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# CANADIAN DRUGGIST. 

# GANADIAN • DRUGGIST. 

WILLIAM J. DYAS, rublisher.

Sobscmption, \$1 per year in advance. Advertioing thates on Application.

The Canadian Drugsist is lssued on the 16 th of ecth month, and all matter for insertion should reach us by the bth of the month.
New advertisemerits or changes to be addecased
CANADIAN DRUGGIST,
Strathroy, Ontario.

## EUKOR'EAN AGENGY:

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## Notice of Removal.

It has been decided to remove the office of the CANADIAN DRUGGIST to Toronto Ontario, at the beginning of the new year. The issue of January fifteenth will therefore be from our new office in that city. Our readers and advertisers will please bear this in mind.

## Where is Canada's Contribution?

The physicians and pharmacists of Victoria, N.S. W., have forwarded to the PharmacopreiaCommitter of Great Britain the recommendations adopted by them, which we had intended inserting in this issue but were prevented by want of space.

What, we ask, are the recommendations from Canada? Surely we, the foremost of Britain's Colonies, should have something to say in the preparation of such an important work as "An Imperial Plaranacopcia." Truc, we have not as pharmacists been officially notified and request. ed as properly constituted legislative bodies to formulate and present our views -only the general circulars being vouchsafed to us,-but we should take it upon ourselves as an important portion of Her Majesty's dominions to say what should or should not appear in any work designed to be the official guide of our actions. Let our various Provincial Associations take prompt action in this matter, and, we would suggest, submit any suggestions to an appointed Dominion Board comprising a delegation of physicinns and pharinacists who will finally submit the propositions to the Pharwacopeial Committee. Who will act first?

## Hours of Business.

We have never yet heard an objection urged against the drug business which did not in some wiay bring up the lengthened hours supposed to be necessarily devoted to it. The work in itself is not hard. The character of it is agrecalle, but the monotony of a business which affords no hope of rest or holidays is irksome in the extrease. We would not like to say that
it is entirely the fault of the public that the continement is so generally prolonged. Wo doubtless have ourselves largely to blame. We will not shorten our hours because we think our neighboring druggist is not inclined to, and hen credits us with a like perverseness. The public use us because we afford the convenienco and not because they would not wait our con venience if wo thught them 10 . It is very doubtful if the volume of our busi ness is one dollar greater at the end of the year becausig wo toil three hours long. er each day than other trudesme.ti. They work energetically while at it and enjoy their rese when the day's work is done, while we drag the day into the night and are nether tired nor rested, but listlessly weary of things in genernl.

The druggist is by nature and ability like other mortals possessed of elpual edncational advantages, and could doubtless win in other spheres of labor a healthier, happier and wealthier condition than it is now his lot to enjoy. Those who like the drug business and who sutered well at it should stick to it, beecause some one must do the work, but we are contident that there are hundreds in the business to day who would be better and do better out of it.

## Physicians Speak Determinedly.

Atar recent meeting of the liontreal Medical Alhanat, thes commattee appointed to consuder the relations with druggists presented the following resolution, wheh was unanimously adopted:
"l. Instead of using the preseription blank supplied by the druggists, each physician should have some of his own, on which there should be an inscription forhidding the druggist from renewing the prescription without tirst obtaining tho authorization of the physician.
"9. A prescription being tise property of the licensed physician signing it as de. cided by Judge Morris, of New York, the medical board of the province should be requested to take legal proceedings ugainst every druggist who shall, without due authorzation, repent a prescription.
"3. The College of Phasicians should also be requested to take action ngainst the druggists who give yresrifitinne, whl to have the law amended so that all licensed physicians living in cities may keep a public pharmacy:"

## Pharmaceutical Association of the Province of Quebec.

## 1'relisnimary Fixaminatlonn.

The next preliminary examinations for candidates entering the study of pharmacy will be held in the Mtontreal College of Pharmacy, 695 Lagauchetiere Street, Montreal, and Caval University, Quebee, on 'Thursday, January 3rd, 1895.

Candidates must give notice to the legistrar, in writing, of their intention to present themselves, at least ten days before the date fixed for the examination.

A printed form of application must be obtained from the Registrar, which must be duly sigued hy tho applicant.

The Council of the Association having instructed the Registrar to strictly enforce the ten days' notice: rule, no application will be accepted after the 24 th day of December, 1894.
These preliminary examinations are held on the tirst Thursday in the months of January, April, July and October of each year.

## A Specimen Order.

The following telegram was received by one of our wholesale houses the other day:
"Please send first express one truss following measurements: From one anterior superior spinous process of illum to other twenty-one inches, right anterior superior spinous process to rupture six inches, length of spring twenty-one angular process with water pad six inches."

Whis very definite order is a sample of what jobbers have to strive with very frequently. What would any of our readers have supplied?

## Prescribers and Dispensers.

Alistract of a paper read before the American Medical Association, by Prof. W.M. Scarby.
Notwithstanding the cordial relations which in general exist between the professions of medicine and pharmacy, it ars admitted that a good deal of friction occurred at times, becruse each imagined that the other was trespassing unduly upon his province. While in a general way the physician is the only one who should prescribe, it was shown that the public prescribe largely for themselses and their friunds. This was an ovil that neither doctors nor druggists could prevent. It was admitted by the writer, who is a pharmacist, that druggists also prescribe more than they ought to do. Cn the other hand, it was contended that pharmacists, in a general way, are the only ones who should dispense, but it was shown that physicians do more dispensing than is consistent with harmony. It was contended that the disposition wanifested in certain quarters by physicians to dispense their own inedicines was a retrograde movement, that the science of medicine had become so vast that no one man felt himself capable of attending to every case that
came before him, that specialism was the order of the day and was becoming so more and more. Under these conditions it was unanifestly inexpedient for physicians to attempt to acquire a knowledge of pharmacy sufficient to enable them to correctly , that is, scientitically, do their own dis. pensing. Novertheless, it was claimed that nore latitude should be allowed on both sides, so that the viows entertained by both parties should be so moderate that neither should be expected to conform to ironclad rules, the druggist being free to give such information concerning the medicine he sells as is customary in other lines of business where the dealer is usual. ly better informed than the purchaser. A few doses of medicine for tritling ailments, which the patient himself diagnoses, should not be considered a violation of medico. pharmaceatical ethics. In like imanner the physician who keeps in his oflice a few favorite remedies for cmergencies, or for the purpose of proventing dangerous repetitions as in the case of narcotics, or for other purposes, not being intended as a substitute for a legitimate pharmacy, should be free to dispense thest occasionally without pharuacists feeling that he was violating the code. Thus common sense and a mutual regard for the other's interests would regulate both professions, and the friction now too common would cease.

The writer took exception to the practice of wany physicians of allowing patent. medicine proprittors and manufacturers of pharmaceutical specialities to do the prescribing for them, and showed that the medical profersion are responsible for having aided the sale of many quack wedi. cmes, by prescribing them when first in. troduced. The proprictors of these preparations having, through the aid of physicians, established a sale for their wares, in some cases throw the profession overboard and publicly advertise their goods in the daily papers and by other means, so that the public is Jed to supply itself with these goods and use them independent of medical advice.

He urged that physicians and pharma. cists, instend of quarreling with cach other on matters of minor moment, should unite for mutual protection hgainst abuses which are greatly damaging to both. Among these he mentioned the manufacturers of pharmacentical specialities and many of the charities that exist all over the land which, as now abused, monopolize a large share of the business which should fall to legitimate pharmacists and physicians, to the special injury of tise younger members of the medical profession.- $P^{2} a$ cific Medical Journal.

Russian physicians and pharmacists will be required to employ the decimal system of weights and neasures after the expiration of the present year.

The medical profession is represented in the new French cabinct by Doctor Viger, Minister of Agriculture, and Doctor Lourties, Minister of Commerce.

## Drug Clerk's Column.

## Keep on Filling the Reglster.

There is still room for a large number of manes in tho column devoted to the registering of drug clerks' names and addresses. We are shtistied that the names published ase scanned carefully in cach issue, not only by clerks but by druggists, who would often communicate with former cmployees if thay knew where to address them. We know by the receipt of your name and address for this purpose that you apprecinte our effort to maintain a connection with old associations, and we are gratified to have you use freely what we give freely-our space. Fill up the list.

## An Offer to Give and Take.

During the next three months we would like to sccure a set of origimal rules for conduct and guidance of the clerk behind the dispeusing counter, and, as we prefer to get it from our young friends who are more especially interested in the Drug Clerk's Column, we make an appeal to them to contribute it for us. We will publish the copies sent us, and to the person sending the best set we will forward is copy of "The Art of Dispensing" in return.

We anticipate something good and orig. inal, so now, boys, put on your thinking cap and prepare it for us.-Editon.

## A Good Recipe Wanted.

At this season of the year many druggists prepare their own emulsion of Cod-Liver-Oil. Some have really good ones, while others again are very indifferent. We beheve that in a matter of this kind those who are in possession of a first-class formula should not hesitste to give their fellow druggists the benefit of it, and, as we are sure it would be appreciated, we ask those who are willing to do so to send us copies of recipes which they have found perfectly satisfactory.

## Query.

## ahonatic castor oil.

"A. W. H." asks for a formula for aromatic castor oil. The following has been recominended:

| Oil lemon | ps |
| :---: | :---: |
| Oil neruli | 3 drops |
| Oil pepper | 2 drops |
| Vamillin | 2 grain |
| Glycerin | 1 dr . |
| Castor oil | 10 |

Ft. mixt.
Over 600 new cases of leprosy are annually registered in Russia.

Doctors Tizzoni and Luciani have been awarded $\$ 4,000$ by the king of Italy for their experimental research on the functions of the cetebellum.


TOLU SUGAR PLUMS JAPAMESE HANDKERCHIEF BOXES JAPANESE CLOVE BOXES

Bisst LINs of Ohewing Gums in the market.
EANDGONE finely polished Oak Frame Show Oasen,
3 sides glase, 3 glasu chelves, 24 in . high, 8 in . wide, 7 in . deep.
cur Senll for lirlce I.int.
Also for Christmas Trade:
Fretich, Cave a Co.'s "Swect Chimes" Perfume in , 1, 1, 2, 4 nnd 8 ox. bottles; "Sweet Chimes" Sachet Powier ; F. C. \& Co.'s Concentrated Extracte, for naking Toilet Waters, in 4 and 8 oz . bottles; D. \& H. Rock Candy in 5 lb . boxes and in pails; Cachous, Swan Down Face Powders, etc., etc.
THE CANADIAN SPECIALTY CO. - ${ }^{38}$ riminsitymit Eant. Reimadill Mandaduing Co.

767 GRAIC STREET, MONTREAL.

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## Hair Brushes \& Mirrors.

## Jee our 75C. Sett

## Celluloid Brush \& Mirror

Or our $\$ \mathbf{1 . 0 0}$ and $\$ 1.25$ Sett.
Celluloid Combs, Dressing Cases, Odor and Shaving Setts.
CUT \& PRESSED BOTTLES-LAREE VARIETY.
Sole Ageents for Collapsible Tin Tubes and Sprimkers,

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| :---: |
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| GREEN SOAP. |
| CHIORODYNE. |

Standard in strength and quality. Reasomble in price. Satisfactory in use.

Appiy for Price List and Special Discounts to

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TORONTO, - - ONTARIO.

## Druggists' Paper Boxes

We are the only Manufncturers' in Canada making a specialty of Druggists' Paper Boxes.

RESULT

WE ARE RICHTIM
$\left\{\begin{array}{l}\text { Price, } \\ \text { Size, } \\ \text { Style, } \\ \text { Finish. }\end{array}\right.$

Write for Prices and Samples.


THE HEMMIMG 3ROS. CO. (umited) 76 York St., ToBoito.
Are you interested in $\qquad$

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If so, write for particulars and prices to
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Anything used in the Sick-room, the Hospitai, the Dispensary, by Medical Practitioner or Patient in nnyway connected with Surgery or the Practice of Medicine.
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145 Wellington St., West, TORONTO.

always ready, without heating !


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## WM. RADAM'S

## Microbe Killer.

Wm. Ellis,
Sole Manufacturer for the Provinces of ONTARIO and QUEBEC,

The factory having been removed from Toronto.
SOLD BY ALL WHOLESALE DRUCCISTS.
Head Office \& Factory, 98 Dundas St. LONDON, ONT.
 MANUFACLURED 13X

## A. Dupont \& Co.

 PARIS.Agents for Canada-
J. PALMER \& SON,
$1747 \begin{gathered}\text { Notre Dame - MONTREAL } \\ \text { Etreet. }\end{gathered}$
$\qquad$

ASK for the
"LONDON"
Hot Water Botiles
-: AND:-
Fountain Syringes.

The best in the market for the money.

The Lamond Rug Ca.
IONDON, ONTARIO.

## The Lyman Bros. din. <br> (himited)

## TORONTO, <br> ONT.

We are going out of Tube Colors and offer the following

## Rowney's Tube Colors

to clean out stock at special prices. If you are in want of any, drop us a card, and Colors can be sent with your next order.

ALL ORDERS SUBJECT TO STOCK.

| 3 | dozen | Brown Red. |
| :---: | :---: | :---: |
| 12 | " | Crimson Lake. |
| -1 | " | Indian Reu. |
| 12 | " | Light Red. |
| 53 | " | Soarlet Lake. |
| 9 | " | Venetian Red. |
| 3. | " | Purple Lake. |
| 53 | " | Antwerp Blue. |
| $3 \frac{1}{3}$ | " | Chinese Blue. |
| 5 | " | Chrome Green, No. 1. |
| 3 | " | " " " 2. |
| 5 | " | " " " 3. |
| 21 | " | Emerald Green. |
| 27 | " | Sap Green. |
| 2 | " | Terra Vert. |
| 2 | " | Verdigris. |
| $4{ }^{3}$ | " | Chrome Yellow, No. 3. |
| $4{ }^{3}$ | " | " " "4. |
| $5^{5}$ | " | French Naples Yellow. |
| $\stackrel{3}{2}$ | " | Gamboge. |
| 1.4 | " | Italian Pink. |
| ${ }_{2}$ | " | Kings Yellow. |
| 2 | " | Naples Yellow, No. 1. |
| 2 | " | " " " 2. |
| 1 | " | " " 3. |
| $4 \frac{1}{2}$ | " | Raw Sienna. |
| 2 | " | Yellow Lake. |
| 11 | " | Yellow Ochre. |
| 2 | " | Asphaltum. |
| 63 | " | Burnt Umber. |
| 21 | " | Caledonia Brown. |
| 5 | " | Raw Umber. |
| 3 | " | Vandyke Brown. |
| 21 | " | Blue Black. |
| ${ }^{5}$ | " | Ivory Black. |
| $3 \frac{1}{2}$ | " | Lamp Black. |
| 3.5 | " | McGuilp. |

75c. per Dozen.
22 doz . Vermillion - @ $\$ 1.20$ doz.
3 " Vermillion, Chinese, 1.65 "
21 " Madder Lake, - 2.25
$\begin{array}{llll}2 \frac{1}{2} & \text { " Rose Madder, } & \text { - } & 2.25 \\ \frac{1}{3} & \text { " } \\ \end{array}$
WE MANUFACTURE
Concentrated Spirits Nitre.
Oue part of Coucentrated to nine parts by weight of Rectified Spirit to make 10 part Spirit. Etheris Nitrosi.

## Trade Notes.

John K: Peplow, druggist, Selkirk, Man., died last month.
W. G. Pettingoll is opening a drug store at Regina, N.W.T.
B. F. J. Suith, druggist, of Northlield, B. C., is giving up business.
W. L. Clarey is opraing a drug husiness at Moosomin, N.W.T.
L. A. Gamsby, Orono, Ont., has sold his drug business to Mr. Giltillan.

The death is anounced of H. B. O'Connor, druggist, Teeswater, Ont.

Dr. D. Johnston, Iroquais. Ont., has sold his drug business to 13. F. Smith.
E. W. Knowles, Brampton, Ont., has sold his drug business to W. R. Sharp.
G. Butchart, druggist, Cypress River, Man., has sold his business to N. Littlo.

John W. Livers, druggist, Kaslo, B.C., has sold his drug business to S. A. Drake.
F. W. James has purchased tho drug business of Dr. R. A. Clark, St. Thomas, Ont.

The drug stock of J. Ogden, Toronto, Ont., has been sold at 60 cents on the dollar.

Alonzo M. Wright, druggist, Parliament St , Toronto, Ont., hus made an as. signment.
E. Scarlett has sold his drug business at Mri.jtou and Pilot Mound, to R. W. MeClimats Ce .
J. II. Nicholson, who recently sold his drug business in Essex, Ont., has gone to Detroit to study medicine.

The Martin, Bole \& Wyune Co., Winpipeg, Man., have applied for incorpora. tion as wholesule druggists.
W. Crooks is opening a new drug store at Port Artbur, Ont. He was formerly with W. J. Clarke of that place.

Mr. Allan, senior member of the wholesale drug sundries firm of Allan \& Co., 53 Front St. E., Toronto, died Oct. 15 th.
D. W. Bole, of Bole, Wynne \& Co., wholesale druggists, is mentioned as a candidate for the mayoralty of Winnipeg.

Herbert Reynolds has purchased the drug business known as the Wellington Medical Hall, at Point St. Charles, Montreal, P. Q.

Dr. J. A. Hamel, druggist, Quebec City, lins assigned. He moved from Fraserville in 1893. Liabilities about $\$ 2000$.

Albert M. Todd, the "peppermint-oil man," of Kulamazoo, Mich., was the: prohibition candidate for Governor of Michigan.
C. H. Allison, class '93, O. C. P., formerly with C. D. Danied \& Co., Toronto, has purchated the drug business of T. C. Nichols, Port Perry, Ont.
A. J. Roos, for many years assistant for S. Snyder, Waierloo, Ont., has bought the drug business of W. H. Bowman, Berlin, Ont. Mr. Bowman, one of the
old landumarks in the drug business of Waterloo County, is going to give all his attention to C. ㄴ. R. busiuess.
G. Lugsden, of Port Colborne, Ont., has purchased the drug stock of J. Ogden, at Queell ind Bathurst Sts., Toronto, Ont., and will continues the business theres.
J. D. Mathirson's drug store on King St. West, 'loronto, Ont., was entered by burghars on tho aight of Nore 7 th, and goods estimated to be worth about $\leqslant 100$ stulen.

On the night of Nov, ith, tire oceurred in the photugraph gallery orer W. J. Dyas' drus store, Strathroy, Ont. 'There was a slight damage to some ef the drug stock by water.

Win. Qerry, of London; Ont., Intely with Henry S. Sanders, diuggist, London, Ont., left with his wife on Sinturday last for Vancouver, B. C., where he intends opening a business.

Dr. H. T. Helmbold, so widely known as the proprietor of llelmbold's Huchu, which at one time had an enormous sale, died in the Now York State Asylum, Oct. 2tth, aged 50 years.

David Watson, of Kerry, Watson d Co., wholesale druggists, Montreal, Que., has declined to allow tis name to be sub. mitted for reelection as president of the Dominion Commercial 'Travellers' Association.

Letters patent have been issued incor. porating Henry Mogan, hotel-keeper ; J. Stirling, accountant; J. Gustave Laviolette, physician ; Joseph Barsalou, auctioneer, all of Montreal, and Meary P. Schmel. back, glass manufacturer of Stenbenville, Ohio, to manafacture and deal in glass and nlass wares of all kinds, by the name of "Dominion Gluss Company," wath a total capital stock of $\$ 100,000$, divided into 1000 shares of $\$ 100$ each.

Jus. Clark, of Renfrew, Ont., moved into his new drug store a flew days ago. The store is cinimed to be one of the finest drug stores in Canada, the cities not excepted. The shelving, counters, etc., are all made of British Columbin cedar finished in the natural wood. The front store is sixty fect long and in the partition dividing the front from the rear stands a British bevel plate mirror over seven feet high and nearly six wide. The building is heated by stean:, and everything in the building is designed with a vew of providing comfort and convenience in doing busias:ss.

The drug store of W. J. Mitchell, Winnipeg, Man., was completely gutted by fire on the night of Nov. 1 Eth.

## Pharmacy Examinations.

The Board of Examiners of the Pharmaceutical Association of the Province of Quebecheld theirsemi-anmualexaminations in Laval Unixersity, Quebec, on Tuesdsy and Wednesday last, when fourtcen candidates for the major and eighteen for the minor examination presented themselves.

Of therse the following in onder of merit passed successful exnminations andaroentitled to bee registered as Licentiates of Plinrancy and Curtitied Clarks renpectivoly, mamely: As "Licentintes of Pharmacy," dames Shes, Qurbec ; II. W. Reynolds, F. O. Anderson, A. Hendrie, IR. N. Miller, A. Savard, Montreal; Alphonse Minrtincosu, Quebec. As "Cerritied Clerks," J. V. Levesque, A. Brillon, A. Carruthers, Roch Des Islets ; Joseph Bontin, A. C. Paguette, Wilfred Giroux, Montrial; Damase Joliceur, Quebec; Wilfred He:bert, Three Rivers; F. I. Wooley, Montren ; 15. Brodenr, St. Hyncinthe; Alphonse Viellieux, Quebec. Tho candidates were exnmined in written and ornd Chemistry, Materia Medica, Botany, Dharmacy, lReading of Prescriptions, Practical Dispensing, and Weights nul Mensures. The examiners wero Messrs. $S$. Lachance, W. A. Chapman and J. R. Parkia, Montreal ; A. E. Duberger, Waterloo; N. W. Williams, Three Rivers.

## Nova Scotia Notes,

C. B. Sutherhand, the well kunwn and popular drughist of New Glasgow, was married a few days ago. We feel suro we express the sentiments of his many friends in wishing Mr. Sutherland and his bride long continued happiness and prosperity.
D Tremaine, of Malifnx, has latoly accepted a position with Stewart Burns is Son, of Syduey, C. B.
R. O. Christie, of Amherst, is about again after his severes illness. We were phersed to sco Mr. Christic in Malifati a few days ago, looking like his old self.

George V. lland, of Wolfville, is sbout moving into his new and commodious premises. Thes tine store is a creditalike to the proprietor and the town of Wolfville.

Geo. C. McDougall, who was for some monthe sojourning in the United State-s, has returned to Kinteille: and taken over the business formerly managed by him in that town.
E. L. Nnsh, of Lunenburg, has lately moved into his new store, corner of Lin. coln and Cornwallis Streets. Mr. Nash's business is deserving of the success he has attuined.
II. A. Taylor, tho veteran druggist of Halifax, has recovered from his lates illness and is now to be seen at his accustomed post. Mr. Taylor was lately the recipient of a valuable jewel, a token of eiteem from the Independent Order Oddfellows, on the occasion of his retirement from the position of Trrasurer which he worthily tilled for many years.
J. A. Craig, of Yarmouth, returned froma trip to the United States a few days ago. "Poor Craig" seems to be looking as well as usual.

Twelve Englishmen in every 10,000 die of gout.

## 'Notes from England.

## (k'rom our own Correapondent.)

We are constantly seeing suggestions in the drug jourmin that manufucturers of proprietary preparations should mect the druggists by supplying 820 worth of their irticles at their lowest rates. This is a method which is stated to have been adopted by Pears for their soaps for sov. eral years and the result has been very matisfactory. Many druggists make it a rule never to stock new preparations until they are mbsolutely obliged by their customers. This plan, if generally adopted, would place all tradesmen on the level with stores, etc., but it is impossible to expect that it will be universally approved. This attempt to do business direct with the manufacturer fails becsuse the manufncturer maturally prefers one or two large accounts with the patent medicine houses to several hundred small accounts all over the country. The only way in which it could be accomplished is by the co-operation of druggists themselves Thus if all the druggists ill ${ }^{4}$ town were to put their orders together they could frequently buy on the sume terms as the best wholsale tirms. In one part of London I know of four neighboring druggists who have done this for years, not only with patents or proprictaries, but with drugs. The saving effected in the year has been very considerable. They wake out their list of wants for a month, unite them together, and submit them to one or two leading tirms, and the lowest quotation is accepted. The result is naturally mutually satisfactory.

Some idea of the method by which the "cutting" drug stores manage to flourish has been revealed by a correspondent to a newspaper. Attructed by an advertiseuent of cheap drugs, he proveeded to the store and noticed a large poster which stated that Epsom Salts were only 2 cents per 1b. Not requiring a dose for cattle, he asked for a small packet and was in. formed the price: was the same. Not satistied with this, the assistant strongly urged him not to take "such nauseous, griping stuff as Epsom Salts, but to try their Cascara syrup," which, it was added, was identical with Siegel's Syrup. The result was that he paid 24 cents for the imitation syrup when he could have procured the genvine article at the same shop for 20 cents.

According to a decision of some local justices, a pharmacist who is engaged as teacher of pharmacy, or as laboratory nanager to a wholesile tirm. or manager of a hospital dispensary, is not engaged in the practice of pharmacy. It arose in this why. The chemist to Messrs. Burroughs, Wellcome is Co, who apprars to be a pharmaceutical chemist, found his name on the register of those liable to jury service. Now, according to the Juries' Act, pharmacoutical chemists "in actual practice" are exempt from service. He therefore applied for release, but was met with the sbove expression of opinion.

Curiously enough, the Secretary of the Pharmaceutical Society also went out of his way to assure this gentleman that, in his opinion, he was not practising pharmacy. This was rather rough upon him, as at least he might have expected that the Society should support him in his contention. It certainly seems ludicrous that hair-splitting should take place upon such a subject, but this is very close to it. A doctor is not deprived of his right of claining exemption because he prefers a hospital appointment to a cousulting practice. The conundrum, when is a pharma. ceutical chemist not a pharmacist? will have to be answered, when he is engaged in any of the higher branches of his calltug.
The annual exhibition of the brewing and allied industries is nlways of interest to plarmacists, as the goods shown are of very varied use and description. I tave just returned írom a careful inspection of the present exlibition just concluding at the Agricultural Frall. Quite apart from beer and barcels. there is much interesting machinery and mppliances to be seen, whilst the mineral water industry each year occupies more space and greater prominence. It is because of the mineral water makers being present, I suppose, that some of the manufacturing chemists, who make soluble and fruit essences aspecialty, are also exhibiting. Amongst the latter are Messrs. Bushic Co., Stevenson d Howell, Martin Perles, of Messiat, and coany ochars. All of these have bright displays of essentinl oils and soluble essences. Disinfectants are also represented by sanitas and its junior rival, zual. Why disinfectants should claim to appear in a brewers' exhibition, it is ditticult to say. Probably the Extract of Meat people, like Armour, Brand, Mason, Booril, etc., clain that their preparations are the hot drinks of the winter season. In the machinery portion I noticed Gardner's mixing and sieving machines, which are extremely handy for pharmacists who have a large trade in powders, required to be uixed. They clam that 1 oz. of turmeric added to 56 lbs . of flour and passed through their machine will emerge in a few minutes a uniform pale yellow tiat. The automatic weighing machine is also very useful where packets of goods like Epsom salts, granular etfiervescmg preparations, de., require to be put up in large numbers at a time. Botule washing mashines ares also innumerable, and one of special utility, inasmuch as it really washes and not rinses the bottles, was exhibited by T. Hills, of Anlaby lkoad. Hull. This consists of a wheel which rapidly rotates the brush under water, the bottlo being held by the hand. As the bottle is pressed forward the brush cleanses all the inside perfectly.

In connection with essence of lemons, the attempt to sell it by a chemical standard of about 8 per cent. of citral, is openly derided by the leading houses. It appears that this arbitrary standard was fixed by a couple of enterprising analytical chemists, whose businese methods of
writing analytical puffis I have drawn attention to before. They are very anxious to assist the trade by supplying nalytical reports of a, invornble charscter -for a consideration. In connection with essence of lemons, without any prectical know. ledgo of the industry and inerely upon the uxamination of specimens supplied to them, they suggested this standard, which no one of leading importance: recognizes. Whilst the application of chemical tests for sdulterations is of immense inportance, the nosa and mouth remain the principal reliable reagents for determining the quality of essence of lemons when adulteration has been proven to be abserit. After all, the matter is simple enough, as although adultertation undoubtedly takea place with the cheaper produce of disreputable houses, the universal diluent is turpentine shipped direct from Bordeaux to Messina. No vast amount of aumlytical talent is reguired to detect any considerable proportion of turpentine, sud it is an indisputable fact that a guaranteo of 8 per cent. of citral in an essence of lemon is by no means indicative of the entire absence of turpentine

The production of diphtheria antitoxin serum is now being undertaken by the British Institute of Preventive Medicint. Alresdy one horse is supplying a considerable quantity of serum and another will shortly be ready. As the work is under the supervision of Sir Joseph Lister, F. 12. S., and is carried on without regard to profit, the genuine article will shortly be offered in quantity at about one-tenth of the price charged by the coutinental makers. This will be a boor, to the poor in our hospitals and elsewhere.

Formalin, the name given by Schering's to 40 per cent. solution of formic aldehyde in water, is attracting some attention. It is a powerful antiseptic and deodorant and is employed at the hospitals, particularly in the post mortem departinents. It has the special advantuge of not injuring metais, wood or linen, whilst its germicidal properties have been proved when diluted so that it contsins but 1 per cent. of formalin. It is besides, a cheap disinfectant, as it is supplied in 1.oz. glass bottles at 60 cents. per doz., or in gallon jars ali \$j each.
The eternal rage for highly-concentrated preparations is illustrated by the latest liquor for the extemporanious production of Euston's syrup. Messrs. Cooper \& Co. have introduced a liquor, Eastoni, which is stated to mix witho syrup of phosphate of iron, in the proportion of 1 part of liquor to 7 parts of syrup, and form the B. P. C. Syrup Eastoni. Proviously manufacturers appear to heve been satistied with a 1-3 article, but the tendency to further concentration is well illustrated by this latest novelty.

Motion has been conveyed by electric wires a distance of 120 miles.
Edison claims it to be possible to measure the millionth part of a second.

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See our New Styles and compare prices before ordering.

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Have proved a grand success. Those who want really first-class gouds at moderate prices are to try them. They can be retailed at good prices and afford a large profit.

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Our stock at this season of the year is always large. Please write for quotations.

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IN GREAT DEMAND EYERYWHERE. NO CHEMIST SHOULD BE WITHOUT THEM.
PARCEES ENCLOSED DAILY to any of the London Wholezale Houses to 8ave Carriage.

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THIS HANDSOME AND IMPROVED HENT-(BLASS - ATB OHEMIST'S GOUNTER SHDN-GASE

Stamls unrivalled for style, convenienen, and beanty ; menapies lutis san all space on the connter, - ale to open bask or front, in ait the comenience purchaser.
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## The roronto Drug Store Burglars.

The police and detectives; of Toronto, are jubilaut. For a long time they have been worried about drug store and hotel robberies. Hardly as weels parsad without several cases of this kind buing reported, and plain clothes policemen ind mid. night watches on suspected characters failed to secure any results. Buit on Saturday they struck it rich, to use as cherished Western phrise, and now they think they have all the gang implicated in the roliberids under lock mad kieg.

The uen arrested are Albert Kupitz, John Riorcian, and Fred. Collie.
The detectives have been on the lookout all along for the stolen goods, but they could not tind out where the thieves were disposing of them. Finally on Suturday information was given to the department to the effect that some of the stolen property was in the drug store of A. MreLaren, next to St. Andrè's church, on King street west: A search warrant was procured, and several of the druggists whose stuff was stolen, were notified! to attend at the detective office. In company with the druggists, Detective.Sergeant Reburn and Detectives Burrows and Davis visited McLaren's dreg store and produced their authority to sersch. Some of the stolen goods were first found in a glass case, and Mr. McLaren told them he had a lot of stuff which be bad bought from three men in the back room. The stuff wis identified as that stolen from some of the hotels and drug stores, and consisted of cigars ind liquors, besides perfumery and drugs. Mr. McLaren then gave the nawes and a description of the men to the detectives, and Detretive Davis started out, and in a iew minutes he had Kapitz in custody. He took him to Police headquarters and locked him up. About an hour later Riordan was found in a poo! room on Queen street west, and he was also locked up for the night. Mr. MeLaren gave some further information, and the detectives started out to recover the stolen property. Theg visited a room on Adelaide street west, and found it packed from ceiling to floor with stolen goods, such as perfumery, tooth-brushes, pills, whiskry, champagnr, brandy, cigars, and other valunblearticles. About 51,000 worth of goods, all told, were recovered. Then Mr. McLaren visited Police headquarters and identified Kupitz and Riordan as the men who sold him the stolen stuff, and only another arrest remained to complete the case: Detectives Davis, Porter, Curry, and Burrows lay in wait all evening about the house of Fred. Collic, who is an expressman, on Farley svenur, and airout ten o'clock he showed up. They at once arrested him and he wias also locked up at Police headquarters. The thicves alternated hotel and drug store robberies, and had they succeeded in disposing of all their plunder they would have mado $a$ good thing out of it. Among the places roblied were the follow. ing:-Andrew Dow's drug stom, corner
of Augastnavenue and St. Patrick strect; Mathieson's drug store; corner of King and York strects; Jackson L. Little's drug store, comer of Spadian and King street ; A. E. Kennedy's drug store, corner Queen and MeCanl streets; Messrs. Botham di Mallis dang store, corner of Fook and Queen streats.

Besides these burglaries the pulice think that the contidnace gane was work. ed by the same modoviduals. On September 27 th, Messers. Eilliott © Co., wholesale druggsts, fromt struet, recended a telephone missuge: purporting to be from " well-known druggist, asking them to make up an order for him, and send it at once. The messenger that was sent with the goods was met by a man who sard he had been sent by the alleged purchaser, nod he would take the goods. The whoio thing was a fraud. Un Uctoker 3rd, Messrs. Lyman Bros, were defrauded in a similar manner out of $\$ 20$ worth of goods. It is supposed that Kupitz and Riordan were the parties who worked this confidence game.-M/ail.

## Pharmaceutical Bacterlology,

Br. Jobeht G. Eccles, Yig. G., M. D.
Read at the Asheville meeting of the American Pharmacentical Associatien.
The impression previls that medical men alone should interest themselves in bacteris. It is assumed that the subject contains nothing of interest to pharmas. cists. It requires no prophet to foresee that this attitudo is not likely to be main tained very much longer. The indications are that pharmaceutical bacteriological laboratories are a certainty of the future, and that they may exceed in castness and importance those now conducted by the medical profession. As yet we have ouly hints of what is in store for us. Here and theres rift in the cloud which obscures the future from our vision lets through an illuminating beam of light.

It is said in Holy Writ that "that which hath been is now, nnd that which is to be hath already beea." In the vast laboratory of nature, jong before mata had synthetizerd a single remeds or combuned, secunduru artem, a singl: pair of synergistic remedies, plants had done the same. Yes, and more ; it can now be maintitined with $a$ formidable array of evidence that the aim of such combination wias precisely that of the pharmacist and physician when a remedy is compounded for a patient. In hoth cases the overcoming of patholegical diserase gerns whs the ulthmante result atad olyject simed ut, ii there was any aim. The resins, the essential oils, the tamnins, the alkaloids, the gluco. sides, the bitter principies, are nil so many bacterium kilfers or inhibitors devised by plants, or produced by the direct sction of bacteria themselves that in the econo. my of nature serve to give immunity to plants against the ravages of other organisars. As if quinine nis not enough to shield tho cinchona and other synergists:

With mornhine is combined codeine, nar. ceine, and is host of other alkaloids hating amalogons ethects. The life history of these plants casts a flood of light on this subject, and if won had anything lize a perfect geologital history of any genus there and lo but little dudet that it would fully contirun all we atr abie to infer from the immediate data nt our command.

In the cinchonas we have an especially abondant supply of material on which to base an inference in this respect. Their habitat is a region of perpetual fog and drizale. For months in rity of sunshine seldom if ever reaches them. The region is utterly unfit for human habitation, and intermittent and remittent fuers are the pemalty paid for a temporary residence in the vicinity Now tha fact so thoroughly established, that phants are as frequently the victims of the parasitism of micro orgamisus as are mamals, pinced beside the fact that their home is such mideal ones for micro organisms, would naturally lead us to think that if the trees owe their intmunity to some chemical secreted by them, we should be able to discover it. Now let us add the further fact that quanine and these other alkaloids they secrete are: powerful antisepties and do destroy just such germs, either out of or within the body, and the conviction begins to grow upon us that something like a purpose is manifested in thas arrangement.

But on reasoning further we learn more. These alkaloids are always forad in the very parts of the plant where the attack of the germs would be most likely to occur, and when ocenering would prove: most injurious to the ereer Why is thete: not a good supply of these alkaloids in the wood or in the corky layer of the bark 1 Why are they in the very part of the bark where a uriori we would expect them to do the most good?

Now let us add :anther fact. The yidel of these alkaloids is alwnys greatest, thae greater the danger from such masion. The season of maximun fog and drizalo is the semson of maximum yielils of alkaluids, and especially of quinine, the most powerful one. What is quite remarkabli, too, in this comection, is the fact that the cinchoma tree secme to hate the power of anticipating the bacterial invasion by the very method that we would be likely to use in anticipating it. The incroase of alknloids evdently occurs prior to the invasion of the germs, and following the: adve:is. of the conditions which make such incrasion possible. The cutting of of their sumshme by fog is their signal for an increased supply of alkaloids, and especinlly of quinme. Itr Indin, where cinchomes are now cultivnted nad where fogs are not so common, the cultivators cover the bark of the trees with cotton and shield them from direct sunlight to increase their pro. duction.

The dark, waran and dainp forests where heary growths of pince abound would surcly preve miasinatic but for the good offices of the pines themselves. They lond the sir with germ destroging terpenws
the oxidation of which gives forth a rich supply of ozone. These vestiges of the primitive world tell us of their struggle against disease germs, and survival by virtue of this protection.

It seems a rather singular fact that when plants or animals do not produce destructive agents by which to vanquish bucteria, they are sure sooner or later to bring into existence a product destructive to theuselves. When we-pause to think that "the mill cannot grind with the water that is passed," nor the fire to burn with the carbon dioxide produced, we see it is a universal fact in unture. The germ that runs sugar down into alcohol, soon perishes in that alcohol. Following it comes the vinegar germ, giving us acetic acid in sufficient abundances to stop its own activity. Next follow one by one other germs to carry the changes farther and farther down the hill, cill in every instance thay work their own destruction -or at least cessation of activity. Each of these products, final to some definite species of geran, is an antiseptic to that germ, and therefore a medicinal agent for the subjugation of that germ when it becones pathogenetic. It took usa long time to learn that all our alcohol, wines and liquors were the products of germis. Even when "mother of vinegar" was handed from house to house and mannufacturer to manufacturer, they did not for centuries suspect that they were handing gerus. Many druggists do not yet know that ergot is the product of a disease gern. It is only lately that we have discovered that we owe our nitric acid, sultpetre, swict spirits of nitre, and all our antrates and nitrites, to the usfful labors of humble bacteria. Nuch of our ammouia, some of our benzoic, hippuric and lentyric acid, wo owe to their kind otfices. As our knowledge of micro.oryanisuns widens, our respret for their pharnn:ceutical and chemicnl skill increnses. Within a year Dr. Carl Wehmer has reported the fact that he has isolated a species that converts sugar intocitric acid se that deleven pounds of sugar will produce six pounds of the crystallized ncid. The cost of such conversion is so trilling that it is scarcely worth considering. A discovery like this will work little short of a revolution. Sugar is cheap, and the acid is bound soon to be sold for little if suly more than the price of the cheapest sugar. Oi course we wi" have to wait till the patents run out for such a consummation.

When we pauss to consider the fact that in the plant world the cells build ap the conntless numbers of orgnnic compounds from simple carbonic acid, water and nitrogen compounds, and when we further consider that the bucterin are isolated cells capable of duplicating much or all of such work, we can gain some ides of the posesibilities that lie before us. We have to snpply them with the raw material for their food, and without money and without price they will do the rest. We only need to isolate the specinl kinds in relatively pure culturea, and set them to work. When mixed, one kind undoes
the work of another, so that . 10 useful results occur. Professor Conn, of Wesleyan University, has lately isolated the special bacterium that produces the essential ether to which is due the rich favor of our highest quality of butter. Follow: ing his directions, the butter maker can now at will produce a ripened cream possessing the highest, richest aroma of prime butter. If we have successfully produced one such product, who can say what the end is? The highly prized aromas of wines and liguors, the rich tlavors of roots and flowers, may all be within our power to produce in the same manner. If we can call these pigmy workers to our aid in making alcohol, acetic and citric acid, why not for other acids, other alcohols, and other organic compounds? We have found that through the magic of their power certain leguminous plants are able to draw from the atmospheric nitrogen their necessary supplies of that refractory gas. May we not utilize their scrvices in a similar manner? Will not our pharmaceutical chemists of the future supply these same bacteria with what the leguminous plants provide them, and on a vast scale procure our nitrates, nitrites, alumonia and ammonium compounds, at the same time giving to the farmers all they need to enrich the soil of their farms? All the rich mines of Golcondr never contnit. such wealth as is promised in this direction.

Man first learned of the winds as his foes, but soon he harnessed them and they became his friends. At is later date he gained power over fire, and in the conquest found he had a mighty ugent to do his bidding. Still later, and the lightning that he had so long dreaded as the bolt of heaven, came within his grasp. and we ara beginning to realize the majesty of such a victory. Now he has just begun his conquest of the most direct force he has ever had to fight-the microbes; and if our vision is not distorted he will find a power heres second to none of the rest in the hencfits it can bestow upon him.

## Nèw Reactioiss of ChioralHydrate.

If 12 centigrammes of resorcin are dissolved in a dilute aqueous solution of chloral hydrate: and the liquid is superstratified with a pipette: over dilute sulphuric acid, a few coloned rings appear, amongst which a brown one is distinctly visible. On shaking, the inixture turns brown; it is clear at first, but becomes turbid on cooling. On superstratifying with concentrsted smmonia, the uppermost alkaline stratum turns yellowish-red. -(2) Nessler's reagent proiluces, in an aqueous solution of chloral hydrate, $\pi$ brick-rod sodiment, which gradially becomes brighter and finally assumes a dirty yellowish green color-(3) If 30 centigrammes of potassium sulphocyanate are dissolved in $2 \mathrm{C} . \mathrm{c}$ of chloral hydrate solution (the latter to correspond to 3.6 centigrammes of chloral hydrate), and the
solution is heated to ebullition and then mixed with 3.5 drops of normal potasea solution, it assumes a light-brown color, deposits a dark-brown precipitate, and is gridually more or less decolorized. On the addition of ammonia, the solution turns Ilght-brown, but does not become turbid.-(4) If $\frac{1}{3}$ centigrammes of sodium thiosulyinate are dissolved in 2 C , c. of chlormlhydrate solution (as above), and this tiuid is heated, the latter will assume a brick-red color and become turbid; and on adding a few drops of normal KHO, the solution turns a clear brownish-red.(5) If 6-12 centigrammes of phioroglucin are dissolved in $\xlongequal[3]{ }$ C. c. of hot distilled water, and if the solution is mixed with 9-12 centigrammes of chloral hydrate, heated to ebullition and at once mixed with 16 drops of normal KHO solution, it turns a deep brownish.red. If the cooled liquid is acidulated with hydrochloric acid and shaken with amylic alcohol, the latter turns a brown-red or deep-brown. Chloroforn yields under the saue circumstances (phloroglucin being dissolved in hot $90_{\%}^{\circ}$ slcohol) a dirty brown color in 2-4 hours.-A. Jaworowski, in Pharm. Zlich. f. Russl.

## Chologogues.

For a long time our knowledge of the chologogue properties of drugs was more or less empirical or derived from clinical experience. The physiological experiments of liutherford, Vignal, and Rohrig, however, gave us a scientific basis on which to work. The A.'lowing is Rutherford's classilication of tite diugs which have the power to stimulate hepatic function.

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## nodemately powerful.

I.eptandrin
jHydrastin.
Julap. Juglandian.
Sodiunlin sulphate.
Baptisia.

## having litthe of no mfect.

Porophyllin.
Aloes, in large doses. Colchicurn, large doses. Enonymin, (Wahoo). Irisin (33lue Flag). Sanguimaria.
Colocynthin,large doses
 itro hylrochloric acid, Ammonium phosphate. dii.

Ipecacuanhin Soxiam Phoephate. Rotansium sulphate. Phytolaccin. Sodium benzoate. Ammonitum benzoatc. Mercuric chloride.
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 cent. provend worthiess.
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 smell whatever, not by disguising it, lut hy destroying it.

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The litenglo has lecen awarided (iwh Medals amd Diglonas in all parts of the worli.



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## Weights and Measures.

By D. B. Dorr.
The question of introducing the metric system of weights and masures into the Pharmacopocia is now prominently brought forward, and deservea full discussion and consideration. The introduction of the metric system is recommended on two dis. tinct grounds; first, that of its essentina superiority to the British code, and secondly, on what may be called the cosmopoli tan ground, that because other mations havo adopted the system, it is convenient that we should do so also.

It is too much the fashion to speak as if the British system were everything that is bad, and the metric everything that is good. It may readily be monitted that the adoption of the metric in place of the avoirdupois system would bo an advantage, as it would greatly simplify calculittions, yet its introduction would have other drawbacks besides the trouble involved in making the change. I remember Sir Frederick Bramwell, froman engineer's point of view, objecting to the decimal system, because it did not conveniently lend itself to sub-division by halves. No doubt there is something in that objection. By the unfortumte fad of fixing the size of the metre from a proportion of the earth's moridian, a standari has been got which is ingonveniently long. As Professor Tait says:-"Any cloth merchant will tell you that." Similarly, the kilogramme and litre are inconveniently large. To many tuinds, alio, the nomenclature, however systematic, is clunsy and long-winded. All our English mames for weights and measures are short, mostly monosyllabic, unlike "cubic centimetre," while the very similarity of such numesas decigramme and dekiagramme suggests confusion. It also seems worthy of aote, that it is casier for a man to learin mind such a quantity as 3 lb .13 o7s. than, say, 1720 grammes (see U. S. Pharmacopouia). But the chicf weakness of the actrac system is just in the same fact in which consists its strength, viz., that it is a decimal system, dependent wholly for its aecuracy on the position of a point. It is, indeed, not a system of different denomimations, 25 grains, drachas, ounces, but a system of one denomination muitiplied or divided by the plrcing of a point. I ann itware it has bern denied that there is any more liability to error in the one system than the other. That is a matter of opinion. From a pretty constant experience of both methods for twenty years, ithink thete is 22 decided balance of accuracy in favor of the Bratish system. A man is mure apt to write 01 gramme instead of 001 gramme, than he is to write gr. j. instead of $\mathrm{gr}^{1} \mathrm{I}^{1}$, and when the writing is preceded by a calculation there is even greater lisbility of the decimal point going wrong. I am, therefore, of opinion that for prescribing and dispensing tho British system of weights aud measures is to be preferred, while for analytical work the netric is more convenicut.

The British system, as wow havo it, has one serious defeet, which is noted in the Pharmacopain itself. "lt must lee admitted chat the absence: in the present system of any denominntion of wright between ther grain ard thesvoirdupoisonnce of 437.5 grains, and the fact that the ounce is not a simple multiple of the of the grain are grave defects." It might be added that the diflerence in volume between the minim and gratan measule is an momaly mad absurdity. The old troy weight, or that modification of it which used to be called apothecmries', is a system complete and perfect in itself. Who it was that conceived the idea of mixing up two difierent systems and so producing confusion I do not know, but it was not a happy thought. Suraly tho trifling trouble of keeping two sets of weinhts, one for dispensing purposes nad one for ordinary trude transactions, wonld be preferable to working with a hybrid mixture which is no system at all.

It is proposed that in the new pharmacopecia the proportions of ingredients should be given in the metrice as well as in the British system. Of course the present mothod of stating "parts" and "flaid parts" is practically the same thing. In the volumetric tests it would be seareely worth white to refer both to grain measures and culsis centimetres. It would probably be sullicient to give only the metric equivalents. In the prosent pharmacoperia the strength of a freparation is sometimes indicated by percentige, sometimes by grains in a Guid ounce, or some other anount. It woukd he distinctly better to invariably give the procentage, or in the cass: of liguids, it might be grammes in 100 c.c. for the convenience of prescribers it. is quite appropriate to state in the account of a preparation the number of grains of the active ingredient in the fluid ounce; but under "characters and tests" the strength should be systematically statid hy purcentage-/'har. Jour. and Transactions.

## A Physician on Incompatibilities.

## 13y C. C. Hemsmen, M.D.

A certain amount of clacomistry, medical chemistry, is essemtisl to the physician, and is not always to be gotten in books. He who would zonoranty combine sulphuric acid and a carbonate would certainly need to restudy his chemistry. I wish only to point out a few principles and some of the crrors in prescriptions which ate cumaitted daily.

> MISTURE of SOL.CHIFE S.I.TS.

Two soluble siths it solution which can by decomposition form and throw down an insoluble salt, such as an iodide, a chlorate or a bromide and sulphate of morphine or strychnine, etc., etc., should never be combined, unless the compound is desired for its therapectic effect, such as acetate of lead and sulphate of zinc, or lead and opiun wash, etc. A tyro in pharmacy might filter such preseriptions and thureby thwart your object. A dan-
gerous habit is to preseribe an alkali and an alkatoid, always bad pharmacy. I have seen prescriptions of the following kind: Cocaine hydrochlornte, glyerrole of peqsia, syrup and lime water, which is also bad pharamey.

## cautions to pleschmens.

Glucosides, such as santonin, colocyuthin, etc., should never be preseriled with fleenceids.
'ramaic acid is incompatible with alkn. loids, albumin, gelatin, ete.
lodine and Iodudes should not go with the alkaloids.

Death has been caused by the combination of iodide of potush and sulphate of strychmine.
lodide of pohash should be preseribed with no druge except iodine and bichloride of mercury; with the hater it forms a double salt, biniodide, but as it is soluble: in the excess of iodide it is not objectionable.

Bichloride of mercury is incompatible with almost everything. As a rule it should be preseribed in simple syrup, it being incompatible even with compound syrup of sarsaparilla, as it forms calomel.

Syrup of squills is incouputible with ammonum carbonate, but not with anmoninan chloride.

## mactery and todne.

One of our South Sidedrugists, just at the beguning of his apprentieship, recently received a prescription for mercury (lagurd) and rodine (resublimated), with instructions to tritarnte the two and add other ingredients. The drugs fused with an actue comssion of satuck or fumes, leaving the rendue a hardened mass to be hroken up with the pestle.

## 

M:any members of the medical profession daty write preserptions which are incompatable. If a litule judgment and forethought were expresed diere ate very iew but would hnow better. The following is an illustration:

> Tuacturac ferrn chlordh,
> Potassii chloratis.
> Syrupi tolutani,
> Mucilaginis acacie.

In this mixturo the nencin, neid and iron are incompatible.

The following prescription was a favorite for years, and some phystenans are stall writing it. It is a very good one to ex and make tronble for the drumist :

Ferri pyruphersphatis.
Aquae ballieates.
Sisinpl zuntiberis,
finctur: chachume empmosita, Aeadi phasphorien diluza.
Conless propared aiter a specal process this will form a gelathous mass.

On a certan ocension when I was in a drus store the followng came in.

> Mentholan. 5 *s.
> Aybac athmoma.
> Coillendia,
> Thacture iodi ata © vas
> Fi. lia.

In place of a liniment a plastor is the result.

During my experience in the upothecary business I received the following:

## 'otassii chloratis, Sacehari tia $\mathrm{a}_{\mathrm{i}} \mathrm{i}$.

Triturate, and acidulate with a drop or two of sulphuric acid and add water sulticient to make three tluid ounces.

If the instructions for preparing this are carried out active combustion is bound to result.
Combosive: sumimati and strychining.
Occasionally a physician may order a solution of strychinine sulphate and bichloride of nercury, an, gr. 1 to the drachm. If the pharmacist uses a solution of bichloride of mercury, in which ammonia is a usual ingredient, the mixture becomes semi-solid, caused by the ammonia used to hold the mercury in solution. A common mistake is as follows:


## Quininue sulphatis gr. $x$,

Acidi sulphurici aromatici of s.,
Extratis chlyeyrrhize fluidi 3 zi .
The acid in this is incompatible with the liquorice. It precipitates and renders tasteless the sweet principle. A better method is to suspend the quinine in the liquorice.

I have filled the following a number of times, but it is decidedly unsafe :

Potassii permanganatis 3 ss.,
Glycerini,

Not long ago I saw the following:
Morphine hydrochloratis gr. ii,
Ammonii chloridi $\mathrm{ai}^{\mathrm{A}}$,
Cincture aconiti mxx,
Aynse camphore f 5 ii .
The camphor water should be repiaced by some other vehach, otherw:se there will be a deposit formed.

Finally, "as directed" is a perfunctory direction often added to prescriptions. As the memory of the nurse or patient is likely to be weak, errors may be eisily made under such lax directions.-Pittslurgh Medical Revicu:

## The Pharmacist as Phllosopher, Poet and Author.

That portion of the annunl address of President E. L. Patch delivered bufote the American Pharmaceutical Association at the recent metcting at Asheville, N.C., treating of pharmacists in literature, will probably be read with not a little interest.

The question hus been publicly asked, the speaker said, whether a pharmacist was ever known to honor his country by attainments as a poet, an orator, or a statesman.

Any one familiar with our craft would see in the intenso mplication to petty details whicls is essential to conscientious service the reason fur non-development in general lines. An ex-lawyer or ex-physician who acquires distinction in public service obtains reputation for his profession, but, putting aside the undeniable fact that the members of these professions have a much higher average of general culture than pharmacists as a class are
permitted to reach, the latter leave their calling and their relation to it forgotten.

With professions and vocations as with men we pass without comment the theery that blood tells, and ignoring all achievements of ancestry we concern ourselves with the quality and character of the individual who to day stands before us and honor him for what he is and for what hes does and not for what his fathers were or did. Yet there have been great men who were ex-pharmacists. Moses, the law giver, wust have been trained in pharmacy at the priestly schools at Heliopolis; Aristotle left his home in Stagira to become an apothecary at Athens, but association with Plato fitted him to become tutor of Alexander, Galen was quite as much apothecary as physician. Tho unfortunate poet Keats wasadrug clerk at Edmunton for tive years of his too short life.

George Crabbe, the English author, was ${ }^{3}$ druggist. Louis Desire Veron, the Frenchauthor and journalist, began life as a pharmacist. Carl Wilhelm Scheele, the Swedish discover of manganese, chlorine, barium, oxygen, prussic acid, etc., lived and died a pharameist. Serturuer, who by the discovery of morphine revolu. tionized the practice of medicine, was an apothecary.

Sir Humphrey Davy was an apothecary's apprentice to N. Borlass, at Penzance, England, but the chance reading of "Elements of Chemistry" hy the martyr Frencla chemist, Lavoisier, led him into his brouder career.

Did any of you who visited the marvelous White City and were attracted by the remarknble exhibition made by the Baltimore and Oho Railroad showing the evolution of the locomotive realize that the world was largely indebted to an apothe. cary of Baltimore, William Morris, for the tirst practical six-wheeled locomotive, capable of clambing an incline, and that the achievements of his locomotives "Washington" and "Lafayette" at the Columbia Incline, Philadelphis, and the "Philadelphin"at the Lickey Incline, EngJand, led to the establishment of the Royal works at Vienne under his direction?

And as you looked over that exhibition were you not impressed as never before that nently all advance is by very short successive steps, the present building upon the prast?-Western Druggist.

## Ginseng.

The products of Cores are but little known in the commercial world. Trade in that country is carried on by means of markets or fairs, and transactions are hampered by the deficiency of the currency. Foreign commerce there is none, unless the annual fair held at Pien-men is to be counted an exception.

Awong the productes of Corea peculiar to atself is that of Genseng, a root of great medicinal value. The demand for it is so great that many other roots are substituted for it, especially a kínd known in commerce as American gensing, imported from the United States. The finest
kind of root grows wild in the wountaine of Manchuria. At one time this particular kind was considered of so fine a quality and, in consequence of becoming scarce, that an Imperial edict was issued prohibiting its collection. Its value varies from three to twenty pounds sterling per ounce. Roots of this latter quality can only be purchased by the wealthy. The real Aranchurian ginseng is only found in the upper valley of the Usuri, where ruined towns and forts mark the cradle of the race, which seven centuries ago ruled over Chine from the Yellow River to the great wall.

Ginseng loves moisture, and in the densest of the forrsts which cling to the slopes of the hills, it nestles in recesses, which the rays of the sun lave never penetrated, and which are as pathless now, as in the days when the golden Tartars were dwelling in, and cultivating the plain. The genuine Manchuria, consists of a stem from which the leaves spring, and of two roots branching, off ut the same point from each side of the crntre root. The stem somewhat resembles the head and neck, and the side roots the shoulders and arms of a man; the main root represents the body, and a fork which the roots frequently form, the legs. The Coreans, with a not ungraceful feeling, believe that a plant, which thus expands into the human form amid thickets and jungles, on which the foot of man has never trod, must be intended to alleviato the sufferings of the human race. Its precious qualities are jncreased and intensified by age, and a plant is of no great value until it has been growing and gathering strength for at least an ordinary lifetime. The age, und, consequently, the value of a plant, are ascertained by a eareful examination of the upper portion of the centre and side roots. These portions should be covered with rings, and the thicker and more numerous the rings the greater the age. The value of ginseng in no way depends upon its lengith, thickness or color. The uppur portions of the root also possess liealing power. The stem which appears above ground, on the other hand, ought not to be eaten. It is supposed to be hurtful rather than beneficial. In former years the collection was in the hands of some forty merchants, who, on payment of a heavy fee, obthined tine necessary authority from the Tartar general. In addition to this fee, every merchant was bound to hand over ${ }^{-}$ to the Government a certain weight of the object of his search. This continued from May lst to September 30th. In the gathering of the root. merchants employed outlaws. Thero mon underwent great hardships, and incurred frightful dangers Forced to wander far from the patches of millet they had ramed for their support they were crean menaced by starvation as well as by the wolf, tiger or leopard, and not unfrequently these hardships were endared in vain, for ginseng becomes yearly more acarce, and plants of any great age are but rarely found. Finally, in order to arrest ite utter extiuction, the collec.

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tion of the wild root was prohibited by Imperial edict. Steps were takin in Kirrin to carry out this order mad to prevent the admission of the root into China. Notwithatanding, a small quantity is clandestinely collected, hence its prohibition price. At one time, it was proposed by some Russians to establish pimsing plantations, with a view of srowing the root as an important article of trade with China. It has beon cultivatod in Jupern, but with little success. In apprarame ginseng is translucent, very brinth, taste mucihginous, sweet, slightly bitter and aromatic; its supposed virtue is that of restoring verile power to the aged A visit to a ginseng merchant is thus recorded. Opening the outer box the merchamt removed several paper parcels which appeared to till the box, but under them was a second box, or two shall boxes, which, when taken out, showed the bottom of the large box and all the intervening space tilled with more paper parcels. "These parcels," he said, "contained quicklime, for the purpose of absorbing any moisture, and keeping the boxes quito dry, the lime being packed in paper for the sake of cleanliness." The smatlen box, which held the ginseng was lined with sheet lead; the root was further enclosed in silk wrappers and kept in small silken covered boxes. Taking up a piece he requested his visitor not to breathe. upon it, nor handle it, and then dilated upon the many merits of the drug and the cures it could effect. In Corea and Chima the ginseng is often sent to friends as :t valuable present; in such cases accompanying the medicine is usually given it small, beratifully finished, double ketale, in which the ginseng is prepared. The inner vessel is made of silver, and betwern this and the outside kettle, which is a copper jacket, is a small space for holding water. The silvor kettle, which tits on it ring near tho top of the outer covering, has a cuplike cover in which rice is placed with a little water. The ginseng is put into the inner vessel with water, a cover is placed over the whole and the apparatus put on the tire. When the rice in the cover is sumbiciently cooked, the medicine is ready and is then eaten by the patient, who drinks the ginseng teat at the same time. The dose of the root is 60 to 90 grains. During the use of the drug, tea drinking is forbideden for at least a month, but no other change is made an the dirt. It is usuatly taken in the morning before breakfast and sometimes in the evening at bed-time.-G. D. in British and Colonial Druggist

Anctines and Anytols.- By the action of sulphuric acid on mineral oils, resin oils or hydrocarbons, bodies aro obtained which, either in the pure state or ats salts, are soluble in water and in alcohol. These bodies are being termed anytols, and the original bodies which yield them are the anytines. There is nothing new here except the names, which are likely to be used extensively. Creolin belongs to the group.- Repertoive de Marmacis.

## WIndow Dressing.

## Br L. II. Poster.

With respect to advertising, aphormacy is in a measure hamdicapped, it has not the latitude of the largodepartinent stores of the city, which aleertise one particular line and incidentally sell a dozen others. If a mang goes into a drus store to hag liver pills, it shelf full of congh minture does bot appeal to hime in the least. It maty be thint the recail drusgist of the future will be forced to carry a general line of merchandise to which his drug stock wall be merely an adjunct, but today the professton louks to cath individa al pharmacist to protect its dignity and demonstrate: its ability to stand ibone

One might as well bee a dead man as a nonentity in business. The merchant must make himself known, and if, as is the case with the druggist, his ahrertising resources are limited, he must fall back on an attractive establishment to invite the public within his walls. Ife must make a hadmark of his store, gise it ats indi viduality, and have it. known for its relia bility and high standard. Not enough attention is paid, as a gemeral rule, to the dresstug of show windows, and this is really so important a fature the drupgist camoot affurd to overlook it or grow care less in has displays. It is a imstatio to till a window wath a heterogenems coller thon of dixuts, pills, perfumes, cignts, corn-cure and hail bushes, it may ha a tine exhibit of first-class stock, but it is too confusing a mass to make any inpures sion on the passerdy-there is nothing to catels the rye. On the other hand, if the druggist will clear ont his whadow, and into the empty space unload carelessly in theay a barrel of stick liquorice, a monke:y-skin of aloes, a quantity of some crude drug, or some other one thing, it is comprehended at a glance, and serves as a reminder to the pedestrian of something in the drug lme he ought to have.

A window in one of the gopular Dew York pharmacies presents a very athatetive appearance. The background and thoor are covered with Turkish :owels; the pyramid of rock salt boces thanked on both sides with loofahs, two meeting in a point at theapex; sponges festooned from the ceiling, and so:ap, thesh.brushes, ete., dropped promiscuously about, the whole. making an attractice, nad just now seasonable, disphay.

It is a good thing to keep window decorations "up to diate"-that is, com menorate cancmi festivites and celoforations whth approprate desigas and colors. In selecting colors, harmony is of course the main thing, atad the following combinations may be used with artistic effect:

Orange and black.
piak ned Olive green.
Livender and manve.
Golden brewn and yellow
Cherry mad white.
Light blue and mahogany:
jellow and white.
On class days, and occasions that arouse public enthusiasur, as foot-ball games,
boat races, etc., the college or cluh colors luny be adopted in the window dressing. These eolordisplay arrangements are exceedingly dininty, and involvo only the oxpense, of a varety of drapery silks, whol will last ahost indectinitely if wmover! canofally and had away saoothly nfter ench thme of using. Thise Iraping may he more or less phinorate aceording to the talont of the deresser; a simples method bemge a halfolaneth curtain hung on a brass rod at the bach, and the thoor cosered seosely wath solh of the cumpli mentary shade. One weok tho rexhibit in the window may bo toilet artieles--pere. fume, face-powider, tooth-brushors, manicure muphements; mother weeh, brunchal loarnges, a bulk nad packages, tho next were, an array of witch hazel, or what ever is smanomble. Rose piak draperies and bhek haporices in a window would tomptany man to lay.

A very elever device, and one which at once attrats the eyo and couli bo used in these color windows effectuely, is long satian stremmers, attached to bottles or pakases or to manatme bargoles, and kept tlyme festicely $\mathbf{w}$ the beceac created by at concmated electric fan.

A marine window for the dadertisement of the various cod haser ofl products, is good. In thas a complete mondel of a shap -schooncr, sloop, or other fishuge boatis used as a centre piece, and around it, in chasobiod groups, botiles of pure codliver onl, emulson, capsules, malt and oilmay propmation that contantosa percentages of oil. Sem wered, star lish, or any apmatic curiosity, mayle usel for additiomal decoration.

This method of advertising adhats of almost inexhaustible variety, but even in this the queston of enviromment must be considered. One must study the taste of his patrous to learn what st.ghe is most likely to win their attention; he mast look at the sulyect not only from his own standpoint but also from that of the dind of trade his locality commands.-.- Buelletin of Thermace!.

## Strawberries as a Medicine.

Strawherries have for a lons time had $\pi$ well estabhahed reputation is is remedy for the gout. Dr. A Eeorge, in the An
 tells un that in the hast century the great botanist, limamos, who was gouty, had math camse to extol the action of the fivit in this disetise de this epoch, when uric and was unknown, he haed the presciestee that hat chemical cause oi gout was mentical wath that of gravel, and he expressed himseli in a pieturesque manner to one of his friends when he wrote to him: "f have the gout and you have gravel; we hase married two sisters." The only methorl that Limacas fomad of easing his prout was by an abundant uso of this fruit, to which lie has made a gracefal acknowledgement in his writings. -Science Sifting:.

# Canadian Druggist 

## WM. J. DYAS, EDITOR ANO PUBLISHER.

## NOVEMBER 15TH, 1894.

The Medical Soclety's Request.
A number of Toronto druggists were recently surprised to receive a copy of a resolution, which appears elsewhere on this page, passed at is late meeting of the Toronto District Medical Association, in which the general practice by druggists of repeating prescriptions withoutauthority from the prescribing physician was unanimously condemmed, and in which they were requested to desist from a continuance of the custom. A meeting of the Druggists' Association was called to consider the matter, but, as it was felt that the Association could not as a body bind its members to any course which they, as individuals, might not care to adhere to, it was considered wisest to leave to each the manner of replying which his judgment and policy dictated.
Enguiry amongst the druggists showed that they felt that the Medical Association had asked too much in requiring a portion of them to stop a practice which was so universal. They were at all times willing to refuse to repeat specitic prescrptions which the physician ordered should not be repeated, as, in such cases, he would share with them the responsibility of refusing; otherwise, they felt that they should be permitted to conduct their business as demands determined.

Iuterviews with prominent physicians elicited the information that while many of them used their own preseription pads, having printed thereon instructions that the medicine ordered should not be repeated, the instructions were not adhered to, and that copips of those prescriptions had in wany cases been given by the druggist to their patients. They further claimed that copies thus given were being hawked all over the Province to friends at a distance, and served purposes for which they were never intended. They believed that a practice which had become so general would be difficult to overcome, but thought that the bringing of the matter to the attention of druggists would be productive of good and would lessen an injustice to themsulves and a danger to the community.

## What Shall the Answer Be?

The Toronto Medical Association's request to the druggists of that city is one which is likely to provoke a considerable amount of fecling and discussion in the ranks of both parties interested. Iooking at the matter from the druggists' standpoint. we cannot well see how any druggist could honestly reply his acquiescence. When the druggist receives from his custoner a prescription to be filled he feels that he is dealiug entirely with that customer and not with any physician, un-
less a scalping arrangement exists between them. Ile fills tho prescription, charges his price, retains the origimal if permitted to, or returns it or a copy if so requested. If the prescription has written upon it instructions from the prescriber that it is not to be repeated, the instruction certainly binds him in case a renewal is sought, but does not emable him to retain the prescription, which may be dispensed elsewhere and in as many different places as the person having it may desire. When, however, the preseription is given to the druggist by the physician with an order for a delivery of the medicine to the patient, the prescription is in that case subject only to the will of the prescriber, although it is rarely exercised.
When the physician gives into the hands of his patient any prescription his claim to it ceases and is supplanted by a fee charged or paid. That written order for specific medicine represents his skill and value to his patient, and is carefully preserved for that very reason. If the patient does not wish to use it he is at perfect liberty to destroy it, so that his right to possession is unassailable. When he appeared before the physician he brought to him only his individuality and paid him for the prescription written for it. When he afterwards appears before the druggist he brings to him not individuality but a prescription and pays him for the medicine the supplies upon it-in both cases only paying for what he did not bring to either, and retaining what neither has the slightest claim to,-the prescription.
Having reached this point we get back to the question at issue. The physician wants the drugrist to stop repeating. He cannot ask his former patient not to have his prescription repeated because that party is absolutely independent and can do as he pleases. The druggist, being in n ineasure dependent upon the good will of the prescriber, has, perforce, to check his $\mathrm{g}_{\mathrm{j}}$ independence of spirit and co-operate. In those cases where a refusal to repeat would be for the benefit of the party refused, it would be well to do sn, but, if for no better purpose than to fatten the field we most unhesitatingly say no. What shall the answer be?

## Physicians Denounce Repetition.

The West Toronto Medical Territorial Division Association, composed of all licensed practitioners of medicine residing west of Yonge street, Toronto, Ont., held their regular meeting a short time ago in Broadway Hall on Spadina avenue, with Dr. George H. Carveth acting as Secretary.
That it was an important meeting will be readily seen by the following resolution, which was moved and seconded by prominent West End physicians and carried unanimously :
Resolved, "That the secretary be instructed to write all the druggists west of Yonge street, informing them that the matter of repeating prescriptions without
suthority had been Sormally considered by this association and una simously condemmed, and that each and avery one of the druggists be asked if ho will desist from this time the practice of repeating prescriptions without the knowledge and consent of the prescribing physician."

## As Outsiders View It.

One of the Patron leaders says that the next move of the physicians will be to ask for legislation to prohibit druggists from filling a prescription more than once. The result of this would bes to increase materially the receipts of doctors, since it would be necessary to pay for a fresh prescription each time the medicine was required to be duplicated. If such a proposal is entertamed, which is extremely unlikely, it might as well be abandoned, since the Legislature would not consider it for a moment. It looks as if some one had been making a man of straw for Mr. Haycock and his followers to combat. Toronto Mrail.

## Doctors, Dentists and Druggists.

They are a drug in the market. You find them in every hole and corner, especially in our cities, many of them having all the evidence externally of hard times. In Quebec, it is the anbition of the habitant, who perhups can neither read nor write, to make some of his sons priests doctors or lawyers. It seems to us that this thing is overdone in Canada, especially in Ontario and Quebec. It is only by raising the standard that it can be restisiued. Unfortunately, however, there ssems to be a factious desire to cherpen education. We fully expect to see our profession reduced again to the ranks of the peddling "tooth-carpenter." - Duminion Dental Journal.

## Drug Store Burglars in Toronto.

The noise of the falling of a large pane of glass, which had been neatly removed and placed standing on end by burglars, grobably saved Mr. A. M. Dow, at the corner of Augusta ayenue and St. Patrick street, about \$200. Mr. Dow reported to the police that his drug store had been entered during the night and $\$ 40$ worth of perfumes taken. The burglars had worked under the full glare of an electric light. They removed a heavy plate glass panel from the front door, and, after placing it on end on the pavement, entered. While they were operating inside the pane, which leaned against the door, fell, and the crash evidently frightened them off the premises.

When Mr. Dow's clerk came to the store at 7.30 in the morning, he found the glass smashed to atoms, and about $\$ 200$ worth of goods, which had been taken from the drawers, lying piled up behind the counter. The proprietor states

## Holiday Perfumes.



SATIN BOX.


CELEBRATED PERFUMES.
IXXQUSITH ODORS.
BEAUTIFUL PACKAGES.
LARGEST ASSORTMENT.

CORRESIONDENCE SOLICITED.
Rearers, please mention the Casabias Drcuaisr whell writine or buslug.




#### Abstract

A substantial and reliable article. Send for descriptive circular.


## Radlauer's Somnal.

## AETHYL-ORLORALURETHAN.

(HEGISTEMED) THE NWWEST \& MOST BFPICIENT SOPORIFIO REMEDY.

Taken in doses of 32 grains, or half a teaspoonful, in milk, ale or cognac, produces in half-an hour a quiet refreshing sleep, lasting from six to eight hours, with no unpleasunt after effects. The effects of Somsal are more pleasant than those of Chloral Hydrate and Morphia. Experiments male in the Cown Hospitals, Moabit and Friedrichshain, Konigliche Charite and Konigliche Universitats Poliklinik, Berlin, have shown that Somval. dees not acelerate the pulse and does not upset the stomach. Somsan is especially recommended for Nervons Insomnia, Neurasthema, Spinal Complaints, Infectious Diseases, Laralysis, Melancholin, Hysteria, Morphinismus, and Diabetes. The low price of Somsal cnables its use in the poor and workmen's practice and in hospitals.

## Radlauer's Artinervin.

(BALIOYLE BROMANIIIDE) in the form of Powder, the most efficacious Antipyretic, Antineuralgic, and Antinergine.

Astinenvis replaces aml surpasses Antipyrin, has no hurtful secondary effects, and is cheaper. 'raken in doses of 8 grain four times a day, it is an excellent remedy for Feverish, Catarrhal and R̀heumatic Pains.

Astinferis is of especial service in cases of Influcnza, Neuralgia, Asthma, Tuberculose, Iellow Fever, Malaria, Migrainc, Gout, Rheumstism in the Joints, 1)iphtheritis, and other typical Fevers.

MANY GOLD MEDALS HAVE BEEN AWABDED.
S. RADLAUER, Kronen Apotheke, FRIEDRICHSTRASSE, 160, BERLIN, W. W. J. DYAs, Strathroy, Ontario. - Wholesale Agent for Canada.

## THE MONTREAL OPTICAL COMPANY

The only firm of Manufacturing Opticians in the Dominion.

## Prescription Work a Specialty.

Country orders filled with care and promptitude.
If you are dealing in OPTICAL GOODS it will PAY YOU to do business with US, and if you are not doing so already, write and get our Catalogue and Price List.

## To the Trade. $\sim$

In all localitice from which we have secured and published testimonials for our Dodi's Midney Pills, the sale has been greatly iucreased, which resulted to the benefit of the druggist as well as ourselves.

We would thercfore respectfully request all druggists to forward ue the names of any of their customers who have been cured or benefited by ou: Doold's Widney Pills, and secure us the testimony for publication if possible. In return for which we will be pleased to give them the bencfit of any advertising connected therewith if desired.

Thanking the Drug Trade for their assistance towards the success of our Remedies, and reapectfully soliciting a continuance of same.

Respectfully,
THE DODDS MEDICINE CO., Limited.
that he locked up the premises at 12 o'clock.

The crooks, it would appear, must have awnited thes opportunity afforded them by the constable on duty being at the far end of his beat, for that otlicial did not see any persnn in the neighborhood, nor did he hear the crash of beaking ghass.

A grang of drug thieves nere evidently opernting in that part of the city, for within less than a month four irun stores lave been entered. The list is as follows: Little's, corner King street and Spadina avenue: Kennedy's, cormer Queen and MeCanl streets, and nunttompted entrance into Gibbard's drug store on the corner of King and John streets.

It is thought that the same gentry who last month used the telephone to order parcels of goods from the wholesale houses and who stopped that plan after a couple of days' successful operations are at the bottom of this new phase of rascality. On those occasions only staple stock was ordered and in such quantities as to excite no suspicion, while in the recent burglaries only the choicest goods in perfimes and drug sundries were taken, showing that tho thieves are as expert in judging as in stealing. So far the polico aro said to have no clue whatever as to the perpetrators.

## To Remove the Ammoniacal Odor from Solutions of the Polybromides.

When, says M. Dugung, in the Union Pharmaceutique, a solution of the three bromides (putassium, sodium and ammonium) is prepared by the cold method, it gives off a very unmistakible ammoniacal odor, and it is ensy to determine the presence of free ammonia by the use of a rod carrying a drop of Nessler's test. The same phenomena is produced when an ammoniacal salt is brought into contact with the alkaline iodides, or with the bromido and iodido of strontium. The freeing of ammonia in these cases is due, evidently, to the alkalinity of the bromides and iodides used. According to the researches of the author the quantity of momonia is very feeble, and the therapeutic value of the medicament can be diminished only very slightly, if at all. In order, however, to obtain a solution that does not present the phenomenon spoken of; it is necessary merely to dissolve the salts in a small quantity of distilled water, and to bring this concentrated solution to active cbullition for a moment. You can then finish the operation by adding the necessary volume of water to the solution. In this manner you can prepare an inodorous solution, and the method has the advantage of neutralizing the free alkali of the bromides sid iodides used.-Nat. Druggist.

Small incandescent lampa, using secondary batteries weighing about half a pound, are used in the German army for nightduty.

## Apparatus for Fllling Bottlos.

The accompanying sketeh, taken from the British and Colonial Drugyist, is that of a machine devised for rapidly tilling bottles with thick liguids, such as Castor Onl, Glyerrime, or other heary onls. The machine is simple in construction and apparars to be very easy to work.

It will be noticed the machine consists of a nue inch feeding pipe, which can he rendily attached to the tank, tion or vessel contaning tho liquid it is desired to bottle. The ppopersess into a coil, cos. ered with a sheet-iron jacket, lined with asbestos; beneath this is a specially.dosigned Bunsen burner, by means of which the liquid passing through the coil can be

A. Feeding pipe. B. Cover for coil. C. Copper coll. D. Bunsen burner. E. Stop valve. II. Valve I. Lever for valve. $J$. Rodi nttached to slide to open valve. $k$. Stand and dripper. $L$. Nipple. $M$ Bahance. N. Foot lever. $O$. Slide which raises bottle and dripper. $P$. Pipe to convey drippings.
rendered thinner in cold weather if necessary. The eoil is connected by a oneinch pipe with the main upright stend, the pipe being divided by at stop-valve to regulato the supply of liquid, and prevent waste by accident. The stand supports the main cut off valve to which nipples of various sizes, from $\frac{1}{d}$ inch aperture can be screwed in order to fit the neck of the bottle. This valve is controlled by a lever to which a rod is attached connecting it with a slide arrangement supported by the main upright stand. The slide is raised and lowered by means of a foot lever, which opens the valve to release the liquid on pressure, and closes it by means of a weighted balance. The connecting rod also carries two nuts, by means of which the opening of the valve may be regulated to a nicety. Aflixed to the
slade is a stand mad dripprer, foum which a pipe rans to contry any drippings into a receptacle placed bebind the machine. The pipes are lined with block tin, and the machine may be ensily cleaned by passing stean, spirit, or my hipuid through it, necording to the meture of the loody which has bren used. It may even be amployed for bothliog liguids us viscid as diamond coment. The inventor chams that 1,500 dom. botalies of shycerine or castor oil can thas be tilled in the coursts of an hour, 1 oz. bottles being filled at the late of 16 to $3: 4$ a minute. The machine has beon patented by the inventor, Alr. Robert, of Bolton, E:ngland.

## Limeseed Oll.

The lossische Zailuny, in an articlo dealing with this oil, says: "Morethan a hundred years ago the importance of the tine sweet oil made from the seeds of lime trees was mentioned, but no attempts were made to procure this oil on a harge scale, and hater on the matter was forgotem. A few years ago limeseed oil was, as it. were, discovered for the second time, and the experitence then acquared justified great importance being ascribed to the industry. Lime trees blossom so abundantly every spring and produce such a multitude of sceds, which frll to the ground in nutumn, that it, nould be casy to collect large quantities under every lime-treo alenue. The seeds posscess 58 per cent. of oil, and are in this scarcely surpassed by any other seed; only slightly by the para-nut, the coconnut, and the hazelnut. I'he percentage of other important oil yielding seeds is far le:ss. The oil of the lime tree seed, which cate bo gressed in II sorts of ways, is distinguished by a beautiful clear culor and fine taste, has not a trace of hitteniess or aromatic flavor, and may lee juatly compared to the finest oline oul. It never becomes ratucid, and can le left exposed to the air in open vessels with out the slightest change in taste or state of preservation. It i, an oil that does not dry, and has not the least inclimation to combine with oxygen. It is, therefore, not only valuable as a food oil, but also for industrial npplianees. It does not freecent any degree of cold temperature known to us, and is not changed at even $21^{\circ}$ Centigrade. It is remarkable that this valuable oilseed has not been more utilized, for it would not be dificult to find the proper places for obtaining the serd in quantity, and collecting it cheaply. The lime.tree produces the same enormous quantity of seed almost every year, and ther-fore there would bo no stoppage in the regular manufaciure of the oil."

An Euglish surgeon says that prople who use rocking chairs become deaf the soonest, and that rocking also hurts the eyes and makes people nearsighted.

## An Improved Method for Preparing B. P. Tinctures.

## By Chamhes E. Dodsley.

Everyone who has had any experience in the manufacture of tinctures is aware of the great loss of spirit entailed by implicitly following out the directions of the B. P.; this is not, however, the only unsatisfactory point. The process of unceration and percolation as directed is as follows:-A given portion of a drug is ordered to be macerated in a certain measure of spirit for a given time, then the uixture is transferred to a percolator, and when the supernatant fluid has passed through and ceased to drop percolation is continued with the remainder of the spirit. Press the mare, filter, mix, and add sulficient spirit to make up the measure. But little consideration is necessary to pick out the weak points. The first thing that will occur to most is the loss of spirit; this certainly is great during the three transferrings from one vessel to another; there is loss both by evaporation and also in numerous particles of the drug which are saturated with liquid adhering to the sides of the vessels. In the second place, how much dissolved extractive matter and how much spirit is left in the mare after pressing 3 Another objection to expression is the amount of useless suspended starchy nad mucilaginous natter which is forced out. Especially is this noticeable is treating gentian, rhubarb, squills, calumbra, and others. This extraneous material collecting upon the filter chokes up the pores, retarding filtration and retaining by absorytion a quantity of liquid in proportion to its bulk. All this loss and wuste has then to be made up. This is decidedly unscientific; the object of all true science is utilitarian in itsaim. Thus we arrive at this fact that the procuss, as set down in the Pharuacopocia, is, from a atrictly pharmaceutical and business standpoint, unsatisfactory. With a perfect process a definite measure of liguid. in which is dissolved a soluble portion of the drug, should, when tinished, equal the measure of liquid plus the bulk of dissolved matter. Instead, the direction in every case is, add sufficient spirit to make up to the original volume. In the last place, is the drag exhausted by this process? In most. instances it is not.
The: improved process which I now propose to lay before the readers of the $B$. and C. D. is not $n$ matter of theory, but the result of practical work extending over a lengthened period. The method is to do away with s"narate maceration, and also pressing, the whole of this part of the process being conducted in one apparatus by repeated and continuous percolation. Briefly a tincture may be described as a spirituous solution of the active principles and soluble portions of $n$ drug or drugs, representing a definite uniform strength.
In. preparing a tincture it is necessary first to consider thn most suitable physical condition in which to subject the drug for treatment. This the B. P. procides
for in ordering the various degrees of comminution into which the drug is to be divided. And in the second place, the best means of exhausting the drug with the least amount of wate, and to give the best results in every way. For convenience I have tabulated the whole of the B. P. tinctures, under four headings or groups, as under :

Group 1. Simples solution of one or more ingredients.

Group 2. By exhaustion of a single drug (simple tinctures).
Group 3. By exhaustion of a number of ingredients (compound tinctures).
Group 4. Complex tinctures.-Under this heading are included all which do not come within the liuit of the other three. This group is sub-divided into three divisions, $a, b$, and $c$.
a. Exhaustion of a drug and solution of one or more ingredients.
b. Solution or exibustion of one or more drugs in a compound menstruum.
c. Simple mixtures of other compounds.
alifabetical list of tinctures.
Complete list of all tinctures in the British Pharmacopocia:
12. signifies IRectitied Spirit. P. Yroof Spirit. D. Dilute.

GROUP I.-BOLUTIONE.
Aloes. P.
Cananbis indicar. R.
Nucis romica. D.
Asafuctidas. R .
Jodophylli. R.
Beazoin. co. R.
Myrrbic $R$.
Iodi. K.
GHOUP II.-SIMPIEE PERCOLATES.

Aconiti. $R$.
Arnice H
Aurantii. $P$.
t Aurant.
Recent. I .
lielladonne. 15 .
Huchu. P.
Caluintar. 13.
Cuntharidis. 15.
Capsici. 1.
Cuscarilla 1 .
Chirettre. $P$.
Cimicifuga 12.
Cinchon:i: 1
Cinuanoni. R.
Cucci. 12.
Colchici sent. $P$.
Conii. 1.
Croci. 1
Culcebse $R$
Nigitalis. ${ }^{2}$
Firgota. 1 .
Gelecmii. $P$.

Grgota
Hyoscyami. $\boldsymbol{P}$.
Jaborandi. ${ }^{2}$.
Jxapae $\boldsymbol{1}^{2}$
Laracis H .

+ Liunonis. P .
Lolvelia $P$.
Impuli. $P$.
Opi. 1
pyrethri. R.
Quassia. 12.
Krameria. $P$.
Sabiaza.
Scillat 1
Sinegne P.
Serpeatarias $1 P$.
Stramonii. ${ }^{1}$.
Sumbuli. ${ }^{2}$ ?
Sumbuh.
Veratri virinl. R.
Zingib. R.
Ziugih. Fort. 1.
+ 13oth prepared from frenh pecl, but one directed rectitied spirit the other proof spirit; the reason why, it is diflicult to fnehom.

GHOUP IIR.-COMPOUND PEHCOLATKS.
Cardamomi co. P. Rhxi. ${ }^{1}$.
Cinchonat co. 1. Senne. P .
Geutian co. P.
GHOUP IV.-COMPLEX TINCTURFS AND
8IMPLE MIXTURES.
Camphorai comp. P. Guxiaciam.
Catechu. 1'.
Lavandul. co. R.

Lobelise atheria.
Opii ammoniata.
Quinina animoniata Quinine:
Valcrian. ammon.

## Kino.

a.

Chlorofornil et morphive.
Chloroformi eomp.
Fe.ti mectatis.
jierri perchloridi

Group 1 includes four tinctures, which may be classed as typical, $i, e$., a stable solution of the active portion of the drug of a detinite strength. First is nux vomica, a solution of the standardized extract representing a dedinite percentage of alkaloidal value; canmabis indica, not standardized; podophyllin, a solution of the resin of podophyllium; and iodi, a solution of iodine and iodide of potassiun. I find the best method to adopt in making Tr. myrrh., is to digest the gum in spirit for the stated period, transfer the undissolved portion to a cylindrical percolator, and pass the remainder of the spirit through; when the last portion is added, and hus sunk ahout half an inch below the top of the residue in the percolator, gently pour on a sufficient quantity of water to displace the spirit remaining in the residual mass, by this means the whole available amount of tincture is collected. Asafoctide may be treated in a similar manner. In the case of aloes and tolu, the amount of undissolved matter is so small that the quantity of spirit held in solution is practically nil. From Tinct. benzoin. co. there is a much larger quantity of undissolved watter. With this tincture displacement with water is not applicable. Where these resinous tinctures are prepared in any quantity, say gallon lots, the residues may be reserved in a suitable well-closed vessel and the spirit distilled off at some future time.
Group 2 now claims our consideration. With the exception of tincture of cantharides, which is strictly according to B. P., these may all be prepared by the same process, i.e., maceration and repercolntion. The modus operandi is as fol-lows:-The new displacement apparatus of the York Glass Co. is the most suitable for sma!! quantities. Pack the prepared drug in the perco!ator (the upper part of the: appatratus) taking care that no powder falls to the bottom, or the pores of the muslin or lint will be choked up, Where rectitied spirit is the menstruum, first pour over the drug a sufficient quantity of spirit to cover it, and set aside until it is absorbed, and the drug thoroughly softened; now pour on rbout half the quantity of spirit that is to be used, and digest for two duys, after which allow the liquid to percolate through, taking care that the liquid does not fall beneath the level of the marc;* pass the percolate through again and reserve. Repent the process with the remaining spirit, retaning 1 or 2 ounces or more, as the bulk is more or less, which is to be used for washing the exhausted marc, and then displaced with a quantity of water equal to that retained in the marc. These directions are applicnble to all rectified tinctures under Group 2. It is necessury to slightly alter the process for proof spirit tinctures. As an example, we will take Tr. cnlumber, using B. P. quantities to produce 1 pint. Take at ounces caluniba root, cut small, i.e., about the sixe of a hempseed; put this in-

- It in important always to watch chis point, to avoid air bnbbles getting in, and also to proreat forming chanache through the mire.
to the percolator of suitable capacity, the bottom of which is covered with a picse of fine muslin, which has been washed; close the air outlet of the receiver, and pour on to the calumba root a mixture of 5 ounces of S. V. R. and 2 ounces water. Allow this to thoroughly permeate and swill out the root, and then add a further portion of $\overline{5}$ ounces spirit and 3 ounces water, and allow to uacerate for two days. Allow this to percohate through, and then repersolate with the same, remembering the injunction not to let the: liquid fall below the top of the mure; now pour on $2 \frac{1}{2}$ ounces spirit and $1 \frac{1}{2}$ ounces water, remerving 1 ounce of water to displace the spirit with; when this has passed through add just suticient water to make the per colate measure $19 \frac{1}{2}$ ounces; put this to one side and continue percolation with water until the calumbe is exhausted. Evaporate this watery percolate to inalf an ounce, and when cold add to the reserved portion, which should measure exactly 20 ounces. The only tincture under this group calling for special note is Tr. opii. Use a coarsely-powdered opium, which digest for half an hour in hot water before placing in the percolator (of course using the water as a portion for percolating with), and then procted as sbove.
We are now cone to Group 3.-Compound tinctures. The same process is employed as for simple tinctures. The preparation of the drugs and the order in which they are packed in the percolator have much to do with the ease or otherwise with which the process will be effected, and also with the resulting product. All these compound tinctures differ in some minor respects from each other; we will, therefore, consider them separately in the order in which they occur. The first is Tinct. cardam. $\infty$. The best plan, after opening the raisins, is to boil them in $n$ portinn of the water. until the fruity pulp is detachod from the skin; then rub through a sieve. By this means the seeds and tough enveloping skin are left behind, and only the useful portion enters into the making. The ingredients being all prepared, pack into the percolator in the following order : At the bottom place the broken cinnamon bark, cochineal, cardamoms, snd carraways, and proceed as directed for Tr . calumber, using the watery solution of raisins in place of a corresponding portion of water.

Tinct. Circhonce Co.-I find the most satisfactory resulta if the ingredients are placed in the following order: Saffron, orange-peel, serpentary root, cochineal, and jastly the cinchona.

Tinct Gentian. Cn.-Unless the gentian root is very dry, it is much easier to cut small than to bruise, as it simply fattens out, without breaking it at all soft. Pack orange-peel, cardamons, gentinn.

Tinch. Dhere.-Inatend of powdering the rhubarb root, a mach better plan is to sonk it in boiling water until quite moft, then cut very small; use the water in which it has been sonked in place of water for macerating and percolating
with. Pack first the saffron, coriander, cardamoms and thulurb, and proceed as for the others.
The last of No. 3 group is tincture of seman. In preparing this tincture let the raisins be prepared in the same way as for tincture of cardamons. Place: the bruised cormader at the bottom of the percolator, the mixed scmanand carraway seeds above, and proceed as directed for Tr. card. co.
The next and last group we must notice under the divisions A. B. and C.
$A$. This division includes three only, the first and last of which call for little comment. Tr. catechu should be treated similarly to Tr. myrrh.; macurate for the specitied time and then transfer to cylindrical purcolator and displace with water.
13. Iznct. opii ammoniata, comuonly known as Scotch paregoric. My experience of this has been that it is practically obsolete. Tinct. lobelia atheris and valcrian. amm. may both be prepared in the same uray as simple rectitied tinctures as directed under Group 2.
C. These are all simple mixtures, and call for no special note, coming more under the province of dispensing.

As mentioned in the eariier part of this paper, a tincture prepared from a standardised extract, as nux vomica, may be regarded as a typical high.class pharmaceatical preparation. liut why should not all tinctures of simple drags be prepared in a similar manner, more especially those possessing more powerful propertirs, as aconite, ke:ladonna, digitalis, argot, hyoscyamus, jaborandi, opiam. d.c.? For some years now I have prepared Tr. camph. co. from Tr. opii and sp. camph., thus always ensuring a definite strength of morphia with the additionsl advantage of being prepared in a few minutes, a saving of both time, trouble and waste. The addition of 40 m . sacch. ust. to the galion gives that color which pleases the public cye.

There is always room for improvement, and even those who have but little opportunity for practical pharmacy or research may, if they will only keep eye and car attentive, observe and note daily some. thing new, which, if followed up, will lead to some real advisntage or improvement in pharmacy, and that is what we are all striving for. Our: calling has many troulkesome details and drawbacks, but if we will make use of every opportunity which offers we may all leave it better than we found it, and not regret having been a private in the army of pharmacists. -British and Colonial Drugglse.

## Laboratory Notes.

Iotanalum Stearata in Turgentine I.Inamanta
By F. C. J. Ford.
Read before the British Pharmnocatical Conference.
The compounas of stearic acid with the alliali metals preseocs in a high degree the property of forming gelatinous solutions
with water, thes presence of a very small propertion of dissolved stearic soapleting sutheient to render a liguor almost solid. It was thought that this micht be turned to account in the preparation of a liniment containing turpeatine mad anmonia as its chinf constatuents, which, after repeated trals with sapo mollis, had proved unsatisfactory, mod had invariably separat ed. Potassium stearate in solution war nt first used, but with little success. When, however, stearic acid was dissolved in tho turpentinc, and the mixture of anmonta and distilled water ndded, agitation mstantly produced a milk whito cmalsion of adminable consistence, and showing no tendency to separate. In this case the large excoss of ammonia exerted no disturbang influence, but appeared rather to increase the cmulsivo powers of the stcarate. The proportion of stearic acid necessary for a given quantity of turpentino varies from 1 to 2 per cent., according to the rmount of water present, increased water roguiring a larger proportion of stearic acid. The acid should be melted on a water bath, a little turpentine added, the mixture warmed till clanr, and then poured into the remainder of the turpentine.

The sane process may be applied to the preparation of lin. terehinth., B. P., tho formula for which would stand as follows:

## I.IN. TEHF.MISTHIN.E.

|  |
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Melt the stearic acid, with a little of the curpentine, on as water bath, and add to the: remainder in which the camphor has been previously dissolved. Mix the solution of motash and distilled water in m bottle of suthicient capneity, add the turpentine solution, and shake vigorously for a few seconds. The result of this formula is a milk white liniment, which is always of uniform consistence and does not separate. The advantage of employing detinite materisls, as liquor potasse and stearic acid, in place of the sapo mollis of the present otlicial formula, with its varying precentage of water and free alkali, is obvious, cusuring, as it dots, a liniment which is always of uniform consistenceand appearance. The small quantity of etearic soap required to effect the emulsification of the turpentine, and the case and rapidity with which the liniment cin be prepared, aro additional points in favor of this formulns. One grain of stearic acid requires about 3 tninimes of liq. potasse for neutralization. This corresponds to the formation of the neutral potassium stearate, and is the proportion which succeeds best with ol. terebinthinat.

It lins been shown that with the official process slight varintions in manipulation, cren with the same materials, will produce widely differing results, but working in several different ways witi stearic soap, I have not succeeded in altering thio character of the liniment.

## DISTILLED WATER.

The quality of the distilled water used in pharmacy has from time to time given rise to much discussion, which, at all events, has had the effect of drawing attention to the very unsatisfactory condition in which this article is often met with. Distilled water containing unlmonir is very prone to develop fungoid growthe, and there are many apparently obscure cases of fermentation rud decomsposition, causing much trouble and loss, which may lat fraced to the presence of fermentative bacteria and fungoid germs as impurities in the distilled water. The subject merits more attention than it usually receives, as organic matter of this description is almost more objectionable for many pharmaceutical purposes than inorganic salts.

A still of large capacity was formerly necessary to furnish sufficient distilled water for average requirements, but the small stills on the continuous principle, which have of lato years been placed on the market, are far more convenient in use, and need but little attention. Evidently, in a continuous still, the first portion of the distillate cannot be rejected, and the product will always contain ammonia, unless an acid be placed in the still to retain it. To effect this, and at the same time destroy organic matter and nitrites, various substances have been proposed, such as alum and potassiuin permanganate, sulphuric acio, phosphoric acid, potash and permanganate of potash, and permanganate acidified with sulphuric acid. This last combination is the most effective with a second-rate water, but tho distillate always acquires a peculiar odor, which for certain purposes is objectionable. With the view of svoiding this odor if possible, I tried the substitution of potassium bichromate for the permanganate, aud obtained a distillate which wis odorless, and answered the pharmacoperia tests. Suitable proportions for use in a continuous still are 10 grains of bichromate and $G$ fluid drachons of sulphuric acid for each gallon of the still's crpacity. With water from the London mains, sulpluric acid alone, or even oxnlic scid, will furnish a very puro water, which, if properly kept, never lecomes cloudy or develops fungoid growths.

A microscopical examination of samples of distilled water containing fungoid will also show small particles of vegetable tissue, introduced ws dust, which have formed nuclei for the growth of bacteria. The appearanco of fungi in distilled water is generally attributed to ammonin in solution, but thery probably quite as often rise from the fragments of vegetabledebris; alurays to be found in the dust of a pharmacy, which form $s$ werk infusion very favorable to their development.

A useful form of vessel for the storage of distilled water consists of a large giass bottle with a stonewsio tap and narrow neck, the latter being plugged with cotton wool and surmounted by $n$-looselyfitting.tin cap. Storage tanks constructcd on this principle preserve their con-
tents in a perfectly swect and clear condition, however warm and uniavorable the situation in which they may bo placed.

> "Jumping Beans."

## 13y Puof. Id. F. Sayme.

A short time ago tha writer received from Trinidad, Col., \& letter of inquiry concerning the so-called "junping beans." Briefly stated, the answer given to this inquiry was as follows:

The jumping bean is obtained from a Mexican plant of the natural order euphorbiacee, which is hubitually infested with the larva of a small moth, carpocap. sa saltitans, West, and by some means not well understood this larva is inclosed within the walls of the seed, of which there are three, naking up the berry or fruit of the plant infested. The imprisoned larva when it is warmed makes the seed roll about on a flat surface, or even jump a slight distance in the sir.

The larva develops into its second stago in January or Feuruary, and the moth soon after issucs through a hole previously cut by the larva.

The larva of the insect carpocapsa is very destructive to fruit. such as apples, pears, etc., depositing its eggs in the fruit as scon as set. The seed of the euphorbiacea, however, seem to be the most frequently infested by this pest.

The following reply was made by my correspondent:
"Yours received in reply to my inquiry concerning the so called 'jumping beans,' carpocapsasaltitans. Please accept thanks.
"The information concernlng the destructive habits of the insect leads me to address you again, hoping that a word of warning from you may save the conutry from being literally over-run with this pest. On or about August 15 th there came to my employer fifteen of these buginfested beans, sent out by parties who claim to be the sole rgents for the United States and Canada. These goods are offered only as a curiosity, and with the consignment came anany copies of letters from widely scattered localities in the United States and Canada stating that the beans sold readily; some partics ordering one and two hundred, etc. It has recently come to my knowledge that there passed over the Santa Fe by express 10, 000 of these pests, presumably to be sold over our country, and your statement being truc, the farmer will have another evil to fight. To make matters worse the druggists are made the distributing agents, and like myself and my employer are innocently scattering the pests.
"d word from mo of wirning to the profession would not amount to much, but your influence might arrest the evil.

Our Depertment of isgiculture should be warned. Tho mails are being used to nnke the distribution."

In reply to this warning $I$ would like to say that $I$ do not think there is any occasion for alarm at present as the particular species of shltitans does not attack
plants of economic value. Still it might be wise to be on guard fearing this species miglit change its habits.

The plant which it attacks especially was not described until late in 1891. This plant is maned by I. M. Rose as sebastianáa fulueri.

Attention was called to the insect by C. B. Riley, Government entomologist, at a mecting of the Entomological Society held at Washington in 1891.
lefgarding the matter of spreading the pest I would say that so far as my observation has gone, 90 per cent. of the larvas die before they leave the hands of those whom they have served to amuse as a. kind of toy.-Druggists' Circular.

## Storax Oil.

The first sensation obtained when smelling storax or storax oil, is that of an odor resembling benzol. This is due to styrol, a very volatile hydrocarbon, chemically related to benzol. Styrol constitutes the principal part of storax oil. When the oil is employed for perfumery purposes, it. is necessary that the styrol should first be volatilized, in order that the remaining oily parts, which possess a pleasant odorof ciananuic ester and vanillin, and volatilize with great difficulty, may develop. their odor.

The quality of the oil may be most easily estimated iy placing a few drops upon a piece of filtering paper and inhaling the odor after the styrol has evapora-ted-Schimnel \& Co.'s Report.

## When to Stop Advertising.

When the population ceases to multiply, and the generations that crowd on after you and never heard of you stop coming on.

When you have convinced everybody. whose life will touch yours that you have better goods and lower prices than they can get anywhere else.

When you perceive it to be the rulethat men who never advertise are outstripping their neighbors in the same lineof business.

When men stop making fortunes right in your sight solely through the direct use of this wighty agent.

When you can forget the words of the shrewdest ana most successful businces wen concerning the main cause of their prosperity.

When every man has become so thoroughly a cremture of habit that he will certainly buy this year where he boughtlast ycar.

When younger and fresher houses in your line cease starting up and using the newspapers in telling the people how much better they can do for them than you can.

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## Pharmaceutical Notes.

'lo Incomporatt: the Bembacts in Vasians.-Pivert d'Audray states that tho addition of 1 part of Imolin to 60 parts of vaselin renders the instant incorporation of the extracts with the latteran easy matter. Even extract of belladonma, and of rontany, can be thus readily incorporated in vaselin. It also facilitates the incorporation of iodide of potassium in vaselin in a remarkable manner.

## $\dagger \dagger \dagger$

Calombl, anis Iodoform.-Schweissinger relates in the Pharmaceutische Central. halle that a mixture of equal parts of calomel and iodoform, kept in a glassstoppered bottle, gradually became eatirely converted into red crystalline mass, not a trace of the original substances being: disclosed by the microscope By double decomposition mercuric cluloroiodide, mercuric iodide, and chloroform had been formed, the latier being recognized by its odor on opening the vial.

## t+ $\dagger$

Insolumbe Guas Rendemed Solumbe by Hybrogen Peronime.--It is stated (Bayr. Ind. u. Gewerbebl.) that if insoluble gums are treated for three to four hours at from 80 to $100^{\circ} \mathrm{C}$. with solution of hydrogen peroxide they will become soluble in water. The proportions given ara: Gum, granulated, 220 g. ; water, 1000 g. ; hydrogen peroxide (12 vol. p. c.), 50 to 60 g . A larger proportion of hydrogen peroxide solution will render the gum completely soluble. Tragacanth is similarly affected.

## iti

Pernanent Feilling's Solution.-Rossel proposes the following formula (Schweiz. Woch. f. Pharm.) :-Dissolve 34.06 graus of pure crystallized copper sulphate in distilled water; add 150 grams of pure glycerin, then 130 grams of pure caustic potassia, and, lastly, sufficient distilled water to make $1,000 \mathrm{ce}$. Each cubic centimeter of this solution corresponds to 0.005 gram of glucose. If all the ingredients are pure, it is said that the solution will keep indelinitely.

## $\dagger \dagger$

Gualacur, Curstalminf.-Since the careful researches of Behal and Choay on this interesting body, much interest and care have been bestowed on its manufacture. The properties of the puro compound and its derivatives have also been carefully studied. The following results have been obtained in the laboratory of Dr. Thoms. The specific gravity of three pure samples lay between 1.1355 and 1.1370 at $15^{\circ} \mathrm{C}$. The melting point of the three samples, taken in capillary tubes, were $25.5^{\circ}, 28.5^{\circ}$ and $2 S .25^{\circ} \mathrm{C}$. Seifert had given $32^{\circ}$ as the melting point, which is now considered too high. The solubility in water was found to be 1 in 50 . The behaviour on distillation was found to be fairly constant in sll three
cases. Of sample No. 1, 85 per cont. distilled at $203.55^{\circ} \mathrm{C}$; of sample No. 2 , 90 per cent. distilled at this temperature; and of No. 3, S0 per cent. distilled between $2033^{\circ}$ and $203.85^{\circ} \mathrm{C}$. The solidifying points wero $25.25^{\circ}, 95^{\circ}$, and 27 ro. spectively. The benzoyl compound pre pared by the action of benzoyl chlormes and potash on guaiacol, when purilied by erystallisation from alcohol, was found to melt at : $8 . \mathrm{i}^{\circ}$ in all three cases.-Apothe. ker Kciluny.
$\grave{i}+\dagger$
Tonorons ron Conss has been recommended by Mr. Maurel in Therapentische Bhatter (Pharmacentische Centralhalle). Suall pieces of tive or ten per cent iodoform gaice are folded into suitable rolls, which are to be inserted into the nostrils and allowed to remain for several hours. This operation has to be repeated occa somally during the day. The treatment is well borne, and patients soon acsustom themselves to the odor. The iodoform bapors kill the micro-organisms, which cause the cold, and according to Mr. Maurel have been found in the secretion of the lung.

## $\dagger \dagger \dagger$

Test fon Thon is Coprefi Suhpiate. To detect iron in commercind copper sulphate (contained as mu adulterant.) $x$ writer in the Bulletino Chim. Farman, recommends the following easy nad raphe test :-Make a 20 -per.cent solution of the suspected salt in distilled water, and pour 5 cc . of it into a large test tube. To this add an equal volume of a 10 -per.cent ethereal solution of salicylic:aed. If iron be present the violent. reaction of it with salicylic acid at once appears at the plane of junction of the two solutions, its depth of color being proportionate io the amount of iron present. If the copper is free from iron, no color reaction is shown.

## $\dagger{ }^{\dagger} \dagger$

New Unoryichal. Fommus.e.-At the last merting of the British Pharmaceutical Conference, held at Oxford, the report of the Unoticial Formulary Commit. tee, suated that since the last meeting of the Conference: a new edition of the Formulary had been produced and was now on sale. Four new formulic have been added, viz. : collodium stypticum, extractum belladomuc jolii alcoholicum, liguor bromo. chloral compositus, nad syruphes acid hydriodici. Other alterations consist chicfly in lessening the acidity of certam syrups, and in an improved formula for collotium belladonne, which is now directed to be made from a solid alcohoiic extract of belladonna leaf, essayed at the time it is used so as to obtain $\Omega$ uniform product, instead of from a liquid extract.

## t+ $\dagger$

Ansenate of Lfadids as Insecticher. It is well known among farmers and others engaged in bucolic pursuits that Paris green is one of the most efficient insecticides, but it is not always successful, and, moreover, it not infrequently injures the delicate foilage. This new competitor,
arsmate of lead, is said to be more reliable, and can be used in considerable strength without in the least doing horm. A solution containing eq pounds to 150 ghllons of water has been used without mury to the leaves of delicate plants. This fact points to its sucerssful employ. ment in the treatment of diseased conditions, not only extermaly, but interamly, and if some enthusiastic chemist will put it on the market, no doult it will readily find investigators.-American Therapist.

## New Remodios.

Astivarmazise is atn medition product of quinine, prepared by Zambletti, of Milam. It is recommended for theumatio athections nud inthurna, It is also a strong antiseptic. The hydrochlorate is given in doses of from 10 to 20 grains per diem

Cindororomber is a substituted phenol product introduced by the same chemist. It is a well defined erystallino body, and is recommended for throat affections.

Incerstol.-Whis product is introduced by Nichter, of Rerlin, for the treatment of ague and chronic stomachic troubles, and also for sea sickness. It is a fecbly opalescent liguid of a lemon yellow color. lt appears to contain magnesiam sulphate, sodium sulphate and chloride, potassium sulphate, ether, alcohol and iron salts.

Latgostlafist:-The product formed during the manufacture of sulphocellulose receives this mame. It contains freo and combined $\mathrm{H}_{2} \mathrm{SO}_{4}$ and certain volatilo products of the wood. It is recommended as a disinfectant.

Lechoal.-An extract of Quinllin sapomarm, with its taste masked ly appropriate substances, receives this name. It is hardly a medicament, beng used chiedly for putting a fotan on mineral water beverages.

Bomal and Cutol.-These two bodies are aluminium borotartrates and borotamate respectively. The former is soluble in water, the latter is now. They are both stroagly astragent, and are designed as medicaments for dermatologicni cases. Erysipelas and gonorrhea are two of tho discuses which ding are chiefly ndvisedfor. Cutol contains 76 per cent. of tanain, 13.2 of alumina, and 10.7 of boric acid.

Plaster or Pams as tested by simply rubbing a portion of it betwem the tingers; if particles of grit are felt, it indicates that the plaster has ahsorved water and become deteriorated. A supplementary test may be observed (Cimrlotte Med. Jour.) by taking a pinch of the plaster ugnin nad immersing the fingers in water, then rubbing again. If, in both thes. tests, no grit is felt, and the plaster forms a thin crenay mixture in the water which easily rubs of the fingers, the plaster is tit for use.

# Pharmacy Abroad. 

The: Wonas Druecast.-It is generally supposed that the woman druggist is altogether a development of the present day-tho direct result of thes scientific course of this end $o^{\prime}$ the nineteenth century college. Nevertheless, it was the other end o' the nincteenth century that baw Elizabeth Marshall of Philadelphia succeed her father, Charles Marshall, to n drug busiaess established by her grandfather, Christopher Marshall, before the Revolution. Aud she made a success of it, too, as a clever womun will of anything if given a fair chance and $n$ freo foot. One of her apprentices was Charles Ellis, subsequently one of the founders of. Phila. delphia's Colloge of Pharmacy and at one time its president.

The Drug Trade in Cahcutta.-People in the Mofussil, in India, and the great manufacturing trades in Great Bricain, can hardly inngine tho enormous and lucrative business in drugs, chemicals, and patent medicines that is carried on through the vast Indian Peninsula, mor: especially in the large metropolitan provincial cities. Men retiro yearly with princely fortunes who but a few years before were almost penniless. Drug shops and palatial drug houses form part of the street frontage of every thoroughfare, even to the smallest by-lanes of these rapidly-developing centres of the populatiou. During the past year (1893) the revenue of the custom house in Calcutta alone was estimated as drawn against an import trade in drags equal to sixty-four lakins of rupees, while that on patrat med icines ran as high as ninety-six lakhs of rupecs. This, to the export industry of Great Britain and America, is a most salutaryand promising commentary. Some idea of the vistuess of the drus trade in India may be estimated from the statistics of Calcutta alone. There are in this city no less than 750 drug stores. These may be graded into three classes. The tirst would include large and old established European houses and a few immensely wealthy but littie known Indian import businesses. The second would embrace numerous second-rate recently estiablished chemists' shopes which do little more than general dispensing work. The third class includes hundreds of putty retail chemists' shops which deal in patent medicines and cheap drugs, and buy up and retail the condemned stock of the more respectable firms. In the: first class there are about ten houses; in the second about at hunded, and the babane "wald be relegated to the third class. Some streets areliterally crowied with this lateer chass of petty stores. In College strect alone there are 113 drug shops. The great emporium of Calcutta, its royal exchange, so to speak, Chadney Chowk, has not a fuw of these places, and it is simply surprising to witness the daily sales of drugs and patent medicines in this veritable bechise of
human trade. Here the poor man can get an ounce of stel drops for four pice, loottled, labeled, and all. Here Beecham's ,ills can be oblained for 40 .per cent. less than the price charged in an Eugish place of business. In one of these snops none in Chadney Chowk we have seen a day's sales often amount to five and six thousand rupees, and here any singlo drug is imported by the huadredweight. -Indian Journal of Pharmacy.

## **

The Phobomion of Pinsiclans to the Porumation.-There are more doctors in the United States-physicians and sur-geons-in proportion to the whole population than in any other country. The ofticind percentage bere is 125 to every 100,000 inhabitants, agninst 91 in Scotland (the: Scotch take ligh mank as surgeons), 70 in Germany, 69 in Irelnnd, 64 in Eaghand, is in Belgium, $3: 3$ in Italy, 31 in Spain, 29 in France, 27 in Hungary, IS in Russin and 14 in Sweden. It. Mray be generally set down as a proposition which is almost universal in its application that doctors are most numerous, in proportion to the population, where the ratio of inhabitants is most dense, and scantiest in thinly populated agricultural countries. It is a somewhat peculiar fact, to which nowhere has attention been called, that in Russia, where the proportion of physicians to the whole population is so low, the number of female physicims is comparatively great. There are about 700 women doctors in lhussia, and many of these occupy important positions in hospitals and workhouses, in educational establishments, in factories and works of various kinds and in Govermment institutions, while othrss hold appointanents from municipal bodies. The remuneration for these different posts averages from about S 1000 a year downard.

## ***

Alabming Inchease of Chemists :N Soutil Austialia.-The returns of the occupations of the people in the colony of South Australia, as ascertained by the census of 1591 , have only just been issued. Pharmaceutical chemists and druggists numbered 276 , including IS females; ten years beforo there were only 101. The population increased about 13 per cent. in the decade, hut the chomists $41 \frac{2}{2}$ per cent. Medical practitioners numbered 161 in 1881, and 20: in 1591, an increase of 95 per cent.-Chemist and Druy. gist.

## Shark Oil.

Shank wil is expurted in large yumations from Iecland to Germany. It is of a fine color, never becomes thick, and is said to possess similar medicinal virtues to cod liver oil; and, no doubt, it is often sold in the name of the latter product. A lleet of 100 boats is engaged in the indus. try every year, from Jauanry to August. They are schooners of from 30 to 50 toas, with a crew of from eight to ten men.

The sharks are captured about 20 miles from the const in the winter, and in the summer about 100 miles away, in deeper water. Every two or three wecks the bonts return to port, with from 100 to 120 barrels of liver, which is boiled in dirty and evil-smelling hovels. The sharks captured by the Tcelanders reach 20 feet in length, and $\overline{5}$ feet in thickness. A liver yields up to 5 gallons of oil. The neighborhood of a shark oil refinery is not to be mistaken, as the odor arising therefrom is far from pleasant. The tishermen carn about 35 s. per month, with a premiull of Gd. on each burrel of liver. The captain gets $\mathrm{Is}_{\mathrm{s}}$. 3d. per barrel for the first 100 , and 3 s . 4 d . per barrel for all in excess. Sickness seems to be very rife among sharks, judging from the small quantity of heaithy livers, belonging to healthy tish, compared with the greenish ones, from the fish suffering from disease, and the red livers from the thin, ill-conditioned fish. The Icelanders only take the livers from the fish, and they neglect the fins, skin and tecth; but that is not so in the Tasmanian fisheries, as in Sydney fins fetch $£ 28$ per ton. They are also saved in the Hawaiian, the Arabian Gulf, and the China Fisheries, in fact, in China the fins of sharks are considered a delicacy. The Iceland shark is not scuh a ditticu!l fish to tackle as the tiger shark, the terrible "bluepointer" of Australian waters, which, although smaller, is swifter, more ferocious, and fusnished with a more massive jaw than his congeners; however, a large number of tishermen fall victims to his voracity and violene. One of the chief sites of the shark liver industry is Slamsund. but whe: the: oll laves there it is not fit for use, but it is stat on to Christiania, whereit is refined, and freed from sangaineous globules and stearin, filtered through paper, and packed ready for the market.

## The Action of lodoform on Calomel.

Iodoform and calomel, in equal parts, are a invorite mixture for external use. When freshly prepared it has a clear yellow color. ifter a time, however, it becomes red on the surface, and after some months the whole mass is one of red crystals. It is iound that the whole of the mercury bas been transiormed into the biniodide, or into a mixture of this and of the chloriodide. Chloroform is iormed at the sume time, which is easily recognized by its odor. The microchemical examination of the mixture is interesting. A drup of iadite of yotassium un the slide shows the formation of the double iodide of potassium and mercury. After a few seconds the crystals become powdery and dissolve in the excess of KI, and nothing is seen but oily drops of chloroform. Bichloride of mercury and iodide triturated with alcohol give rise to the chloriodide of mercury, which is known as houtigny's salt.-Repertuire de I'harmacie.

## KOFF NO MORE.

## Watson's Cough Drops

Will give positive and instant relief to all those suffering from

Colds, Hoarseness, Sore Throat, Etc. . . and are . .
Invuluable to Orators and Vocalists.

## R. \& T. W.

Stamped on Each Drop.

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COMBINED VAPORIIER AND INHALER, THE CHAMPION VOLATILIZER.

For the trentment of Consumption, Catarrh, Bronchitis, La Grippe, Asthma, Hay Ferer, Whooping Cough, and all Iliseanca of the Nose, 'lhroat and langs. Complete list of formatice for inhal. ation with each instument.

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Entrance,
ds lay St. Toronto, Ont.
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TO THE DRUG TRADE.

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Direct all Dominion corretpondence to
JOEN C. GERRY, Dominion Agent, Toronto, Ont.

## Wine of the Extract of Cod Liver.



This Wine of the Extract of Cod Liver, prepatal by M. ChIn:VRIER, a first-chass Clicmast of Paris, possesses at tha same time the activo principhes of Cod Liver Oil and the theraprutic properties of aleoholic preprations. it is vamble to persuns whose stumach camat retain fatty substances, lis effect, liku that of Cod Liver Oil, is invaluable in Scrofula, Rickets, Ancemia, Chlorosis, Bronchitis amd all diseases of the Chest.

## Wine of the Extract of Cod Liver with Creosote.




The beech-tree Oreosote checks the destructive work of Puimonary Consumption, as it diminishes expectoration, strengthems the appetite, reduces the fever and suppresses perspiration. Its effect, combined with Cod Liver Oli, makes the Wine of the Extract of Cod Liver with Creosote an excellent remedy aginst pronounced or threitened Consumption.


## ADAMS' ROOT BEER.

 Pays Well, Sells Well, and Gives Satisfaction.Retail, 10 and 25 cts. ; Wholesale, 90 c. and $\$ 1.75$ per doz., $\$ 10.00$ and $\$ 20.00$ per gross.
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## Painful \& Irregular Menstruation

That Physicians prescribe them liberally.
The Druggist can safely recommend them for their value to the sick.

At $\$ 8.00$ per dozen delivered, you get a good profit of 50 per cent. No need to try to work off an imitation of them.

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## RICHARD Ist

## CIGARS.

FINEST 5C. GOODS INS TEIT MOAREETI.
J. M. FORTIER,

MANUFACTURER,

## Formulary.



This is to be applied to tho hairy parts every dny for two or three days.-Unem Medicale.

## meacumat coldumon.

For the removal of corns the following prescription is given :

Corrosive sublimate .... 0.3 grammes
Salicylic aceid ........... 4.0 grammes
Collodion . . . . . . . . . . . . . : $:$ 0. 0 grammes
To be applied daily to the corns, care being taken to remove each time the pellicle formed from the provious application. The corns soften readily with this collodion, which is very readily removed. The treatment may be followed by an application of some soothing ointment.

## SAINE FOK SHOE BLISTERS, ETC.

Youbsh soap
. 22 parts
Wiater............................. 27 parts
Vasclin 15 parts
Cinc oxide .... . . . ........... . 6 parts
Oil of lavemier to perfune.
Mix and make a liniment.-7herapea. tische, Ilatter.

## CRAYONS OF CHRISAROMIN.

These are coming into considerable use among dermatologists in the treatment of alopecia, barber's itch, etc. The following is Leistikow's method of preparing then :

| Coloph | ts |
| :---: | :---: |
| Tellow wax | 3i piarts |
| Olive oil | 30 parts |
| Chrysarohin | 30 parts |

Melt the wax, rosin and oil together, and stir in the chrysarobin. Cast into pencil form, using paper moulds.-Wat. Dring. gist.

Chllmbalss.

To be rubled in after washing.-Stern. Ex.

TOOTH ACHE.
Dr. Ben. H. Broadnax, of Broadinne, La, packs the cavity with cotton moistened in a mixture thas composed :

Rub together equal parts of
Carbolic acil, (lia.)
Gum-camphor,
Chloral hydrate,
Menthol,
Glycerin.
-Jour. Mat. Mcel.
h.f.monnuchins-l.ocal treatmbint.

Cocaine hydrochlorate ... .. 15 arn.
Morphine sulphate............. 3 gig grn.
Atropine sulphate ............... $\boldsymbol{i s}^{3} \mathrm{gru}$.
Tannic acid.................... 15 grin,
Vaseline ...................... 1 oz.
Apply within the anus.-L'Un. Med.
tingture of abinatto.
The Suddeutsche Apooheker Zeitung gives the following new formula for the preparation of this useful coloring tinc-
ture: Mix 200 parts of armato and 200 parts of water and add 3 parts of potas. sium carbonate and exhaust. Draw off the liquid, again exhaust with a like quantity of water and 1.20 part of potas. sume carboaste, again draw off, nad final. ly boil the residual arnatto with a like quantity of water and 1.20 part of sodium carbonate. Evaporate the united flaids by builiag down to 120 parts. To the residue when cold, add 24 parts of alcohol, and, after letting stand awhile, filter. The result is excellent.
hose Watria cheam.


Melt the wax and turpentine together in a water-bath, using precautions against the latter catching tire. liub up the fish oil and lamp black, and nidd to the melted mass. Jinnlly add the soap, continuing the hent until the latter is dissolyed, and agitating until cold to prevent separation. Apply with a brush.

## Lemion Dmassing -

Follow the foregoing formula, except that instead of lamp black use: 25 parts of yellow ochre. Then dissolve fince parts of finely powdered borax in $9 \overline{5}$ parts of glycerin by the atd of heat, and stir into the solution of fats, contmuing the stir. ring until the material is homogencous.

## Cobombiss Dherssing.-

|  |  |
| :---: | :---: |
|  |  |
|  |  |

Mix mad melt together.
The above is especially suited for reins, fine harness, etc.
Rebi Russta-Leatiera Polish-


Dissolve by maceration the first five ingredients in $8^{5}$ parts of nlcohol. idd the oil birch-tar and fuchsin. Vilter the solution, pressing sufficient alcohol through the tilter to make 100 parts.

Any yellow leather may be mado to resemble Russia leather by first eleaning with benain to remove grease or dirt, and then trenting with this solution.-Dieler ich's Manual.

Minemar. Waters in Constipation. The mineral waters tend to desiccate the mucous membrane of the inturstinal canal ; especially is this true of sulphate of magnesium and the magnueium salts gencrally.

## "Home-Made" Instrumont for Urinalysis.

Frank I. Gireen has described in ar recent number of the l'acific Drugyist an albammometer made at a cost of is cents. Its construction and use are as follows. "It is only necessiary to purchase an iguition tuber 6 itches lutig and 9 lif of an itach mande dianmeter, or a trallu we: $\underline{a}$ an uch will do. Measute an is manas of water at ahout $20^{\circ} \mathrm{C}$., mark the lower end of the meniseus with pen and ink, and number it 1. On top of that put in 17 minims of water, mark a lines and number it 2 . On top of that put in 15 minims, mark a line and mumber it 3 . Put in 13 minims, line it and number it I: then 11 minims more, and umber the line 5 : 75 minnas more, line it und mark it $l^{\prime}$; hastly, 110 minims, marking this tup lise R. The instrument is ready to be parmamently marked and lettered. 13y means of a sharp trinagular file the lines of mensurement can be ent on the ghass. With a firm, stendy hand the tigures can be scatched on by writing with the point of the tile. The insertsment now is known as Eslach's albuminometer. The guantity of alhumin in urine is estimated as follows: lill up to mark U with fiteered acid urime; then fill up to matrk 12 with Dibach's reagent ; cork and reverse a dozen times; allow to stand 2.4 hours. The tigures will indicate grammes to a hiter or parts to 1,000 , and. by pointing off one place, wifl indicate fractions of 1 per cent. For example, suppose the albuminometer read, after 24 hours, 2. The urine would contain 2 parts to 1,000 or two tenths of 1 per cent. 'The formmh for lislmelb's seagent for albumin is : Dissolve 2.5 grams oi picric acid and a grams of citric acid in 205 c.c. of boiling distilled water: when cold add water sullicient to make 250 c.e."

## A Remarkable New Compound.

According to Dic Jatur, a German chemist has discovered a new body which possesses the remarkable property of solidifying under the influence of heat and of becoming liquid ngain at temperatures below zero. This body, which has received the name of cryostase, is obtamed by mixing together egual parts of phenol, camphor and saponine, to which is added a slightly smaller quantity of oil of turpentine. Up to the present there has been no product known that posserses this property of liguefying when cold and solidifying when warm; for, alehough certain bodies, such as albumia, harden at a slightly elevated temperature, it is impossible to bring them back to a liquid state, even under the influence of very low temperatures.

Nicket, unknown till 1il5, is now very extensively used, having largely taken the place of silver in plated ware, and as an alloy with steel it is supcrior to any other sectal.

# Photographic Notes 

## The Artistic Aspect of Photography.

During the course of a lecture before the Woodford Society, J. W. Spurgeon said, "The point of view, suitable angle, and distance are all very inportant ele. ments in securing a good picture, even when suitable objects are found. The priscipal object should never be in the centre, but if a rectangle be divided into three equal parts, both vertically and horizontally, an object on either of these dividing lines will attract attention by reason of its position, the strongest points being at the intersection of the lines. Strong lines in one direction should be balanced by those running in opposition, a wedge should always have its apex supported, and a building have more -' the picture in front than behind it. Always aim at breadth of efficet, and choose the time of day when the lighting is most suitable.

## Develóping Gelatino-Chloride Paper.

S. H. Fry's process of developing gelatino chloride paper or prints, is as follows (Anthony's Phot. Jull., 1S94, xxv, p. 306): The prints are exposed, so as to render the image slightly visible, and are then placed in a bromizing solution (potassium bromide, 1 fl. os.; water, 10 il. ou.) for nbout fifteen minutes. They are then thoroughly washed and developed in the following solutions:

| Hydroquinone. |  |
| :---: | :---: |
|  |  |
| Sodium sulphite . . . . . . . . . . $\ddagger$ |  |
| Potussium bromide. . . . . . . G0 grains |  |
| Water.... . . . . . . . . to make 2j $^{\text {f }}$ j, oz. |  |
| 2-Caustic sodu............... $\ddagger$ |  |
| Sodium sulphite . . . . . . . . . ${ }^{\frac{1}{2} \text { oz. }}$ |  |
| Water. . . . . . . . . . . to make 2 ij fl . 07. |  |
| $\left.\begin{array}{l}\text { 3-Amnonium bromide } \\ \text { Ammonium carbonate }\end{array}\right\}$ ini. ... 1 oz |  |
|  |  |
| Water |  |

Take equal parts of each.-Development should be stopped when the details in the high lights begin to show, as the image rather gains than loses subsequently. The prints are then thoroughly washed, to get rid of all developer, and may then be toned in the usual toming.baths. The prints, when they leave the develop. er, are of a brick-red color, and are said to tone readily.

## Developing Enlargements with Eikonogen.

A correspondent in l'hotography advo. entes the following developer for obtaining rich velvety black tones in bromide pmper:

$$
\begin{aligned}
& \text { (Bisulphite of sonla, not ordinary sulphite of } \\
& \text { oda.) }
\end{aligned}
$$ soda.)

$$
\begin{aligned}
& \text { s-Sodiam bisulphide ........ } 60 \text { grains } \\
& \text { Fikonogen .................. } 120 \text { grains } \\
& \text { Whatil water............... } 10 \text { cunces } \\
& \text { n-lotassiun carhonate ....... } 240 \text { gmins } \\
& \text { potasyina bromide ......... }{ }^{8} \text { grains } \\
& \text { Wiater..................... } 10 \text { otuces }
\end{aligned}
$$

To develop take three parts a and one part a just before using. With anything approaching correct exposure through a good even negative, development will be complete in three or four minutes. Eikon-ogen-developed prints should bo washed for at least ten minutes before tixing. No acid bath is reguired to elear, as the water will do this. Fix in hypo four ounces, water twenty ounces, for ten minutes, and wash thoroughly as usual. Always use fresh hypo for each batch of prints, if good tones are to be relied upon.

## Another Sensitive Material.

C. F. T., in the Photoyram: We must add mother to the list of substances sensitive to light. It has been shown that cotton soaked in a five per cent. solution of metatungstate of soda becomes blue on exposure to light. In a dark room the action is reversed, the fabric returning to its original hue. As the color reappears on exposing it again to daylight, there seems a possibility of using the salt in actinographs.

## Photographic Lamp Shades.

Take a shect of ferro-prussiate paper and cut it up into pieces of pyramid shape ; then place the paper under a negative ( 4 by 5) in the printing frame; if this be done carefully the paper need not be creased much, and the subsequent washing will remove what creases are made. When printed pretty deeply, remove paper, and, placing some circular object -say a jam-pot-over the centre, leave it exposed to the light until the uncovered portion of the picture is efficed; then fix the print by washing in the usual way, and having ooined the necessary number of pieces-say six-together by gumming them to strips of tape, the shade is complete.

## Hints for Photographers.

Paper used in developing lamps will fade. For safety, renew them from time to time.
There is no economy in using old and dirty Hypo solution; remember, it will stain the film.

Do not diaphragm too close; the effect is harsh, and, not artistic.

Do not use your developing tray for holding Iypo solution, and then hope for clean negatives.

See that the drop which closes the slot when the slide of your plate-holder is withdrawn is in working order. Many plates are fogged from this drop being out of order.
Use only the best, you will find them the chrapest.
A weak solution of perchloride of iron will remove yellow stains from negntives.

Don't put plates face down in a box. Hypo in straw board wiil injure the filu.

Do not attempt to clean the surface of a dry plate by drawing it across the coat sleeve or rubbing it with the hand, but in all cases remove any dust with a camel hair brush.

Do not hurry your negative out of the Hypo bath; it will save you trouble later on.

Drain the Hypo from your plate before putting into wash; it will help to prevent softening.

Do not develop your plates too close to your developing lamp; you may fog them.

In summer, keep your developer cool, and note the clean, clear results.

In winter, keep your developer between 65 deg. and 70 deg. Use a liquid thermometer for this purpose-it will pay.
Keep your stnck of dry plates in a dry, cool room-not hot.

Do not dry your negatives in a room having a close atmosphere, but give them a little draft.-Seed's Manaul.

## Spectrum of the Electric Discharge.

The Pharmaceutical Joumal (quotingthe Philosophical Magazine) states that Liveing and Dewar have conducted experiments with a view to observing the emission-spectra of liquid oxygen, air andnitrogen, when stiuulated by the electric discharge, at temperatures of $180^{\circ}-200^{\circ}$ below zero. Platinum electrodes were employed, and in the case of oxygen the spectrum was chiefly a continuous one, brightest in the yellowish-green, but extending for some distance loth on thered and blue sides. The absorption bands were conspicuous on this bright background. Much ozone was formed during the passage of the discharge, and imparted its characteristic indigo tint to the liquid. With liquid air the effects were similar, but oxides of nitrogen were produced, and liquid nitrogen áave a continuous spectrum with three bright lines in the green and yellowish-green, generally resembling those seen in liquid oxygen. For the sake of comparison tie spectrum of the spark in distilled water was observed. This also. was continuous, with the red line (C) of hydrogen conspicuous, and the F line just visible, and glimpses of thethree platimum lines in the green and yellowish green. The bright linesseen in all ceises were traceable to the electrodes, and it secms not unlikely that the continuous spectrum was due to paricles thrown off them.

Imphoved Evapoleating Method. Penchen and Clarke describe in Corps Gras Inedustriclle an improved method for evaporating liquids. Instend of applying the heat to the bottom of the vessel they suspend the steam-coil near the surfare, thus lawing the lower strata unheated (comparatively) and hence less prone to change by prolonged heating. The process is also claimed to be more rapid than the older method.

##  <br> "MANLEY'S" Celey Here Compound <br> -witilm <br> Beef, Iron \& Wine. <br> A welontifle combination of Celery. Benf. Iron  Inaterat of alcoliont. <br> -: UNEQUABA.ED:- <br> as a health buliofe and health restorer. Has uiven tho FUn.t.riST S.ITISFACTION to persons who have taketh it. <br> it is put up fian 10 oz. bottle, contained in an attrac the bluo and white carton. <br>  <br> $.6 \%$ ofl on three dozen orders, and $5{ }^{2}$, of for spot cash. Sells for 81.00 a Hottle. <br> Oriers respectially mollelted. <br> For tectimonials, ctu., writo to the makers. <br> The LION MEDICINE CO. 87 King St. East، TORONTO.

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IS THE FINEST

## NORWEGIAN COD LIVER OIL.

Sold in 25 imperial gallon tin-lined larrels, and in 2 and 4 gallon Tins.

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Solo Makor and Exporter.

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Toothache 澲 Gum . . .

Per doz. \$1.00
_ $1 / 7$ gross 2.75

For Sale by all Wholesale aruggists.

## J. A. Gibbons \& Co.

TORONTO.


GRAY'S CASTOR-FLUID for the hair.
GRAY'S SAPONACEOUS DENTIFRICE, an excellent antiseptic dentifrice.

GRAY'S DENTAL PEARLINE, an excellent antiseptic tooth wash.

GRAY'S SULPHUR PASTILLES, for burning in diphtheritic cases.

## THESE SPECILLTIES,

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

## Pharmaceutical Chemist

22 St. Lawrence Main Street,
(Corner of Laxauchetiere)
MONTREAL.

## Major's Cement.

ESTABLISHED 1876.
Universally acknowledged to be the
Best and Strongest preparation ever offered to the public.
For repaiting Chinn, (ilassware, liuraiture, Necrschumm, Vases, Booky, Leather Bolting, Tibuing Billinal Cues, ate.
 15 ant is cante pur lutte.
 reparing all kinds of l.enther (ionds.
 10, 15 dilli is centm pers lentle.
 repairing boots and Shoes and all kinds of Rubber (jocols.

The leather and linbber Cements atenuperior to any in the market, ame can be uect by any one, as the directions are given so explicitly: It is phit up in two ounce botiles, ohe gmart and one gallon catas.
 repairing Wood, l'ipping Billiaral Cines, vtc., always ready for use.
16 abil $1: 8$ evonte iner buttle.
A. MAJOR CEMENT COMPANY, 232 William St. - Now York City. A. J. Lantom, T. I. Hexberson.
J. N. Henbrasos.

Lancley \& Co.
Est.manamal 18.58.
Wholesade Duggisis 21 and 23 Yates Slreet,
VICTORIA,
B. C.

## JOS. E. SEACRAM

WatERLOO. . ONTARIO.
Masuricerbisiz of

## ALCOHOL

PURE SPIRITS,

## Rye and Malt Whiskies.

"OLD TIMES" \& "WHITE WHEAT."

## DRUGGISTS' CONFECTIONERY.

## ROBERT GIBSON \& SONS, Medicated Lozenge Manufacturers,

 CARITOIN WORKS, ERSKINE STREET, HULME, MANCHESTER, 1, glasshouse yard, aldersgate st., london, england.
## Superior Boiled Sugars

Have gained a High Reputation everywhere

## 

They are put up in $1-\mathrm{lb} ., 2-\mathrm{lb}$., and $5-\mathrm{lb}$. Bottles. Packed in Casks or in 1 doz. Cases as required, and delivered F. O. B. at any Port in England. These Sweets are absolutely pure.

## SARSAPARILLA AND SULPHUR TABLETS.

As it is extremely probable these Tablets will have a very large sale, we beg to advise Chemists that we guarantee every pound of Tablets to contain equal to 24 ozs. of Compound Decoction of Sarsaparilla, besides the usual quantity of Sulphur, thus securing a really valuable blood purifier.

## HIGH-CLASS LOZENGES 

## CHLORODYNE COUGH LOZENGES, <br> CHLORODYNE JUJUBES, PEPPERMINT LOZENGES,

In every variety of size and strength. Curiously Strong, and Multum in Parvo Mints give the utmost. satisfaction. Medicated Lozenges of Pharmacopœia Strength.

DIGESTIVE TABIETSS.
VOICE AND TEROAT IOZEINGES for gingers and public speakers.

## ORIGINAL SUGAR WORM CAKES

Mave an immense sale, both at home and abroad; will keep in any climate, and give entire satisfaction.
Put up in Tins containing 3 doz., 6 doz., and 12 doz. cakes.
TEIEROAT FIOSPITAI LOZENGGES
(As per T. H. Pharmacopoia)
All Lozenges are sent out in 2-/b. and 4-lb. Bottles (bottles free) but allowed for if returned.
Proprietary Lozenges Carefully Prepared, Stamped and Cut to any Size or Shape. PIRICE LISTS SENT ON APPLICATION.

## Tablet Triturates.

## By D. J. Thomas.

From a paper real before the l'ennsylvania Pharmaceutical Associntion.

Although triturate tablets possess, in many instances, an obvious superiority - over pills, they are, however, objectionable in others. For example, in exbibiting the bitter substances, such ms strych. nine, quinine, aloes, ete. Owing to the absence of a coating it is quite impossible to swallow a tablet containing any of the bitter medicaments without leaving some indication of its bitterness upon the senses of taste. An occasional objection is found in some instanees where the active constituent of the tablet is arystalline in character; owing to the recrystallization in the tablet, it becomes hard, and conse--quently is rendered ditticult to redure to a powder unloss subjected to extraordinary pressure; thus destroying, to some extent, one of the advantages clamed for it. Again, if the quantity of adhesive matter introduced into the tablet for the purpose of maintaining its form and holding it together has been used to excess, its ready reduction to powder is impeded. -Care, therefore, should be intelligently .exercised in their preparation, or, again, their superiority over conted pills becomes weakened. From persinal olsservation it must be admitted that in proportion to the increased demand for triturate tablets there appears to be a decreased demand for pills, capsules, and powders. While thera still remains an active demand for pills, powders are being rapidly :supplanted by tablets. It is not claimed by the writer that this condition exists wherever tablets have been introduced. The reverse of this condition may exist in many sections.

It is a settled fact that triturate tab. ilets have come to stay, at least until some better ueans has been discuvered that will .accomplish the same end. As there is no secret about the modus operandi for the manufacture of triturate tablets they can - be produced by the average pharmacist through the employment of ordinary skill and the utensils he now has at hand. With mortar and pestle, glass or poroelain slab, spatula, and a few sets of hard rub.ber or metallic molds, he finds hiuself -equipped for the production, on a small acale, of any tiablet that the large manufacturer is caprble of making, with the ex--ception, as in all other things, that they - can be made on a larger scale at a great. ly reduced cost. The possible danger of .ultimate injury to the prescription busi-- ness can only result where the pharmecist fails to recognize the preference the physician is disposed to show towards the triturate tablets, and refuses to supply :them when prescribed.

The electric centrifige is an apparatus invented by Doctor C. W. Purdy, of -Chicago. It is designed for the centrifugal analysis of urine.

Rlco Paper.

The rice paper tree, one of the most interesting of the tlorn of Chima, has recently been successfully experimented with in Florida, where it now flourishes with other sub-tropical and Oriental species of trees and shrubs. When tirst transphanted in American soil, the ex. perimenters expressed donitt of its havilness, fearing that it would be unable to stand the winters. All these fears have vanished, however, and it is now the universal opinion that it is as well adnpted to tine climates of this country as to that of the famed llowery Kingdon.

It is a sumall tree, growing to a height of less than 51 feet, with in trunk from 3 to 5 inches in diameter. Its canes, which vary in color necording to the season, are large, sott and downy, the formar somewhat resembling that noticed in those of the castor bean plant. The celebrated rice paper, the product of this queer trec, is formed of thin slices of pith, which is taken from the body of the tree in beantifal cylinders, several inches in lengeth.
The Chinese workmen apply the blade of a sharp, straight knife to these cylinders, and turning them round, nither by rude machinery or by hand, dexterously pare thes pith from circumferenco to cen tre. Thisuperation maliex a woll of extra quality paper, the scroll being of equal thickness throughout. After a cy linder has thus been pared it is unrolled, and weights are placed upon it until the surface is rendrred uniformly smooth throughout its entire length.
It is altogether probable that if rice paper making becomess an iudustry in the United States these primitive modes will be done awny with.-St. Loulis Republic.

## Be Wise.

If $\Omega$ man is content to follow in one beaten puth all his life; if he is so wise in his own conceit that he thinks he knows it all, and that nobody can teach him anything ; if he is content to remain in sodden ignorance because he cannot see that in the knowledge offered him is going to bring him an immedinte return in cash-then, and in all such cases, a man cannot afford to pay for a trade journal. But if he would keep abreast of the times in his calling, if he would know what new inventions and discoveries are being madu that directly effect his own interests; if he would profit by the experience of others as told in print; if he would know everything possible connected with his own calling, so that he may be able to converse intelligently, not only with his co-workers but with outsiders seeking informa-tion-then the trade jourual is indispensible. Says the British Printer:-It is a power in the land, and he who rejects its friendly aid will soon find himself at the rear end of the procession. He cannot know too much of his own feeling.-Ex.

Vogotablo Lifo a Nocessary Condition of Anlmal Lifo.

## By Du. S. Di hoswisme.

Fiveryone knows that utmospheric air is composed of twenty three units of oxygen mad seventy three units or nitrogen, Exesides fives six thousmadths of carbunic ncid and a variable proportion of vapor of water. This composition is remarknbly unsarying allowing for differences in combtimes and altitudes. The oxygen is a latele less abuadant on the surface of tho sea, which ahsorbs some continually for the respuration of fish. It is transformed into carbonic neid in all contined centres where mimals breathe. It would dis- pear from tho surface of the globe if the green parts of regetation wero not here to release it from combonic acid amd under the inthunce of the solar mags to throw it back into the atmosphere.

However, oxygen has not nways existed; sulphides and graphite aro fonnd in the primitive rocks which would buve burned if oxygen had been contempormeous with them. These rocks have cooled in a medium composed of carbonic acid, nitrogen, and hydrogen. This is the atmosphere in which the tirst plants have been developed. How do our plants, those of the present day, belave in this mediam? This is the problem which bus been investigated for some years ly an English chenist, J. 1. Phipson.

Itis experiments wero tried upon plants of the genera poa, agrostis, trifolium, myosotis, antirrhinum, and convolvulus. Me had the roots placed in fertile soil and exposed the upper parts of the phants in ghass covers regulatea to the light of the sky, with a temperature vary from $15^{\circ}$ to $26^{\circ} \mathrm{C}$. during the day.

In earbonic acid the phants do not prosper, in hydrogen they do better; the hydrogell is gradually ahsorbed and disappears at the end of n few wecks. In nitrogen the convolvulus arvensis lives for a long time, provided that carbonic ned is kept freely in the water which bathes its roots. In this experiment the ronts were kept in water. In nitrogen contain. ing a third part of carbonic acid the vegotation prospered, and after a jew weeks the amalysis found inside the glass cover nearly the composition of nir, without its volume having changed. 'The piant had made oxygen.

A curious cosmogonic fact results from these experiments; we must attributo the genesis of oxygen to vegetable liff, 1 condition sine qua non of animal life.--Popular Science News.

Genesis of Natulial Phosphate.Acoording to Gnutier, it has been experi. mentally established that at least a part of the tribasic calcium phosphato has rosulted from the astion of ammonium phosphate upon limestone, the anmonium phosphate having itself leen derived from tho bacterian destruction of ammunium.

## Chemical Pèrfumes.

Almost all the natural perfumes are of vegetable origin, and are derived from the treatment of flowers and fruits. In this why are obtaned the aromatic essential oils of rose, mint, misi, santal, thyme, cloves, etc., and the perfumes of thic violet, iris, and jusmin. Musk is the only important perfume that is of animal origin.

For a long time now, however, the odor of fruits has been imitated with the aldehydes and ethers of fatty acids, such as the acetates, valerianates, benzoates, salicylates and butyrates of metyyl, ethyl and amy, which, mixed in delinite proportions, recall the odor of strawberries, raspberries, apples, pears, etc. The following are two examples of such mix-tures:-

PERFUSE OF THE PINE APPLE.


## PERFUME OF THE APPLE.



The aroma of rum and cognac and the boquet of wines have also been reproduced artiticially. We shall not dwell upon the danger that accompanies the use of these products in a large quantity when they are mixed with beverages and alimentary substances. We shall occupy ourselves here more particularly either with products like those which we find in nature, such as vanilline, or with perfunes such as musk and the odor of violet, which are designed not for slimentation, but for perfumery properly so called.

Auong the aromatic products employed as perfumes wo may first mention methylsalicylic ether, which reproduces the oil of wintergreen. The oil of bitter almonds, too, has been frequently replaced by nitrobenzine. Nitrobenzine, as regards composition, is absolutely different from the oil of bitter slmonds, but it resembles it in odor. Benzaldeliyde, likewise, has ruplaced the oil of bitter almonds in' certain cases.

Such substances possess but a secondary importance; but vanilline, on the contrary; which reproduces the odoriforous principle of the vanilia bean, is an object of an extensive and very prosperous manufacture. The first process that gave rise to it was elaborated in 1574 by Messrs. Ticmann and Harmann. In studying coniferine, these scientists found that it wias formed of a glucoside which, under the: influence of a special ferment (cmulsine) split up into glucose and coniferic acid. This latter, through oxidntion, gives vanilline. The coniferine itself, oxidised with a mixture of sulphuric Heid and bichromiate, furnishes vainilline.

It was by this process tlint it was first manufuctured. The method of puritica. tion was very simple. Like aldehyde vanilla possesses the property of forming an insoluble bisulphite combination, which was scparated from the mass and afterward decomposed.

Chemically, vanilline wethylprotocate. chuic aldehyde.

The arrangement of the benzenic nucleus is of importance, since isounniline, which is constituted by exactly the same groupings, but diflierently placed, has no odor. After the formula of vanilline became known, an endeavor was made to employ the neighboring bodies, to add the groupings that were wanting, and to properly place them with respect to each other. A host of methods was proposed to this effect, in making use of eugenol (De Laire and Tiemann), which was oxidised by permanganate; of cugenol and bromide of methylene (Da Boissien) ; and of guaiacol and pyrocatechine (Tiemana and Reimer). Vamilline is ceven found in certain natural products, such as the benzoin of Sinn, crude bect sugar, assafotida, and opium. A certain number of these processes is employed industrially.

Piperonal or heliotropine is closely connected with vanilline. It is, in fact, the methylenic ether of protocatechuic aldehyde. In order to prepare it, pipericacid is oxidised by permanganate, but it can also be obtained by means of safrol. It is found in the oils of sassafras and shikimal, and can also be obtained from the oil of camphor. Coumarine is the anhydride of ortho oxycinnamic acid. It has been obtained synthetically by Perkia by causing acetic amhydride to re-act upon the sodium salt of salicylic aldehyde. It is especially extracted from natural products, such as the tonka bean and the "vanilla plant" (liatris odoratissima) of the United States.

Spirit of turpentine has likewise yielded ne perfume, the terpinol of De Laire. To this effect one can either dehydrate terpene or trest spirit of turpentine directly. This perfume is known under the name of lily of the valley or lilac.

We now come to the two most recent discoverers, viz., the perfume of muskand that of the violet. Natural musk is the product of a secretion of the musk deer, a ruminant mammal that inhnbits certain regions of Asis. The perfume is found in a sack which usually contains from fourteen to twenty grammes of it. It is ilso found, but in much sumbler or even minimum quantity, in other animals, such as the civet, the musk rat, the badger, and the martin. Certain plants, too, oftea possess the odor of musk. This product is of the highest importance, since it is the base of all artificial perfumes, which sometimes contain considerable quantities of $i t$.

The first process of preparation of a product haring the odor of musk was discovered by Messrs Sharier and Maffeld, who heated a mixture of dinechipl bunzine, insobutylic alcohol, and chloride of zine, which they afterwards ibroke up and ni-
trated. The truly industrinal discovery of an artilicial mask dates back to 1889 , and was made by Mr. Baur, on the ocension. of some researches upon the oil of resin.
In order to prepare the Baur unsk chloride of isobutyl is made to react upon toluene (methyl benzine) in the presence of chloride of aluminum. We thus obtain isobutyl toluene, which, under the influenct: of nitric acid, is converted into trinitroisobutol toluene, which is the somewhat cumbersome cheurical name of commercial musk.
There exists, theoretically, $a$ host of analogues and homologues of this musk. A certain number of them have been prepared from xylene, cymene, and the diplecnyl and xylyl methanes. A large number of such products possess the characteristic odor of musk.
A no less important discovery is that made: a year ago by Mr. Tiemann, who reproduced synthetically the perfume of the violet (called ionone) after a series of researches of the greatest interest, from a scientitic standpoint.

In order to prepare this perfume we start from citral, which is itself derived from the oil of lemon, or from the oxidation of the alcohols of the formula $\mathrm{C}_{10}$ $\mathrm{H}_{1} \mathrm{O}$ that we find in certain essential oils: geraniol, linaleol, nurantiol, and lavendol. The citral is shaken with acetone and barytes, and pseudo ionone is thus. formed. This body is odorless and in order to render it odorous it is necessary to convert it into ionone, a product which. is very closely related, but which is cyclic while the psuedo derivative is of the openchain series. A long series of similar products can be made with other acetones, and these have heen studied with the greatest care by Messrs. De Laire and Tiemenn.

Messrs. Tiemann and Kruger, on treiting orris root with approprinte solutions, have separated various products and, among others, irone, whicin is the odorous. principle of this root, and it was in thio wake of these experiments that the synthesis of ionone was made, these two bodies. being, in fact, isomerous, and consequent:ly very closely relatud.-Le Genic Civil; through Chemical Trade Journal.

The lnfluence: of $\mathrm{CO}_{2}$ on Flames.From experiments made with naked flames results have been obtained showing that the thames of liquid hydrocarbons burnt from wieks require a proportion of earbon dioxide to aif, ateraging about 15 per cent. oi the mixture, for the extinction of ordinary finmes, A coal.gas fame burnt from u jet requires as much as 33 per cent. of carbon dioxide in the air to extinguish it ; while the hydrogen flame re. quires no luss than is per cent. It is of interest to note: that the: fame of firodamp is easily extinguished, requiring the presence of only 10 per cent. of the extinctive gas.-Chem. Traile. Jour.

906 persons in $1,000,000$ die of old age.

## BUTTERMILK Toilet Soap．



Over 2，000，000
Caxke Sold in 1892 The Best Selling Toilat Soap in the World．
Excels any 25 cent Soap on the Market．Nets the Retailer a good profit．
When sold at a very popular price it will not remain on your counters．Try －2．sample lot．
The qually of this may in GUAitASTtifib．See that he tame＂udirteresill．k＂is jrinted as alwove＂in green －bronze＂and the name＂Cosmo lbuttermilk Soap Cons－ pany，Chlcaso，＂fa diamond of end of gackace．Heware of initaticns．

## COSMO BUTTERMLK SOAP CO．，

185 Wabash Ave．，CHICAGO．
T．W．HUDSON \＆CO．，－Toronto， Soln Agents for Camaila．

## Rubber Goods

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Oar line of ENEMAS，TCBING，FOUN． TAINS，ATOMIZERS，is very courplete anil prices raght．Buyers can effect great saving iby placing orders with us．

## Sure Selling Specialties ：

## Carson＇s Bitters <br> Pectoria

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Allan＇s Cough Candies \＆groas ifinxes at 1.00 iner ghox．

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Fitll lincs of Sundrics．
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ALLAN \＆CO．， 55 Front 8t．East，TORONTC．


THEY REFRESH，STIMULATE AND NOURISH．
Recommended by Physicians throughout the Dominion．
BREWERY AT LONDON，ONTARIO，CANADA．

## KENNEDY＇S

Magic Catarth Snuff
A POSITIVE CURE FOR
Catarrh，淡
Cold in the Head， Catarrhal Deafness，
洸 Headache，\＆c．
It is relialle，safe and sure．hiving instant relicf in the must distressung üns．

Price，es Cents．
Wholusale of Kerry，Watson st（：o．，Montrcal． hyman，Knox（t Co．，Shontreal and Torchts．
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YES．IT WILL PAY YOU TO KEEP －DICK＇S Universal • Medicines FOR HORSES AND CATILE．
They always gise crillice matlefaction and there are no medicines In the market that can compare with them．
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Is a certain and sperdy cure for 1NTEMIl：MANCE，and destroy all appetite for alcololic liyuors Price：\＄1．00
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S．LACHANCE．Montreal．
THE OLDEST．－THE BEST．





## A Druggist's Specialty. GURTIS \& SON'S Yankee Brand PUBE Spruce Gum

Is meeting with the success its high qualities menit.

EFS A TRIAL ORDER KOLICITED
CURTIS \& SON, PORTLAND, ME., - U.S.A.

## MINARD'S <br> "Kilig of palit: <br> LINIMENT

SOLD TO THF: TRADI: 135
 MONTREAL\{ Laman Sons SiCo Fians So TINGSTON Inman, Fnox di Co. KINGSTON-Menry Shinact it Co.
EAMEILTON-Archdate Witsons Co. J. Winer s Co LONDON - London Drur Co. C. McCalluna Co . Jak, A. Kennedy «Co.


The "IIIEAI،" $\operatorname{sig}$ M.AnKtil outrits for letterdilg imajilay Caraixd IVrjee Ticketm.
grate of setm. $\operatorname{Tite}$. up.
 Outht.- larse and smail leters, capitals, s:3 111. Mysil. 2 nizer of flaurem Si.ki : rame 1 ath lach. ctorated Dutimus Tho Celebrated De inne Tiso Facexvemersty as hord Send for complete P rice
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E. R. BAKER, : Manulacturer,
1301 Jackson Streot CHICAGO, ILL. CE

Mention thin paper In ordeting and recelie Fill:t: 25 whare fret Superior Card Board.



For cale at Manufacturers' l'rices by the leaditign wholesale drugrists and drugrivtes sumdrimen throughout Canaila.

## IF YOU USE THE



You will beat your neighbor as no other approaches it for beanty.
Scant 2 oz. (looks like a 300z.) completeopen crown sprinkler, at $\$ 7.83$ net per gross. Sample sent on receipt of 5 cents to pay postage.
T. C. Wheaton \& Co., Millville, N. J.. manufacturers of Flint, Gricin and Amber ware, and the largest factors of Hómeo. Vials in the world.

## For Druggists, Manufacturing Chemists, Perfumers, Etc.

Suitable for the manufacture of Baking Powder, Tooth Powder, Face Powder, Condition Powder, and for the Compound Powders of the Pharmacopceia.
tifese aif: made in three sizes:
SUITABLE TO MIX-5 Ibs., 10 lbs. and 25 lbs.-at \$6, \$12 and \$18 Each.


Rubber Brush rubs all lumps out of powder before it is sifted.
These machines mix the powders thoroughly and then force thetn through sieves of the proper fineness for the intended powders. : Two Sieves, 40 and 60 mesh, with esch Mixer.
-This Mijxer añd Siffer is handledi hy the jorominent wholesale druggists of the United States and gives. general satisfaction. Amongst those handing theni are. Morrison, Phummar, Chicago ; Bullock itCrenshaw, and Smith, Kline d Co., Philadelphiag; W. H. Sclieffelin. ©Co., and Hekesson d Robbins, New Xork, and others.
$\because$ The 10 . 16 . Mixer is specinlly adiapted for the general requiruments of the Retail Druggist.
."WM. J. DYAS, Strathroy, Ontario, Sole Agent for Canada:

## Business Notices.

As the denkn of the Casautas Durgoint is to benent mutunily all fiterested th the huslices, we would repuest all parties orderims roods or maklut: purchases of ans description from houses adierthing with us to mention in their letter that such sulvertisement was noticed in the Casadiar Dhtoolst.
The attention of Drukgistw and others who may ly ins. tervated in the articles alvertioen in this journal, is call ed to the Srectan Cosminkration of the Bupinem Notices

## Hiatt djuturrs.

The wellknown brands of "Lebat's" Stoutand Ales, which are peculiarly adapt ed for invalids and convalescents, are advertised on page 281 of this issue.

## Kofrico Mrore.

R. \& T. W. is the well known brand of Watson's Cough Drops which have increased so largely in their sales year after year, until now, no drug stock is complete without them. At this season of the year it is purticularly desirablo that you have a full supply. ilow is your stock?
I.ino .Tuice.

Messrs. Simpson Bros. ac Co., Malifax, N.S., have this year handled over 10,000 gallons of Liure Juice-shipments outside of Americas going to India, Africa and Australia. The silver medal, the highest award, was awarded to their Lime Juica - the Provincial Exhibition of Nova Scotia.

## Meathol Cough Dropis.

The latest addition to the list of cough confections is the Menthol Cough Drop. The presentation of Meathol in this form for the alleviation of hourseness, sore throat and tickling cough is a happy thought, and we have no doubt their efficacy will be the means of creating a largo demand. See advertisement in this asue
Waljgote Chemitenix.

The Walpole Dye and Chenical Co. have appointed Mr. G. Gennert, of 24 E . Thirteenth-st., New York City, solu selling agent for the Middle and Southern States. He will carry a fall line of Wal pole Hyposulphite, Sulphite of Soda, and Waipole double refined Chemicals in stock. Goods can be shipped either direct from the manufactory or from this agency, as rates of freight favor the purchaser.

## Chewling 'uman

The Canadian Specialty Co. report increasing sales for the Royal Memedy and Extract Co.'s Chewing Guans, which are clained to be the finest line of gams in the market. Their latest is the Celery and Pepsin Gum, which is very neatly put up, and has proved to be a fast seller. Druggists not carrying these goods in atock should try a sample lot. The Conpany is furnishing a nice show case with in moderate purchsee of their goods.
$\left.\begin{array}{c}\text { Washington, D. C., } \\ \text { Sept. 11th, 1894. }\end{array}\right\}$
Gertlemen:-
I desire to thank you for samples, of the drug, often but poorly imitated, made by your firm and known as "Antikamnia."

The adoption of the monogram on the now tablets and the recall of all the old
stock from the market, will prove of benoIft to you and tho many pligsicians who may hereafter destre to aftord relief by its use.

Yours respectfully,
C. E. Posrlisy, M.D.,

1429 1lth St., N. W.

## (To Tur: Antikameia Cummical Co.

 St. Louis, Mo.
## Demonstration of the Admixture of Forelgn Fats with Vaselin.

Is Reolo and Dupin give, in l'Union pharmaceutique, the following method of detecting the admixture of animal or vegetable fats with sascline: A weighed quantity of vasclin, say 5 gm. , is rubbed up in a mortar with $\overline{0}$ drops of a solution of potassium permunganze. If the vase lin be unadulterated the rosy color of the solution will remmin umaltered, but if animal or vegetable fats be present will turn to a chestnut brown, the depth of which will be in direct proportion to the amount of adulterant present.

## The Behavior of Chioral Toward Water and Alcohol.

Piofessor Schar, in the Journal der Pharmacie von Elsazs-Lothringen, shows how instably tho water is combined with the alcohol in chloral hydraten in the presence of chloral alcoholate. if an alcoholic solution of chloral alcoholate be poured into water, oily drops inmenediately separate, which, on tirst separstion, are dissolved only by hard and persistent stirring. If left to stand a while these drops coalesce and form an oily stratum at the bottom of the glass, which, without my appurent change in character, will dissolvo upon the slightest rgitation. In this manner the nearly insoluble alcoholate, by merely being brought into contact with water, exchanges the alcoholic combination for water. In the same manner a freshly preparedalcoholicsolution of chlora: hydrate when mixed with water, st once makes a limpid solution. If, however, the same be allowed to stand a short tiune before being mixed with water, the oily drops, referred to above, separate, and subsequently redissolve. Thereforc the solvent, in both instances, is directly responsible for the interchange of the water and alcohol molecules.

## A Liberal Offer.

The enterprise of the publishers of The Youlh's Companion of Boston, Mass., has steadily advanced the paper year by year, keeping it always in the front rank of the best periodicals. It inlls to day as no other publication the popular demand for-a practical fmmily paper, one that is equally. valued and enioyed by old and young, and free from all objectionable features.

The best writers of all lands are engaged to write for its columns. Among the faruous contributors for the volume for 1895 are two daughters of Queen Victoria;

Mr. Gladstone, the most cminent living statesman, who has for the third time written nu article expressly for The Com panion: Sir Edwin Arnold, W. Clark Russell, Charles Dickens, lirank 1 . Stockton, J. 'I'. 'I'rowbridge, Mark Twain, Cy Warman, the famons locomotive engineer, and more than a handred other writers who are known the world over.

The Compuation appeals to all, whether in the home, in professiomal or business life, to the educator and laborer in evory depmertment of work. Its sound, practical ciatorals deal frankly, fairly and concisely with the questions of the day. Every utterancemay be accepted without reserve. Full Prospectus nad specimen copies sent free on upplication.

New Subjeribers will receivo The Com panion free to 189.5 if they sulscribe at once, sendung sliti, the year's subserip. tion price. It comes every week, finoly illustrated.

## A Christmás Book.



IT 5 publishera of Toronto Saluriay Nioht may well offer to placu their Christmas Num. ber of this year alongside anything produced anywhere Tho book itrelt is cxtromoly hand. some. Tho cover In designel or Mr. John D. lielly, of Turanto. atio sxate of the must bribiant and attradivo thing ta the way of a corer over derno in tho Duabinion. Three nictures, instead of one nen biven awng with the Number thin year, and "C:.tarmed ly the Song 13tri" has oaly to bo
 chillera llstening to tho birde. It wis paintel beri.-l. liced (whose fanious pictures. " Murt-
 Slorenate" our readers will remember havirg seen atitho Tornnto Fris) and is reproluent in the chocrina colora of real life by tho newly dircovercd process called photo-lithograplis: It is $n$ great pleture No. ISapplement. "llaymases." is a French mastel and a mareel of
 "A Intileult Trick," in tho drei popahar seproduction of an oiderashoned cteed encraviag by T. Webster. On tho expiry of tioc conerifist The Sheprand I'ublishing Co. (LAti.) ai onco hat a plato made of which thes nero peoprictord, nad wime furmerly coald not lo buazin: for lens than tea dollars they now sto whth thoChristmas Number free. As a study In faces it cannot bo equalled. The theco pietures linvobeen adenired by all who havesecn them. Tho leacIng stors in tho Christmas Numberin by lenbert lhart, recently, nssociaial with Jernats $k$. Jeforne in mublehbige the Iomion ISHcr. bnt beitcr known as Julio Share, vilmo writunge u.sico ta:o Detrolt Free Press fnmous 1lis rinzy. Ono Dasis Conrtship, accuplen niteen
 Ilistrationa aro chyltal. Other stoaise are: The Simado of Ilelen, by Finnels MSorimon: Io Ioup Garou, by Clitard Smith: Why Johnaio W'at IJack L.s Exdmund Fo Sheppand: Tho Pasding of Ragne the Club Man, by Margaret IIarves, and An IIerosc Irabeclle, bs Joo ClarkThero are beaulliully dilustrated poems by J. IV. ïcssoush and Renien luatchare, Kempall : - ' seami James A. Tucker. Theroaroloch c:atrinsers nut (If not xotneoneshould tako bold o: is) anal our realers ahouhd reo tho brook. It costs felts cents (ficiurcs and allh and is fors ulched in tubcen romis for maillacr.

# Books \& Magazines. 

## Magazines. <br> Seribner's Ilngaxine.

The November number of Scribuer's Magazine has for its leading article one of especially timely interest on "Election Night in a Newspaper Oltice," written by Julian Ralph, one of the New Yook Suris most valued special correspondents and a newspaper man of wide experience. Prof. N. S. Shaler's article on "The Horse," another of his popular papers on Domesticated Animals, tells in an untechnical and thoroughly interesting way of tho develop. ment of this tine animal, whose many adnirable qualities have contributed so much to man's advancement in ceviliza. tion. The distinguished French painter Delort has made a series of striking pictures to accompany the text. The frontispiece of the number is.at reproduction of Louis Deschamps' great painting "Charity." It is another of Mr. Hammerton's selections, who contributes an entertaining biographical sketch of the artist.

## A Thankwgiving Mugariuc.

When a woman is at her best, mentally and physically, is a question which receives adequato answer at the hands of such mpresentative women as Mrs. Julia Ward Howe, Mary E. Wilkins, Mrs. Amelia F. Barr, Mrs. Burton Harrison, "Octave Thanet," "Gail Hamilton," Mary Mapes Dodge, and others in the November Ladies' Home Journal. Good fiction is a tonic, and the serial story, "A Minister of the World," by Caroline Atwater Mason, for which William T. Smedley has prepared some chrrming illustrations, will prove one of the best. Mrs. A. D. T. Whitney contributes another interesting "Friendly Letter to Girl Friends'" and Mrs. Burton Kingsland writes of the social laws which govern ilie "Intreduction of a Girl to Society." The twelfth installinent of Mr. William Dean Howells' "My Literary Passions" is full of interest a ind charm, and Mrs. 1.yman Abbott, in "Looking Toward a Wife," defines the wisest position for parents in the love affairs of their sons. Rose Hawthorne Lathrop contributes a dainty poem, and Mary Chahoon: a Thanksgiving story, "The 'Sociable' at Barnes' Corners." The Christinasanthem by Bruno Oscar Klein, which won the prize in the Journal's Musical Series, is given. Palmer Cox has his "Brownies" play football. The editor discusses the financial problems that have beset the nation during the past year, applying their effects upon women in the home. Marin Parloa writes of "Heat and Light in France," Mrs. Mallon of "Graceful Dinner Gowns," Miss Hooper of "Frocks for Girls of All Ages," Helen Juy of "The Work of a Farmer's Wife," and Elizabeth Robinson Scovil of "Thanksgiving for the Children." For this delightful issue Mr. Wenzell has designed na attractive
cover, which does its part toward making this holiday number a particularly attrac. tive one, and one which no woman can afford to bo without. The Journal is published by the Curtis Publishing Com. pany, of Philadelphia, for ten cents per number and one dollar per year.

## Heviow of heviuwn.

The Review of Reciews for November, in its editorial departuent "The Progress of the World" has some suggestive para. graphs bearing on the present attempts it "municipal housecleming" in the great cities of New York, Chicago and San Franciseo, and takes the occasion to emphasize certain lessons to be learned from European municipal experience. In speaking of Glasgow's system of street cars, owned and operated by the municipality, the editor points out that this responsibility was not undertaken by the city until the municipal government had been tested with many large enterprises which it bad shown its fitness to control and operate succrssfully; it is now managing its street car servict says the he view, as successfully as the best of our American cities manage their fire departments.
A. Famoun Show of Benuty.

The show of distinguished beauty, transfixed by famous artists, which is now taking place at the Academy of Eine Arts in New York, has been antic:pated by The Cosmopolitan Mayazinc in its November issue, in an article by Wm. A. Collin, with illustrations of some of the more benutiful faces. The "Great Passions of History" series has for this month's subject the romantic career of Agnes Sorel, who influenced the destinies of France under Charles VII. "The Art Schools of America," "The Great British Northwest Territory", "Tha Chiefs of the American Press," and the "Public Library Movement," are amongst The Cosmopolitan's table of contents. Survivors of the war and their children will find intense interest in "The Story of a Thousand," a personal narrative begun in this number by Albion W. Tourgee, who tells in a graphic way, of a regiment which saw fierce ser vice-of its organization, its marches, its sports, and its denth-roll.

## The Cloristinans Number

Is always a notable edition of this favorite magazine, and this year it. is full of unusually good things. Many of the contributions have the distinctive flavor of the season, among them being Christmas Cheer, Gifts and Giving, A Plantation Christmas, and a Cliristmas Entertainment. In the Kindergarten Suries the subject is Christmas Work for the Child ren, and the chapters on Venetian Iron Work and Crupe and Tissue Papers also treat of articles suitable for presentation. Barnard College (New York City) is the subject of an, able paper hy a graduate of ' 93 , and there is a practical and helpful article on Photo-Negative Retouching as an Exployment for Women. The initial chapter of a series on the Relations of Mother snd Son opens the subject inter-
estingly; the second instalment of The House discusses sensibly the matter of furnishing, and the continuation of What to Do in Illness will be of great benelit toevery Mother. In the popular Tea Table Talks is found gossip about seasonable affiars. There is an article on Fur Rugs. and. Robrs, and the newest books are noticed. New desigus are shown in Knitting, Netting, Tasting, Crocheting, Lace. Making, etc. The subscription price of the Delineutor is One Dollar a year. Siugle copios, Fifteen Cints. Address. orders to The Delineator Publishing Co.g. Ltd., 33 Richmond St. West, Toronto, Ont.

Frank I.enition Popalur Monthys.
Frank Leslie's Popular Monthly forNovember describes and illustrates "Niagara in Warness," in an claborate articlewritten by Arthur Vaughan Ablott, C. E., which gives un idea at once clear and urost iupresisive of the stupendous achievewent of diverting the power of the mighty cataract to mechanical use. Other illustrated articles are: "To Rio in a Sailing Vessel;" by Henry Wysham Lanier;. "Costume on the Stage," by Percy Anderson; "The Country Fair," hy Thos. Donnelly. "Pike's Peak by Moonilight," by W. C. Campbell; "Shinnecock Silhouettes," by Don C. Seitz; "The Strugelefor Life in the Deep," by Col. Nicholas Pike; and a second paper on "British Etching," by Frederick Wedmore.
——: OUR :-_
Lades hmpatious.
ALUM, in bbls. ALUM POWDERED, in bbls. FINEST EPSOM SALTS; in bb/s. FINEST SUBLIMED SULPHUR, in bbls.. BOLL SULPHUR, in bbls. CHLORIDE LIME, in casks. SALTPETRE XTALS, in kegs. SALTPETRE POWDERED, in casks. POWDERED HELLEBORE, in bb/s. GLYCERINE, in tins. WHITE CASTILE SOAP, bars. WHITE CASTILE SOAP, cakes. PARIS GREEN, in casks and drums. GIBSON'S CANDIES, full-assortment.

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# IF YOU ARE OFFERING <br> <br> HOLIDAY GOODS? 

 <br> <br> HOLIDAY GOODS?}

Bear in mind that the Druggists of Canada handle the finest lines of goods, and control the best class of customers.

## Reaches the entire drug trade of the Dominion, from British Columbia to Prince

 Edward Island.
## Canadian Druggist Prices Current: CORRECTED TO NOVEMBER 10th, 1894.



| Castoh, Filure, lb. | 90 00 | 200 |
| :---: | :---: | :---: |
| Cunisk, lirnah, ponelered, | (1) | 12 |
| Precip., see Calciam, lb | 10 | 12 |
| Preprared, lb... | 5 | (i) |
| Cinacosl., Animal, powd. | 4 | 5 |
| Willow, powdered, lb.. | 20 | 25 |
| Ci.ovs, 11............ | 25 | 30 |
| 'owdered, 1 | 30 | 35 |
| Cochise:st, S.G., lb | 40 | 45 |
|  | 5 | SU |
| Cantaridal, 11 | $2 \%$ | 27 |
| Cosrectios, Semmi, | 35 | 40 |
| Creosote, Woorl, 1 l . | 200 | 250 |
| Cutthertsh lbose, Ib | 25 | 30 |
| Dextmise, lb, .. | 10 | 12 |
| Doven's towner, | 150 | 160 |
| Ereot, Spmish, 11 , | 75 | 80 |
| lowdered, Ib | 90 | 100 |
| Encoutis, $k$ cith's, uz. | 200 | 210 |
| Exitager, logwoorl, bulk, | 13 | 14 |
| lounds, lh............ | 14 | 17 |
| Fionkiss, Armica, | 15 | 90 |
| Calcmiula, 16 | 53 | 60 |
| Chamosnile, Roman, Ib | 30 | 35 |
| Germatu, lb | 40 | 45 |
| Eliler, lb. | 29 | 22 |
| Iavender, 1 t, | 1\% | 1.5 |
| Rose, red, French, | 160 | 200 |
| Ilosemary, 16. | 2.5 | 3) |
| Suffron, Ansericat, lt, | 7.5 | so |
| Spanish, Val'a, oz. | 100 | 125 |
| Geiarise, Cooper's lb | 75 | S0 |
| French, white, Ib. | 3.5 | 40 |
| Ginctmise, llo.. | 14 | 16 |
| Gualmas. | 300 | 305 |
| Iowniered, 11. | 35 | 3 O |
| Gus A1.0ヶx, Cape, | 13 | 20 |
| 1kirbadocs, lb | 30 | 5.0 |
| Socotrine, 1b, | 6.5 | 70 |
| Assafoctida, lb | 25 | 23 |
| Arahic, lst, li. | 6.5 | 70 |
| lowdered, it | 75 | $8:$ |
| Sifted sorts, Ib | 40 | 4.5 |
| Sorts, 1b.. | 25 | 30 |
| I3enzoin, ll. | 50 | 100 |
| Catechu, l3lack, 16 | 3 | 20 |
| Gamboge. jowdered, lis | 120 | $1 \%$ |
| Guxima, th. | 50 | 100 |
| Powdered, 1b | 70 | 75 |
| Kino, trac, Ib | 125 |  |
| Myrrb, dib.... | 45 | 48 |
| Howdered, Ib | 55 | 60 |
| Opium, lb .... | 425 | 450 |
| L'owdered, lb.... | 600 | 650 |
| Scammony, purc Resin, | 1280 | 1300 |
| Shellac, lb., | 45 | 48 |



|  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| . Purity 200 sticks in box | 150 | 150 |  | 20 | 25 | BlxMritit |  |  |
| ". Acmue Pellets, 5 lib, tins | 200 | 200 | iniu Sanke | 40 | 45 | Iolide | 5 | 55 |
|  |  |  |  | 215 | , 5 |  |  |  |
| ib. tins | 2 | 200 | Esenetec, | 300 | 325 |  | 200 | 0 |
| Lurulis, |  | 35 | Sucth | 125 | 150 |  | 9 | 0 |
| , moron | ${ }^{70}$ | 80 | Sxki, Aniso, 1 | 13 | 15 | Powdered, |  | 1 |
|  | 120 | 1 |  | ${ }^{35}$ | 4) |  |  |  |
|  |  |  |  | 30 | 35 |  |  |  |
|  | 9 | 10 |  | 5 | ${ }_{1}^{6}$ |  |  |  |
|  |  | 50 |  |  | $13$ | Caphise, | ${ }^{35}$ |  |
| Musk, |  | 5000 |  | 125 |  |  |  |  |
| ${ }_{\text {Numen }}$ | ${ }_{25}^{21}$ | 25 | Celery | 30 |  | Calcem, Hy |  |  |
| Nutames, 6 | 100 | 110 | Coriamder, | 10 | $12$ | Phosphate, |  |  |
| Nux vomea, il | 10 | 12 | Cumin, | 15 | 20 |  |  |  |
| Powdered, lb . |  | 27 | Fennel, ib | 5 | 17 | Cemus, Oxalat | 10 | 2 |
| Oakus, lb | 12 | 15 | Fenugreek, powi |  | 9 |  |  |  |
|  | 70 | 75 | Flax, cleaned, 16 | $3{ }^{31}$ | 4 | Culoorat, Hydrat | 00 | 80 |
| Citrine, IL | 45 | 50 | Ground, it |  | $\begin{aligned} & 5 \\ & 6 \end{aligned}$ |  | 75 |  |
| Pambiberye | 15 | 18 |  | 5 | 2 | Cixa |  |  |
| prean |  |  |  | 1 | 12 | Cischosise, |  |  |
| Pitcu, black, lib | 3 | $\stackrel{3}{4}$ | Puank ${ }_{\text {Pan }}$ | ${ }_{25}^{15}$ | $\begin{aligned} & 20 \\ & 30 \end{aligned}$ | Cocatse, Ma | 70 |  |
| Bergundy, true | 10 |  | Qui | 65 | 70 | Cobsia, ${ }^{\text {a }}$ п | 100 |  |
| Plastrar, cilcine | 225 | 325 |  | 8 | 9 |  |  |  |
| hhesive, yil | 12 | 13 | Strophant | $50$ | $\stackrel{55}{25}$ |  |  |  |
| laiona |  | 70 | Worm, lb | $\frac{22}{22}$ | $25$ |  |  |  |
| Gallanum Co | 80 | 85 | St: |  |  | Соген |  |  |
|  |  |  | Castic, M | ${ }_{25}^{10}$ | $\frac{12}{2}$ |  |  |  |
| Porpy Heans, per ${ }_{\text {cosis }}$ | ${ }^{100}$ | ${ }^{1} 10$ | White, Conti's | $\frac{15}{25}$ | $\begin{aligned} & 16 \\ & 35 \end{aligned}$ | Etiès, Aceti |  |  |
| Rosis, Common, | ${ }_{3}^{25}$ | 3 |  | ${ }^{25}$ |  | Exalpose, | $1{ }^{100}$ | 10 |
| Resorcis, White, |  |  | Sprrmachit, lib | 55 | 60 | Hyoscriarine, Sulp., crystals, gr. |  |  |
| Ruchelie Salt | 25 | 28 | Tunerstise, Clian | 75 | 80 | Iodise, 1 l | 75 |  |
| oot, Aconite |  |  | Venice | 10 | 12 | 10Dorors, |  |  |
| Althea, cra | 30 | 35 | ${ }^{\text {Wax }}$ | 50 | 55 | Torol, or. |  |  |
| Blood, 1 lb | 15 | 16 | Wood, Guaiac, rappe | 5 | 6 | Carbonate, | 15 |  |
| Bitter, 1 l | 27 | 30 | Quassia chips, 1 l | 10 | 12 | ascll., lb. | 30 |  |
| Blacklicrry, |  | 18 | Red Saunde | 5 |  | Chloride | ${ }^{45}$ |  |
| Burdock, | 18 |  | Santal, ground, |  |  |  |  |  |
| Calamus, siced, | ${ }_{20}$ |  | ato chemioals. |  |  | Citrate, U.s. P. | 90 |  |
|  |  | ${ }_{20}$ | Acip, Acctic, |  |  | ${ }_{\text {And }}$ And ${ }^{\text {animi }}$ |  |  |
| Colchicum, 1 l | 40 |  | Berzoic, Euglish, | 20 | ${ }_{25}^{0}$ | Quin. and | 18 |  |
| Columbo, il | 20 | 22 | Corm, | 10 |  | And |  |  |
| Powdered, 1 l | 25 |  | Boracie, | ${ }_{8}^{20}$ |  | Dialyzed, Solutio |  |  |
|  | 38 | ${ }_{25}$ | Carbohic Crysum | - 10 | 25 | Eerrocyanid |  |  |
| Curcuma, pow | 13 | 14 | , |  |  | Iodud |  |  |
| Dandelion, lb | 15 | 18 | Citric, 1 b | 50 |  | Syrup, 1 lb | 40 |  |
| Elccann | 15 | 10 |  | 10 | 12 | Lactute, oz | 5 |  |
| Galang | 15 | 18 | Hydrobromic, diliuted |  | 35 | Pernitrate, |  |  |
| Gentian or | ${ }_{9}^{22}$ | 20 | Hydrocyanic, diluted |  |  | Phosplate |  |  |
| Ground, 16 | 10 | 12 | Lactic, ${ }^{\text {tes }}$ doz ${ }^{\text {dent }}$ | 20 |  | Exiphicate, |  |  |
| Poudered, ib | '13 | 15 | Muriatic, 1 l | 3 | 5 | And Yotase | 30 |  |
| Ginger, African, | 18 |  | Chem, pur |  |  | $\mathrm{And}^{\text {Amm }}$ |  |  |
|  | 20 |  | Nitric, ll.. |  |  | Lexd, Aceta | 13 |  |
| Jamnica, bleha., ${ }^{\text {Po., }}$, ${ }^{\text {a }}$ | 30 30 | 35 | Chem, pure | $\frac{25}{75}$ |  | ${ }_{\text {Carthonat }}$ | 35 |  |
| Ginseng, | 300 | 325 | Oxatic, 1 l . |  | 13 |  | 7 |  |
| Golden Seal, ib |  |  | Yhosphoric, ${ }^{\text {a }}$ | 100 |  | Luse, Chlorinated, |  |  |
| Goid Threa, hib | ${ }^{90}$ | 95 |  |  | ${ }_{28}^{17}$ | In packuges, | ${ }_{30}^{6}$ |  |
| Indian Hemp.... |  |  | Sayngaic, oz. | $1{ }_{60}$ |  | Carbontte, oz. |  |  |
|  | 26.5 | 275 | Sulphuric, car |  |  | Citrate, | 25 |  |
| Powdered, 1 l | 2 so | 300 | Bottles, | 5 | 6 | Iolide, |  |  |
|  | 55 | ${ }^{60}$ | Ch | 8 | 20 | licylate |  |  |
| Kava Kara, |  |  | Tamni |  | 110 | Marimiun, cia |  |  |
| Kaca kaja, | 12 |  | ${ }_{\text {Tartaric, }}$ |  |  | Citranate, |  |  |
| Powidered, il | 13 | 15 | Acoitisis, | 4 |  | Sulph '(Epsomn sait), ib | 19 |  |
| Mandrake, lb |  |  | ALux, cryst.. | 18 | 3 | Masonsess, Black Oxide, | 5 |  |
| Master |  | ${ }_{35}^{40}$ |  |  |  |  |  |  |
| Orris, |  |  | Amsosit |  | 12 | Mercurr, |  |  |
| Powdersel, 15. | 40 | 45 | Ammonius, Bromide, | 65 | 75 | Amminn (luy |  |  |
| Pareir |  |  | Carbonate, |  | 15 |  | ${ }_{00}^{00}$ |  |
| Parsicy, it | 30 |  | Nit |  | 45 | With Chalk | 60 |  |
| Pleurisy, 1 l | 20 | 25 | Murinte, lt |  | 16 | Iodide, Pr | ${ }^{35}$ |  |
| Poke, ${ }^{\text {d }}$. | 15 | 18 | Val | 55 | 60 |  | 5 |  |
| Qucen of the | 18 | 20 | Axiz, N | 16 | 8 | Oxid | 15 |  |
| Rhautari, lb | 20 | 50 | Ast |  | ${ }^{00}$ | Pill (blue M | ${ }_{30}$ | 5 |
| Saramp |  | 2 |  | 00 | 10 | Moxplise | 200 |  |
| Cut, | 50 | 55 |  |  |  |  | 0. |  |
|  |  |  | Absesic, Donovan |  |  |  |  |  |
| still | 13 |  | Foulcr's, sol., lb........ | 13 | 15 | Pxrsts, Suecharated, oz ....... | 35 | 40 |
| Powdereal | 25 | 27 |  |  |  | OCAkrise, Mu |  |  |

## New Patents.

Amongst the recent patents issued from tho U. S. Patent Otfice are the following which are of interest to the drug trade:
No. $503,85 \%$.-Stopper for Hot Ninter l3ags. Dennis 13. Martin, Nuw Haven, Conn., as. signor to the Seanless Rubber Company, вatue place.
A screw-stopper for water-bags, consisting of a spun sheet-matal body having its inner end closed, and its outer end open, and formed with serew threads, and with an annular recess, located between its serew-thrends and its closed inner end a sheet-metal cap applied to the open outer end of the body, a handle secured to the cap, and an annular packing. wnsher located in the recess of the body.
No. 525,92J.-Urinal. August Sahlistrom, Minneapolis, Minn.
A concealed urinal, portable with the person, consisting of a flexible tube depending inside the trousers and provided with a pair of suspending devices attached one above the other, the one below the mouth of the tube for forming a fold to close the tube at its upper end and raising the tube at its lower end, when suspended thereby.
No. 526,353.-Vagimal Syringe. Jessa 11. Lamb. Minorland, and Jonathan C. Hardes. ty, Millville, Ind.
The combination in a vaginal syringe ombracing a main body, a fixed shicld on one end of the main body, and a detach. able and dilatable elastic reversed shield. No. 526,501.-Water l3ag and Food Warmer. Amie II. Plummer, Glencoe, Ill.
In a combined hot water bag and food warmer, the combination with a main water-tight receptacle for hot water, of a pocket attached to the outside of the receptacle and adapted to receive the food to be warmed.
No. 526,850 - Comibined Bottle.Stopper and Syringe. Walter F. Ware, Camden, N. J.
A combined bottle-stopper and syringe, formed of a single piece of soft iubber and comprising a bulb, a conical nozale, and a neck portion situate between the nozzle and bulb, the neck portion having - tapering exterior and adapted to form 8 bottle stopper, there being on the periphery of the neck portion a groove extending from a point below the junction of the nozzle with the neck to a point on the neck above the line of junction.
No. 526,932.-Tecthing. King. Martin I. Metz. ger, New liork, N. X.
A teething ring, the same consisting of a stem bent upon itself to form two opposing and contracting wembers, at trans. verse aperture being made at the lower portion of the stem and at the lower portion of the space between the members, annular ribs formed on the opposite end of the stem, a ring passed through the aperature in the stem, and a nipple located on the end having the ribs.
No. 526,452-Syringe-Comegyn. C. Lusby and Charles H. Richardson, Fhiladelphia, Pin, assignor to the S. S. White Dental Mlanufacturing Company, same place.
A syringe adapted to heat the contents
thereof which consists of an elastic bulb partly surrounded by a metallic slicied, having a serew litted delivery tubecarrying electric conductors extending within it and terminating near the end thereof in the resistance piece adnpted for gomeratingheat, and suitable conducting devices wherely a current may be sent throngh the resistance piece at will.

## Differentiation of Olive and Sesame Olls.

Franz Mussely gives the following, in the Pharmacentische Contralhadle: Into a test-tube of 15 ccm capacity, put $\$$ to 10 gm . of the oil to be tested, mad add 10 com. of dried phrosphorus. Close the tube and dissolve the phosphorons, by the aid of heat, in a water-bath. Lett conl, replace the cork in the test-tube with is plug of lint cotton and set aside in a place where the oil will not congeal. At the end of twenty-four hours, if the oil is pure, whitish oparue streaks will appear through the body of the same, which, in another day, will settle and form a transparent yellowish-brown ring or cup, covering the bottom and sides of the test-tube. If oil of sesame be present to the amount of 10 per cent. at the end of the first day tho white streaks will form, upparently as in the pure oil ; but closer obsersation will detect a decited tiage of yellow amons them, nad at theendot second day all will have becomeyellow, which subsequently becomes brown. The rapidity of the color change depends directly upon the amount of adulterant present. If; for mstance, there be 50 per cent of sesame oil present, a deep brown ring will show itself within from twenty-four to forty-eight hours. The author gives, as a further test, the following: Into a tube of the phosphorized oil let fall a single drop of wood tar, and add 2 ccm . of nmmonia. The tube is then agitated, and if the oil be pure no color change will be noted, but if sesnme oil be present, a brownish color develops, the depth of which depends upon the amount of adulterant.

## New Remedies.

(Continued from page 37̄i.)
Hacmatogen is a derivative of iron al. buminate, very similar to ferratin. An alkaline solution of iron albuminate is precipitated with iron citrato and acetre acid, and the resulting body is a ycllow powder containing 7 per cent. of iron. It is easily soluble in alkalis. Gaduol is an alcoholic extract of cod-liver. Latiordin is merely a synonym of analgene. Papoid is the dried juice of Carica papaya. Lactol or lacto naphthol is the lactic ester of b naphthol. Salautol is a combination of acetone with salicylic acid, and is very similar in its action to salol. Chromogen is the acid sodium salt of di-oxy-naphtholsulphonic acid. Lodopheno-chloral. is a mechanical mixture of equal parts of tinctura of iodine, phenol and chloral hydrate. $I_{i}$ is a brown solution.-British and Col. Dr regist.

## Appendicitis.

Have you got the new disorder?
If you haven't 'tis in order.
To succumb to it at once without delay. It is called uppondents,
Very difterent from gastritis,
Or the common trash diseases of the day.
It creates a happy frolic,
Something like the winter colic,
That has often jarred our inner organs some.
Only wrestless with the weallhy,
And the otherwise most heathy,
Having got it, then your migh to kingdom come.
Midway down in your infestine,
Its interstices infestin',
Is a little alley, blind and dark as night ;
Seading off to simply nowhere,
Catching all stray thiness that go there, As a pocket it is simply out of sight.
It is prone to stop and grapplo
With the seed of grape or apple,
Or a soldier button swallowed with your pie.
Having leved on these chattels,
Then begin cternal battos,
That are api to end in mansions iat the sky.
Once located, never doubt it,
You would never be wathont it;
It's a fad among sociely that's gay,
Old heart failure and paresis
Have decamped and gone to pieces.
And dyspepsia has fallen ly the way.
Then stand back there diabetes,
For hre comes apmendicitis,
With it brood of minor troubles on the wing;
So, vermiform, here's hoping
You'll withstand all drastic doping,
And enrn the appellation, "Vnerowned king."
—Therapy.

## The Photogram.

The Photogram for November, contains a pictorial record of the photographic exhibition and is an excellent number both in regard to Allustrations and matter of interest to the amateur as well as the professional photographer.

This journal has come rapidly into the front rank of ats class, and lins reached a circulation quite marvellous in such a short existence. Published by Dawhorn © Ward (tidd.), Farriugton A ve., London, E. C., England. Subseription price, $\$ 1.10$ per annum.

Twice as many women as men are afdicted with neuralgin.

In consequence of the war letween China and Jnpan, the price of opium has advanced over thirty per cent. during the past month.

| Prirekis, oz. . . . . . . . . . . . . . . . | 100 | 110 | Stryounise, crystals, oz.. | 100 | 110 | La, umler, Chiris. Flour, lb... | 300 | 350 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Phosinionus, ils | 90 | 110 | Sulponal, oz.. | 34 | 35 | Garden, lb................. | 150 | 176 |
| Potassa, Cinstic, white, 11 | 55 | 60 | Sulpilur, Flowers of, lb | 22 | 4 | Lemon, lb. | 200 | 210 |
| Potassium, Acotate, lb. | 35 | 40 | Puro precipitated, 1b | 13 | 20 | Lemongrass, lb............... | 150 | 160 |
| licartomate, 1 l | 15 | 17 | Tartar Emetic, 1 l . | 50 | 65 | Mlustard, Essential, oz......... | 60 | 65 |
| 13 c ¢ ${ }^{\text {romato, }} 1 \mathrm{lb}$ | 14 | 16 | Turmol, (Thymic acid), oz...... | 55 | 60 | Netoli, vz.... ............... | 425 | 450 |
| Bitrat (Cream 'lart | 28 | 25 | Vrilathish, oz.... .......... | 200 | 210 | Orunge, ll | 275 | 300 |
| Bromide, lls. | 55 | 60 | \%rice, Acetate, lb. . . . . . . . . . . | 70 | 75 | Sweet, lb . . . . . . . . . . . . . . | 275 | 300 |
| Carbonate, 1 l | 12 | 13 | Carbonato, lb. | 25 | 30 | Origanum, ll................. | 65 | 70 |
| Chlruate, Eng, | 22 | 25 | Chloride, gramular, oz | 13 | 15 | patchonli, oz. | 20 | 85 |
| Mowderal, | 25 | 27 | Iodide, oz......... | 60 | 65 | Pennyroyal, Ib | 250 | 275 |
| Citrate, lb. | 70 | 75 | Oxido, lb. | 13 | 60 | Peppermint, lb | 425 | 450 |
| Cyanide, ll | 40 | 50 | Sulphate, 1b | 9 | 11 | limunto, 16. | 260 | 275 |
| Hypophosphites, es. | 10 | 12 | Valerianate, oz..... | 25 | 30 | Rhodium, oz. . . . . . . . . . . . . . | 80 | 85 |
| Iodide, 16......... | 400 | 410 | ESSENTIAL OILS. |  |  | Rose, oz. | 760 | 1100 |
| Nitrate, gran, ${ }^{\text {l }}$, | 8 | 10 | Orr, Almond, bitter, oz. | 75 | 80 | Roscmary, lb................. | 70 | 75 |
| Permanganate, lb | 40 | 45 | Srect, lb............. | 50 | 60 | Ruc, oz... | 25 | 30 |
| Prussiate, Red, ib | 50 | 5.5 | Amber, crude, 16. | 40 | 45 | Sandalwoor, | 550 | 750 |
| Xellow, Ib | 32 | 33 | Rec't, 16. | 60 | 65) | Sassufras, lb. | 75 | 80 |
| And Sud. Tartrate, | 25 | 30 | Anise, lb. | 300 | 325 | Savin, Ib. | 160 | 175 |
| Sulphuret, 1b. | 25 | 30 | lay, or. | 50 | 60 | Sprarmint, | 375 | 400 |
| Propilaminse, oz | 33 | 40 | 1ergamot, | 375 | 400 | Spruce, lb | 65 | 70 |
| Quinise, Sulph., bulk ........ | 30 | 32 | Cade, 16. | 90 | 100 | Tunsy, Ib | 425 | 450 |
| Ozs., 0z..... .. ............ | 3.5 | 38 | Cajuput, lb. | 160 | 170 | Thyme, white | 180 | 190 |
| Quininise, Sulphate, ozs., oz. . | 16 | 20 | Capsicma, oz | $\mathrm{fi}_{0}$ | 65 | Wintergreen, 16 | 275 | 300 |
| Saticis, 16. | 375 | 400 | Caraway, lb. | 275 | 300 | Wormseed, lb. | 350 | 375 |
| Sastonin, oz. | 20 | 22 | Cassia, ib. | 175 | 180 | Wormwool, 15. | 425 | 450 |
| Sinvil, Nitrate, cryst., oz | 90 | 100 | Celar |  | 85 | FIXED OIKS. |  |  |
| Fused, oz. | 100 | 110 | Cimmamon, Ceylo | 275 | 300 | Castor, ll . .... ............. | 9 | 11 |
| Sonium, Acetate, llo | 30 | 35 | Citronelle, lb. | 80 | 85 | Cod Liver. N. F., gal. . . . . . . . . | 115 | 125 |
| Hicarbonate, kgs., | 275 | 300 | Clove, 16. | 100 | 110 | Norwegian, gal.. | 150 | 160 |
| Bromide, $16 . .$. | 63 | 65 | Copaiba, 1 l | 175 | 200 | Cottosserd, -gal | 110 | 120 |
| Carbonate, lls | 3 | 6 | Croton, lb . | 150 | 175 | Lakb, gal. | 90 | 100 |
| IIypophosphite, oz | 10 | 12 | Cubeb, 16. | 300 | 325 | Lisserd, boiled, ga | 60 | 63 |
| Hyposulphite, lb. | 3 | 6 | Cumin, It | 550 | 600 | Raw, gal.... | 58 | 61 |
| Iodide, oz... | 40 | 45 | Erigeron, oz | 20 | 25 | Ne:atspoot, gal. | 100 | 110 |
| Salicylate, 16 | 175 | 180 | Euculyptus, | 150 | 175 | Olive, gal. | 130 | 135 |
| Sulphate, 13 | $\stackrel{2}{8}$ | 3 | Fennel, lb... | 160 | 175 | Salad, gal | 225 | 2410 |
| Sulphite, 1 b | 8 | 10 | Geranium, oz | 175 | 180 | Pala, ${ }_{\text {Sper }}$ | 12 | 13 |
| Somsalioz . | 85 | 00 |  | 320 | 360 | Sprem, gal...... | 175 | 180 |
| Spimit Nithe, lb | 35 | 65 | Juniper berries (English), lb. . | 450 | 500 | Tordestine, gal. | 60 | 65 |
| Sthontium, Nitrate, lb... | 18 | 20 | Wood, Ib .............. | 70 | 75 |  |  |  |

## The Standard Brands. <br> MILLIONS - OF - EACH - BRAND <br> Sold Annually. <br> $\}$ 'Cable Extra' 'El Patre' 'Mungo' and 'Madtre e'Hijo' \{ S. DAAIS \& \& SONSS,

"DERBY PLUG," 5c. and 10 cts., "THE SMOKERS' IDEAL," "DERBY," "ATHMETE" OIGARETMES,
D. RITCHIE \& CO., ARE THE BEST.

## Drug Reports.

## Canada.

Business is fairly active. The demand for seasonable goods has been a little in advance of last year owing, no doubt, to the fact that little sorting was done during the summer months. There have been a number of alterations in values."

Camphor is easier for the present, but an advance is not unlikely, as shipments in the future from Formosa and Japan will no doubt be irregular.

Opium has advanced owing to the reports of drought all over Turkey.

Morphin has advauced 20 per cent.
Cocaine shows every indicution of an advance in price.

Oil Eucalyptus-many worthless grades are offered.

Oil Lemon casy-an advance is predicted.

Gum Shellac has again advanced, with a likelihood of its being permanent.

Lithia Salts have advanced all around.
Creavo Tartar has advanced fully 10 per cent. and very firm.

Norway Cod-Liver Oil, firm at advance. Best brands are worth here about $\$ 1.50$ by the barrel.

Quinine, firm at advance.
Gum Arabic is advancing on account of scarcity.
Vanillas have advanced; they aro worth from $\$ 7.00$ to $\$ 12.50$ in New York.

Oil Anise and Cassia are much higher:
Ammonia Carb.-sharp advance.
Caffeine-sharp rise in price.

## England.

$$
\text { London, Oct. } 27 \text { th, } 1894 .
$$

The feature of the month has been the sudden rise in Opium. Morphia manufacturers were only waiting for this, and they have promptly advanced the prices of all the Salts. Speculation and American buying are stated to be the cnuse of the advance in Singrna.

On of Star-Anise and Oil of Cassia are also higher.

Caffeine and its Salts are dearer owing to the absence of the delantured tea, which is permitted to be used duty-free.

Saffron, new stock, just received, and quotations are already lower.

Chlorate of Potash, Quinine, and Valerian, easier.

The extraordinary price to which Pilocarpine has been raised is firmly maintained, as there is only one firm offering-

Ergot, Ipecacuanha, Gum Acacia and Siam Benzoin, are all firmly held, and an advance will probably take place.

Tins wholesale drug trade are now discussing is to which is the better method of selling spirits turpentine, whether the old system of gauging shall continue orwhether the newer method of selling by weight shall take its place. Already in the West sales are made according to weight. In Europe this method has bocome quite universal. Complaints of the errors in gauging and irregular capacity of the barrels used, have been very numerous of late.-Journal of Commerce.

Bacteria are not destroyed by a tenperature as low as $-213^{\circ} \mathrm{C}$. oven, according to Pictet.
Newspapers being impervious to air make good wrappers for ice and for liguid desired to be kept cool.


[^0]:    WM. J. DYAS, Mandfacturens's' Agent.
    Chemicals,
    Drusgrsts' Spccaalics, Proprictary Mcdicines.

    WAREROOMS \& LABORATORY:
    Strathros, Canada.

