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# CANADIAN DRUGGIST. 

## CANADIAN DRUGGIST.

# WILLLAM 山I DYAS $_{1}$ - Editor and Publisheri 

Sumscuiptos, Sl per vana in amoince. Adertising inates oit dpplieation.

The Canadian Druserist is issued on the weh of each month, and all master for insertlon shouh reach us is month, and all matter
the fith of the month.
All chigues or drates to be masle payable to the embitor. Nex aderlisemetts or chasiges to bic addressed

CANADIAN DRUGGIS'l,
Stiathiov, Ontanio.

## SPECIAL REMINDERS.

We iswue on the 15th of each month, theretore. Correspunilence shouht reach us liy the ath.
Now Adsorflemements shoubd reach lis by the ith.
 he Sth.

## Volume Four.

Wimn this number the Casamon Druggisp enters on its fourth volume, stronger and better timan ever.

Commencing in 1889 with an issue of 20 pages, it has now attained more than double its orjginal size, containing is pages, and recognized everywhere as the exponent of pharmaceutical affains for the Dominion.

That such a journal as this was needed for Canadian pharmacists has been aloundantly proven by the great success whith it has attianed in a short time, and from the fact that from one end to the other of this vast Dominion the Casadiax Drug: gist is a welcome visitor to all pharmacists, and the established organ of the entire trade.

Through the services of a number of regular contributors, we hate been enabled to place before our readers every month events of interest to the profession which have occurred in the various Provinees of the Dominion athd which-must have a tendency to bring all phamacists in this country in closer touch with each other, ongendering a fecling of harmony and. doing awiay with that mutual distrust, too frequently found between business
men in their peculiar lines, a ic, is only by such interchange of ideas a edge of each other that any more thins: to a Dominion organization of phammacists, such as has been proposed, can bo consumated.

We would insite druggists to make still further use of our columas by contributing to its pages, cither in correspondence or articles on any speciat subjects of interest to our readers. Our colums are open to all, and as many matters which materially ablect the business of the retail druggists are beginning to make themselvers felt, we would ask for a full and free diseussion of then: in the Casamas Deveseist.

## Drugs and Preparations Used in Dental Practice.

## If W. Rusmros, l. I). s.

The author commenced by referring to the medicaments and appliances of by-gone times, as drecribed in the "Arcima frairfaxama," of which so much has been heard from various sides lately. This work contaned many quaint and curious recipes setting forth the virtues of some remedies still used three centuries later. Among these were pellitory of Spain, which was infused in vinegat, and white arsenie, employed now for the devitaluing of exposed tooth pulps. Taughter was also excited by the reading of in old reciper for toothache, which involved the use of "worms when they bo a-gendering," and gave a num er of quaint directions for use. Opium was another drug used in these carly times, which was still arecognized rentedy.

There could be no doubt that down to about 30 years ago dentistry was in a non progressive state, until the litbors of Sir. Johin Tomes beran the movement which hatd reduced it to atn exact science. The main causes of toothache, decay, de., were now understood and made subservient to treatment. The author then procceded to treat the druss and preparations used in dental panctice in classes, according to the purposes for which they are emplojed.

Amonse escharoties, chromic acid, nitrate of silver, chloride of rine were mentioned. Arsenious acid was used to de. stroy the exposed sensitivg pulp of at
tooth : the e $R$ RI) // had not found that the drugs privi
 rito moyed for the same purpose, was open to many objections. Depsiin luad been sugesested as a solvent for the pulp, but its action was too slow to be mach good.
of anodyne agents, chloroform, chloral hydrate, spinit of camphor and cocatine were well known examples.

With respeet to deating with the pulp after it was dead, to prevent it undergoing patrefaction, very antiseptic new and old had been tried, such as creosote, merenry perchloride, iodoform-the unpleasint taste and odor were grome disiad. santages of this agent the oils of clove and eucalyptus, alcohol, thymol, mapihol, creolin, betamaphtol, ice.
lrof.-Mueller, of Rerlin, had made :un exhanstive sturly of the effeaty of vations antisepties in preventing the decomposition of the pulp. Of course it hat to bo bept in mind that the antiseptic hat not, so to speak, a fair chance: it was and could be applied only at one end, white the decomposition could begin at the other. Prof. Murlier, in accordance with this condition, arranged his experiments in a similar way, starting the putrefat. tion at one end of the pulp and the antrseptics at the other. The whele thins was then phaced in mulritive agar-agar and the two processes lefi to tight it out together.
The results were expressed by dividing the substances used in flaree classes as follows:
(1) Antiseptics promamently aetion in the deromposition of the tooth pulp: Mercuric chloride in powder, mercuric cyanide, phenyl trichloride, carbolic acid, oil of cimmamon, camphophemique, hydronaphitol.
(ㄴ) Antiseptics of doubtulul value: Pive per cent. mercuric chlopide was amons these; it only penetrated hali way through the" pulp.
(3) Antiseptics nearly or quite werth. less for this purpose: lodoiorm, basic aniline colors, berax, boracie acid, maphtalene, and many essential oils.
(4) Antiseptics not yet sufficient tosted to enable their real value to be determined.
Spaking of teething, the author referred to the importance of phosphates and lime in the fool, and empliasized the necessity of a diet containg plenty of bone forming olements for tho mothor during
pregnamey. Meremry had a strong action on the formation of the teeth, and the elistinctive character it imparted to them was often seen as the result of the use of mercurial powders.

Anarstheties next came under consideration. Choroform was more frequently used in Scotland, its home, than in- bingland, where it was considered unsure, since the patient was in an upright position. Ehare was more generally employed in lingland, especially in combination with gas to deepen the ansesthesia. Ni. trous oxide, or laughing gas, was the chief agent employed, the most important factor being its purity. The ellect was pro. duced in 30 to 10 seconds, but, of coarse, owing to the nature of the operations, which necessitated the suspension of the antesthetic, was only of short duration. In a few instances this diffieulty had been met by spraying the agent down the pharynx through the nose.

As local anesthetics, important service was done by chloride and bromide of ethyl. With regard to cocaline, more information was required as to the impurities, which anade its use sonectimes dangerous. Tt was important to make tho injections slowly, from quarter to half int hour being required for half at grain. Strong carbolie acidatso belonged to the samm ditas, as well is mher and uthea lipuids applied with the view of protucing local insensitivemess. The use of the latter was, however, almost as bad as the extraction, owing to the cold produced. Electricity in : fow cases deademed the pain, in a few made it worse, and in the mitpority of casses hat no eftect one way or the other.

Precipitated chalk was the foundation of mostioothpowders; arecanut was useful in. habbiness of the grums, but camphor wis of litthe real use. The statement that it inguriously atfecteci the enamel required contirmation. Yellow bark and myrih were also frequent ingredients; essential oils were not much good save as thavoring agents. Soap and pumice were both useful constitumas. Carbon and soot could not be commended, as particles got up under the flee border of the gums and catused them to teede. Any tooth powaer containing a free adid, such for instance as cream of tartar, should be condemaerl.

In month washes, myrrh, tannin, catechu, and other drugs containing tamic acid were used as astringents; carbolic acid, permangabate of potassium, samitas, thymol, borax, , (re., as antisepties; bismuth nitate, quiblan, and ahum as purifiers. Jhe hatter should be used carefully as it often contained free acid. Chlorinated lime has beon employed without much suceess as a bleaching agent for discolored tecth.
$A$ number of drugs were used in the treatment of neuralgin, such as ammon-
inm ehloride, Indan hemp, chloral hydnate, hyosigamus, mendiol, opium, phosphorus, de. Potassiam iodide, and quinine were also given in mixtures, while mustard and cayeme wero applied locally.

For gramboil, poppy-heads and camomile deeoetion was still used, but a word of warning was required with regard to extermal fomentation; this should never be done, as it brought on the breaking of the noscess on the face, which was followed by permanent distigurement.

To control hemordage after the extraction of teeth, plags of lint wero used, which had been soaked with tamic acid, hamamelis, de.; matico leaf was sometimes very effectual. For inflammation round the roots of the teeth iodine was used as well as capsienm and aconite.
Ilamin borax and iodine also played a part as temporary fillings. The anthor urged the necessity of rinsing the month ont with platin or allaline water after cach
 casy.

Other substances mentioned were copper suphate and wats or guttaperchat in makmis models of the mouth and arrangement. of the teeth. IS. aud C. Drumist.

## A Now Tablet Machine.

J. b. WITAEL, M.D., tacony, mhladelimha. Kead at the pharmacentical Meeting of the Philudelphiar College of l'harmacy:
Rasarang the geat demand for compressed tablets, the writer has endeavored to bring bufore the profession a tabletcompressing machine that is simple, powerful, compaet and, as nearly as possible, perfect in every respect. The accompanying cut shows the apparance of the machine, the motions of which are positive and atutomatic.

The frame is one salid casting; the hand machine weighs about 125 pounds, occupies a counter space of $10 \times 17$ inches and stands 9! inches high; power machines have an additional stand to give clearance for the large fly wheel. The capacity is from in to 95 tablets per minute, and is inerensed in proportion to
the number of plangers in operation. Tho pressure can be regulated to myy desired degree, is direct and comes to bear between the cams which impart the desired motions to the sliding blocks. The steel plungers, if necessary nickel plated, have a projecting shoulder on the lower part and may be of uny size or shape, and hopper and mould are stationary. There being absolutely no waste, a sibving of material results, and the absence of friction from feed makes the machine run

Ample provision is made for taking up losh motion froni wear of moving parts. The dies and moulds can be ensily changed from one sias to mother, and the regulations being so few and simple, they aro readily understood and easily manipulated. I'te working parts being inclosed, accumulation of dust is provented, wearing of the parts is lessened and foreign matters are not rubbed into tho mould for compression; hence, the tablets are kept clean and unobjectionable for hypodermic

Tiablets are formed by the following methods: When the plungers are below the hopper, they receive the froperamount of material, which is conveyed under cover into the mould; one phanger is held stationary while the other advances and compresses the material into the shape desired; then both dies recede, thus looseming the tablet in the mould and bringing it to the end of the mould, where it is ejected by the wiper.

Pextal.- A New Antis-pheric.-A new anawthetic has been given the name of pental. It is produced in Germany, its inventor being Professor Fon Merings, director of the Medical Policlinic, in Malle, who chose the namo he has given it owing to the circumstance that it contains $\overline{5}$ carbon atoms. It is very volatile and casily combustible. It can, it is said, be administered exactly like chloroform, and the guantity required each time need cost no more thatn $6 d$. Anesthesial set in aftey three or four minutes-rarely later. It is not deep, but suftices to render small operations, such as the extraction of teeth, painless. It is neither accompanied nor followed by any unpleasant effects.-Wat. Drugyist.
Toomincme may be relieved by maplsthalin, J.grains, dissolved in chloroform, 1 dram.

Phylaminus Ninum L., by the natives called Daon Manitim, is employed in Java as a diuretic, laxative, abortifacient and anticteric.

Tasi, largely used medicinally by South Americans, is being brought to the atteution of practitioners as an excellent wnlactgogue. The plant is known as Morrenia brachystephama.

## STEARNS PERFUMES ARE THE FINEST．



CUSTOMER—＂What an exquisite odor，so dainty and sweet，yet so full of fragrance ！Is it something new？＂ PROPRIETOR－＂Yes，madam，it is called＇AMORITA，＇one of STEARNS＇FINE PERFUMES，the choicest line of odors made． You will find them all equally good．＂


 unigue and attractive method for showing perfunes over devised．

The following is a list of odors furnished ：

WHITE LILAC
HELIOTROPE

WHITE ROSE
ROSE GERANIUM
CLOVE PINK
PATCHOULY

| SPHCIAI |  |
| :---: | :---: |
| MAY BLOSSOM | 4 ROSmS |
| OLIVE BLOSSOM | ERMINIE |

FREGUIAIE ODOES． YLIANG YIANG WEST END RONDELITIA TEA ROSE UPPER TEN TONQUIN MUSK

ESS．BOQUET MOSS ROSE FRANGIPANNI

ODORS．
EUXENIA kalanthe
wOOD VIOLET NEW MOWN HAY OPOPONAX STEPHANOTIS

CRAB APPLE BLOSSOM LILY OF THE VALIEY

## JOCKEY CLUB TRUE ENG．VIOLET MUSK <br> WHITE POND LILY







PERFUMES BOTTLED FOR RETAILING．
We furnish all oar Odo：s bottlod in the following styles．


Glass stoppered tall bextles，elonzuted stophers，capped with ciald． beater skin，tied with corded silk，besutiful habel，full measure，hargest atperering packaze for size．

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| :---: | :---: | :---: | :---: | :---: |
| One half ounce | ． $2+409$ | \＄120 0 | S 630 | S20．0 |
| Onu ounce | 4.50 .1 | $\pm 30.5$ | 11 i．） | $+6$ |
| Two ollue | 700 | is io | 200 | 700 |


Round glass stoppered botales，kid－cipped，nual handsomely ribimed．


Cork stoppered，humbome hothes，lithographac haluls capped with kil．



We gamantee all of our botiled goods to le of the same puality an those furnished in loulk．

SACHET POYVERS IN BUTK゙ AND FANCY PACK゙AGES．

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## *SEELY'S <br> American Perumes

HERD OFFICE RMD LABORATORY
Established at DETROIT, Mich., in 1882.

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Seely's PERFUMES are known as the STANDARD GOODS of America. For Fragrance, Delicacy, and Permanency of Odor, they take the lead.

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| Victoria Regia, | Jockey Club. |
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| Colden Rod. | White Keliotrope. |
| Mary Anderson. | Knights Templar. |
| Her Majesty Rose. | Minne-ha-ha. |

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Tho Druygiste' stock of l'erfumes is alncays low after the Holidays. Replenish with Secty's Jine. Sond us a mail order, or wait jor our Representative, who will call upon the trade carly. Give us a trial order. Our l'erfumes are sure to take well, for they are manufictured from the finest material that cun be had.

We solicit correspondence.
Vours respectfilly,


# J. PALMER \& SON 

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PEARS' * SOAP, Betands Frees Peffinay,

## Duponts Brushes.

Special prices given for Import Orders on Brushes and l'erfumery.

We bave just received and our stock is now complete in the following:
Turkey and Honey Comb Sponges, 250 Cases.
Chamois 8kins, extra quality and good value.
Violet and White Lilac Perfumes, the latest and best.
Also Roger \& Gallet's, Coudray's, Gello Frores, Pinaud's and Pivers', Colgate's and Vennard's Perfumery.

A splendid variety to sclect from.

## Belladonna

## Plasters.

PROF. D. HAYES AANEW, of Pulatimin'ma,

Very kindly permits us to say to Physicians and Druggists that "he is greatly pleased with JOHNSON \& JOHNSON'S belladonna Plaster. That it gives a quicker and better effect than any Belladonna Plaster he has heretofore used."

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Royal Pepsine Compound.
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## TRADE NOTES.

'G. A. Sherrin, drugs, Willaceburg, has solid out.
W. H. IIIls, druggist, Acndia Mines, N. S., has failed.

Chas. J. Ruinan, druggist, North Syd. ney, N. S., has made an assignment.
G. A. Mugill, St. 'Ihomas, Ont., has sold his drug business to J. P. Kidd, formerly of Barrie.
Thos. E. Atkinson, drugs, etc., Vancouver, B.C., has sold out his cigar business to Mr. Robinson.
A. E. Kemnedy, comer of (ueen and McCaul streets, 'loronto, has moved to the opposite corner.
C. I. Hood, Lowell, Mass., is in Canada looking after the agencies of Hood's Sarsaparilla in this country.
George A. Fraser, druggist, of Woodstock, Ont., has assigned. The tirm was originally Fraser \& Gunn.
J. Coombe, one of the oldest druggists in Ioronto, but who retived rom active business some time ago, is dead.

Little d Cleveland, druggists and "stationers, Iethbridge, Man., had their stock partially destroyed by fire last month.
"Pears' Soap" is to be turned into a joint stock company, and the prospectus will be issued to the public in the early days of the new year.

Mr. C. J. Ferris, one of the travellers of the wholesale drug house of Kerry, Watson \& Co., Montreal, was married Dec. 30th, to Miss Theresa Conway, of that city.
The firn: name of Dawson, Bole © Co., wholesale druggists, of Wimipeg, Man, is now Bole, Wynne \& Co., mention of the change of business being made in last month's issue.
W. C. Maskett, for many years oftice manager for Elliott \& Co., 'Toronto, has entered the employ of Lyman, Knox is Co., Montreal, as traveller for the district west of Montreal.
J. G. Hearle, Montreal, manufacturer of toilet soaps and perfumery, has made an assignment. Siabilities about $\$ 16,000$, the principal creditor being the Bank of Montreal, for $\$ 3,942$.

We regret to hear of the severc illness of Mr. E. Gregory, of Iindsay, Ont. We trust to hear of his speedy recovery, for the retail drug trade can ill afford to lose such a sterling man.
C. H. Cranston, fornserly traveller for Martin, Rosser \& Co., wholesale druggists, Winuipeg, Man., has entered the employ: ment of Lyman, Knox dCo., of Montreal, and will tiavel for them in Manitoba and the Territories.
The following druggists were elected mayors of their respective towns at the elections of January 4th: A. E. Blaichef; of Blaicher fiteche, Hamilton; F. F. Arkell, Blenheim; W. Colclengh, Mt. Forest ; II. Paffarl, Niagara; J. W. Cull, Mitchell.

The Matto leptonized Porter Co., (lim. ited), with a total capital stock of $\leqslant 100$, 000 , headquarters at the town of l'ruro, in the Province of Nova Scotia, has upplied for letters of incorporation to manufncture, sell and deal in throughout Camadia medicimal preparations, mad specially that known as peptonized porter:
C. G. Mecilashan, formerly of the firm of Smith is. Melihashan Co., of lloronto, is now representing Parke, Davis \& Co., of Detroit and Walkerville, in Western Ontario. We are plensed to hear of Mr. MeG.'s engagement with this enterprising firm, and congralulate them on secoring as their representative one who is so well and favorably known to the druggists of Ontario.

The Camada Paint Co., (limited), with a total capital stock of $\$ 25,000$, with hemdquarters at the city of Montreal, with places of business elsowhere in the Dominion of Canada, has applied for letters of incorporation. The purposes for which incorporation is sought are: Dealing in, mining, smelting, and manufacture of lead and other metals: dealing in, aid manufacture of paints, colors, chemicals, varnishes, oils, and of painters' and decorators' supplies and materinls.

## British Columbia Notes.

The British Columbin Pharmacy Council met in Namamo d'hursday, Dec. 10th, the following members were present. Messrs. 'I. M. Menderson, Victoria ; 'I. R. Shotbolt, Victoria, G. MI. Blanshard, Victoria; II. McDowell, Vancouver; E. Pimbury, Namimo.

Mr. J. A. Tepoorten, traveller for Langley \& Co., Victoria, has just returned from an extensive trip through the province. Ife reports business fair with good prospects for spring trade.
C. II. Bowes \& Co., draggists, Victoria, have dissolved paitnership.

Messes. McPherson it 'lhompson, of New Westminster, contemplate opening up a binach drug store in Rev. Mr. Green's block, Namimo.

Mr. G. Morrison, Victoria, is moving into his handsome new store on Government street.

The druggists of Victoria are talking of boycotting the Montreal wholesale drug house that supplied the 'Joronto dry goods house recently with druggists' sundries to be used in their retail trade.

## Manitoba Notes.

The druggists throughout the city of Wimnipeg and the province report a good Christmas trade.
la grippe in a mild form is holding high carnival in this province, and in consequence antipyritics are in demand.

Mr. Theo. Sweet, late of Exeter, Ont., has bought the drug business of Dr. E. IH. Scott, MToosomin.

Mr. M. E. Neclans, for some years head assistant with Mr. J. F. Howard, is
about to open a drug store in the Mani toba Hotel, Winnipes.

The stock of Mr. II. I:. Jackson, Win nipeg was sold by sherift's salo Jan. Gand, at 6 en ents on the dollar: Alartin lioss er \& Co., wholesnle douggists, were the purchasers.

## Montreal Notos.

Notwithstanding all Hat has been written, experienced Montreal druggists were not sumpised it the nssigmment of
 being can carry on successful move than one drug store. Whether wholesale or retail, one of the proprictors will niways be the popular man, whom crorybody mase see at least occasionally, and a smile and a hearty handshake from him will do move in securing custom than all the efforts of all tho bummers and managers in the world. Now, how is it likely that Mr: Camplell could carry on his wholesale in a business like manner and at the same time find time to attend to his threo retail branches. We all know that the success of a retail drug store is governed to a latge extent by the persomal popular. ity of its proprietor. What earthly inducement is there for any one to patronize a branch store if the proprietor is never seen there?

Much comment has been made by Montreal druggists on the six reasons given "Why physicians should desuense their own medicines," by the antiquated $1 /$ edi cal Acus, and the remark is ireely made whether it would not be better for physicians, in the interests of their patients, to study "Jherapenties and the incompatibility of drugs" during their leisure hours. Judlging by tho average prescription of the average doctor it would be decidedly unsafe for the public to trust their lives to the ignomance of such men on all mat. ters connected with the handling of olrugs. Supposing a physician kills a patient. by an overdose, or a carclessly weighed dose, who will ever lee the wiser? It is not very likely the doctor will criminato himself. As it is the drugegist checks the prescription before he dispenses it and if he finds an error he communicates with the doctor, and gets it rectified and this happens in large dispensing houses three or four cimes a weck. How ean the doctor check his own mistake before making up the medicme? Then agam, wall it be convenient for a young medico who is innpecunious to keep a stock of drugs and pharmaceuties sutliciently varied nand fresh to meet all the requirements of his practice, and if he has not exactly the thing he wants to give to his patient, will he not be very likely to substitute some. thing else:

Dr. Thayer, a well known druggist here, was sued in the Police Court by the Reg. istrar of the Pharmaceutical Association for his amual license fee of 汤, which he refused to pay. judgment, of course, went agrinst him and he will hate to pay up. Probably he will appeal it he can,
which I very much doubt, ns the julsment of the Police Magistrate in such cases is summary-besides it would only be throwing good money after bad.

It is wery gratifying to observe how honorably every physician in this city keeping a drug store has paid up his ammal license fee to the Pharmaceutical Association. The only exeeption is Dr. Thayer and it was found neesssary to bring his case before Police Magistrate DesNoyers with the result as mentioned abave.
'The Montreal Druggists' Association have agreed to a list of prices and the list is ordered to be published, Messrs. Lyman Sons d Co . having very generously ofliwed to bear the expense. It is to be loped Mr. Contant will have the very few palp. able crrors altered before printing. I noticed one or two which were evidently oversights. Cutting is not going on to may great extont here, Most firms who have gone into that sort of thing have luckily "gone under." Pour cneorrager les maters, I presume.

The question of puting into force a clause in the Pharmacy Act, which prevents afprentices from dispensing, except under the direct surveillance of the proprietor was brought up at the last Council meeting. There seemed to be considerable difference of opinion at the meding, some members thinking it would be best to use the power confided to the Council as mercifully as possible. The worst eases appeared to be those of doctors who were absent from their stores most of the time and a mere apprentice lad left in charge in their absence. With druggists, as a rule, the proprietor was there most of the time. Two bad cases were, however,cited even among druggists, and it was decided to appeal to the common sense of the parties before proceeding further. Anyway no one would be prosecuted before being duly cautioned.

## Ontario College of Pharmacy Notes.

The semi-amual meeting of the council for granting certificates of competency, in accordance with section eight of the act respecting plarmacy and for general business, will be held in the city of 'Toronto on Tuestay, the 2nd day of February, 1892, at 2 o'clock p. m .

The following are the results of the junior examinations at the Ontario College of Pharmacy held in December. First class-V. Barber, J. Gillillan, F. (i. Hufiman, C. D. Williams, G. A. Petrie, and J. Werner, equal ; P. B. Wallace; S. Zeller, E. D. Munro, H. Packert, equal ; C. W. Hill, W. Smallwood, C. Law, A.V. Rand; J. W. MeRac, E. M. Shildrick. Second class-S. S. Smith, T. S. Grimshaw, M. P. Reekic and P. F. S. Maddock equal, F. Whelihan, F. Barrey, W. Williamson, J. S. McKeown, J. II. Burchinl, C. E. Parker, G. E. Rogers and J. E. Co gan equal, H. G. Barry, J. T. Mus.
growe, S. B. Chatk, (i. A. Crowe, F. A. Merrill, M. A. Young, A. W. Med. din, A. I': Budd, N'. A. Wallace, It L. Pement, f. llarkness, J. J. Woonl. 'litird class-A. I. H. Brown, G. A. Krmedy, S. Oldham, I:. A. Clarke, A. Higinbothan, D. S. Martley, C. R. Fowids, 1I. (. Camphell, 1. F. Boyd, S. L. Dunin, tC. W. Shearer, II. Love, (i. A. Weloster, lis. W. Cameron, J. MeLarty, L. I. Thompson, A. B. Hoolihan, W. A. Barlow: W. Campbell, W. Herod, J. Phin, E. Phin, E. Rickey, D. Robinson, *W. A. MeCrea, J. A. Loucks, \#N. J. Atkins, J. A Stuart, *A. C. Gillies, A. J. Gould, R. Hatter, J. E. Davis, W. It. Smith, R. Hossack, *F. C. McCarthy, J. D. Warren, J. F. Berry, 1. Jerry, A. N. Trotter, N. M. Duteher, R. J. MeApinc, E. T. Howard, B. M. Sargat, If. Hardison, II. R. Shepherd, †TI. Mi. Hagarty, tiH. I. Stone, t.I. C. Boyd, *1I. C. Row(rtson. * Supplementary in chemistry : $\dagger$ supplementary in botany.
'The following passed in the supplemental junior examinations held Jan. 5 ha :and Gth: W. A. Kaiting, W. S. Skimer, H. O. Rose, J. E: Bright, W. W. Emerson, C. W. Shearer, J. Sheigley, IF J. Crease, F. C. MeCarthy, I. IV. Faweett, J. A. Boyd, II. W. Stone, T. M. Magarty, E. W. Cameron, W. Eams, W. Scott, A. Cavers, II. C. Robertson, W. J. Atkins, A. C. Gillies, J. J. MeDowell, II. (i. Stuart, W. J. Nec(iuire.

The Ontario College of Pharmacy entered urion the senine course on 'Thursday, Jan. 7 th, with the largest scminr class ever in attendance. There are about one handred students on the rolls. The college is in a prosperous and contented condition, and its future success thoroughly assured.

## Notes from England.

## (By our own Correspondent.)

An important concession is about to be made by the Inland Revenue of this country to the wholesale perfumers, by allowing a drawhack on the spirit used in perfumes when exported. About three years ago, through the instrumentality of the chemical section of the London Chamber of Commerce, this concession was obtained for the wholesale drus trade, to allow of the exportation of tinctures, spirits and other alcoholic preparations in bond. It is therefore an extension of this concession, mather than a new one, that is about to be made. Th the case of spirits and tinctures, although the concession is hedged around by numerous absurd anomalies, as has been pointed out in an editovinl of the British und Colonial Druy. gist, it has been largely adopted by tie wholesale trade. A coinpounder's license (costing $\widehat{S 0} 0$ per immum) is necessary and then, after carrying out all the requisite instructions, a rebate of $\$ 2.5 \pm$ per proof gallon is made, together with an additional 4 per cent. to allow for waste in manu-
facture. The new order has been hailed with satisfaction by some chemical manufacturers as a step in the right direction, viz.. free alcohol for manufacturing purposes. It is undoubtedly only fair nud just that the haray duty under which aleohol and all alcoholic preparations suffer in this country should be remitted when exproted abroad. But it is quite nother matter to attempt to obtain pure grain spirit free of duty for manufacturing purposes here alone. As it is, it is well known that the Revenue suffers considerably owing to the drinking among the poor classes of methylated-duty frec-spirit. The nausconsness of this spirit has recently been increased by tho admixture of threeaighths of one per cent. of paratilin oil to the spirit already containing 10 per cent. of wood maphtha. It would be dillicult to devise a more objectiomble compound as a beverater, and yet it is stated on celiable authority that methylated spirit drinking is on the increase.
Considerable inritation has been felt by chemists generally at the dilliculty that is experienced in obtaining vaseline in bulk. The Cheseborough Company have adopted this method of pushing the smanl tins and bottles of their petroleum jelly, but announce that their real reason is scarcity of supply. When recently interviewed on tho suliject, Mr. Robert A. Cheseborough let the cat out of the bag, when he complained that chemists have no right to use their registered title "vaseline" at all, even when putting up vaseline itself. He alsocomplained that somedishonest persons were putting up petroleum jelly of other mamufacture and labelling it vaseline. As this last practice is manifestly illegal it is somewhat extraordinary that the Company, whilst talking so big, do not instantly stop it by summary procecdings With regard to the practice of putting up vase line in one's own bottles or pots, it is certainly late in the day to take exception since it has been carried on for over ten years without expostulation. Indeed there is very little doultt that much of the present wide-spread apprecintion of this brand ef petroleum jelly is due to the prominence given to it by pharmacists. Petroleum jellies of more or less approximation to vaseline are in the market at 14 to 16 cents per pound, and if the Cheseborough Company persists in its present policy it will undoubtedly prove a good opening for other manufacturers. It may be remembered that the 13. P. whilst describing vaseline in its physical and chemical properties calls the article parafinum molle. It is not so well known that the mame vaseline would have become the pharmacopeial synonym if the Cheseborough Co. had renounced its right to the trade mark.
The dispensing of bicarbomate of soda and subnitrate of bismuth together in mixtureform is often attended withresults not altogether desirable. This form of pharmaceutical "torpedo" has attracted attention in the dispensing portion of the Chicmist and Druggist, where E. J. Millard hans pointed out that if in larger
H. B. sleemain

Agent

Druggists' Supplier,

Executes orders promptly and cheaply'

Drugs.

Patent Medicines,

Proprietary Goods,

Surgical Instruments

and Appliances,

Druggists' Sundries,
Sponges,

Chamois Skins,

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\text { A Complete Cure, } & \text { A Prompt Cure, } \\
\text { A Positizo Cure, } & \text { A Perfect Cure, } \\
\text { A Wonderful Cure, } & \text { An Effcient Cure } \\
\text { And THE KING OF CURES. }
\end{array}
$$







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The impontance of a Shouliter. Brace in holding the Tomly erect, ex panding the Chest, pretenting Romal Shoulhers and Hollow Chest, is well uaderstoot. (ioent healih depemp upon it. Dian attempts have been made to present a suitalile atiede for this purpore. all of wheh, humever,
 prevented their comina into wencmal use. In the Kincterloceker Thace all ohjections have licen overeome. It is : Combined Shoulder-Brace and Suspender. It provides now and improved suspenders for heen's panse, ami suppurters fun lachio ${ }^{\circ}$ amilerakirts. whath dre the domble duts oif holdag up and bateng up.
Soh hy Druggists. Send chest-measure womid the bendy. didren,
Knickerbocker Brace Gompany, h..nstun, l's., L.s.s. N. A. Juhnsun, trop.
sar for ale by Lyman Hrom. \& Oo., of Tonosto, and other Wholevale Druatiatr.


We are offering special inducemenis in abvee lines, and will bo glad to guole lowest proces for c:nytiung in our lino on application.


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SUSPEKNER COMBIINED.
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## E. B. Shutlewanth's Fluid Extracts \& Pharmaceuticals

quantities than 10 grs. of each salt are preseribed per ounce, it is safer to substitute subcarbonate of bismath for subnitiate. In comnection with this he pul). lishes two letters which ho had received on the subject from Dr. Isauder Branton, M. D., F. R. S., and Dr: Nitchell Bruce, F. 1. C. R., two of the editors of The Practifioner. It appears that each of these leading physicians had recommended in their respective works on therapeuties, the exhibition of these salts togetherin certain ston:achic alfections. On their attention being directed by Mr. Millard to the decomposition which must inevitably ensue, Dr. Brunton stated that he had given up prescribing subnitrate of bismuth with soda except in small doses in favor of subcarbonate, whilst Dr. Hruce stated that he always prescribed them separately--the bismath in powder form to be taken with the alkaline mixture. Tho editor recommended the plan suggested in the "Art of Dispensing," a valuable little work brought. out by tho Chemist and Drueqist. Jhis consists of accelerating the decomposition of subnitrate and bicarbonate by the use of hot water and a mortatr. This plan has also received the approval of J. Ince, teacher of Pharmacy at the School of Pharmacy, but 7 must confess that it secms a roundabout method of obtaining the same result. liy this action one obtains subuarmunate of bismuth amd initrate of soda at the expense of some of the bicarbonate of soda. From experience of several WestEnd dispensing cstablishments, I can safely saly thiat it is almost it rule to substitute subcarbonate of bismuth for subinitrate in these mixtures.

The subject of selling patent or proprietary medicines containings scheduled poisons will probably receive close and jumediate attention. At the request of Mr. Einest Hart, editor of the Slrilish Ifedical Jomromb, Dr. Paul has amalyzed some 14 of such preparations, the result of which shows that ten of the mixtures contain morphine, two contain strychane and one aconotine. As most of these mixtures can be readily oltatined in any quantity at the grocers, "muslin druggists," se., it is high time that some interfercnee should titke place in their indiscriminate sale. It is not clear that these preparations were devoid of poison liabels but it is certain that some of them require, under tho Poisons Aet, further regulations to be attended to in connection with their sale. So far, our poison schedules are wretehedly inadequate to cope with the proper protection of the public, but much more might be done if a little more energy were shown by the Council of the mharmaceutical Socicty in the mater.

## FOLMUL.E.

Liquil Extract of Mald.-Extract oi malt, 10 ozs.: distilled water, S! fl. 07s.; rectified spirit, $1 \frac{1}{2}$ n. azs. Mix and allow to stand a fortuight and filter.

Antisentic Pelletsor Disca.-Perchloride of mercury, $\$_{i}^{?}$ yrains: chloride of ammo.
nium, 6 fogrs. Mix and compress. May be colovel by a small quantity of methylencs blue dye. One dise or pellet dissolved in a piat of water forms a 1 per 1,000 strength solution.

Ouinine Incir Hesh.-Sulphate of quinine, 20 grs.; acetic acid, 1 th. o\%.; glycerine, 2 ozs.; Fam de Cologne, 1 o\%.; rectified spirit, $10 \%$; concentrated infusion of quas. sia, S fl. ors.; water to 20 fl . ozs. Mix and filter.

Wan de Coloyme. -..Oil of lergamotte, 10 drms.; oil of lemon, 10 dems.; oil of rosemary, 80 minims; oil of neroli, $2 \frac{1}{2}$ drs.; orange thower water, 14 ozs.; rectified spinit, $3!$ pints.

## 

Lomdon, Dec. 29, 1S91.
The concluding month of the year is always quiet in both chemical and druc markets. The auctions are chictly noticenble for their sundry nature. The principal features of the month are the adrances in value of ergot, cocaine, vanilla, and mercury, whilst sulphate of copper, quinine, and copaiba are lower. Tyecactanhat is tirm and opinm very quiet. Shellac has declined asain. The following are current prices:

| cusmachas. |  |  |
| :---: | :---: | :---: |
| Acill citric | per 13, | 33 |
| " oxalic | ${ }^{*}$ | ${ }^{\text {i }}$ |
| " tartaric | " | 96 |
| Boras | " | 6 |
| Copper sulphate | * | 3 |
| (ircim tartar | " | 2 |
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| * sulschloride | " | 70 |
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| Jalap | " | 40 |
| Oil anisced | " | 130 |
| "peppermint, Aug | - " | 722 |
| " H G II | 11 " | 365 |
| Scnna | " | 18 |
| Shellnc, 'T' ${ }^{\text {a }}$ | ${ }^{6}$ | 19 |

## Synthetical Carbolic Acid.

114 H. W. Jalise.
[Rend at the pharmacentical mecting of tict Philadelphia College of Elarmacy, Nov. 17.1
It has been known for some years that carbolic acid could be produced by numerous synthetical methods, but interest in the subject has been especially manifested recently on account of several firms, in response to the constantdemand for purer preparations, having undertaken its manufacture on a commercial scale. Of the many reactions by which phenol can be proluced, only two are, at present, commercially practical ; both using pure benzol ns the starting point.

The first or sulphonate method is ap:
plicable to the preparation of all phenols and has been used for some years, producing on an immense scale of naphithol, tho phenol of naphthalin. In this method pure benzol, free from thiophene, is placed with about five times its weight of strongest commercial sulphuric acid ( $67^{\circ}$ 13.) in closed east-iron pots, provided with stirrers and leadcoolersind capable of beingheated by a steam jacket. While the mixture is slowly stirred, the vessel is gently heated with steam in such at mamer that the vapors of beazol which pass into the cooler are continually returned to the kettle. After a mumber of hours the reaction is finished, and the benzol not acted on, is collected as it hows from the cooler. 'lhe arude benzol-sulphonic acid, mixed with the excess of sulphuric acid used, is allowed to cool and then diluted with water in a lead-lined tank. Slaked lime is atded to the hot solution in sufficient guantity until it is faintly alkaline. Jhis removes the excess of acid by forming cal. cinn sulphate, which is then filtered ofl by means of a filter press. The clear liquor containing calcumbenzolsulphoante is treated with sufficient sodium carbonate to precipitate all the calcium as carbonate, which is removed by filtmation, and the liquor is now evaporated to dryness, leaving the sodium bemzolsulphonate as a white powder.
In the large cast-iron kettle, heated by a coal fire, caustic soda is melted, and small portions of the dry sodium salt, prepared as above, are gradually added and tinally the whole is kept in quiet fusion for some time. The melt now contains sodinm carbolate and sulphits together with the lange excess of caustic soda used $-\mathrm{C}_{6} \mathrm{H}_{5}-\mathrm{SO}_{3} \mathrm{Na}+2 \mathrm{NaOH}=\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{ONa}$ $+\mathrm{Na}_{2} \mathrm{SO}_{2}+\mathrm{H}_{2} \mathrm{O}$.

Tt is ladled from the kettle into pans and allowed to coul, broken up, dissolved in water and acidified with sulphuric or hydrochloric acid. the phenol thas liberited separates from the concentrated salt solution, and can be collected and dis. tilleci.

In melting the sodium benzolsulphonate with caustic sodia it is necessary, in order to obtain a good yicld, to use a very large excess of the latter. A greater yield is obtained with caustic potash, and if as large a quantity as six parts are used to one of the sola or potiash salt is nearly theoretical yield can be obtained, but as this would greatly inercise the cost, crustie s:ata is used instend.

It has been proposed to treat the melt after dissolving in water with carbonic acid sas, which would liberate the phenol equal. ly well as a stronger acid, and in addition would form carbonate of sola or potash, which together with the sulphite already present could be conserted into the hydrate by trating with lime, concentrated, and used for a second operation. It does not appear, however, that this has been carried out in practice.

The second method is much simpler. A pure aniline oil; preferably that grade called amilize ior biuc, is dissolved in waterin a lead-line: tank covered with a

## SPECIAL

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## TO THE RETAIL DRUCGISTS OF CANADA:

Five Thousand Dollars will be placed for advertising my Small Size of

## DR. T. A. SLOCUM'S

## Oxygenized Emulsion of Pure Cod Liver Oil

Which is sold at 35 cents per bottle, to place it within the reach of all, and can be purchased from all Wholesale Druggists in Canada.

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LARGE SIZE,
\$3.00 PER DOZEN, less 5
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Circulars and Beautiful Lithographs supplied on application.
I. A. SIOOUM, 186 ADELAIDE STREET, WEST,
hood and provided with stirers and leaden stean coils. The solution is acidulated very strongly with sulphuric acid, and to the hot loguid in solution of commercial nitrite of soda is gradually added, phenol being at once formed.

In this reaction the sodium nitrite, in contach with the acid solution, liberates nitrous acid, which forms diazobenzol sulphate with the aniline sulphate- $\left(\mathrm{C}_{\mathrm{G}} \mathrm{H}\right.$, $\left.\mathrm{NH}_{3}\right)_{2} \mathrm{IH}_{3} \mathrm{SO}_{4}+211 \mathrm{NO}-\left(\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{~N}=\mathrm{N}\right)$ ${ }_{2} \mathrm{SO}_{4}+4 \overline{1}{ }_{2} \mathrm{O}$, but as the solution is hot it at once decomposes into phenol with coolution of nitroyen- ( $\left.\mathrm{C}_{6} \mathrm{H}_{5} \mathrm{~N}=\mathrm{N}\right)$, SO ) $+2 \mathrm{H}_{2} \mathrm{O}=2 \mathrm{C}_{6} \mathrm{H}_{5} \mathrm{OH}+1 \mathrm{H}_{2} \mathrm{SO}_{4}+4 \mathrm{~N}$.

Neither of these synthetical methods can, at the present time, compete in price with the extraction of carbolie acid directly from the coal tar oils.

A good grade of cryst al acid can be purchased abroad in large quantities at this time at about eleven cents per pound, while the pure bersol used in the first method is worth at the Euglish retineries about feurteen cents per pound and aniline oil about twenty cents, without taking into consideration the other expensive chemicals necessary to carry out the reaction.

When the synthetical acid was first placed upon the market it excited much interest, and purchasers were willing to pay the high price it commanded, belier. ing that they were getting a nueh purer article than could be produced by the ordinary methods. This interest, however, considerably abated since the actid has been found to redden just as easily as the best commercial grades.

It could searcely be expected that an acid obtained by cither of the complex reactions just described would not be contaminated by products formed by side reactions in the process. In its preparation by the sulphonate method, sulphur compounds (thiophcnols, etc.) are likely to be formed; and its manuficture from a substance like aniline, which so readily produces coloring matters, could scarcely be carried out, without at the same: time forming hodies which at once, or later under the influence of light and airwould discolor it.
In addition, commercially pure benzol or aniline oil always contain suall quantities of, respectively; toluol or coludine. These bodies being submitted to the same treatment as their homologues give cresylic acid. It is true that this acid would be present only in minute quantitics, but sufticient to reduce the meltiag point of the resulting carbolic acill.
Lunge has shown that the addition of 1.3 per cent. of eresylic acid to pure phenol reduces the melting point eight degrees to $321^{\circ}$, and in thepreparation of $\pi$ ligh grade carbolic acid a difference of a part of $:$ degree is of great importance.

Forty degrees acid is at present at commercial article sold at cercessively low prices, and if a small part. of the attention and labor which is used in producing a synthetical acid was expended in the further purification of this $10^{\circ}$ acid, without doubt just is grod if not a purer
artiele could be produced direct from tar oils and at a much lowar cost.-Dabors. tory of llir II. II. , heyme Chemical C'o.

## Indigestion.

Owen Meredith has happily called indigestion "thes conscience of every bad stomach." Cortitinly indigestion is one of the most common of humam aihments.

Among convenient means of assisting enfeebled digestive powers, supplied by Parke, Davis d. Co., are Antacid Jiablets. Digestive Trablets, Peptonizing Tablets and Lactated Pepsin Thbels.

Antacid Cablets are of service in dyspepsia and gravel. The formula is : Cialcium (arb. precip., in grs: magnesiam (arl). 21 grs.; sorlium chloride, 1 gro; (excipient, q. s.

Jigestive Trablets are uscful in forms of indigestion dependent upon deficiency of the secretions, or upon indiseretion in cating. Formula: Pepsinum purom, 1 gr: pancreatin pure, 1 gr:; calcium lacto. phos, 2 gis.

Peptonizing Cablets form a most convenient method of preparing preptoaized milk, sruel, beef tea, wine jelly, blame mange, oysters and milk toast.

Sactated Pepsin T:blets have proven eflicient in relieving the distressing symp. toms of dyspepsia, and in nany diseases of which mal-nutrition is a pronounced feature. Formula: Pepsinmm purum, :3.10 gre; Pancreatin pure, 3.10 ogr: laciic acid, hydrochloric acid, maltose aud dias. lase, y.s.

Tactated and Pepsin P'urum Jaiblets c:u be fumished in bottles of 10 and 65, convenient for dispensing.

## Out For 1892.

Dawson, bole i: Co., wholesale: drus. gests, Winniperg, have just issued theinsixth ammal almanac, which is specially adapted to Manitoba, the territorios and British Columbia. The first issue of the almanac in 1857 :amounted to about 5,000 copies. The number has been increased each grat, and the new issue for 1502 amonats to approximately 50,000 copies. The growth in the circulation of this little amual, may be taken as am indees to the extension of the business of the house.
 drops of mitro-sulphuric acid are putinto a water-ghass and a few grains of pawdered satol sprinkled in. This is colored yellow, and on stirring with a glass rod the color passes from brown to green. As soon as this tint is seen the contents of the watch-ghass are transferred to: porcelain dish ind $50 \mathrm{c} . \mathrm{c}$. of water addrd :und well stirred, the liquid becoming rosecolored, while the green tint may be restored by the addition of ammonia. Jesorcin treated is: the same manner becomes at once of a derp blae color; on adding water a red colomation is given which ammonia changes again to blue. -


## CORRESPONDENCE.

Correppmence ts incitest trom nil membern of tha profession. We to not hoth oursethes responsthe for
 lase the tame of the writer athaehter, not neresuarily for puhbication, hut aw a $\quad$ ularantece oh poxd taith. Any nom de finme may lie used for pultheation. Write only on one sthe of the paper, amble tometis.
"Fair Play."

## To the Editme:

Sin,--In the Dharmactutical Lira, Dec. 1:th, 1 s 91 , paye 36.4, appears an article from which 1 will give some extracts :

> " How he passin Tm: bo.nno."
"Mr. Clyde II. Brooks, of Jackson, at the last meeting of the Michigan State Joard of Phamacy at Lamsing, passed with a higher percentage than has ever heren achieved by any other candidate in th. history of the board. Thinking that some iniormation as to the methods of study pursued by Mr. Brooks in litting himself for the examination might prove of servier to many would-be phatrmatests, the Eres representative in an intervien obtained these points :
" In answering the queries as to what. studies were pursued and what books emploged preparatory to appearing before the lionrd, Mr. Brooks responded.
"، How and what books dial you study relating to l'ractical Mhamacy?
"dly libnary cmbraced, and in fact consisted of Heebuer's Minual of Pharmacentical Chemistry, lemington's Practice: of Pharmary, the t. S. Pharmacopuin, amel a Dispernsatory. In Heelmer's work I studied each drus and chemieni with particular reference to its ehemical properties, solubilities and general description, and was particular!y pleased with its brief, concise and simple text.'"

Cias. F. Leeobner, Professor of Theory and L'ractice of Phamacy and Pharmacentical Chemistry in the Ontario College of Pharmacy, is the author of this Manual of Mharmanerutical Chemistry.

At the inceting of the Council of the O. C. P., in August last, Mr. Polson moved, Mr. ID'Avignon seconded, (these Mr. Shattleworth ceills his iuvincibles) a resolation of censure upon the previous Conncil for having appointed Professor Ileebner as a tracher in the O. C. P., and not some untried and inexperienced teachers, simply bacause they were born in Caiada.

1 believe the majoity of the druggists in Ontario have sufficient manhood and honor to give any qualified person (even if they were not born in Cannda) an opportunity to demonstrate his ability and titness for geving instruction in the 0. C. 1 .

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## Fractical Hints on Dispensing for Stucients.

me. s. s. momison.
(L'rom the British and Coloninl Drugyist.)
ciabotitis.
Trme gargle is the name given to a liquid medicine employed for local application to the throat, usually consisting of salts in solution, or combined with glycerine, and astringent prepatations. The methods of prepanation aro the same as those used in compounding mistures. Honey is frequently used in gargles. It should bo placed in at mortart, himed down with the water, and strained through muslin. The following formula is sometimes met with:--

```
B) Alum. sulph.
```

$\qquad$

``` 2 drms.
Tr: myrrh... 6 drms
Aуите........... ................
Misce.
```

The alum may be placed in at mortar, and rubbed down with the water, until dissolved, the tincture of myrrh being diffused through the solution, and the whole strained into the bottle. The resin is soon thrown out of solution on standing. Chlonate of potassitum is often prescribed in gargles, and the aid of a mortar is usually necessary to properly dissolve it. Carbolic acid will form a elear solution with water, if first mixed with a small guantity of glycerine. Gargles should be dispensed with a distinctive label to that used for mixtures, and with instructions that the liquid should not be swallowed.

## INH.1t.illus.

Inhalations usually consist of at light oil or other volatile body, or spirituous preparations, de., a ee:tain gu:utity of which is directed to be placed in at suitable apparatus, and inhalled in the form of wapor. They are, ats at rule, dispensed in glass stoppered bottles. When preseribed in diluted form with water, the admixture of a little magnesia is sometimes ordered, :ss the followins combinittion will show:-

| $1 ?$ | Thyinul | $\frac{1}{2}$ drm. |
| :---: | :---: | :---: |
|  | Spit chlorois | 3 drans. |
|  | Er. benzoin comp | 3 drus. |
|  | Magroes. cialc | 10 -rs. |
|  | Agux...... | . all 2 0 zs. |

Misce.
This should be dispensed by first dissolving dhe thymol in the tincture and spinit, then mix the magnesia with part of the water, sraciually adding the thymol solution, and make up remainder with water, well shaking the whole. This should have :t "shake the botule" label aflived.

## I.OTIONS.

The lotion is the term given to a liquid application or wash for external use to various parts of the body. That used for
 collyrium. The meparation of the average lotinn presents an qu ial dithin alty to the dispensur In cume combinations chemical reaclion takes place, it being usually the intemion of the prescriber. The lotio hydarg, nig. of the Phamma-
copmiat is cth instatich of this, whot wh shaking up the calomel with lime-water mercurous oxide is formed. Lead in the form of acetalo and subacetate in solution is an ingredient freguently met with in these lotions. Fordiluting distilled water must always be used, otherwise an opaque solution will result. The addition of opium preparations to a lead solation produces at copious precipitate, but by addingo a small quantity of glycerine to the lead first, and then the opinm, the precipitate is prevented. The following formulit may sometimes be met w:th:- -

$$
\text { 1) Mumbi acet } \quad . \ldots \ldots \ldots \ldots \ldots \text {, drm. }
$$

## Misec.

An insoluble precipitate of sulphate of lead is the result, but it should not be filtered out in this cuse uuless so ordered.

A similar reaction takes phace on mixing the following lotion:-

1) Alum sulph
3 drms. 1hmubi. acet.... ............. ${ }^{1}$ drms.
Ay. destill .............add $\%$ ors.

This is usually dispensed without straining.

Another instance:
li Liq. plur:bi ....................... 3 dr .
Acill cartholic. . . .............. 3 ir.
Acid hydrocyan. dil.......... $\geq$ dr:
Aqua ....................... . . . S o\%.
Misce.
An insoluble precipitate: results when the above ingredients are mixed together, but the lotion maty be much improved in appearance if the carbolic acid before being added is first mived with an equal quantity of olycerine. Solid extracts like opium, belladona, se., should be rubbed down in a mortar with a small quantity of hot water, and strained into the bottle. Oxide of rinc and other insoluble chemcals must always lirst be finely levigated in a mortar, then rubbed. down with the liquid menstruum, and dispensed with a "shate the bottle" label. Milk is occisionally ordered with solution of subacetate of lead; usually in the proportions of one part of the latter to eight of the former. The solution should be added to the milk in small quantities at a time, and the whole well shaken. Boancic acid is a common ingredient in lotions. It is well to remember it is soluble 1 in $2 \overline{5}$ parts of cold water, and easily dissolved on brisk agitation without the aid of a mortar. Jotions shoukd be dispensed in colored bottles, those known as actinic green, round or octagonal being especially suitible for the purpose. The labels should be distinetive in color and cinaraeter to those employed for medicines for internal use.

## mistmasts.

A liquid :upplication that is to be rubbed wer the surface of the body is
 In consistence the liniment is necessarily thicher than the lution, and may be consposed of oils, sonps or spirituous preparations, atone or in combination. The liniments of the Pharmacopeeia are generally in usejand the methods used in preparing

How ohe wall hawat. Tiniments gre seribed in phatmacy are usunlly an admixture of two or more of these, the mixing of which canses no special difliculty. The following formula is one frepuently prescribed:

```
1) Acidnectic fort
```

$\qquad$

``` \(1 \% \%\)
Spt. terchinth o..
dui. vitell.
```

```
AIf, cinntant
    AIf, cimbitu
```

    Misce.
    In preparing this limiment the turpentine should tirst be emulsified in the usual maner with the yolls of egrs, the emulsion being thinned down with some of the water and stireed consta:atly. Finally the acid may be added and the whole miade up to the required quantity, a thick, creamy emulsion beins the result. Liniments, composed of spirits and oils, should be dispensed, with is "shake the bottle" label. The following is best prepared with the aid of a warm mortar :

## Take of

$$
\begin{aligned}
& \text { Lin. potass, iodid. c sapon. ...... } 1 \text { oz. } \\
& \text { Lin. c:amph. ......................... } 3 \text { оz. }
\end{aligned}
$$

Misce.
The lin. pot. iodid. should be well stirred for a short time, and the camphor limiment then added gradually, constantly stircing until the whole is thoroughly incorporited. Tiniments should invariabiy he dispensed in colored bottles, with it bold and distinctive label, and this rule should never be depated from, more especially when the liguid is of a poisonous nature.

## PIGMENIS.

The pigment, or paint, is the term applied to a liquid application that is directed to be painted on the part affected by means of a soft brush. Jhe base usually consists of it solvent, such as spirit of glycerine, lolding the active remedy in solution. The latter especially is a yaluable agent, it forming an excellent solvent for at large number of salts, ats well as being a most suitable medinn for cexhibiting them. The class of remedial applications known as glyeeroles are prepared with glycerine as a base. The slycerole of lead, now an oflicial prepariation, is really an inproved form of Cioulard's extract, strength 1 to 7 , and the olycerole of bismuth is atso met with-made in tho same propertions. In forming some of the sfyecroles a decomposition of tho glyeerine takes place. The glycerinum iodi is prepared 20 grains to the ounce, and the glycerinum belladomna 1 to 1 . In making the latter, the extract should be placed in at warm mortar, and rubbed down perfectly smooth with the smallest possible quatutity of boiling water before adding the glycerinc. Chloral camphor the peculiar liquid body formed in rubbing down chloral hydrate and camphor together, is generally used as a pigment. In preparmars ty equal patts of the two substances should be placed in a warm mortary, well rubbed together, and then allowed to stand for a short time, until a clear liquid results. The product will mix with alcohol, ether and oils, de., but not with water or glycerine. When wor-

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| -sio. |  | $\ldots$ |
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phine or other alkatoids arte ordered to be dissolved in the liguid, they should be rubbed down with it in a mortar. Men. thol and choral hydrate, also thynsol and chloral hydrate, when rubbed together in equal proportions, form similar compounds. pigments are asually dispensed in ghassstoppered bottles.

OHIEATESS.
The class of remedies for external application known as oleates are formed by combining oleic acid with most metallic oxides, for which the acid aets as a solyent, the result being a solution of oleates in an excess of oleic acid. The oleates have the adrantage of being readily abs. sorbed by the skin. Tho oleate of mer. cury is perhaps most frequently met with in dispensing, and is usually kept prepared of various strengtles, containing 5 , 10 , and 20 per cent. It is made by gradually adding 1 part of yellow oxide of mercury to 19 of oleic acid in a mortar, and stirring constantly until the oxide is all dissolved. The 5 per cent. solution remains liquid, but those containing over 10 per cent. are of a semi-solid nature. When no specitic strength is particularized by the prescriber the 10 per cent. is usually dispensed. Alkaloids are soluble in oleic acid, but not their salts; thus morphine and other alkaloids may bedissolved in oleate of mercury when so ordered. Oleic acid will dissolve risth its weight of morphine. The oleate of morphine is made 1 grain to the drachm, and oleate of atropine, 1 in 40, is prepared by dissolving the alknloid with the aid of gentle heat in the acid over a water bath. Quinine is dissolved by oleic acid 1 in 4 , and may so be mixed with cod liver or other oils. The oleate of aine is made by heating together 1 part of ainc oxide with $S$ parts of oleic acid until they are combined. The so called metallic oleates are formed by the double decomposition of a soluble metallic salt and Castile soap, and occur in the form of fine powder, used for dusting in skin discases, ixc.

## onsTMEN'IS.

An ointment is a semi solid application, usually employed to smear over the surface of the body, the base of which consists of a substance of a greasy mature. Those met with in dispensing are generally formed by the mixint of two or more fatty substances, or by the incorporation of some oil, chemical, or vegetable body in the form of poider, with the fatty base. The ofticial ointments are, perhaps, most frequently ordered. The bases gemerally in use are bewzoated lard, soft paraflin, or vaseline, a mixture of hard and soft parathin, lanoline, and combinations of was, oil and spermaceti. As a general male, the simple mixture of two or more ointments may be made on a suitable slab wit! a spatula, but when the admixture of a powdered substance is desired, it mortire must be used to ensure the powder being levigated, and free from grittiness, a most essential point in preparing an ointment. When dealing with a large quantity of powder, it should first bo fine-
ly levignted, and then robbed down with a few drops oil, or of tho melted base, to the consistence of a stifl paste, before mixing with tho base. Some substances, such as iodide of potassium, reguire to bo rubbed down with a littlo water and dissolved, to ensure smoolhness, with others it fer drops of rectitied spirit are neeessary as in the ease of jodide of sulphur. The alkaloids, aconitine aud atropine are dissolved in this mamer with spirit before being combined with the lard to fonm an ointment. The preparation of other ointments, arain, require heat, and it is neeessary the base should be melted to ensure thorounh incorpocation of the solid body to be mixed, as in the case of theoint ment of boracic acid and others. Thevefore, in the ointments thestudent willmeet with in dispensing, he must be guided by the nature of the ingredients he has to combine as to the proper course to talke. When rectified spirit is ordered to be mixed with hard it is best to use a mortar; and add the spirit is few drops at a time, well incorporating a:ach portion before adding another, until the whole is thoronghly combined. (Alyeerine maty be easily mixed if the mortar used is slightly wammed. Extracts of belladomma abd henbane, new; should first be rubled down to a smooth paste with it few drops of boiling water, and resinous extracts with a small quantity of spirit. In preparing an ointment in which thymol is an ingredient it is necessary to reduce it first to powder, and then heat it with the melted base until dissolved. Undis. solved particles produce gratt irritation when applied to the skin. When making iodoform ointment, the base should be melted and allowed to become faily cool before adding to the iodoform, when the whole should be well stirred until cold. For melting the base, at water-bath should always be used, and a high temperatur: should be avoided. Ointments prepared with a base composed of hatd and soft parathin, should be stirred comstantly while liquid, until cold, or otherwise they will be gramular and lumpy when set. The following formulat illustrates a case in which the use of a mortar as we! as heat are reguired.

| 13 | Ext. opii |
| :---: | :---: |
|  | Ext. Inelladoma |
|  | ling. liydrarg |
|  | Latuolin |

Jo prepare this ointment the extracts should first be placed in a mortar and carefully rubbed to as smooth paste with a little boiling water. The mercarial ointment and lanoline meanwhile may be heated gently over is water bath until dissolved, then added gradually to the extracts, and the whole well stirred untal cold. Care must be taken to avoid using steel spatulas with ointments containius anything that will act on the metal, such as ung. hydrarg. nitrat. An ointment when properly made must be free from jumps or gritty matter, and should be perfectly smooth and bland throughont. Ointments are dispensed in covered pots of carthenware or oflass, those known as
"opal" having a neat appeatance. 'lhe surface of the ointment should be covered with waxed paper, white being usually proferable to the colored varieties.

## flaAsthiss aNd blisteiss.

The preparation of a plaster is purely a matter of mampulative skill, which has to beacusired by long practice and experience. Io spread it rally good plaster is not a very easy task, and only fuew become adepts. The wholeart is to thinly cover or spread a piece of leather or other medium with a compound of was, resin and other ingredients, while in at thuid condition, by means of a wam plasteriron or spatula, a process which reads simply enough in abstract, but which the student will find is not so easy in practice.

## What is the Best Excipient for Nitrate of Silver Pills.

m. w. h. wemin, chamourn, s. c.

Nitate of silver being incompatible with all orsanic substanees camot be made into pill mass with the usual excipients. Considering this fact, various phammacentical anthors have preseribed powdered gum acaciat and water sublicient yuatity to form pill mass, notably: Wood, Bache © Remington in their Dispensatory. Also its companion mica pmis.

The difliculties accompanying their use has produced this query quite is number. of times.

I have found in my experience that powdered gum acacia as a bise triturated dry with the nitrate of silver, adding sufficient quantity of glucose to form mass, produces a mass that is perfect, of is beautiful eream white color, having a decided tenacity.

When made into pills they retain their shape and do not harden.

## The Treatment of Trismus Neonatorum with Sulphonal.

The foumend de Medecine de Paris for June 2 lst refers brieily to a case originally reported by J. Berenyi in the pheraperutische Ifonatshefl. An infant. $S$ days' old had suffered from trismus for three days. It had five attacks in five hours. Merenyi preseribed sulphonal by the mouth and by the rectum, in doses of there grains. The attacks diminished in intensity and irequency inmediately after the institution of the treatment. Recorery wis complete in six days. During this period the child had taken, in all, at hundred and fifty grains of sulphonal without the occurrence of somnolence or any other umpleasant secondary symptoms.

Quinethylene is the name given by Grimans and Arnoud to the homologue to quinine prepared by them from cupreine.

Halviva, a proprictory remerly sold in England as a quiuine substitute, is claimed by the manuiacturers to be prepared solely from kreat, the dried plant of Androsraplis or Justicia paniculata.

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## Ontario Collego of Pharmacy.

The following are the examination papers which were given at the last Junior Jixaminations of the Ontatio Colluge of Pharmacy held December, 1891 :
cha:Msxim axb bussics.
Examiner-A. X. Scott, B.A., M.D., C.M. g'ine-3 hours.

1. Explain the following equation:-
$3 \mathrm{Cu}+\mathrm{S} \mathrm{IINO}=3 \mathrm{Cu}$ (NOB) $\mathrm{IN}_{2}+\cdots \mathrm{NO}$ $+41120$.
2. Write equations to show the action of.
(a) Zinc on Mydrochlorie Acid.
(b) Potassium Mydrate on Ammonimm Chloride.
(c) Dilute Nitric Acid on Phosphorus.
(d) Chlorine passed througl a solution of Sodium Mydrate.
3. Complete the following equations -
(a) $\mathrm{NaCl}+\mathrm{MnO}_{2}+\mathrm{HI}_{2} \mathrm{SO}_{4}$
(b) $\mathrm{BaO}_{2}+\mathrm{HE}_{2} \mathrm{SO}_{4}=$
(c) $\mathrm{BaO}_{2}+\mathrm{CO}_{2}+\mathrm{H}_{2} \mathrm{O}=$
(el) $\mathrm{Fe}+\mathrm{H}_{2} \mathrm{O}=$
(c) $\mathrm{Sb}_{2} \mathrm{~S}_{3}+\mathrm{IICl}=$
(f) $\mathrm{KClO}_{3}$ + leat $=$
4. Give the discovery, occurrence, preparation and properties, uses and tests of Chlorine. Compare its properties with those of the other members of the Hallogen Group.
5. Describe the preparation and properties of Nitric Acid. Give also the sources and tests for its impurities, and method of purifying.
How much Chili Saltpetre will it require to make 1000 grammes of Dilute Nitric Acid. $(17 \cdot 44 \%)$
6. Deseribe the method of preparing Hy drogen Sulphide, and explain what is formed when the gas is passed through.-

| (1) A solution of Chlorine. |  |  |
| :--- | :--- | :--- |
| (2) | $"$ | Iodine. |
| (3) | $"$ | Bromine. |
| (4) | $"$ | Lead Acetate. |
| (5) | $"$ | Ammonia. |

(6) A ressel containing sulpharous anlydride.
7. Ifow would you test for thie presence of the following in water: (1) harcluess; (2) chlorides; (3) sulphates ; (4) ammonia; (5) albuminoid ammonia; (6) organic matter.

8 , (a) What are the sources, preparations and uses of phosphorus? (b) How much phosplicrus could be obtained from 100 lbs . of calcium phosphate $\mathrm{Ci}_{3}\left(\mathrm{PO}_{4}\right)_{2}-$
9. 200 litres of oxygen are collected at $15^{\circ}$ and 780 man what will it uccupy at the normal temperature and pressure?
10. How much Sodium Chloride will it require to make 20 lbs . of Hydrochloric Acid (B.P.)
11. Draw a diagram illustrating the principle of (1) an air pump; (i) a force pump.

## THEOHERICAL PHABMAOS:

Eamminer-1'rof. Chas. F. Heabner, 1h.C.

1. Detine a Pharmacopuia.
2. State the meaning of each of the following terms: (a) ollicial, (b) ollicinal, (c) galenical, ( (l) magistral.
3. Detine (11) weight, (i) What are weights? (c: What is the weight oit one lmperial thaid ounce distilled water in grains, (d) grams.
4. (a) How many minims ate containcel in one Jmp. iluid ounce distilled water? (b) How many c.m. 3 ? What is the weight of each of tho following volumes of distilled water: (e) One Imp. gallon, (d) onc Wine minim, (c) one Inp. minim.
5. A solution of alum is requived of which each thuid drachm shatl contain one decigram of the salt: state number of grains necessary to make $2!$ wine pints. What quantity of alum will one pint of the solution contain?
6. Metric system: Mention the units of : (a) Lincar measure, (b) weight, (c) capacity; and give the derivation of ench, (d) also the equivalents for cach in the ollicial system; (c) give equivalent for one Eing. inch, $(f)$ for one and a four il grains, (g) one kilo.
7. Define (a) simple solution, and (b) chemical solution, stating phenomenat accompanying each of these processes, together with oflicial examples of each.
S. Distinguish between saturated and supersaturated solutions.
8. (a) Define sublimation; (b) mention two forms of products that mily be: obtained, giving conditions involved and examples of ench.
9. Add together and reduce the vesult to Troy ounces : $3 \frac{1}{2}$ kilos, 2.4 grams, $1 S$ centigran:s, 40 đ̈̈ekagrams, 302 malligrams, 23 heetogrims, and 356 decigrams.
10. One cubic inch of gold weighs 1553.35 grains; what is its specitic gravity.
11. Jexphain fully the method for determining the sp. gr. of a solid soluble in water.
12. State the oflicial specific gravity of each of the following: (a) rectified spirits, (i) proof spirit, (c) glycerin. (d) pure ether, (e) liq. ammoniar, (f) Hydrochloric acid.
13. What will one litre of sulphuric acid weigh?
14. (a) Define calcination, and mention ofticial examples. (b) What phamacal process is made use of in prepar. ing ointments and plasters?
15. Having several lots of powdered jalap on hand, containing respectively $7 \%$, $91 \%, 13 \%$ and $15 \%$ of resin; a mixture is required to represent 46 grams of $12 \%$. How much of each must be used ?
16. Define (a) Comminution ; (b) What is meant by the term "No. 50 pow. der?" (c) what is a "dusted powder,
(11) impalpable powder, (a) give two examples of puiverization by intervention.
17. Define (a) Jacvigation, (b) Elutrintion, (c) Trochiscation, (d) Mention an ofticial chemical in the preparation of which each of these processes is represented.
18. (a) What si\%e of bottle will 10 ar. ozs. of glycerin fill? (b) lixplain specilic volume and its determination.

## hatis phenchtrionss, Nc.

E.ceminer-J.T. Fotheringh:an, B.A., M.B., M.D., C.II. Time Alloted-3 hours.
T. Latin:-

1. Fxpand these abbeviations to full Latin, and translate:-Sesunc., si n. val., semilh., sesquih., prit. vic., o. m., mod. pravse., quor., ejusd., coch. pare.
2. Write these directions with no ab.
 coch. ij magn. quartis horis ad effectum, phiala prius bene agitata. (b) Injus capiat dri hora 7 man matut., et circiter horam decimam drij si op sit. (c) Quod coch. leat. sumat, dolore urg. (d) M. et in iij vel iv dos. dividie, quarum j sumat. omni bihorio. (c) Fit. mist. cujus sumat coch. j. mod. omn. quadr. hor.

## II. Posolocis:-

1. Fill in the amount of each jugredient. necessary to dispense in this prescription for a child of \$ years of age :-
11 Morph. sulph
Vin. ipecac.
Ammon. chloridi.
Syr. scillie.
Syit tolut.
Aq. ad ors. .

Sig. dyj tertia quaque hora, ex. aq.
2. Give maximum dose of ench of these remedies:-Tr. Calumber, Tr. Aconiti, Tr. Ferri Mur., Tr. Catechu, Tr. Nucis Vom., Ir. Opii, Syr. Ferri Phosphatis, Sp. Ftheris Nitrosi, Sp. Ammon. Aromat., Pulv. Cretae Aromat., Puls: Glycyrrh. Co., Ol. Morrhuee, Ol. Anisi, Iiq. Arsenici IIydrochlor., Tiq. Calcis, Extr. Tijicis Tiq!., Extr. Cascara Sagr. Nl., Extr. 'Tataxaci, Extr. Hyoscyami, Extr. Nucis vom.
III. Tmbinaputics, Eic.:-

1. The Mlood.--J)escribe briefly (a) its structure; (b) its circulation; (c) its functions.
2. A 3 grain dose of Ammon. Carb. is given in an expectorant mixture. Follow it from lie time that it is swallunced till it again leaves the body.
3. Define the following classes of remedies, and give two examples of each: -Sialagogues, Hidrotics, Carminatives, Febolics, Styptics.
4. Distinguish clearly between the following, and give an example of each: Vesicants and Pustulants, Rube-

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## ANAINTICA1. CHEMISTME.

EBxamincr-Graham Chambers, B.A., M.B.
Students aro expected to explain the method of their work:

1. Determine tho $\boldsymbol{A}$ cid in the substance matked ( A ).
2. Determine the Acid in the solution (B).
3. Determine the Acid present in (C).
4. Tho following solution of Potassium Iodide is said to contain Potassium Mromide and Jotassiam Jodate. 'I'est it.
5. Blow a bulb and bend the tube at right angles two inches from the bulb.
N. B.-Nentness of work and cleanliness of the desk and apparatus will be counted as important factors.

## hotani.

Examiner-A. Y. Scott, B.A., M.D., C.M. T'ime-Three hours.

1. Describe fully the parts of a vegetable cell. What are spiral vessels and sieve tubes?
2. Show by diagram the difterence between an endogenous and exogenous stem.
3. Draw diagrams showing the structure of the cross-section of a leaf.
4. Explain what is meant by venation and the use that can be made of it in classifying plants.
5. How do subterranean steme differ from roots; name and describe the different forms of underground stems; to which (if any) of these do the following belong-onion, sweet potato, potato, Indian turnip, turnip.
6. Explain the following-parasite, pileorhiza, helicoid dichotomy, imbricate restivation, definite inflorescence.
7. Name the parts of a flower; what reasons have wo for saying that the parts of a tlower aro morphologically the same as leaves, but physiological. ly different.
8. Explain the terms-raceme, umbel, pappus, cyme, pedancle, involucre, bract, glume, spathe, acaulescent.
9.3.
9. $\}$ Practical
12.)

## MHAMMAC.aL, Lamoilatoizy,

Examiner-Prof. C. F. Heebner, Ph. G. 1. Construct the apparatus required in the verification of your thermometer, as to the degree indicating the boiling point of water.
Begin the operation, nad allow it to proceed until the apparatus has been inspected.
(Carefully observe all the precautions and instructions heretofore given
you.) you.)
2. Determine the specitic gravity of the powder handed you, and submit a report of the same, in accordance with the subjoined synopsis.

Stment's mane........ Desk No.... Date.....
Number of powder.......... Weight used....
Weight of equal volume of water .......
Sp. Gravity of prowder.
N.B.--Neatness of work, the order of arrangement and the eleamliness of working desk and outtit, will enter as important factors in your rating.

## Quebec Pharmaceutical Association.

The regular quarterly meeting of the board of preliminary examiners of the Pharmacentical Association of the Province of Quebee was held in tho Montreal College of Pharmacy on Thursday, Jian. 7 th, when 28 candidates presented them. selves for examimation for entrance to the study of pharmacy. Of these only two passed upon all subjects, and seven failed in one subject. The names of the former are Archile Gauvin nad IF. A. Longtin. The mames of the latter are Allen $D$. Doils, I: Rainville, 12. Beaudry, B. W. Evans, P. C. Anderson, L'Hereau, and John Wood. These latter gentlemen will be required to come up again in April for examination on the subject in which they have failed. Mr: Joseph Goulette and J. G. Laporte, who failed at last examination in one subject passed that subject success. fully, and are entitled to their certificate. The remninder of the candidates were referred back for further study, and will not be allowed to occupy a position in a drug store until they have passed their preliminary examination.
The following gentlemen passed their preliminary examination in Quebec the same day as above, viz.: D. Jolicour and Joseph Routhier.
The following are the questions subuitted at the Pharmaceutical Association of the Province of Quebec for the written preiinuinary examination heldat Montreal on January 7th, 1592:

## fiench for bagilish candiditis.

## Translate into French-

If you are to build a new house, be sure to take pains about ventilating and draining the cellar, for it positiveiy is the most profitable way you can spend the amount it will cost you.

## 'Translate into English-

Parceque cela vous coutera bien peu si vous y voye» pendant que votre misison est en construction; puis vous aurez toujours une cave secheavec de lair pur autant que la ventilation sera bonne.

## Amithmetic.

1-Reduce to its lowest terms, $\frac{3}{6}, \frac{9}{3}, \frac{1}{1}, \frac{7}{3}$.



3-Give result with problem of the following operations-1234 $\times 3 \div 2.53+3 \times$ $4-7.236+7.25 \div 4.5$.

1-What will be the interest at 6$\} \%$ on $\$ 12.437 .53$ for 2 years, 3 months and 3 days ( 30 days to a month.)
b-What will be the proceeds of a note of $\$ 1400.00$ at 4 months and 3 days, discounted at $7 \%$ per nunum.

## (indmmats.

1-What is a diphthong? What is a word of one syllable called?

2-What is a pronoun, and what a verb 1 Explain the difference between a preposition and a conjunction.

3-When is the article $a$ used and when an? Give fominine of the following words: Duke, Giovernor, Executor, Hero, Hencfuctor, Sultan, Gaader, Eurl and Bachelor. Substantives havo how many cases, and give examples?

4-Adjectives have how many degrees of comparison. Compare the following: Jittle, Much, Bad, Good. Give possessive and objective cases of I and He . Give the Pres.-Indic.-Passive of verb to rule, also, Pres. Potential of verb to le.
j-Parse the following: He has sold his stock and moved into a new store.

## ghography.

1-(a) Give the cupital cities of Eng. land, Irelind, Scotland and France. (b) The rivers on which they are situated. (c) The parts of the countries they are in.

2-Where are the Bay of Fundy, Bay of Chaleur, and James' Bay.

3-(a) Name some of the principal rivers of the Province of Quebec. (b) Where are the sources and months of the same.

4-In what Provinces are New Westminster, Brandon, Sault Ste. Maric, St. Joln, Antigonish and Sydney.

5-Name three of the mountain ranges in the Eastern (United) States.

## EATIN.

## 1-Translate-

Post ejus mortem nihilo minus Melvetii id, yuod constituerant, facere conantur, ut o tinibus suis exeant, Ubi jam so ad cam rem paratos esse arbitrati sunt, oppi. dar sua ommia numero ad duodecim, vicos ad quadragentos, reliqua privata redificia incendunt ; frumentum omine, practer quod secum portaturi erant comburunt; ut domum reditionis spe sublata, paratiores ad omnia pericula subeunda, essent: trium mensium molita cibaria sibi quemque domo efferre jubent.
2-Give person, number, tense, voice and mood of exeant, incendunt, efferre.
3-Write principal parts of facio, conor, comburo, tollo.
4 -Write in full-oppidum, finis, ricos. Histomy.
1-When and by whom was America discovered? By whom was tho expedition fitted out, and where was the first landing made?

2-Name the best Saxon king? What was Magna Chaila, and by whom signed?

3-Name threosmportant events in the reign of Edward ISI., including two great battles. What young Frenchwoman was,


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instrmental in raising tho seige of Orlemas? What linglish monarel had the longest reign?

4- What were the "Wars of the Ro. ses"? In whose lime was Bughand declared a commonwealth? During the reign of what linglish king tid the American war break out, which ended in the separation of the United States from Bugland?
:- -'Lo what line of kings did William the Conqueror helong? What Frenchman explored the Gulf and River St. Tatwrence in 1531 and 1535 , and gave them their names? Who was the founder of the Province of (luebec.

## The Physician as a Dispenser.

Usually it is desirable to learn well the particular vocation for which one is trained, and the greatest success is likely to come to those who faithfully carry out this phan. There are a fen people who succed in more than one line of business interests, but they are rate. The physician of the past had not the opportunities of study possessid by the student of to dlay; and the mistakes of practice of the days gone by are made fewer by the better teaching of the professors of our time. The complaint now is that there is too much placed before the student that is considered necessiary fur him to study. Ihe natural conclusion is that the lime of study shonld be inereased, and the several schools of medicine have come to this de-. cision and have acted wisely in lengthening their comse of teaching.

Among the branches that bother medical students, and which usually receive less of their attention than some that appeal more strongly to them, are materia medica, chemistry, and pharmacy. When it comes to anatomy, physiology, surgery, they are apparently more attentive and studious, and it is believed that the examinations of medical students show a much better profieiency in the latter three than in the former. The study of materia medica seems to the student to be in uninviting task, and we fear that in many if not most of the schools it is helittled by the manner of its presentation, which does not increase the desire of the student to conguer it.

Chemistry is more popular, but to the average medieal student it is perplexing and diticult, though he may acknowledge that it is interesting because of its reliation to sanitation and the many facts that the physician should know. Of phamacy he knows little or nothing, as about all the information that the average medical collage affords is what the professor or instructor in materia medica gives in the way of oral statistics that such a drug is administered in the form of a tincture. a fluid extract, or in powder, or that, certain chemicals are given in solution, in certain combinations, or -may be given in pilular form, de. Very few colleges give more than oral demon stration of these facts, and still less pro-
vide any practical laboratory work in the former, whilo the latter is practically ig. nored altogether. The lacti of interest in these threo branches was never more pal. pably shown than at the last convention of the American Medieal Associntion at Washington, when the section of materin medica and pharmacy at its several sessions was not attended by a dozen members out of the thousand or more who were present.

In view of these facts we cammot but deprecate the idea that the physician of today is prepared to be an intelligent and proper dispenser of medicine, even of tho majority of his own prescriptions. line exceptions to this are those who may have taken up medicine after having taken pharmacy as a separate and preliminary course, or who have taken careful and special instruction in this coincident with their medical studies. It may be said that to diay the physiciam has had better. opportunities for dispensing because the mamufacturer places in his hands the methods of dosing the patients ready made. This is true, but it is cither the physician or the manafacturer who is treating the patient. If it is the manufacturer, then the physician is secondary, and maty in many instances be ignored, and he frequently tinds this to be the case through this very method he has used.

We are led to these remarks by the re".at appearance in one of the medical journals of an editorial in which the reasons are advanced why the physician should dispense his own medicine. The various claims made are "comsenience aud the avoidance of trouble." "This may be true in some iastances, and to carry out the phan he proposes the physician lapses into the position of a merchant dependent on the manufacturer, and must necessarily depend upon a small line of remedials, and suit the ease to the remedy, not the remedy to the ease. Ihis may be less trouble to the physician, but the patient has the right to expect that his interests are the ones to be consulted.
"It saves the putions tronble andmoney." That is, it may save tronble, but not always mones. 'Ihe physician' who supplies medicines is not usually the one who does it, for philanthropy alone. "Some find it hard to pay for simple advice." This is cloubtless true in some instances, but is not this the very oijeed of consult. ing the physician, his advice? If it were not for the desire to secure what the patient believes grood advice, the doctors would soon be gone. lhere are times when in emergency cases the prompt administration of remedials saves valuable time, and to the country paractitioner it is a necessity that some leading remedials should be carried by him, but this is the case to but a limited extent in cities. The accidents of prescription writing are the best clam made, for all pharmacists finow by experience how frequent they are, and the same absentmindedness would just as likely lead to the physician's wrong selection of his own renedials were he to dispense them.

The evils of hospital dispensing we havo pointed out on previous occasions, but this is the outcome largely of the eftorts of physicians who are identified with such institutions. Drugstore doctoring is tho outgrowth in poor neighborhoods usually of the efforts of the medical man to secure practice. Any advice which goes to tho extent of suggesting medicine should bo the province of tho physician-but there are many instances where the drugeist can properly advise for or against the uso of medicines the customer asks for.

Thee physician is not usually the man who is qualified as a dispenser; but while there may be emergencies in which it is proper and necessary, the physician will have more the respect and confidenco of the patient if he confines his duties to his usual routine, giving more cure and study to the care of disease and the amelioration of suttering, and having the acguain. tance and confidence of pharmacists who are competent and proper dispensers of medicines to whom he can refer his clientage.--Mhar. Recomd.

## Ready Money.

The great tirm of Baring Bros., one of the oldost and wealthiest bamking firms in the world, got into trouble because they had too many securities, and not enough cash, and this is likely to happen in every busiuess having too many accounts and less ready money.

A merchant's book debts might be the most reliable in the world, but they are not negotiable to pay a bill or take up at note, and it is a fact that there are occasions, when cash, and casli only, will do the talking.

If it is necessary to do business on a credit basis (and it would seem impossible to do otherwise) there can be phaced a limatation to the amount of credit given, but to go on increasing bills, and take as consolation the belief that the account is solid, and will some day yield a return, savors too much of that blind faith in hamanity, which will not look on the dark side, and is unintluenced by the gathering. clouds.

Cash in hand is always reliable. You can do more with eren a little ready: money, than a whole ledger full of accounts be they "as good as gold," and merchants, shewd business men though they are, if they have permitted their capital to become locked up in securities, either of stocks or bonds, or have allowed their customers' accounts to encroach upon their banking resources, are spendthrifts, not in the sense that they have thrown their money away, but in that they have put from them the ready money which should bo at their command at all times. In times of stringency and panie, it is the man who has the money who is master of the situation.

Man: lifan.-The belief that filicic acid is the aetive principle of male fern, is again attacked by I. Reater, who advocates an entire re ision of the subject.

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## JANUARV Jити, IS0』.

## 1891

The drug market of 1891 has been on the whole free from anything of a startling nitture, either in prices or abnormal denamal. One of its pechliar ieatures has been the umprecedently low price of quinine, which has never in the twelve months been quoted higher than forty five eents and has been as low as twenty-five. Duting February, owing to a breaking up of a combination, chloral hydrale dropped to a price never before seen and has been steady at the low price ever since. It is many years if ever that carbolic acid has been as low as it has been known in 1891. Oil of lemon early in the year wats high, and during the summer showed signs of going still lighocr, but in the fall one of those sudden drops peculiar to the drug hasiness occurred, and at present it is at at low average price. Morphine and opium have been steady at low prices. pot. iodide has aweraged about 83.50 all yeat. Bromide on the contrary, owing to a break in the bromine combination, has been lower than ever before; ramors of a renewal of the combination are continaally in the air, and hately have been of at more positive character. Silver nitate has mantained a high average price. Fluctuations have been freguent, but not very great. Ipecac root and cubeb berries have been at very high prices. Ergot has been at it normal price until the fill when an advance of about 50 per eent. took place. Even at present adramee it is considered good value. Aleohol early in the summer was adraneed some forty cents a gallon owing to a new excise duty: This is the most unpalatable adsance of the year for the retail drugeists, as it is considered by them a direct tax, and it is difficult for anyone acquainted with the drug business to see it in any other light.
Business as a rule has been satisfactory; and the daily routine has been broken by the continual advent of new drugs and new patent medicines, until one is alnoost bewildered. The eutting started late in the year by houses outside the trade, followed by some inside the trade, looks ominous for the future, but the solid combination shown by both wholesale and retail dealers will be a strong factor in retarding others from taking the step.

The past year has not been as productive of new remedies as was the previous one, nevertheless son:e drugs and chemical products have been brought to the fore, which, alhough all of them may not be entirely new to the profession, yet, some of them at least are worthy of being placed in the category of useful :additions to our pharmaceutical knowledge. Several iodoform substitutes have been named, viz: Liurophen, dermatol, or subugallate of bismuth, salicylamide nud apyonin ; a new
boric acid compound formed by boiling to. gether equal parts by weight of borice acid, boras and water, is recommended in the treatment of uleers and old sores, it is more soluble in water than boric acid; pental, a new anasthetic ; thoman, which is a sulphurated lamolin, is a new. substitute for Indsam of pera; tonquinol, a substitute for musk; dithiosalicylate of sodium, a powerful antiseptic; cantharidinate ot sodium, which was brought into notice last year as a remedy for tuberculosis, has not found much favor. Merck has brought into some prominence several alkaloidal and other preparations, which may in time be usetill, amongst others sabadine and sabadinine, both from sabadedia seeds, and pseudoconhydine, a neverystalline base from coninm fruit. A new erystalline alkaloid has also been discovered from phants of latarine, which M. (iosshofl has called lamotetamine which has therapeutical action somewhat similar to strychnine.

In Phatmaceutical legislation We have to chronicle the passing of a Pharmacy Aet by the Legishature of British Columbia and the organization of a Pharmacentical Sociaty under the provisions of the: Aet, thus completing the provincia! orgramations of the Dominion. 'The clection of an new Council for the Ontario College of Pharmacy was held in July and resulted in the reelection of most of the former members. The new teaching stall of this College began their labors with the fall session, with a class exceding in numbers that of any previous year.

It now remains for the pharmacists of the Doninion to set on foot a scheme which will result in the formation of a "Canadian Pharmaceutical Association," not bounded by any provincial lines or charters, but with a uniform standard of qualitication and the privilege of caryging on business in any prortion of the Jominion.

## Caution Your Customer.

Many of the new remedies which have come into use during the past year or two have been brought into generai notice by the secular press, and their therapeatic claims set forth in such a way that the public have come to consider them as ordinary household remedies, which may be user according to their own diseretion, or in the manner deseribed by those piatpers. This is very much to be regreted in many cases, and the mumerous deatl.s which have occurred through the impreper use of these remedialagents has shewn how careful the antutord public should be in bandling them. Lharmacists should consider it is a part of their duty when selling preparations such as antipyane, cocaine, or any chemical product which should only be used wien prescribed by the physician, to aseertain from the purchaser whether he or she has any knowl. edge of their dose, use, and peculiar action on different individuals. Such cantions would not only serve to make them more
careful in the uso of the drug, but also show the interest taken by the pharmacist in the well-being of his patron.

## The Relations Between the Wholesale and Retail Trade.

The following correspondence was receivel too late for insertion in our last month's issur. We regret that several wholesale houses have not yet availed themselves of this opportunity of present. ing to the retail tade their ideas in regard to this rexed question of "cutfing," and thas showing a determined opposition to am abuse which threatens seriously the trade of the retailer. Whether their withholding their opinions and declaraations in the matter is through as fear of giving ton much prominence to the subject we camot say, but if so, we must express the opinion that they ate not acting wise$\mathrm{l} y$, as such silence may not only bo misconstrued but maty prove a serious drawback in presenting that solid front which the wholesaler should display at such a time. The first letter is from

## NJ.t.AS \& Co.

$$
\text { 'Toronto, 1)ec. 12, } 1891 .
$$

## Etitor Casimas Dbegeist :

Dr:ut Sut,-Replying to your favor re cutting would sity that we have confined our sales to the drug tazule in the past and will pursue that course in the future We think the neans now heing male use of by the Drug Association here will be very suceessfal, provided that manimity he manataned nomarg the members.

Cours truly,
Amhas Co.

Toronto, Dec. 14, 1s01.

## E: UROR Cavadma Dhugcist:

Denik: Sn:, -Tour favor is received cmuming an to the conrse we are taking in reference to protecting the retail druggists in the sale of patent mellicincs, and in reply:
We believe the patent medicine trade should be in the hately of the duagists in all places where there is an established slruggist, and in the past we have contined our trade as much as prossible in such piaces to the druggists. The exception has been in phaces where there are general storekeepers who have been our customers for years before the druat stores opened, and aye not willing to hased the trade over to the dŕngeist Wetry to have them put ths business in its iegitimate chamel but are not nlways successfui.
We neter sohl aray gookls to IT. Faton iA Co. maddo not intend to, or to any other firm doing $n$ similar lonsiness.
We are in full sympathy with the retail duggists'asswiation of Turonto in their caldeavor to incineuin prices and fecep patent medicines out of the hamis of alepartuncut atores. and if the members are true to the aspociation we helieve they will tre successful.

Vours truly,
J. H. MeKiNNON, Secretary:
"A clemk in a Windsor grocery sold saltpetre in mistake for IEpsom salts, and a Dles. Whitely who used it narrowly escaped poisoning."-Canadian Grocer. This is a simple of what we may expect when the "muslin stores" are in full swing. Ignoranee and crimimal negligence go hand in hand.

## Clinical Dietetics.

Predigested Fools are now, more than ever before, relied upon by physicians in the treatment of disease. Armour's Peptonizing Tablets---free from the slightest taint of toxic principles---are put up in tubes containing fifteen tablets, accompanied by convenient recipes. Send for prices.

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 jom cirs sell handreds of shese l'urses, or Tolmect youcher, ns

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 the sume without cutting or injuring the l'urse in any maner.



 agrenk, if you want

## Strike it Rich




 Time is loney.

 to all. Ahitress all onicen, quich, to the manufactneers,

MAGIC PURSE CO., New Milford, Conn.

## Pharmaceutical Education.

Improvement in the position of amy section of haman society is invarinbly preceded by an adsanced development in the individuals constituting that section. This development, though varying in its direction, is summed up in the word education taken in its widest sense. The general adsatnce in the position of pharmacists during the past half eentury bears out this statement, being distinetly due to the leavening mhluence of a few well-ducated men upon the mass of their fellows who werestimalated to elevate themselves individually, and so deserve better things as a body.

The tale has been often told and retold, and it is ceferred to tiere simply to illustrate the fact, which is too frequently overloobed, that individual self-improrcment must precede general advantage in the domain of pharmacy as elsewhere. Every real substantial aldantage must be purchased by contimad striving and persevering labor: The price, too, must ahways be paid in adrance. We suppose no one nowadays will be found to deny that the labors of Jacob Bell and his associates wers fraught with great and Insting advanticge to the pharmaceutical Society. At the same time it is equally certain that had these leaders not been thoroughly well fitted for their posts their libors would bave been in vain. They had specially trained themselves for the vocation they elected to follow, and their commercial prosperity, professional status, amblhigh socinl position, were essuntially due to the fact that they were, in the best sense of the term, men of education. Again, unless those to whom they appeated hat decided to follow in their footsteps to the best of their ability, liritish pharmacists would not to dny occupy their present position. They and their successors must shive to emulate the labors of their predecessors if they would inprove or ceen maintain that position.

All education should be fitted to the requirements of the students and, in the case of the pharmacist, this implies that he should be so taught as to be eflicient in all pertaining to the production, preparation and distribution of medicines. This efficiency depends on the application of methonls adiapted to the respective natures of the great variety of drugs in the: modem materia medica, and the conception of right methods dimands an intimate acgunintame with their physical, chemical, and, in some cases, vital properties. An extensive scientific knowledgo is required to understand and control the various phenomena exhibited during proaluction; a logical npplication of principles is uecessiry to prepare drugs aright; and much skill in techaical minutiae, combinod with an intimate acquaintance with men and things, is essential for successiul distribution.

Though both physical and biological science are laid mader tribute by pharmacists chemistry is and must be preemin-
ent in their curriculum. It is called up. on to explain, in some degree, almost every operation in the daily round of the phamacy. The tyro camot study it too much or too pactically. When he has worked through the syllabus set before him, and seeks advice regarding his after studies, it will certainly repay him best to do mote chemistry. It may be feared that the other physical sciences are apt to be regarded as ormanental, the reason being that they are not sulficiently applied by students. It is quite conceivable that improved forms of pharmaceutical apparatus and simplified methods of working might result from the more frequent ap. plication of physical data. Botany, which shoukd rank next to chemstry in importance, is likewise often regarded as am unnecessary avil. But it is as impossible to study the vegerable materia medica elthciently without a practical knowledge of plants and their organs, as it is to understand the properties of salts and acids without an acquaintunce with the laws of chemistry. The one is as needful as the other in the equipment of the fully educated pharmacist. Doubtless in many instances there have been attempts to study botany without the aid of plants, and perhaps suficient omphasis has not been laid upon the faet that each vegetable drus represents some particular part of it plant. The new regulations of the examining boards should go far to remedy this state of affairs, by requiring candidates to show a more practical acquaintance with their work, and by allowing sulficient time to test this fully. It is only by a more complete knowledge that students are embled to estimate properly the respective values of the various subjects in which they are expected to be more or less proficient. $A$ subject may be studied for the sake of the discipline it imparts, rather than to add to one's study of knowledge; jut it camot with reason be srid that anything not strictly cosential is included in the pharmaceutical curriculum. It is by going beyand this; by continually adding to his store of knowledice: by unceasingly striving to improve his education on crery one of its manifold sides, that the pharmacist of to day may hope to continue the good work begun diity years ago.-I'harm. Journal.

## Incompatibilities in Prescriptions

Some time ago a prescription was smut to me Erom one of the Southern States by a former pupil. If the object of the anthor of this prescription wiss to crowd as many incompatibilities as possible into a short prescription, he has succeeded pretty; well.

The reactions occurring when this prescrintion is compounded are simple, and should be understood by atny student who has taken a colloge course in chemistry; but the prescription is an interesting one from the number of slistinct incompatibil. ities it presents, there being about as
many as there ure ingredients in the mixture. It is as follows:

$$
\begin{aligned}
& \text { Tlinetura furri chloridi........ }{ }_{12}^{1 \frac{1}{d r}} \\
& \text { Sodii hyposulphitis .......... in dr. } \\
& \text { Potassii chlorntis ............. is dr. } \\
& \text { Quinine sulphatis................ } 15 \text { gr: } \\
& \text { Agи: ..... .................... } 2 \text { дд. }
\end{aligned}
$$

The original dispenser mixed the severat articles in the order in which they are written above, save the water, a portion of which was used to dissolve the sodium thiosulphate. If the several reactions which oceur in this case are noted, they will be found to be as follows: On adding the solution of the thiosulphate to the tincture of iron, the brown color of the latter is quickly changed to the per green characteristic of ferrous compounds, and at the sime time a slight milkiness due to the separation of sulphur occurs.
The ordinary tests for ferric iron show that all the ferric salt has been reduced to ferrous. At this point the mixture probably contans ferrous chloride, sodium sulphate, and sodium thiosulphate, the reaction being as fellows: $2 \mathrm{Fe}_{2} \mathrm{Cl}_{6}+2 \mathrm{Na}_{4}$ $\mathrm{S}_{2} \mathrm{O}_{3}+2 \mathrm{IH}_{2} \mathrm{O}=4 \mathrm{VeCl}_{2}+2 \mathrm{Na}_{2} \mathrm{SO}_{6}+$ $4 \mathrm{HCl}^{3}+\mathrm{S}_{2}$.
The hydrochloric acid set fres is immediately decomposed by the thiosulphate with the evolution of $\mathrm{SO}_{2}$.

These two decompositions leave about 66 grains of sodium thiosulphate still undecomposed.

On alding the potassiuni chlorate ( 180 grains) this remaining quantity of theosul. plante is entirely decomposed, and the ferrous chloride again raised to ferric chloride. One molecule of potassium chlorate will give up enough oxygen to convert six molecules of ferrous chloride into ferric salt, and six molecules of free hydrochloric acid will be required to satisfy the increased valence of the ferric iton. Inasmuch as the acid set free by the reduction of the ferric chloride originally used was destroyed by the thiosulphate, at least one-third of the iron will be precipitated as oxide, as shown by the following equation: $6 \mathrm{FeCl}_{2}+\mathrm{KClO}_{3}=$ $2 \mathrm{Fe}_{2} \mathrm{Cl}_{6}+\mathrm{Fe}_{2} \mathrm{O}_{3}+\mathrm{KCl}$, or more prob. ably two thinds of the iron will be precip. itated as oxychloride, and one-third remain in solution as chloride. In cither case the amount of potassium chlorate decomposed is the same, amounting to only $1 \underset{2}{1}$ grains, and leaving an abundant supply for the decomposition of the 66 grains of sodium thiosulphate which still remained, and which is promptly oxidized to sulphate as follows: $6 \mathrm{Na}_{2} \mathrm{~S}_{2} \mathrm{O}_{3}+2 \mathrm{KClO}_{3}$ $=6 \mathrm{Nin}_{2} \mathrm{~S}_{2} \mathrm{O}_{4}+2 \mathrm{KCl}+3 \mathrm{~S}_{2}$ Not quite: 11 grains of potassium chlomte is required to decompose the above quantity of crystallized sodium thiosulphate, making in total loss of chlorate of about $1 \geq 12$ graias, and leaving a large evecess for the next reaction, which occurs after the guinine is added, when, owing to the insolubility of the chlorate of this alkaloid, it exchanges its acid madical with the yotassium chlorate, forming, of course, an equivalent quantity of potassium sulphate. This is especially noticeable if the quanine


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salt is dissolved before adding it to the misture.

Our curions and unusual series of reactions is now complete, and the vial contains ferric chloride and oxyehloride, precipitated sulphur; sodimm sulphate and chloride, potassium sulphate, chloride and chlorate and guinine chlorate. The question as to what the physician who is responsible for this abgregation of incompatibilities intended to administer remains at mystery; that of the expected effect up. on the patient has excited the curiosity of the profession. With these questions the phamancist is, perhaps, not legitimately concerned, and the average medical student continues to look upon the time he is obliged to spend in the study of chemistry white at college as simply wasted.The Apothecary.

## Refining Camphor in Japan.

A very important change has recently taken place in the methods of preparing camphor for market. The principal source of supply is in southern Japan, and for many years it has been exported from there in the crule state only: liecently, and since the great advance in the price of the drug, ciused by its consumption in the making of cellatoid, plants for the refining of camplor have been set up in Jirpan. In April last complete machinery, including stills, engines and boilers, were manufactured at Pittsburgh, Pa., for Messrs. Gribble i Nish, and sent to Hiogo, J apmon. The complete machisery werghed about fifty-fice tons and cost $\$ 75,000$. Dr. A. G. Boym; who had pre. viously given mueh time and thought to devising improved methods of procuring the crucle gum and refining it, went to Tapan as the chemist in charge of the enterprise. Previous to setting up this phant near Miogo, all cauphor left Japan in at crude state, and was refined either in Europe or this country. This caused it great deal of waste from eraporation, and has prompted capitalists to do the refining where the dirug is produced, and thus avoid the wasto and loss which has heretofore attended its transportation. About the same time that this plant was sent to Tapan, mother one, purchased by native capital, was started. This shows how quickly the matives of Japan, ndopt improved methods of trade and manafacture, rather than he outdone by foreign competitors.
The American refinery is composed of machinery made under the patents of W. Ir. Simes, of Philadelphia, and will be able to produce from lifty to seventy-five thousand pounds of refined camphor in a month.

The products are of two kinds. One is sublimed, and called thowers of camphor, which slightly resembles desicented coconmut, except that it is of a gummy nature. The other lind is pressed into cakes of varying slapes and siges, but generally about the size of a cake of toilet soap. The flowers of camplor is prepared especially for use in the manufacture of cellulojd.

Since the American refinery has got into successful operation, a company has been formed witha capital of $\$ 100,000$ to prosecute the business.

Just what elleech the new method of refining camphor will have upon the price of the article sems to be a matter of considerable uncertainty, the market value laving fluctuated greatly at times, owing in part to the mamipulation of speculators and also to reports of its use for making smokeless powder and for other purposes. It is now said that camphor has proved unsatisfactory in smokeless powder, because it evaporates after the powder is placed in the cartridge.

The methois of procuring the crude camphor in Japan are of a vely primitive character, though sufficient quantities are always fortheoming to meet the demands of the trade.

As was shown in the Scientific American of June 6 last, camphor trees are being domesticated in this country, a large number of specimens having been distributed by the United States Dipartment of Agriculture. A gentleman who has spent a number of years in Japan, and is familiar with the procuring of camphor gam from the trees there, said recently that he saw wo reason siby camphor should not, in time, be produced here in paying quan-tities.-Scientific Americen.

## The Preparation of Suppositories

Mr. D. S. Metherington read a paper on the above subject at a meeting of the Liverpool Yharmacuatical Stadents' As. sociation on Nov. 19, of which we give an abstaact below.

A large and varied assortment of suppositories were slown, including the glyco gelatine suppository of the Pharmacopecia, which the aththor said could not, according to the directions given, be made satisfactorily ; part of the selatine, however good the ghality, being loft undis solved.

Gelatine, not being soluble in cold wat ter, but merely sucking up is part of it, it was necessary to warm the soaked gelatine in a water bath previous to adding the slycerine. Also a minute or two was too short a time ; it required at least $\overline{3}$ to 10 minuies to soak. The manufacture of suppositories with a basis of glyco.gelatine should cause little difficulty to any one, providung no thmin or spirit were contained in the formula. Even then in tho case of extract; there is usunlly a sufficient quantity of glycerine to redissolve nny cextract wlich might be thrown out of solution. The astringent extracts, as for example, est. hamanelis, causes some little tronble, and might be guoted as an exception. Even aiter they are made they becom juite wet with sworting, caused, as I Jetherington said, by the alcohol matu - in the giycerine being affected by $t_{1}$ atine in compound with tammic acid, as .lcoholic precipitates an aqueous solutici- of gelntine by withdrawing the water; 'lich causes the gelatine
to be thrown down. Cacoa butter, when heated and allowed to cool without stir. ring, and the melting point taken of samphes, one from the top, and the other from the bottom of the hager, it would be foumd to vary from two to four degrees. It followed tisite suppositories made with of. theobrom. must be very gently heated, or at uniform wesult would not be arrived at. Vegetable butter, although laving a melting point of only $S \sum^{5}$ Ri, did not set so readily as cacao butter, and could not with adrantage be substituted in the manufacture.
The mode of making uterine pencils, both with a basis of cacan butter and glyco-gelatine, was explained, was of hollow pessaries, which are coming into so general use among medical practitioners. -Br. and Col. Drugyist.

## British Manufacturers and the Chicago Exhibltion.

The attitude with which british manufacturers generally regard the incitation to exhibit at the Wordd's Fair in Chicago is gradually becoming more definite. It is shown pretty significantly in the answers which have been sent by the leading Chambers of Commerce through out the country the circular letter of the royal commissioners soliciting their coop. eration. Though the London chamber has courteously accepted the suggestion to form it committec 'for exhibition purposers, it is an open secret that its individual members do not feel the slightest enthusiasm for the idea of exhibiting their goods. The Chamber of Commerce Tournal now publishes sixteen replies from provincial chambers to the commissioners' letter: Five of the sixteen-viz, Belfast, Birmingham, Glasgow, Middleborough, and Wolverhampton-decline to accept the invitation; two, Edinburgh and Sunderlamel, acerpt it with an intimation that they do not anticipate that their efiorts will produce much result ; Leeds talks of considerable apathy and postponcs its decision; Bradford also defers; and though the Bristol, Halifas, Keighley, Nottingham, Sheftield chambers agree to act is locial agents or committees, it is evident from the tone of the letters that some of them, at any rate, do not think it will be of much use. Leeds and Bris. tol discuss the question whether exhibitors will be allowed to mark the price of their goods in such a manner as to show the extm cost occasioned by the American tarift:-Chemist and Druggise.

Tossumtis and diphtheria have been sicecessfully treated by Dr. Haberkorn with dry salicylic achd applid twice a day.

Murimese Warts frequently disappear, according to Pullin, after a weck's internal use of Fowler's solution in doses of 6 dirops.
Bitis of maid dogs should be liberally washed with nil of turpentine, which Gaitier (Joum. Pharm. d'Anv.) has found a superior agent for destroying the virus of rabies,

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## Books and Magazines.

A portrait of Gounod, the celebrated French composer, forns the frontispiece of the Jammery Gentary, and along will the portratit is a charming paper reminiscence of the early life of the musician. eence of
1 lis experience as a student of music at Jome and his later acpuaintance with Mendelssohn are delightfully narrated. This paper by Gounod is one of : musical series which will make 'lhe Century especially attractive to lovers of music during the coming year.
The first of the series on "The Jews in New York," loy the Rev. Dr. Wheatley, is given with numerous illustrations, and there also appears a brief artiele on "'he Jewish Question" in general, treated from is very lofty point of view by :an anonymous writer who uses the signature "Joscphus."

In the series of pietures by smerican artists a full-page reproduction cf a painting entitled "Dole Far Niente," by Will 11. Low, is given. Mention also should bo made of an illustrated article on "The Alligator IIunters of Louisiana."

In "The 'lopics of the 'lime" two editorials appear in the series on "Chap Money" movenents, one deseribing "Alizbama's 'Thousand Dullar a May Blunder," and the other telling of the "Mississippi Crop-Moving Currency:" Other articles in "Topics of the 'lime" and "Open Ictters" are on "The Progressive Discovery" of America," "Attacks upon Public Parks," "M. Gounod and his incoils" and "thon Camp Morton Controversy."

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'Ihe Reviens of Revieus for Jannary contains the portraits of some fifty or siaty of the notabilities of the day. General Johnston and Governor Nicholls of Louisiani, Secretary Boster, Assistant Secretary Wharton, the hate Dom Pedro, Fonsec:a of Brazil, Mt. Jiackson the new Irish Secretary, Mr. Redmond the Parnellite leader, Ars. Fiavin of Cork, Arelobishop Walsh of Dublin, Prince George of Wiales, tive governors of Australian states, the late Lord Lytton, the lite Rev. Oseat McCulloch, the late William 13. Florence, Governor Alvin P. Hover, Senator Plumb, Mon. S. J3. Elkins, Mr. Gillan of Judye the Caar and Cratcina of Russia, with vatious other Russian portraits; Mr. Elbridge Gerry of New York, Mr. Benj. Waugh of London, Mark Twain, Frederse Marrison, Thomas Nelson Page, the late Mr. Felhagen the distinguished German editor, and Lord Rosebery, the rising Jiberal statesman of England, are among the people whose fites are presented in this number.

The Ieading Artiches of the Month, as condensed for the Jomuary number of the Revicu of Revieus, comprise the most important essays and discussions that have appeared in the leading periodicals of the world in the month of December.

Tuf Them Caxadiay Monthiz--The npmouncement of the esinblisbment of 4

Canadian illustrated monthly madazino is a source of gratification to the very largo class of readers who have been wating to welcomo just such n periodical from in Camadian publishing house. The Sabiston Litho. and Pub. Co., Montreal, have taken the decisive step, and the first issue of the Dominion lllustrated Monthly will make its bow to the public during Jamuary. It will be a $6.1-p a g e$ magazine, handsomely illustrated, and Camadian and patriotic in toue. The most gifted of Camadian authors will contribute to its pages, making it a most desimblo family magazine for all Canadians especially. The subsuription price, 8.50 , places it. within the reach of all.

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Mar. Howeras' New Work.-Hhe announcement that Mr: Howels will leave Marper's Mayraine to take editorial charge of the Cosmopolitan,on Miarch lst, calls attention to the process of building up the stafl of a great magarine. Probatbly in no monthly has the evolution been so distinctly under the eyes of the public as in the case of the Cosmopoliten. 'Ihe first step : ifter its colitorial control was assumed by Mir. John Brisben Walker, was to add to it Edward Everett llale, who took charge of ". department called "Sucial Problems," subjects concerning which the greatest number of people are thinking to.day. Some montils later, a department was established called "The Review of Curent Events." 'The next step in the listory of the Cosmopolitan was the plaring of the noviow of the intellectual movement of the month in the hands of Mr. Bhander Matthews, who for some time hats been recognized as one of the two or three ablest eritics in the United States.
Finally cane tho acceptance of the editorship conjointly with Mr. Wialker, by Mr. Wra. Dean Ifowe:ls.

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Owing to delay in the receipt of the corrected proofs, the article by Mr. Gladstone promised for the January number of the North American Rericie does not appear in that number, but there is no lack of fresh and interesting matter in the first issue of the new volume-the one lindred and fifty fourth of this ancient and honorable periodical. Lady IIenry Somerset has a word to say about the stums of Loulon as contrasted with those of New York, in "The Darker Side." Fast railway travel is described by Theodore Foorhees, the general superintendent of the New Fork Central Laibroad, under the title "Ninety Miles in Jighty-nine Minutes.' Charles H. Cramp writes of "The First Cost of Ships" from the point of view of the practical shipbuilder. The Notes and Comments of this number will be found full and interesting.

## ${ }^{*}$ *

AN Exchament 'Tmo.-A trio of excellence is the Da:ly Witness, Wrelly Witness and Jorthcrin Messcutere; of Montreal. The first, as a ciaily from the commercial gentro of Canadn, should be read by overy
business man, the frani:\% Ilitn"!, as a useful and interesting family paper, is known throughout America and Great Britain, while the Dorthern dessenyer, for the younger members of the fanily and for Siablath Schools, is most desimble. The great success of these papers makes their circulation very large. Any two of them would add to the happiness and prosperity of any Canadian home. The priee of the buily llifeness is s3 a year, of the IVeckly IVieness st, and of the Northern. Mexse יyer 30 cents. Messers. John Dongall \& Son, Montreal, are the publishers.

Marvelously rich in illustrations and text is the fiftieth anniversiny number of the American Agriaulturist for Janunry. It contains no less than $1+3$ illustrations engraved especially for it. Most of the leading authorities in American and formign agriculture are among its contributors, including J. IR. Dodge, the government statistician, President Berckmans of the American Pomological Society; 1 . V. Munson, the grape expert; Dr. Jenkins of the Comecticut lixperimental Stition ; George A. Mirtin, the authority on horses and cattle $;$ A. B. Allen, the founder of the magazine; Henry Stewart, L. S. Hardn, Mady Moggan, Willian Folcouer, C. I. Allen, Prof. I. R. Iraft, Prof. J. L. Budd, H. S. Babcock, P. M. Jacobs, Dr. 13. D. Malsted, Dr. II. W. Wiley, Joseph 1Intis, (ECorge Eillwanger, Dr. C. V. Riley, Clarissi Potter, Jessie Jenton Fremont and others. It gives a remarkable statistical epitome of the present sifuation of Americin agriculture :and the figures. to show its apparently brilliant future. A comprehensives statisticat review of the cotton fade and crop for difty years and of our live stock and priacipal cereal crops is also given. 'The list is given of all the ive stock breceders' associations of the world that preserve a registry for recording pedigrees, which is as complete for Burope as for the Crited States, and is alone worth many times the 15 cents charged for a single copy, or $\$ 1.50$ per year.

How Many Cars?-_" If 300 cats can lill 300 rats in 300 days, how many cats will it take to kill 100 rats in 100 diays?" A fine toned upright piano will be given by The Queen to the first person answering the above problem correctly; an clegant gold watch will be given for the second correct answer; a chinat dinner set will be given for the third correct answer; an elegant silk dress. pattern will be given for the fourth cornect answer, and many. other valuable prizes, all of which will be amounced in the mext issue of The (bucen. As the object of offering these prizes is to attract attention to our popular family magazine, each person answering must enclose four three cent stamps for sample number containins full particulars. Send to-day: You may secure a valuable prize. slo in gold will be paid for tho bost ori, final problem to bo publiabed in a finture

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## Commercial Travellers.

At the annual mecting of the Dominion Commercial 'Travellers' Association held at Montrenl, Mr. Fred ITaghes was re-elected president; vice-president, 1R. O. Simpson ; directors, Alf. Elliott, J. L. Gardiner, J. E. Wright, R. G. Stokes, and C. Gurd. There are now 2250 mem bers on the rolls, an increase of 71 over last year. During the year 9 members died, and 80,175 was paid for death claims. The total income for the year was $\$ 37,721.64$ and expenditure including insurance indemnity, \$11,S+1.62, leaving a gain of $\$ 15, S 50.02$ for the year, which was carried to capital account, which now reaches $\$ 180,012.82$. Satisfactory arrangements had been granted by the Windsor \& Annapolis and Nova Scotia Central Railways giving uniform concessions with other lines. The amount paid for weekly indemnity for accidental injuries received had been in excess of last year. In this connection it was announced that a further reduction of $\$ 3$ per $\$ 1,000$ had been made by the London Guarantec © Accident Insurance Company to members of the association who might wish to carry additional accident insurance.

The following were elected oflicers of the Western Commercial 'Iravellers' Association at their annual merting at London, Ont.: President, R. C. Struthers: first viee-president, R. Iait; second vicepresident, P. J. Conroy; directors, I. II. McGillivray, D. Nekenzie, J. Bums, If. Inine, J. Collimder, Thos. Mortimer, J. E. Richards.

The Canadian Commercial Travellers' Association at the Xoronto meeting elected officers as follows: For TorontoMessrs. J. Kilgour, W. B. Dack, II. C. Ellis, J. Everett, H. Morrisson, J. Orr, II. S. Stanbury, J. Haywood and J. A. Ross. For Ilamilton-Messis. J. IIooper, H. Beldinton, E. A. Bilby, W. E. T. Chance, W. C. Reid and J. II. Merring
spoiled ballots. Other olficers clected at provious meetings wero: President, John Burns; first viee-president, C. C. Vamnorman; second vice-president, 1R. J. Orr ; treasurer; 1R. 11. Gray. The association has 3290 members, income $\$ 40,175$, on hand 87,976 .

## The Drummer's Story.

Two drummers for new patent medicines dropped in on $n$ druggist at the same time ono day, and wanted him to take a lot of their stull on sale. Of course, each medicine was warranted to cure naything, from headache to consumption, and they had written testimonials to back them up. One of them read off the following:
"Dear Sir,-Six months ago I had the misfortune to fall from the top of a fivestory house, breaking most of the bones in my body and injuring myself internally in many distressing ways. I was under the care of distinguished physicians for some time, but got no relief until a friend sent me a bottle of your invaluable medicine. I felt better from the first day after taking it and within a fortnight was as good as new."

The drummer thought that letter print ed in circulars would be a catching advertisement, and the apothecary agreed with him, saying that the bigger the yarn the more likely people would be to swallow it.
"Just what I think," said the other drummer, getting out his documents, " so just listen to this one; it's a daisy that leaves all the rest of the garden a howling widderness. Get onto it now: 'Dear Sir,-I had the misfortune to be born without either lights or liver; and often experienced great discomfort from the lack of one or other of these useful organs. A sample bottle of your medicine was leftat my house one day, and the first two or three doses made me feel like a new man. I went on taking it, and now I have a tenpound liver-and electric lights.'"

The first drummer was so used up by his certificate that he went out of tho business and joined the church.

## Last Month's U. S. Patents.

The following comprise last month's patents and trade marks relating to medicine, surgery, dentistry, pharmacy, undertaking, and painting. Copy of any one 95 cents. lbook on patents and trade marks free. Collamer \& Co., attorncys and solicitors, Washington, D. C.
G. W. Archer, Rochester, N. Y., dental chair.
C. Cheswright, London, Eng., capsuling bottles.
W. J. Collinson, Mialeton, Pil., coflin lid and hinge.
N. Crank, Hill City, Kins., vapor bath.
P. A. Emanual, Aiken, S. C., preparing aluminium sulphide.
12. Ii. Eollenius, St. Iouis, monument name plate.
B. P. Roberts, Cleveland, apparatus for directing proper administration of medicine.
W. R. Brown, Boston, intemperance cure.

Carter Medicine Co., Now York, pills.
I. L. Johnson, 'Ihompson, Comn., mualarin remedy.
Larrabee it Co., Lo Roy, Minn., tonic.
I. Scott, Wichita, Kans., liniment.

Silver Fern Remedy Co., South Bend, Ind., remedy for female diseases.
J. T. Calvert, Spartanburg, S. C., dental engine.
L. 'T. Flodin, Omaha, truss.
P. De Wilde, Brussels, Belgium, making chlorine.
A. Herrmann, Hochst, Germany, blue dye.
W. H. Lawson, Detroit, coflin handle.
J. Massignon, Paris, manufacturer of chromnfes.
A. Sommer, Berkeley, Cal., removing hydrochloric acid from sulpho-chlorides.
A. Willoughby, Philadelphia, catamenial sack.
J. H. Dunn, Binghampton, remedy for fits.
G. I. Myers, Denvar, cure for rheumatism.
National Drug Co., New Ifampton, Iowa, liniment.
F. Paulsen it Co., N. Y., cod liver oil.

Vignes it Pepsin, New Orleans, remedy.
W. Whitaker, London, antiseptic bandage.
A. Gralt, Medford, Minn, artificial limb.
S. E. Heineman, Detroit, capsule.
M. Hofmann, Frankfort, Germany, blue dye.
F. J. Peek and J. O. Outterson, Dexter, N. Y., making solutions of bisulphites. Chiles id Co., Chicago, toilet preparatinn. L. Crocker, Boston, meat extract.
H. C. Lemke, Chicago, cure for cholera, etc.
T. J. Carrick, Baltimore, dental vulcanizer.
J. C. Chambers, Detroit, suspensory ban-. dage.
W. Cline, Cinyton, Ind., monument.
R. T. Crane, Chicago, device for detecting intestinal perforations.
F. Steinmetz, Milwaukee, abdominal supporter.
W..J. Stoop, Pittsburgh, cork cutter.
J. Barton, Washington, veterinary remedics.
A. L. Beck, Sharon, Pa., heulache powders, etc.
M. L. Jewesson, Brooklyn, cure for piles.
F. E. Matthews, Stewart, O., tonic.
G. S. Pitcher, Nashville, liver remedy.
J. F. Reid and J. H. Ullrich, Decatur, Ill., (2) veterinary remedies.
M. J. Bosworth, Warren, R.T.; dental mallet.
J. S. Chase; Cochranton, Pa., surgical instrument.
M. R. Griswold, Martford, forming dental plates.
F. E. Finsen, Minneapolis, rubber dam clamp.
A. D. J'uffer, Medford, Mass., solia water - fountain.
C. Rudolph, Offenbach, Germany, brown nzo dye.
C. B. Paul, Whittemore, Iowa, bed-warming device.
Piper, Dorenus it Co., New York, bronze powder.


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## Proscriptions arid Proscribing.

Is the art of prescribines to be numbered among the lost arts? $\AA$ correspiondent, with some show of reason, would wish us to believe this question is to be answered in the aflimative. Jle enavely asserts that doctors study the advertisentents of enterpriving pharmacists more than thoir materiat medica, and he feas that in the future patients will be as wise as theid modieal men if they take in the same lit. crature. Doubtless the socabled elegant prescription, with its rigid atherence to the rules anforcing the presence of at basis, an adjusant, a corrective, and a vehiele, is now marly met with; and, although certain examining bodins still strugegle to maintain the ancient tatin form of the prescription, jet litte by litto the hatiority seems to be slipping :way. The symbols remain, but abbreviations obviate diticulties with doubtful genitives and undeclinable substantives of recent invention, and the dirwetions ares, more often than not, written at full length in ling. lish. It is difleult to account for these tendencios. l'erhaps they are the mesult of the insportance at present attached to the study of the varions branches of science, which leares litale room for the cultivation of the ohder proud boast of languages. Pertirps they are the almost unconscious expression of a feeling that in medicine the days of mystery have passed anay. The prescription, with its mystic symbols, which merely indieated more or less annecessary directions to the dispenser, although regarded with awe, is no longer felt to represent theracme of shill. Among certitin classes of pationts its retains its former potent sway, and continues to be interchanged among friends as at talisman; but the more en lightened sections of the public prefer to be treeted as individuals, to whom specia? instractions of diet and mode of life mean almost as much practical bencitit as the preseription. Moreover, in matis instances they prefer to know what is being ordered, and although this knowledge may convey very little enlightenment, there may possibly be a certain satisfaction in finding two or thre lines in the fimiliar vemacular. Consulting the wishes of patients, therefore, it would seem that it is seareely worth the trouble to leep up a semblance of secrecy on paper: On the other himed, for those in the profession who can, but do not, write their prescrip. tions in Satin, the explamation may possibly be found in some umavowed liack of confidence in the subsequent translation of their directions. Many veneralule jokes upon this subject bave had their serious side and eflect. While they have served as object lessons to young dispensers, they have equally caused a gradeal disinclination on the part of the prescriber to run any facetions but undesiazble jisks. But apart fiom the way in which the directions are written, the component parts of the prescription fall under eager scrutiny. The small mystifications of Nowler's solution of soap pill, of sparit of Minder-
erus, or eren of solution of trinitrin, callnot hold out against the inguiring spirit of the age. latients havo been known to go to the nearest free library to solve the problem. Perhaps one satural outcome of this is the "growing tendency," of which our correspondent complains, to preseribe secret and special nostrums. "When pationts beeome aware that they have patid for a preseription of 'somebody's syrup' which they may have tried before or maty have seen recommended in the daily papers, they are inclined to think the fee is wasted, and to lose faith in the doetor; while if they get relief from the patent componnd, they tell all their neighbors how to do without the doetor." Ile futher complains of the loss and inconvenience oceasioned to the chemist by em. bodying in a prescription certain preparations to which the names of the makers are attached. Tn the modern nomenclature of diseases many proper hatmes, unde. simably, as we think, are linked to groups of symptoms, for the convenience of abbreviation or with the intention of conferring honor; but is their any justilica. tion for the extension of this principle to drugs? Is there any gain in selecting the tincture, syrup, or pill prepared by any particular firm? Our correspondent thinks not, and does not hesitate to employ a harsh term to those addicted to this practice. Still, there are two sides to every question. These preparations have frequently been most carefully made, with appliances whose cost can only be met by wholesale manufacturers. They are usually prepared with every conceivable pre caution for insuring unifomity of strength, and when their ellicacy has been repeatedly tested, it seems somewhat hard to accuse those who employ them of quackery. 'lhe term is only appropriate when such substances tatike the place of such a preseription, the prescriber being alike ignorant of their compositions and actions.Lancet.

## Manipulation of Pure Pepsin to Form a Neutral Solution Permanent and Clear.

he w. h. weabn, chambotte, s. c.
Pepsin has been a product of contimal study from its discovery to the present day both thempentically and pharmacenticailly, coming to our hands first in the form of saccharted pepsin, which represented a very minute amount of pure pep$\sin$, and the dose being very little more than the customary dose of the highest solvent pure pepsin of the present diay. Its solution in pharmaceutical preparations was casily elfected and permanent, but as scientitic investigations proceeded the fallacy of the minute dose of pepsin contained in sacchamed pepsin was shown and pure pepsin manufactured which has entirely displaced the first. The close of pure pepsin at the present time being from 1 to 5 grains.

With one of om best pharmaceutical chemists, Dr. Eecles, stating that after continued study and investigation of
vears, that it is worthless in hess than ? to i2 drachun dose's; hence wo ate called upon now to prepare compounds and clixirs, containing at last from $\frac{1}{}$ to 1 grain of pure pepsin to the lluid drachm, and peering into the future more will be expected. Pepsin being extracted from the stomad of the sus scrofit is matmatly of a muchous mature.

At this period of pepsin history our trouble begins, in making preparation of it when its dose is administered ; its solutions are viscial : filtation and chavifieation slow and dithienlt according to all preseribed methods. Being confronted with these facts I havo found in saceham lactis an agent that clavilies the most concentrated solution and makes filtation rapid. Its manipulation consisting in simply triturating one part of pure pepsin with two parts of saccham lactis gradually adding the solvent liyuid. The action of the agent is purely mechanical, the fine but linity granules being thoroughly triturated, figuratively speaking, lay atom to atom of pepsin, thereloy preventing the temacious atoms of pepsin from uniting with each other when the solvent is added, and exposing each one to its action which readily dissolves them when rapidly triturated. All finished products manipulated by this process aro clear and permament.

## Substitute for Glass.

A Vienna ghass manufacturer clams to have produced is substitute for glass which contains all the transparent, odorless and resistance to acid properties of glass, while it has the great advantage of being pliable and to a great degree instangible. It speaking of his new preparation the writer says: I dissolve from four to eight parts of collodion wool in about 100 parts by weight of ether oralcohol or acetic ether, and with this I intimately combine from 2 to 4 per cent. of castor oil or otlier nonresinous oil, and 4 to 10 per cent. of resin or Camada balsam (soft resin.) The compound when poured upon a glass plate and subjected to the drying action of a current of air of lifty degrees centigrade.- $P$. $O$. and D. Reviev.

Bromide of bismuth for producing high temperatures in liquid baths.-Victor Mreyer (Liebig's Amalen) says: A bath for producing temperatures between $\bar{b}$ lS and $606^{\circ}$ C. is not known. Bismath chloride, however, boils at $440^{\circ}$, and phosphorous bromide at about $540^{\circ}$. We might reasonably expect bismuth bromide to answer the requirements. This has been proven not to be the case, as experiment shows $453^{\circ}$ to be the boiling point of the bromide. Bismuth bromide may be produced by letting finely powdered bismuth stand in contact with bromine for several days, and then distilling oyer.

Nowbouldia Cevis, an African tuec, belonging to the Bignoniaceer, is stronsly recommended by Dr. Farrell against dysentery.

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Iarmest circulation of any scientithe paper in tho nork. splemddy ilmatrated. No litellicent man should lu Hithoue if Wimix $\leqslant 5.1103$
 l'eulisuter, zil meadway, Now York.

## T. MILBURN \& Co.

56 Colborne Stroet,
TORONTO.


## SPECIALTIES


Ihtridomh llealitis "listurnt.
Hunderk lintis.
lis toriaz lisjughasahute



11.a゙natits Vellan (al
$k$ al
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Saltomal bislda,
Brillidan sulue


F'racmanis Wormi lownt ma


Hr. Iron'm Sulphar sosi




## FRANKLIN'S

 ELECTBRC IWAIER Calarilz. Cold in Hund, Hencinche, T'oothncho. Nouralkit. nind all Norvous Palu.

Futs brangiat showhil hery lim in stemh. is it motls wedt and gilersiomal katishacthots. Iletnils COL 25c.
Franklin's Bload
Romedy, 60 c Blalss Gold Oil, - 25c. Minture Cormacut. - 16c. Ishatro Wilal Inallus
Bhanl l'arillory, jurs





For saic at Manututurers I'rees lis the leadinis whole-
 thro'ifliont Cisiasta.

## WATSON'S COUCH DROPS

Are the best in the world for the THROA'T and CHEST and for the VOICE.

R.- \& - - - - W. Stamped on each drop.

## FORMULARY.

## SI:W OHNTMENT BMSL:

Helbing, in the Zeitschr: cl. Ally. Oesterr: Spot. Vercin, recommends the following as a base for mercurial ointment, and other ungents containing metatlic mercury:
Whol fat (suint) fred from water bis pirts.
fiquil parallin............ ....... 30 parts.

Wiater ..... ...................... 30 pints.
Mix sectundem artem.
NEW , ockis chub fonmula.

| lissence of acacia . . . . . . . . 1 , (000 parts. |  |
| :---: | :---: |
| lissence of tubetose |  |
| fissence of vanilla |  |
| 1:ssence of jasuine | ,000 parts. |
| lissence of rose | 100 |
| bissente of civet | 301 |
| lissence of herga | 25 |
| Dissence of rose gera | i) |
| lissence of lemon | 0 |

Mis. Said to be very tine.

- Tut. Drueryist.


## beaury bowner.

 -Sigifajubrikame.

## chambats ramers.



Add the resin to the oil of cajeput and wirm gently until dissolved. Ielt tha was, laud and oil, add the clemi and cajs:put solution, strain, and lastly, add the camphor. If too soft, increase the proportion of resin and wax.-b) and $C$. Drugyist.

## liNaUD'S EAU DF guIsiN:.

Krause states, in the Deretsche dpotheKer Zeitung, that this article hats the following formula:


## hadiaumbs artiseptine.

Radlauer, of Berlin, introduced, under. the trivial name "Antiseptine", a substance which found much fatior among Berlin surgeons, and which he elaimed was a boro-thymolate of zinc. Goldmann analyzed it, and found it a simple mixture of zinc sulphate, boric acid, zinc iodidr, and thymol, after the following formula:

| borin acid ............. a to 10 parts. |  |
| :---: | :---: |
|  |  |
|  |  |
|  |  |

The mixture has been found of considerable value in the treatment of intertrigo and of sweating hamds and feet.-NTational Druagist.

## binsib ANTfPBmas.

The following is recommended by the Chemist and Drugyist:

$$
\begin{aligned}
& \text { Antifelrin ......... . ....... } 120 \text { gis. } \\
& \text { Rectified spinit ............... . . in irs. } \\
& \text { (ilycerine .......... ........... } 1 \text { oz. } \\
& \text { d'inctur fresh oratuge peel to.. I } 1 \text { ors. }
\end{aligned}
$$

Reduce the antifebrin to fine powder, and ngs. itate with the rectilied epirit until dissolved: then adil the glycerine, mixed will 1 oz. of the tincture, and make uy to 1 aze with the tiantires.
A that drachm of this thixir contans it grains of the remedy, so that ant ordinary teasjoonful will represent agood dose, and may be taken in hall a wine ghass of water:

## dhepabarions of syizup of samemine.

M. (i. Patrouillard, phamacist at Gihors (Department de l' Eure), contributes all artielo on this subjeet to the Bulletion de la Societe des lharmaciens do 'l Eure, from which we extatet as follows:

I'o prepate a syrup of narecine it is, of course, neeessary to lissolve the marecine. To this end acetic and citrie acids have been employed, but the syrup obtained by these processes is instable, the nareceine precipitating prompely., M. latronilland conceived the idea of peparing first a double salt of narecine, and had recourse to bitartrate of potassium as the atgent. The found, howerer, thit sooner or latere the marceine crystallized out and precipitated. He next tried ben\%oate of sodinm, and had the satisfaction to tind the preparation stable, the benzoate acting with natreene as it dows with eallime. Llis formula is as follows :

$$
\begin{aligned}
& \text { Simple syrup.... ............int gm. }
\end{aligned}
$$

Triturato the marecine and potassium benzoate together with a little water, and bring to a boil. As soon as solution is eftected, akd to the syrup, and hont the latter until the total weight is reduced to 500 gm . Syrup thus prepared is stable, but on long kerping acepuires a slighty disagrecable odor: for the latter reason it is best always to make it extempore, as needed.-Hat. Druyyist.

## Spirits Thymolini, Compositusa Substitute for Listerinc.

## HV C. J. HPPINCOTT, DESVEA, COL.

Listerine, as introduced by Dr. ذ.ambert, is a step in progressive pharmacy. The new antiseptic disinfectant and prophylactic has become popular in nearly all civilized countries. While a mechanical mixture in itself, it exhibits the manifold properties of its constituents, and occupies a prominent position in the long catalogue of medicosurgical and therapentic agents of modern practice. While we justly ndmit that we are madebted to Dr. Sambert for its introduction, yet as professional phamateists we do not frel like being contined to the necessity of dispensing empiacial or proprietary preparations; hence it behooves us to come to the front with a substitute, which wa all may manufacture and which will, beyond doubt
prove equally ellicacions in its object. Such a preparation I herowith respectfully submit for your eareful consideration, nad invite research and experiment, with a view to possible improcement of this formula. 1 also recommend the adoption of a detinitu term for such a proparation. 'J'o me the term Spirits Thymol Compound would not he inappropriate, conveying, as it does, ats intelligible meanins to physician and pharmacist. The dambert Phammaceratical Company of St. Louis phace their formulit upon each hottle of their preparation as follows. They say: " Listerine is the essential anciseptic constituent of thymol, encilyptus, babtisia, gandeheria and mentha arvensis, in combimation. Bach lluid dratm also contains agrains of relimed and puritied beazo-boracie acid." Given internally, they advise 1 teaspoonful three or four times a day either full strength or diluted with water, or in combination with other drugs. My formula for what, for the present, I will call Spirits Thymol Compomed, is as follows:
Take of

$$
\begin{aligned}
& \left.\begin{array}{l}
\text { Acid benzoic } \\
\text { Sceliun biburate }
\end{array}\right\} \text { of cach . ... } 1 \text { ob. 3:. grs. } \\
& \text { Beric aciil.................. } 9 \text { oz. bi grs. } \\
& \text { Dissolve with aisl of heat in } \\
& \text { distilled water . . . . . . . . . . } 4 \mathrm{~A} \text { w } \%
\end{aligned}
$$

Then add
1'hymol. ... ..... ............ 160 ges.
Jinealyptol Oil wintergren $^{1}$ of each.... 10 drops.
Oil of peppermint . . . . 2 I irops.
Oil of white thyme. ......... 8 drops.
l'reviously dissolval inalcohol
( 11 f per cent.) ................ 40 on.
Miv the two sulutions, alli ear-
athel . . . . . . . . ........ l0 irops.
Vistilled water I. s. to make I gallon.
Let the mishare stand if hours, and fimally pass through a wetted double tilter. - Hhar: Recorel.

## Petrolatum as an Excipient for Pills.

Petrolatum is frequently recommended as an excipient well adapted for use in making pills of potissima permangamate. An associate recently expressed the belief that it was quite untit for the purpose, and to test the matter faidly a mixture of the two substances was set aside.

After a few weeks the mixture assumed a purple tint, but the permanganate: was to all appearances well preserved, very littlo reduction having taken place. It occurred to me howerer that, owing to its greasy nature, petrolatum, like wax, is apt to form it pill which would prove in. soluble in the digestive juices of the alimentary canai.-Leon C. Fink in Buelletin of Dhormacy.
Urostigma dolarium mig., a Brazilian giant tree, yields a caeutehoue milk from which is obtained an unorganized ferment much resembling papayotin.
larhaemaglobin is a new body produced by Kobert by the abstraction of oxygen from hiemoglobin. It may be separated from the fluid portions of blood by filtro: tion.

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We will Print your Name and Address on Label when desired, free of Cost.
A full size sampie by mail on application.
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Argoline Camphorated.
Àrgoline Carbolated.
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IMPROVED EMPTY CAPSULES
For l'owders, S Sizes. Liquids, S Sizes. Reetal, 3 Nizes. Si,gimal, a Siras. Horses and Cintle (Omal) 0 Sizes. Horses and Cittle (Rectall : siges. Capsules for mechanical punposes.
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MINERVA

## RICHARD Ist

CIGARS.
FINEST 5C. GOODS IN TEETM MATKTXT.


MANUFACTURER,

## SELECTIONS.

 cationso of the lifth herw are often instant Iy relieved, according to a report of Dr: (ino. Leslie, of Falkirh, Scolland, by the simple insufilation of about four grains of finely powdered table salt.

Powasatm Casthambare has given good sat isfartion in the hands of dubinski ('Therap. Monatsh.) in the treatment of atfections of the macous lining of the phatynx, lay ans and the air passages. No untoward eftects were observed when carefully administered, but complete cares have not beren effected.

Local. Axistmbincs-Richardson uses a mixture of 100.8 ether and $0.1 . g$ carbolic acid preferably to ether alone. Its netion is more intense and of longer duation. He recommends as a spraying solution: alcuthol, 1 , chloroform, 10, and ether, 15. Neudorfer employs at solution of 0.59 cocame hydrochlorate in 50 g . of bitter almond water. The combination of cowane and cyanogen should be very eflective. Steever uses coeatine hydrochlorate, $1:$ antipyrine, 3 , and water, 20.Comes. $t$ : S'me. Arate and I'h. Central.

Bucabprolimulems.-Thisisthename given by larbey, in the Juthtin Com. merciel, to a reaction product of resorcin and oil of cucalyptus. Resorcin in excess is mixed with the oil of encalyptus, and chloroform is added, and the whole shaken. The clear solution, when poured off, leaves behind a mass of needle-like crystals, havang a strong canulinone odor, and which are insoluble in water, but casily soluble in alcohol, cilure; and chloroform. Chis buly, on fractional distillation, gives various liguid and solid distillates which have nut jot born eamined. Naphthol, pyrogallol, and pierie acid also give encalyptol similar crystalline bodics, all of which have a strong camphoric odor.

A Cobon li bacrion ron Sadol., -A fen drops of nitro sulphuric acid are put into n watch glass and a few grains of powdered salol sprinkled in. This is colored yellow, and on stirring with a glass rod the color passes from brown to green. As soon as this tint is seen the contents of the watch glass are inansierred to a porcelain dish :and $50 \mathrm{c} . \mathrm{cm}$. of water added and well stirred, the liquid beconing rose colored, white the green tint may be restored by the addition of ammonia. Rrsorcin treated in the same manner becomes at once of at derp blue color ; on adding water : : red coloratien is siven, which ammonia changes again to bloredonen. de jhatm. didneers.
M. linaitu and F. Crosz ( $G$ razella and .7uer. Chrm. Soe.) have found the following process convenient and conomical for the preparation of considerable quantities of hydrob:omic acid:-A mixture of 1 part of red phosphorus, 2 parts of water, nud suthicient sand to form a paste, is introduced into ia llask, 10 parts of bromine are then graduaijy added by means of a funnel provided with a stopoock, the liask grodually warmed, and the mixture of
hydrogen bromide and bromine vapour passed through at deep ghass jur filled with a mixture of red phosphorus and asbestos impregnated with concentrated hydrobromic acid. Every trace of bromine vapour is thus effectually retained, and the process is continuous, and requires no supervision beyond an occasional shaking of the hask.

## Cod-Liver Oil and Creasote in Consumption.

Dr. Julius Summerbrodt, Professor at the University of Breslau, has recently published his experience in the use of creasote in consumption. He states: " $A$ fter nine years employment of creasote, in thousands of cases of consumptive patients, Thave reached the conclusion that we can cure with creasote sufferers in the initial stages of luarg tuberculosis, and not only the initial stages, but also longer seated and severer forms may be completely and permanently cured. Creasote is for countless sufferers an excellent remedy, thus far unequalled by any other ior tuberculosis of the lungs. I consider the most desimable form for alministering creasote to be the capsule, adding a readi-ly-absorbable fat, as cod-liver oil or olive oil."

Parke, Davis it Co. supply soluble elastic capsules, prepared from the finest French gelatin-cod-liver oil ten minims, creasote one minim-which offer a convenient mode of administering these remedies, and will mail to those interested a geprint of Professor Summerbrodt's report of his experience with these remedies.

## Spirit of Nitre Incompatible with Astringent Drugs.

ME LEON C. FINR.
The explosion of a bottle containing $\Omega$ mixture of spirit of nitre, fluid extract of uvia ursi and water, brought to mind a form of incompatibility with which everyone may not be familiar.

Spirit of nitre is a preparation which, in a general wity, deserves to be regarded with suspicion by prescription dispensers, since it is known to cause decomposition when combined with many counnonly prescribed substances.

The explosion under consideration wis undoubtedly caused by the elimination of gas produced by a reaction between-the spirit of nitre and the tannin pieasnt in the uva ursi.

With the view of determining beyond question to just what extent this decomposition could be attributed to the action of tannic acid, about forty experiments were made.

Combinations of spirit of nitre with fluid extracts of ura ursi, buchu, matico and cranesbill (all of which contain a considerable proportion of tannin), fluid extract of gentian (which contains gentiotannic acid, a substance allied to tannin), solution of tannic acid and solution of
gallic acid. all eliminated a volume of gas, heavily charged with some nitrous compound, in sutlicient volume to blow out the corks or burst the bottles.

Combinations of spirit of nitre with fluid extracts of cubebs and columbo (which are comparatively freo from tannin), solutions of quinine and morphine alkaloids and glycerin, failed to develop any signs of similar decomposition.
A second corresponding series of samples carefully neutralized, and a third series acidulated, indicated that the reaction of the misture had no bearing on the result.
It seems safe to say, therefore, that spinit of nitre shonded not be dispensed in combination with drugs contaning tannin. - Wulletin of 1'harmacy.

## Points for Clerks.

An old writer says that the best education for a youth for business pursuits is that which draws out, develops, trains and educates those faculties which listinguish the accomplished'man of busitess.
A good man needs physical vigor and strong nerves: and should be able to read well, spaak correctly, write plainly, and count quickly and accurately; therefore a youth shouk be taught reading, spelling, writing and arithmetic.

A business man needs good sense and a retentive memory: therefore the senses and the memory should be educated.

A business man should hove business habits; therefore a youth should be trained to industry, system: punctuality and perseverance.
A business man must be decided in character, yet courteous in manner ; a youth should therefore cultivate self-reliance, presence of mind and politencss.

A business man needs sharpness and versatility: there should be nothing in the plan of education which has a temency to produce excessive prudence.

Wafers and Cachets.-The wafer, a dish of flour and gum, is well adapted for use in administering disagreeable powders. A common difficulty in using them consists in moistening too much beiore folding, producing a soit, unsightly mass. The seal or cachet, a special form of wafer, is preferable. The edges only are moistened and two sealed together with the powder between. We belicere an improvement over the present hard. pills would be the furnishing of these eachets in share and size to take pill mass of rather soft consistence, but not soft enough to impair the cachet-E. It. Patch, Ph. G.

## Situations Wanted.

 melalist 0 . C. ${ }^{1}$ : Rood diapenser: licat of referencer "scacia, Box idn, Strathros, Onh
RUGeIST wantw z situation as eraiclling afent for a кomi rellatie urganinn; references giren if muirn). Apply at this ofice-Draver if.

Wanted.
TYANTED-A jumist clefi, Apply to John Stork,


## 

wholbeale druggints,
mingres am mampactiame anamsts,
LONDON, - ONTARIO.
WE OFFER, OF OUR OWN MAKE:
crerate ar Mencmemin.
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 OUR OWA GERMDE:Cromen Turtar, bila, form and bozem
Pure Hphoes or all kinder
Imodet Powder. etce, che.
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Haremes Crorm orlive. Keerny fromamale Cure, Werclokis Itan minwern, momin Indita Truice-Gemulwe, Wialsun's Crown marmpertity, ofe.
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Propristor of the following Specialties: Father Mathew Remedy, Dr. Sey's Remedy, Persian Lotion, Indigenous Bitters, Audelte's Hair Promotor.


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Put up quecially for the Drug Trade.
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Wr: are proprietors of this medicine, well known and largely sold in Nova Scotia and Quebec. A powerful ammoniacal liniment of a rich creamy consistence. Approved by all who use it, and always makes trade for itself. May be had through the wholesale houses in Toronto and Montreal, or direct from




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Has become a Staple and Invaluable Eamedy for the Cure of Spasmodic Aethma, Bronchitis and Nasal Catarrh.


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> DR. B. W. HAIR.

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## Soothing - Syrup

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## BUSINESS NOTICES.

Ay the dexigit of the Cassmix Datouse is to heneft mutually all latereseal in the hushess, we would request all partics ordering zoosis or makius purnhases of any dexeription from thouses ablertionize watt: as to mention in their letter that nuch advertisement way notuen in the Casablan mhtomet.
llawe you a stock of Phenyo. Catiein, the great headache and neazalgiar remedy. lhead the special ofler on page 31.

Adams di Sons Co, are offering some new and specially saluable bramds of Chewing (ium in their new adve, pase 13.

When in want of atock of trasses you cannot do better than order from that old established andfarorably known bouse, The Hastings Truss Co. Look carefully at their "ad." on page 10.
 York, are inviting the attention of the drus trade in their adet., patse 13, to the "Express Duplicator,": an article of the greatest utility.

A great didiculty heretofore has been to supply a prepas:ation of Cascata, whirh would be agreeable to the tiste, without interfering with its medicinal properties. Such at preparation howerer is now olfered in Sharns' Casearat Aromatic, a preparation at once clegant in appeanatuer, quite palatable, and retainias all the therapentic action of the drug. Sie alvt. on page 19.
Attention is speially directed at this time of the year to one of the finest products of petroleum on the markit. We refer to Aryoline Petrolatum, which is put up in varions size pachalyes from one pound to a barrel, also in.two ounce vials at the remarkably low figure of Si. in per gross. Send to your jobber for at supply of this brath, and if they have not got it, order direct. It will pay you. Sce prese 3 B .

Litlle boxes medium boxes, large boxes, tin boxes of all kinds: plain, lace quered and desorated seamices tin boxus are manufactured by Wm. A. Gill \& Con of Golumbus, Oaio. On the B3rd pase will be found an athet. for the above firm, and if you specify cill's boxes, you will always have a very substantial example of their work for your convenience in putting up nintments, etc. A scamless tin box is the oaly satisi:ntory bos for dispensing ointarents in.

Planten's C.upsules, of all kinds, have justly won the ticle of "The Best." Eew people of the present day realize how
 pioneer hoase in the mannineture of Soluble, Ilaral, Soil, Biastic, cmpty and filled, Capsules lut a few years ago, the sick were required to swallow the most bitter amd umpalatable dosis ; while now, thanks to the enterprise of the above firm, the most disagrecabie merlicine can be takera in any size dose desired with all the ense imagimable Sce ndet. en page 35.

## Woman Pharmacy.

Ihe employment of women in pharmacy is receiving general attention abroad. Fram Schulate Cianer, in Gemamy, has recuatly presented a petition mumeronsly signed to the l'russian Reichstar, in fivor of athitting women to this profession. Thate petitioners base their demand on historice right, and recall the fact that for conturies :and until the middle of the eighteenth century the propazation of medicine wats almost wholly in the hands of women ; that women apothecuries, who were examined by learned physicians, were given the right to prepare and sell drugs, ant matay of them enjoged a high repatation in the business. The pretition also claims that afont the middle of the eightecath century narrow minded jealousies of women arose, and a desire to arive them from all lucrative hamdiwork to make place for men resulted in their almost absolute exclusion from this calling. Jlacy argar: that the proiession of the druggist demands no great bodily exertion, 1 :or any undue publicity which would render it dillientt for wonen or unwomanly. It is as wommly at colling as that of at teacher or saleswo:nza. Pusyi. cians testify, accordiag to this petition, that " women are fay superior to men in the fulfillment of all s:anitary duties, in panctual obedience to a physician's orders. in dexterity and deftuess.;
the callmer of at drugrsist demambs certain scientific study and preparation, which wemen have certainly shown themselvesable to master. The laws in this state require this study atad preparation, besides survice for a terni of yeats in a drug store and at certificate froin a Shate Board of Pharmacy. There is no prohibition in our laws aganst women in this calling. In Hussia, Melgium amd Holland women have passed phamactutieal ex:mainations and devoted themselves suecessinally to the profussion. It is at least :a more independent calling than that of a nurse, which demands in aearly every case a great deal of individual patience, besides bodily exertion. A nurse has much responsibility in the administration oi medicine as a druggist in the preparation of it. The ca!ling of a druggist is, moreorer, one which :uy woman of relinement might seck.-A. F. Tribune.

## Midwives' Remedies.

A writer has collected, in the Jomonal WIItrienr, a :amber of rocipes usiod hy the midwive a various parts of France, from which - . stract the iollowing:

For the $8 .$, a appotite that afficts many pregnith. women take the leaves and tendrils " $"$ the grape vine, bruise them, make in a catnplasm, and apply to the stomach

Grape stone masted, pulverized, and appliedias a ca plasm upon the stomach cure diarrhera and dysentery.

A decoction of the leaves of̣ the ciomo
(bryonin alla), or tetterbery, in wine, will cure cpilepsy.

Cow's dung, mingled with cesposhells, dissolved in vimegar, will remove freckles and diseolomations of the skin of pregnant women, if appliced as a plaster.

To the above we may add a fers that we have pieked up during several years' practice in the wilds of Arkansas and other parts of the South:

Chicken dung, dried and powdered and pue into a hollow aching looth stops the pain inmaediately. (So will uric acid, which is the terapeutic agent in this c:asc().

Sheep's "sitfiron" (dung) and chicken satiron, made into tex. are considered specidics in measles and mumps.

The "longing" of pregnant wramen is cured by administration of sow bug tea.

Bee-tea proluces urination in the newlyborn infant. (This is really an excellent sliuretic. It is made by scalding it hand. ful of ordinary honey bees and letting the liquid sipe for a few moments. The diuretic action is due to formic acid.)

Pench-leaf tea cures gripings of the bowels in infants and produces sletep. (Evidently due to the minute quantity of hydrocganic acid prosent in the leives.)
loultices of cow's dung are used by nesroes and whites on fresh wounds and old.sore shins.

Buckeyes, carried in the pockets, cure rheamatism, and ward off future attacks. Trish potatoes do the same thing.

Aud so we may go on almost indefinitely enamerating the viriues of many domestic semedies, some of then real, but the most of them purely inngianary, and whose only recommendation is their cheapuess and mastiness.-Nitet. Druggist.

Littife in Imptie. - If you are gaining litte by little, every day, be content. Are your expenses less than your income, so that you are jet constantly accumulating? Be content; so far as concerns moncy, you are doing well.

Are you gaining kuowledge every day $?$ Though it be litely by little, the aggregato of the aceumulation, where no day is permitied to pass without adding something to the stork, will be surprising to yourself.

Solomon did not become the wisest man in the world in a minute.
little by little, fortunes are accumulated: little by little, knowledge is gained; little by little, character and reputation :ure achïuch.-Inatiomal IFeckly.

Clegnsing: of the Mands aften the Lise or Camolic Acin on Commosive Sumbmate.-Carbolic acid is removel isom the hands by bathing them, for a sufficient time in alcohol and then ammointing them with lanolin. After the use of cormsive sublimate solution the hands should be bathed in a solution of common sall 1 to 50 , then washed with soap and water, and fimilly rubbed with lanolin. Jharmac Contral.

# To the Retail Truggists and Chemists ol Canala. 

GFINTIEMEFIN =
Owing to the rapidly increasing demand for my Preparations and the numerous orders received from Retail Druggists, I have conclided to place the Medicines in the bands of the Wholesale Druggists of Çanada.

The following Agents have thus far been appointed:

## DRUGGISTS - WHOLESALE.

TORONTO, ONT.
Lyman Bros. \& Co.
Elliott \& Co.
Northrop \& Lyman.
T. Milburn \& Co.

Lyman, Knox \& Co.
hALIFAX, NOVA SCOTIA.
Brown \& Webb.
F. C. Simson \& Co.

Forsythe, Suteliffe \& Co.
LONDON, ONT.
J. A. Kennedy \& Co.

The London Drug Co.
HAMILTON, ONT.
J. Winer \& Co.
A. Wilson \& Co.

MONTREAL, QUE. Lyman: Sons \& Co. Evans \& Sons.
Kerry, Watson \& Co. Lyman, Knox $\bar{\phi}$ Co.
BELLEVILLE, ON:.
L. W. Yeomans.

WINNIPEG, MAN.
Martin, Rosser © Co.
ST. JOHN, N.B.
S. B. Barker is Sons.

OTTAWA, ONT.
H. F. MeCarthy.

VICTORIA, B. C.
Langley $\overline{\$}$ Go.
GUELPH, ONT.
A. B. Petrie.

## IMY PREPARATIONS =

## Slocum's Psychine,

Oxygenized Emulsion of Pure Cod Liver Oil, Coltsfoot Expectorant, Regulative Pills, Magnetic Medicated Plasters,
Can be purchased through the above Houses at List Prices. Price List and Beautiful Lithographs supphed on application.

## T. A. SLOCUM, M. C.,

## Drug Reviow.

Busincss duting the past month, particularly the carly part of it, was not as good as the good crops and season of the year waranted. No doubt the unsensonablo weather had a good deal to do with it, as that is always bad for any business, whether dependent on seasons or not, for goods not sold in those seasons are not sold at all. The reports from the direct Christmas t:ade are good, many druggists saying the business of the day before Christmas was the best they have ever had. The drag trade has done perhaps less in what would bo termed fancy goots, but of late years have depended more on fancy bottles, perfumery, de., and the chathe on the whole has proven very satisfactory, for these goods, even if not sold in the ioliday season, do not spoil in keeping, but sell largely the year round, consequently the protits are not packed awny until next season. Changes in prices during the year have heon few

Ergot has doubled in price, and higher prices are looked for consequent on shortage in the crops.
Quinine is still low. We referred in September to it combination under consideration, but 5 no firm would not agree to some of che terms, but from reports just received this firm is more tractable than before, and prospects of at combine are very bright, which, of eourse, would mean higher prices.

Cocaine has advanced 20 per cent.
Other drugs and chemicals are materially unchanged. for minor changes see price list.

Gums, assafictida and seammony are somewhat higher:

Oil lemon adrancing in price.
Tellows' Syrup and Johnston's Fluid beef are now on the rebate plan.

* Grains of Gold.

Happiness can be made quite as well of cheap materials as of dear ones.
To the readers of the Caxamas Dieuo. (ast-A happy and prosperous New Year.

Art possesses a language which speates to nll eycs and is understood by all mations.

The Chinese, with a good deal of quiet saversm, call cercmony the smoke of friendship.

You may glean knowledge by' reading, but you must separate the wheat from the chaff by thinking.
Slen of genius are often dull and inert in society: as the blazing meteor, when jt descends to the earth is only a stone.
There is nothing like a fixed steady nim with an honorable purpose. It dignifies your nature and insures your success.
Subtract from a great man all that he owes to opportunity, and all that he owes to chance, all that he has sained by the wisdom of his friends, and ly the folly of
his cnemies, and that giant will often be leit a pigmy.

## Flips.

Physicians have amounced that yellow fever ean be carried by a mosquito's bill. The disease has not yet been mamed that is carried by $a$ doctor's bill, but it is something like paralysis.-A nuals of $I I_{y}$ iene.

Latwyer C. (entering the oflice of his friend Dr. M. and speaking in athoarse whisper)-" Fred, I'se got such at cold this morning, that I can't speak the truth." Dr. M.-"Well, I'm glad it's nothing that will interfere, with your business."

A Chautauqua dress reformer alleges that "corsets have filled more graves than whiskey." There is this point of agreement between those destructive agents: they both make their victims tight. Wrashinyton l'ost.

Fular Equippen.-"As $\Omega$ doctor, do you keep a waiting room?"
"Yes; in fact, I have two-one in which my patients wait for me, and the other in whis': I wait for my patients."Miegenos Blatter.
"Aha! I catch you buying a porous plaster, do II I thought your devotion to fresh air theories would bring you to this."
"It ain't the plaster that does me good," answered the crank. "It is the ventilation obtained through the holes." -Exchange.
Fashionable physician (in surprise, to patient): "Why, you're getting better!"

Patient: "Yes, doctor."
Fashionable Physician (insensed): "Well, didn't I tell you chere was no hope for you?"
Patient (meekly): "Yes, doctor, you must excuse me; but I couldn't help it."
"Worth a Guinea a Box."

Mr: S—, a chemist of Liverpool, re. ceived a bill for the amount of 28 s . from Thomas Beecham, St. Helen's. Mr. S—, being at the time in pecuniary difficulties, pondered for a considerable time how to meet the demand. At last a brighit idea flashed across his mind, and he said joyfully.
"Yes, I will send Becham a bos of his own pills-he says himself they are worth a guiner a box-and seven shillings in cash."
This hedid. In the course of a few days, great was the surprise of Mr. Sto find that leecham had forwarded the receipt, attached to which were the words:
"Cash only in future. Thos. Beecham."

To Prbverit Todisn.-Todism, it is said, may be prevented to those who are linule ly combining a full dose of aromatic. spirit of ammon. with the iodides of potass or sodium.

## We have in Stock:

A large assortment of Rowntree's Celebrated English Pure Gum Candies.

Chocolate Creams in boxes, specially suited to THE DRUG TRADE.
A full line of Gibson's Candies in 'stock.
Seely's Perfumes, a large assortment.
Taylor's Perfumes in half pound and twenty ounce bottles, a full assortment.

SEND US Your oriders.

## Jas. A. Kennedy \& Co.

 WHOLESALE DRUGEISTS, London, - Ontario.
## New England Magazine

hilustrated monthly.
THE LITEARRY MIMRBZIIE OE BOSTON.

It is unique, containing American Legènds, Traditions, History, Story and Poetry, Philosophy and Masic; Science and Art.

1 Fow Articles for 1892 :
stomies of satem witcichate,
$\begin{array}{ll}\text { IHILIMS MBOOKS, } & \text { Illuntrated. } \\ & \text { Illuxitated. }\end{array}$
JAMES PARTOS:
Howicirs boston.
THE FUTURE OF EEECTRICITY,

WOU: want this carctully edlted ami fincly illuatrated litcrary 9 mapazino of Eoston, whether yon hare tny other or not.
Every Namber Finely Illustrated.
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Social questions are discussed in ite columns.
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For male on all niwxtands.
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- S6: Federal Strect, Boston, Mass.


# ARCHDALE WILSON \& CO., Wholesale Druggists, - Hamilton. 

## CANADIAN AGENTS FOR

# W. R. Thluery \& Co., <br> English Tooth Brushcs. 

# Whitaker \& Grossmith, <br> English Perfumes, Toilet Soaps, etc. Clarke, Niçolls \& Coombs, 

English Confectionery., French Solid Back Hair Brushes. Hughes-Guzzier, Grasse, - Finest Bulk Perfumes in 20 o\%. (. S. Bottles.

THESE GOODS ARE SOLD TO DRUGGISTS ONLY.

## Canadian Druggist Prices Current: CORRECTED TO JANUARY 10th, 1892.



|  | 78 |
| :---: | :---: |
| anik, French, powdered, | 10 |
| 1 'recip., see Calcmun, | 10 |
| Prepared, il | 5 |
| Cnamedar, Anima |  |
| Willow, powd | 0 |
| C1.ove, | 0 |
| lowidered | 30 |
| Cocmserat, Hondu | 10 |
| Commonos, lb. | 7 |
| Cantharidal, |  |
| Confletios, Scma, | 25 |
| Creosote, lloer | 0 |
| Cuttlerisa Bose | 5 |
| Dexthase, ll | 10 |
| Dover's Powper, | 0 |
| Ehegot, Spanish, |  |
| l'owdered, | 5 |
| Ercotis, Kei | 200 |
| Exthact, Logwoon, 1 | 13 |
| Pounds, ib | 4 |
| Flowrbs, Arnica, |  |
| Calendula, 16 | \%) |
| Chamomile, Rom | 30 |
| Geras:in |  |
| Elder, 11 |  |
| Lavender, 16. | 12 |
| Rose, red, Fren | 60 |
| Rosemary, ll |  |
| Saffrn, American, | 3 |
| Spanish, Valia | 100 |
| Gelatise, Cooper | 120 |
| French, white |  |
| Gincerise, lb |  |
| unimsa. | 300 |
| lowdered, | 3 5 |
| Gun Aroni, Cape, lb........... | 13 |
| Biathadoes, i : |  |
| Socutrine, 16 | (0) |
| Aosafetida, 1 |  |
| Arahic, | 00 |
| Powdered. | 110 |
| Sifted sorts, | 75 |
| Sorts, 1b |  |
| 3enzoin, lb | 0 |
| Catechu, 1lack, |  |
| Gamboge prowlered, | :0 |
| Guaiac, 1 , | 80 |
| lowdered, lb | 00 |
| Kimo, trac, | 5 |
| Myrrh, |  |
| Powderck, | 55 |
| Opium, le | 350 |
| Powderad, $16 . .$. | 4.60 |
| Scammony, pure Res Shellac, lb. |  |



| Iheacheal. lb. | 1.15 | 51) |
| :---: | :---: | :---: |
| Spruce, true, lb | 36 | :30 |
| iragacinth, thate, last, It. | 1 (1) | 10 |
| 1 lowiered, 16 | 110 | 15 |
| Sorts, 16. | 9 | 30 |
| Jhus, ib. | S | 10 |
| Hems, Althea, | 27 | 30 |
| litterwort, 11 | 27 | (3) |
| 13udock, 16 | 16 | 1s |
| 13nnenct, ozs, | 15 | 17 |
| Catinjp, 0zs, If | 17 | 90 |
| Cliretta, 13. | 2.5 | :10 |
| Coltsfont, 16. | 90 | 35 |
| Feverfew, usa, 1 | 5:3 | \% 5 |
| Grimdeliar robnsti, If | 4.5 | 50 |
| Hoarhoumd, osx., Ils | 17 | 20 |
| Jaboramd, lb... | 15 | 50 |
| Lemon l3alm, lb. | 33 | .11) |
| liverwort, (ierman, il | 35 | 40 |
| lolvelia, uzs., If...... | 1.7 | - 20 |
| Motherwort, ozs, 113 | 20 |  |
| Mullein, Gicrman, lt, | 17 | 20 |
| P'ennyroyal, oza., It. | 17 | 21 |
| Peppermint, ozs., lt. | $\because 1$ | 95 |
| Juec, ozan, lis....... | 20 | 35 |
| Sage, Ozx, 16, | 15 | 0 |
| Spearmint, ll, ... ... . .... | $\because 1$ | 9 |
| Thyrme, ors., lh......... ... | 18 | 20 |
| 'lansy, ozs., th. | 15 | 13 |
| Worinword, оя | 20 | 29 |
| Verbit Sauta, lh | 38 | 4.4 |
| Howis, lli... ... | 13 | 15 |
| Hors, fresh, Il. | 30 | 3.5 |
| Iswneo, Madras, 11. | 7.5 | 50) |
| Instict l'uwdrin, 16. | 23 | $3:$ |
| Isisichass, lmazil, Ib | 200 | $\because 10$ |
| Russian, true. 16 | 600 | 6 00 |
| Letir, Aconite, ${ }^{11}$ | $\cdots$ | 80 |
| 3ay, ib ..................... | 18 | 20 |
| 1Rellaionna, Hy. .... .... | 29 | 30 |
| linchus, long, lb. . . . . . . . . . . . | .10) | 4.7 |
| Short. ib | 15 | 15 |
| Cocit, 16. | -5 | 60 |
| Digitalis, 11 | 25 | 30 |
| Filcialytus, ib | 15 | $\because 0$ |
| Myoucyamas. | 27 | 80 |
| Matico, lb... | 70 | 75 |
| Scana, Alexandria, lh. | 29 | 30 |
| Tinucrelly, ${ }^{\text {d }}$, | 15 | 9 |
| Stramoninn, lb. . . . . . . . . . . | 90 | 2-5 |
| Uva Úsi, IU | 15 | 13 |
| Inecurs, Swedish, doz. | 100 | 110 |
| Lacou:ict, Solazii | 15 | 50 |
| Pignatelli. ... . | [i5 | 40 |
| Girneso | :0 | (5) |
| İS-Sticks, 0 to l lb., per lb | 27 | 30 |


| S－－prurity， 100 sti |  |  | Unicorn |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ${ }^{\prime}$ P＇urity，${ }^{\text {anosticks in low }}$ | 150 | 150 | Valerian，Haglisi | 20 | 2 in |  |  | ${ }_{2}^{360}$ |
| ＂A Acme Pellets， 5 lle tins | － | ${ }^{200}$ | Yirginia Sunde ib．．．．．．．．． | ${ }^{40}$ | 45 |  |  | 10 |
| Lomenges， 5 It，tins．．．． |  | 175 | Yellow Doek，ib．．．．．．．．．．．．． | I，j |  |  | 110 | 11 |
| Tar，Licorice \＆Tolla， 5 |  |  | Res | 225 | 250 |  |  |  |
| H，tins．．． | 200 | 200 | W |  | $3{ }^{23}$ | Cannus，1ronide，of |  |  |
|  | 30 | ， | Sac | 125 | 1：0 | cmane monit． |  |  |
| Lscoromise， | 70 | so | Sera，Anise，Italian，siftei，iil． |  | 15 | cascus，1ipmoniosi |  |  |
| Nacte， | 19 | 125 | Star， 1 | ： | 419 | dodide，os．．． | 9 | 100 |
| Mases，ib | 160 | 175 | Burdock，ili． | 30 | 35 | Phoophute，pre | 35 | 38 |
| Mose，leelani， |  | 10 | Camary，bay or less，It．． | 4 | 5 | Sulphild | 5 | ${ }^{6}$ |
| Histh，lb． |  | 10 | Caramay，il | 10 | 13 | Csmest，Oxalut | 10 | 12 |
| Мusk，Тımy | 40 | 5000 | Carrlanum， 1 | 125 | 150 |  | 15 | 18 |
| Nutbanis， 1 | 21 | 23） |  | 30 | 35 | cillatal，hydr | 75 | 85 |
| Powdered， | 20 | 30 | Coldel | 100 | 120 |  | 7 |  |
| Nutsea | 100 | 110 | cor |  |  | Спино | 50 |  |
| Nux vomes，ib |  |  | Cumin， |  |  | cischostse，sulphate， | 25 | 30 |
| Powdered，il | 920 | 95 | Fenamel | 1.5 | 17 | ciscuasimise，Sulph．，oz | 15 | 20 |
| Oanca，Ib | 19 | 1. | Fecmurcek，powil |  | 9 | cocunsr，Mür，uz．．．．． | 50 | 1000 |
|  | 80 | 75 | Hax，cleaned，ils | 34 | 4 | Corres，Suph．＇（Bine Vitroi） 310 | ${ }^{7}$ | 8 |
| Pamanvenve，\％．．．．．．．．．．． |  | 18 |  |  |  |  | 05 | $\stackrel{3}{3}$ |
| PAkaldminde， Perrea，haek， | $\stackrel{10}{20}$ | －35 | Snstarel，white，ii | 9 | 12 | Corrmas，ib．． | $\frac{1}{75}$ | 3 80 |
| Powitered，il． |  | 30 | Powderel，lb． | 15 | 20 | Sulphuric，ib |  |  |
| Piteils，black，il | 3 | 1 | Prampkin． | 2J | 30 | Exalaser，o\％ |  | 110 |
| Bergundy，true ili | 10 | 12 | Quince， 11 | 45 | 70 | hioseramisk，Sulp．，crystals，gr： | 25 |  |
| Plaster，Calcineel，bid | 22. | 325 | Rape， | s | 9 | Iomse，Resubilim | 00 | 550 |
| Allhesive， | 12 | 13 | Stroplantl | 50 | 5 | тоноговм， 16 | 00 | 700 |
| Belladoni：，IL | 65 | 71 | Worm， 11 | 22 | 2 | Toum， | 30 | 140 |
| Gallinum Comp， | S0 | 8 | Sembitz Maxtier， 1 l |  | 30 | Imes，by Hy | 100 |  |
| Lead，13． | 2 | 30 | So．n＇，Cistile，Mutited，pure，！li．． |  |  | Carlomate，Pre |  |  |
| Porer heabs，per 100 |  | 90 |  |  |  |  |  | 40 |
| Rosis，Common，lb． | $2 \cdot$ | 3 | Powitered，lb | 25 | 3 | Chloride， 1 | 45 | 55 |
| White，1b． | 3 | 4 | Green（Sapo Viritis） | 12 | 25 | Sol． | 13 | 16 |
| Resonces，White， | 2.5 | 30 | Spremacrit，ll |  | co | Citrate，U．S．P． |  |  |
| Rocinsins Sumt | 26 | 2 S | тurestris，Clian， | 75 | s0 | And Ammoni， | 75 | 80 |
| Roort，Aconite | $\stackrel{2}{2}$ | 2 | venice， 1 lb | 10 | $\underline{12}$ | Amil Quininc， |  |  |
| Althea，cut， ，lb | 30 | 3.3 | Wis，White，li | 50 | 7 | Quin．ami Stry |  | 40 |
| Belliationa， 1 l | 2 |  | ${ }^{\text {cher }}$ | 10 |  | And Strychmine， 08 |  |  |
| Blood，th | 1.7 |  | Wrob，Gmaac，raspel |  |  | Dinlyzed，Solution， 11 |  |  |
| jitter， 1 lb ． | 27 |  | Quassin chips，lb． |  |  | Ferrocyanite． |  | ${ }^{6}$ |
| Black lecrys，lil． | 15 | 15 | liea samaders，pround， | 5 | ${ }_{6}^{6}$ | Hypophosplites， | 20 | ${ }^{25}$ |
| Burdock，ernshai | 15 | 20 | Sautal，gimumil If． | 5 | 0 | Iod | 40 | 45 |
| Calamus，sliced， | 9 | 2 | －uctic |  |  |  |  |  |
| Comuda Snike， 11 | 30 | 3 | Acri，Aectic，ll |  |  | latate， | － | G |
| Collosh，Black， 11 | 15 | 20 | Ghacial， | 45 | 50 | Perritrate，solution， | 15 | 16 |
| Colchicun， 1 l |  |  | Benzoic，Engl | 20 | 2 | Thissilhate scalces， 1 b |  |  |
|  | $\stackrel{20}{1}$ | $\stackrel{9}{2}$ | ${ }^{\text {Gerruan，}} \mathrm{L}$ | 10 | 12 | Supphate，pucit | 7 |  |
| Contusfoot． 13. | $\stackrel{2}{2}$ |  | forate， |  |  | rexice |  |  |
| Cominres，erusicie | ${ }_{90}$ | S | Calverts | ， |  | Amm Patass．Ti |  |  |
| Curcumi，powdered， | 13 | 14 |  | 133 | $1 \pm 0$ | Lfaib，Actate，white， 16 |  |  |
| D．andelion， H ， | 15 | 18 | Citrie， 1 l | 0.7 |  | Carlouate， | 7 | s |
| Elecampane， | 15 | 10 |  | 10 | 12 | Iodide， | 3 |  |
| Gailangil， 1 l | 15 | 15 | Hydrohromic，idinted， 11. | 30 | 33 | Rea，ib． |  |  |
| Ciclsesminu， | $2 \cdot 3$ | 20 | Mydrocyamic，diluted，\％\％．bot－ |  |  | Lisse，Chlorimated | 32 |  |
| （inniau， Cround | 9 | 10 | tles do\％ | 150 | 160 | One 113 3： |  |  |
| Gromal， <br> lowilerel， |  |  | Jatetic，concentaten， |  | 25 | L．tтиим，Bromide，o |  |  |
| Ginger，Africul， | 11 | 11 | Chem，pure， |  |  | Citrate，o\％ |  |  |
| or, li...i.i; | 13 | 1.5 | Nitric，lli．． |  | 13 | Iorlide， |  |  |
| Jamaiel，Ulelıd．，Ili． |  |  | Cheme，yure，il | 等 | 30 | Salicylate， | 35 | 40 |
| Po，lb | － | 30 | Olceic，purified，lis | 宕 | so | Magenems，cal |  | 析 |
| （inseng， | 29 | 300 | Oxatic， 1 ll | 12 |  | Carloinite， 1 b ． |  |  |
| Condonstal， 1 |  |  | 1husphoric，${ }^{\text {g }}$ |  |  |  |  |  |
| Ginli Phreaid lib．．．．．．．．．．．．． | 910 | 9 | Dilate，if， | 13 | 17 | Sulph．（Epsom sale），ib | 19 |  |
| Hellebore，White，jowd．，Hi．． | $\frac{18}{18}$ | $\begin{aligned} & 1,5 \\ & 30 \end{aligned}$ | Pryoughte，wit． |  |  | Mantinese，Back Oaide， |  |  |
| Ipeeac，$^{\text {l }}$ ， | 990 | 300 | Sulphurie，carloy，ib ．．．．．．．．． |  |  | Mextuay， |  |  |
| powder | 310 | 320 | Bottles， 11 |  | 6 | Amumn（Whito | 2） | 130 |
| Jalay， 1 l |  | ${ }_{6}^{100}$ | ${ }^{\text {Chemen pure，}}$ | 15 | $\stackrel{20}{2}$ | Chlorite，Cor | 100 | 1.10 |
| KıッลKanal | ${ }_{6}^{60}$ | ${ }_{6}^{65}$ | Ta | 10 | 123 | Calo | 15 | 120 |
| Licorice， li ， | 12 | $1: 5$ | Аентімй11， |  | 100 | Ioilide，1＇rot | 35 |  |
| Powdered． 1 | 13 | 15 | Acositis | 4 |  | linin，uz． | 25 |  |
| Mamlrike，lb | 13 | 18 | Alus， | 17 | 3 | 0 Side，Red， lb |  | 35 |
| Masterwort，li | 10 | 40 | lowdered， H ．${ }^{\text {a }}$ |  |  | Pill（Blue Mass）， | 70 |  |
| Orris，Horentit | －3， | $\stackrel{19}{ }$ | Amsosin，Lic ei |  | 15 | Nu．k Sctar，powlered， | 50 |  |
| Purewirn Bravi， | $\stackrel{3}{3}$ |  | Anıosies， | 83 | 75 | Monrmise，Actate， | 1.60 | 0 |
| Pureim，li， | 40 | 4 | Carbointe， | 12 | 13 | Muriate，${ }^{\text {oz }}$ | 1：60 | 65 |
| Parsleg，il | \％ 30 | s0 |  | －30 | 4 | Pulphate，oz．．．．．． |  |  |
| Pleurisy， 1 | 20 | 25 | Mariate，lb．． | 12 | 16 | Puxscerise，oz | ${ }_{70}$ | $7{ }^{2}$ |
| loke，hi． | 15 | 15 | Falerima | 5 | 60 |  | 5 | 6 |
| Qucen of the ． | 15 | 20 |  | 析 | 18 | Pu | 00 | 110 |
| Rlinamy， | $\stackrel{3}{75}$ | 2 ${ }^{30}$ | Ask | 0， | ${ }_{-1}^{1} 10$ | Phosrionies， 1 b | 90 | 1.10 |
|  |  |  | Ansroi． |  |  | Porsiss， ，Cumstic，white | 55 | 60 |
| cut， 1 ma，．．．．．．．． | 30 | 45 | Ansesic， Fowler＇s，sol．， | $\stackrel{13}{13}$ | 130 |  | 15. | ${ }^{40} 17$ |
| Scuem，lib | \％ | 65 |  | 33. | 40 | Bichrounte， 11 | 12 | 13 |
| uill， | 13 | 15 | hite |  |  | Bitrat CCram | 28 | 30 |
| tilliugia，ll． | 22 | 2 | Atrourse，Sulp．，in io 0 zs | 700 | 800 | Promile， | 37 | 40 |
| PRydered，li．．．．．．．．．．．．．． | ${ }_{6}$ | ？7 | B！saluth Ammolingegitrato，oz， | 40 | 45 | Carhomate，It | If | 18 |


| Clilorite, Fing., lb............ | 18 | 20 | Vehathisk, oz..... ........... | 200 | 010 | Tenmograks, $16 . .$. | 150 | 160 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| lowdered, fib. . . . . . . . . . . . . . | 83 | 9 | Zinc, dectate, lb. . . . . . . . . . . | 70 | $7 \%$ | Mustarl, lissential, uz | 00 | 6is |
| Citrate, lb. ................... | 75 | 90 | Ciatmonte, llo. | -5 | 30 | Noroli, 18 | 19 | 18 |
| Cyanide, fured, ib ......... | 110 | 5.5 | Chlorile, granular, oz........ | 18 | 1.7 | Onamper, ib | 37 | \%00 |
| Ilypophosphites, oz.. ........ | 10 | 19 | lextide, oz... | 161 | 60 |  | (i) | 380 30 70 |
| Iodite, $16 . . .$. ... . . . . . . . . . | 360 5 | 370 10 | Oxile, Sulpha | 1:9 | 11 |  | 13.0 | 1\% |
| Nitrate, grati, lb | 80 | 5 | Valerimate, oz. | 95 | 80 | l'emyroyat, it. | $\because 01$ | $\because 10$ |
| Permangamate, il Prussinte, Red, ll | 50 | 5 | ESSENTIAL OILS. |  |  | Pepmeminint, Ib. | 48 | 45 |
| Yellow, lb... | 3: | 0 | Ont, Almomd, hitter, oz. | 74 | SO | limente, lb.. | $\because 6$ | $\because 7$ |
| And Sod. 'lartrate, 1b | 30 | 3.5 | Sweot, ll. . . . . . . . . . | \%0 | (i) | Rhorlimm | S 18 0 0 | - $\begin{array}{r}50 \\ \hline 00\end{array}$ |
| Sulphuret, llu...... | 25) | 30 | Amber, cirude, lb, .......... | 10 | 15 | Rose, Da Ruselmay, If | 60 70 | 780 |
| Prorytasilst, oz. | 3 | 40 | Ree't, Ib................... | 80\% | 70 |  | ? | 301 |
| Quisise, Sulph., bulk | 3 | -38 | Anisc, ll. ............... | 275 | 300 |  | - | $0{ }_{1}(1)$ |
| Ozs., 0z..... | 30 | 30 | 13iy, oz....i | - 80 | 60 $\sim$ | Sasminas, 1 C | (25) | 70 |
| Quinimisy, Sulphate, ozs., 0\%... | - 16 | 3190 | luergamot, ib. | - 00 | \% 0 | Savin, 11, | 1 (i) | 17 |
| Sabicts, lli................. | 275 20 20 | 3180 | Cinle, Its. ${ }^{\text {Cijujut, }}$ | 90 180 | 100 100 | Sploumint, 16 | (i) (k) | (i) |
| Sintunis, oh............. | 905 | 100 | Cajuput, Capsicum, or | 1 (i) | 180 | Eprues, 11, | 6.5 | 70 |
| SiLursed, oz............ | 100 | 110 | Canaway, lb. | 3.30 | 37 | 'limsy, Is | 18.5 180 | 180 180 0 |
| Soutum, Acctate, lb. | 30 | 35 | Cassin, ib. . . . . . . . . . . . . . . | 18 | 160 | Wintergrea, in | ( 3 (1) | 180 |
| Bicarbonate, kga, lb. | 275 | 300 | Cinnamon, Ceylorn, o\%........ | 130 | 160 | Wormsed, 16. | -3 30) | $\because$ |
| Bromide, lb. | 63 | 65 | Citronelle, lb....... | 80 | 3 | Wimmuomed, ib | (i) : | i |
| Carbonate, lh. | 3 | 6 | Cluve, ${ }^{\text {lb }}$ | 160 | 18.0 | Wommoen, ${ }^{\text {b }}$ | (1) | 0 d |
| Hуprophosphite, oz. | 10 | 12 | Copmils, ${ }^{\prime \prime}$, | 160 | 13 | FINED OItS. |  |  |
| Hyposulphite, lb. | 3 | 6 | Croton, lb. | 180 | 178 | ('istur, 16 | 10.4 | 13 |
| Indilde, oz.... | 40 | 45 | Culnh, lb. | 1500 | $\therefore 010$ | (\%it) latist, N. H., gill | 100 | 1 - |
| Salicylate, 1 lb | 150 | 200 | Cumin, Ib. | 350 | 600 | Nothrexim, x.ll.... .. .... | 1-i | 150 |
| Suphate, 1 l | $\underline{1}$ | 3 | 1:rigerou, 0\% | 0 | 9 | Corrownilio. | 110 | 12 |
| Sulphite, ${ }^{\text {b }}$ b. | 10 | 12 | Fucalyptus, | 290 | $\because 10$ | Lakbl gral | 90 | 100 |
| Sitiat Nirat. lb. | 30 | 5 | Fentel, lls. | 160 | 130 | lisstith, Imonded, gal | 7.7 | 75 |
| Sthustiva, Nitrate, lb | 18 | 20 | Curanimm, 0\% | 130 | 150 | Raw, \&゙al. | 73 | 7.5 |
| Sthrcisine, crystals, oz. | 110 | 120 | Rose, lli. | :390 | 380 | Statsiomm, sil | 110 | 110 |
| Sulfoxal, oz... | 10 | 45 | Juniper lewies (Eaglish), Hb.. | 4.80 | 510 | Ohtve, whl | 13.5 | 1.10 |
| Sulintur, Flowers of, lb | 2.4 | 4 | Woorl. 1b | 30 | 7 | Salal, dul | 23 |  |
| Pure precipitated, Ib. | 13 | 20 | Lawender, Chiris. Flenr. Ib... | 30 | 3 B | PM, M, lli... | 1: | 12 |
| 'antai Empric, lb. | 50 | 5.5 | Ciarden, lt | 150 | 175 | Sirims, gnt | 1 16) | 175 |
| Turmol, (Thymic acid), oz. | 60 | 0,3 | I.cmon, ll). | 350 | 875 | 'IUnersithemesul | (6) | 71 |

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