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| For Making Junket. |
| TEN TABLETS |
| TEN QUARTS |
| TEN CENTS. |
| 'STAR'' LIME JUICE |
| 1/2 Pint, Pint and Quart. |
| WILSON'S ROOT BEER |
| BULL'S GINGER BEER |
| DR. ROSS' |
| EXtract of |
| Wild Strawberry.- |

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DOMINION RENNET TABLETS
For Making Junket. TEN TABLETS TEN QUARTS TEN CENTS.
'STAR'’ LIME JUICE $1 / 2$ Pint, Pint and Quart.
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Extract of
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Our line of Hot Weather Specialties is the most complete of any house in the business.

Dominion Rennet Tablets is our latest.

In Stand Cards of 3 doz .

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DON'T FORGET OUR MOTTO-
PURITY, PRICE, PROMPTNESS,
THE DOMINION DRUG Co.,
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By recent additions to our Milling Machinery we are enabled to offer our friends in the trade a very superior quality of

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and buyers should see that every package bears this brand.

The Powder is marketed in Ioo, 50 and 25 lb . kegs, and in io lb. tins.
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It is what its name implies, a sure, positi/e and absolute

## MOTH AND MILDEW EXTERMINATOR.

Its properties are such that while utterly reppelant to insect life, it is wholesome and pleasant to man. List-\$3.00 per doz.
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SWEET LAVENDER.
RED \& WHITE ROSES. JASMINE.

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through
the
RETAIL
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THE
Abbey Effiervescent Salt Co., limited,

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Prices and Samples CHEERFULLY SUBMITTED.
We are strictly independent of any monopoly or combination.

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Prepared from a vegetable product, and is Nature's specific for the teeth and gums. It is already a success. It should be, as it is a foe to tarter; will keep the teeth clean and sound, and therefore lessen dentist's bills and the agonies of tooth ache. Is antiseptic and will destroy disease germs. Will heal sore mouth and inflamed gums. It is so delightful and refreshing that to clean your teeth becomes a pleasure and a joy.

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Medicine methods differ with those of long ago. The oldfashioned paraphernalia of bottles, pestle and mortar, etc., with their mystic symbols, no longer create any impression on the people. The world has advanced. Medical science is enriched with new discoveries, and the people are educated. $* * * * *$


Is but the creation for a demand induced by the new order of things. Hutch cures dyspepsia and painful digestion. The tablets are heavily coated with chocolate, and they are delicious to take. Sealed in glass, their prime virtue is retained unimpaired by the action of moisture or the atmosphere. Their convenience insures a regular treatment-a regular treatment insures a cure. Ask your neighbor.

The fermentation in your stomach comes from indigested food. Gases are generated and poisonous liquids form, which emponson your entire system and tear down the essential and delicate functions of the sti mach. Huich induoes seorction of the gastric juices, promotes assimilation, and by beng slightly eathartic expels excrément. Ten Hatch ton cents. All draggists,


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Fountain Requisities are the finest made, and guaranteed uniform, reliable, and satisfactory.


Manufacturning Themists.

## Rochester, N. Y.



## Toronto, Ont.

Pioneers in the Manufacture of Syrups from FRESH RIPE FRUIT.


We beg to call the attention of the Trade to our

## "FAULTLESS"

quality RED Rubber goods.

A printed guarantee accompanies each bottle.

Our SPECIALTIES are to be found in the leading Drug Stores throughout the Dominion.

The latest edition of our SUNRIES CATALOGUE is now ready for distribution. Sundries Department

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Agents for J. Stevens \& Son :

## KILLS EVERY TIME.

 "Common Sense Exterminator"Once sold always recommended.

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## Chamberlain's Preparations,

Sheffield, England.

J. W. HAYWARD,

Canadian Representative, Toronto, Ont.
Our goods are offered to the retail druggists of Canada under contract only. Are sold direct to retailers and only to the public at the price stamped on the Containers. Circulars, prices and all information forwarded on request for the follow-ing:-

Chamberlain's English-Lemon Fruit Salt in two sizes.

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Chamberlain's Malted Beef, Wine, Iron \& Celery.
Ru-Kava for Diarrhced, and all Summer Complaints. Put up in powders 6 in each box.

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5c CIGAR

Is as deservedly popular as its name-sake-made from a fine blend of choice tobaccos.

## "It's a Winner."

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Is well known as the best smoke for the money in the market.

Do You Handle Pipes and Smokers' Sundries? We have them at lowest prices and best qualities procurable.

Drop us a Card and we will mail you some nice Hangers for your Spre or Office.

## W. B. REID \& Co.,

85 Yonge-St., TORONTO.
Cigar Manufacturers and Wholesale Tobacconists.

## Lyman's Lightning Fly Paper Poison. SHASON 1901.



Ask For LYMAN'S. Take No Dther.
the LYMAN BROS \& CO., limited. Wholesale Druggists: TORONTO. SOLE CANADIAN AGENTS FOR MUNYON'S HOMEPATHIC REMEDIES.


## The

SILENT SALESMAN.
. . The most profitable investment a pharmacist can make. . .
It keeps goods clean, shows them effectually, and makes sales. Don't be without one.
Our Other Lines Are: Drug Store Fittings, Prescription Cases and Counter Cases.

Write for Estimates and Prices to the
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For all particuiars of quality and prices address:

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Sold from Halifax to Victoria by
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A Highly Concentrated Fluid for Checking and Prevelting Contagion from Infectious Diseases.

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In a test of Disinfectants, undertaken 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 second required 7 per cent., and many Disinfectants, at 50 per cent., proved worthless.
"Little's Soluble Phenyle" will destroy the infection of all Fevers and all Contagious and Infectious Diseases, and will neutralize any bad smell whatever, not by disguising it, but by destroying it.

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

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

Sold by al Druggists in 25c. and 50c. Bottles, and $\mathbf{\$ 1 . 0 0}$ Tins.

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


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WIGHTMAN

## DRUGGIST.

## OWEN SOUND - - ONT.

Sole Agent for the Dominion.
To be had from all wholesale druggists in Montreal, Toronto, Hamilton, London, and Winnipeg, Man.

## Canada for Canadians

We beg to call the attention of the Drug Trade to the far famed

## Turkish Dyes,

manufactured and owned exclusively in Canada. They have stood the te it of time, and still the sales are increasing, We espectally commend our TURKISH DYES for cotton, the first and most complete list of Cotton Dyes on the market. To day our prices to the trade are right and quality guaranteed. Ask your jobbers for TURKISH DYES and see that you get them They are good sellers and will bring you new customers every day.

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 58 Wellington St. MONTREAL.Lyman, Knox, \& Clarkson,
Limited,
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The Lyman, Knox Co.,
Limited,
MONTREAL.

Letter orders given special attention.
MONTREAL
AND TORONTO.


BENVETT'S DRUG CABINET DRAWER.

One of the strong points in the Bennett Cabinet is the DRAWER.

Temperature has no effect on it ; it never jams or sticks; it is made of block tin and wood. In the cabinet it is dustproof, insect proof and vermin proof.

Write to J. S. BENNETT, for all particulars. Address,

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# STOCK LABELS... 5 CENTS A HUNDRED <br> and from that, as high as 35 c . 

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DRUGGIITS PRINTERS, \&c.
19 Leader Lane,


CIGAR CASE No. 530.

## "The Porto Rican."

## CIGAR CASES

# FOR DRUG STORES <br> MODERN AND MODERATE PRICED FLOOR CASES. <br> ten different designs. <br> <br> THE PORTO RICAN 

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As shown, combines counter and show case, shows boxes and labels, has space for stock, and is fitted with moistener. Height 44 in. Width 28 in. Length 4 tt. Price in Oak or Cherry $\$ 2800$.

Estimates on entire outfits furnished on application.
JONES BROS. \& Co.,
OFFICES :
29 and 31 AdelaideSt. W. TORONTO.

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## Manufacturing Chemists.

ELIXIRS, SYRUPS, SOLUTIONS,

COMPRESSED
TABLETS and
LOZENGES, Effervescing Salts.

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## FOOT OF COMMON HOUSE FLY AND DISEASE GERMS.

FOOT AS TAKEN FROM THE FLY. DISEASE GERMS $\qquad$ FOOT AFTER BEIM 3 CLEANED.

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FOOT OF THE FLY IS
MAGNIFIED 506
TIMES.


HOW TANGLEFOOT STICKY FLY PAPER ACTS
THE fly's foot shikg into the sticky material on the sheet of Tanglefoot adithe gerin it carries goes with the foot. In a short time the sticky material bas coated over the antire fly and all the germs on it. Neither the fly itself, nor the germ can ever escape.

NOTE The disease germs are magnified 250,000 times, If they were maguified only as much us the fly's foot, they wonid hardly be visible on tise picture.

THE DISEASE GERMS
ARE
MAGNIFIED
250.000
times.

PROTECT Your Fruit Trees and Potato Vines by Spraying them with

Is Recommended by the Authorities at the Experimental Parm, Ottama.

The PARIS OREEM made by the OANADA PAINT OOMPAWY, Limited, is gwaranteed to be in striot mocordance with the Covernment standard, and will, thorefore, glve thorough saflefeotion. Beware of substitutes and insist upon The CAMADA PAIMT CO's. name on eaoh package.


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Company
Limited.

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## SPECIALISTS IN PROGRESSIVE PHARMACY.

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An examination will show a rapidly growing business, and at what astonishingly low prices we can sell our products, and yet maintain a standard of quality, which ever has and ever will be the highest.

Many houses make extravagant claims for their goods-we, however, do not claim that ours are the best, but prefer to leave judgment on this point to our customers.

Our preparations are made from selected materials, of the best goods only, by modern approved methods, and and have a uniformity and elegance that will commend them to your confidence ; they will keep intact, without spoiling, and, with few exceptions, in any climate, and for any length of time.

Even at this season of the year we are finding it difficult to supply the demand tor our TASTELESS PREPARATION OF THE EXTRACT OF COD LIVER OIL-We introduced it nearly twenty years ago, and in spite of criticisms, misrepresentations (principally through ignorance) and immitations, (very poor ones) it is universally conceeded by Physician, Pharmacist and Layman, to be the best preparation of Cod Liver Oil extant.

The reason for all this is readily explained --Wampole's Preparation has always been what it has always claimed to be, and will do what has always been claimed it will do.

We invite your enquiries or orders, assuring prompt attention, and courteous treatment.

## HENRY K. WAMPOLE \& Co.,

## Branch Office and Laboratory, <br> Toronto, Ont., <br> Canada.

Main Office and Laboratories,
Philadelphia, Penna.,
U. 8. A.

## Ideal Perfumes.

Quality will win every time. If you have not stocked the " IDEAL" or " SUPREME " goods

TRY
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"Supreme" Arbutus,
"Ideal" Pink Blossoms,
"Ideal" Beauty Rose,
"Ideal" Wild Heather,
"Ideal" Japanada,
"Ideal" Canadian Wild Flowers, (a spring bouquet.)
"IDEAL" Sachet Powders are made in twelve different odors. Put up in handsome bottles. These goods are bound to increase your perfume trade.

Order from our Travellers or by Mail.

We send free samples with order.

## The P. R. CORSON Company, limited.

23 Adelaide St. W.,
TORONTO.


## Maltine M'fg Co.'s Preparations.

MALTINE (Plain).
MAITINE Ferrated.
Maltine with Cod Liver Oil. MAlfine with C.I.O. and Hypophos. maltine with Creosote.

MALTINE with Pepsin \& Pancreatine! MALTINE with Hvpophosphites. MALTINE with Cascara Sagrada. MALTINE with Phos., Iron, Quinia, MALTINE WINE. [and Strychnia.

MALTINE with Peptones. MALTINE WINE Pep. and Panc. MALTINE WINE, Beef and Iron, MALTINE with Coca Wine. MALTO-YERBINE.

## Duncan, Flockhart \& Co.'s

## Blaud's Pill Capsules

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ARE SOFT AND FLEXIBLE, NEVER BECOME HARD,
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NEVER BECOME OXIDIZED, NEVER VARY IN STRENGTH.
Put up in I , 2. and 3-pill sizes, with or without Arsenic, and supplied in boxes of 100 each. They are prepared by an original process, which entirely overcomes tendency to hardening so common in the ot dinary Blaud Pills. FOR SALE BY WHOLESALE TRADE.

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Preparation : of Opium.

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man be ordered from any of the Wholesale Houses, or (if required immediately) will be sent direct "charges paid" on receipt of price.
R. L. GIBSON, ${ }^{88}$ Welington st w. Toronto.

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ESTABLISHED 1868.
CANADIAN PHARMAGEUTICAL JOURNAL
-AND-
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## THE COUNCIL OF THE O. C. P.

The result of the scrutiny of ballots cast in the three districts, No's 3, 8 and 12 , where there were contests for seats on the Council, was to elect Messrs. Jury, Sweet and J. M. Hargreaves. The contest was close only in No. 3, where Mr. Jury lead Mr. Gould by five votes. The completed board is as follows:-
District No. 1............. Henry Watters, Ottawa. " $2 \ldots \ldots . .$. .......... W. Case, Picton.
" $3 \ldots .$. ..J. H. H. Jury, Bowmanville. " $4 \ldots \ldots$.... G. E. Gibbard, Toronto. " $5 \ldots \ldots$..... John Hargreaves, Toronto. " $6 \ldots \ldots \ldots . .$. . G. A. Hunter, Soo. " $7 \ldots \ldots . . .$. . A. Turner, Orangeville. " $8 . . . .$. ...Theo. Sweet, St. Catharines. " $9 \ldots \ldots$.....R. A. Harrison, Danville. " Io.......... W. A. Karn, Woodstock. " $11 . \ldots . . . . .$. J. T. Roberts, Parkhill. " $12 \ldots . . . .$. J. M. Hargreaves, Paisley. " $13 \ldots \ldots$. W. B. Graham, Ridgetown.
When the Council assembles there will be nine
familiar faces around the board and four strangers. Whether the infusion of new blood will have any marked effect on the future policy of the board time alone will reveal. They may not cause even a ripple on the surface. At least the balance in favor of the old heads is sufficient to prevent them from wrecking the concern and sending the institution to the everlasting bow-wows.
There are not wanting indications that the requirements of the pharmacists of the province will receive a larger measure of attention than in the past. So far as we can ascertain the platform of all the new men is, "More attentis $n$ to the commercial side of pharmacy," while a goodly number of the old councillors have been persistent advocates of the same policy in the past. Under the circumstances then the pharmacists of Ontario would be justified in looking for and expecting some movement along that line. Just what and how much good can be accomplished is an unsolved problem, but the uncertainty need not prevent an effort. We have just this one hint to offer,-Much more good can be accomplished by the Council, or in fact the officers of any organization, if each member of the body interests himself in forwarding any scheme launched.

## LEGAL ANTI-CUTTING.

Last month we referred to the case of Elliman, Sons \& Co. against Carrington. Walker and Thompson, in which a verdict with damages was secured against two of the parties for violating an agreement entered into not to cut the price of the plaintiff's medicines.
The judges' decision, which we gave in full, clearly established the legality of such an agreement and the proprietors' right to insist on its being adhered to.
There was one point in the case, however, which the judge did not touch on in his judgment, but which might have a bearing on future cases.
This point was raised by counsel in their arguments. That was the status of the contract secured between the second and third parties. Carrington \& Co., as jobbers, had sold Elliman's goods to

Walker \& Co. after securing fom them a similar contract to that entered into between themselves and Elliman's. The conditions of this contract had been violated by Walker \& Co. Now the question was, could Elliman's sue on this contract? Their counsel contended that they could, as Carrington had acted as their agents in the matter. Counsel for the defence strenuously opposed this, and contended that only Carrington \& Co. had cause of action against Walker \& Co.

Unfortunately it was not necessary for the Judge to rule in this point, as Ellimans were able to show a previous contract with the parties and also establish the fact that Carrington \& Co. as well as Walker \& Co. had sold directly to Thompson \& Co., the offending cutters, without securing from them a contract to maintain prices.

As this plan for prevention of price-cutting is now being urged on the Canadian proprietors for adoption, and as most of the contracts would have to be secured by the jobbers, it would be wisdom on the part of those interested in it to see that there are no gaps in the agreement through which could be driven the proverbial "coach and four." The contract could be one directly between manufacturer and distributor, secured through the medium of the jobber acting as agents of the former.

## SPONGES ADVANCING.

Latest reports from London and the West Indies tell the oft repeated tale, "Another advance in sponges." From London the report is great scarcity of honeycombs in forms and half forms, and an advance of $10 \%$. One factor in bringing about this condition is a threatened strike by the Mediterranean fishermen. This has not actually occured as yet but their demands in the hands of employers have considerable unsettled matters. Froin Cuba the advice is an advance of $20 c$. per pound on sheeps wool. Scarcity of stock in first hands is the cause. Added to this is the fact of the near approach of the " hurricane season" when all operations are suspended for a period of at least three months. From the regularity with which these reports reach us we are safe in assuming that the world's supply of sponges has now fallen behind the demand, and in the near future sponges are to be a luxury only possible to the wealthy. A synthetic sponge is just about due now.

## THE DEFENSE FUND.

At the last meeting of the Toronto Drug Section a resolution was passed favoring the formation of a defense fund and the matter placed in the hands of a committee with instructions to formulate a scheme
and submit it to the section. The purpose, as explained by the mover, is to provide a fund upon which to draw for defense purposes in case of unjust prosecution of members. A sort of "insurance against unjustifiable prosecution." The need of such a fund was demonstrated in the recent prosecutions by the Medical Council of members for viola.tion of the Act in "counter prescribing."

To get a correct interpretation of the law on this question was of interest to every druggist in the province, and was so recognized by a number of the city druggists, who voluntarily contributed to carry the case to a high court for a decision. Now, if some such fund as suggested existed it would not be necessary to pass around the hat when an occasion would arise.

Personally we believe that the Council of the Ontario College of Pharmacy could find more unprofitable employment than giving such a scheme some consideration.

In a recent issue of the Chemist Eo Druggist a suggestion is made by X-rayser that a surplus of some $£^{2}, 000$, now in the treasury of the Pharmaceutical Association, be appropriated for a purpose similar to that in view of the " Drug Section."

## LIQUID HYDROGEN.

From London, during the month, comes the record of another triumph of science. James Dewar, the indefatigable searcher in the domain of Science, carried in a jar through the streets of London to his lecture room nearly two quarts of liquid hydrogen, which until yesterdav was the most intangible form of matter known to man. On arriving before his audience this wizard of science, who deals with temperature compared with which Arctic cold is like seething furnace, proved marvels never witnessed outside of his own laboratory.

He reduced hydrogen to a solid which appeared like snow in the test tube. and announced that a temperature had been produced eight or ten degrees lower, or within nine degrees of absolute zero. There is but one substance now known which has as yet not been reduced to a liquid; that is the new gas, helium. This most volatile form of matter has a boiling point four or five degrees above absolute zero. The hope of being able to liquefy helium depends on sabjecting it to the saine process as has succeeded with hydrogen, only instead of using liquid air under exhaustion, as the primary cooling agent, liquid hydrogen under exhaustion must be employed, and the resulting liquid collected in vacuum vessels surrounded with liquid hydrogen.

In this way, by the use of liquid or solid hydrogen as a cooling agent, it ought to be possible to
liquefy a body having a critical point of about six to eight of absolute zero and a boiling point of four or five degrees. Then if liquid helium could be produced, this substance would not enable the zero of temperature to be reached. Another gas must be found as much more volatile than helium, as helium was more than hydrogen in order to reach within one degree of zero. If the helium group comprises a substance having an atomic wetght of two or one-half that of helium. such a gas would bring nearer the desired goal. Meantime the production of liquid helium is a difficult and expensive enough problem to occupy the scientific world for many a day.

In conclusion Professor Dewar showed how the crystal nitrate of uranium, when placed in liquid hydrogen, became for a time self-luminous on account of the high electric stımulation brought about by cooling, causing actual electric discharges between the crystal molecules. When cooled the crystal was removed from the liquid luminosity and electric discharges took place during the return to normal temperature.

## The W. H. Steele Co.

The requirements of their patrons is always the first consideration of this firm and all the newest and latest brands and designs in smoker's supplies are in their stock. Several shipments of goods for fall trade are already in and more are following.

The S. \& H. cigar was a genuine "strike" and it has secured a popularity not even anticipated by its makers. Having secured this popularity they are determined to retain it by maintaining the high standard of quality of the past. One essential of excellency in a cigar is seasoning and this is secured by always keeping on hand a stock of not less than 100,000.

Consequent on few changes in price the Silent Drummer will not be issued until August when it can be looked for. It will be the most complete catalogue and price iist of pipes, tobacco, cigars, cigarettes and smoker's sundries ever placed in the hands of the Canadian trade. Look for it.

Is the race to become extinct while our women hunt for work higher than that which God gave them? It is infinitely lower work. What Woman's Club or Woman's Column can match the home which the wife and mother makes beautiful and sacred for her husband and sons? What are a thousand canvases to a live child with its fair dimpled body and living soul? -June Ladies' Home Journal.

## Editorial Motes.

The London Lancet places the posi ions of the three forms of tobacco smoking as to injuriousness in the following order:-The cigar first, the pipe next and least injurious the cigarette. It removes the cause of injury rom nicotine and places it on pyridine and its derivatives, these producing headache, trembling and giddiness. The degree of toxicity, it claims, depends on the completeness of combustion, and in the cigarette this is more complete than in the other two methods, consequently less injurious. - The pipe is a condenser although the product rarely enters the mouth, but with the cigar the condensed product is absorbed in the system through the mouth.

Synthetic Cbmphor is a subject upon which the Spatula writes in the June issue, and according to it such a commodity is looming up in the near future. May the time speedily come is the earnest wish of every druggist. Nothing in life is more galling than to feel daily the influence of the monopoly or combine. In this line the Japanese are experts. The source from which the synthetical article is to be secured is oil of turpentine. The process is covered by a patent, and any variety of turpentine may be used if it contains pinene in considerable proportion. Five parts of the oil is heated with anhydrous oxalic acid, whereby pinal formate and pinyl oxalate are formed. On treatment with caustic alkalis, these are changed to camphor and borneol, and steam distillation separates these from impurities. The borneol is then oxidized into camphor. If this process is successful cheaper camphor may be looked for.

The Worcester Plan seems to have fairly "caught on" among our American friends. Every exchange coming to hand from acrost the border has a good word for it. In its present condition it is not accepted as perfect and altugether workable, yet containing possibilities of great good as a weapon against the cutter. The defects of the present plan are easily remedied. All that is required is for the interested parties to come logether with an honest endeavor to solve the slight difficulties and the thing is done. A number of State associations have accefted and endorsed the plan and urged it upon the proprietors. Among them are Massachusetts, Pennsylvania, New York, Cgnnecticut and, we might add, Ontario.

## AMONG THE SEARCHERS.

ARTIFICIAL SULPHUR BATHS.
The eninent French chemist, M. Armand Gautier, has reported a discovery to the Paris Academy of Sciences which may prove of great hygienic value. He has found that finely powdered volcanic stones, treated by boiling in water at a temperature of $250^{\circ}$ to $300^{\circ}$ Celsius, yield a liquid identical in composition with the ordinary sulphur water of mineral springs, except that it is stronger than the latter.

PERFUMES AND THE VOICE.
French scientists have been making experiments in regard to the effect of certain perlumes upon the voice. Many of the most successful teachers in singing have cautioned their pupils stringently against the use of perfumes or the proximity of odorous flowers. Some masters go so tar as to forbid their pupils the use of any perfumes at all, and if one of them is detected wearing a bunch of violets the lesson is postponed. The perfume of violet has been found by the use of the larnygoscope to be particularly injurious.

AN UNCULTURED SENSE.
A novel suggestion comes from a man who has been looking into the growing chemical industry of producing artificial perfumes. He says that the sense of smell in man is wholly uncultured, but that it is as capable of artistic development as our perception of colour. In walking through the country, for example, one can seidom identify the plant from which a certain odour comes; it is necessary for the plant to be in sight. He thinks that the sense of smell can be cultivated so that there can be instant and complete identification under these or under any other circumstances, and that this cultivation will be brought about by the continual production of new odours in the manufacture of perfumes.

## A NEW ANAESTHETIC.

A new method for producing anaesthesis was discussed at a recent meeting of the Medical Society of Berlin. Dr. Wohlgemuth has constructed an apparatus by which patients inhale chloroform mixed with oxygen. It has been tried by many prominent surgeons, with results that are reported as satisfactory, the disagreeabie sensations being obviated.

NEW TELEGRAPHIC INVENTION.
London, June 18. -Some experiments in connection with a new telegraph system which is said to cheapen considerably the cost of telegrams have recently heen conducted by the postal engineers between London and Glasgow. The new apparatus is the invention of a French engineer of the name of Mercadier, and by its means it is possible to send twelve separate messages over one wire at the same
time. The system is also capable of being duplexed, by which twenty-four separate messages can be sent at one time over a single wire.

## A SUBSTITUTE FOR RUBBER.

After experimenting for several years, a Copenhagen chemist has succeeded in producing a material called "solicum," which possesses qualities that will render it of the greatest importance to the caoutchouc industry. It appears it is producd from asphalt, and can be used for the manufacture of linoleum, rubbers, insulators, \&c. It is also claimed that the material can be used as a paint, in all colours, and that it is absolutely waterproof.

## CANCER MICROBE.

Dr. H. S. Gaylor, of the University of Buffalo, states that cancer is caused by an animal parasite which has been identified and isolated. He has been investigating the cause of cancer for two years as head of the New York State Pathological Laboratory. He has inoculated animals with cancer germs and cancer afterward developed in the animal. Cultures of these organisms have been injected in the abdominal cavities of other animals and they recovered having apparently grown in the serum of the animal.

## Revival of Pilewort. .

The use of the Pilewort or Lesser Celandine (Runnculus Ficaria) for hemorrhoids is being revived by Sir James Sawyer. It appears this distinguished Birmingham physician was led to try the old remedy as an application for piles, from the study of old herbals, "with preposterous therapeutic results," to use his own words. To prepare the ointment the whole plant is gathered when in bloom in the spring, cut up, and macerate at $100^{\circ} \mathrm{F}$. in lard for twentyfour hours, the lard being in the proportion of 3 parts to I part of plant. At the end of that time the herb is pressed and the ointment cooled. The result is a bright olive green ointment, which is applied to the parts twice daily, preferably just after evacuation. The ointment is known as ungentum ranunculi ficariæ, and it is suggested that if made with a basis of wax and oil, it could be literally called "Celandine Cerate." This latter suggestion seems to involve altering the formulæ merely for the purpose of getting a pleasantly alliterative title.
—Chemist \& Druggist.

An attachment is provided in Sweden by which the secrecy of the telephone is assured. The apparatus indicates whether the operator is listening or not.

## Correspondence.

## Many Thanks.

St. Catharines, Ont., July 5th, 1901. To the Druggists of No. 8.

It is with a great deal of pleasure that, through the columns of this journal, I thank my many friends for their kind influence and liberal support on my behalf in the election to the Ontario College of Pharmacy Council, and I assure the retail druggists in district No. 8 that $I$ shall at all times endeavor to prove myself worthy of the confidence bestowed upon me, by constantly advocating such measures as may prove beneficial to the druggists of our district. Believe me,

Sincerely yours,
Theo. Sweet.

Montreal, June 14th, 1901.
To the Enitor,
Dear Sir, -
I had the pleasure of being present at the 5 th annual banquet of the Pharmaceutical Socicty of Quebec, on the IIth I enjoyed it very much, and intend to attend again should the opportunity occur.

Now, sir, some of the points in the speeches struck me very forcibly. One and all seemed to think that the hours of the retail druggist were too long, and that "it was a nuisance to have to sell stamps." Ye Gods, I would really like to know what right a druggist has to sell stamps. This poor man, the druggist, hies him to the G. P. O. and lays in a large stock of stamps. What for? To make money? No, to oblige the ladie, No ! ! he buys the stamps, sells them, and then kicks about "having to do it." Mr. Editor, it is all rot, perfect rot. A druggist has no business to sell, anything that does not yield a profit any more than anyone else has. No other trade stoops to such pettifogging business.

Let the druggist be more manly and say to the public,-We do not keep stamps, you can obtain them at the post office.

Then the question of long hours. Why not look at this question in a business-like way? Let every man run his own business; let the other man go to grass. If it does not pay to keep open after certain hours, why shut up shop. The public never says that the dry goods man ought to keep open after decent hours; then why the druggist? The druggist knows perfectly well that "cases of emergency" is all rot and nonsensical. No druggist would ever think of using such an argument to another druggist; he would feel too stupid. The reason the druggist keeps open so long is because he is afraid of the other man; the reason he sells stamps is because of
the other man. He has no confidence in himself.
In conclusion, sir, let the druggist be more profession,al, less pandering to the unsympathetic public, a little more personal dignity, and then the profession may again rank high enough to be an atttaction for the bright young men of the day.

Yours sincerely,
A. D. Thornton.

## Toronto Drug Section.

The regular monthly meeting of the Section took place at the Association room, 155 Bay St., on Thursday, June 13th. Attendance fair. Mr. Bingham in the chair.

The minutes of previous meeting were read and on motion approved.

Mr. Hargreaves, reported further on the anti-cutting scheme submitted to the Proprietory Association and suggested that the Association be asked to receive a deputation of retailers at their meeting in Montreal in August.
Mi. Flett reported progress for the Pharmacy Committee.

The Section placed itself on record in connection with the telephone situation in the city by passing the following resolution:-

Moved by Mr. G. G. Reid, seconded by A. E. Walton, " That in view of the attitude of the Bell Telephone Co. of Canada towards the council of the city of Toronto this Section would hereby urge upon all sections of the Association the necessity of ddvocating and supporting the efforts of the city council in the immediate construction of a civic telephone and in their endeavor to defend the rights of the citizens."

The general secretary explained the positions of the anti-trading stamp by-law and the Eaton assessment appeal.

The advisability of organizing a defense fund was discussed and it was decided to take action in the matter. The following resolution carried :-

Moved by G. E. Gibbard, seconded by F. W. Flett, "That a committee, consisting of Messrs. Bingham, Waiton and Gibbard, be appointed and known as the Committee of Defense, and that a fund be organized to be known as the Defense Fund. That all moneys now on hand contributed for defending the recent actions brought by the Ontario Medical Council against city pharmacists and all sums yet to be contributed for such purpose be added thereto, and that only members of this Section shall be eligible to become members. That a satisfactory membership fee be charged to any person wishing to participate in the benefits of such a fund."

The matter of providing some profitable enter-
tainment for the Section meetings was urged upon the executive.

The report of membership committees indicated that the entire city trade was favorably disposed and likely to come into the Association.

On motion Section adjourned to meet again at the call of the president.

## Pharmaceutical Association of Quebec.

The annual meeting of the Pharmaceutic ${ }^{1}$ Association, of the Province of Quebec, was held in the College of Pharmacy, 595 Lagauchetien street, Montreal, on Tuesday, May i1th, 1901.
S. Lachaner, Esq., President, occupied the chair, and Mr. E. Muir, the Registrar, acted as Secretary.

The minutes of the last annual meeting having been read and confirmed the Secretary read the 3ist annual report and also the Treasurer's financial statement for the year ending April 5th, these showing the Association to be in a very satisfactory condition, the financial statement showing a creditable balance on hand.

The President then nominated Mr. L. A. Bernard and Mr. A. B. J. Moore as scrutineers, who proceeded to count the ballot papers for the six new members of Council. During the interval the President read his address, after which the meeting was declared open for general discussion.

The scrutineers, having completed the counting of the ballots, declared the following gentlemen to have secured the highest number of votes cast, namely:-R. W. Williams, Three Riv. rs; Henry Willis, Quebec; J. E. Tremble, W H. Chapman, A. J. Laurence and C. J. Covernton, Montreal.

The chairman announced that the above named gentlemen with the following, who remained in office, namely: -S. Lachance, Joseph Contant, R. McNichols, A. B. J. Moore, J. A. Piertti, Montreal, and J. C. Sutherland, Richmond, would compose the Council of the Association for the years 1901-2.

## New York Pharmaceutical Association.

The twenty-third annual meeting of this Association was held in Buffalo on June $4^{\text {th }}$ and four following dajs.

The attendance was larger than anticipated, some 300 members facing the prisident when he called the first session to order.

The Association was welcomed by Mayor Deihl, who expressed his pleasure as a medical man in extending to them the freedom of the city.

The president's address, after summarizing the work of the N. A. R. D. and commending it, was confined to subjects and recommendations of interest only to the State pharmacists.

Two important recommendations were made by committees. The first, that after January 1st, 1905, graduation from some recognized college be a prerequisite condition to examination by the State board of pharmacy.

The second was the adoption of a resolution calling on the N. A. R. D. to incorporate the "Worcester plan," for prevention of price cutting, in their plan of operations.

Among the most interesting reports and papers presented was the report of the Committee on New Remedies, which contained a list of those remedies recently introduced, with their characteristic composition of doses.

A paper of much interest also was read by Mr. Joseph Helfman, of Detroit, on "Abuses of Proprietory Rights in Pharmacy." This paper received considerable discussion and was ordered to be printed in the proceedings.

On Friday evening the annual banquet took place at Convention Hall, and was an enjoyable affair attended by nearly 400 guests.

One of the social features of the meeting was a vaudeville entertainment presented by members of the city drug fraternity.

## Philadelphia Druggists.

The regular June meeting of the Philadelphia Association of Retail Druggists possessed more than one feature of interest to pharmacists in general. The first item of interest was the Treasurer's report of a balance of $\$ 83683$ on hand, the next was that the mem ership now totals 560 , with applications for membership coming in at every meeting. The proprietary committee announced that it was the intention of the Association $t$, bring a suit as a test of the Worcester plan in the States.

The most important item, however, was the following resolution passed :-

That after July i, 1901, no rember of the $P$.
A. R. D. will purchase any new proprietary preparation unless the proprietor thereof accepts the price-protective plan and protects the retail price of his goods, and that cards shall be issued to s:asmen of firms so agreeing by the Chairman of the Executive Committee or his ast istant, certifying that the goods they represent are s.ld on the price-protective plan.

Women are not jolly enough. They make too serious a business of life and laugh at its little humors too seldom. Men can stop in the midst of perplexities and have a hearty laugh and it keeps them young. Women cannot and that is one reason why they fade early. Worry not only wrinkles the face, but it winkles and whithers the mind.

## Bingham's Palm Garden.

"A thing of beauty" is Mr. Bingham's palm garden at 100 Yonge St., and deserving of all the nice things said about it. It was formally opened on Saturday, June 29th, and the scene which met the eyes of patrons was a view of loveliness; cool, refreshing, restful.

Pure white was Mr. Bingham's choice and no criticism of his taste could be in order. The walls and arched ceiling are finished in white stucco in colonial style with panels of plate glass mirrors. At the end opposite the entrance is a fire place and elegant tiled mantel ornamented with bronze vases and ferns. Over all. in the arch of the ceiling, is the British coat of arms, facing which, over the entrance, is the Dominion coat of arms draped with Canadian, Scotch, Irish and American flags. Ornamented brass jardineers. on brackets from wall columns, support a profusion of palms.

The gas $\log$ in the fire place is supported by two artistic bronze dog irons with dragon head mountings. This fire place and fittings adds to the coziness of effect and will be utilized for heating purposes in the winter. A rich pompeian tile linoleum covers the floor.

The lighting is effected through fancy glass windows during the day and a unique and tasteful arrangement of electric light for the night. There are four arches of opaque incandescent lights pendant from the ceiling, while attached to the walls are a dozen or more three-globe electroleers of chaste and beautiful design. The effect where they spring from the centre of plate glass mirrors is particularly striking and is enhanced by the cut glass stalactites containing the light. There are sixty-six lights in all. The furniture is in keeping with the character of the surroundings. The chairs are of bent copper wire, oak seats. The tables are of golden oak. The seating capacity will accommodate sixty people. An Onyx fountain, on a golden oak counter, is being put in place by the Liquid Carbonic Acid Mf'g Co., of Chicago. Electric fans produce an agreeable coolness for patrons while they imbibe most seductive beverages. The completeness of detail together with the altistic merit of the institution is indicative of Mr. Bingham's good taste and creditable to the city of Toronto.

On opening day each lady patron was presented with a neat souvenir spoon as commemorate of the occasion. Mr. Bingham's enterprise deserves, and no doubt will receive, a widely extended patronage.

Dr. A. Robin, of Paris, recommends persulphate of soda as a power ful appetite stimulater. The dose recommended is about $11 / 2$ grains taken after meals.

## 玉elected Dapers.

## The Metric System.*

This system is the most simple, and the one approaching nearest to perfection of any ever devised by man. In consequence, the large majority of the civilized nations, including Russia, have adopted it and are enjoying its many advantages and benefits. The only people outside of the pale of its benefits is the Engliah-speaking race, represented by the British and Americans.

It is now a hundred and ten years since the famous committee composed of Laplace, Lagrange, Borda, Monge and Condorcet, who were appointed at the instance of Talleyrand, presented its report, advocating the adoption of a metric system to the French Academy of Sciences. This action was taken to cleanse the Augean stables of defective and heterogeneous weights and measures.

There were two distinct principles which occupied those scientists in devising a new system; the one was that the fundamental unit should be based on some physical constant and therefrom always determinable, and the other that the base of the system should be ten, that is the decimal system. The constants which received consideration were the length of the seconds pendulum, of the earth's equator, and of the earth's meridian. As the seconds pendulum involved time besides length, it was discarded; as the equator was not so available for measurement as a meridian, nor was there any reason for believing it to be more regular than a meridian, the latter-a quadrant-was chosen as the constant.

The quadrant was imagined to be divided into ten million parts, and one part was designated a meter. Theoretically, nothing remained to be done but to measure accurately the angular distance between two places on or near the same meridian, that is, their difference of latitude, and also the linear measure between the respective parallels of latitude. Whatever ratio the difference of latitude bore to $90^{\circ}$, the linear measure would then bear to ten million. Hence the actual measure of length of the meter would be found.

With our present knowledge of the figure of the earth, and the high degree of precision that has been attained in making comparisons of material measures, the quadrant is not looked upon as a practical constant for re-determining a fundamental unit. All quadrants of the earth are not equal, for the earth is not a perfect figure of revolution.

[^0]Furthermore, a material unit, no matter on what constant in nature it is based, or with what degree of precision it has been obtained, can only become a legal unit by statute. The statute alone gives finality, and not scientific determinations, to a measure as a standard.

To make this point clear, it may be said that the metric system would have lost none of its value had the French Academy of Sciences adopted as the unit of length an arbitrary unit as that of some properly constructed bar, which might for convenience have represented the toise or yard.

The merit of the metric system is, above all, its simplicity, and this is based on the two elements: (1) That all the weights and measures are interrelated and dependent upon one unit-the meter; and (2) That all the multiples and sub-multiples are tens.

The decimal system is the great saver from "the brain-wearying, intellect-destroying system of weights and measures in use among English-speaking people," as Lord Kelvin has so justly characterized the latter.

It is not believed that any one would for a moment question the desirability of adopting a system were we to begin de noro based on a single unit with derivatives by the powers of ten. The theoretical superiority of such a system is so manifest that it need not further be pursued.

However, for the purposes of life, we have to deal with the question from the practical and not from the theoretical standpoint.

One of the most exhaustive reports on weights and measures, including the metric system, was written by the Secretary of State, John Quincy Adams, in 182.1.

As we in Canada have not yet adopted the metric system, although it is a legal measure, the question presents itself-is it desirable, is it expedient, is it beneficial to replace the present system by the metric system? In the wilderness or conglomerate of the former, we have inches, feet, yards, rods, miles, leagues, gills, pints, quarts, gallons, pecks, bushels, grains, pennyweights, ounces (troy and avoirdupois), pounds, hundred-weights, tons (long and short), chaldrons-and the rest. The relationship which exists between the above is one that has caused a vast amount of unnecessary expenditure of human energy in memorizing "tables." This expenditure is an absolute loss in our youth and is continued through life in our daily vocations.

By an Act of Congress of July 28, 1866, the metric system of weights and measures has been legalized throughout the United States, and it is the only system whose use is made legal throughout the whole country by Act of Congress. The Act, not being mandatory, has remained practically a dead letter.

At this moment there is a bill before Congress to make the metric system, after the ist January, 1903, the only one to be used by the various departments of the government, except in completing the survey of public lands.
In 1875, an international metric convention was agreed upon by seventeen countries, through which an international bureau of weights and measures was established. From this bureau, at Sèvres, near Paris, have been issued the prototype metric standards to the various countries; thereby assuring international uniformity in weights and measures.

In passing it may be remarked that Canada is sadly in need of a thoroughly equipped and scientifically maintained standardizing bureau for all the various fundamental units of measures.

From our commercial relations with the mother country and the United States, we are more or less guided by their action and their system of weights and measures. Conservative England, always slow to move in any matter of reform, is however beginning to awaken, and by that most powerful lever, Commerce. Manufacturers and exporters are finding to their cost that many avenues of trade are becoming contracted and even closed by the persistence of their present system of weights and measures when pitted in foreign countries against the universal metric system there. Boards of trade, engineers and scientists have petitioned the British Government to adopt the metric system and have urged their claims with the most cogent reasons which cannot much longer be ignored. Many apparently insurmountable difficulties that have been portrayed by opponents to the desired reform, such as change of tools, plates and templets, in machine shops and factories have vanished by the fact that the changes have been made and to the commercial advantage of the manufacturer. That the change from one system to the other will cause some little exertion for a short time until the metric system is familiarized is admitted, but when once acquired people will wonder how they could possibly have floundered so long in the old morass of weights and measures.

The United States is in a position somewhat similar to that in Great Britain, perhaps somewhat worse, from the lack of a uniform system applied throughout the Union, for it appears every State is or may be a law unto itself in the matter of weights and measures, of which condition chaos alone can be the result. However, the metric system has made more advance in its use by the various departments at Washington than has been done in London, and a bill, already referred to, is now before Congress still further increasing its use, but unfortunately not with a compulsory clause applicable to the whole country. In order that the metric system may be
speedily and thoroughly introduced, and with the least friction, it will be necessary in Great Britain and the United States as well as here to enact a law making the system, after a certain date, the only legal one and abolishing all the old measures. The scientists, the leaders of the manufacturing industries and the exporters are the advance guard clearing the way for the coming change, and the sooner the change comes the better for the whole community. Sentiment for our old weights and measures must give way to a better system, one associated with a progressive people.

As our late Minister of Inland Revenue, Sir Henri Joly de Lotbinière, an ardent advocate of the metric system, pointed out, in his addresses on the subject, the change is sure to come in the very near future, so let us prepare for its reception by having our children thoroughly familiarized therein in our public schools.

From circumstances it will. fall to Canada to be the last among civilized nations to adopt the system and thereby close the circuit of the world, whereby there will be but one language in weights and measures.

May that day not be distant.

## OTTO J. KLOTZ.

## New Method of Examining Sputum.

Lanuoise and Girard (Arch. gen. de Med.) recommended the following method of examining sputum suspected of containing tubercle bacilli. It is based on the property possessed by the alkaline hypochlorites of dissolving mucous matter without the aid of heat. The sputum is put into a conical vessel, and covered by about to times its volume of a 33 per cent. solution of chlorinated soda, and the whole well stirred up. It is then set aside for 24 hours, being given an energetic agitation from time to time. The disengagement of chlorine commences at once, and in 20 minutes globules of mucus and of pus (should the latter be present) are dissolved, the liquid becoming more or less turbid from the matters held in suspensior. At the end of the time named, however, the suspended matter will have settled in the conical point and the supernatant clear liquid may be drawn off with a pipette. If a centrifugal separator is at hand, the operator can, of course, save himself the delay by operating on a single tube several times. decanting each time. When the volume of the material has been reduced to 2 or 3 c.c. there is added 5 or, 6 drops of normal solution of sodium or potassium hydrate, ( 40 grams of NaOH or 56 grams of KOH to the liter of water). This transforms the residual chlorine into a chloride of sodium or potassium, as the case may be. The
mixture is allowed to stand, and the supernatant decanted. This leaves the material in condition to be fixed and stained by the processes of Zeihl or Ehrlich.

## Manufacture of Cocoanut Butter in Mannheim.

The manufacture of cocoanut butter is an industry of some importance in Mannheim. This factory is said to be the only one of any considerable size in Germany. It has an output of about 10 tons of butter per day. The business was started in 1886, and, the proprietors say, shows a steady increase. The product is sold under the name of " Palmin "a registered trade name-or cocoanut butter (German, " Kokosnussbutter"). It is manufactured from the kernels of cocoanuts and used as a substitute for butter and lard in cooking. As sold, it is generally white in color, almost tasteless, melts at about $80^{\circ} \mathrm{F}$., and is of about the consistency of mutton or beef tallow. When desired by consumers, as bakers, confectioners, etc., the product is colored to resemble ordinary butter. When furnished to dealers, it is unlawful to color it. The proprietors claim an analysis of their product shows it to contain more than 99 per cent. of vegetable fat, with but a slight trace of water, while ordinary butter contains about 85 per cent. of fat and nearly 15 per cent. of water. It is stated that the substance does not become rancid easily, that it will keep for three or four months in a cool room, and that it is much more wholesome and easily digested than the ordinary fats used for baking and cooking. For this reason the product has met with considerable favor in German hospitals and other institution, and for use in army camps.

Cocoanut butter is generally put up in square packages wrapped in parchment paper, a small percentage being sold in tin cans. The latter are hermetically sealed for shipment during hot weather. The product is sold at one price throughout Germany, namely, about 16 cents per pound, or about half the price of ordinary butter. It is handled in somewhat limited qualities by about fifty grocers in Mannheim.

The processes of manufacture are, for the most part, secret, and, it is claimed, are protected by patents. The kernel of the cocoanut is imported in thoroughly dried strips, forming the "copra" of commerce. It is subjected to various refining processes by which all the free acids and other substances are separated, leaving only the vegetable fat. In the latter stages of the manufacture the product resembles ordinary butter recently churned. It is placed in machines similar to the separators used in creameries, in which the water and other foreign substances are separated by centrifugal force. In the manufacture of cocoanut butter a by-product, consisting of free acids and other substances, is obtained and sold to soap manufacturers. -Scientific American:

## How to Breathe.

Dr. John H. Girdner says that probably but one person in twenty knows how to breathe. In ordinary unconscious or involuntary breathing not more than ten to fifteen per cent. of the air in the lungs is changed. The rest is residual air, which has given its oxygen to the blood and remains practically useless, except as it is slightly reoxygenized by the ten per cent. of fresh air which mingles with it during unconscious respiration. But another set of respiratory muscles can be moved at the will of the breather. By the use of these, which are known as the voluntary muscles of respiration, the lungs can be almost completely inflated. Before proper breathing is mastered, the control of these voluntary muscles must be secured. The way to do, Dr. Girdner says, is to throw the shoulders as far back as possible, lift the chest upward and forward, at the same time depressing the front of the abdominal wall. Then all the air possible must be forced into the lungs by means of a long deep inspiration. The air must be held there for a few seconds and then slowly breathed out. This can be done every few minutes, either when walking or riding in the open air. If it is practiced in a room the windows must first be thrown open, so that pure air shall be taken into the lungs. This exercise not only takes out of the lungs the stale residual air and brings a rich supply of oxygen to the blood, but it develops all the muscles of respiration. The more it is done the easier it becomes, and a few months of it will enlarge the chest measurement, develop the bust, increase the breathing capacity, and will prove a most potent means of preventing disease of the lungs. - Ex.

## The Thermometer.

The first use of the name, thermometer, and the first accurate description, comes from Leurechon in 1624, but the real inventor of the instrument was Galileo, and the date between 1592 and 1597 . This is proved, not from any statements of the inventor, but from letters written to him, and the proof is complete. This first thermometer consisted of a bulbed tube, inverted in colored water, in which the liquid rose and fell with the temperature of the bulb. With such an instrument Sanctorius discovered that there was a normal body temperature. In 1632 Jean Rey made a water thermometer, in which the expansion of a fluid replaced that of air, and not long after this Ferdinand II, of Tuscany, by sealing the top of the tube, gave approximate. $y$ the modern form to the instrument. Mercury had been previously used to show expansion by heat, but in 1714 Fahrenheit constructed the first mercury thermometer with a reliable scale.

Many different scales have at various times been applied to the thermometer, and in most of them the graduation has been almost purely arbitrary. The origin of the Fahrenheit scald is involved in much obscurity. Reaumur was the first to use the melting point of ice for zero, while his boiling point of water, $80^{\circ}$, was obtained by the expansion of one thousand parts of 80 per cent. alcohol between the freezing and boiling points of water. As this was eighty parts, he used this number for his higher fixed temperature. The first to adopt $0^{\circ}$ and $100^{\circ}$ for the two points was Celsius, but in his instrument $0^{\circ}$ represented the boiling point of water. Finally the change to the modern centigrade scale was made independently by Christin of Lyons and Stromer of Upsala, in 1743.-Science.

## Unnecessary Cutting.

Nearly all price-cutting is so to some extent. That is, the beginning of it. When once begun it is hard to determine whether it is necessary to continue it or not, in many cases. But in this instance we think there will be no doubt of it.

Given a prosperous village with two drug stores and a goodly agricultural community to help the village in supporting these stores. Business enough for both. Prices fair. Rents low and expenses light. Far enough away from cut-rate towns to be practically unaffected by their demoralizing trade conditions. In short, a business situation seeming to be ideal for such a place, and being sùsceptible of cultivation in an unusual degree.

The two druggists agree that money is to be made by both. There is room for two stores to do pretty well-not room for three. Therefore they proceed to develop their trade by progressive methods, never forgetting that the profit on the goods sold is what they are there for-do they? That is exactly what they do not do !

Instead one of them gets it into his head that it will sound very fine to advertise as a cut-rate druggist. So down go the prices and away go the profits! Dollar proprietary goods go at 75 cents; smaller sizes in proportion; 30 pounds sal soda for 25 cents; ammonia (strong), 5 cents a pint; $121 / 2$ pounds Glauber's salt for 25 cents. And so on through a whole list of staples. Mind you, this store does not even pick out certain items as " leaders," a clean sweep is made of the profits on the whole line. The result is that the business is sacrificed, utterly without cause, and for years, even if the senseless mistake is acknowledged and prices are restored, there will exist in the public mind of that place the impression that prices are exorbitantly high, and the druggists will be continually annoyed by individual demands for concessions.

This is no fable. It is an exact account of something that has happened within our knowledge and the cutting go s on unabated. just as ruinously as if there were something to be gained by it. The cutter thinks he is doing something 'cute. He will find out where the 'cuteness comes in when he looks at his ledger in a year or so. In a crowded city there is undoubtedly a temptation to begin cutting and go at it in a sensational manner, when there appears to be an opportunity to make a big "hit" by doing so. No such temptation exists in the smaller towns. There is, on the other hand, every incentive to maintain good prices, and thus reap good profits, for where the volume of business is necessarily limited the margin of profit must be good. Meantime the cutting goes on.
$-E x$.

## PERSONALS.

Mr. T. R. Morrow, of Rossland, B. C., was among our visitors during the month. Mr. Morrow is an old Toronto boy and spent a few days with us, renewing old acquaintances. His trip extended to New York and home by way of Chicago, which citiies he visited in the interest of the mines in which he has heavy interests.

Mr. Bauer, of Bauer \& Black, Chicago, also favored the city with a call and spent a day. Mr. B. had been doing the Pan-American at Buffalo.

Mr. I. T. Lewis, the genial Registrar-Treasurer of the O. C. P., is spending a well-earned holiday in the wilds of Muskoka. He will be home in time to have his house in order for the August Council meeting.

The Elliot \& Co. travelling staff has undergone a reorganization during the month, due to the resignation of Mr. W. Madill to take a position with the Bole drug Co., of Winnipeg. Mr. Wilson Fowler takes the eastern ground covered by Mr. Madill, and W. H. Pearson takes Mr. Fowlers position as assistant city traveller. Mr. Pearson was recently with J. C. Gray, of Parkdale.

Mr. Walter Madill, for a number of years representative for Elliot \& Co'y in Eastern Ontario, as intimated, has severed his connection with that house and taken a position with the Bole Drug Co., of Winnipeg, Man. Mr. Madill will travel over Southern Manitoba and we can commend him to his future patrons as a courteous, attentive salesman and gentleman, who will consider their interests, as well as eerve the house with whom he is employed, in a faithful manner. We anticipate a duplicate of his Ontario success in the Prairie Province.

Mr. L. G. Amsden, secretary of the Cohen Bros. Lt'd, and optical editor of The Journal sailed for Europe on June ist. Mr. Amsden is a Canadian born but spent his early days in England and is now gi ing over his youthful days again in the old haunts seeing the changes which the years have made. This holiday is well earned by twenty years of close application to business, in the course of which Mr. Amsden has scored a decibed success and is to-day one of the foremost opticians of America, holding the position of vice-president of the American Association of Optlcians. Business and pleasure will each claim a share of Mr. Amsden's time while in Europe, and when the autumn finds him back in his place in Toronto he will be chuck full of new ideas and schemes.

The holiday season is fairly opened and relieving staffs are working long shifts. Elliot \& Co. are short only two. Mr. H. Miller, of the sample room, is spending his vacation in Whitby, while $W$. Bleaklay of the office force is at the Credit.

Of Evans \& Sons Mr. A. E. Ragg is resting quietly at New Toronto, and Mr. Barker is with friends at Buftalo enjoying the pleasures of the Midway as a variation. Mr. Rowen is taking his work in the meantime.

Mr. C. McD. Hay, of Lyman Bros. \& Co., with Mrs. Hay, are located for the summer months at Grimsby.

Mr. Hagarty is spending his twelfth season on the Island.

Mr. Wm. Millsap is at Kew Beach and Mr. Chas. Baird, manager of the Lyman Bros'. u arehouse, is home, after a week at the Pan-American.

Mr. E. G. Lemaitre, in company with Dr. N. W. McKenna, enjoyed an outing through New Ontario and the Lake Temiscamingue district.
W. H. Field and family, of Spadina Ave., are again located in their cottage at Rosebank.

Walter G. Parsons, son of Mr. G. Parsons, has taken the position as representative of the Toronto Drug Co. for the Eastern Provinces and Newfoundland. This ground was previously covered by Mr. A. S. McLean.

June has proved the month of weddings among pharmacists. On the 15 th Mr. Oliver Flett; of the Lyman Bros. Co., was married to Miss R. A. Palmer, of Wellesley St. The house employees, with their usual liberality, contributed a silver tea set to the list of presents. Mr. and Mrs. Flett enjoyed the honeymoon doing the St. Lawrence trip.

Mr. J. H. Scott, of Bathurst street, also deserted batchelorhood for the joys and comforts of wedded life. The trip included Montreal and Quebec.

Out of town, Mr. J. E. Gayfer, of Ingersoll, joined the happy throng on the 29 th and passed through the city after doing the Pan, and continued to Montreal and Quebec for the honeymoon.
J. M. Sisson, of Beeton, is another pharmacist who had decided to go double during the balance of the journey and took a partner during the month. The honeymoon trip was down the St. Lawrence through the Eastern States to Virginia.

## NEWS ITEMS.

Wm. Chestnut, M. D, is opening a store in Winnipeg, Man.
H. R. Carter, of Port Elgin, N. B., has sold out to R. D. Wilson.
H. E. Jones has purchased the business of J. Cholloner, Dogby, N. S.

The partnership of G. T. McDonald \& Co., Shelbourne, N. S., has been dissolved, Mr. G. T. McDonald continuing the business.
R. N. Thurtell has succeeded to the business of A. E. Gayfer, Ingersoll, Ont.

The estate of Herbert F. Spencer, St. Thomas, Ont., was sold for 65 cents on the dollar.

The estate of M. F. Eby, Port Elgin, Ont., has been sold to L. E. Shier.

The firm of Cochrane \& Plaunt, Renfrew, Ont., has dissolved partnership and Mr. J. M. Plaunt continues the business.
L. E. Morin, Jr., \& Bro., Montreal, are registered as dealers in chemical products and oils.
W. A. Jamieson, Ottawa, Ont., has disposed of his branch store.
C. Wylley, of Saltcoats, N. W. T., has discontinued business.

The estate of W. C. Tole, Bowmanville, Ont., is being advertised tor sale.

Hunt \& McDonald, Frederickton, N. B., were burned out about the middle of June. Loss partially covered by insurance.

Charles Marin, a patent medicine concern of St. Cunegonde, Que., has assigned.
G. A. Deadman, of Brussels, Ont., has sold cut to L. R. Harvey.

Dr. J. A. Rouleau, St. Louis, Que., had his drug stock damaged by fire July 2nd.

The partnership of Field \& Bews, Kevelstock, B. C., has been disolved.

Wesley Latimer has re-sold the business which he purchased last month from Thos. Rustin, Georgetown, Ont. W. J. MacFadden, of Alliston, has acquired it.

## TORONTO NEWS.

Although somewhat tardy in coming now the summer trade is on, and those who cater for such are enjoying the looked-for harve $t$. Up-town districts will begin to thin out and down-town houses will look for the summer visitors from over the border. He will be welcome unless the Pan skins him so close that pawning his summer suit will be a necessity.

We have not heard of a great rush of city pharmacists to the Pan-American having materialized. A few have braved the broiling and taken in the sights. All speak in praise of the exhibition and particularly mention the illuminations, which they say are most effective and grand.

The faddists are again on their rounds, and during the month a number of the craft have been called upon by His Worship to contribute a quota of their hoarded wealth for the general good. The cause of the interview with His Worship was Sunday selling of ice cream sodas. We sympathize with the unfortunates. "A fellow feeling makes us kind."

We notice the fixtures and fountain being put in position in Dr. Snider's Medical Hall, in the Yonge St. Arcade. The latter is an attractive affair in Onyx and is being placed by The Liquid Carbonic Mf'g Co., of Chicago.

A move indicative of the "growing times" is that of Mr. Taylor who now occupies an attractive and commodious premises on the corner of Queen and Jarvis St's. Everything about the place looks new and attractive, and the sign on the window announces the fact that it is an antiseptic pharmacy.

The Lyman Bros'. baseball team met the Chandler Massey team in a contest on the diamond at the Centre Island on June 28th and proved their prowess again as wielders of ihe willow by a score of 15 to 3 .

The Engineers' Club of Toronto have appointed a special committee to draw up a resolution setting forth the club's endorsement of the metric system of weights and measures, and to recemmend that the Government take early action to adopt the system.

The employees of the Shuttleworth Co'y and their friends, to the number of about forty, enjoyed a most pleasant picnic outing at Lorne Park on June 22nd. The party was conveyed to and from the park by the steam launch Geisha.

## BRITISH NEWS.

Birmingham water works is about complete, and when in operation will supply water to the city containing 6 grs. solid matter per gallon instead of 26
which is now the proportion. $\$ 60,000,000$ is the cost of the new works.

The Government of Ceylon is employing Capt. O'Reilly, a Boer prisoner, to prospect the island for gold and quicksilver. The Caprain is a mining expert of considerable experience and the government is acting on his representations and from certain proofs of the existence of metals which he has furnished.

At the first meeting of the British Pharmaceutical Society after the elections Mr. G. T. W. Newholme was re-elected president, Mr. C. B. Allen vicepresident and Mr. S. R. Atkins treasurer. The Finance Committee's report showed a balance on hand of over $£ 2,600$.

Dublin has two members of the pharmacal craft who are licensed to write K. C. B. after their name, and now it is rumored that a third is to be knighted.

A fire was started recently in a Birmingham chemist's window in a peculiar manner. Some bottles of chemical solution acting as a focusing glass concentrated the sun's rays on some celluloid goods behind them and caused them to ignite.

On June 15 th Major Ronald Ross, F.R.S., of the Liverpool School of Tropical Medicine, and Dr. Logan Taylor, Assistant Professor of Pathology in Glasgow University, sailed from Liverpool for Sierra Leone. These gentlemen form part of the fifth malarial expedition despatched to West Africa by the Liverpool School of Tropical Medicine. The other members will follow a fortnight hence, and will include special representatives of the India Office. The expedition will be absent at least six months, and efforts will be made to rid a certain area of the malaria mosquito, and if successful other districts will be attacked. For this purpose they take out a large quantity of petroleum-creosote and cement, the former for ise in the breeding-pools and marshes, and the latter among rocks.

Mr. H. S. Wellcome, of the firm of Burroughs \& Wellcome, has offered to present to the Gordon Memorial College at Khartoum a fully equipped bacteriological and analytical laboratory. Mr. Wellcome says that the gift has been made in view of the considerable possibilities which he foresees for technical education in that region and that the laboratory will be specially adapted to the requirements of the population and fitted with every modern appliance.

Quarantine restrictions are somewhat relaxed at Cape Town, S. A., indicating abatement in the severity of the plague.

The Cape Town pharmacy board only passed six out of twelve applications for registration during the
year. The standard of preliminary education has been raised for all future applications for a pharmacy course.

The air now supplied to the men working in the Greenwich Tunnel, London, is filtered through boxes containing a strong solution of caustic soda, for the purpose of eliminating from it the carbonic acid gas. Previously the percentage of deleterious gas was $0.148 \%$. Since the filter was installed it is only $0.086 \%$.

## AMERICAN NEWS.

On April 5th, 182I, the degree of Master of Pharmacy was conferred on sixteen candidates by the University of Pennsylvania. This was the first recognition of any honorary distinction of pharmacy on the American continent.
J. D. Rockfeller has given $\$ 200,000$ to found " The Rockfeller Institute for Medical Research." This money is for immediate expenditure and not as an endowment. Original research is to be undertaken along the line of medicine and hygiene in their bearing on the prevention and treatment of disease.: The advice of leading medical men will be followed and the first work will be in co-operation with the New York Board of Health. The city milk supply will receive particular attention. In the fall a wider field of research will be undertaken by the most experienced investigators.

At the recent meeting of the Illinois Pharmaceutical Association, held at Rock Island, the president, Mr. Gale, made the startling statement that "It is well known to some Chicago druggists that 300 ounces of cocaine are sold every month on State street between Harrison and Twentieth.

The N. A. R. D. has at last been forced to resort to violent means with a Chicago cutter, and has declared war against The Boston Departmental Store owned by Charles Netcher. Mr. Netcher is described as a man " who would rather fight than eat," and who says he will spend $\$ 100,000$ in the fight to break the boycott. An interesting time is anticipated.

On July ist the repeal of the Stamp Tax came into operation throughout the United States and henceforth proprietory medicines, perfumery, cosmetics and chewing gum will have the tax removed.

Late one evening a doctor received a note from a couple of fellow-practitioners, saying: "Pray, step across to the club; we are one short for a rubber." "Emily, dear," he then sait to his wife, "I am called away again. It appears to be a very serious case, for there are two doctors already in attendance."

## FOREION NEWS.

A syndicate of French pharmacists belonging to the Scientific Chemical Society of the South-east are manufacturing a line of pharmaceutical preparations to displace proprietary pharmaceuticals. They have addressed a letter to physicians calling attention to these and asking that they assist the project by specifying such in prescriptions.

An opium factory at Batavia is to be added to the government industries of Java. When completed it is expected to employ about 800 natives. under European supervision.

A central laboratory; to examine and study new remedies placed on the market in Germany, is proposed by Professors His and Kobert. So many of these remedies are uncertain in their properties and dosage that this precaution is deemed necessary.

The Minister of Finance, of the Grand Duchy of Baden, has defined "Secret Medicines" as "All healing medicaments offered for sale, prepared with spirits, for healing or preventing any kind of illness in man or beast, the contents, weight or mode of preparation not having been made known to the public." The addition of a mode of preparation, to understand which technical knowledge is required, is no exemption. All preparations containing spirits, formulas for which are to be found in the Pharmacopœia for the German Empire or in those of other countries, are excluded.

Nancy, France, was the scene of a murder and suicide in pharmacy circles. Professor Bleicher, head of the Nancy School of Pharmacy, was shot by another city pha macist who then turned the revolver on himself with fatal results. The author of the crime was a "cutting" pharmacist, consequently not looked upon with favor by his confreres. A few days previous to the tragedy a sample of inferior cenchora bark had been seized at his laboratory and subjected to analysis. He wanted Professor Bleicher to stop the proceedings. The latter declined to interfere and the shooting was the result.

A sulphuric acid combine is being tormed in Japan to keep prices up. The five leading firms of the country are in the ring.

The Dominion Drug Co., of Hamilton, are again to the front with a new hot weather article, in the shape of a rennet tablet. This is put up ten tablets in a glass bottle and comes in a very attractive stand card sor counter display. A book of recipcs for making junket and other summer dishes is enclosed with each bottle. We have no doubt it will meet with a very large sale.

## The Argyle.

The many citizens of Toronto, who have enjoyed the "North Shore" trip during the hot summer months for the last few years, were more than alarmed when they heard that the steamer which had provided this pleasant outing was to be withdrawn for another route. Their fears were soon, however, allayed by the announcement that the commodious steamer "Argyle" was to take the trip. This boat has been for some weeks on the route and is pronounced by patrons as speedy, comfortable, a good sailor and manned by a courteous and attentive crew. This being the case the popularity of the North Shore will be enhanced the coming season and the pleasant Saturday afternoon excursions still remain a feature of Toronto lake outings. Of the route itself it can be safely pronounced as the most attractive available, offering more variety than any sailing out of Toronto port. Crossing the lake there is only Niagara at one end and Toronto at the other, and lake between. The Hamilton route, -well-Hamilton,-Oh! Hamilton is all right and has a mountain, but the eastern route offers a variety of scenery and changing landscape views, at all times charming and frequently approaching the enchanting.

## Chamberlain's Effervescent Salts.

Mr. J. W. Hayward, the Canadian representative of Chamberlain's, Sheffield, England, is at present placing on the Canadian market the elegant line of Effervescent fruit salts, manufactured by this firm. These salts come well recommended and if the quality of the article is indicated by the appearance of the package then they are all right.
No cutting in price is the condition under which the goods are sold to the trade, and a contract must be signed to this effect by the retailer before any goods are delivered. A list of the salts will be found in the advertisemenr on page 534 of this journal.

A small quantity of turpentine poured in closets is said to be effective in keeping away moths.

Have you seen our WALLACEBURG OVALS, the finest prescription bottle in the market to-day. If you do not believe it give us a trial order and be convinced.

The SYDENHAM GLASS CO., of Wallaceburg, Limited.

## formulae.

## ANTISEPTIC SOLUTION.

| Thymol | dr. |
| :---: | :---: |
| Oil Eucalyplus odorata. | dr. |
| Oil Gaultheria | 40 m . |
| Oil Menth pip. | m. |
| Benzoic acid, natural | 1 oz . |
| Fl. Ext. Raptisia | 1 oz . |
| Boric acid | 3 oz . |
| Alcohol........ (i6 oz.) | 3 P |
| Water......... ، 6 |  |
| Talcum. | $21 / 2$ |

Dissolve the thymol, oils, benzoic acid and fluid extract in alcohol and add the talcum. Dissolve the boric acid in the water, previously heated, and add to the alcoholic liquid and shake occasionally during seven days or longer (the longer the better) then filter.
This formulæ was presented by Prof. W. L. Scoville at the last meeting of the Massachusetts Pharmaceutical Association.

## LIQUID GLUE.

| Joiners glue | 250 grms. |
| :---: | :---: |
| Barium dioxide | 10 |
| Sulphuric acid (conc) | 5 |
| Water | 1015 c. c. |

Dissolve the glue in 1,000 c. c. of water, mix the barium dioxide, sulphuric acid and 15 grms. water. Add this mixture to the glue and digest the whole on a water bath at 80 c . c. for 48 hours. Sulphur dioxide is gradually evolved, the glue looses its properties of gelatenizing, acquires a pleasant odor and does not become mouldy. It is strongly adhesive. When dried in the form of scales it resembles gum arabic and is recomended as a substitute for the latter.

## ACID-PROOF CEMENT

| Asbestos, shredded, . . . . . . . . . . . . . 1 p part.Fine sand . . . . . . . . . . . part. |
| :---: |
|  |  |
|  |
| FUMIGATING POWDER. |
| Cascarilla bark................ . 4 parts. |
| Benzoin ............ . . . . . . . . 2 parts. |
| Cloves . . . . . . . . . . . . . . . . . . . . I part. |
| Saltpetre . . . . . . . . . . . . . . . . . . . . . $\underset{\text { Mix. }}{2 \text { parts. }}$ |
| MENTHOL LINIMENT. |
| Menthol. |
| Chloral. |
| Camphor, of each . . . . . . . . . . ${ }_{3} \mathrm{i}$. |
| Soap liniment to make......... Oi. |
| M. |

SOME LABEL PASTES.

1. To 1 part venice turpentine add 5 parts of rye-flour, and work well in together, then stir in sufficient lime-water to make a thick clyster-like paste. This paste dries slowly, but has powerful adhesive properties, and unites paper on pretty much all metallic surfaces.
2. Gum arabic $\ldots \ldots \ldots \ldots \ldots \ldots \ldots$
Glycerin $\ldots \ldots \ldots \ldots \ldots$
Water $\ldots \ldots \ldots \ldots$
Liquor of antimony chloride $\ldots \ldots$
. $\ldots \ldots$
no parts.
20 parts.
Mix.
3. Boil rye-flour with strong lime-water to a thick, pasty mass, and to each 1,000 parts of this add 30 parts of linseed oil varnish, dissolve in 30 parts oil of turpentine. This makes a waterproof paste for labels for articles stored in damp places.
4. Dissolve 2 parts of dextrin and 1 part of acetic acid in 5 parts of water by warming together in a water bath, and to the solution add 1 part of alcohol.
Any good, strong vinegar will answer in the place of acetic acid and water.
5. Dissolve 100 parts of gum arabic in 140 pa ts of water, by putting the ingredients in a flask with a large mouth, and giving them frequent stirrings. After solution, which will take from 2 to 4 days, according to the number of stirrings the mixture receives, add 10 parts of glycerin, and mix well together. After a little standing, add 20 parts of dilute acetic acid, and stir in. Finally, add 20 parts of aluminum sulphate, let dissolve, and pour through a fine hair sieve.
-Spatula.
PULV. CAFYEINE COMP.


For one powder.
-Phila. Ho-p. Form.

## The J. Stevens \& Son Co. Catalogue.

This catalogue and price list, which has just been issued to the trade, will be an unmistakable convenience to druggists, providing as it does a "ready reference" list of sundries at net prices. The house has exceptional facilities, through their European connections, for securing and supplying a high grade line of druggist's sundries at catching prices. The catalogue furnishes not only the name and prices of articles but also half-tone cuts, so that mail ordering is made easy, the purchaser knowing exactly what he is ordering. Among the goods stocked by the firm is a most complete line of electrical appliances, medical and industrial. To know just where to procure such is frequently a worry to the druggist. In future write to Stevens.

## OUR

## 1901

## PERFUMES.

The line of perfumes we have prepared for this season's trade is better than that of any previous year. That is saying a good deal. Former lines having proved so very salable we confidently assure our customers that they can afford to await an opportunity for seeing our samples if our representative has not yet called.

As before, the perfumes are genuine floral triple extracts imported from Grasse, France, as indicated on the labels. Our new label is very handsomeembossed leatherette and pure gold leaf. Our cases now include several very fine French styles with beautiful floral coverings. Linings are assorted satins and "cut outs."

The values we present are such that our customers can in many instances obtain 100 per cent profit; for example a $\$ 3.00$ line that retails fast at $50 c$. per bottle. Our 25 c . line, glass-stoppered bottle, gold shield label, each bottle in a case, at $\$ 2.00$ per dozen, is fine value and a great seller. We invite you to send us orders naming the cost price per dozen. We will send our best lines at the prices named.

Orders are coming in plentifully. Send yours or reserve it for us and we will guarantee satisfaction.

```
Tropon,
Metol,
Amidol,
Ortol,
```

Hydrokinone,
Eikonogen, Pyrogallic Acid, Sodium Sulphite, pure,

## Shell Castile Soap,

$$
\text { 2,2i-2, } 3 \text { and } 4 \mathrm{lb} \text {. bars, }
$$

also $21-2 \mathrm{oz}$. and 5 oz . cakes,
Castor OII, Itallan \& ist press.

## We invite Letter-orders

and give such special care.

# 프 ELLIOT \& Co., Limited. TORONTO. 



## Established 1896.

## Next Class August 7th, 1901.

To the valuable experience gained in the successful direction of our school during the past five years we have added that of the leading A merican Colleges in associating with us Dr. L. F. Isaacs, late Instructor in the Chicago Psot Graduate School of Medicine.

Our School still continues to teach the necessary facts pertaining to optical science in the simplest and most practical form, devoid of technicalities.

Our recent reorganization, however, enables us to go a step farther and show the connection between the diseases of the eye and errors of vision.

The free services of both instructors are at the disposal of any and all of our graduates for consultation on difficult cases.

Our Course assures to the graduate a thornughly sound and common-sense training.

For those unable to attend a personal course we have provided a
Correspondence Course.

TUITION FEES :- $\$ 25.00$ for Personal Course only ; $\$ \mathrm{I} 5.00$ for Correspondence Course; $\$ \mathbf{2 5 . 0 0}$ for Correspondence Course with privilege of attending subsequent Personal Course.

Address, L. G. AMSDEN, PRINCIPAL, 24 Adelaide St. W., Toronto.

## PHOTOGBPPHC

## SUPPLIES.

We have pleasure in announcing that we have laid in a stock of Photographic Mater ial and Cameras, in the hope that our various friends in the Drug Trade will give us their support in this new venture.

We believe it is in every way an excellent side-line for the Druggist to take hold of.

Our Catalogue recently published will be mailed to every druggist in Canada and will contain all requisite information, but should any of our friends require any further information on the subject, if they will write us we will only be too glad to reply immediately.

Among our specialties will be

## "The Poco"

Camera, made by the Rochester Optical and Camera Co., an instrument whose popularity has increased with every year of its output, and "The Paget Plates," so widely known in England, and for which we have obtained the exclusive agency for Canada.

## EVANS \& SONS,

LIMITED.
37-41 ST. JEAN BAPTISTE
MONREAL, P. Q.
133 William-St., New York, U. S.

56 hanover-st., ILVERPOOL
evans, lescher \& webs, GO BARTHOLOMEW CLOSE, LONDON E. C.

## TO THE ROYAL FAMILY.

To the Prinetipol Courts
Moncils acud Bighout
Avolirin at ill Areat Inter. sentional Exhtbitions.

## ROSS, Limited.

MANUFACTURERS OF CELEBRATED
Photographic Lenses, Microscopes,

Cameras,
Optical Lanterns,
Field and Opera Glasses
Telescopes, Etc.
LIBERAL TERMS TO CHEMISTS.

## 111 New Bond-St., LONDON, W.

Estab. 1830 Works: CLAPHAM COMMON. Lists Free.

Now Ready, English Edition, Price 6s. 6d.

## Trays.

We have a limited supply of
Fibre Trays, $4 \times 5$,
which we offer at $\$$ r. 20 per doz., nett. No orders received for less than one dozen.

## Eakins \& Ferris,

48 Richmond St. W. TORONTO.


LIONEL G. AMSDEN, Editor.

All communications for the Optical Department should be addressed to
L. G. Amsden, 34 Adelaide St.

## OPTICAL PHILANTHROPY.

There is probably no profession or trade known to civilization that is so replete with philanthropical attachments as that of optics.

Take the graduate optician, when first he hangs out his illuminated shingle, and declares himself prepared to cater to the ametropical wants of his locality. Does he not wait with an agonized expectancy for his first victim for "free examination?"

Does he not also bestow his advice in prodigal fashion-ill free of charge.

It is to the dispencers of optical prescriptions, however, that we must turn for superior instances of philanthropy.

Handsome and expensive catalogues, in half-tone and lithograph, gems of artistic merit, are sent broadcast throughout the optical community; test cards are handed out on demand, and the ingenuity of the advertising artist is set in motion to design new styles to be given away next year.

Prescription books are not to be considered as private property at all, but are the stock in trade of the optical community, in which every optician is a stockholder, entitled to a dividend.
Post cards, address labels, post boxes and similar stationery appurtenances, are gotten up in the height of philanthropical enthusiasm.

As for screwdrivers, they are made to give away ; in fact, the modern optical jobber must have a private formula for making screwdrivers without cost.

Not satisfied with this long list of charities, they are now supplying advertising ideas as well as optical knowledge.

It is to be presumed, then, "Virtue is its own reward" in business as in general, and that "the casting of bread upon the waters" will bring a return in whatsoever sense it is carried out-that he who judiciously plants his seed does so in the sure and certain faith that it will return to him again an hundred fold, if properly tended.

So it is with these little philanthropical trimmings that have been grafted into the optical business. They are but practical workings of the theoly of mutual interest that of necessity must exist between producer and consumer, and in the enjoyment of which the aealer is perfectly satisfied.

## ANOTHER THEORY EXPLODED.

Exhaustion of the interni is the latest theory offered to account for exophoria. That is, hyperopia in the first place causes strain of the ciliary and that induces convergence because the 3 rd nerves are involved. In this manner, according to the theory, the 3 rd nerves become exhausted both with reference to the ciliary and their effect upon the converging muscles, and the eyes tend to turn outward. Correction of the hyperopia allows the 3 rd nerves to recuperate, and with their recuperation, convergence becomes active again and overcomes pseudo-exophia. A little examination will show that this theory will not pass muster. If the interni are stimulated by the same nerve-force that causes the ciliary to act, and nothing prevents it, the eyes would cross. They do aften cross as a result of this influence, but it is because the externi are unable to neutralize such action. If the 3 rd nerves become exhausted because of the hyperopia the less powerful externi, operated by the 6th nerves, become exhausted first. The tendency is therefore to produce pseudoesophoria, not pseudo-exophoria. The externi act binocularly, from the necessities of the case, in preserving binocular fixation. The action of the interni is not binocular, but sympathetic-a reflex merely. Correction of hyperopia will not reduce pseudoexophoria to orthophorio, unless the examiner be a pseudo optician who can advance any sort of statement in support of his contention. The causes of real exophoria and esophoria lie deeper than this. Let the philosophers go after them, but let the opticians treat them as they find them. Covering up the head or understanding, like the ostrich when in peril, won't scare them away.

# OUR OPTICAL CLASS. 

L. G. Amsden, Instructor.

A STUDY IN LeNSES. (Continued.)
Standard sized rimless lenses are of the following dimensions:-


Lenses for rimless purposes are usually selected from somewhat thicker stock than edged lenses in order to insure greater bearing surface on the screws.

Rimless glasses are extensively worn owing to the fact that they are inconspicuous and larger lenses can be used than is possible with rimmed goods, thus giving a larger field to vision without destroying the proportion essential to perfect cosmetic effect.

Lenses are made of colored glass, either smoke, blue or pink for the relief of photohobia. These are made in six shades, numbering from No. 1, which is the lightest, to No. 6, the darkest.
in smoke tint a special dark shade called "electric" is made for use in connection with electric lighting plants, or occupations where a very strong light is necessary.

Lenticular lenses are of recent invention and are made either in concave or convex. In the convex form they consist of a circular plano convex disc of the required strength and of about $7 / 8^{\prime \prime}$ diaineter cemented on a plano lens, while in the concave a plain slab of glass is used of about one half the thickness necessary to grind the lens required in the ordinary form. In the centre of the glass a circular concave disc is ground of the required curvature.

Lenticular lenses are, of course, only advantageous when they are of strong power, such as cataract. They are very light in weight and neat in appearance. The central part of this lens-that is, the disc-is, of course, the only part that possesses the requisite amount of curvature, but as in the ordinary lens, when the curvature is spread over the whole surface of the lens, the periphery is useless owing to abberation, so that this curtailing of the field is not a disadvantage peculiar to the lenticular lenses.

Bifocal lenses are constructed with a view to affording the advantages of perfect adaption in one glass for near and far work.

They are of four distinct types -solid, split, perfection and cement.
These four are alike in principle, but different in detail. In all of them the lower portion of the lens through which the light rays from near objects must pass in entering the eye is of stronger refractive
power than the upper part through which distant objects are viewed. Solid bifocals are constructed of one piece, which is first ground to the power necessary for reading and near work. The lens is then attached to the shell and the upper section ground to the curvature required for distance.

The primatic effect introduced in grinding the upper section to the refraction required is so great as to destroy their usefulness. The shape of the reading section, which is an inverted crescent, is also inconvenient.

The split bifocal consssts of the half of a complete glass suitable for reading, combined with the half of the distance glass.

While not as objectionable as the solid form, they are by no means a satisfactory lens, and have fallen into disuse.

Cemented bifocals are the most common form of double vision glasses, and are made by cementing onto the lower section of the distance glass a thin wafer, possessing the necessary additional power for reading. This wafer is usually made crescent shaped, but can be made to any design required. Canadian balsam is used in cementing, and the prismatic feature is avoided by decentring the wafer a like amount in the opposite direction, one prism thus neutralizing the other.

The only objection to this form is their liability to blister, that $i$, the wafer becomes slightly detached with a sudden jar and admits the air between the two surfaces and interferes with the transparency. They are, however, easily repaired.

As the cement bifocal has become a staple article among opticians, a brief description of the method of making and repairing will be useful and interesting.

In making a new lens the main lens of the required strength for distance is cut to the proper size, but not ground (edged). The wafer of the strength necessary to increase the power of the distance glass to the strength required for reading is placed on top of it with one drop of Canadian balsam between them. With a pair of blunt tweezers the two pieces are held in the flame of an alcohol lamp or Bunsen burner until the cement boils freely. In cooling off the wafer is adjusted in place and the air bubbles squeezed out and the whole is edged to the required size, and the surplus cement cleaned off in methylated spirits.
It will, of course, be readily apparent that in order to effect an invisable joint between the two surfaces th-y must be of exactly corresponding curvature in ord $r$ that they may be closely attac ed.

In ::eriscopic convex lenses the inner surface is always -I.25, so that the wafers are necessarily +1.25 .

In cylindrical $b$ focals one surfnce is plano and consequently ıequires a wafer with a plain surface.


## The Glenco Camera

TAKES EVERYTHING IN SIGHT! Full line of supplies always on hand. Send for catalogue. $\$ 5 \mathrm{TO} \$ 50$
The only Camera manufactured in British North America. Sold in all the Colonies. MANUFACTURED BY
The CANADIAN CAMERA Co., 46 Adelaide Street, West.


We beg to announce that in addition to the 7 oz . and 14 oz . bottles in which Listerine is offered to the trade, we now place upon market a 3 oz . package of

## LISTERINE.

An active demand for a smaller package of Listerine evidently exists, especially among the travelling public and the rapidly increasing number of patrons of Listerine who prefer to purchase their favorite antiseptic in the ORIGINAL PACKAGE, under the seal and guarantee of the manufacturer.

We respectfully suggest that you place in stock a sufficient quantity of the small sized Listerine to meet the requirements of your trade, as we guarantee to create and maintain an active and important demand for

## LISTERINE IN THE ORIGINAL PACKAGE

Ttade supplied ly Wholesale Druggists.
W. LLOYD WOOD, Toronto, Gen. Agt.

Yours Respectfully,
LAMBERT PHARMACAL CO.
St. Loưis, July, 1900 .

In sphero-cylindrical bifocals the wafer has to be specially ground to fit the curvature of each glass. This will account for the large cost of the latter as compared with the former.

In repairing cemented bifocals the lenses are warmed in the flame and the wafer pushed off and both sections thoroughly cleansed in alcohol, and re-cemented as in the case of a new lens.

Care must be used in cementing on the proper side.
P. rfection bifocals are made from two distinct lenses, one adapted for distance and the other for reading.

From the lower half of the distance lens a crescent shaped section is cut out and the edge ground smooth, and a curresponding piece cut from the centre of the reading glass is fitted to it.

These two latter forms of bifocals give good results, and are perfectly satisfactory.

The general objection 'o bifocals is, that in going up-stairs the ey.s are turned down to see the posttion of each step, w.ich is located probably four or five feet away, but the lower section of the glass is adapted for reading distance (say 16 inches), and consequently the stairs are indistinctly seen and the wearer is liable to stumble. This, while a disadvantage, is very much less $s$ than that of having to constantly change one's glass for distance to reading, and can be easily overcome by learning to use the stairs without looking at them

The coquille lens is usually a smoke or blu: tinted glass curved to the form of a shell, from which fact it takes its name. They are worn as a protection from the su.i or snow, and are made in two ways.

The irdinary coquille, such as is commonly sold for the purpose, is a cheap affair, in which the pieces of glass are pressed up while hot and consequently are full of optical imperfect ons.

The ground coquille is made from a thick block of glass in which the shape is formed by grinding. Their expense pievents their coming into general use.

## Dhotographic Ðepartment

## FORTNIGHT PHILOSOPHY, ON EDITORS.

An editor of a photographic paper is not really a philosophical object, but so little is known about him by the world at large that $p$ rhaps a few unvarnished notes on this somewha curious pebble of the seashore may prove of interest. It is difficult 10 classify editors-with other mortals you may divide them irto those who drink whiskey and soda ant those who drink whiskey and appolinaris, but editors drink both or either indiscriminately and imp irtially, and they're not a tit proud if there is only the
whiskey, and even if there isn't the whiskey as long as there is anything else liquid but writing-ink, and water. All editors, too, smoke large cigars, and ride in hansom cabs, and go to conventions, and when you say they're having a good time, they point out its all for the good of the paper, and with a resigned look the y plod on their weary way and fake their accounts for the cashier every Saturday.

Some editor; write articles, although it isn't by any means the usual thing, and when they do so they are so frightened that their reputation for dignitate without the otium should be discovered that they sign themselves Cosmos, and all kinds of funny names.

But the most wonderful thing about them is their love for each other. Now with the ordinary man there are fr endships sincere and true, but they're not in it $w$ th the affection an editor has for his contemporaries. They won't allow anything to be said derogatory about each other except they say it themselves, and then they only do it for the other man's good. It is a pretty and touching sight to see a group of editors at a society dinner and hear them call each other by their Christian names, and gush like a pack of schoolgirls; and your faith in human nature goes up to about 90 degrees in the shade, till you read the next week's papers. It's something like Chamberlain's dispatch as to Mr. Kruger's health some time ago. I believe they call it diplomacy.

Some editors have caineras, and some of themnot all-take photographs, and some believe discretion is the better part of valor, and if they do take a Tella to the convention they rest content with witing a letter to the makers to say they changed four million films in 23 hours and never had a hitch, but don't let us se-the results.

The most useful instrument in the hands of the editor is a large pair of $s$ issors, and this, combined with a pastepot, helps him to while away many happy hours between the time when he gets down to the office and when be has to go out to see a man ab sut a dog. American editors have obtained, perhaps the greatest proficiency in this respect, and have entirely abolished the poor down-trodden contributor.

The editor, unlike others, is only kind to be cruel, and his politest notes are those in which he thanks some poor juggins for favoring him with a perusal of his article on printing before development, or some other novel subject, but regrets that it is unsuited for his journal. I have a fine collection of these at home, and I trust to hand them down to posterity as an evidence of what fools some people can be. It seems to me that an editor of a journal is just the man most unlikely to know what is suited for his readers' mental pabulum. It reminds you of

## Sixyy-Six and Two-Thirds per cent.

This is the net profit you will make on WAMPOLE'S PULVEROUS PILLS if you buy them on our best terms-in other words, to get our best discounts, we do not want you to "LOAD UP" with a lot of stuff to fill your shelves, but only carry a representative stock of those Pills, Tablets, Compressed Chocolate Coated Tablets, Elixirs, Syrups, Gelatine Capsules, etc., as are in frequent demand.

We know you buy Pills, and presume you are dispensing a certain make, and are satisfied-yet we know you do not dispense this make because you love the house that makes them.

Why not, therefore, push the make that yields you the most money, everything being equal as regards quality.

This is a progressive age, and we make pills now, better than ever before and cheaper too. They are not insoluble like many brands.

They are PULVEROUS Pills, and contain the medicament in the form of a fine, dry powder, enclosed within a thin, freely soluable coating; they are really coated powders, and have the same ready medicinal action as the drugs administered in the form of a powder.' They are made without excipient or pressure, do not become hard or insoluable, and will preserve their medicinal action unimpaired, in any climate, as perfectly and as lung as if the drugs were in seal. ed bottles. Each Pill is made true to formula by up to date methods and ideas,

We want your orders for Pill or anything else we manufacture. At least give us the oportunity to submit quotations.

Samples gratis-price list tells everything.

## Henry K. Wampole \& Co.,

## Specialties in Progressive Pharmacy,

Main Office and Laboratories,

Branch Office and Laboratory, Toronto, Ont., Canada.

Philadelphia, Penna.,
U. S. A.
poor H. J. Byron, who, dining with the editor of Punch, inquired whether ever any good things were sent in by outside contributors. " Oh , yes," said Burnard, "lots of real good jokes." "Then why don't you put 'em in ?" said the wit.

If you looked at any editor you would think he was the best man on the face of the earth, and I understand proprietors of journals always insist, as a sine qua non, that they must have an evangelical countenance. In most cases, so I am led to believe, all applicants for an editorship have to send in a photograph, and a description of the color of their eyes and hair, just like barmaids or flunkeys. The editors of the photographic papers have evidently passed this test with flying colors.

It isn't difficult to be good when you're an editorhe has $£ 5000$, or $£ 50,000$, or $£ 500,000$ a year where poor Touchstone and the rest of us are good for nothing! (Do you catch the delicate double entendre?)

What is the reai use of them heaven only knowsthey don't write the paper, or print it, or sell itthey are just lilies of the field, who toil not, neither do they spin.

If I'm lucky when I get a bit older I am going to be an editor, but I haven't decided of which paper! --Amateur Photographer.

## Dont's For Amateurs.

By W. H. Moss, President Toronto Camera Club.
Don't buy a plate because it is cheap-get the best to be had.

Don't omit, before putting your plates in the holders, to back them with a perfect Anti-Halo backing.

Don't after backing your plates, put them in holder till they are quite dry-they may stick.

Don't dust your plates with a brush; use a silk handkerchief or other soft cloth.

Don't leave the top of your tripod at home when starting out for a day's photographing.

Don't fire away at the first pretty scene you come to; see if it is good composition when seen on your ground glass.

Don't forget to set your shutter before pulling out slide.

Don't imagine your shutter is set at instantaneous when perhaps it is at time.

Don't forget that snap shots taken on a dull day need a much longer exposure than they do when sun is shining brightly.

Don't take snap shots indoors even if the sun is shining into the room.

Don't forget to expose for the poorest lighted part of your subject.

Don't forget to stop down when taking views over water,

Don't attempt to take snow scenes unless sun is shining.

Don't take any view with the sun behind you; they come out flat.

Don't when taking a view against sun, let it shine into your lens.

Don't use a lens of shorter forcal length than the diagonal of your plate if you wish for pleasant perspective. $61 / 2 \mathrm{in}$. for $4 \times 5$, and $81 / 2$ or 5 for $5 \times 7$.

Don't use slow plates for landscape work including moving cattle, sheep, etc.
Don't pour developer on plate till you have first washed off backing.

Don't wash off backing until you have first soaked film. You may get some of backing on emulsion and stain it.

Don't be too economical with developers; 202 is little enough for a $4 \times 5$, and 3 or 4 oz . for 5 by 7 .

Don't allow any air bubbles to remain on film; use a little cotton-batting and swab the plate over.

Don't handle plate more than necessary or you may cause edges to frill.

Don't use a saturated solution of Hypo to fix your plate in. 4 oz . of Hypo to 20 ounces af water is strong enough ; Cadett plates, double that strength.

Don't hurry your negative out of Hypo bath ; it will save yeu trouble later on.

Don't develop your plates too close to your light ; it may fog them.

Don't use your developing tray for Hypo or toning solutions and then hope to get clean negatives.

Don't forget to whipe your negatives off with a piece of cotton-batting and so remove all loose pieces of film from surface before putting to dry.

Don't dry your negatives on the radiator or over the gaz; you may melt the film.
-Can. Photo Blue Book.

## Profits From the Sale of Photographic Preparations.

Joseph F. Hostellery, in the Druggist's Circular, contributes a paper on this subject. His purpose, he says, is " to consider in figures the actual interest to be realized upon small sums of money invested in certain photographic materials. It is diffiult, in fact impossible, to be arbitrary in these calculations because of the various and varying commercial cond'tions of the country. Market quotations fluctuate on chemicals and photographic accessories; competition as a factor for governing prices may be much more operative in one section than in another; a small demand will not permit of the large discounts on purchases which more active patronage makes possible. These computations are therefore somewhat approximate. They are so nearly correct,

## ROBINSON'S

## AROMATIC

## CASCARA.

When a Physician prescribes "Cascara Aromatic" the Pharmacist can dispense ROBINSON'S with perfect confidence that the results desired will follow its use. It is Manufactured from carefully selected bark of guaranteed purity. It is a HIGH GRADE Extract at the price usually charged for an inferior article. Write for particulars.

## The Robinson Manuf'g Co.,

61 Front St. E., - - $\quad$ TORONTO.

## ALMOST INCREDIBLE

But for the fact that the following unsolicited testimonial bears the signature of one of our oldest and most reliable retail Druggists, its truth might well be doubted, BUT IT IS A FACT that anyone may verify for himself where Flies are very plentiful.

ARCHDALE WILSON \& Co.,
Hamilton.
Dear Sirs,-The following may be of use to you. A customer of mine who keeps a butcher shop in this town bought a ten cent packet of your Fly Pads from me and in ten days killed over a bushel measure of flies.

Yours truly, F. G. SANDERSON.
No Other Fly Killer Produces Such Results as WILSON'S FLY PADS,
however, as to closely estimate the profits which the average druggist can anticipate. Essentially the profits of the city pharmacist will be something under those of the druggist of the small $t$ wn. For most chemicals the druggist can usually ask a few cents in advance of the quotations of the photographic supply house. But to successfully compete with this aggressive competitor, it will be necessary in some instances for the druggist to meet their prices."

To estimate the profit in chemicals he gives a ist taken at random from a price catalogue of a photographic supply house and the price at which the same can be bought in the wholesale drug market, also assuming that the druggist may be able to secure a price a few cents higher than that charged by the supply house. In this list "p. h." signifies, photographic house; "d. m." means, drug market.

Potassium bromide.—p. h, 12 c. oz., 25 c. $1 / 4 \mathrm{lb}$. ; d. m. 56 c. lu.

Potassium iodide.-p. h. 35 c. oz., $\$ \mathrm{I} .00 \mathrm{I} / 4 \mathrm{lb} .$, $\$ 3.40 \mathrm{lb}$; d. m., $\$ 2.75 \mathrm{lb}$.

Ammonium bromide.-p. h.' ${ }^{\prime} 12$ c. oz., 30 c. 1/4 lb.; d. m., 74 c. lb.

Sodium sulphite.-p. h. $20 \mathrm{c} . \mathrm{lb}$. ; d. m. $10 \mathrm{c} . \mathrm{lb}$.
Pyrogallic acid.-p. h. 30 c . oz., $\$ 1.001 / 2 \mathrm{lb}$., d. m. $25 \mathrm{c} . \mathrm{oz} ., \$ 2.90 \mathrm{lb}$. in $1 / 4 \mathrm{lb}$. cans.

Hydrochinon.-p. h. 30 c . oz., $\$ \mathrm{~s} .00 \mathrm{l} / 4 \mathrm{lb} . ; \mathrm{d}$. m. $19 \mathrm{c} . \mathrm{oz} ., \$ 2.00 \mathrm{lb}$. in $1 / \mathrm{lb}$. cartons.

Sodium thiosulphate.-p. h. 5 c. lb.; d. m. 3 c. $1 / 2 \mathrm{lb}$. in kegs.

Ammonium sulphocyanide.-p. h. 15 c. oz., $\$ 1.00$ lb.; d. m. 7 c. oz., 55 c. lb.

Lead acetate.-p. h. 12 c. oz., 15 c. $1 / 4 \mathrm{lb} ., 35$ c. lb.; d. m. 14 c. lb.

Citric acid.-p. h. 16 c. oz., 70 c. lb; d. m. 52 c. lb.

Distilled water.-p. h. 35 c. gal.; d. m. 15 c. gal.
Developers are important preparations financially as well as otherwise. The following receipt for a metol developer is given, to cost about 14 cents per 8 oz . bottle and should be sold at 35 c .:

When dissolved add
Sodium sulphite, cryst. . . . . . . . . 1114 ozs.
Sodium carbonate, cryst......... . 3/4 oz.
Potassium bromide .............. . . 10 grs.
This may be called a triple strength solution. Two ounces of water is to be added to 1 ounce of the solution for ordinary snap shot work such as the average amateur will be practicing.
dOUBLE SULUTION DEVELOPER.
A.

Water.... $\therefore . . .$.
Sodium sulphite . . . . . . . . . . . . . . . 360 grs.
Eikonogen . . . . . . . . . . . . . . . . . . . . . 192 grs.
Hydrochinon . . . . . . . . . . . . . . . . . 63 grs.

## B.

Water

8 ozs.

Potassium carbonate. . . . . . . . . . . . 256 grs.
For a normal exposure use 1 ounce of each solution to 2 ounces of water. For under-exposure use a little more of solution B. Restrain development by adding water to the mixed developer or a few drops of solution of potassium bromide.

This costs about 24 cents and would sell at the photo supply house at 50 c .

The major number of beginners in photography tone and fix prints in a combined toning and fixing bath. Such a solution is an inevitable item in a catalogue of photographic accessories. A good formula for a combined gold bath is the following :


This is a triple strength solution. It keeps well in an amber bottle. It costs about 20 cents, including the bottle.

## Photographic Printing in Two Colors.

A new method of photographic printing upon paper in two colors has lately been devised by $M$. Bolle. By this means images may be printed side by side in different colors and an agreeable effect thus produced; it is especially applitable in the case of a central image surrounded by a border of a second color. One of the images is printed from a photographic negative and the second from a negative prepared from a hand design. The method is based upon the combination of the ferro-prussiate (blue print) and the bichromated gum process, and gives a blue image combined with another whose color may be varied according to the taste of the operator. To obtain the blue image the paper is sensitized by a m.xture of the two following solutions:-
A. Citrate of iron and ammonia...... 15 parts or 15 grains.

B. Ferricyanide of potassium ...... 8 parts or 8 grains.

Water ......... ......... ........ ......... 40 parts or 40 minims.
These solutions, prepared and filtered, may be mixed in advance and kept in yellow bottles, but it is best to mix at the time of using. The image is strongly printed and developed by washing in water till the whites become pure. The second image may form, for instance, a border for the blue image. To obtain it a plate is first prepared by exposing an ordinary gelatine plate to daylight and developing it until it is entirely black. The design to be reproduced is copied or traced upon tracing paper and transferred to the plate by impression


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of Corrugated Paper for packing purposes in Canada is
The Elliott Mf'g. Co., LIMITED.
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Paper Boxes, Lithographing. Pronting. Embossing and Gold-leat Stamping. Folding Cartoons. If you are requiring anything in these lines write for quotations and find their prices right.


## KNOWN AS RELIABLE OVER SIXTY YEARS.


Some Specialties.-Sandal Pure Eandal, 1-10 Cassia;
Apiol ; Wintergreen; Terpinol; Frigeron;
Damiana, Saw Palmetto, Etc.
EMPTY CAPSULES OF ALL KINDS.
Encapsuling Private Formulas a Specialty. Correspondence solicited.

IMPORTANT-We will gladly send Druggists or Physicians, on receipt of list price, direct by mail, any of our Filled Capsules and Perloids.
Specify PLANTEN'S on all orders. Send for samples.
H. PLANTEN \& SON., Established 1836 NEW YORK.

[^1]paper. It is then engraved through the film with the point of a needle, giving a negative in black and white. To print this design the border of the blue image is sensitized by brushing over it a thin and even layer of gum arabic, 40 per cent. solution, to which is added a sufficient quantity of the color decided upon. When this layer is dry a sensitizing solution of bichromate of potash ( 10 per cent.) is applied in the same way. The printing is carried out as usual and the image developed by washing in cold or lukewarm water. This process may be modified in different ways and will find many applications: if desired, the centre of the image may be printed by the latter method and the margin in blue, or different images may be printed side by siae.-Scientific Ainerican.

## The Us: of Chemicals.

Acetate of Soda is used to hold the brilliancy and roundness of the print.

Borax is used to retain the high lights while the shadows are toning to a dark chocolate.

Common Salt is used to give a Rich, Deep Olive Tone. Too much Salt may slightly flatten the print.

Sal. Soda (small quantity) may be used instead of Borax but it gives more of a light Olive tone, the Borax the dark. Salt deepens the tone in either case.

Before transferring Prints to the Platinum bath, they should be thoroughly washed in say from 6 to 8 changes of water. If they are not properly washed the Alkali in the print would neutralize the acid in the Platinum bath and cause the latter to precipitate. You would not only loose Platinnm but have inferior prints.

## Dark Rooms Everywhere.

## By W. B. Blackhall, Toronto.

When on a photographic tour it is sometimes desirable that the exposed plates be developed, to ascertain if proper exposure, composition, lighting, etc., have been obtained.

Most photographers leave the developing of the plates until their return home, being under the impression that it is impossible to do otherwise. It is, however, a very simple matter, and one that well repays the slight trouble involved.
I have developed plates in log cabins, farm houses, and city hotels, with perfert cleanliness, as follows :-

Every room being a dark room at night, requiring only the closing of the door and drawing down of the window blind, the only articles necessary are :Two trays, one for the developer, and one for the fixing bati, A folding candle lamp, gne yard of
oilcloth, a packet of powdered Hypo, and a bottle of developer. Also borrow two ordinary pails each half filled with water. Begin by laying the oilcloth on the table, pin the corners up so as to form a large dish, place the lighted candle lamp in the centre with the developing tray in front and to the right hand side. The fixing tray in front and to the left hand side. Just behind the lamp place the two pails, one to the right and the other to the left. It will be seen that all operations will be conducted over the oilcloth dish, and not one drop of any kind can fall upon the floor.
Having closed and fastened the door, throw a towel over the shoulder, and drawing up a chair to the table, sit down. Taking the first plate from the holder, rinse it thoroughly in the pail on the right hand side of the table, next place it in the developing tray, and when developed, rinse off again in the same right hand pail, to stop development. Having carefully inspected the plate it is now passed over and into the fixing tray, where it remains while plate No. 2 is being developed. After which the first plate is removed from the fixing bath to the left hand pail, slightly rinsed, and stood up on end, face in, to the sides of the pail. The second plate meantime going into the fixing bath. Leave the plates in the left hand pail for an hour, after which stand them round the outside of the pail to dry, and pack them up in the morning. These negatives, of course, contain some Hypo, which would in time spoil them, therefore wash them thoroughly upon returning home.

To change the plates in the holders during the daytime, draw down the blind, making the room as dark as possible, then turning down the bed covers, place the holders with the exposed plates in the centre of the bed, with a box of unexposed plates alongside. By replacing the covers and passsing the arms underneath, one can without difficulty empty and refill the holders. The film side of the plate is easily known by applying the finger nail. Place the exposed plates in the box and close it before lifting the cover.
-Can. Photo Blue Book.

## Magic Photographs.

Make a print on albumen paper in the usual way, fix and wash thoroughly without tuning, inmerse the print in a saturated solution of bichloride of mercury until the image disappears; wash and dry. To make the invisible image appear, place the picture in contact with a moistened piece of blotting paper previously soaked in a saturated solution of hypo-soda, when the image will reappear with all. its pristine vigor, as if by magic.

## Working for Profit.

The drug business cannot be maintained upon any other basis than that of profit. The druggist must ever bear in mind that the volume of his individual business cannot be increased by any means beyond a certain sum per annum, as the public will not buy medicine at any price unless they have immediate use for it. When he is obliged to pay 67 c . for a remedy to retail at 75 c . he makes but 25 per cent of the profit he would have made could he have obtained the regular price,one dollar. He cannot find four times as many persons to buy from him so he is a certain loser. To offset just such a condition of affiars the business of the Toronto Pharmacal Co. was started and the success it has attained has resulted from the wise determina. tion of the druggists to protect themselves.

The patent medicine manufacturer has guarded his profits; the public are sure to look after their own interests and the druggist is assuredly not in business for the good of the other two.

He must either sell the patent goods at full prices or manufacture lines for himself, which he can control both in sale and in price.

## The

TORONTO PHARMACAL CO.,
LIMITED,
Toronto and Montreal.

## PRICES :: CURRENT.

CORRECTED TO JULY 10, 1901.
The quotations appended represent average prices in the Toronto and Montreal Markets, for quantitities usually purchased by Retail Dealers. Larger parcels may be obtained at lower figures, but quantities smaller than those named will command an advance:

Acid, Aceti

|  | O 35 |  |
| :---: | :---: | :---: |
| tb | 10 | 13 |
| Ib | 25 | 27 |
| tb | 8 |  |
| 02 | 15 | 20 |
| 02 | 7 | 10 |
| tb | 10 | 15 |
| tb | 45 | 50 |
| tb | 31 | 40 |
| gal | 50 | 80 |
| to | 50 | 55 |
| to | 10 | 120 |
| to | 30 | 32 |
| oz | 8 | 10 |
| tb | 10 | 125 |
| tb | 4 |  |
| tb | 18 | 20 |
| tb | 10 | 14 |
| tb | 20 | 25 |
| tb | 10 | 12 |
| tb | 35 | 40 |
| tb | 12 | 15 |
| tb | 60 | 65 |
| tb | 2 |  |
| tb | 16 | 22 |
| tb | 60 | 65 |
| tb | 85 | 90 |
| tb | 30 | 35 |
| gal | 452 | - |
| gal | 490 |  |
| gal | 200 | - |
| gal | 125 | 150 |
| tib | 11 | 13 |
| tb | 13 | 15 |
| Oz | 15 | 20 |
| tb | 2 |  |
| 16 | 10 | 12 |
| tb | 55 | 60 |
| tb | 80 | 85 |
| tb | 12 | 13 |
| fb | 9 | 10 |
| tb | 25 | - |
| tb | 525 |  |
| tb | 35 | 40 |
| 02 | 15 | 20 |
| 02 | $\infty$ | 40 |
| 1 b | 10 | 18 |
| tb | 35 | 40 |
| tb | 20 | 25 |
| gr | 5 | 5 |
| Ib | 30 | 45 |
| Ib | 14 | 15 |
| Oz | 185 |  |
| It |  | 30 |
| 1b | 8 | 10 |
| dr | 70 | - |
| tib | 40 | 50 |
| tb | 55 | 65 |
| tib | 200 | 250 |
| It | 70 | 75 |
| tb | 15 |  |
| - | thi5 |  |

18





## $\square$ <br>  <br> $\square$ <br> 

There is no portion of your business so easily ruined as your perfume trade. ab Customers are shy and hard to please. You must appeal to the sense of smell and satisfy the eye. Discriminating patrons demand a line of odors that are true to name, lasting and pleasing, and a line of packages that are attractive, and at the same time good value for the money. Our 1901 lines are the best values in 25c, 50c and $\$ 1.00$ packages on the Canadian market. $\dot{\mathrm{O}} \dot{\mathrm{B}} \dot{\mathrm{B}} \dot{\mathrm{B}} \dot{\mathrm{B}} \dot{\mathrm{B}}$ Our STANDARD and CZARINA odors are the best "TRADE


> STEARNS' PERFUIIES

## "WITCH HAZEL,"

## (Distilled Extract.).

## To The $\boxplus$ rug $\mathbb{C r a d e}$ :

This is the season to consider the quality of the product you supply your . customers, we manufacture Distilled Extract of WITCH HAZEL from the Canadian Twigs and Leaves, and can supply the trade with a better product than that which is imported. The difference between the foreign Distilled Extract and that which we distill is, THAT OURS IS AN ALCOHOLIC DISTILLATION, the alcohol being put in the Still and run over through the leaves and twigs which insures it keeping perfectly pure and sweet, under all reasonable conditions. IT CONTAINS 15 per cent GRAIN ALCOHOL. The grade usually imported is an aqueous extract which quickly sours, the alcohol being only added to it by the jobbers in Canada, hence the trade do not get a FRESH. DISTINCTIVE ODOR which CHARACTERIZES OUR PRODUCT.

Dr. J. P. Bond, V. S., Toronto, writes as follows :-I called at your office and procured a sample of your DISTILLED EXTRACT of WITCH HAZEL and found it so superior to what I have been getting that I shall use it in my practice. We would like you to write for sample and quotations so as to convince you our contention is correct, that we manufacture the best Dist. Extract of Witch Hazel upon the Canadian market.

## тне Toronto Drug Co

## тне Toronto Drug Co, , цumer.

MANUFACTURERS OF


## BOTANIC DRUGS

## Crude, Granulated, Powdered.

We have every facility for supplying the best grade of Crude $\mathscr{D} r u g s$, ground to any fineness. The Granulated and $\mathscr{P}$ owdered $\mathscr{D}$ rugs furnished by us are not only pure but are made from the 'highest standard of Crude Material attainable, and the Milling is done by our own Machinery under per = sonal supervision. We give special attention to the Grinding of Customers Own Material and Private
$\mathscr{F}$ formula Wort.

Send for samples and quotations before mako ing your purchases.

## The Toronto Drug Co Limited.

## IIST OF

## Granular Effervescent Salts

## PUT UP IN 8 oz. OLASS STOPPERED BOTTLES HOLDING 4 oz. OF SALTS And in One Pound Bottles.

## Alkaline Lithia.

Each teaspoonful contains Caffeine, grs. I; Soda Bicarb. grs. 10; Potass. Bicarb ${ }_{n}$ grs. 10; Lithia Carbonate, grs: 5 .
Caffeine and Potassium Bromide.
Each teaspoonful contains Caffeine, grs. 1 ; Potass. Bromide, grs. 5.
Gitrate of Magnesia.
Each teaspoonful contains-Magnesium Citrate; grs. 24.
Lithia Citras B. P.
Each teaspoonful contains. Lithia Citrate, grs. $2 \frac{1}{2}$.
Lithia Citras and Soda Salicylas
Each teaşpoonful conṭains Lithia Citras, grs. 5 ; Soda Salicylas, grs. 1o.
Dagnesia Sulphate $B . P$.
Each teaspoonful contains Magnesia Sulphate grs. 30.
Saline Laxative
Each reaspoonful contains Magnesia Sulphate, grs. 5 ; Sodium Phosphate, grs. 5 .
Sodium Phosphate B. P.
Each teaspoonfül contains Sodium Sulphate, grs. 30.
Sodium Salicylate
Each teaspoonful contains Sodium Salicylate, grs. 15.
Sedium Sulphate B.P.
Each teaspoonful contains Sodium Sulphate, grs. 20.
Seidlitz Mixture
Rochelle Salts
Each teaspoonful contains Rochelle Salts, grs. 30.
Bethesda Salt
Each teaspoonful contains the equivalent of one pint of the natural water.
Indicated in the treatment of the Kidneys.
Carlsbad Salt
Each teaspoonful contains the equivalent of one pint of the natural water.
Indicated in Constipation, Hepatic Troubles, Gout, Rheumatism and Diabetes.
Kissingen Sall
Each teaspoonful contains the equivalent of one pint of the natural water.
Indicated in indigestion, Hepatic Troubles, morbid conditions of the Kidneys, Obesity, and gives a general tonic to the organs.
Friedrichshall Salt
Each teaspoonful contains the equivalent of one pint of the natural water.
Indicated in diseases of the Stomach, Liver and Urinary Organs.
Vichy Salt
Each teaspoonful contains the equivalent of one pint of the natural water.
Indicated in Kidney Diseases, Diabetes, Gout and Hepatic Derangements.
Obesity Salt
The remedy par excellence for reducing the weight and abdominal enlargement without disarranging the systom.
We ask special attention to our Effervescent Citrato of Magnesia. A large granular without any dust. Put up in 5 and 25 pound tins.

Write for quotations.

conforms strictly to the Pharmacopea in strength and kind of drug used.

## BELLADONNA PLASTER-JOHRSON \& JOHRSON'S FORMULA.

Belladonna gathered in proper time and season extracted with alcoholic menstruum so as to retain all soluble constituents of the drug by maceto-percolation, reduced in vacuo to a semi-solid extract. Incorporated by mixing cold with plaster mass. See U. S. D., page 491.

## Johnson's Belladonna Plaster Contains all the soluble Oonstituents of Belladonna in Absorbable Form.

"After a careful test of Johnson's Belladonna Plasters in the Philadelphia Hospital for Skin Diseases, I find an increased action and more immediate effect.Jno. V. Shotmaker, M.D.
"Johnson's Belladonna Plaste" has met with approval. An ithprovement has been made in the addition of Boracic Acid to the plaster base with a view of opening the skin pores and enabling the drug to be absorbed."-British Medical Journal.
-I am greatly pleased with Johnson's Belladonna Plaster. I. find it gives quicker and better effect than any other I have hitherto used."-Dr. D. H. AGNEW. University of Penna,

The essential feature of Johnson's Belladonna Plaster is the use of an absorption promoting base that frees the pores from fatty matter, thus insuring reliable and increased action of the drug.

## New York Pharmacal Association's Preparations.

I AOTOPEPTINE POWDER (ounce bottles.)
" $\quad$ ( $\$$ lb botles,)
TABLETS.

Lactopeptink elixir. Plain.

| ". | ". | Iron, Quinia and Strychnia. |
| :--- | :--- | :--- |
| ". | "a | Bismuth. |
| Gentian and Chloride of Iron |  |  |

Arlington Chemical Company's Preparations.

Beef Peptonoids (Powder.)
Liquid Peptonoids with Coca.

Liquid Peptonoids.
Phosphagon.
Phosphagon.

Peptonoids, Iıon and Wine. Liquid Peptonoids with Creosote.

## Palisade Manufacturing Co's Preparations.

Borolyptol. Kola-Cardinette.

Velvet Skin Soap.
Velvet Skin Powder.

## HEADQUARTERS

## HOR

Antiphlogistine
Alkavis
Campbell's Arsenic Wafers
Campbell's Gall Cure
Campbell's Horse Foot Remedies
Chapoteaut's Capsules
Coke's Dandruff Cure
Cushman's Menthol Inhealters
Curine
D. Audurand's Anti-Gout Wine

Elliman's Embrocation
Eskay's Food
Floraplexion
Fould's Arsenic Soap
Gourard's Cream
Green's Nervourta
Glycothymoline
Hyomei
Hammond's Extracts
Hall's Teething Syrup
Hayes' Hair Healh
Hair's Asthma Cure
Isham's Water
Karn's Menthol Plaster
Kilmer's Swamp Root
Kinsman's Asthma Remedy
Keonig's Nerve Tonic
Kutnow's Salts
Kline's Medicines
LaBlache Face Powder
Lacupia
Laville's Gout Cure
McArthur's Syrup
Manalin
Marcal
Marsh's Electric Liniment

## MERCK'S CHEMICALS

## Modene

Moller's C. L. Oil
Newton's Heave Remedy
Omega Oil
Packer's Tar Soap
Parker's Hair Balsam
Peruna
Pepper's Sulpholine Lotion
Phenalgin
Phospho Albumen Tablets
Pil Cannabine Phosphite
Pil Cannabire Phosphite and Creasote
Pyramid Pile Cure
Resinol
Roger and Gallet Perfumes
Santal Midy
Samaritan Nervine
Sanmetto
Seven Sutherland Sisters Hair Restorer
Sargeant's Dog Remedies
Sulphume
Switt's Specific
Tamarindien
Thialion
Thatcher's Butter Color
Tuchahoe Lithia Water
Valentine Meat Juice
Vitalized Phosphates.

## Munyon's Homeopathic Home Remedies. Agents.

## Wholesale Druggists, Toronto.


[^0]:    *Extract from an address on Metrology, delivered by Mr. Otto J. Klotz, before the Literary and Scientific Society, Ottawa.

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