathrm{Mn}_{2} \mathrm{O}_{3}$.
5. Of what use to the chemist is the law known as "the law of Dalong and Petit"?
6. What volume of chloroform (S.G. 1.49) is equal in weight to ali imperial pint of water?
7. What do you understand by the terms element, molecule, compound, mis: lure?
S. A ray of light falls upon a transparent surface (e.s., a sheet of water or of glass); show by diagram (or describe) its future course.
8. Find the percentage composition of the $3^{\text {rd, }}, 5^{\text {th }}$, and $7^{\text {th }}$ compounds given in question number four.
9. Given the weight of a quantity of oxygen gas, how would you find its volune? Given its volume, how would you tind its weight?

The results of both of these examina. tions appeared in the January issue.

## Phasmaceutical Association of the <br> Province of Quebec.

The following are the examination papers given at the preliminary examina. tions held January zind, 1 S96:

B:NGIISA laNouagie.

1. Write out the words dictated.
2. Write a short composition on "nouns."
3. Replace, without change of meaning, the italicized phrases in the following sentences, by chanses:
(a) Haroing finished the chapter, he closed the volume.
(1i) No one doubts his soodness.
(c) He is a man of hivh attainments.
(d) Many a man has suffered imprisonment for his adherence to the right.
4. Explain clearly and briefly the difference of meaning in the following pairs of words : Cap, hat; shovel, spade; invent, discover : principal, principle.

5: Parse the italicized words in the fol. towing sentence:
$I$ shall bic pardoned for calling it ly so harsh a name as madness.

Fresch.

## Pranslate :nto French:

1. Please nd us cheque for the ainount of your bill due $25^{\text {th }}$ of last month, amounting to $\$ 8.4 .52$. You are well aware that our accounts are payable within thirty days of date of bill, and we will thank you to give the matter your earliest attention.
2. Translate into English :

Nous avons l'homneur de vous transmettre ci-inclus facture et connaissement des marchandises qui seront expédiées aujourd'hui d'après vos intentions en sorte qu'elles vous parviendront demain. Nous sommes entierement à votre disposition: sojez assure que nous iravaillerons toujours au micux de vos interéts.

## (:yOGRAPHY.

1. Where are the following: Mt. Brown, Cape Trafalgar, Riviere des Praires, Iake Bras d'Or, d'ersian Gulf?
2. In what coumtry is each of the following towns: Séoul, Honolulu, Jerusalem, Benares, Yokohama, Warsaw, Aix-la-Chapelle, leiprig, Bangtok, Tanan arivo?
3. In a voyage from London to Sebas. opol, through what seas and straits would you pass?
4. Give the main divisions of Hindustan.
5. Name the bays of New Brunswick. Histoky.
6. Give one important event connected with each of the following names: Cortez, Cabot, Champiain, Laval, Amherst,

Turenne, Marlborough, Walpole, Robespierre, lincoln.
2. What causes led to the confederntion of the Canadian provinces? Give the date, and the names of the leading statesmen instrumental in effecting it.
3. State briefly some of the leading events in the career of Napoleon Bonaparte.
4. What were the causes of the American civil war?
5. In the reign of what English sovereign did each of the following come under English rule: Ireland, Wales, Scotland, Canada, Cyprus?

## ARITHMETLC.

1. A locomotive burns a ton of coal while going 75 miles, and moves forward to yards for every revolution of the driving wheel. How many times does the driving-wheel revolve for every pound of coal burned?
2. The sum of two numbers is 220 and their difference is 106 ; what is their product?
3. A three months' note for $\$ 2,410$, dated September 14 th, is discounted at a bank on October 3rd, at 9 per cent. Find the proceeds.
4. If 20 men can perform a piace of work in 12 days, how many men will do another piece of work, three times as large, in one-fifth the time?
5. I sell $33^{6}$ shares of C.P.R. stock when quoted at 53 . What annual income shall I receive from the investment of the money in Bank of Montreal stock quoted at 212 and paying $91 / 2$ per cent. dividend?

IATIN.

1. Decline in full, unus, duo, tres.
2. What is the present name of the country occupied in Casar's time by the Helvetians? By the Gauls?
3. Give the nominative singular in all genders of the comparative and supcelative forms of the adjectives, bonus, malus, parvus, magnus.
4. Explain the difference in meaning between the following: Pons, pontus; via, vita; animus, anima; opus, opera: hostis, hostia.
5. Give four semi-deponent verbs, and write their principal parts.
6. Translate into English: Jam per angustias et fines Sequanorum Helvetii suas copias transduxerant et in Aeduorum fincs pervenerant, corum agros populabantur. Acduj, quum se suaque ab iis defendere non possent, legatos ad C.asarem mittunt rogatum auxilium. "Ita se omni tempore de lopulo Romano meritos esse, ut paene in conspectu evercitus nostri, agri vastari, liberi eorum in servitutem abduci, oppida expugnari non debuerint." Eodem tempore Ambarri, necessarii et consanguinei. Aeduorum, Cesarem certiorem fa ciunt, sese, depopulatis agris, non facile ab oppidis vim hos. tium prohibere: Item Allobroges, qui irans Rliodanum vicos possessiones que habebant, fuga se ad Cæsarem recipiunt, et demonstrant, sibi praeter agri solum nihil esse reliqui.

## Royal Oil Co.

## Toronto

Offer the following special tines to the Drug Trade:

XX Petrolatum, in 50 lb . tubs, 7 c . per lb .

$$
\text { " in } 25 \mathrm{lb} \text {. subs, } 7 \frac{1}{2} \mathrm{c} \text {. " }
$$

White Petrolatum, in 2516 . and 50 lb . tubs 18c. perlb.
Benzine, 5 gal. tins, 20c. per gal.
Extra Gasoline, 5 gal. tins, 25c. per gal.
Sewing Machine Oil, 5 gal. tins, 6oc. per gal.
Sewing Machine Oil, in 2 oz. bottles, $\$ 5.00$ pergross.
Royal Hoof Ointment, in I Ib. Ins, 24 tins $t 0$ case, $\$ 3.50$ per case.
Raw Linseed Oil, by the barrel, s4c. per gal.
Raw Linseed Oil, in 5 gal. tins, 59c. per gal.
Boiled Linseed Oil, by the barrel, 57c. per gal.
Boiled Linseed Oil, in 5 gal. tins, 62c. per gal.
Pure Neatsfoot Oil, in 5 gal. tins, goc. per gal.
Olive Oil, Union Salad, 5 gal. tins, goc. per gal.
Olive Oil, for table, Pure Italian, \$2.00 pergal.
Sperm Oil, pure, in 5 gal. tins, $\mathbf{S}_{2}$ per gal. Castor Oil, Calcutta, cases, $6 \cdot \frac{1}{2}$. per $1 b$.
" " 5 gal. tins, $\boldsymbol{j c}$. perlb.
" French, 5 gal. tins, 7 hc . per lb. Sperm Candles, 36 lbs . to case, 10 fc . perlb. Paraffine " " " ix t c . per 1 b . Spirits Turpentine, pure, by the barrel, 40 c . per gal.
Spirits Turpentine, pure, in 5 gallon tins, 45c. per gal.
Wood Jacket, 5 gal. cans, 35c. each.

$$
0: 5 \cdot 5: 5 \cdot 5:
$$

Terme: 30 days. No Discount.
W E GUARANTEE PURE GOODS
EGUARRNTEE PROMPT SHIPMENT
EGUARANTEE PERFECT SAIIS-
FACTION FACTION

We are the largest producers and mamufac. turess of Canadian oil, and the largest im.
porters of Americinn oil in Canada.

Your orders will be appreciated.
$0.5 .5 . \equiv .9 .5$.

## ROYAL OIL COMPANY Toronto

GEU. ANDERSON
Mrnmerer


No. 1. Nozzle and Bhleld, with Outlet Tubing . $\quad \$ 80$ No.8. " " Complete 2.nt. Founta\{t, 4 discount to trade oh appucation.

LYMAN, ENOX \& CO. Montrea! and Toronto
dceuts for Canada.


Sold from Iralifax to Victoria

## yy

 ST. JOHN-T. B. Barker \& Sons. D. McDiarmid \& Ce.

qubeec-
 montreal \{ Xerty, Waimon \& Co. Lrman Sons a Ca KINGSTON-Henry Skinner a Ca.
 TORONTO $\left\{\begin{array}{l}\text { Llliot \& } \mathrm{Ca}_{\mathrm{C}} \text { Northop \& Iyman. } \text { T. Millbara \& } \mathrm{Ca}\end{array}\right.$ HAMILTON-Archdale Wiboa \& Ca J. Winer \& Ca LONDON-Londoa Drug Co. Jma A. Kennedy it Ce. WINNIPEG-Martin, Bole \& Wyrae Co.
NEW WESTMINSTER - D. S Curtis $\&$ Ca
victorla-langley \& Ca
qUEBEC. - W. Brunet et Cie.

IT PAYS TO HANDLE OUR SPECIALIIES

## Le Vido

Water of Beauty.
Atrue apectic for an Skin lymeasea

## BECAUSE

It gives satisfartion to your customers.

It is a reliable, safe, and sure preparation.
It has bren on the market for 25 years.

It is handsomely put un and extensively advertised.
It gives you a fair profit.
Order now through your jobber.

| Boulanker's Cresm Emuision. |  |
| :---: | :---: |
| Dozen | 3 Sold at |
| \$4.00 | O SOC. |
| "Le Vido" Water of Beauty. |  |
| Dozen | $n$ Sold at |
| \$7.00 | 0 St.00 |
| Dr. S | Scost's Pile Cure. |
| 1 l oren | 1 Sold at |
| \$1.50 | 0 25c. |
| Injection Wattan. |  |
| Dozen | 1 Sold at |
| \$5.00 | - 75c. |
| Dermatonic Complexion Powder. |  |
| Dozen | - Sold 21 |
| \$5.75 | 525 c . |

## THE MONTREAL CHEMICAL CO.,

 MONTREAL.[^1]

## BRAYLLY, SONS \& CO.

Wholesala Palant Medicines
48 and 45 William Street, - MONTREAL.
OUR SPECOIALTIEG,
TURKISH DYES.
OR. WILSON'S HERBINE BITTERS.
Sole Propriators of the followine:
Duw's Sturkeon Oil Linimen!
Gray': Anodyne Liniment
Dr. Wilson's Antibilious Pills
Dr. Wilson's fich Oinement Dr. Wilson's Persian Salve
Dr, Wilson's Sarsaparillian Elixir
Fiench Magnetic Oil
Driwihone Pul Wrison's Worm Lotenge
Lon's Pulmonary Cherry balsam ${ }_{\text {Dr }}$. Wilcon's Cramp and Pail, Keliever
Dr. Wilson's Cramp and Pai, Reliever
Ctert Dure Condition Nurse Wison's Sootbing Syrup
Wrigtie Vermifuge
Wrightia Vermifuge
Robert's Eye Water
Dr. Howatd's Quinine Wine
Dr. Howard's Heef, Iron and Wine
Strong's Summer Cure
Dr. Howard's Cod Liver Oit Emukion

GERMAN ARMY


Each One Dollar Package Contains

## Liquid, Ointment,

 and Pills.GOOD SELLER. GOOD MARGINS. WELL ADVERTISED.

## TIEE 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.

Cunadian Agenoy Toronto.


## W. Millichamp, Sons \& Co.

manuractunens or
SHOW CASES
And all
Intcrior
Wodivork
EITTINGS

Special
New Dasigus

Hest
Worlinnansihip

Cigar Cases with Patented Moistening Trays. Sponge Cases.

234! Yonoe Street, Toronto.
Send for Cratulughe.

C. Schack \& Co. . . .


Manufacturers of SHOW CASES STORE ND OFFICE FITTINGS

## Special Attention Given to Fitting Drug Stores

Evitnates and Decigns
Evimates and Decigns
Furninhed on Application.

21-23 Alice Street, - - TORONTO.
London Show Case Works


COUNTERS, WALLS, OR DISPENSARIES. SHOP FIXTURES • COUNTERS * TABLES • SHELVING • MIRRORS, Etc. $\frac{\text { Send for Catalogue }}{\text { and Price List }}$

237 King Street.
LONDON, ONT.

## Gray's

assor.fun
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 bouses at Manufacturer's price.

## HENRY R. GRAY

 ESTABLISHED 1859.
## Pharmaceutical Chemist

22 St. Lawrence Main Street (Cor, of Lagauchetiere) MONTREAL

## JOSEPH E. SEAGRAM

Wateries, Ontario.

## manufactuner of <br> ALCOHOL

Pure Spirits
Rye and Mralt Whiskies
"OLD TIMES" AND "WHITE WHEAT"
"St. AUGUSTINE"
Registered at Ottawa.

[^2]
## Attar of Roses, or Rose $0 l l$.

Attar, or otto, is from a word signifying perfume or odor, and is obtained by simply distilling the roses with water. There are many kinds of roses known to botanista,such as R'osa damascima, R. sempervirens, $\lambda^{\prime}$. muschanta, R. srallia, $R$. cen tifolia, K. . prceuncialis. All of these are more or less attar-yielding roses, but the special kinds for yielding the commercial product are the $R$. centifolia and provin. cialis. The kind, however, grown in liulgaria for its attar is the $R$. damastena. This is a variety which has been for long under cultivation as it is unknown in a wild state, and is saici to have been brought into Southern Italy in the remote ages, and from thence spread northwards. The perfume of the rose was made use of by the anciems in various ways. These early methods were chiefly by distillation of rose water and an infusion of roses in olive oil, but the process of distilling the essential oil is of modern date. Langles, in his interesting book, entited "Recherches sur la Decouverte l'Essence de Rose." giver us an account of the discovery of the essence in India. On the occasion of the marringe of the Mogul, Emperor Jehan Ghir, with Nur Jehan, A.D. 1612, a canal in the garden of the palace was filled with rose water, and the princess, observing a certan scum on the surface, caused it to be collected and found it of admirable fragrance, on which account it received the name of Atar.jelanghiri, meaning Jehan Ghir.

So far as the trade in England is concerned, it was very little known until the early years of the present contury. In the year 1809 it was included for the first time in the British tariff, when we find that the duty on attar of roses was fixed at sos. jer ounce. This was subjected to many changes, both high and low, until, in the year 1860, it was removed altogether.

The chief seat of the trade is in the Balkan Peninsula, at hazanlik, a town of about 10,000 inlabitiants. It is situated in the valley of the Tunja, which is remarkable for its beauty. The cultivation of the rose is confined to a small tract of country on this southern side of the mountain range. North of the Balkans, a small trade is carried on at the town of Travina. The cultivators are, for the most part, the Christian inhabitants of these districts. The produce is exceedingly variable, as the profitable cultivation of roses for the preparation of the perfume is entirely dependent on climatic conditions. In a favorable year as much as nearly 100,000 ounces have been produced, while as small a quantity as 27 ounces has been known as the total for the whole season ; but an estimate, based on an average production during ten years, gives us the reliable figures of 55 , 520 ounces as the produce of the rose farms of the Balkans. Besides this district, extensive rose farms may be found
at Adrianople, Brussa, and Uslak. India also has a considerable area devoted to rose culture-at Ghazipur, Luhore, Amritaur, and other places on the Ganges; but the produce is wholly consumed in the country, never coming intus the Eng. hish market. It is also produced at Medinet Fayum, southwest of Carro; this is entercly consumed in Egypt. T'unis has some celebrity for this commodity, but none from these last-mamed localities reach Europe, the demand in the East being almost greater than the supply. This is of very excellent quality. My first acquaintance with the perfume was through an Arab merchamt at Assouan, who had for sale a few boules of the verit. able attar produced at Tums.

In Southern France, the cultivation of the rose is one of the industries of the districts about Grasse, Cunnes, and Nice. These are, to some extent, familiar to English visitors. These districts, however, produce rose water rather than attar. The rose pincipally cultivated is the $R$. provintalitis, or what is generally known as the Ciblage Provence rose, which has a characteristic perfume, arising, it is said, from the bees transporting the pollen of the orange flowers into the petals of the rose. The farming operations are net difficult, for they are exceedingly simple and primitive. The field is first manured with the refuse matter left after the distillation of other plants; it is then ploughed, young plants of roses, procured from layers, are planted in rows, two teet from each other, each row being five feet asunder. In the second year a considerable quantity of flowers appear, but it is not until the fourth year that they are considered to be fully developed. A plantation of roses well looked after will last from six to eight years, but the land must be well drained. To cover an acre of land 7,000 rose plants are required, and this will produce, in an average season, $5,000 \mathrm{ll} \mathrm{s}$. weight of roses, at the value of about a penny farthing per pound, or yielding about 30 lbs. per acre. These thus grown are not treated for attar, but are submitted to a process of maceration in fat or oil, about 10 kilos of roses being required to impregnate $I$ kilo of fat. The chief centre of this trade is at Cannes and Grasse.

To produce the oil, the flowers, fully expanded, are gathered in April and May. The harvest lasts till the begiming of Junc. They are picked before sunrise, often with the calyx atached. Such as are not required for inmediate distillation are spread out in cellars, but all are treated wihhin the day on which they are plucked. An expert states that if the buds develop slowly by reasion of cool, damp weather, and are not much exposed to sun heat, when about to be collected, a rich yield of attar, having a low solidifying point, is the result; whereas, should the sky be clear and the temperature high at, or shorlly before, the tume of gathering, the product is diminished, and is more casily congealable.

The distiling apparatus is of the simplest kind-a tinned copper still, erected on a semi-circle of bricks, and heated by a wood fire; from the top passes a straight tin pipe, which traverses a tub kept filled with cold water by a spout from some rivuet, constituting the condenser. Several such simple apparatus are erected together, and about forty pounds of the fowers, with their calyces, are placed within the vessel with 60 pounds of water. The mass being well mixed, a gentle fire is lit, and when fumes begin to rise, the cap and pipe are properly fixed and luted. When the impreguated water begins to come over, the fire is lessened by degrees, and the distillation is continued until 30 pounds of water have come over, which generally takes place in about five hours. This water is then poured upon 40 pounds of fresh roses, and from thence 15 to 20 pounds of distilled water is drawn by the same process as before.
It is then poured into pans of earthenware, or of timned metal, and left exposed to the air for one night. The attar, or essence, will be found in the morning congealed, and swimming on the top. It is then skimmed off, carefully freed from any remaining drops of water, and put into bottles for sale. This, if carefully distilled, is colorless at first, but gradu. ally becomes of a yellow color. Its specific gravity is 0.87 at $221 /{ }^{\circ}$ ( $721 / 2 \mathrm{~F}$.) ; its toiling point is $229^{\circ}\left(44+\frac{\mathrm{F}}{}\right.$.) ; it solidifies at $11^{\circ}-16^{\circ}\left(52^{\circ}-61^{\circ} \mathrm{F}\right)$, or stll hugher; it is soluble in ausolute alcohol and in acetic acid.
No drug is more subject to adulteration than attar of rose, and none is more difficult to discover. The principal ingredients employed are the oil of an Indian grass, and the essence of geranium, or geranium oil, which is imported into Turkey for this express purpose. When this is the case, the boiling point is low. ered and the congealing is raised. The reliable tests are, first, temperature at which crystallization takes place; and second, the mamner of crystallizing. This latter should be in light, feathery plates, filling the whole liquid.
As to the commercial value of attar when pure, it may be estimated at from 25 s . to 30 s . per ounce. The product is of no medicinal importance, only as a scent for ointments. It is much used in perfumery, and very largely in the scenting of snuff.
In these days of extensive travel, few visitors to Eastern Europe, especially to Egypt, return home without purchasing one or more of the long, angular vials to be found in such quantities in all Eastern bazaars, said to contain the true attar of roses. These small receptacles, for which a fabulous amount is often asked and paid, contain about 15 drops of oil ; they are covered over with a bladder and a piece of silk; but, alas ! they only contain geranium oil, the bladder being smeared with a touch of attar. Experiention docet.-G.D., in The British and Colonial Druggist.

## Medicine Two Centuries Ago.

We have among us at all times worship. pers of the past, of the good old times long aso, who desire to see the wheel of time set back; some of them are more or less in earnest, usually, however, only in regard to some particular phase of life which has caught therr fancy; but probably they never consider what a reversion to the good times of, say, two hundred years ago, would mean in the way of doctors' draughts and domestic remedies : for certainly some of the medical prescrip. tions and recipes of our ancestors, if extremely curious and well adapted to make the dispensing chemist of our times sit up, are anything but nice reading for a patient. Snakes, smanls, toads, and frogs seem to have been held in particular esteem; calcmed and powdered, stewed, mashed, or otherwise treated, they enter into the compostion of a great number of concoctions, all more or less umpleasan: to one's ideas. John Bate, in his "Mys. teries of Nature and Are," ${ }^{16} 635$, in a series of remedies for bleeding at the nose recommends the toad, alive or dead. "Also, if you the a live toad in a net and hang it about the patient's t:ecke he will be in a sodaine feare, and so the blood will leave his former current, and have recourse into the heart. Or else a dryed toade held in one's hand, or hanged about one's necke." Elsewhere he tells us for the same purpose to take a black toad in May. Snails come in for the cure of rupture. "Take nine red snails, lay them between two tyles of clay, so that they creep not nor slide away, and bake them in the hot embers, or in an oven, till they may be powdered; then take the powder of one of the snailes, and put it in white wine, and let the patuent drink it in the morning at his risung, and fast two hours after, and drink these nine snailes in eighteene daies, that is, every other day one. And if the sickuesse be so old that it will not heal in eighteene daies, begin again, and drink other nine snailes, and he shall be whole; this considered that he weare a trusse in the meantime, accordlug to the manncr of the rupture." Begm again and "drink other nine smailes" is a very fine touch. Next we have, "For the biting of a mad dogge." After bathing the wound in brine, "then take two live pigeons, cut them, throw the middle, and lay them hot to his hand, if hee be beten in the ames. If in his legges, to the sole of his feet." A water, prepared from cal. cined flints, for making "steele as soft as lead," is of double value, since it is "likewise a soveraigne water to help the gout, being anoynted where the griefe is, for it giveith ease very speedily.'

In "The Ladies' Cabinet," by the L.ord Ruthven, 1655 , we are told that "oyl of worms asswages paine, and is good for bruises and paines in the joynts." It is prepared by boiling earth worms in white wine and sweet oil. For another purpose, the foot of a hare is burned to powder and drunk with red wine and cin-
namon. The milk of a red cow is an es. sential in another compound, and a remedy is provided "to heal children of the lumatick disease caused by renson of a worm with two heads, which breedeth in the:ir bodies, which, coming to the heart, causeth such a passion in the child that oftimes it kils them."

Dr. John Lirench, in "The Art of Dis. tillation," $166_{4}$, gives his readers a collection of remedies, some of them almost universal in their application, such as the "elixir of mummie," prepared thus: "Take of mummie (viz., of man's flesh hardened), cut small four ounces, spirit of wine terebinthinated ten ounces, put them into a glazed vessel (three-parts of four being empty), which set ma mixer to digest for the space of a month; then take tout and express it, let the expres. ston be circulated a month, then let it run through 'manica Hippocratis': then evaporate the spirit, till that which remains in the botom be like an oyl, wheh is the true elixir of numme. This elixir is a wonderful preservative against all infections, also very balsamical.'
"A mummiall quintessence," which produces wonderful effects in preserving and restoring heath, is also described in Edwardo Bolnest's "Aurora Chymica," 1672. For its preparation you have to take three or four pounds of the flesh of a sound young man dying a violent death about the niddle of August. Why the violent death, or why the particular time specifed, is not clear. However, to return to Dr. French. the oil of suakes and adders is prepared thus : "Take snakes or adders. when they are fat, which will be in June or July; cat off their heads, and take off their skins, and unbowel them, and put them into a glass-gourd, and pour on so much of the pure spirit of wme, well rectified, that it may cover them four or five fingers' breadth; stop this glass well, and set it in Balneo till all their substance be turned into an oyl, which keep well stopt for your use. This oyl doth wonderful cures in recovering hearing in those that be deaf, if a few drops thereof be put warm into the ears. A nobleman of (iermany, that was famous for curing the deaf, used this as his chiefest medicine, by which they say be cured those that were born deaf." A similar preparation: "The quintessence of snakes, adders, or vipers, is stated to be of extraordinary virtuc for purifying the blood, flesh, and skin, for the falling sickness, strengthens the brain, sight, and hearing, preserveth from gray hairs, reneweth youth, cureth the gout and consumption, is very good in and against pestilential infeciions." "Viper wine" has the same virtues as the preceding, and cures leprosy as well.
"A pectoral water" introduces some new elements; the liver of a calf and the lungs of a fox are added to a handful of each of five specified herls, to say nothing of about a dozen other ingredients which are infused in rich old wine, and then distilled. Another preparation, a
most infallible medicine against the falling sickness, is "the essence of man's brains," prepared from "the brains of a young man that hath dyed a violent death." No doubt that commodity was more easily obtainable two centuries ago "han it would be at the present day. "Aqua-magnanimitis" is a preparation of ants ("the biggest that have a sowrish smell are the best "), dygested in spirits of wine, of whel: one author siays: "This spirit is of excellent use to stir up the anmal spirit; in so much that John Casmire Palsgrave, of the Rhene and Seyfric of Collen, general against the Turks, did always drink of it when they wemt to fight, to morease magnanimity and courage, which it did even to admiration." Even more efficacious should be the next preparation, consisting, as it does, of ants, ants' eggs, millipedes, woodlice, and bees, all digested in sprits of wine, and impregnated with sont. "Oyl of bricks" is another valuable compound; "it helpeth all cold distempers whatsoever, falling sickness, palsie, virtigo, lethargy, forgetfulness, gout, toothache, and a large number of other ills." Ob: for oyl of bricks. The "oyl of the philo. sophers," or the "blessed oyl," appears to be much the same thing.

Other preparations are the essence of swallows, essence of crabs, oil of egges, oil of bunes, oil of crabs' eyes, water of spawn of frogs, quintessence of centipedes (good for purfying the blood), and the quintessence or arcanum of toads, "a noble remedy " against all sorts of poisons, cancer, etc.; for its preparation we are directed to "get in the month of June and July a great quantity of overgrown old toads." The quintessence of man's blood, made "of the blood of a young, sound man, of which there is enough to be got at spring and fall, from such as let blood for recreation," has some very wonderfal propertics, one of which is that it puts off age very long. "Oyl of the blood of the stag" is not so allembracing in its virtues, but it is good for the gout. "Spirit of man's hair" is very unpleasant to take, and therefore is rarely used inwardly. This appears not unlikely, as mother writer tells us of a water and oyl made out of hair which is used in Germany for sprinkling upon fences and hedges "to keep wild and hurtul cattle from coming to do harm in any place; for such is the stink of this liquor that it doth affright them from coming to any place near it." It must not be thought that we have left all these outlandish remedies far behind us. The hair, preferably black, of healthy females of good digestion, was the essential feature of a medicine patented as an invention in England within the last decade or so, and snails are still used as a household remedy in country districts.-Indian Lancet.

Dr. Whaipley has epigrammatically remarked that the pharmacist must remember that he is a tradesman in business as well as a nember of a profession.

Are warranted to give Immediate Relief to those suffering from Cold, Hoarseness, Sore Throat, etc.

R. \& T. W. STAMPED ON EACH DROP



Borine Chemical Company 21 WEST 23rd STREET

NEW YORK


## "DUNRAVEN" 10 "R\&S." ${ }^{6}$ <br> These are both very

 high-class Cigars.Fraser \& Stirton,
Send for Sample Order.
IONDON, Ont.

## FOR BODY ${ }_{\text {AN }^{D}}$ BRAIN

SINCE 30 YEARS AII, EMINENT PHYSICIANS RECOMMEND

## VIN MARIANI

The original French Coca Wi..e ; most popularly used tonic-stimulant in Mospitals, I'ublic and Neligious Institutions everywhere.

Nourishes, Fortifies, Refreshes
Strengthens the cutire system; ; most .trrecable, Effectize and Lasting Renosator of the Vital Forces.

Every test, strictly on its own merits, proves exceptional reputation.
Palatable as Choicest Old Wines
LAWRENCE A. WILSON \& CO., SOIE Agents, MONTREAL

## Effect of the French Treaty

## CLARETS AT HALF PRICE

The Bordeaux Ciaret Company, established at Montreal in view of the French treaty, are now offering the Canadian connoisseur beausiful winet at $\$ 3.00$ and $\$ 4.00$ per case of 12 large quart boules. These are equal to any $\$ 6.00$ and $\$ 8.00$ wines sold on their label. Every swell botel and club are now handling them, and they are recommended hy the best physicians as being perfectly pure and highly and they are recomuse. Address: BORDEAUX CLARET COMPANY, 30 Hospital Street, Montreal.

## Radlauex's Somnal AETHYL.CHLORALURETHAN

(REGISIERED)
the newest and most efficient soporific remedy
Taken in doses of 32 grains, or half a eacpronful, in milk, ale, or cosmac, produces in half an bour a guiet refreshine sleep, hasting from six to eight hours, with no unpleasant after effects. The effects of Somsat. are mare pleasamt than those of Chloral llydrate and Morphia. Evperituents made in the Town Hospmals, Moalnt and Friedrichshain, K.mipliche Charite and Kunghehe Úniveratats Lolihlinih, Berlin, have shown that Sonsiat, does not accelerate the pulse and does not upset the stomach. Somsat, is especially recommended for Nervons Insomma, Neurasthenia, Spinal Complaints, Infectious Daseases, I'aralysis. Melancholia, Ifyseria, Morphinismus, and Diabetes. The low price of Somsat. enables its use in the poor and wotkmen's practice and in hospitals.

## Radlauer's Antinervin

 (SALICYLE BKOMANILIDE)In the form of Powder, the most efficacious Antipyretic, Antineuralgic, and Antinervine

Asmaibivis replaces and surpasses Antipyrin, has no hurtful secondary elfects, and is cheaper. Taken in doses of $\$$ grains four times a day, it is an excellent renedy for beverish, Catarrhal, and Rheumatic latus. Axtintinvis is of especial sen . $t$ in cases of lamenza, Neuralgia,
 tism in the Joints, Diptheritis, and other typical Fevers

MANY GOLD MEDALS HAVE BEEN AWARDED
S. RADLAUER, Kronen Apotheke, FRIEDRICHSTRASSE, y6o BERLIN, W.
W. J. DYAS, Toronto, Ontario

Wholesale Agent for Canada

## Wine of the Extract of Cod Liver



CIE
General Depot:-PAR1S, 22, Fiubourg Montmarte, 21
This Wine of the Exiract of Cod Liver, prepared by M. CIIEVRIER, 2 first-ciass 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 -ulistances. Its effect, like that of Cod Liver Oil, is invaluable in Scrofula, Rickets, Anemia, Chlorosis, Bronchitis, and ail diseases of the Chest.

## Wine of the Extract of Cod Liver with Creosote



The beech-iree Creosose checks the destructive work of Pulmonary Consumption, as it diminishes expectoration, strengthens the appetite, teduces the fever, and suppresses perspiration. Fis effect, combined with Cod Liver Oit, makes the Wine of the Extract of Cod Liver with Creosote an excelleat remedy against pronounced or threateped Cobapumpion.

## LIVE DRUGGISTS <br> KEEP <br> ON <br> HAND <br> Dr. Camboll's Safe Arsenic Compleion Wafers...

## AND <br> Foulds Medochied Arsenc Conplexon Soap

## THE ONLY REAL BEAUTIFIERS OF THE COMPLEXION, SKIN, AND FORM

H. B. FOULD
sole proprietor 214 Sixth Ave., NEW YORK. 71 Front St. E., Toronto, Ont.

## Formulary.

## SYRUI OF WH.D CHERKS ANH HOREHOUN1). <br> Wild cherry bark, in No. 20 powder 4 <br> Horehound. 1 <br> bilycerin. J 1 H <br> Alcohul ........... ... ................ 1 . 11. <br> Sugar............ ... ............... is <br> Water, If.s. ad. 16 月.

Mox the glycerm and alcohol with eight ounces of water; mosten the wild cherry and horchound with two ounces of this muxture, pack in a cylindrical percolator, tightly covered; after twenty-four hours' maceration proceed with percolation, using the remainder of the menstrum, and afterwards sufficient water to make ten fluid ounces of percolate ; in this dissolve the sugar by agitation, without heat, and strair.-Ex.
htoueur carminative.
lasts.
Melissa, herh
30
Melissa, herl. - 5

Orange peel, sweet, fresh
Coriander.
Cardamom.
Cassia.
Nutnes..
Angelica root
Alcuhol, $90^{\circ}$
Water
Mix and let stand for twelve hours. Kemove to a distilling apparains and distil off ;00 parts. Disso've 100 parts of sugar in 200 parts of water and add to the distillate. Color red.-Natiomal Drugsist.

## HIt: SUPIOSITORIFS.

## No. 1-lodotorm............................. $3^{0}$  Сасао butier..........................gr. isó

Mix, and make twelce suppositories.
No. 2-Entract with harcl, prond....fr. (6)
Tannia.... ............................. 12
Opinı....................................... ${ }^{\text {t }}$
Mix, and make twelve suppositories.
Either of the above can be casily and profitably made and yield excellent reme-dies.- Ificstern Drusinist.
akomatic stevi of miquokice Granmes.
Cinnamon (Ceylon) ..... . ...... 20.00
Ginger (Cochin) .................. 12.00
Clotes............................. . . Sn
Sinmeg. S
Exumeg-..... -...... 5.00
50,00

Sugar........................................00
Alcohol (S.V.K.) and water, cach a sufficient quantity.
Reduce the cimamon, ginger, cloves, and nutneg to i No. to powder, moisten with 15 c.c. of alcohol, macerate for twenty-four hours in 2 covered vessel, then pack into a cylindrical percolator and gradually pour alcoho: unon it until 100 c.c. of percolate is obtained; mix this with the sugar ilt 2 mortar and set aside in a moderately warm place until the alcohol has evaprorated. Add water until 500 c.c. of percolate is obtained: dissolve the extract of liquorice in the
percolate with the aid of gentle heat, add the aromatized sugar, let the whole come to a boil, strain anil add enough water through strainer to make 1,000 c.c.- $H$. F. Míasselorock, at mectins of Missomeri Assuciation.

COI.OKED POL.ISH FOK L.EATHEK.
A German patent for colored polishes for boots, harness, etc., specifies the following mixture: White bone ash, 46 parts; treacle or glucose, 92 parts; oil or grease, 9 paits; concentrated sulphuric acid, 12 parts ; concentrated hydrochloric acid, 10 parts; yellow mineral color, 2 to 5 patts; azo color, $1 / 2$ yart. The bone ash is finely ground and nixed with the treacle or glucose. The grease-which may be animal, vegetalsle, or mineralis then add $s$ d, and finaily the acid and then the color. This polish is applied with a brush as usual, and is said to give a peculiar brilliance to yellow leathers whithout alteration of their slade.-Oils, Culors, and Drisalteries.

Laxolane pomade

j'erfunte to taste.
-Chemist and Drugisist.
Cletaning fiuli).

| Oil of turpentine . . . . . 2,600 prasts. |  |
| :---: | :---: |
| Ammonia mater, | 1,950 pats. |
| Methylic alcotol.. | 2,500 parts. |
| Ether, sulphuric., | 225 parts. |
| Fiher, actic | 225 jarts. |
| Water to make. | 10,0:0 parts. | - National Drussist.

## I.EATHER PRESERVATIVES.

For use during winter the following will be found excellont applications: Fellow wax, 1 oz ; petroleum jelly, 407 . Melt togather. Aideream.-Melt together ; o\% of Japan wax and 1507 of linseed oit. and atd $\ddagger$ scr. of levigated lamphlack. Perfume winh a few drops of oil of nirbane. Harmess-faste.-Melt together 10 oz of tallow and 507 . of resin, then add 10 oz . of soft water and 7 oz . of common soap; continue the heat, stirring assiduously until a uniform paste results. Chionist and Drusist.

## chul.manis romator.

The Petil Monitear de le Pharmacic recommends the following:

| Menthol. |
| :---: |
| Olive oil. |
| Inmolin |
|  |

Mix and make an ointment.
l'ain is su!dued at once on application. The skin becomes soft under regular use of the promade, and loses its tendency to crack and uicerate.

This is an excellent formula, and would make a good seller.- Vifional Drugrist.

## White vakNish.

Colorless varnish for use on fine labels or other prints, as well as for white wood
and other spotess articles, is made as folluws: Dissolve two and a half ounces of bleached shellac in one pint of rectified alcohol; to this add five ounces of anima! bone black, which should first be heated, and then boil the mixture about five minutes. Filter a small quansity of this through filtering paper, and if not perfectly colorless, add more hone black and boil again. When this has been done, run the mixture through silk and through filtering paper. When cool it is ready for use. It should be applied with care and unitormity.

## IMPKOVED H:LINIK AKOMATIC.

The National Formulary, as well as the U.S. Pharmacopeia, gives formule for elixir aromatic in which it is necessary to have a preparation in stock that is never called for, except in making elixir aromatic, as suggested in the duestion. It no doubt would be a saving of time and trouble, and obviate the necessity of haring unnecessary bottles on our shelves, by making the elixir direct from the ouls. Through experience I have made the preparation according to the following for mula, and have had satisfactory results :

| Oil orange | 30 drops |
| :---: | :---: |
| Oil lemon. | S drops |
| Oil coriand | 2 drops |
| Oil anise | 1 drop |
| Syrup. | 375 ccm . |
| Alcohol. | 250c.cm. |
| iVater enough to make. | 1000 |
| Irecipitatert phohps of | q.s. |
| Mix and follow direc Iharmacupcia. | ling to |
| A formula that inas tion is as fullows : | n satisfac |
| Oil orange. | 10 drops |
| Oil almond, 1 | 1 drop |
| Oil clor | 1 drop: |
| Oil cinnamon | 1 trop |
| $\left.\begin{array}{l} \text { Alcohol } \\ \text { Svino } \end{array}\right\} \text { a.a. }$ | $360 \mathrm{c.cmi}$. |
| Talcun. |  |
| Water, enough to ma | 1000 c |

Ilix the oils with 15 grams of talcum, add the alcohol and syrup, mix thoroughly, and, fanally, add the water. I.et it stand in a closed vessel or bottle for 24 hours and filter through paper.

This formula gives a preparation that can lee colored with a sufficient quantity of tincture cudbear or red aniline. Solution to be used when curacao is ordered in prescription and the genuine or imported article is not specified. It is 2 good imitation of the imported liquor.

A Breaching Fiuto.-"Ozonine" is the name given to a new bleaching fluid discovered by a German chemist. It consists of 2 solution of 125 parts of resin in 200 parts of oil of turpentine, to which is adkied 90 parts of hydrogen peroxide, and a solutior, of potassium hydrate in 40 parts of water. This mixture first takes the form of a jelly, but in a few days changes into a thin fluid, which requires some weeks for its completion.-Mas: Phar.

## Photographic Notes

## A Revolution in Photography.

According to the Viema correspondent of the Standard, the Presse for lamany 7 gives further details of the remarbable scientific discolers made is l'rufessur Runtgen, of Wuaburg liniversty. "The prutessor came upon his discovery quite b) accidem. He was expermenturs in the datk with a Crookes vacuum tube, which was cotered with sume sont of cloth. A strong electric curnent mas passed through it. whle close by there was some prepared photographic paper. bat no canera. On this papea the protessor noticed aest day sevetal lanes for whath he could not account. his restoring exactly the circumstances as they existed on the preceding day, he was able to ascertain the real origin of these mysterious marks. He contumed his experments with the (rookes' tube and photograpinic paper, and found, in the first place, that not only may a camera be dispensed wath. but that the image from the laght rays of tine Crookes' tubes is not obtained if it hats to pass through lenses.
" By the use of tirese rays photographing is immensely simplitied. There is the sacuum tube: in front of it is the object to be photographed, and immediately behind it is the prepared paper, in a wooden case, wood being transpatemt to these rats. An ordinary phate, whether wet or diry, must not be exposed to daylught until ather fixins, becatise the ordinary hyht rays would act upun the siluer or wher compounds. hat in the case of the Crookes' rays this dinticulty does not exist, because the sensatised paper can be left in the wooden case, and, therefore, in complete darkinss.
"That, inowever, is not all. The professor found that these peculhat ratso are not refracted, whin is the etason for the inapplicability of lenses or the camera . and he further fown ins caperimations tiat they develop no heat, and that the are without amg influcace apua the most seastuce majneth motruments. He also discovered that these rays possess this entraordmary pecularity that they do not tratel in unamanas wates, hut by moving forward an a direct lime. The the orethcal meterest athactirg to tius last peculiarity. if it he contirmeth, is enurmous. The first photograph of a haman hand, showing only the bones and the migs on the fingers, was obtanced by the peofesoor phacme his own hand on the wooden case when the prepared paper, and atowmy the rays trom the (rockes tule to atill directly upen it.

- There are already mine differemt Crookes tule photozaphs in Vienna, the m.gionty in the kecpung of prefessor $k$. Binifmaman of Viema Comversity. This camment profesoor of physics declares that the discovery of this "new lygh," as he serms $n$, will form an epoch in the history of srienire. He says that there are still certan: obscure points that sequire clear-
ing up; but, on the whole, lee is not skeptical. The repection of the experiment, however, has not get been success. ful in Viema; but this, it is said, is because the Ctookes' tuies at the disposal of the expermenters here were not sufficiently large."
A correspondent of the Stamdard of serves, ill confirmation ot Drofessur Runt gellis discover!, that he and a friend "have obtained distinct proof that the radiations in questuon di phass easil? :hrough varous substances that are quite opaque to ordinary lyhh, and do produce strong impressions upon ordmany photo graphic phates entuely meased in lie hatproof maternal. Indeed, all substances that we have so far experimented on in thas haboratory appear to be transparent to these radiations, eren shects of ebonite, carbon, vulcamed fibre, copper, aluminiam, :md irom, though there is consider. able variation in degrce."

A later report states that Professor Klupathy, of the physical institute at the C'nicersity of l'esth, has repeated, with very satusfactory results, the experiments made by lrofessor Romgen. Ile was able to obtaia pictures on a photographic dry phate enclosed in a wooden case, and has likewise photographed a larger pant of the human body than the hand, obtaining priares of the bones onde, withom their Reshy coveting.
" Professor Rontgen has sent rays of the new chemeai light through alumin tum phates of one and a half centimetre in thickness. and they wem as clean through as is the substancehad been wood. I he same was the case whth two sets of boons, includng many volumes. Th. he placed between the Crookes tube and an ordinary compass: behind them was the wooden case with the dry plate, and the resule was as complete a photograph of the compass as possible. It is, perinaps, not strictly a photograph on the ordanary sense, because no lenses are used ; it is not a negatuce bet a postuve plate that is obamed. lience some people are mchand to call such a figure simply the stade of the obyect. It has not, however, up to the present. been fornd possible to get such a shade fixed."- - 'harmatiafical fiminal.

## Snap Shots and the Hand Camera

Ill dust covered and nespected, the mplenents used in early efforts mark the course of adrancement in our chosen lmes of work and pieasure. The advanced amateur has forgoten the hand camern of his first steps in photography, or only remembers it to remark, iI dod that once," as he meets the sumphothing fiend exerywhere wandering up and down the land.

But great strides have been taken in the manufacture of hand cameras and all the accessories, and the work that is possible, and the results that are obtained by the successful snap-shotter of to day, are
alike a credit to him and his instrument, and a wonder to all.

A hand camera should be a part of cery amateur's outfit. Such an instrument could have been used to advantage the day of the linights lemplar parade in Boston, where a harge tripod camera was useless and heavy baggage.

The gualdications necessary in the suc cessful use of the camera are a quick eye, judyment of distance, some idea of composition, courage, and a steady nerve. possessed of these, you can go anywhere it is right to go and come away with good proof of your trip.

The film, a bugbear to many, is really the meat of the hand camera. You call do nothing with plates that cannot be duplicated with the film. You can carry more of them, make the changes quicker, and, consequently. get more exposures. The small universal focus, film, and platecarrying cameras of recent manufacture answer all sequirements, and have many advantages.

We dress our wincows to attract attention, and while our wares are capable of arrangements pleasing to the eye, the novelty wears away with repetition. It must have been observed how quickly pictures catch the eye and stop the feet. People are meerested, study the display, smile, stop again as they return your way, and ask their frends if they have seen the pictures in your window. It is something your neighibor camot exactly duplicate. The negatives, the prints, the display are wholly your own, and a little imelligent talk, when the customer comes in, about the pictures, and the making of pictures, interests and pleases him.

Now, the hand camera and the snapshot make this nearer and easier to you than the tripod and the larger box, because a larger variety can be shown. Some of the pictures can oaly be obtained that way: you come nearer to the great majorty of picture takers. You can send your clerk, you: family, your out-of work freend off for what will interest them in obtaining and profit you in having; it will make trade for you in photographic material, and it comes aearest to the desired result of all window display by attractung favorable attention to your store and your goods. - Spatuha.

## Cassia Oil for Clearing Microscopical Objects.

Dr. H. G. Piffard, of New York, linds pure oil of cassia best suited of all oils as a monating medium and clearing oil, owing to its high refractive index ( 593 ). Hacilli examined in cassia cxhbit an unrivalled brilliancy and sharpuess of contour; and the minuter details, such as spores, flagella, etc., are shown with a distinctness impossible in cedar oil. The oil oi cassia. like the oil of cloves, zends to alistract the color from tacilli stained with some of the aniline dyes, but not with sufficient rapidity to inteffere with the diagr:ostic examination.


M'COLLOM'S

## R <br> heumatic epellant

Hy intrinsic merit has obzained extensive sale in Canada and the United States 24 the most reliable cure known for sheumatism, ax it not only relicves, but also thoroughly remover the cause from the system. Is is neatly put up in St.on Lotilex, taken with good effect on the liver, kidneys and Llood, and has been in succesfuluse overtwent; years
Many druagists to whon we are under great obligation express much eatisfaction in handling this reliable senuedy.
Sold by Wholentio Firiuy of Monirent Toranto, Einmiltian, Lomaloa. Winulpeg. mud hy Retail Drumelate noneralis:


## "MANLEYS"

 ceerery Merve Conpounowirll
Beef, Iron, and Wine
A acionilice combimation ot Colery. Fref, Iron. mail Wime. Tonlon, amal Pure ditycerlue, inntend of nierhol UNEOUAJ.T.ED

## LSA MELLTH BULLDER aUI MELLTH RESTORER

Has riven the FUlitest Satisfaction sopersons who have raken is.
It is put up in a to-0z. iotile. contained in an attractive Hue and White carton.

TLERMS.
30 dajx ( $20 \%$ of $)$ or
. 56.70 per dos.
Srot Cask (on delivery) when
shipped directonly....
For orders of 3106 dioren
Todas ( 5 300) 310 nod $\%$ of or
70 days ( 57.30 ) 80 and s/onf
NELESTMK A ABITELE.
Urderx respectfolly solicited.
THE LION.MEDICINE CO., 35 Queen St. East, TORONTO.


COPYRIGHTS.
CAN I GBTAIN A PATENAP Fin a MinN \& 《li.; who have had nearly yity yeare experterce in the gutchit busineas. Communicm formation concernink lititutimand bow of ino tain thein zent iree. Also a catalogue of suechath.

 Lus art broucht widely berore the publle with. out conat to the inventor, Thas solendid paper. anceat circulatiou of auy scientifc wor in the worla Sis nycar. sample coptre moristin the coples $\mathbf{2} 5$ tifut plates. th colors. and phorocrapas of new.



## ONTARIO

 VACCCINE FARMPure and Reliable Vaccine Matter alwaye oa band. Orders by mail or otherwise prompily filled.

30 Ivory Points, $\$ \mathrm{t}$; 3 Ivory Pisnte, of cents; slogle Points, zo cents. Discount to the trade.

Addicssall orders- WACCINE FARM,
A. STEWART, M.D.

Palmorator. Ont.

I can save money
for any advertiser ir. Canadi. I can make his advertising more profitable. In some cases I can niake it very much more profitable. In others only 2 little nowe, hut in every case I honestly believe that I can make money for my client. I an an advertisement writer, but I mm more than that. I not orily hely my clients in the preparation of their advertisements, bat I tell them what to do with the ads. after they are prepared. I also tell them what not io do with then.

A great deal of money is wasted in advertising. There's no fuection alout that. Excery diay business men are using money for alleged acvertising that dees no good at all. It is gurt of my work to kefp my clients out of mistakes. If every one of my clients will refuse to emter an advertising contract without consulting me, he will be ahead a great deal of moncy at the end of the year.

Advetising is my buciness and my protession. It is a thing that I know lest in all the wotd. I have hat experience in all its varinus phases. I have written a great many ads, and booklets Sor druggists. I am thoroughly lamiliar with the kinds of ads. that pay best in that business. My regular price for such retall work is $\$_{1}$ an ad. without an illustration, or $\mathbf{S}_{1} .50$ each, including an appropriate illustration.

I hace a handsome 48 page book that tells all about my bucinexs. Send for a copp: It iifrre.

Plans, Advice, Writinc, and Illustrating for Advertisers.
Mys new zou-page book, callied "Good Advertising," costs $\$ \mathrm{~s}$. It is the higrext money's worth ever contained in anj book on advertising.




## Advertising.

## Practical Hints on Advertising.

## Copyrighted 8895 , ing Cibakleks Austis Bates.

I do not believe in scheme advertising of any kind. In some cases it may pay, but they are few and far letween. The kind of advertusing that can always be depended on is newspaper adverising. It always does what it is intch.'. is used properly. If it ever fails, it is not the fault of the medium, but the fault of the advertiser, or the way he advertises. The right sort of advertisements in the newspapers go right into the family circle, exastly where the dealer wishes his goods to go. For this reasom, if for no obler, it is better than any other possible method for bringing husiaes.
I have had quite a good deal of experience in managing different outside schemes for advertising a busmess, and I have been able to fikure up the results rather accurately. I have never yet seen an undertaking of this sort bring back enough money to pay for itself, either directly or indirectly.

The advertisement that pays best is the plain, honest, forceful talk, written just as if the writer was talking to the reader face to face-a statement of facts. There is nothing in the world so mereresting as facts, especially the facts of business. They shoald be written about entertaningly. People like to know how and where things are made. Not a techmeal description, but a hint here and thene. For mistance: "These groods were designed and woven in France, the cotton came from Abbama and the silk from China. Twice across the dilatic, once across Asia and Europ:, and hure is the fimished fabric for 75 c . a yard.". It cacuaes an interest that a mere bald statement would never get. Knowtedge, thought, and truthfulness will gencrally; produce a good advertisement, and a gond advertisement in a good paper will always bring good results. The selection of the medium is the first and most important point. The writing comes after. Even a bad ad. it a gond maper will bring some business. s good ad. in a pour paper is sheer waste.

Advertising, properly ronsidered, and in its strongest sense, is merely telling people what and where and why-particularly why-they should buy some particular thing. Advertising isn't geod unless it accomplishes this, and convinces a greater or less number of people that the advertiser and the thing advertised are just exactly what they have been looking for.

A great many merchants cut down their advertising in the summer. Some even stop it altogether.
in everyday life, when a thing is hard to do, it only calls forth greaier effort.

If the laborer cau't move the stone, he gets a crowbar and a block of wood. He makes a lever and the stone moves. If the crowhar isn't long enough, he gets something longer. He doesn't give up because the stone has got to be moved.

Same way in busiriss. Prade is a stone. The fumy thing is that the lighter it gets, the harde. it is to move. It can be moved, though. You may have to have the lever lengthened. Certainly you ought not to shorten it. The best business lever is advertising-newspaper advertising is the longest lever and the quickest to move trade.

Common sense has a great deal to do with advertising. Think about it from a common-sense standpoint. It may take some "nerve" to pay out money for newspaper space when the business is not pasing expenses, but it will pay:

More than half the busmess houses in the country would be ahead if they could shut up for three months in the summer. l lut they cannot do it. Why? Simply because they camot afford to. People would forget them.

Same way in advertising. Think about it.

Dull times are the times to put forth the greatest effort and the most money. people don't usually ask for what they have already. Advertising is merely asking for trade. When the store is full eviry day, cut down your spare. Don't eapect that you will get a big trade in dull times, but keep count, and you'll find that the advertising was profuable-profitabie right at the time and enornously profitable after a while. The very fact that only a few merchants are wise enough io advertise in dull seasons makes it all the more protitable for those who do. You are there when others are not. It gives you greater promineace. It will make your advertising in busy times much more effective.

Advertisements should never be prepared in a hurry. There ought to be some particular time set apart in each day or each week for the consideration of this question. Do not wait unti! the last minute. and then write something hurriedly, rumming the risk of making mistakes, and with almost the certainty of failing to get a really good amouncement. A bad advertisement in a good paper may possibly do some good; a good ad. in a goot paper will alwa;'s pay: It isn't such a hard thing to write geod ads.; it is mainly a question of taking lime enough and giving the matter the requisite amount of thought. Do not say you baven't time, because this part of the business is just as important as any other. In one sense, it is more important, because without it the business cannot amount to very much.

A shrewd advertiser said to me recently: "I like to advertise in papers which
charge a good stiff extra rate for display and for the insertion of cuts. The fact that they do this prevents a good many people using them, and, as a consequence, my ads. are very much more prominent, for I always pay the extra price and use the cuts and display."

I have recommended frequent changes in a m.un who said: "Yes, but our newspaper charges us extra for composition if we change our ad. oftener than once a week"-or once a month, as the case might he. 'That doesn't alter the case at all. The advertisement should bechanged, and, if it costs a little more, it costs a little more, and that's a!! there is of it. It will pay to pay the additional charge.

I saw a notice the other day of an advertisement which had been run continuously in identically the same form since 1566.

That advertisement may have done some good, probably did; but, to bring really adequate returns, advertising should be freshened by frequent changes of copy.

## Commercial Value of an Even Temper.

Don't grow angry at your employecs. If they do wrong, tell them in an explanatory way of their shortcomings; then watch the result. It works like a charm. A kind word can produce a change for the better quicker than a reprimand. The one leaves a desire to do better, the other a sting ; both are boomerangs. Choose the wiser plan-kind zurds. It don't do harm to have occasional talks with your people. You have no idea what bright thoughts some of your people have. You can often learn something from them. All they need is a little encouragement to express themselves. It is best to have your people like you. You can get better results from them, and, besides, it is a splendid advertisement. It spreads like wild-fire.-Kejstone.

## The Estimation of Glycerine.

Gantheradivgeates the following process for the estimation of glycerine in the free state or in the combination with fats. The operations are conducted in the gas apparatus described some time ago by the author. Three grammes of solid potas. sitm bichromate are mixed with a sufficifint quantity of the glycerine for the estin.ation (about 3 grammes) and made up to 5-10 cc. with water. The mixture is heated until neaily the whole of the bichromate is dissolved, and then 10 cc . of sulphuric acid ( 75 p.c.) are added. The $\mathrm{CO}=$ evolved is me:sured in the ordinary way. The author claims that the decomposition proceeds exactly according to the equation $\mathrm{C}_{3} \mathrm{H}_{8} \mathrm{O}_{3}+\mathrm{O}_{7}=3 \mathrm{CO}_{2}+4$ $\mathrm{H}_{2} \mathrm{O}$. Of course, in the case of fats it is necessary to saponify and separate the fatty acids before the estimation is made. —Brilish and Colonial Druggist.

## Pharmaceutical Notes.

Sabictile Acid Solution. - It was found some time ago that boras increases the solubility of salicylic acid in water. Some believe that a true chemical compound is formed between these two sub. stances, and that this compomed contains exactly one molecule of each, being similar in composition to the tartro. borates ob:ained with tartaric acid. It would be interesting to make more investigations on this subjeet, for it might be possible thus to produce a stith more valuable antiseptic solution than the plain solution of salicylic acid in water, and one in which the orritant effects are reduced, provided that the solution is not made too strong. In making such preparation, it is necessary to use absolutely pure boras, and to discard any product that contains soda or carbonate of soda. If the existence of a true compound of salicylic acid and borax should be placed beyond doubt, it would be interesting to isolate this compound and prepare it for pharmaceutical use. - Masweine Phar. macy.

Preparation of Thancetic acid.This may be readily and quickly prepared, according to Sciniff, by carefully heating and divilling a maxture of phos phorous pentasulphide, a part ; cuarsely powdered glass, $\frac{1}{2}$ part; glacial acetic acid, a part. The reaction, which soon commences, is easily regulated, and is not attended by excessive frothing. Distillation must be stopped when the thermometer marks $103^{\circ} \mathrm{C}$., and the distillate fractioned, the portion passing over between $92^{\circ}$ and $97^{\circ} \mathrm{C}$. being collected. The substitution of thiacetic acid for sulphuretted hydogen is recommended as a reagen for arseme in particolar and the heavs metals in seneral. Its advantages are : Convenience in use, comparatue ab. sence of odor, and absolute ficedom from arsenic, even if prepared from a phosphorus containing arsenic. In practice a 6 per cemt. solution of the reagent in water, or a $j^{\circ}$ per cent. solution in ammonia water, may be used.-four. Chem. Ind.

Memicate: Gelathen bougns.-M. J. Schroder prepares bougies whit gelatine, as follows: Gelatine, 5 gm ., is macerated in water, 25 gm . for a quarter of an hour. Cilycerine, 5 gm ., is then added, and the mixture heated until solution is complete, when the liguid is straned and agan heated until it is reduced to 25 gm . If the medicament is soluble in water, it is dissolved in as litule as prosible, the solution added in the melted mass, and the whole heated till again reduced to 25 gm . If, however, more than 5 per cent. of the medicament be added, further evaporation of the mass should be avoided. Readily decomposable compounds should be dissoleed in a known quantity of water, and that quantity evaporated from the mass be.
fore the addition takes place. Bougies containing silver nitrate can thas be obtained both transparent and colorless. When insoluble compounds are to be added, the gelatine mass should be prepared with water only, and the medicament mixed with the glycerine before mixing. Special precantions to be observed when adding alum, tannin, or ferric chloride to the gelatine mass are described by the author, but in such cases it would seem preferable to resort to the use of some other hasis. A similar method of preparing the gelatine mass has been found satisfactory for preparing capsules. - Nederlandsch 7ijdschrift zoor Pharmacic; Phar. Journal.

Liquemia. Carbolic Acid. - Two years ago Mr. Peter Bon communicated a note to the North British Branch of the Pharmaceutical Suciety on 13.1'. Liquefied carbolic acid, pointing out that it freeses at $50^{\circ} \mathrm{F}$., and in the discussion which followed Mr. George luman suggested that the purer the acid the mome hable is it to crystallize, and spote of the uee of 11 per cent. of water rather than the official soper cent., bit whether Mr. Luman considers that better or not we do not gather from the discussion. The same subject has recently been considered by M. Giot, a Belgian pharmacist, and follunmse up his olservations M. sam. l.edden Huldenbosh, of the Phar. Wicekhat, gres the following table of results obtaned by himself, both acid and water being taken by weght:

| Carlolic acid, parts. | linter parts. | Cryst | ailize t. |
| :---: | :---: | :---: | :---: |
| 100 | 20 | $2.2{ }^{\text {C }}$. , or | $.36{ }^{\wedge} \mathrm{F}$ |
| 100 | 15 | 4.5 C., or | . $40^{\circ} \mathrm{F}$ |
| 100 | 14 | 6.0 C., or | 42.S F. |
| 100 | 13 | 7.5' C., or | 45.515 |
| $1 \mathrm{CO}^{0}$ | 12 | 9.0 ( $\because$ or | + ${ }^{2} \mathrm{~F}$ |
| 100 | 11 | $10.2{ }^{\text {c }}$ C., or | $50.4{ }^{7} \mathrm{~F}$ |
| 100 | 10 | 11.6 C., or | . $53 \%$ |

The last mixture, which may be considered to be equal to one containing 11 per cemt. of water in the British sense, commenced to crystallize at wi C . The results corroborate the Scotch observations, and show that if acid carbolic lig. B.P. were made to contain 20 per cent. of water it would not give trouble during cold winters, and the dilution would lie a concenient one for calculation.-Chem. ist and Drucist.

Iodorormin.-E. Kouteschweller suggests that this substance, which is stated to contain is per cent. of iodoform, may be analogous to. if not idemical with, a compound obtained by him some years ago by maxing alcoholic solutions of Schering's arotropins and ioguform with alcoholic solution of iodoform. Chloroform solutions may be used, and the precipitate forming on mixing is decomposed b) contact with water evolving iodoform. Iocioform is liberated from iodoform by contact with acid or alkaline liquids, and it is to this property that its eflicacy is duc, the compound itself being free from the objectionable iodoform odor.

Iomine a Good Disherghant.-Iodine is regarded as a good disinfectant, quite as powerful as chlorin. Mr. B. W. Edwards sugsests its use by vaporizing the crystals in a hot saucer, or by wetting cloths with an alcoholic solution and hanging them about the room.

## WANTS, FOR SALE, ETS..


 surers muat mot le spint in cure of this uplee untors postago otampis are forwaurled to re-muil ipilie.

## SITUATIONS WANTED.

STUATION WAN RED,-YOUNG MAN, FOUR S ${ }^{3}$ ears' experience, de dires situation, wholesale or ne.
 cate of thia journal.

## $A$ DRUGGATS ASSISTANG OR MANAGER,  ences. Muderate alary. Address, Hox ai, Ansus, Ont. <br> CRaDU ITE ONTARIO COLDEGE PHARAACS: G Fise gears experience. One in tornall doe ${ }^{23}$. Hope. <br>  11. Iawson, North Alsanta, Ont. <br>  Ddence Junior O.C.1. maminationt AI reterencen. Addre", E:F, Mle Kechnse, Suithi, Fall- <br> YOUNG MAN WITH THREE TEARS EXPER1. fruce at drag busine (cmantry and city) wonld like refereaces. Addrens. W. BS. Nethers; Melville, Brinue Dilward Counsy, Oni. <br> FOR SALE. <br>  munt he illand, canhe pemoved ir desired; mo fixtive s. It thing for young doctor or durecit. Dhar:iculari on application to Dr, Ely, Sebrinat: ile. <br>  <br> DRUGGISTS SHOULD HANDLE <br> Dr. Story's 5 -Minate Headache Cure:

First,-Mcrck says the formula cannot be inproved.
See:onat, - 10 cents is the popular jorice.
Thiral, -Out of 4 dasilic:, Omario, we have a six-inch dieplay and eaders in thirty; will have ail in 60 days.
Equrth.- We protect dee druggist in that we never sell or allow our goods sold to Department, Dry goods, or Grocery stotes.
Finth,-The immense profit.

## KINDLY SEND AN ORDER TO J. A. Kenneid \& Co., London,

for 1 Groan of 1)r. Storg's Es-3ninuto honainche cure, nt $\# 6.50 \approx$ Erin日, or $\$ 0 \mathrm{c}$. A Alozes.
(ict ready for the boom. Don't wait, as this journal sajs, till you have a doren calls, and your neighlor gets the benefit of the advertising.

STORY MEDICINF, CO. Cleveland, Ohie.


## Hve Maria

The latest Aristocratic, Fascinating Perfumc 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 " " " $\quad$ " 1 " $\quad$ " 8.00

## MYOTM \&EOIED INT IEBUIGEL

Send for Catalozue

## Seely Manufacturing Co. <br> DETROIT, MICH. <br> WINDSOR ONT.

## CANADIAN DRUGGIST PRICES CURRENT

| The quotations given represent average prices for quantities usually purchased by Netail Dealers. |  |  |
| :---: | :---: | :---: |
| Larger parcels may be obtained at lower figures, but quantities smaller than those named will command an adsance. |  |  |
|  |  |  |
| COHOL., | \$4 37 | \$4 65 |
| Methyl | 190 | 200 |
| a.s.sicre, | 13 | 15 |
| l'ow, der | 15 | 17 |
| Aloin oz | 40 | 45 |
| A NODVEE, Hloffman's bot., lis | 50 | 55 |
| Akrowroot, Bermuda, lb. | 50 |  |
| St. Vincent, $\mathrm{ll}^{\text {a }}$ | 15 |  |
| 13a:. AM, Fir, ll | 40 | 45 |
| Copaila, Il | 65 | 75 |
| Pera, ib. | 375 | $+\infty$ |
| Tulu, can or | So | 85 |
| Макк, Barberry, | 22 | 25 |
| Bayberry, ${ }^{\text {l }}$ | 15 | 1 |
| Buckthorn, 18 | 15 | 17 |
| Canella, 1 l . | 15 | 17 |
| Cascara, Sagrad | 25 | 30 |
| Cascarilla, select, | 18 | 20 |
| Cassia, in mats, ils. | is | 20 |
| Cinchona, red, 1 | 60 | 65 |
| Poudered, | 65 | 70 |
| Yellow, | 35 | 40 |
| Pale, ll | 40 | 45 |
| Elm, selected, | is |  |
| Ground, 13 | 17 |  |
| lowdered, 1b. | 20 | 28 |
| IIemlock, crushed, 11. | 15 | 20 |
| Oak, white, crushed | 15 | 17 |
| Orange peed, bitter, | 15 | 16 |
| l'rickly ash, 1 | 35 | 40 |
| Sassafras, 11 . | 15 | 16 |
| Soap (quillaya) | 13 | 15 |
| Wild cherry, 1 b | 13 | 15 |
| Beans, Calalar, | 45 | 50 |
| Tonka, th. | 150 | 275 |
| Vanilla, lb. | S 0 | 850 |
| Bexrins, Cubeb, sifted, ll | 30 | 35 |
| powdered, lb... | 35 | 40 |
| Juniper, lb. | 7 | 10 |
| Ground, It | 12 |  |
| Prickly ash, 11 | 40 | 45 |
| Buds, lbaln of Gilcad, | 55 |  |
| Cassin, 11 | 25 | 30 |
| Butter, Cacao, | 75 | 8 |
| Camphor, lb. | 85 | 90 |
| Casthariots, Russian, | 140 | 150 |
| Powidered, Ib |  | 160 |
| Carsicum, ib | 25 |  | quantitics usually purclised by lechil 1 unters. Larger parcels may be obtained at lower figures, but quantities smaller than those named will command an adsance. Methyl.

$\$ 4$ 405
200
Ala.suce, ll
15
17
l'ow, dered, lb
A xomste, hofman's bot., ibs.
Аккоикоот, Bermuda, lb.
S. Nincen,

Copailin, Ib
Tolu, can or less, ib
Bayberry 11
Buckthorn, lis
Canella, lis.
agrada.
Cassia, in mats, ill.
nchona, red,
Yellow, Ib
lm, selected, ib Ground, lb
emlock, crushed, 11 .
akt, white, crusheci lis
Orange peel, bitter, llo..
richly ash,
Saap (quillaya), lb.
Wild cherry, lb.
Tonka, th...
Vanilla, lb........................
powdered, ll...
Ground, It
Prickly ash, lb:..........
Buds, lalm of Gilcad, ib
Cassin, 11 ..
CAMP!ok, lb
astinkiots,
Powdered, ib
arsicum, ib.
Carsicum, ib

Powdered, it
Carion, Bisulyhide, 1 l
Carmine, No. 40 , oz
Carmine, Nu. 40, oz..........
Castor, Fibre, Ib...............
l'recip., see Calcium, Ib . . . . . . Prepared, ll.
Cirakcoan., Animal, 子owd., ib...
Willow, powdered, Ib..
Clove, It.
?owdered, ib.
Cocurstan., S.G̣., 16
Col.tomion. (b..... ....................
Canthatidal, ib
Confection, Senna, ib............
Creosote, Wood. Ib............ .
Curtifrish bows, $16 . . . . . .$. .
Inexarise, lh.
Dover's l'OwDer, lb............
Ergot, Spanish, Ib
lowdered, ${ }^{\text {Ergotin, }}$ Keith'....
On
Exi KACT, I.ogwood, bulk, li....
Pounds, 11
Fi.clleks, Arnica,
Calendula, It
Chamomile, lioman, ib........
German, lb
Elder, th.
lavender, lb.......
Rosemary, lb...
Saffron tucrican, li..........
Spanish, vial'a, oz.............
Griatise, Cooper's, B .
French, white, Ib.
Gineekine, Ib.
Guaraía..............................
Powidered, th
Gum Aloms, Саре, 11 ,
13arbadoes, 11
Socotrine, lt.
Asabic, ist, it
Powdered, 1 b
Sifted sorts, lb
Sorts, 1b.
Menzoin, b......
Gaminge, powidered, is
Guaiac, lb
35
15
50
00
12
12
6
5
25
17
18
45
80
75
45
450
30
11
60
50
00
10
14
17
20
60
30
45
22
15
200
30
70
25
80
40
25
25
20
20
20
70
45
70
85
45
30
00
20
25
00
95
25


| Seman，Alexandria，ll Tinnevelly，16 | $\begin{aligned} & 25 \$ \\ & 15 \end{aligned}$ | 30 25 |
| :---: | :---: | :---: |
| Stramoniun，Ib．．．．．．．．．．．．．． | 20 | 25 |
| Utit Lisi，Ib．． | 15 | S |
| L．bi：chiv，Swedinh，doz | 100 | 0 |
| L．ICuster，Soluzi | 45 | 50 |
| Prenatelli． | ． 5 | 40 |
| （irano． | jo | 5 |
|  | 27 | jo |
| ＂l＇unts， 00 stichs in box | 75 | 5 |
| ＂luity， 200 sticksinlos | 150 | 50 |
| ＂Acme l＇ellets， 5 lb ．tins | 20 |  |
| ＂Lozenges， 5 ll．tmm．．． | 00 | $2 \infty$ |
| －Tar，licunce，and Tolu， 5 lb．tilis．．．．．．．．．．． | 200 |  |
| Luplunis，oz．．．．．．．．．．．．．．．． | 30 | 35 |
|  | \％ 0 | So |
| Mact，th．． | 20 | 25 |
| Masia，I） | 60 | \％ |
| Moss，Iceland， | 9 | 1 |
| Inish，th． | 9 | 0 |
| Musk，Tonquin，oz． | 4600 |  |
| Nulisits． 16. | 21 | 5 |
| l＇ondered，it． | 25 | 30 |
| Nulames， 16 | 100 | 10 |
| Nux Vomica， | 10 | 2 |
| lowdered，Ib | 25 | 27 |
| Oaktes，lis． | 12 | 15 |
|  | 70 | 75 |
| Citrinc，Ib．．．．．．．．．．．．． | 45 | 50 |
| Pakabiniavide， | 20 | 2 |
| lerris，black， 1 | 12 | 13 |
| Powdered， 16. | 15 | 16 |
| Prich，black，Ib． | 3 |  |
| Bergunds，tue， | 10 | 2 |
| Ph．dsitik，Calcmed，hhh cash． | 225 | 305 |
| Athesive，yd． | 12 | 15 |
| Iselladomm，it | 65 | 70 |
| Galbanum Comp．，ll | So | S； |
| Lexad， 16. | 25 | 30 |
| bopry lleabs，per 100 | 100 | 110 |
| liosts，Common， 16. | 21 |  |
| White，H．． | 31 |  |
| Resokntis，white，oz | 25 | 30 |
| Rochelat：sam，16． | 2 S | 30 |
| Kool，Aconite， 16. | 2 | $2 \hat{3}$ |
| Althea，cat， 11. | 30 | 35 |
| lielladuma，It． | 25 | 30 |
| 13lood，ib． | 15 | 10 |
| Bituer．It． | 27 | 30 |
| Blackbery，is） | 15 |  |
| Burdock，crished，14， | 15 |  |
| Cahamm，siced，white，If | 20 |  |
| Camain Smake，It ．．－ | 30 | 35 |
| Cohosh，black，lb． | 15 | 20 |
| Colchicum， 16 | 40 | 4 |
| Columix）， 11. | 30 | $=2$ |
| lowderei，lb．．．．．．．．．．．． | 25 | 30 |
| Collsfort， 16 | 35 | 40 |
| Comifey，crushed，lb | 20 |  |
| Curcuma，powdered，H．．．．．． | 13 |  |
| Dandelion，lib． | 15 |  |
| Elecampane，it． | 15 |  |
| Galangal，ll，．． | 15 |  |
| （icheminu，lb）． | 22 | 25 |
| Gentian or Genitan， $16 . .$. | 9 |  |
| Giround，th．．． | 10 |  |
| lowdered，Ib． | 15 |  |
| Ginger，African， | is |  |
| Pio．，it ．．．．．．．．．．．．．．．． | 20 |  |
| Jamaica，hlehd，If．．．．．．．．． | 27 |  |
| l＇o．，It．．．．．．．．．．．．． | 30 |  |
| Ginseng，il． | $+50$ |  |
| （ $o$ dien Seal， 11 | 污 |  |
| （iuld Thread， 16. | 90 |  |
| Helletwre，whate，imow．，it ．． | 12 |  |
| Indian Hemp． | is |  |
| 1 lperac． 1 lb ．${ }^{\text {a }}$ |  |  |
| l＇owderei， 16 | 200 |  |
| Jahap，lb．．．．．．．．．．．．．． | 55 |  |
| Powdered，lb，．．．．．．．．．．．．． | to |  |
| Kava Kava， $11 . .$. ．．．．．． | 40 |  |
| L．icurice，H．．． | 12 |  |
| Powdered，il）．．．．．．．．．．．． | 13 |  |
| Manitrak，It．．．．．．．．．．．．．．．． | 1.3 |  |
| diasterwort，it | 16 |  |
| Grris，Florentins，Ib | 30 |  |
| lowdered，it ，．．．．．． | 40 |  |
| Pareira lirava，：ruc，lb．．．．．．． | 40 |  |
| link，if ．．．．．．．．．．．．．．． | 40 |  |
| larsley，Ib．．．．．．．．．．．．．．．．．．． | 30 |  |
| l＇icurss，If．．．．．．．．．．．．．．．．． | 20 |  |
| Poke，13．．． | 15 |  |




## （H1：31JCd．）．

．Wu，Acelic
Clacial，H！
Benroic，linglinh，or．．．． Gcrmant，ot
Boracic， $\mathrm{il}_{1}$
Carlolic Crystai，lib．．．．．．．．．． Calvert＇s Xis，1，ib
Ciric 1 b
（ialiic，oz
lyadrobrmise，dilued．ib．．．

llydracyanic，dhuted，uz．1malio． doz

## Jactic，cunce Mulatic，H，

Muintic，H，
Chem，jure，If，
Nitric，${ }^{1}$ ，
（hem．pure，lh）．
Olese，purtied，It Onalic， 16

## 

 Dilute， 1 l.Promalic，of
S．licylic，white，in，
$\because \overbrace{3}$

Sulphuric，carlmy，lio．．．．．．．． Ikothes，Ib．
Chem．！n
annic，
Tartaric，powdered，ib．
ACETNNI．It，H
Aconirisil，gram
lowlered．il
Amarnita， J iquor，ib．，．SSo．
IMsonil：m，Iromuide，H．，．．．
Carbonate， 11 ．
Indide，iz．．．．．．．．．．．．．．．．．．
Xitrate，crystals．Ib ．．．．．．．．．
Muriate，il

30
2.15
1.40
13

## 30 <br> Ci

Arkolinl：，Sul！．in a whs．Soc．，


Inlide，oz．．．．
Salicylate，ot．
Subcasbonate，

| Valesimuate，uz．．．．．．．．．．．．．$\$$ | 55 |  |
| :---: | :---: | :---: |
| Amst．，Nitrite，oz． | 16 | 18 |
|  | S5 | 00 |
| AN！IKIV！ | 125 | 130 |
| ふN」lviN，Uz． | 10 | 20 |
|  | 1 \＄5 | 200 |
| Alvi？NIC．，Downvan＇s sol．，｜l | 25 | 30 |
| Fownler＇s © ${ }^{\text {a }}$ ，｜b．．．． | 10 | ． |
| loslicle，orz | 50 | 55 |
| White，ll． | 6 |  |
| drkorinis，Sulp，in $\frac{1}{}$ urs． |  |  |

60
18
00
30
20
00
30
13
55
7

## Sulnitrate，lb．．．．．．．．．．．．．．．．

lowalered． 11.

Iolide，oz．．
Caftisini：oz．

Indide，of．．．．．．．．．．．．．．．．．．．．．．．
Phosphate，precip．，ib．．．．．
Sulphide，on．．．．．．．．．．．
Cumbll，（Daiate，oz．．．．．．．．．．．．

Crotan，oz．．．．．．
Cillokatak
Cincilovise，sulphate，oz．．．．．．．
Cixclowiolve，sulph．，oe．
Cocлini，Nur．，в．．．．．．．．．．．．． 6

Corres，Suluh．，（ Cluc Vitriul）ib． lorlide，ose
1） $11.1: \therefore$ ，of．




Carlmonte，l＇iecu．，ib．．．．．．．
Sacch．， 16.
Chlomsle， 16. Sol．，ll．

Guinc and Sirs．，Oz Dialyzed，Sinlation，lb
Ferrocy．．tide．It．．．
Itypiphovphite，of
loilide，oz．．
I，nciate，o．．
lersutrate，solation，ib．
lhosphate scalex，ib
sufphate，pure．Ib．


l．f．ab，Acetate，white，It．
Cathonatc，its
Indide．oz．．．
lied，lis．．
Livit，Clilonmated，lith，ib．．．．．
In pakarges，I！
L．thilum，Bromide，o\％．
Carlonate，oz
Citrate，oz．
Jodide，ont．．

C．ubonate， 11 ，

Sulph．（ bjpsom sali） $\mathrm{lh}^{2}$ ．
IANi．dstisti，Blach Oxide，ib．．．
MrNilion．，oz．

Chlmide：Corrosive，Ih．．．．．．．
Calomel，lis ：．
With Chalk，ib．

## Magazines.

Three departments in the liebruary Petersun Magazine are notable by reason of their beautiful illustrations. These are "The Musical World," "People T'alked About," and "Among the Players." Thirty new portraits illuminate the text.

In the light of the work that the Red Cross Society will endeavor to do in Armenia, an article in the pebruary Peterson Magraine, entitled "The Armenian Struggle," will attract much attention. The illistrations are from photographs brought especially from Turkey for this publication.
"The University of Chicago" is one of the leading articles in the February Peterson Mragrazine. It pives a description of this wonderful institution, with more than a score of good pictures of the buildings and their donors. A supplementary sketch and protrait of Mr. Rockefeller accompanies the article.

Ex-President Harrison's next article in his series in The Ladics' Some fournal will tell what it means to be l'resident of the United States. He will outhe the President's power, his duties, and how he discharges them; the trials and annoyances to which he is put, and show what the central idea of the President is, and how he tries to carry it out. General Harrison also explains what relation each Cabinet office holds to the liesident and telis of his own relations with bis Cabinet when he was President.

The new Frant Leslic's Pleasant Hours for Boys and Girls improves with every number. That for February is the best yet; it is full of good things for young people. Oliver Optic starts the number with an interesting Washington's birthday story. An article that every reader of juvenile literature will enjoy is "Favorite S:cry-writers for Young People," by Frank Lee Farnell, in which are described the methods of work of Oliver Optic, Edward S. Ellis, Nora Perry, J. T. 'lrowbridge, and Susan Coolidge: finely illustrated with their latest portraits.
Live while you live. Get all legitimate pleasure you can. This is a beautiful world. Don't miss a harge part of its pleasure by going through life blindfolded, as many people do. The outdoor world is poetic, pleasing, instructive. 'There's a wealth of pleasure in roaming over the hills, across the fields, or through the woods. All nature is in harmony of music to the attentive ear. Birds, plants, flowers, ferns, mosses, insects, the beauty of minerals, yes, even the stars above, are strains in this harmony. Get in closer touch. Take The Obscrier, Portland, Comn. Sample to cents. One year \$1.

The Lee family of Virginia is the subject of a series of profusely illustrated articles which will constitute a leading feature in Frank Leslic's Popular Monthly
during the current year. The lebruary number of this magazine, just ont, contams the initial article of the series, entitled "The Ancestors of General Robert E. Lee, and the Times in which They Lived," written by Mrs. Roger A. Pryor, embodying many rare portraits, coats-ofarms, etc. This same February number of lrami Leslic's also contains beautifully illustrated articles upon "A Roman Festa," by Theo. Tracy; "Sardinia," by Charles Edwards; "The Social Settlement in America," by Rufus R. Wilson; "West Point," by Carl J. Becker; "Art Students in Paris"; and stories, sketches and poems by Howard Paul, George Edgar Montgmery; Dr. I. H. Porter, J. F. Sullivan, Ella Rodman Church, Lena I. Pep. per, and other popular sontributors.

The February number of the Delineator is called the midwinter number, and covers the whole fieid of seasonable fashions with its accustomed thoroughness. A very pretty ballad, far above the ordinary magazine contribution, begins the number. Mrs. Roger A. Pryor concludes her admirable serieson "The Social Code" with a discussion of the various ways of getting into society. A well-known New York dentist has an article at once scientific and popular on the care of the teeth. Dr. Aimee Schrader brings personal e, perience to bear in telling of the facilities and obstacles before women who set out to study and practise medicine. Sara liller Kirby explains the possibilities of Kindergarten work at home. A handsomely illustrated article by M. C. Frederick is devoted to Mexican stamped leather. Subscription price of the $D i$ lincutor $\$ 1.00$ per year, or ${ }^{15} \mathrm{c}$. per single copy. Address all communications to the Delineator Publishing Co., Ltd., 33 Richmond strect west, Toronto, Ont.

## Stearns' Beef Juice.

An assay made by the Lancet (London, Eng.) of Stearns' Beef Juce :
"When it is known that the fluid consists practically of the juice of fresh, lean, uncooked beef, expressed in the cold, ats value as a nutrient does not need emphasizing, for it will contain the albuminous constituents of the meat unchanged, besides all the stimulating extractive principles. This accurately describes Stearns' Beef Juice, which is a dark-red liquid, turning semi-solid on the epplication of heat from the coagulation of the albu mens. The congulum, which is the most important nourishing constituent, amounted to at least one-sixth of the total dry matter, the latter being equal to 44 per cent. The mineral matter consisted, of course, principally of soluble phosphate, and a not excessive quantity of common salt. The taste is agreeably fresh and "beefy," and such that invalio. could take it without reluctance. The p.eparation, judging from these results, should serve admirably wherever a vigorous nutrient is needed.-London Lancet, Novemiber 16, 1895.

## Business Notices.

As the design of the Eanamian Drugeist is to benefit mutually all merested 27 the business, we would request all yatties mererimg Loode or makimg purchases of any de. scription from houses adu utising with us to mention in their letter thas sulh ailvertisement was noticed in the tanabian Duuggist.
terested in th. articter nepists and others who may lie into the special consiles mation of the luasiness viotices

The Perfection Novelty Co.. Chicago, Ill., have appointed the Canadian Specialey Co., Toromo, Ont, as them Camadian agents. They manufacture sonat very nice new styles of show cases. with cash drawer and combination locks attached, which should commend themselves, on account of their usefulness and cheapness, to the drug trade. Write to the Canadian Speciaity Co. for catalogue.

Thitteen students from all parts of Camada attended the February course at the Ontario Optical Institute, Toronto, conducted by W. E. Hamill, M.D. The rapid pupularity this institute has secured shows it is under able management.

The following testimonial from a prominent druggist speaks volumes on behalf of Mckay \& Co.'s Birch Deer, advertised elsewhere in this issue:
"We tried your 'Blue Seal' Birch Beer, not as the unruly youth at the hands of the ruthful master, but as a thirsty mortal, and found it equal to 'ye olden tyme,' when, as lads, we visited the hills for birch twigs for the toothsome bark.
"Blue Seal' Birch Beer is, in our opinion, just the right thing in the right place, and we shall have it at our store this season."

## Refused to Sell Them.

Mr. W. L. B. Barkwell, London Ont., proprietor of several well-known proprietary remedies, received enquiries recently from the Barnsdale Trading Co, Limited, of Stratford, Ont., well known to the western trade by their price-cutting, about procuring a supply of his prepa ations. Mr. Barkwell, himself a druggist, replied that "it was h:is desire to have the sale of his preparations contined to the legitimate channels, viz., the druy trade, and that, in his opinion, there were quite sufficient druggists to supply all demands, and therefore declined their order." This is the plan that should be adopted by all manufacturers-not only for the purpose of keeping in touch with the drug trade, but also for their own self-protection; for, sooner or later-and we believe it will not take long-cut-price proprictaries will cease to have the sale which they would have-if kept in stock by tuose to whom the public look for what is best in medicine.
"Ou Zoku Zuki Nippon Zoko Kiyoko ho" is the title of the ner Japanese Pharmacopoei..

| Iudicle，I＇roto， 1 | \＄ 35 | \＄ | Iodide，oz． | \＄． 10 | $\$ 43$ | （ieranimm，oz．． | \＄175 | \＄1 So |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bin．，or． | 25 | 30 | saluglate， | 175 | 1 So | liose，Il．． | 320 | ． 50 |
| （ivick，lied．H．．．．．．．．．．． | 115 | 120 | Suphate，ll， |  | 5 | Juniper berries（linglish），IL．． | ＋ 50 | 500 |
| l＇ill（Bluc Man），It．．．．．．．．． | \％ 0 | 75 | sulphite， 11 ， | 3 | 10 | Wioncl，Ib． | 70 | 75 |
|  | 30 | 35 | Sunima，＂ | S5 | $\infty$ | lavender，Chitis．liteur，lib．．．． | 300 | 350 |
|  | 105 | 170 | Sthki Xuns， 16. | 35 | 65 | （ ${ }^{\text {arden，}}$ II） | 150 | 175 |
| Manbite，a，．．．．．．．． | 105 | 170 | Stmath v，Nitate，Ib | is | $\therefore$ | I．cmon，ll | 175 | 1 Sn |
| suphate，of | 75 | 1 So |  | So | s5 | I．cmiongrave， 17 | 150 | 160 |
| proms，sachamat， | 35 | 40 | StItownt， 9 ．．．．．．．．．．．．．．． | 10 | 4 | Plusard，limential，or． | 60 | 65 |
| Pminder miniou | 3－ | ． 40 | A pilters，lowers of，lls．．．．．．． | 21 | 4 | Neroli，${ }^{\text {\％}}$ ． | $+25$ | 450 |
|  | is | $3{ }^{3}$ | Pure precipuated． 16 | 13 | $\because 0$ | Grange，ils． | 275 | 300 |
| Prmekts，or | 1 （x） | $? 10$ |  | 5 | 55 | sinceet，li | 275 | 300 |
| Phonitasic，lis． | （0） | 110 | Tursay（libume acid），of． | 53 | 60 | Origanmin，Ib． | 65 | 70 |
| Powand，Cownic，white，ib． | 10 | $6_{5}$ |  | $=\infty$ | 210 | l＇atchonli， 67. |  | $\mathrm{S}_{5}$ |
| bosmary，deetate，ll． | 35 | 40 | ／ive，．ketate 13， | 70 | 75 | lenayrosal，its | 250 | $=75$ |
| Bicalmante，If， | 15 | 17 | Cathonate lb． | 25 | 30 | I＇eppermint，lb，． | 360 | 375 |
| Bichnomate．Ib | 1.4 | 15 | chlonte，gramular，${ }^{\prime \prime}$ ．．．．．－ | 15 | 15 | limento，th． | 200 | 275 |
| Binsat（Cican lant．），Ib | －1） | 30 | Iodade，if．．．．．．．．．．．．．．．．． | 60 | 65 | Whodimu，oz | So | $\mathrm{S}_{5}$ |
| liramide，lla．．．． | 05 | 70 | Comde，Ib | 13 | 00 | liose，of． | 750 | 1100 |
| Carimmate，lis． | 12 | 13 | Sulphate，Ih．．．． | 19 | 11 | Liosemary， 16 | 70 | 75 |
| Chlorate，Eing．， 17 | 15 | 20 | Vilctianate，or． | 25 | 30 | Kite，wr． | 25 | 30 |
| lowdered，ib． | 20 | 22 |  |  |  | Sandalsood，IL． | 530 | 730 |
| （inate，H．．．． | 70 | 75 | I．以下রimi Of |  |  | Saッafras，11． |  | So |
| Cyanich，16．．． | 40 | 50 | Oni，Mmomi，hitter，az． | 75 | So | Savin，lli． | 160 | 175 |
| 11）${ }^{\text {apophophite，}}$ ， | 10 | 12 | Sueet，lli．．．． | 50 | 60 | Spuarmin， 16. | 375 | 400 |
| Iodide，th．．．．． | $+\infty$ | $+10$ | Amber，crude，ib | ．10 | 45 | Spruce，ib． |  | 70 |
| Nitrate，gran，If | S | ：0 | liect，It． | 60 | 65 | Tany，ils． | 425 | $+50$ |
| Permangamate，lli．．．．．．． | 40 | 45 | Amee，It． | 300 | 325 | Thyme，＂hate，in | 1 So | 190 |
| Prusiate，Red， 16 | 50 | 55 | 13．1．，or ．． | 50 | 60 | Wintergreen，th． |  | 300 |
| Velluw，lb．．． | j2 | 35 | Bergamot， $\mathrm{ll}^{\text {a }}$ | 37 | ＋ 0 | Wirmseed，${ }^{1 /}$ | 350 | 375 |
| And Sod．Tirtate， 16. | 25 | 30 | Came，it ．． | no | 100 | Wormwood，ll．．．．．．．．．．． | 125 | 450 |
| Sulphures，lb．．． | 25 | 30 | Cajuput，It | 100 | 170 |  |  |  |
| Prohi mammise，Ot | 35 | 40 | Capacmm，${ }^{10}$ | 60 | 65 | matio onis． |  |  |
|  | 32 | 35 | Curaway， 11. | 275 | 300 | Casion，lli．． | S | 10 |
| Ors．，י\％．．．．．．．． | 36 | 40 | C．心n，ilb |  | 1 So | Conlatek，NiF．，מal．．．．．．．． | 190 | 200 |
| （10nomine，Sulphate，of，02 | 10 | 20 | Cedar．．．．$\because$ ．．．．．． | 55 | S5 | Nursegian，kal．． | 275 | 300 |
| Salmix， | 75 | $4 \infty$ | Cimmmon，icglon，oz． | 275 | $3 \infty$ | Cormoxstar，zal | 110 | 120 |
| SANiosid ${ }^{\text {at }}$ | 20 | 22 | Citronclie， 1 | So | S5 | L．akt，gal．．．．．． | 90 | 100 |
| Sthers，Nitrate，cryl，${ }^{\text {a }}$ | 90 | 100 | clove，it | 110 | 120 | 1．1sstitil，hoiled，gal | 62 | 65 |
| Funcd，of．．．． | 100 | 110 | Copabin，Ib．．．．．．．．．．．．．．． |  | 200 | Ran．sal． | 60 | 62 |
| Sobltas，Acesate，lb | 30 | 35 | Crotom，ll．．．．．．．．．．．．．．．．．．．．． | 150 | 175 | Nisasitout，gal |  | 130 |
| Bicarimmate，ks．，H， | 275 | 300 | Cuheb，15．． | $=50$ | 300 | （1）ma，gal．．．．． | 120 | 125 |
| Brumite，lli．． | 05 | 70 | （umm，lt．． | 550 | 60 | saladi，gal． | 250 | 260 |
| Carmante． 16 | 3 | 17 | Ficseron，02．． | 20 | 25 | ［a14， 11 | 12 | 13 |
| Hypophopphite，or． | 10 | 12 | fucalypis， 16. | 150 | 175 | Sronv，gal． | 135 | 1.10 |
| Ilyporuphite，（1）．．．．．．．．．． | 3 | 6 | Fenne ，il．．．．．．．．．．．．．．．．． | 160 | 175 | Tuxpmine，gal． | 60 | 65 |

## Drug Reports．

## Canada．

Businens during lanuary has been quite actue ；high prices of staples men－ tioned in last month＇s report are main． tained．

Morphia，opium，gentian root oil， orange and bergamot are hogher．

Heave chemicals are stofiemng up，as is usual at this season as stocks become depleted．

Arsenic is much adsanced，and high prices on laris green may te expected． Insect powder and hellebore will be about the satne price as last season for prose soods．Blue vitriol is higher，and the outlook uncertain．

Citric acted is firm．Jartaric has ad－ wanced，and manufacturers are not eager to sell，which indicates another ad－ vance．
Iodine preparatons are still an uncer－ tain quantity：No change so far．
Morphine and opium have advanced， and the impression is that higher prices will prevail for some tume，as the present outlook on opium in Asia Minor is bad．
Gemtian root is scarce，at advanced prices．

Vanilla beans are higher，and the pres－ ent outlook is not favorable for lower prices in the near future．
（Oll anse is higher，and，as usual in surh cases．mpure autules are being offered．

## English．

Loondon，Eng．，Jan．27th，1896．
The market has been quiet，on the whole，durng the month，athougl：the general wolume has been good．

Cadamoms are dearer，and cream of tartar is moving forward agan rapidly． Camphor dull，and ergot unsaleable． Gentian root has advanced slighty；and ipecacuanha is firmly held．New cod liver cil（Nowegian）has arrived，and full prices ate asked．Aniseed and cassia oils are steads，at recemt advance． Cimamon leaf oil is dearer．Balsams of Tolu and Peru are lower．Shellac is re－ covering from a recent declince．Vanillas still very dear for good quality．

## Cod－Liver Oil．

Report from Joh．Rye Holmboe，Trom． soe，Norway，January 15 th，1Sg6：

The stocks of 1895 cod－liver oil prac－ tically are all cleared．
Condition of livers reported to be slighty better than last year．

Winter fisheries utterly poor up till date，on account of bad weather and scarcity of fish．

I．ofreten fishery does not commence till end of January．
l＇roduction of new oil quite unimpor－ tant．Probably 100 to 150 barrels．No ofticial report issued jet．
Quotation camot be given．I expect the operang price to be atsout 175 sh ．cif East coast．

## Trade Papers Deserve Success．

A man who subscribes for a trade paper does so not because he is alive to the in－ terests of his trade in general，but because he expects to find in it－and generally does－mformation and suggestions of value in the conduct of his own business． Such a man reads his paper from end to end，advertisements and all，commenting as he goes along．Many things are jotted down on his memo．pad for every－ day use，as well as for inquiring further into on his first visit to market．And as it is necessary for a man to be wide awake nowadays in order to succeed in business， these are the men who subscribe to their trade journal and are the adventisers＇best patrons．They cannot afford to pass any－ thing which promises help or suggests additional profits．Hence the trade journal is the best medium for advertising things which concem the man＇s business． －Neauspaperdom．

The McCORMICK MANUFACTURING COMPANY (LImes)
Fruit Tablets DRUGGISTS' SPECIALTIES

## LONDON

The Greatest Remedy Known for the Cute of COLDS. HOARSE. NESS. SORE THROAT, Etc.

CANADA


## "ROUGH ON RATS"

 THE GREATEST INSECT AND BUG DESTROYER ON EARTHSOLD 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,
Sleunlss, Squirrels,
Weasels, Jack Rabbits,
Moles, Gophers, etc.


Gone where the Woodbine Twineth.

CLEANS OUT
Flies, Water Bugs, Roaches, Beetles, Insects, Chipmunks, Moths, Potato Bugs, Gophers, etc.
"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 Stares, 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.


# Taka - Diastase A Powerful Starch - Digestant. 

## Acts more vigorously on starch than does pepsin on proteids.

## Pepsin is of no value <br> 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


[^0]:    Oil of lemon. . . . . . . . . . . . 2 drs.
    Glacial acetic ncid......... . . . . 6 dirs.
    Yolks of eggs. . . . . . . . . . . . . . . . . . . 6

[^1]:    Laboratory,
    St. Johnar, Quebec.

[^2]:    Onr "St. Auga:ine " (Registered) is the perfect whe for conmunion or imalid. bour wine merchamt can oupply you at $\mathrm{S}_{4}$ su a cave, one duren imarts. See thint you get the genture article. All goond articles conntertelled. See that our name is on label aund capoble.
    Our "St. Augantine" (kepntered). of 189 v vintage, a choice sweet, $d$ wine, and eyual to inported wines , double the price.
    J. S. EAMETTON \& CO.

    ## BRANTFORD

    Sole Asents for Canada for the Pelee Island Wine Company

