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ONTARIO COLLEGE OF PHARMACY 44 GERRAPD ST. F TORONTO

DRUGGIST. CANADIAN

THE IRANGEST OF THEMAS. DEVOTED TO THE INTERESTS OF THE GENERAL DRUG TRADE AND TO

Vol. 4.

JANUARY, 189

No. 1.

CANADIAN DRUGGIST.

WILLIAM J. DYAS, - Editor and Publisher.

SUBSCRIPTION, \$1 PER YEAR IN ADVANCE. Advertising Rates on Application,

The Canadian Druggist is issued on the 15th of each month, and all matter for insertion should reach us by the 5th of the month.
All chaques or drafts to be made payable to the editor. New advertisements or changes to be addressed.

CANADIAN DRUGGIST,

STRATHROY, ONTARIO.

SPECIAL REMINDERS.

We issue on the 15th of each month, therefore, Correspondence should reach us by the 7th. New Advertisements should reach us by the 7th. Changes of Advertisements should reach us by he 5th.

Volume Four.

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WITH this number the CANADIAN DRUG-GIST enters on its fourth volume, stronger and better than ever.

Commencing in 1889 with an issue of 20 pages, it has now attained more than double its original size, containing 48 pages, and recognized everywhere as the exponent of pharmaceutical affairs for the Dominion.

That such a journal as this was needed for Canadian pharmacists has been abundantly proven by the great success which it has attained in a short time, and from the fact that from one end to the other of this vast Dominion the CANADIAN 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 have been enabled to place before our readers every month events of interest to the profession which have occurred in the various Provinces of the Dominion and which must have a tendency to bring all pharmacists in this country in closer touch with each other, engendering a feeling of harmony and doing away with that mutual distrust, too frequently found between business

men in their peculiar lines, and is only by such interchange of ideas and appoylable of each other that any move edge of each other that any move to a Dominion organization of pharmacists, such as has been proposed, can be consumated.

We would invite druggists to make still further use of our columns by contributing to its pages, either in correspondence or articles on any special subjects of interest to our readers. Our columns are open to all, and as many matters which materially affect the business of the retail druggists are beginning to make themselves felt, we would ask for a full and free discussion of them in the Canadian DRUGGIST.

Drugs and Preparations Used in Dental Practice.

BY W. RUSHTON, L. D. S.

The author commenced by referring to the medicaments and appliances of by-gone times, as described in the "Arcana Fairfaxana," of which so much has been heard from various sides lately. This work contained 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 vinegar, and white arsenic, employed now for the devitalizing of exposed tooth pulps. Laughter was also excited by the reading of an old recipe for toothache, which involved the use of "worms when they be a-gendering," and gave a number of quaint directions for use. Opium was another drug used in these early times, which was still a recognized remedy.

There could be no doubt that down to about 30 years ago dentistry was in a non progressive state, until the labors of Sir John Tomes began the movement which had reduced it to an exact science. The main causes of toothache, decay, &c., were now understood and made subservient to treatment. The author then proceeded to treat the drugs and preparations used in dental practice in classes, according to the purposes for which they are employed.

Among escharotics, chromic acid, nitrate of silver, chloride of zine were mentioned. Arsenious acid was used to destroy the exposed sensitive pulp of a

tooth; the sold had not found that the drugs mixed with the arsenic to allay the printwers much service. Nitrie acid, isomployed for the same purpose, was open to many objections. Pepsin had been suggested as a solvent for the pulp, but its action was too slow to be much

Of anodyne agents, chloroform, chloral hydrate, spirit of camphor and cocaine

were well known examples.

With respect to dealing with the pulp after it was dead, to prevent it undergoing putrefaction, every antiseptic new and old had been tried, such as creosote, mercury perchloride, iodoform-the unpleasant taste and odor were grave disadvantages of this agent - the oils of clove and eucalyptus, alcohol, thymol, napthol, creolin, betanaphtol, &c.

Prof.-Mueller, of Berlin, had made an exhaustive study of the efficacy of various antiseptics in preventing the decomposition of the pulp. Of course it had to be kept in mind that the antiseptic had not, so to speak, a fair chance; it was and could be applied only at one end, while the decomposition could begin at the other. Prof. Mueller, in accordance with this condition, arranged his experiments in a similar way, starting the putrefaction at one end of the pulp and the antisepties at the other. The whole thing was then placed in nutritive agar-agar and the two processes left to fight it out

The results were expressed by dividing the substances used in three classes as

follows:

(1) Antiseptics permanently active in the decomposition of the tooth pulp: Mercuric chloride in powder, mercuric cyanide, phenyl trichloride, carbolic acid, oil of cinnamon, camphophenique, hydro-

(2) Antisepties of doubtful value: Five per cent. mercuric chloride was among these; it only penetrated half way through

(3) Antiseptics nearly or quite worthless for this purpose: Iodoform, basic aniline colors, berax, boracie acid, naphtalene, and many essential oils.

(4) Antiseptics not yet sufficient tested to enable their real value to be deter-

mined.

Speaking of teething, the author referred to the importance of phosphates and lime in the food, and emphasized the necessity of a diet containg plenty of bone forming elements for the mother during

pregnancy. Mercury had a strong action on the formation of the teeth, and the distinctive character it imparted to them was often seen as the result of the use of mercurial powders.

Anasthetics next came under consideration. Chloroform was more frequently used in Scotland, its home, than in England, where it was considered unsafe, since the patient was in an upright position. Ether was more generally employed in England, especially in combination with gas to deepen the amesthesia. Nitrous oxide, or laughing gas, was the chief agent employed, the most important factor being its purity. The effect was produced in 30 to 40 seconds, but, of course, owing to the nature of the operations, which necessitated the suspension of the amesthetic, was only of short duration. In a few instances this difficulty had been met by spraying the agent down the pharynx through the nose.

As local anaesthetics, important service was done by chloride and bromide of ethyl. With regard to cocaine, more in-

formation was required as to the impurities, which made its use sometimes dangerous. It was important to make the injections slowly, from quarter to half an hour being required for half a grain. Strong carbolic acid also belonged to the same class, as well as ether and other liquids applied with the view of producing local insensitiveness. The use of the latter was, however, almost as bad as the extraction, owing to the cold produced. Electricity in a few cases deadened the pain, in a few made it worse, and in the majority of cases had no effect one way or the other.

Precipitated chalk was the foundation of most tooth powders; arecanut was useful in flabbiness of the gums, but camphor was of little real use. The statement that it injuriously affected the enamel required confirmation. Yellow bark and myrrh were also frequent ingredients; essential oils were not much good save as flavoring agents. Soap and pumice were both useful constituents. Carbon and soot could not be commended, as particles got up under the free border of the gums and caused them to recede. Any tooth powder containing a free acid, such for instance as cream of tartar, should be condenned.

In mouth washes, myrrh, tannin, catechu, and other drugs containing tannic acid were used as astringents; carbolic acid, permanganate of potassium, sanitas, thymol, borax, &c., as autiseptics; bismuth nitrate, quillam, and alum as purifiers. The latter should be used carefully as it often contained free acid. Chlorinated lime has been employed without much success as a bleaching agent for discolored teeth.

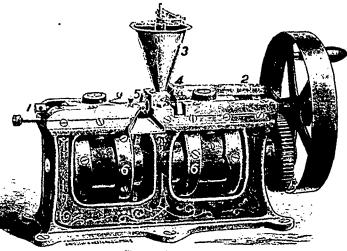
A number of drugs were used in the treatment of neuralgia, such as ammon-

ium chloride, Indian hemp, chloral hydrate, hyoscyamus, menthol, opium, phosphorus, &c. Potassium iodide, and quinine were also given in mixtures, while mustard and cayenne were applied locally.

For gum-boil, poppy-heads and camomile decoction was still used, but a word of warning was required with regard to external fomentation; this should never be done, as it brought on the breaking of the abscess on the face, which was followed by permanent disfigurement.

To control hemorrhage after the extraction of teeth, plugs of lint were used, which had been soaked with tannic acid, hamamelis, &c.; matico leaf was sometimes very effectual. For inflammation round the roots of the teeth iodine was used as well as capsicum and aconite.

Tannin borax and iodine also played a part as temporary fillings. The author urged the necessity of rinsing the mouth out with plain or alkaline water after each dose of acid medicine when a long course of this was taken (c. g. iron mixture).



TABLET MACHINE.

Other substances mentioned were copper sulphate and wax or guttaperela in making models of the mouth and arrangement of the teeth. B. and C. Druggist.

A New Tablet Machine.

J. R. WITZEL, M.D., TACONY, PHILADELPHIA. Read at the Pharmaceutical Meeting of the Philadelphia College of Pharmacy.

Realizing the great demand for compressed tablets, the writer has endeavored to bring before the profession a tablet-compressing machine that is simple, powerful, compact and, as nearly as possible, perfect in every respect. The accompanying cut shows the appearance of the machine, the motions of which are positive and automatic.

The frame is one solid casting; the hand machine weighs about 125 pounds, occupies a counter space of 10 x 17 inches and stands 9½ inches high; power machines have an additional stand to give clearance for the large fly wheel. The capacity is from 55 to 95 tablets per minute, and is increased in proportion to

the number of plungers in operation. The pressure can be regulated to any desired degree, is direct and comes to bear between the cams which imparts 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 any size or shape, and hopper and mould are stationary. There being absolutely no waste, a saving of material results, and the absence of friction from feed makes the machine run easy.

Ample provision is made for taking up lost motion from wear of moving parts. The dies and moulds can be easily changed from one size to another, and the regulations being so few and simple, they are readily understood and easily manipulated. The working parts being inclosed, necumulation of dust is provented, wearing of the parts is lessened and foreign matters are not rubbed into the mould for compression; hence, the tablets are kept clean and unobjectionable for hypodermic medication.

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

PENTAL.—A New ANAS-THETIC.—A new anaesthetic has been given the name of pental. It is produced in Germany, its inventor being

Professor Von Mering, director of the Medical Policlinic, in Halle, who chose the name he has given it owing to the circumstance that it contains 5 carbon atoms. It is very volatile and easily combustible. It can, it is said, be administered exactly like chloroform, and the quantity required each time need cost no more than 6d. Anesthesia set in after three or four minutes—rarely later. It is not deep, but suffices to render small operations, such as the extraction of teeth, painless. It is neither accompanied nor followed by any unpleasant effects.—Nat. Druggist.

TOOTHACHE may be relieved by naphthalin, 5 grains, dissolved in chloroform, 1 dram.

Phylanthus Nirum L., by the natives called Daon Manitan, is employed in Java as a diuretic, laxative, abortifacient and anticteric.

Tasi, largely used medicinally by South Americans, is being brought to the attention of practitioners as an excellent galactgogue. The plant is known as Morrenia brachystephana.

1

STEARN'S 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."

The above illustrates the idea of how our New Test Sample Rack interests customers. Its beauty attracts one to test the odors, and then a sale is easily made. Stearns Perfumes are full of flowery fragrance, yet delicate and laseing. With each order for right lls, is sent an Elegant Counter Sample Test Rack, beautifully finished in oil, containing eight half cance tall vials, the glass stoppers of which taper to the bottom. The most unique and attractive method for showing perfumes over devised.

The following is a list of odors furnished:

SPECIAL ODORS.

WHITE LILAC HELIOTROPE

MAY BLOSSOM OLIVE BLOSSOM

4 ROSES ERMINIE EUXENIA KALANTHE

CRAB APPLE BLOSSOM LILY OF THE VALLEY

WHITE ROSE ROSE GERANIUM CLOVE PINK PATCHOULY

YLANG YLANG RONDELITIA UPPER TEN TONQUIN MUSK

REGULAR WEST END TEA ROSE ESS. BOQUET MOSS ROSE FRANGIPANNI DORS. WOOD VIOLET NEW MOWN HAY OPOPONAX STEPHANOTIS

JOCKEY CLUB TRUE ENG. VIOLET MUSK WHITE POND LILY

We would suggest in making out an order for S lbs., the selection of at least four of our Special Odors. For example say "May Blossom," "4 Roses," "Euxenia," and "Crab Apple Blossom"; then at least two of the recent favorites from amongst "Heliotrope," "Ylang Ylang," "Lily of the Valley," and conclude the list with surely the two old standard favorites, "White Rose and "Jockey Club." Price per ib. cork stoppered flint bottle, \$3.25; regular glass stoppered bottle, \$3.50; per lb. cut glass stopper and label etched on bottle, \$3.75.

NOTE EXCEPTION. - "True English Violet" and "Tonquin Musk," are \$5.00 each per lb.

PERFUMES BOTTLED FOR RETAILING.

We furnish all our Odors bottled in the following styles.

IN GLASS STOPPERED BOTTLES.

NEW TALL ST E.

Glass stoppered tall bottles, clongated stoppers, capped with Goldbeater skin, tied with corded silk, beautiful label, full measure, largest appearing package for size.

One half ounce One ounce Two ounce	15 A)	*** (1)	3 doz. \$ 6 50 11 75 20 00	1 doz. \$2 25 4 00 7 00
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ROUND BOTTLES, LUBIN'S AND ATKINSON'S STYLE.

Round glass stoppered bottles, kid-capped, and handsomely ribboned.

1 gross. 6 doz. 3 doz l doz. One ounce \$15 00 \$23 00 \$11 75 \$4 00 IN CORK STOPPERED BOTTLES.

Cork stoppered, handsome bottles, lithographic labels capped with kid. ROUND BOTTLES, FULL TEASURE.

	i gross.	0 1102	3 GOZ.	1 00%
One-half ounce	. \$22 00	\$11.50	\$ 5 90	\$2 00
One ounce	42 00	21/50	11 00	3 75
Two onner	72 60	37 00	19 00	6.50
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SQUARE BOTTLES, ROUNDI	.D CORNER:	s, shokt 3	TEASURE,	
SQUARE BOTTLES, ROUNDI	.D CORNER: I gross.	s, simict i Gdoz.	3 doz	1 doz.
One-half ounce	I gross.	G doz.		1 doz. \$1 75
·	1 gross. \$18 00 . 36 00	G doz.	3 doz	

We guarantee all of our bottled goods to be of the same quality as those furnished in bulk.

SACHET POWDERS IN BULK AND FANCY PACKAGES.

FREDERICK STEARNS & CO.,

PERFUMERS,

DETROIT, MICH,

WINDSOR, ONT.

NEW YORK CITY,

→SEELY'S←

American Perfumes

HEAD OFFICE AND LABORATORY

Established at DETROIT, Mich., in 1862.

Branch Laboratory: WINDSOR, ONT.

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

Special Odors.

Easter Lily. White Lilac. Victoria Regia. White Hyacinth. Golden Rod. White Rose.
Marie Stuart.
Jockey Club.
Frangipanni.
White Heliotrope.

Mary Anderson.

Knights Templar.

Her Majesty Rose. Minne-ha-ha. Wild Crab Apple Blossom.

PRICE LIST:

Hu	lf Po	unds (gl:	iss stopp	er) -	*2.00	each.
**		" (en	graved)	-	2.25	**
Dir	ne Si	ize (3 doz	on care	1) -	.84	per doz.
8 O	mne	e (cork st	opper) 1	oxed	1.75	••
٠,	**	(glass st	opper)	**	2.00	**
1	. **	44	**	**	4.00	**
15	••	**	• 4	••	6.00	**
22	**	••	••	**	8.00	**
4	**	**	••	**	13.50	**
4	**	(engr	aved)	**	15.00	**

The Druggists' stock of Perfumes is always low after the Holidays. Replenish with Seely's Line. Send us a mail order, or wait for our Representative, who will call upon the trade early. Give us a trial order. Our Perfumes are sure to take well, for they are manufactured from the finest material that can be had.

We solicit correspondence.

Yours respectfully,

Seely Manufacturing Co.,

WINDSOR, ONT.

J. PALMER & SON

1743 & 1745 Notre Dame,

MONTREAL.

AGENTS FOR

PEARS' * SOAP,

Bertrands Freres Perfumery,

Duponts Brushes.

Special prices given for Import Orders on Brushes and Perfumery.

We have just received and our stock is now complete in the following:

Turkey and Honey Comb Sponges, 250 Cases.

Chamois Skins, extra quality and good value.

Violet and White Lilac Perfumes, the latest and best.

Also Roger & Gallet's, Coudray's, Gelle Freres, Pinaud's and Pivers', Colgate's and Vennard's Perfumery.

A splendid variety to select from.

Belladonna

Plasters.

PROF. D. HAYES AGNEW.

OF PHILADELPHIA,

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."

Full list of JOHNSON & JOHNSON'S preparations on application to

THOS. LEEMING & CO.

MONTREAL.

LYMAN BROS. & CO.

TORONTO, - ONT.

Vinolia Cream.

- " Powder.
- " Dentifrice, American.
- " Floral Soap.
- " Toilet Soap.
- " Balsamic.
- " Shaving Sticks.
- " Shaving Foam.

White Pots, Celluloid Top

1, 1, 2, 4 and 8 oz.

Royal Pepsine Compound.

Armour's Pepsine.

- " Pepsine Tablets.
- " Pancreatin.
- " Peptonizing Tablets.
- " Beef.

Vincent's Shavers' Comfort.
Miller's Emulsion.

Get our quotations for

Insect Powder

from Dalmation Closed Flowers before buying.

TRADE NOTES.

- 'G. A. Sherrin, drugs, Wallaceburg, has sold out.
- W. H. Hills, druggist, Acadia Mines, N. S., has failed.
- Chas. J. Quinan, druggist, North Sydney, N. S., has made an assignment.
- G. A. Hugill, St. Thomas, 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. Kennedy, corner of Queen and McCaul streets, Toronto, 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 firm was originally Fraser & Gunn.

J. Coombe, one of the oldest druggists in Toronto, but who retired rrom active business some time ago, is dead.

Little & Cleveland, druggists and stationers, Lethbridge, Man., had their stock partially destroyed by fire last month.

"Pears' Sonp" 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 firm name of Dawson, Bole & Co., wholesale druggists, of Winnipeg, Man., is now Bole, Wynne & Co., mention of the change of business being made in last month's issue.

- W. C. Haskett, for many years office manager for Elliott & Co., Toronto, has entered the employ of Lyman, Knox & Co., Montreal, as traveller for the district west of Montreal.
- J. G. Hearle, Montreal, manufacturer of toilet soaps and perfumery, has made an assignment. Liabilities about \$16,000, the principal creditor being the Bank of Montreal, for \$3,942.

We regret to hear of the severe illness of Mr. E. Gregory, of Lindsay, 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, formerly traveller for Martin, Rosser & Co., wholesale druggists, Winnipeg, Man., has entered the employment of Lyman, Knox & Co., of Montreal, and will travel 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 & Reche, Hamilton; F. E. Arkell, Blenheim; W. Colcleugh, Mt. Forest; H. Paffard, Niagara; J. W. Cull, Mitchell.

The Malto Peptonized Porter Co., (limited), with a total capital stock of \$100, 000, headquarters at the town of Truro, in the Province of Nova Scotia, has applied for letters of incorporation to manufacture, sell and deal in throughout Canada medicinal preparations, and specially that known as peptonized porter.

C. C. McGlashan, formerly of the firm of Smith & McGlashan Co., of Toronto, is now representing Parke, Davis & Co., of Detroit and Walkerville, in Western Ontario. We are pleased to hear of Mr. McG.'s engagement with this enterprising firm, and congratulate them on securing as their representative one who is so well and favorably known to the druggists of Ontario.

The Canada Paint Co., (limited), with a total capital stock of \$25,000, with headquarters 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, and manufacture of paints, colors, chemicals, varnishes, oils, and of painters' and decorators' supplies and materials.

British Columbia Notes.

The British Columbia Pharmacy Council met in Nanaimo Thursday, Dec. 10th, the following members were present. Messrs. T. M. Henderson, Victoria; T. R. Shotbolt, Victoria, G. M. Blanshard, Victoria; H. McDowell, Vancouver; E. Pimbury, Nanaimo.

Mr. J. A. Tepoorten, traveller for Langley & Co., Victoria, has just returned from an extensive trip through the province. He reports business fair with good prospects for spring trade.

C. H. Bowes & Co., druggists, Victoria, have dissolved partnership.

Messrs. McPherson & Thompson, of New Westminster, contemplate opening up a branch drug store in Rev. Mr. Green's block, Nanaimo.

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 Toronto dry goods house recently with druggists sundries to be used in their retail trade.

Manitoba Notes.

The druggists throughout the city of Winnipeg and the province report a good Christmas trade.

La grippe in a mild form is holding high carnival in this province, and in consequence antipyrities are in demand.

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

Mr. H. E. Neclans, for some years head assistant with Mr. J. F. Howard, is

about to open a drug store in the Manitoba Hotel, Winnipeg.

The stock of Mr. H. E. Jackson, Wm nipeg was sold by sheriff's sale Jan. 2nd, at 55 cents on the dollar. Martin Ross er & Co., wholesale druggists, were the purchasers.

Montreal Notes.

Notwithstanding all that has been written, experienced Montreal druggists were not surprised at the assignment of Kenneth Campbell & Co. No human being can carry on successful more than one drug store. Whether wholesale or retail, one of the proprietors will aiways be the popular man, whom everybody must see at least occasionally, and a smile and a hearty handshake from him will do more in securing custom than all the efforts of all the bunners and managers in the world. Now, how is it likely that Mr. Campbell could carry on his wholesale in a business like manner and at the same time find time to attend to his three retail branches. We all know that the success of a retail drug store is governed to a large extent by the personal popularity 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 dispense their own medicines," by the antiquated Medi cal News, and the remark is freely made whether it would not be better for physicians, in the interests of their patients, to study "Therapeutics and the incompatibility of drugs" during their leisure hours. Judging by the average prescription of the average doctor it would be decidedly unsafe for the public to trust their lives to the ignorance of such men on all matters connected with the handling of drugs. Supposing a physician kills a patient by an overdose, or a carelessly weighed dose, who will ever be the wiser? It is not very likely the doctor will criminate himself. As it is the druggist 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 times a week. How can the doctor check his own mistake before making up the medicine? Then again, will it be convenient for a young medico who is impecunious to keep a stock of drugs and pharmaceutics sufficiently varied and 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 something else?

Dr. Thayer, a well known druggist here, was sucd in the Police Court by the Registrar of the Pharmaceutical Association for his annual license fee of \$5, which he refused to pay. Judgment, of course, went against him and he will have to pay up. Probably he will appeal if he can,

which I very much doubt, as the judgment of the Police Magistrate in such cases is summary—besides it would only be throwing good money after bad.

It is very gratifying to observe how honorably every physician in this city keeping a drug store has paid up his annual license fee to the Pharmaceutical Association. The only exception is Dr. Thayer and it was found necessary to bring his case before Police Magistrate DesNoyers with the result as mentioned above.

The Montreal Druggists' Association have agreed to a list of prices and the list is ordered to be published, Messrs. Lyman Sons & Co. having very generously offered to bear the expense. It is to be hoped Mr. Contant will have the very few palpable errors altered before printing. I noticed one or two which were evidently oversights. Cutting is not going on to any great extent here. Most firms who have gone into that sort of thing have luckily "gone under." Pour encourager les autres, I presume.

The question of putting into force a clause in the Pharmacy Act, which prevents apprentices 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 meeting, some members thinking it would be best to use the power confided to the Council as mercifully as possible. The worst cases 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. 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-annual meeting of the council for granting certificates of competency, in accordance with section eight of the act respecting pharmacy and for general business, will be held in the city of Toronto on Tuesday, 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. Gilfillan, F. G. Huffman, 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. McRae, E. H. Shildrick. Second class—S. S. Smith, T. S. Grimshaw, R. P. Reckie and P. F. S. Maddock equal, F. Whelihan, F. Barley, W. Williamson, J. S. McKcown, J. H. Burchill, C. E. Parker, G. E. Rogers and J. E. Cogan equal, H. G. Barry, J. T. Mus-

grove, S. B. Clarke, G. A. Crowe, F. A. Merrill, M. A. Young, A. W. Reddin, A. T. Budd, W. A. Wallace, T. L. Pement, F. Harkness, J. E. Wood. Third class—A. T. H. Brown, G. A. Kennedy, S. Oldham, F. A. Clarke, A. Higinbotham, D. S. Hartley, C. R. Fowlds, W. G. Campbell, L. F. Boyd, S. L. Dunn, †C. W. Shearer, H. Love, G. A. Webster, E. W. Cameron, J. McLarty, L. T. Thompson, A. B. Hoolihan, W. A. Barlow, W. Campbell, W. Herod, J. Phin, E. Phin, E. Rickey, D. Robinson, *W. A. McGrea, J. A. Loucks, *N. J. Atkins, J. A. Stuart, *A. C. Gillies, A. J. Gould, R. Hafley, J. E. Davis, W. H. Smith, R. Hossack, *F. C. McGarthy, J. D. Warren, J. F. Berry, F. Terry, A. N. Trotter, N. M. Dutcher, R. J. McAlpine, E. T. Howard, B. M. Sargant, F. Hardison, H. R. Shepherd, †T. M. Hagarty, †H. D. Stone, †J. C. Boyd, *H. C. Robertson. * Supplementary in chemistry; † supplementary in botany.

The following passed in the supplemental junior examinations held Jan. 5th and 6th: W. A. Kaiting, W. S. Skinner, H. O. Rose, J. E. Bright, W. W. Emerson, C. W. Shearer, J. Sheigley, F. J. Crease, F. C. McCarthy, T. W. Fawcett, J. A. Boyd, H. W. Stone, T. M. Hagarty, E. W. Cameron, W. Evans, W. Scott, A. Cavers, H. C. Robertson, W. J. Atkins, A. C. Gillies, J. J. McDowell, H. G. Stuart, W. J. McGuire.

The Ontario College of Pharmacy entered upon the senior course on Thursday, Jan. 7th, with the largest senior class ever in attendance. There are about one hundred 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 drawback 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 drug trade, to allow of the exportation of tinctures, spirits and other alcoholic preparations in bond. It is therefore an extension of this concession, rather than a new one, that is about to be made. In the case of spirits and tinctures, although the concession is hedged around by numerous absurd anomalies, as has been pointed out in an editorial of the British and Colonial Druggist, it has been largely adopted by the wholesale trade. A compounder's license (costing \$50 per annum) is necessary and then, after carrying out all the requisite instructions, a rebate of \$2.52 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 and just that the heavy duty under which alcohol and all alcoholic preparations suffer in this country should be remitted when exported abroad. But it is quite another 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 free—spirit. The nauseousness of this spirit has recently been increased by the admixture of threeeighths of one per cent. of paratin oil to the spirit already containing 10 per cent, of wood naphtha. It would be difficult to devise a more objectionable compound as a beverage, and yet it is stated on celiable authority that methylated spirit drinking is on the increase.

Considerable irritation has been felt by chemists generally at the difficulty that is experienced in obtaining vaseline in bulk. The Cheseborough Company have adopted this method of pushing the small tins and bottles of their petroleum jelly, but announce that their real reason is scarcity of supply. When recently interviewed on the subject, 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. also complained that some dishonest persons were putting up petroleum jelly of other manufacture 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 proceedings 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 doubt that much of the present wide-spread appreciation of this brand of petroleum jelly is due to the prominence given to it by pharmacists. Petroleum jellics 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 B. P. whilst describing vaseline in its physical and chemical properties calls the article paraffinum molle. It is not so well known that the name vaseline would have become the pharmacopoial synonym if the Chese-borough Co. had renounced its right to the trade mark.

The dispensing of bicarbonate of soda and subnitrate of bismuth together in mixture form is often attended with results not altogether desirable. This form of pharmaceutical "torpedo" has attracted attention in the dispensing portion of the Chemist and Druggist, where E. J. Millard has pointed out that if in larger

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been made to present a suitable article for this purpose, all of which, however, were objectionable in some respects, which prevented their coming into general use. In the Knickerbocker Brace all objections have been overcome. It is a Combined Shoulder-Brace and Suspender. It provides now and improved suspenders for men's pants, and supporters for ladies' underskirts, which do the double duty of holding up and bracing up.

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quantities than 10 grs. of each salt are prescribed per ounce, it is safer to substi-tute subcarbonate of bismuth for subnitiate. In connection with this he publishes two letters which he had received on the subject from Dr. Lauder Brunton, M. D., F. R. S., and Dr. Mitchell Bruce, F. R. C. P., two of the editors of The Practitioner. It appears that each of these leading physicians had recommended in their respective works on therapeuties, the exhibition of these salts together in certain stomachic affections. 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. Bruce stated that he always prescribed them separately-the bismuth in powder form to be taken with the alkaline mix-The editor recommended the plan suggested in the "Art of Dispensing," a valuable little work brought out by the Chemist and Druggist. This consists of accelerating the decomposition of subnitrate and bicarbonate by the use of hot water and a mortar. This plan has also received the approval of J. Ince, teacher of Pharmacy at the School of Pharmacy, but I must confess that it seems a roundabout method of obtaining the same result. By this action one obtains subcarbonate of bismuth and nitrate of soda at the expense of some of the bicarbonate of soda. From experience of several West-End dispensing establishments, I can safely say that it is almost a rule to substitute subcarbonate of bismuth for subnitrate in these mixtures.

The subject of selling patent or proprietary medicines containing scheduled poisons will probably receive close and immediate attention. At the request of Mr. Einest Hart, editor of the British Medical Journal, Dr. Paul has analyzed some 14 of such preparations, the result of which shows that ten of the mixtures contain morphine, two contain strychnine and one aconotine. As most of these mixtures can be readily obtained in any quantity at the grocers, "muslin druggists," &c., it is high time that some interference should take place in their indiscriminate sale. It is not clear that these preparations were devoid of poison labels but it is certain that some of them require, under the Poisons Act, further regulations to be attended to in connection with their sile. So far, our poison schedules are wretchedly 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 Pharmaceutical Society in the matter.

FORMULE.

Liquid Extract of Malt.—Extract of malt, 10 ozs.; distilled water, 8½ fl. ozs.; rectified spirit, 1½ fl. ozs. Mix and allow to stand a fortnight and filter.

Antiseptic Pellets or Discs.—Perchloride of mercury, 83 grains; chloride of ammo-

nium, 64 grs. Mix and compress. May be colored by a small quantity of methylene blue dye. One disc or pellet dissolved in a pint of water forms a 1 per 1,000 strength solution.

Quinine Hair Wash.-Sulphate of quinine, 20 grs.; acetic acid, 1 fl. oz.; glycerine, 2 ozs.; Eau de Cologne, 1 oz.; rectified spirit, 1 oz.; concentrated infusion of quassia, 8 fl. ozs.; water to 20 fl. ozs. Mix and filter.

Eau de Cologne.—Oil of bergamotte, 10 drms.; oil of lemon, 10 drms.; oil of rosemary, 80 minims; oil of neroli, 2½ drs.; orange flower water, 14 ozs.; rectified spirit, 3½ pints.

ENGLISH MARKET REPORT.

London, Dec. 29, 1891.

The concluding month of the year is always quiet in both chemical and drug markets. The auctions are chiefly noticeable for their sundry nature. The principal features of the month are the advances in value of ergot, cocaine, vauilla, and mercury, whilst sulphate of copper, quinine, and copaiba are lower. Ipecacuanha is firm and opium very quiet. Shellac has declined again. The following are current prices:

CHEMICALS. Acid citric per lb...... 33 " " oxalic " tartaric Borax Copper sulphate Cream tartar Mercury " perchloride " subchloride 44 Potash cyanide Soda caustic "bicarbonate per cwt...... 2 54 44 Salphur 1 96 DRUGS. per 1b.....\$ Aloes cape Balsam copaiba " tolu ••••• Camphor refined Colocynth Cubebs Ergot Ipecacuanha Jalap Oil anisced 'peppermint, Aug 3 68 Shellac, T N

Synthetical Carbolic Acid.

BY H. W. JAYNE.

[Read at the pharmaceutical meeting of the Philadelphia College of Pharmacy, Nov. 17.]

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 constant demand for purer preparations, having undertaken its manufacture on a commercial scale. Of the many reactions by which phenol can be produced, only two are, at present, commercially practical; both using pure benzol as 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 naphthol, the 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° B.) in closed east-iron pots, provided with stirrers and lead coolers and capable of being heated by a steam jacket. While the mixture is slowly stirred, the vessel is gently heated with steam in such a manner that the vapors of benzol which pass into the cooler are continually returned to the kettle. After a number of hours the reaction is finished, and the benzol not acted on, is collected as it flows from the cooler. crude 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 added to the hot solution in sufficient quantity until it is faintly alkaline. This removes the excess of acid by forming calcium sulphate, which is then filtered off by means of a filter press. The clear liquor containing calcium benzolsulphoante is treated with sufficient sodium carbonate to precipitate all the calcium as carbonate, which is removed by filtration, and the liquor is now evaporated to dryness, leaving the sodium benzolsulphonate 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 finally the whole is kept in quiet fusion for some time. The melt now contains sodium carbolate and sulphite together with the large excess of caustic soda used $-C_6H_5-SO_3Na+2NaOH=C_6H_5ONa+Na_2SO_3+H_2O$.

It is ladled from the kettle into pans and allowed to cool, broken up, dissolved in water and acidified with sulphuric or hydrochloric acid. The phenol thus liberated separates from the concentrated salt solution, and can be collected and dis-

In melting the sodium benzolsulphonate with caustic soda it is necessary, in order to obtain a good yield, 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 soda or potash salt a nearly theoretical yield can be obtained, but as this would greatly increase the cost, caustic soda is used instead.

It has been proposed to treat the melt after dissolving in water with carbonic acid gas, which would liberate the phenol equally well as a stronger acid, and in addition would form carbonate of soda or potash, which together with the sulphite already present could be converted into the hydrate by treating 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 aniline for blue, is dissolved in water in a lead-lined tank covered with a

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hood and provided with stirrers and leaden steam coils. The solution is acidulated very strongly with sulphuric acid, and to the hot liquid a solution of commercial nitrite of soda is gradually added, phenol being at once formed.

In this reaction the sodium nitrite, in contact with the acid solution, liberates nitrous acid, which forms diazobenzol sulphate with the aniline sulphate— $(C_6H_5NH_2)_2H_2SO_4+2HNO_2=(C_6H_5N=N)_2SO_4+4H_2O_1$, but as the solution is hot it at once decomposes into phenol with evolution of nitrogen— $(C_6H_5N=N)_2SO_4+2H_2O=2C_6H_5OH+1I_2SO_4+4N_1$.

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

A good grade of crystal acid can be purchased abroad in large quantities at this time at about eleven cents per pound, while the pure benzel used in the first method is worth at the English refineries about fourteen 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, believing that they were getting a much purer article than could be produced by the ordinary methods. This interest, however, considerably abated since the acid has been found to redden just as easily as the best commercial grades.

It could scarcely be expected that an acid obtained by either 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 (thiophenols, etc.) are likely to be formed; and its manufacture from a substance like aniline, which so readily produces coloring matters, could scarcely be carried out, without at the same time forming bodies which at once, or later under the influence of light and airwould discolor it.

In addition, commercially pure benzol or aniline oil always contain small quantities of, respectively, toluol or toludine. 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 quantities, but sufficient to reduce the melting point of the resulting carbolic acid.

Lunge has shown that the addition of 1.3 per cent, of cresylic acid to pure phenol reduces the melting point eight degrees to 321°, and in the preparation of a high grade carbolic acid a difference of a part of a degree is of great importance.

Forty degrees acid is at present a commercial article sold at excessively 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 40° acid, without doubt just as good if not a purer article could be produced direct from tar oils and at a much lower cost.—Laboratory of the II. W. Jayne Chemical Co.

Indigestion.

Owen Meredith has happily called indigestion "the conscience of every bad stomach." Certainly indigestion is one of the most common of human ailments.

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

Antacid Tablets are of service in dyspepsia and gravel. The formula is: Calcium carb. precip., 3½ grs; magnesium carb., 2½ grs.; sodium chloride, 1 gr.; excipient, q. s.

Digestive Tablets are useful in forms of indigestion dependent upon deficiency of the secretions, or upon indiscretion in eating. Formula: Pepsinum purum, 1 gr.; pancreatin pure, 1 gr.; calcium lactophos, 2 grs.

Peptonizing Tablets form a most convenient method of preparing peptonized milk, gruel, beef tea, wine jelly, blanc mange, oysters and milk toast.

Lactated Pepsin Tablets have proven efficient in relieving the distressing symptoms of dyspepsia, and in many diseases of which mal-nutrition is a pronounced feature. Formula: Pepsinum purum, 3-10 gr.; Pancreatin pure, 3-10 gr.; lactic acid, hydrochloric acid, maltose and diastase, q. s.

Lactated and Pepsin Purum Tablets can be furnished in bottles of 30 and 65, convenient for dispensing.

Out For 1892.

Dawson, Bole & Co., wholesale druggists, Winnipeg, have just issued their sixth annual almanae, which is specially adapted to Manitoba, the territories and British Columbia. The first issue of the almanae in 1887 amounted to about 5,000 copies. The number has been increased each year, and the new issue for 1892 amounts to approximately 50,000 copies. The growth in the circulation of this little annual, may be taken as an index to the extension of the business of the house.

A Color Reaction for Salol, --- A few drops of mtro-sulphurie acid are put into a water-glass and a few grains of powder-ed 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 transferred to a porcelain dish and 50 c. c. of water added and well stirred, the liquid becoming rosecolored, while the green tint may be restored by the addition of ammonia. Resorcin treated in the same manner becomes at once of a deep blue color; on adding water a red coloration is given which ammonia changes again to blue.-Journ. de Pharm. d'Ancers.

CORRESPONDENCE.

Correspondence is invited from all members of the profession. We do not hold ourselves responsible for opinions of correspondents. All communications must have the name of the writer attached, not necessarily for publication, but as a guarantee of good faith. Any nom de plume may be used for publication. Write only on one side of the paper, and be concise.

"Fair Play."

To the Editor:

Sin,-In the *Pharmaceutical Era*, Dec. 15th, 1891, page 364, appears an article from which I will give some extracts:

"HOW HE PASSED THE BOARD."

"Mr. Clyde M. Brooks, of Jackson, at the last meeting of the Michigan State Board of Pharmacy at Lansing, passed with a higher percentage than has ever been achieved by any other candidate in th. history of the Board. Thinking that some information as to the methods of study pursued by Mr. Brooks in fitting himself for the examination might prove of service to many would-be pharmacists, the Era's representative in an interview obtained these points:

"In answering the queries as to what studies were pursued and what books employed preparatory to appearing before the Board, Mr. Brooks responded.

"' How and what books did you study relating to Practical Pharmacy?'

"'My library embraced, and in fact consisted of Heebner's Manual of Pharmaceutical Chemistry, Remington's Practice of Pharmacy, the U.S. Pharmacopæia, and a Dispensatory. In Heebner's work I studied each drug and chemical with particular reference to its chemical properties, solubilities and general description, and was particularly pleased with its brief, concise and simple text."

Chas. F. Leebner, Professor of Theory and Practice of Pharmacy and Pharmaceutical Chemistry in the Ontario College of Pharmacy, is the author of this Manual of Pharmaceutical Chemistry.

At the meeting of the Council of the O. C. P., in August last, Mr. Polson moved, Mr. D'Avignon seconded, (these Mr. Shuttleworth calls his invincibles) a resolution of censure upon the previous Council for having appointed Professor Heebner as a teacher in the O. C. P., and not some untried and inexperienced teachers, simply because they were born in Canada.

I believe the majority of the druggists in Ontario have sufficient manhood and honor to give any qualified person (even if they were not born in Canada) an opportunity to demonstrate his ability and tituess for giving instruction in the O. C. P.

Fair play and honor to whom honor is due.

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Practical Hints on Dispensing for Students.

BY C. J. S. THOMPSON.

(From the British and Colonial Druggist.)

GARGLES.

The 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 preparations. The methods of preparation are the same as those used in compounding mixtures. Honey is frequently used in gargles. It should be placed in a mortar, thinned down with the water, and strained through muslin. The following formula is sometimes met with:—

R	Alum. sulph 2 drms.
•	Tr. myrrh 6 drms.
	Aquæ
•	ligon

The alum may be placed in a 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. Chlorate of potassium is often prescribed in gargles, and the aid of a mortar is usually necessary to properly dissolve it. Carbolic acid will form a clear solution with water, if first mixed with a small quantity 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.

INHALATIONS.

Inhalations usually consist of a light oil or other volatile body, or spirituous preparations, &c., a certain quantity of which is directed to be placed in a suitable apparatus, and inhaled in the form of vapor. They are, as a rule, dispensed in glass stoppered bottles. When preseribed in diluted form with water, the admixture of a little magnesia is sometimes ordered, as the following combination will show:—

Ŗ	Thymol	4 drm.
•	Spt_chlorof	3 drms.
	Tr. benzoin comp	3 drms.
	Magnes, cale	10 grs.
	Aquæ	
	Misco.	

This should be dispensed by first dissolving the thymol in the tineture and spirit, then mix the magnesia with part of the water, gradually adding the thymol solution, and make up remainder with water, well shaking the whole. This should have a "shake the bottle" label affixed.

LOTIONS.

The lotion is the term given to a liquid application or wash for external use to various parts of the body. That used for application to the eye is often termed the collyrium. The preparation of the average lotion presents no special difficulty to the dispenser. In some combinations chemical reaction takes place, it being usually the intention of the prescriber. The lotio hydrarg, nig. of the Pharama-

copicia is an instance of this, when on shaking up the calomel with lime-water mercurous oxide is formed. Lead in the form of acetate and subacetate in solution is an ingredient frequently met with in these lotions. For diluting distilled water must always be used, otherwise an opaque solution will result. The addition of opium preparations to a lead solution produces a copious precipitate, but by adding a small quantity of glycerine to the lead first, and then the opium, the precipitate is prevented. The following formula may sometimes be met with:—

Ŗ	Plun	ıbi	ace	t			٠.							Ŷ	drm.
	Zinc	i, s	ulpl	١.		•	• •	٠.	•	٠.	٠.	•	٠.	15	gis.
	Aq. Iisce.		siu	•••	• •	• •	•	•	•	• •	• •	•	••	4	drm.

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

A similar reaction takes place on mixing the following lotion:—

R	Alum sulph	3 drms.
•	Plumbi. acet	4 drms.
	Au. destilladd	S ozs.

This is usually dispensed without straining.

Another instance:

ĸ	Liq. plumbi			3 dr.
	Acid carbolic.			3 dr.
	Acid hydrocyan.	dil		. 2 dr.
	Aqua			ad S oz.
M	isce.		•	•

An insoluble precipitate results when the above ingredients are mixed together, but the lotion may be much improved in appearance if the carbolic acid before being added is first mixed with an equal quantity of glycerine. Solid extracts like opium, belladona, &c., should be rubbed down in a mortar with a small quantity of hot water, and strained into the bottle. Oxide of zinc and other insoluble chemicals must always first be finely levigated in a mortar, then rubbed down with the liquid menstruum, and dispensed with a "shake the bottle" label. Milk is occasionally 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. Boracic acid is a common ingredient in lotions. It is well to remember it is soluble 1 in 25 parts of cold water, and easily dissolved on brisk agitation without the aid of a mortar. Lotions should be dispensed in colored bottles, those known as actinic green, round or octagonal being especially suitable for the purpose. The labels should be distinctive in color and character to those employed for medicines for internal use.

LINIMENTS.

A liquid application that is to be rubbed over the surface of the body is usually called a liminant or embrocation. In consistence the liminent is necessarily tlacker than the lotion, and may be composed of oils, soaps or spirituous preparations, alone or in combination. The liminents of the Pharmacopeia are generally in use, and the methods used in preparing

them are well known. Liniments prescribed in pharmacy are usually an admixture of two or more of these, the mixing of which causes no special difficulty. The following formula is one frequently prescribed:

R	Acid acetic fortl oz. Spt. terebinthl oz.
	Ovi. vitell
	Miseo

In preparing this liminent the turpentine should first be emulsified in the usual manner with the yolk of egg, the emulsion being thinned down with some of the water and stirred constantly. Finally the acid may be added and the whole made up to the required quantity, a thick, creamy emulsion being the result. Liniments, composed of spirits and oils, should be dispensed, with a "shake the bottle" label. The following is best prepared with the aid of a warm mortar:

Take of

Lin.	potass,	iodid.	e sa	pon.	٠	1	OZ.
Lin.	camph.				٠	:	} oz.

Misce.

The lin. pot. iodid. should be well stirred for a short time, and the camphor liniment then added gradually, constantly stirring until the whole is thoroughly incorporated. Liniments should invariably he dispensed in colored bottles, with a bold and distinctive label, and this rule should never be departed from, more especially when the liquid is of a poisonous nature.

PIGMENTS.

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. The base usually consists of a solvent, such as spirit of glycerine, helding the active remedy in solution. The latter especially is a valuable agent, it forming an excellent solvent for a large number of salts, as well as being a most suitable medium for exhibiting them. The class of remedial applications known as glyceroles are prepared with glycerine as a base. The glycerole of lead, now an official preparation, is really an improved form of Goulard's extract, strength 1 to 7, and the glycerole of bismuth is also met with-made in the same proportions. In forming some of the glyceroles a decomposition of the glycerine takes place. The glycerinum iodi is prepared 20 grains to the ounce, and the glycerinum belladonna 1 to 1. In making the latter, the extract should be placed in a warm mortar, and rubbed down perfectly smooth with the smallest possible quantity of boiling water before adding the glycerine. Chloral camphor the peculiar liquid body formed in rubbing down chloral hydrate and camphor together, is generally used as a pigment. In preparing it, equal parts of the two substances should be placed in a warm mortar, 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, &c., but not with water or glycerine. When mor-

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phine or other alkaloids are ordered to be dissolved in the liquid, they should be rubbed down with it in a mortar. Menthol and chloral hydrate, also thymol and chloral hydrate, when rubbed together in equal proportions, form similar compounds. Pigments are usually dispensed in glass-stoppered bottles.

OLEATES.

The class of remedies for external application known as oleates are formed by combining oleic acid with most metallic oxides, for which the acid acts as a solvent, the result being a solution of cleates in an excess of oleic acid. The oleates have the advantage of being readily absorbed by the skin. The cleate of mercury is perhaps most frequently met with in dispensing, and is usually kept prepared of various strengths, 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 specific 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 be dissolved in oleate of mercury when so ordered. Oleic acid will dissolve to the its weight of morphine. The oleate of morphine is made I grain to the drachm, and oleate of atropine, 1 in 40, is prepared by dissolving the alkaloid 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 zinc is made by heating together I part of zinc 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 diseases, &c.

OINTMENTS.

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 nature. Those met with in dispensing are generally formed by the mixing of two or more fatty substances, or by the incorporation of some oil, chemical, or vegetable body in the form of powder, with the fatty base. The official ointments are, perhaps, most frequently ordered. The bases generally in use are benzoated lard, soft paraflin, or vaseline, a mixture of hard and soft paraffin, lanoline, and combinations of wax, oil and spermaceti. As a general rule, the simple mixture of two or more ointments may be made on a suitable slab with a spatula, but when the admixture of a powdered substance is desired, a mortar must be used to ensure the powder being levigated, and free from griftiness, a most essential point in preparing an ointment. When dealing with a large quantity of powder, it should first be fine-

ly levigated, and then rubbed down with a few drops oil, or of the melted base, to the consistence of a stiff paste, before mixing with the base. Some substances, such as iodide of potassium, require to be rubbed down with a little water and dissolved, to ensure smoothness, with others a few drops of rectified spirit are necessary as in the case of iodide of sulphur. The alkaloids, aconitine and atropine are dissolved in this manner with spirit before being combined with the lard to form an ointment. The preparation of other ointments, again, require heat, and it is necessary the base should be melted to ensure thorough incorporation of the solid body to be mixed, as in the case of the ointment of boracie acid and others. Therefore, in the ointments the student will meet with in dispensing, he must be guided by the nature of the ingredients he has to combine as to the proper course to take. When rectified spirit is ordered to be mixed with lard it is best to use a mortar, and add the spirit a few drops at a time, well incorporating each portion before adding another, until the whole is thoroughly combined. Glycerine may be easily mixed if the mortar used is slightly warmed. Extracts of belladonna and henbane, new, should first be rubbed down to a smooth paste with a 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. Undissolved particles produce great irritation when applied to the skin. When making iodoform cintment, the base should be melted and allowed to become fairly cool before adding to the iodoform, when the whole should be well stirred until cold. For melting the base, a water-bath should always be used, and a high temperature should be avoided. Ointments prepared with a base composed of hard and soft paraffin, should be stirred constantly while liquid, until cold, or otherwise they will be granular and lumpy when set. The following formula illustrates a case in which the use of a mortar as well as heat are required.

 R Ext. opii
 2 drus.

 Ext. belladonna
 6 drus.

 Ung. hydrarg
 2 drus.

 Lanolin
 2 ozs.

 Misce. Fint ungt.

To prepare this ointment the extracts should first be placed in a mortar and carefully rubbed to a smooth paste with a little boiling water. The mercurial ointment and lanoline meanwhile may be heated gently over a water bath until dissolved, then added gradually to the extracts, and the whole well stirred until cold. Care must be taken to avoid using steel spatulas with ointments containing anything that will act on the metal, such as ung. hydrarg, nitrat. An ointment when properly made must be free from lumps or gritty matter, and should be perfectly smooth and bland throughout. Ointments are dispensed in covered pots of carthenware or glass, those known as

"opal" having a neat appearance. The surface of the ointment should be covered with waxed paper, white being usually preferable to the colored varieties.

PLASTERS AND BLISTERS.

The preparation of a plaster is puvely a matter of manipulative skill, which has to be acquired by long practice and experience. To spread a really good plaster is not a very easy task, and only few become adepts. The whole art is to thinly cover or spread a piece of leather or other medium with a compound of wax, resin and other ingredients, while in a fluid condition, by means of a warm 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.

BY W. H. WEARN, CHARLOTTE, N. C.

Nitrate of silver being incompatible with all organic substances cannot be made into pill mass with the usual excipients. Considering this fact, various pharmaceutical authors have prescribed powdered gum acacia and water sufficient quantity to form pill mass, notably: Wood, Bache & Remington in their Dispensatory. Also its companion mica panis.

The difficulties accompanying their use has produced this query quite a number of times.

I have found in my experience that powdered gum acacia as a base triturated dry with the nitrate of silver, adding sufficient quantity of glucose to form mass, produces a mass that is perfect, of a beautiful cream 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 Journal de Medecine de Paris for June 21st refers brieily to a case originally reported by J. Berenyi in the Therapeutische Monatsheft. An infant 8 days' old had suffered from trismus for three days. It had five attacks in five hours. Berenyi prescribed sulphonal by the mouth and by the rectum, in doses of three grains. The attacks diminished in intensity and frequency immediately after the institution of the treatment. Recovery was complete in six days. During this period the child had taken, in all, a hundred and fifty grains of sulphonal without the occurrence of somnolence or any other unpleasant secondary symptoms.

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

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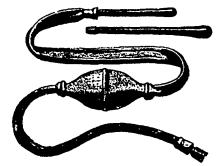
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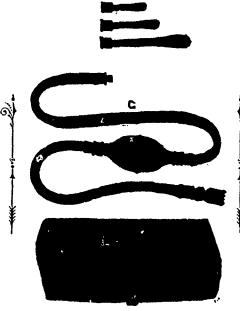


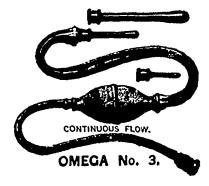
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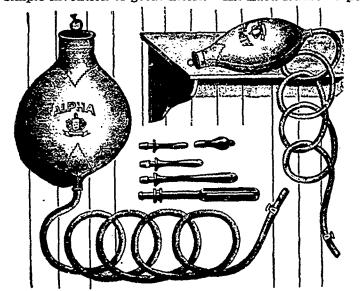


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Ontario College of Pharmacy.

The following are the examination papers which were given at the last Junior Examinations of the Ontario College of Pharmacy held December, 1891:

CHEMISTRY AND PHYSICS.

Examiner—A. Y. Scott, B.A., M.D., C.M. Time-3 hours.

- 1. Explain the following equation :- $3 \text{ Cu} + 8 \text{ H NO3} = 3 \text{ Cu} (\text{NO3})_2 + 2 \text{ NO}$ +4 H2O.
- 2. Write equations to show the action of-(a) Zinc on Hydrochloric Acid.
 - (b) Potassium Hydrate on Ammonium Chloride.
 - (c) Dilute Nitric Acid on Phosphorus.
 - (d) Chlorine passed through a solution of Sodium Hydrate.
- 3. Complete the following equations -
 - (a) Na Cl + MnO₂ + H₂ SO₄ (b) Ba O₂ + H₂ SO₄ =

 - (c) Ba $O_2 + CO_2 + H_2O =$ (d) Fe + H₂O =

 - (c) $Sb_2 S_3 + II Cl =$
 - (f) KClO₃ + heat =
- 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 Nitrie Acid. (17:44%)
- 6. Describe the method of preparing Hydrogen Sulphide, and explain what is formed when the gas is passed through.-
 - (1) A solution of Chlorine.
 - " Iodine.
 - Bromine.
 - " Lead Acetate.
 - " Ammonia.
 - (6) A vessel containing sulphurous anhydride.
- 7. How would you test for the presence of the following in water: (1) hardness; (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 phospherus could be obtained from 100 lbs. of calcium phosphate Ca₃(PO₄)₂-
- 9. 200 litres of oxygen are collected at 15° and $780_{m.m.}$ what will it occupy 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; (2) a force pump.

THEORETICAL PHARMACY.

Examiner—Prof. Chas. F. Heebner, Ph.G.

- 1. Define a Pharmacopæia.
- 2. State the meaning of each of the following terms: (a) official, (b) officinal, (c) galenical, (d) magistral.
- 3. Define (a) weight, (b) What are weights? (c) What is the weight of one Imperial fluid ounce distilled water in grains, (d) grams.
- 4. (a) How many minims are contained in one Imp. fluid ounce distilled water? (b) How many c.m.3? What is the weight of each of the following volumes of distilled water: (c) One Imp. gallon, (d) one Wine minim, (e) one Imp. minim.
- 5. A solution of alum is required of which each fluid drachm shall contain one decigram of the salt; state number of grains necessary to make 21 wine pints. What quantity of alum will one pint of the solution contain?
- 6. Metric system: Mention the units of: (a) Linear measure, (b) weight, (c) capacity; and give the derivation of each, (d) also the equivalents for each in the official system; (e) give equivalent for one Eng. inch, (f) for one and a fourth grains, (g) one kilo.
- 7. Define (a) simple solution, and (b) chemical solution, stating phenomena accompanying each of these processes, together with official examples of each.
- 8. Distinguish between saturated and supersaturated solutions.
- 9. (a) Define sublimation; (b) mention two forms of products that may be obtained, giving conditions involved and examples of each.
- 10. Add together and reduce the result to Troy ounces: 3½ kilos, 24 grams, 18 centigrams, 40 dekagrams, 302 milligrams, 23 hectograms, and 386 decigrams.
- 11. One cubic inch of gold weighs 4883.35 grains; what is its specific gravity.
- 12. Explain fully the method for determining the sp. gr. of a solid soluble in water.
- 13. State the official specific gravity of each of the following: (a) rectified spirits, (b) proof spirit, (c) glycerin. (d) pure ether, (e) liq. ammonia, (f) Hydrochloric acid.
- 14. What will one litre of sulphuric acid weigh?
- 15. (a) Define calcination, and mention official examples. (b) What pharmacal process is made use of in preparing ointments and plasters?
- 16. Having several lots of powdered jalap on hand, containing respectively 7%, 9½%, 13% and 15% of resin; a mixture is required to represent 46 grams of 12%. How much of each must be
- 17. Define (a) Comminution ; (b) What is meant by the term "No. 50 powder?" (c) what is a "dusted powder,

- (d) impalpable powder, (e) give two examples of pulverization by intervention.
- 18. Define (a) Lacvigation, (b) Elutriation, (c) Trochiscation, (d) Mention an official chemical in the preparation of which each of these processes is represented.
- 10. (a) What size of bottle will 10 av. ozs. of glycerin fill? (b) Explain specific volume and its determination.

LATIN PRESCRIPTIONS, &c.

Examiner-J.T. Fotheringham, B.A., M.B., M.D., C.M. Time Allowed-3 hours.

I. Latin:-

- 1. Expand these abbreviations to full Latin, and translate: - Sesunc., si n. val., semili., sesquili., part. vic., o. m., mod. praesc., quor., ejusd., coch. parv.
- 2. Write these directions with no abbreviations, and translate: -(a) Sum. cochl. ij magn. quartis horis ad effectum, phiala prius bene agitata. (b) Hujus capiat drj hora 7 ma matut., et circiter horam decimam drij si op sit. (c) Quod cochleat. sumat, dolore urg. (d) M. et in iij vel iv dos. divide, quarum j sumat. omni bihorio. (e) Ft. mist. cujus sumat coch. j. mod. omn. quadr. hor.

II. Posology:-

- 1. Fill in the amount of each ingredient necessary to dispense in this prescription for a child of 8 years of age :-
- Morph. sulph..... Vin. ipecac..... Ammon. chloridi..... Syr. scillæ..... Sýr. tolut...... ad ozs. 4. Aq.
- Sig. drj tertia quaque hora, ex. aq.
- 2. Give maximum dose of each of these remedies: -Tr. Calumba, Tr. Aconiti, Tr. Ferri Mur., Tr. Catechu, Tr. Nucis Vom., Tr. Opii, Syr. Ferri Phosphatis, Sp. Ætheris Nitrosi, Sp. Ammon, Aromat., Pulv. Cretae Aromat., Pulv. Glycyrrh. Co., Ol. Morrhuæ, Ol. Anisi, Liq. Arsenici Hydrochlor., Liq. Calcis, Extr. Filicis Liq., Extr. Cascare Sagr. Fl., Extr. Taraxaci, Extr. Hyoscyami, Extr. Nucis vom.

III. THERAPEUTICS, ETC.:-

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

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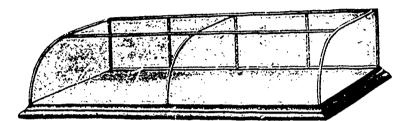
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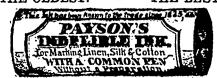
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ANALYTICAL CHEMISTRY.

Examiner—Graham Chambers, B.A., M.B.
Students are expected to explain the method of their work;

- 1. Determine the Acid in the substance marked (A).
- 2. Determine the Acid in the solution (B).
- 3. Determine the Acid present in (C).
- 4. The following solution of Potassium Iodide is said to contain Potassium Bromide and Potassium Iodate. Test it.
- 5. Blow a bulb and bend the tube at right angles two inches from the bulb.
- N.B.—Neatness of work and cleanliness of the desk and apparatus will be counted as important factors.

BOTANY.

Examiner—A. Y. Scott, B.A., M.D., C.M.
Time—Three hours.

- Describe fully the parts of a vegetable cell. What are spiral vessels and sieve tubes?
- Show by diagram the difference between an endogenous and exogenous stem.
- 3. Draw diagrams showing the structure of the cross-section of a leaf.
- Explain what is meant by venation and the use that can be made of it in classifying plants.
- 5. How do subterranean stems 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.
- Explain the following—parasite, pileorhiza, helicoid dichotomy, imbricate astivation, definite inflorescence.
- Name the parts of a flower; what reasons have we for saying that the parts of a flower are morphologically the same as leaves, but physiologically different.
- Explain the terms—raceme, umbel, pappus, cyme, peduncle, involucre, bract, glume, spathe, acaulescent.

9. 10. 11. 12. Practical

PHARMACAL LABORATORY.

Examiner-Prof. C. F. Heebner, Ph. G.

- Construct the apparatus required in the verification of your thermometer, as to the degree indicating the boiling point of water.
 - Begin the operation, and allow it to proceed until the apparatus has been inspected.
 - (Carefully observe all the precautions and instructions heretofore given you.)

Determine the specific gravity of the powder handed you, and submit a report of the same, in accordance with the subjoined synopsis.

PHARMAGAL LABORATORY. Student's name...... Desk No... Date.....

Number of powder...........Weight used.... Weight of equal volume of water

Sp. Gravity of powder.....

N.B.—Neatness of work, the order of arrangement and the cleanliness of working desk and outfit, will enter as important factors in your rating.

Quebec Pharmaceutical Association.

The regular quarterly meeting of the board of preliminary examiners of the Pharmaceutical Association of the Province of Quebec was held in the Montreal College of Pharmacy on Thursday, Jan. 7th, when 28 candidates presented themselves for examination 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 and H. A. Longtin. The names of the latter are Allen D. Doils, F. Rainville, R. 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 successfully, and are entitled to their certificate. The remainder 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.: E. Joliceur and Joseph Routhier.

The following are the questions submitted at the Pharmaceutical Association of the Province of Quebec for the written preliminary examination held at Montreal on January 7th, 1892:

FRENCH FOR ENGLISH CANDIDATES. Translate into French—

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

Translate into English-

Parceque cela vous contera bien peu si vous y voyez pendant que votre maison est en construction; puis vous aurez toujours une cave seche avec de l'air pur autant que la ventilation sera bonne.

ARITHMETIC.

1—Reduce to its lowest terms, $\frac{3}{5}$, $\frac{9}{5}$, $\frac{7}{5}$, $\frac{7}{5}$. 2—Reduce into decimals, $\frac{1}{12}$, $\frac{4}{5}$, $\frac{7}{5}$, $\frac{1}{2}$, $\frac{4}{5}$, $\frac{1}{2}$, $\frac{7}{5}$.

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

- 4—What will be the interest at 63 % on \$12437.53 for 2 years, 3 months and 3 days (30 days to a month.)
- 5-What will be the proceeds of a note of \$1400.00 at 4 months and 3 days, discounted at 7 % per annum.

GRAMMAR.

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

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

3-When is the article a used and when an? Give feminine of the following words: Duke, Governor, Executor, Hero, Benefactor, Sultan, Gander, Earl and Backelor. Substantives have how many cases, and give examples?

4—Adjectives have how many degrees of comparison. Compare the following: Little, 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 be.

5-Parse the following: He has sold his stock and moved into a new store.

GEOGRAPHY.

- 1—(a) Give the capital cities of England, Ireland, 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 mouths of the same.
- 4—In what Provinces are New Westminster, Brandon, Sault Ste. Marie, St. John, Antigonish and Sydney.
- 5—Name three of the mountain ranges in the Eastern (United) States.

LATIN.

1—Translate—

Post ejus mortem nihilo minus Helvetii id, quod constituerant, facere conantur, ut e finibus suis exeant. Ubi jam se ad cam rem paratos esse arbitrati sunt, oppida sua omnia numero ad duodecim, viços ad quadragentos, reliqua privata ædificia incendunt; frumentum omne, 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, vicos.
- 1—When and by whom was America discovered? By whom was the expedition fitted out, and where was the first landing made?
- 2-Name the best Saxon king? What was Magna Charle, and by whom signed?
- 3—Name three important events in the reign of Edward III., including two great battles. What young Frenchwoman was



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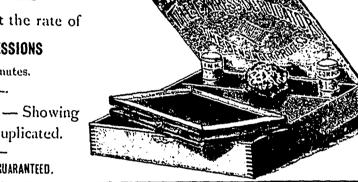
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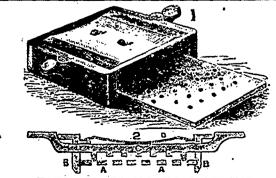
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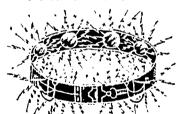
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instrumental in raising the seige of Orleans? What English monarch had the longest reign?

4.-What were the "Wars of the Roses"? In whose time was England declared a commonwealth? During the reign of what English king did the American war break out, which ended in the separation of the United States from

England?

5...To what line of kings did William the Conqueror belong? What Frenchman explored the Gulf and River St. Lawrence in 1534 and 1535, and gave them their names? Who was the founder of the Province of Quebec.

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 plan. There are a few people who succeed in more than one line of business interests, but they are rare. The physician of the past had not the opportunities of study possessed by the student of to-day, 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 necessary for him to study. The natural conclusion is that the time of study should be increased, and the several schools of medicine have come to this decision and have acted wisely in lengthening their course 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 proficiency in the latter three than in the former. The study of materia medica seems to the student to be an uninviting task, and we fear that in many if not most of the schools it is belittled by the manner of its presentation, which does not increase the desire of the student to conquer it.

Chemistry is more popular, but to the average medical student it is perplexing and difficult, though he may acknowledge that it is interesting because of its relation to sanitation and the many facts that the physician should know. Of pharmacy he knows little or nothing, as about all the information that the average medical college 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, &c. Very few colleges give more than oral demon stration of these facts, and still less provide any practical laboratory work in the former, while the latter is practically ignored altogether. The lack of interest in these three branches was never more palpably shown than at the last convention of the American Medical Association at Washington, when the section of materia 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 cannot but deprecate the idea that the physician of to-day is prepared to be an intelligent and proper dispenser of medicine, even of the majority of his own prescriptions. The 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-day the physician has had better opportunities for dispensing because the manufacturer places in his hands the methods of dosing the patients ready made. This is true, but it is either the physician or the manufacturer who is treating the patient. If it is the manufacturer, then the physician is secondary, and may in many instances be ignored, and he frequently finds this to be the case through this very method he has used.

We are led to these remarks by the recent 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 "convenience and the avoidance of trouble." This may be true in some instances, and to carry out the plan 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 case to the remedy, not the remedy to the case. This may be less trouble to the physician, but the pa tient has the right to expect that his interests are the ones to be consulted.

"It saves the patient trouble and money." That is, it may save trouble, but not always money. The 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 doubtless true in some instances, but is not this the very object of consulting the physician, his advice? If it were not for the desire to secure what the patient believes good advice, the doctors would soon be gone. There are times when in emergency cases the prompt administration of remedials saves valuable time, and to the country practitioner 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 claim made, for all pharmacists know by experience how frequent they are, and the same absentmindedness would just as likely lead to the physician's wrong selection of his own remedials were he to dispense them.

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

The 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 confidence of the patient if he confines his duties to his usual routine, giving more cure and study to the cure of disease and the amelioration of suffering, and having the acquaintance and confidence of pharmacists who are competent and proper dispensers of medicines to whom he can refer his clientage.—Phar. Record.

Ready Money.

The great firm of Baring Bros., one of the oldest and wealthiest banking 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 business 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 a note, and it is a fact that there are occasions, when cash, and cash 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 placed a limitation 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 humanity, which will not look on the dark side, and is uninfluenced by the gathering clouds.

Cash in hand is always reliable. You can do more with even a little ready money, than a whole ledger full of accounts be they "as good as gold," and merchants, shrewd 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 spend-thrifts, not in the sense that they have thrown their money away, but in that they have put from them the ready money which should be 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.

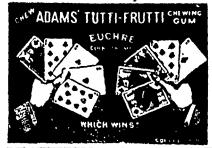
MALE FERN.—The belief that filicic acid is the active principle of male fern, is again attacked by L. Reuter, who advocates an entire region of the subject.

To Retail Druggists and Chemists

Yearly contracts for advertising Sr. Jacons Oil have been made with all the leading newspapers of the Dominion, and other means have been adopted to extend the sale of this Great Remedy. Novel advertising matter, bearing dealers' card, furnished FREE upon application to EDWIN A. WILSON, Canadian Depot, Toronto, Ont



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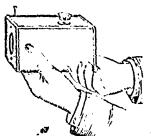
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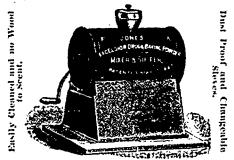
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NOS. HI AND HIS WILLIAM ST., AND NOS. 61, 63 AND 65 JOHN ST., NEW YORK.

CANADIAN DRUGGIST. WM. J. DYAS, EDITOR AND PUBLISHER.

JANUARY 15th, 1892.

And the second s 1891.

The drug market of 1891 has been on the whole free from anything of a startling nature, either in prices or abnormal demand. One of its peculiar features has been the unprecedently low price of quinine, which has never in the twelve months been quoted higher than forty-five cents and has been as low as twenty-five. During February, owing to a breaking up of a combination, chloral hydrate 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 was high, and during the summer showed signs of going still higher, but in the fall one of those sudden drops peculiar to the drug business occurred, and at present it is at a low average price. Morphine and opium have been steady at low prices. iodide has averaged about \$3.50 all year. Bromide on the contrary, owing to a break in the bromine combination, has been lower than ever before; rumors of a renewal of the combination are continually in the air, and lately have been of a more positive character. Silver nitrate has maintained a high average price. Fluctuations have been frequent, but not very-great. Ipecac root and cubeb berries have been at very high prices. Ergot has been at a normal price until the fall when an advance of about 50 per cent. took place. Even at present advance it is considered good value. Alcohol early in the summer was advanced some forty cents a gallon owing to a new excise duty. This is the most unpalatable advance of the year for the retail druggists, 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 almost bewildered. The cutting 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 some drugs and chemical products have been brought to the fore, which, although 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.: Europhen, dermatol, or subgallate of bismuth, salicylamide and apyonin; a new

boric acid compound formed by boiling together equal parts by weight of boric acid, borax and water, is recommended in the treatment of ulcers and old sores, it is more soluble in water than boric acid; pental, a new anæsthetic; thilanin, which is a sulphurated lanolin, is a new substitute for balsam of peru; tonquinol, a substitute for musk; dithiosalicylate of sodium, a powerful antiseptic; cantharidinate of 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 useful, amongst others sabadine and sabadinine, both from sabadella seeds, and pseudoconhydine, a new crystalline base from conium fruit. A new crystalline alkaloid has also been discovered from plants of laurine, which M. Goeshoff has called laurotetanine which has therapeutical action somewhat similar to strychnine.

In Pharmaceutical legislation we have to chronicle the passing of a Pharmacy Act by the Legislature of British Columbia and the organization of a Pharmaceutical Society under the provisions of the Act, thus completing the provincial organizations of the Dominion. The election of a new Council for the Ontario College of Pharmacy was held in July and resulted in the re-election of most of the former members. The new teaching staff of this College began their labors with the fall session, with a class exceeding in numbers that of any previous year.

It now remains for the pharmacists of the Dominion 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 qualification and the privilege of carrying on business in any portion of the Dominion.

Caution Your Customer.

Many of the new remedies which have come into use during the past year or two have been brought into general notice by the secular press, and their therapeutic claims set forth in such a way that the public have come to consider them as ordinary household remedies, which may be used according to their own discretion, or in the manner described by those papers. This is very much to be regretted in many cases, and the numerous deaths which have occurred through the improper use of these remedial agents has shewn how circful the untutored public should be in handling them. Pharmacists should consider it as a part of their duty when selling preparations such as antipyrine, cocaine, or any chemical product which should only be used when prescribed by the physician, to ascertain from the purchaser whether he or she has any knowledge of their dose, use, and peculiar action on different individuals. Such cautions would not only serve to make them more

careful in the use 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 received too late for insertion in our last month's issue. We regret that several wholesale houses have not yet availed themselves of this opportunity of presenting to the retail trade their ideas in regard to this vexed question of "cutting," and thus showing a determined opposition to an abuse which threatens seriously the trade of the retailer. Whether their withholding their opinions and declaraations in the matter is through a fear of giving too much prominence to the subject we cannot say, but if so, we must express the opinion that they are not acting wisely, as such silence may not only be misconstrued but may prove a serious drawback in presenting that solid front which the wholesaler should display at such a time. The first letter is from

alian & co.

Toronto, Dec. 12, 1891.

Editor Canadian Druggist:

DEAR SIR,-Replying to your favor re cutting would say that we have confined our sales to the drug trade in the past and will pursue that course in the future. We think the means now being made use of by the Drug Association here will be very successful, provided that unanimity he maintained among the members. imity be maintained among the members.

Yours truly,

ALLAN & Co.

NORTHROP & LYMAN CO.

Toronto, Dec. 14, 1891.

Eddor Canadian Druggist:

DEAR-Sin,-Your favor is received enquiring as to the course we are taking in reference to protecting the retail druggists in the sale of patent medicines, and in reply:

We believe the patent medicine trade should be in the hands of the druggists in all places where there is an established druggist, and in the past we have confined our trade as much as possible in such places to the druggists. The possible in such places to the druggists. The exception has been in places where there are general store-keepers who have been our customers for years before the drug stores opened, and are not willing to hand the trade over to the druggist. We try to have them put the business in its legitimate channel but are not always suggested. always successful.

We never sold any goods to T. Eaton & Co. and do not intend to, or to any other firm doing

n similar business

a similar business.

We are in full sympathy with the retail dauggists' association of Toronto in their endeavor to maintain prices and keep patent medicines out of the hands of department stores, and if the members are true to the association we believe they will be successful.

Yours truly,

J. H. McKinnon, Secretary.

"A CLERK in a Windsor grocery sold saltpetre in mistake for Epsom salts, and a Mrs. Whitely who used it narrowly escaped poisoning."-Canadian Grocer. This is a sample of what we may expect when the "muslin stores" are in full swing. Ignorance and criminal negligence gohand in hand.

Clinical Dietetics.

Predicested Foods 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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JUST OUT!

LATEST WONDER!

MAGIC PURSE

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Wonderful - Tobacco - Pouch.

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Bonanza for Dealers.

Beats anything you ever saw. The most curious and interesting puzzle of the century. Orientals have rivalled "Yankee Ingenuty" in producing this wonderful and mystifying curiosity

Deceives the sharpest eye, and "puzzles em all," A Marvel of Ingenuity We now offer this great Novelty to dealires for the first time. So now is your chance to send in your order and get the inside track. You can sell hundreds of these Purses, or Tobacco Pouches, as

People Co Wild Over Them.

They can be filled with Silver or Tobacco, and the contents freely offered to any person who wi'll open the same without cutting or injuring the Purse in any manner.

To those understanding the secret it can be quickly opened, while to the uninitiated it appears impossible. Full directions accompany each Purse. They are made of fine quality of Imported Kid and Gost Leather, elegantly trimmed with silk, and attractively gotten up in a variety of beautiful colors, and is with out doubt the most rapid selling Novelty of the age. A perfect beauty and sells at sight. Dealers and agents, if you want to

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Pharmaceutical Education.

Improvement in the position of any section of human society is invariably preceded by an advanced 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 advance in the position of pharmacists during the past half century bears out this statement, being distinctly due to the leavening influence of a few well-educated men upon the mass of their fellows who were stimulated to elevate themselves individually, and so deserve better things as a body.

The tale has been often told and retold, and it is referred to here simply to illustrate the fact, which is too frequently overlooked, that individual self-improvement must precede general advantage in the domain of pharmacy as elsewhere. Every real substantial advantage must be purchased by continual striving and persevering labor. The price, too, must always be paid in advance. We suppose no one nowadays will be found to deny that the labors of Jacob Bell and his associates were fraught with great and lasting advantage 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 labors would have been in vain. They had specially trained themselves for the vocation they elected to follow, and their commercial prosperity, professional status, and high social position, were essentially due to the fact that they were, in the best sense of the term, men of education. Again, unless those to whom they appealed had decided to follow in their footsteps to the best of their ability, British pharmacists would not to-day occupy their present position. They and their successors must strive to emulate the labors of their predecessors if they would improve or even 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 efficient in all pertaining to the production, preparation and distribution of medicines. This efficiency depends on the application of methods adapted to the respective natures of the great variety of drugs in the modern materia medica, and the conception of right methods demands an intimate acquaintance with their physical, chemical, and, in some cases, vital properties. An extensive scientific knowledge is required to understand and control the various phenomena exhibited during production; a logical application of principles is necessary to prepare drugs aright; and much skill in technical minutice, combined with an intimate acquaintance with men and things, is essential for successful distribution.

Though both physical and biological science are laid under tribute by pharmacists, chemistry is and must be pre-emin-

ent in their curriculum. It is called upon to explain, in some degree, almost every operation in the daily round of the pharmacy. The tyro cannot study it too much or too practically. 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 more chemistry. It may be feared that the other physical sciences are apt to be regarded as ornamental, the reason being that they are not sufficiently applied by students. It is quite conceivable that improved forms of pharmaceutical apparatus and simplified methods of working might result from the more frequent application of physical data. Botany, which should rank next to chemistry in importance, is likewise often regarded as an unnecessary evil. But it is as impossible to study the vegetable materia medica efficiently without a practical knowledge of plants and their organs, as it is to understand the properties of salts and acids without an acquaintence 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 sufficient emphasis has not been laid upon the fact that each vegetable drug represents some particular part of a 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 sufficient time to test this fully. It is only by a more complete knowledge that students are enabled 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; but it cannot with reason be said that anything not strictly essential is included in the pharmaceutical curriculum. It is by going beyond this; by continually adding to his store of knowledge; by unceasingly striving to improve his education on every one of its manifold sides, that the pharmacist of to-day may hope to continue the good work begun fifty years ago .- Pharm. Journal.

Incompatibilities in Prescriptions

BY E. B. STUART.

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

The reactions occurring when this prescription is compounded are simple, and should be understood by any student who has taken a college course in chemistry, but the prescription is an interesting one from the number of distinct incompatibilities it presents, there being about as many as there are ingredients in the mixture. It is as follows:

Tincturæ ferri chloridi	11 dr.
Sodii hyposulphitis	
Potassii chloratis	3 dr.
Quinince sulphatis	l5 gr.
Aquæ	2 oz.

The original dispenser mixed the several 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 occur in this case are noted, they will be found to be as follows: On adding the solution of the thiosulphate to the tineture of iron, the brown color of the latter is quickly changed to the pea green characteristic of ferrous compounds, and at the same time a slight milkiness due to the separation of sulphur occurs.

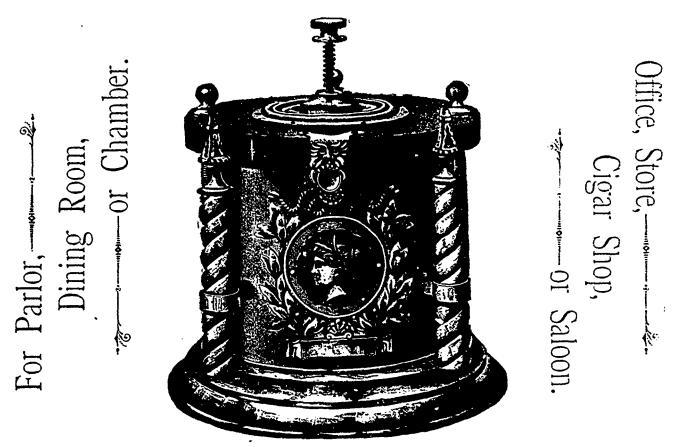
The ordinary tests for ferric iron show that all the ferric salt has been reduced to ferrous. At this point the mixture probably contains ferrous chloride, sodium sulphate, and sodium thiosulphate, the reaction being as fellows: $2\text{Fe}_2\text{Cl}_6 + 2\text{Na}_2\text{S}_0$ 3 + $21\text{I}_2\text{O} = 4\text{FeCl}_2 + 2\text{Na}_2\text{SO}_6 + 4\text{HCl} + \text{S}_2$.

The hydrochloric acid set free is immediately decomposed by the thiosulphate with the evolution of SO...

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

On adding the potassium chlorate (180 grains) this remaining quantity of theosulphate 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 iron. 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: $6\text{FeCl}_2 + \text{KClO}_3 = 2\text{Fe}_2\text{Cl}_6 + \text{Fe}_2\text{O}_3 + \text{KCl}$, or more probably two-thirds of the iron will be precipably itated as oxychloride, and one-third remain in solution as chloride. In either case the amount of potassium chlorate decomposed is the same, amounting to only 11 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: $6Na_2S_2O_3 + 2KClO_3 = 6Na_2S_2O_4 + 2KCl + 3S_2$. Not quite 11 grains of potassium chlorate is required to decompose the above quantity of crystallized sodium thiosulphate, making a total loss of chlorate of about 121 grains, and leaving a large excess for the next reaction, which occurs after the quinine is added, when, owing to the insolubility of the chlorate of this alkaloid, it exchanges its acid radical with the potassium chlorate, forming, of course, an equivalent quantity of potassium sulphate. This is especially noticeable if the quinine

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salt is dissolved before adding it to the mixture.

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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 crude state only. Recently, and since the great advance in the price of the drug, caused by its consumption in the making of celluloid, plants for the refining of camphor have been set up in Ja-In April last complete machinery, including stills, engines and boilers, were manufactured at Pittsburgh, Pa., for Messrs. Gribble & Nash, and sent to Hiogo, Japan. The complete machinery weighed about fifty-five tons and cost \$75,000. Dr. A. G. Boyer, who had previously given much time and thought to devising improved methods of procuring the crude gum and refining it, went to Japan as the chemist in charge of the enterprise. Previous to setting up this plant near Hiogo, all camphor left Japan in a crude state, and was refined either in Europe or this country. This caused a great deal of waste from evaporation, and has prompted capitalists to do the refining where the drug is produced, and thus avoid the waste and loss which has heretofore attended its transportation. About the same time that this plant was sent to Japan, another one, purchased by native capital, was started. This shows how quickly the natives of Japan, adopt improved methods of trade and manufacture, rather than he outdone by foreign com-

The American refinery is composed of machinery made under the patents of W. F. Simes, of Philadelphia, and will be able to produce from fifty to seventy-five thousand pounds of refined camphor in a month.

The products are of two kinds. One is sublimed, and called flowers of camphor, which slightly resembles desiccated cocoanut, except that it is of a gummy nature. The other kind is pressed into cakes of varying shapes and sizes, but generally about the size of a cake of toilet soap. The flowers of camphor is prepared especially for use in the manufacture of celluloid.

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

Just what effect the new method of refining camphor will have upon the price of the article seems to be a matter of considerable uncertainty, the market value having fluctuated greatly at times, owing in part to the manipulation 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 methods of procuring the crude camphor in Japan are of a very primitive character, though sufficient quantities are always forthcoming 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 Department of Agriculture. A gentleman who has spent a number of years in Japan, and is familiar with the procuring of camphor gum the trees there, said recently that he saw no reason why camphor should not, in time, be produced here in paying quantities.—Scientific American.

The Preparation of Suppositories

Mr. D. S. Hetherington read a paper on the above subject at a meeting of the Liverpool Pharmaceutical Students' Association on Nov. 19, of which we give an abstract below.

A large and varied assortment of suppositories were shown, including the glyco gelatine suppository of the Pharmacopeia, which the author said could not, according to the directions given, be made satisfactorily; part of the gelatine, however good the quality, being left undissolved.

Gelatine, not being soluble in cold water, but merely sucking up a part of it, it was necessary to warm the soaked gelatine in a water bath previous to adding the glycerine. Also a minute or two was too short a time; it required at least 5 to 10 minutes to soak. The manufacture of suppositories with a basis of glyco-gelatine should cause little difficulty to any one, providing no tunnin or spirit were contained in the formula. Even then in the case of extracts there is usually a sufficient quantity of glycerine to redissolve any extract which might be thrown out of solution. The astringent extracts, as for example, ext. hamamelis, causes some little trouble, and might be quoted as an exception. Even after they are made juite wet with sweating, they become caused, as Y Hetherington said, by the in the glycerine being alcohol natu affected by to atine in compound with tannic acid, as Acoholic precipitates an aqueous solution of gelatine by withdrawing the water, which causes the gelatine

to be thrown down. Caeoa butter, when heated and allowed to cool without stirring, and the melting point taken of samples, one from the top and the other from the bottom of the layer, it would be found to vary from two to four degrees. It followed that suppositories made with ol. theobrom, must be very gently heated, or a uniform result would not be arrived at. Vegetable butter, although having a melting point of only \$2° F., did not set so readily as caeao butter, and could not with advantage be substituted in the manufacture.

The mode of making uterine pencils, both with a basis of cacao butter and glyco-gelatine, was explained, was of hollow pessaries, which are coming into so general use among medical practitioners.

—Br. and Col. Druggist.

British Manufacturers and the Chicago Exhibition.

The attitude with which British manufacturers generally regard the invitation to exhibit at the World'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 co-operation. Though the London chamber has courteously accepted the suggestion to form a committee for exhibition purposes, 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 Journal 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 Sunderland, accept it with an intimation that they do not anticipate that their efforts will produce much result; Leeds talks of considerable apathy and postpones its decision; Bradford also defers; and though the Bristol, Halifax, Keighley, Nottingham, Sheslield chambers agree to act as local 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 Bristol discuss the question whether exhibitors will be allowed to mark the price of their goods in such a manner as to show the extra cost occasioned by the American tariff .- Chemist and Druggist.

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Books and Magazines.

A portrait of Gounod, the celebrated French composer, forn's the frontispiece of the January Century, and along with the portrait is a charming paper reminiscence of the early life of the musician. His experience as a student of music at Rome and his later acquaintance with Mendelssohn are delightfully narrated. This paper by Gounod is one of a musical series which will make The Century especially attractive to lovers of music during the coming year.

The first of the series on "The Jews in New York," by the Rev. Dr. Wheatley, is given with numerous illustrations, and there also appears a brief article on "The Jewish Question" in general, treated from a very lofty point of view by an anonymous writer who uses the signature

"Josephus."

In the series of pictures by American artists a full-page reproduction of a painting entitled "Dolce Far Niente," by Will H. Low, is given. Mention also should be made of an illustrated article on "The Alligator Hunters of Louisiana."

In "The Topics of the Time" two editorials appear in the series on "Cheap Money" movements, one describing "Alabama's Thousand Dollar a Day Blunder," and the other telling of the "Mississippi Crop-Moving Currency." Other articles in "Topics of the Time" and "Open Letters" are on "The Progressive Discovery of America," "Attacks upon Public Parks," "M. Gounod and his Ideals" and "The Camp Morton Controversy."

The Review of Reviews for January contains the portraits of some fifty or sixty of the notabilities of the day. General Johnston and Governor Nicholls of Louisiana, Secretary Foster, Assistant Secretary Wharton, the late Dom Pedro, Fonseca of Brazil, Mr. Jackson the new Irish Secretary, Mr. Redmond the Parnellite leader, Mr. Flavin of Cork, Archbishop Walsh of Dublin, Prince George of Wales, five governors of Australian states, the late Lord Lytton, the late Rev. Oscar McCulloch, the late William B. Florence. Governor Alvin P. Hovey, Senator Plumb, Hon, S. B. Elkins, Mr. Gillam of Judge the Czar and Czarina of Russia, with various other Russian portraits; Mr. Elbridge Gerry of New York, Mr. Benj. Waugh of London, Mark Twain, Frederic Harrison, Thomas Nelson Page, the late Mr. Velhagen the distinguished German editor, and Lord Rosebery, the rising Liberal statesman of England, are among the people whose faces are presented in this

The Leading Articles of the Month, as condensed for the January number of the Review of Reviews, comprise the most important essays and discussions that have appeared in the leading periodicals of the world in the month of December.

THE NEW CANADIAN MONTHLY.-The

mnouncement of the establishment of a

Canadian illustrated monthly magazine is a source of gratification to the very large class of readers who have been waiting to welcome just such a periodical from a Canadian publishing house. The Sabiston Litho. and Pub. Co., Montreal, have taken the decisive step, and the first issue of the Dominion Illustrated Monthly will make its bow to the public during January. It will be a 64-page magazine, handsomely illustrated, and Canadian and patriotic in tone. The most gifted of Canadian authors will contribute to its pages, making it a most desirable family magazine for all Canadians especially. The subscription price, \$1.50, places it within the reach of all.

Mr. Howells' New Work.—The announcement that Mr. Howells will leave Harper's Magazine to take editorial charge of the Cosmopolitan, on March 1st, calls attention to the process of building up the staff of a great magazine. Probably in no monthly has the evolution been so distinctly under the eyes of the public as in the case of the Cosmopolitan. The first step after its editorial control was assumed by Mr. John Brisben Walker, was to add to it Edward Everett Hale, who took charge of a department called "Social Problems," subjects concerning which the greatest number of people are thinking to-day. Some months later, a department was established called "The Review of Current Events." The next step in the history of the Cosmopolitan was the placing of the review of the intellectual movement of the month in the hands of Mr. Brander Matthews, who for some time has been recognized as one of the two or three ablest critics in the United States.

Finally came the acceptance of the editorship conjointly with Mr. Walker, by Mr. Wm. Dean Howells.

Owing to delay in the receipt of the corrected proofs, the article by Mr. Gladstone promised for the January number of the North American Review 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 hundred and fifty fourth of this ancient and honorable periodical. Lady Henry Somerset has a word to say about the slums of London as contrasted with those of New York, in "The Darker Side." Fast railway travel is described by Theodore Voorhees, the general superintendent of the New York Central Railroad, under the title "Ninety Miles in Eighty-nine Minutes." Charles H. Cramp writes of "The First Cost of Ships" from the point of view of the practical shipbuilder. Notes and Comments of this number will be found full and interesting.

AN EXCELLENT TRIO.—A trio of excellence is the Daily Witness, Weekly Witness and Northern Messenger, of Montreal. The first, as a daily from the commercial gentro of Canada, should be read by every

business man, the Week'y Witness, as a useful and interesting family paper, is known throughout America and Great Britain, while the Northern Messenger, for the younger members of the family and for Sabbath Schools, is most desirable. 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 prize of the Witness \$1, and of the Northern Messenger 30 cents. Messrs. John Dougall & Son, Montreal, are the publishers.

Marvelously rich in illustrations and text is the fiftieth anniversary number of the American Agriculturist for January. It contains no less than 143 illustrations engraved especially for it. Most of the leading authorities in American and foreign agriculture are among its contribu-tors, including J. R. Dodge, the govern-ment statistician, President Berckmans of the American Pomological Society; T. V. Munson, the grape expert; Dr. Jenkins of the Connecticut Experimental Station; George A. Martin, the authority on horses and cattle; A. B. Allen, the founder of the magazine; Henry Stewart, L. S. Hardın, Midy Morgan, William Edconer, C. L. Allen, Prof. L. R. Taft, Prof. J. L. Budd, H. S. Babcock, P. H. Jacobs, Dr. B. D. Halsted, Dr. H. W. Wiley, Joseph Harris, George Ellwanger, Dr. C. V. Riley, Clarissa Potter, Jessie Benton Fremont and others. It gives a remarkable statistical epitome of the present situation of American agriculture and the figures. to show its apparently brilliant future. A comprehensive statistical review of the cotton trade and crop for fifty years and of our live stock and principal cereal crops is also given. The list is given of all the live stock breeders' associations of the world that preserve a registry for recording pedigrees, which is as complete for Europe as fer the United States, and is alone worth many times the 15 cents charged for a single copy, or \$1.50 per

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Commercial Travellers.

At the annual meeting of the Dominion Commercial Travellers' Association held at Montreal, Mr. Fred Hughes was re-elected president; vice-president, R. C. Simpson; directors, Alf. Elliott, J. L. Gardiner, J. E. Wright, R. G. Stokes, and C. Gurd. There are now 2250 members on the rolls, an increase of 71 over last year. During the year 9 members died, and \$6,175 was paid for death claims. The total income for the year was \$37,721.64 and expenditure including insurance indemnity, \$11,841.62, leaving a gain of \$15,880.02 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 Guarantee & Accident Insurance Company to members of the association who might wish to carry additional accident insurance.

The following were elected officers of the Western Commercial Travellers' Association at their annual meeting at London, Ont.: President, R. C. Struthers: first vice-president, R. Tait; second vicepresident, P. J. Conroy; directors, F. H. McGillivray, D. McKenzie, J. Burns, H. Line, J. Collander, Thos. Mortimer, J. E. Richards.

The Canadian Commercial Travellers' Association at the Toronto meeting elected officers as follows: For Toronto—Messrs. J. Kilgour, W. B. Dack, M. C. Ellis, J. Everett, H. Morrisson, J. Orr, H. S. Stanbury, J. Haywood and J. A. Ross. For Hamilton—Messrs. J. Hooper, H. Beldinton, E. A. Dalby, W. E. L. Chance, W. C. Reid and J. H. Herring

spoiled ballots. Other officers elected at previous meetings were: President, John Burns; first vice-president, C. C. Vannorman; second vice-president, R. J. Orr; treasurer, R. H. Gray. The association has 3290 members, income \$40,175, on hand \$7,976.

The Drummer's Story.

Two drummers for new patent medicines dropped in on a druggist at the same time one day, and wanted him to take a lot of their stuff on sale. Of course, each medicine was warranted to cure anything, 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 five-story 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 wilderness. 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 left at 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 this certificate that he went out of the 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 25 cents. Book on patents and trade marks free. Collamer & Co., attorneys and solicitors, Washington, D. C.

G. W. Archer, Rochester, N. Y., dental

C. Cheswright, London, Eng., capsuling bottles.

W. J. Collinson, Hazleton, Pa., coffin lid and hinge.

N. Crank, Hill City, Kans., vapor bath. P. A. Emanuel, Aiken, S. C., preparing aluminium sulphide.

R. II. Follenius, St. Louis, monument name plate.

E. P. Roberts, Cleveland, apparatus for directing proper administration of medicine. W. R. Brown, Boston, intemperance cure. Carter Medicine Co., New York, pills.

I. L. Johnson, Thompson, Conn., malaria remedy.

Larrabee & Co., Le Roy, Minn., tonic. L. 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, coffin handle. J. Massignon, Paris, manufacturer of

chromates.

A. Sommer, Berkeley, Cal., removing hydrochloric acid from sulpho-chlorides.

A. Willowskiy, Philadelphia acteuratics

A. Willoughby, Philadelphia, catamenial sack.

J. H. Dunn, Binghampton, remedy for fits.

G. F. Myers, Denver, cure for rheumatism.

National Drug Co., New Hampton, Iowa, liniment.

F. Paulsen & Co., N. Y., cod liver oil. Vignes & Pepsin, New Orleans, remedy. W. Whitaker, London, antiseptic band-

A. Gault, Medford, Minn, artificial limb. S. E. Heineman, Detroit, capsule.

M. Hoffmann, Frankfort, Germany, blue dye.

F. J. Peck and J. O. Outterson, Dexter, N. Y., making solutions of bisulphites. Chiles & Co., Chicago, toilet preparation. L. Crocker, Boston, meat extract.

H. C. Lemke, Chicago, cure for cholera, etc.

T. J. Carrick, Baltimore, dental vulcanizer.
 J. C. Chambers, Detroit, suspensory bandage.

W. Cline, Clayton, 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 reme-

dies. A. L. Beck, Sharon, Pa., headache pow-

ders, 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.

Ill., (2) veterinary remedies.

M. L. Bosworth, Warren, R.I., dental mallet.

J. S. Chase, Cochranton, Pa., surgical in-

strument.
M. R. Griswold, Hartford, forming dental

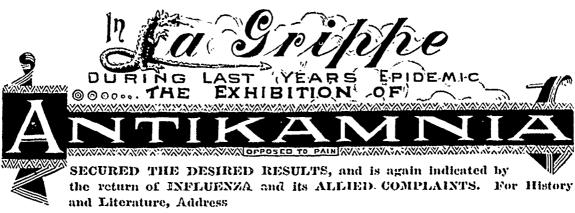
plates. F. E. Hansen, Minneapolis, rubber dam

clamp.
A. D. Puffer, Medford, Mass., soda water

fountain.
C. Rudolph, Offenbach, Germany, brown azo dye.

C. B. Paul, Whittemore, Iowa, bed-warming device.

Piper, Doremus & Co., New York, bronze powder.



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An Effectual Remedy for Headache and Neuralgia.

Trial order sent postpaid free of charge

One-half dozen boxes that sell at 10c. each, together with samples, two kinds puzzla cards and a lithograph. The samples sell the goods.

To old customers we will send on application 100 new puzzle cards. Write for some, they will interest and amuse your friends.

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Now Or Never,

Prescriptions and Prescribing.

Is the art of prescribing to be numbered among the lost arts? A correspondent, with some show of reason, would wish us to believe this question is to be answered in the affirmative. He gravely asserts that doctors study the advertisements of enterprising pharmacists more than their materia medica, and he fears that in the future patients will be as wise as their medical men if they take in the same literature. Doubtless the so-called elegant prescription, with its rigid adherence to the rules enforcing the presence of a basis, an adjuvant, a corrective, and a vehicle, is now rarely met with; and, although certain examining bodies still struggle to maintain the ancient Latin form of the prescription, yet little by little the Latinity seems to be slipping away. The symbols remain, but abbreviations obviate difficulties with doubtful genitives and undeclinable substantives of recent invention, and the directions are, more often than not, written at full length in English. It is difficult to account for these tendencies. Perhaps they are the result of the importance at present attached to the study of the various branches of science, which leaves little room for the cultivation of the older proud boast of languages. Perhaps they are the almost unconscious expression of a feeling that in medicine the days of mystery have passed away. The prescription, with its mystic symbols, which merely indicated more or less unnecessary directions to the dispenser, although regarded with awe, is no longer felt to represent the acme of skill. Among certain classes of patients its retains its former potent sway, and continues to be interchanged among friends as a talisman; but the more en lightened sections of the public prefer to be trerted as individuals, to whom special instructions of diet and mode of life mean almost as much practical benefit as the prescription. Moreover, in many 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 three lines in the familiar vernacular. Consulting the wishes of patients, therefore, it would seem that it is scarcely worth the trouble to keep up a semblance of secreey on paper. On the other hand, for those in the profession who can, but do not, write their prescriptions in Latin, the explanation may possibly be found in some unavowed lack of confidence in the subsequent translation of their directions. Many venerable jokes upon this subject have had their serious side and effect. While they have served as object lessons to young dispensers, they have equally caused a gradual disinclination on the part of the prescriber to run any facetious but undesirable risks. But apart from the way in which the directions are written, the component parts of the prescription fall under eager scrutiny. The small mystifications of Fowler's solution of soap pill, of spirit of Minder-

crus, or even of solution of trinitrin, cannot hold out against the inquiring spirit of the age. Patients have been known to go to the nearest free library to solve the problem. Perhaps one natural outcome of this is the "growing tendency," of which our correspondent complains, to prescribe secret and special nostrums. "When patients become aware that they have paid for a prescription of 'somebody's syrup' which they may have tried before or may have seen recommended in the daily papers, they are inclined to think the fee is wasted, and to lose faith in the doctor; while if they get relief from the patent compound, they tell all their neighbors how to do without the doctor. further complains of the loss and inconvenience occasioned to the chemist by embodying in a prescription certain preparations to which the names of the makers are attached. In the modern nomenclature of diseases many proper names, undesirably, 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 justification for the extension of this principle to drugs? Is there any gain in selecting the tineture, syrup, or pill prepared by any Our correspondent particular firm? 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 precaution for insuring uniformity of strength, and when their efficacy has been repeatedly tested, it seems somewhat hard to accuse those who employ them of quackery. The term is only appropriate when such substances take the place of such a prescription, the prescriber being alike ignorant of their compositions and actions .-Lancet.

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

BY W. H. WEARN, CHARLOTTE, N. C.

Pepsin has been a product of continual study from its discovery to the present day both therapeutically and pharmaceutically, coming to our hands first in the form of saccharted pepsin, which represented a very minute amount of pure pepsin, and the dose being very little more than the customary dose of the highest solvent pure pepsin of the present day. Its solution in pharmaceutical preparations was easily effected and permanent, but as scientific investigations proceeded the fallacy of the minute dose of pepsin contained in saccharated pepsin was shown and pure pepsin manufactured which has entirely displaced the first. The dose of pure pepsin at the present time being from 1 to 5 grains.

With one of our best pharmaceutical chemists, Dr. Eccles, stating that after continued study and investigation of years, that it is worthless in less than \(\frac{1}{2} \) to 2 drachm doses; hence we are called upon now to prepare compounds and elixirs, containing at least from \(\frac{1}{2} \) to 1 grain of pure pepsin to the fluid drachm, and peering into the future more will be expected. Pepsin being extracted from the stomach of the sus scrofa is naturally of a mucuous nature.

At this period of pepsin history our trouble begins, in making preparation of it when its dose is administered; its solutions are viscid; filtration and clarification slow and difficult according to all prescribed methods. Being confronted with these facts I have found in sacchara lactis an agent that clarifies the most concentrated solution and makes filtration rapid. Its manipulation consisting in simply triturating one part of pure pepsin with two parts of sacchara lactis gradually adding the solvent liquid. The action of the agent is purely mechanical, the fine but flinty granules being thoroughly triturated, figuratively speaking, lay atom to atom of pepsin, thereby preventing the tenacious 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 are clear and permanent.

Substitute for Glass.

A Vienna glass manufacturer claims to have produced a 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 infrangible. In. 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 or alcohol or acetic ether, and with this I intimately combine from 2 to 4 per cent. of castor oil or other nonresinous oil, and 4 to 10 per cent. of resin or Canada balsam (soft resin.) The compound when poured upon a glass plate and subjected to the drying action of a current of air of fifty degrees centigrade .- P. O. and D. Review.

Bromide of bismuth for producing high temperatures in liquid baths.—Victor Meyer (Liebig's Annalen) says: A bath for producing temperatures between 518 and 606° C. is not known. Bismuth chloride, however, boils at 440°, and phosphorous bromide at about 540°. We might reasonably expect bismuth bromide to answer the requirements. This has been proven not to be the case, as experiment shows 453° 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 over.

Newbouldia Cavis, an African tree, belonging to the Bignoniacew, is strongly recommended by Dr. Farrell against dysentery.

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Clark's Derby Condition Powders.
Wright's Vermitinge.
Robert's Eye Water.
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remedy. The Druggists here in Canada are losing thousands of dollars through not supplying the demand direct, we have agents in other lines of trade wholly foreign to the drug trade, who have sold thousands of dollars worth of Microbe Killer, and with good profit to themselves. We know of hundreds of sales made direct from our Head Office to people who wrote us that they asked their Druggists for it, but instead were told it was not to be had. .

Write us for prices, etc.

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H. gy ard's Condition Powders,
Dr. Wilson's Magne the Outtine it,
Hagvard's Cattle Spore,
Dr. Fowier's Extract Strawberry,
Dr. Boyer's Galyanic El ud,
Dr. Fife's Worm Lozenges,
National Pills,

Egyptian Salve, Dr. Abernethy - Worne Candy, Freeman's Soothing Syrup,

Freeman's Worm Powders,
Preeman's New Donestic Dyes,
Dr. Low's Worm Syrup,

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The greatest known enterfor

Catarrh, Cold in Head. Headache, Toothache, Neuralgia, and all Nervous Pain.

Every Druggist should keep this in stock, as it sells well and gives good satisfaction.

Retails for 25c.

Franklin's Blood Romedy, Blairs Gold Oil, . 25c.

Blair's Coment. 15c.

Blair's Wild Indian Bland Parifler, per package, 25c.

Put up by FRANKLIN M.D. CO., 36 king St. east, Toronto, or 178 Main St., Buffalo, N. Y.



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Are the best in the world for the THROAT and CHEST and for the VOICE.

--)UNEQUALLED.(.--

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Stamped on each drop.

FORMULARY.

NEW OINTMENT BASE.

Helbing, in the Zeitschr. d. Allg. Oesterr. Apot. Verein, recommends the following as a base for mercurial ointment, and other ungents containing metallic mercury:

 Wool fat (suint) free from water 	r 6	5 parts.
Liquid paraflin	:3	0 parts.
Ceresin		
Water		
Mix secundem artem.	-	

NEW JOCKEY CLUB FORMULA.

Essence of acacia	000 parts.
Essence of tuberose	200 parts.
Essence of vanilla	600 parts.
Essence of jasmine	000 parts.
Essence of rose	500 parts.
Essence of civet	300 parts.
Essence of hergamot	25 parts.
Essence of rose geranium	5 parts.
Essence of lemon	20 parts.
Mix. Said to be very fine.	-

-Nat. Druggist.

BEAUTY POWDER.

Wheat starch, finest	
Ultramarine blue	2 gm.
Attar of rose	1 gm.
Oil of orange flower	50 cgm.
Mie	

-Scifonfabrikant.

CHILBLAIN TABLET.

Oil of cajeput	l part.
Resin	l part.
Camphor	. I part.
Elemi	. 1 part.
White wax	24 parts.
Benzoated lard	3 puts.
Almond oil	3 fl. parts

Add the resin to the oil of cajeput and warm gently until dissolved. Melt the wax, lard and oil, add the clemi and cajeput solution, strain, and lastly, add the camphor. If too soft, increase the proportion of resin and wax.—B. and C. Druggist.

PINAUD'S EAU DE QUININE.

Krause states, in the Doutsche Apotheker Zeitung, that this article has the following formula:

Quinine sulphate 1	part.
Tincture cantharides 10	parts.
Glycerin 75	parts.
Alcohol 500	narts.
Tincture of rhatany 20	parts.
Spirit of lavender 50	nirte
Mix.	lun m

RADLAUER'S ANTISEPTINE.

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

Sulphate of zine	85 parts. 10 parts.
Indide of zine	2 to 5 parts.
Thymol	3 to 5 parts.

The mixture has been found of considerable value in the treatment of intertrigo and of sweating hands and feet.—National Druggist.

BLINIR ANTIFEBRIN.

The following is recommended by the Chemist and Druggist:

Antifebrin	120 grs.
Rectified spirit	
Glycerine	l oz.
Tincture fresh orange peel to	4 028.

Reduce the antifebrin to fine powder, and agitate with the rectified spirit until dissolved; then add the glycerine, mixed with 1 oz. of the tineture, and make up to 4 oz. with the tineture.

A fluid drachm of this clixir contains 4 grains of the remedy, so that an ordinary teaspoonful will represent a good dose, and may be taken in half a wine glass of water.

PREPARATIONS OF SYRUP OF NARCEINE.

M. G. Patrouillard, pharmacist at Gihors (Department de l' Eure), contributes an article on this subject to the Bulletin de la Societe des Pharmaciens de 'l Eure, from which we extract as follows:

To prepare a syrup of narceine it is, of course, necessary to dissolve the narceine. To this end acetic and citric acids have been employed, but the syrup obtained by these processes is instable, the narceine precipitating promptly, v. M. Patrouillard conceived the idea of preparing first a double salt of narceine, and had recourse to bitartrate of potassium as the agent. He found, however, that sooner or later the narceine crystallized out and precipitated. He next tried benzoate of sodium, and had the satisfaction to find the preparation stable, the benzoate acting with narceine as it does with caffeine. His formula is as follows:

Narceine	 25 cgm,
Benzoate of sodium	 40 cgm,
Simple syrup	

Triturate the narceine and potassium benzoate together with a little water, and bring to a boil. As soon as solution is effected, add to the syrup, and heat the latter until the total weight is reduced to 500 gm. Syrup thus prepared is stable, but on long keeping acquires a slightly disagreeable odor. For the latter reason it is best always to make it extempore, as needed.—Nat. Druggist.

Spirits Thymolini, Compositus a Substitute for Listerine.

BY C. D. LIPPINCOTT, DENVER, COL.

Listerine, as introduced by Dr. Lambert, 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 medico-surgical and therapeutic agents of modern practice. While we justly admit that we are indebted to Dr. Lambert for its introduction, yet as professional pharmacists we do not feel like being confined to the necessity of dispensing empirical or proprietary preparations; hence it behooves us to come to the front with a substitute, which we all may manufacture and which will, beyond doubt,

prove equally efficacious in its object. Such a preparation I herewith respectfully submit for your careful consideration, and invite research and experiment, with a view to possible improvement of this formula. I also recommend the adoption of a definite term for such a proparation. To me the term Spirits Thymol Compound would not be inappropriate, conveying, as it does, an intelligible meaning to physician and pharmacist. The Lambert Pharmaceutical Company of St. Louis place their formula upon each bottle of their preparation as follows. They say: "Listerine is the essential antiseptic constituent of thymol, encalyptus, babtisia, gaultheria and mentha arvensis, in combination. Each fluid dram also contains 2 grains of refined and purified benzo-boracie acid." Given internally, they advise I 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 Compound, is as follows:

Take of

Then add

Let the mixture stand 24 hours, and finally pass through a wetted double filter.

—Phar. Record.

Petrolatum as an Excipient for Pills.

Petrolatum is frequently recommended as an excipient well adapted for use in making pills of potassium permanganate. An associate recently expressed the belief that it was quite unfit for the purpose, and to test the matter fairly 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 little reduction having taken place. It occurred to me however that, owing to its greasy nature, petrolatum, like wax, is apt to form a pill which would prove insoluble in the digestive juices of the alimentary canal.—Leon C. Fink in Bulletin of Pharmacy.

Urostigma dolarium mig., a Brazilian giant tree, yields a caeutehoue milk from which is obtained an unorganized ferment much resembling papayotin.

Parhemaglobin is a new body produced by Kobert by the abstraction of oxygen from hemoglobin. It may be separated from the fluid portions of blood by filtration.

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MANUFACTURER.

MONTREAL.

SELECTIONS.

NECLARGE PAINS in any of the ramifications of the fifth nerve are often instantly relieved, according to a report of Dr. Geo. Leslie, of Falkirk, Scotland, by the simple insufflation of about four grains of finely powdered table salt.

Potassium Canthambate has given good satisfaction in the hands of Lubinski (Therap. Monatsh.) in the treatment of affections of the mucous lining of the pharynx, larynx and the air passages. No untoward effects were observed when carefully administered, but complete cures have not been effected.

Local Anestherics.—Richardson uses a mixture of 100. g. ether and 0. 4. g. carbolic acid preferably to ether alone. Its action is more intense and of longer duration. He recommends as a spraying solution: Menthol, 1, chloroform, 10, and ether, 15. Neudorfer employs a solution of 0.59 cocaine hydrochlorate in 50 g. of bitter almond water. The combination of cocaine and cyanogen should be very effective. Steever uses cocaine hydrochlorate, 1: antipyrine, 3, and water, 20.—Corres, f. Schw. Arrete and Ph. Central.

EUCALYPTO-RESORCIN. -- This is the name given by Barbey, in the Bulletin Commercial, to a reaction product of resorcin and oil of eucalyptus. 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, having a strong camphoric odor, and which are insoluble in water, but easily soluble in alcohol, ether, and chloroform. This body, on fractional distillation, gives various liquid and solid distillates which have not yet been examined. Naphthol, pyrogallol, and pierie acid also give encalyptol similar crystalline bodies, all of which have a strong camphoric odor.

A Color Reaction for Salol.-A few drops of nitro sulphurie acid are put into a 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 transferred to a porcelain dish and 50 c. cm. of water added and well stirred, the liquid becoming rose colored, while the green tint may be restored by the addition of ammonia. Resorcin treated in the same manner becomes at once of a deep blue color; on adding water a red coloration is given, which ammonia changes again to blue.-Journ, de Pharm, d'Anvers.

M. Fileri and F. Crosa (Gazzetta and Jour. Chem. Soc.) have found the following process convenient and economical for the preparation of considerable quantities of hydrobromic acid:—A mixture of 1 part of red phosphorus, 2 parts of water, and sufficient sand to form a paste, is introduced into a flask, 10 parts of bromine are then gradually added by means of a funnel provided with a stopcock, the flask gradually warmed, and the mixture of

hydrogen bromide and bromine vapour passed through a deep glass jar 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 flash.

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: "After nine years employment of creasote, in thousands of cases of consumptive patients, I have reached the conclusion that we can cure with creasote sufferers in the initial stages of lung tuberculosis, and not only the initial stages, but also longer seated and severer forms may be completely and permanently cured. Creasote is for countless suf-ferers an excellent remedy, thus far unequalled by any other for tuberculosis of the lungs. I consider the most desirable form for administering creasote to be the capsule, adding a readily-absorbable fat, as cod-liver oil or olive oil."

Parke, Davis & 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 reprint of Professor Summerbrodt's report of his experience with these remedies.

Spirit of Nitre Incompatible with Astringent Drugs.

BY LEON C. FINK.

. The explosion of a bottle containing a mixture of spirit of nitre, fluid extract of uva 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 way, deserves to be regarded with suspicion by prescription dispensers, since it is known to cause decomposition when combined with many commonly prescribed substances.

The explosion under consideration was undoubtedly caused by the elimination of gas produced by a reaction between the spirit of nitre and the tannin present in the use 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 uva 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 sufficient 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 free 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 mixture had no bearing on the result

It seems safe to say, therefore, that spirit of nitre should not be dispensed in combination with drugs containing tannin.—Bulletin of Pharmacy.

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 distinguish the accomplished man of business.

A good man needs physical vigor and strong nerves, and should be able to read well, speak correctly, write plainly, and count quickly and accurately; therefore a youth should 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 have 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 politeness.

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

Wafens 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 before folding, producing a soft, unsightly mass. The scal or cachet, a special form of wafer, is preferable. The edges only are moistened and two scaled together with the powder between. We believe an improvement over the present hard pills would be the furnishing of these cachets in shape and size to take pill mass of rather soft consistence, but not soft enough to impair the cachet.—E. L. Patch, Ph. G.

Situations Wanted.

A S Assistant or Manager, six years experience; silver medallist O. C. P.; good dispenser; best of references. "Acacla," Box 446, Strathroy, Ont.

DRUGGIST wants a situation as travelling agent for a good reliable drug firm; references given if required, apply at this office—Drawer It.

Wanted.

WANTED-A Junier clerk. Apply to John Stork, druggist, Portage La Prairie.

The London Drug Co.

WHOLESALE DRUGGISTS,

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WE OFFER, OF OUR OWN MAKE:

Citrate of Magnesia. Hospherry Citrate of Magnesia. Spirits Aictheris Nitrust Pur. Spirits Ammonia Arom. distilled. Finid Extracta, a full line. Chlorodyne, from a well tried formula.

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OUR OWN GRINDING :

Cronm Tartar, bbls, kegs and boxes. Pure Spices of all kinds, Insect Powder, etc., etc.

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Intger's Confectionery, Gray's Syrap Red Sprace Gum, Major's Corn Salve, Eugene's Corn Salve, Korn's Rhoumatic Cure, Warrick's Real Players, Steam's Indian Tonic-Genuise, William's Crown Saraparilla, etc.

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Fresh Arrivals.

TWO TONS

ROWNTREE'S FINE CONFECTIONERY

Put up specially for the Drug Trade.

CIBSON'S ENGLISH CONFECTIONERY

A large assortment.

SPONCES-Honey Comb Shape.

- ' Noney Comb Coupe.
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CNAMOIS—A good ascertment.

SEE OUR SAMPLES.

MATTI, DOSER & CO.,

Wholesale Bruggists,

WINNIPEG, MAN.

Simson's - Liniment.

WE 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

MAN & MER,

RALIPAX, M.S.



ONLY

THE CAIL BORDEN EXILERAL CONTROL

Mas maintained its high reputation for ABSOLUTE PMNTY for over a QUARTER OF A CENTURY.

AS A FOOD FOR INFANTS IT MAS NO EQUAL. FOR SALE BY Grecers and Druggists Everywhere.

DR. HAIR'S

Asthma - Cure

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

All Betail Drug Stores throughout the Dominion of Canada can obtain DR. HARS REMEDIES from Messis, Lyman Bros & Co. and Messis, Evans & Sons, Toronto, Ont.; Messis, Lyman & Sons and Messis, Evans & Sons, Montreal, Quebec; Messis, T. B. Barker & Sons, St. John, N. B.; Messis, Forsyth, Sutcliff & Co., Halifax, N. S.; Messis, J. Winer & Co., Hamilton, Ont.

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AN OLD MURSE FOR CHILDREN!

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Soothing - Syrup FOR CHILDREN TEETHING,

Should always be used for Children while Teething. It Southes the Child, Softers the Gone. Ulays all Pain, Cares Wind Code and is the Best Bernedy for Brarchen.

TWENTY-PIVE CENTS A BOTTLE.



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BUSINESS NOTICES.

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

Have you a stock of Phenyo-Caffein, the great headache and neuralgia remedy. Read the special offer on page 31.

Adams & Sons Co. are offering some new and specially saleable brands of Chewing Gum in their new advt., page 13.

When in want of a stock of trusses, you cannot do better than order from that old established and favorably known house, The Hastings Truss Co. Look carefully at their "ad." on page 19.

C. Bensinger & Co., 576 Dey St., New York, are inviting the attention of the drug trade in their advt., page 19, to the "Express Daplicator," an article of the greatest utility.

A great difficulty heretofore has been to supply a preparation of Cascara, which would be agreeable to the taste, without interfering with its medicinal properties. Such a preparation however is now offered in Stearns' Cascara Aromatic, a preparation at once elegant in appearance, quite palatable, and retaining all the therapeutic action of the drug. See advt. on page 19.

Attention is specially directed at this time of the year to one of the finest products of petroleum on the market. We refer to Argoline Petrolatum, which is put up in various size packages from one pound to a barrel, also in two ounce vials at the remarkably low figure of \$5.25 per gross. Send to your jobber for a supply of this brand, and if they have not got it, order direct. It will pay you. See page 35.

Little boxes, medium boxes, large boxes, tin boxes of all kinds; plain, lacquered and decorated seamless tin boxes are manufactured by Wm. A. Gill & Co., of Columbus, Onio. On the 33rd page will be found an advt. for the above firm, and if you specify Gill's boxes, you will always have a very substantial example of their work for your convenience in putting up ointments, etc. A seamless tin box is the only satisfactory box for dispensing ointments in.

Planten's Capsules, of all kinds, have justly won the title of "The Best." Few people of the present day realize how much they owe to H. Planten & Son, the pioneer house in the manufacture of Soluble, Hard, Soft, Elastic, empty and filled, Capsules. But a few years ago, the sick were required to swallow the most bitter and unpalatable doses; while mow, thanks to the enterprise of the above firm, the most disagreeable medicine can be taken in any size dose desired with all the case imaginable. See advt. on page 35.

Woman Pharmacy.

The employment of women in pharmacy is receiving general attention abroad. Frau Schulrat Caner, in Germany, has recently presented a petition numerously signed to the Prussian Reichstag, in favor of admitting women to this profession. The petitioners base their demand on historic right, and recall the fact that for centuries and until the middle of the eighteenth century the preparation of medicine was almost wholly in the hands of women; that women apothecaries, who were examined by learned physicians, were given the right to prepare and sell drugs, and many of them enjoyed a high reputation in the business. The petition also claims that about the middle of the eighteenth century narrow-minded jealousies of women arose, and a desire to drive them from all lucrative handiwork to make place for men resulted in their almost absolute exclusion from this calling. They argue that the profession of the druggist demands no great bodily exertion, nor any undue publicity which would render it difficult for women or unwomanly. It is as womanly a calling as that of a teacher or saleswoman. Paysicians testify, according to this petition, that "women are far superior to men in the fulfillment of all sanitary duties, in punctual obedience to a physician's orders, in dexterity and deftness.

The calling of a druggist demands certain scientific study and preparation, which wemen have certainly shown themselves able to master. The laws in this state require this study and preparation, besides service for a term of years in a drug store and a certificate from a State Board of Pharmacy. There is no probibition in our laws against women in this calling. In Russia, Belgium and Holland women have passed pharmaceutical examinations and devoted themselves successfully to the profession. It is at least a more independent calling than that of a nurse, which demands in nearly every case a great deal of individual patience, besides bodily exertion. A nurse has much responsibility in the administration of medicine as a druggist in the preparation of it. The calling of a druggist is, moreover, one which any woman of refinement might seek .- N. Y. Tribune.

Midwives' Remedies.

A writer has collected, in the Journal d'Hygiene, a number of recipes used by the midwive a various parts of France, from which - extract the following:

For the i. i d appetite that afflicts many pregnation women take the leaves and tendrils of the grape vine, bruise them, make in a cataplasm, and apply to the stomach

Grape stone, roasted, pulverized, and applied as a car plasm upon the stomach cure diarrhea and dysentery.

A decoction of the leaves of the viorno

(bryonia alba), or tetterberry, in wine, will cure epilepsy.

Cow's dung, mingled with egg-shells, dissolved in vinegar, will remove freekles and discolorations of the skin of pregnant women, if applied as a plaster.

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

Chicken dung, dried and powdered and put into a hollow aching tooth stops the pain immediately. (So will uric acid, which is the terapeutic agent in this case).

Sheep's "saffron" (dung) and chicken saffron, made into ter, are considered specifics in measles and mumps.

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

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

Peach-leaf tea cures gripings of the bowels in infants and produces sleep. (Evidently due to the minute quantity of hydrocyanic acid present in the leaves.)

Poultices of cow's dung are used by negroes and whites on fresh wounds and old-sore shins.

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

And so we may go on almost indefinitely enumerating the virtues of many domestic remedies, some of them real, but the most of them purely imaginary, and whose only recommendation is their cheapness and nastiness.—Nat. Druggist.

Lattle by little, every day, be content. Are your expenses less than your income, so that you are yet constantly accumulating? Be content; so far as concerns money, you are doing well.

Are you gaining knowledge every day? Though it be little by little, the aggregate of the accumulation, where no day is permitted to pass without adding something to the stock, will be surprising to yourself.

to the stock, 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 are achieved.—National Weekly.

CLEANSING OF THE HANDS AFTER THE USE OF CARROLIC ACID OR CORROSIVE SUBLIMATE.—Carbolic acid is removed from the hands by bathing them for a sufficient time in alcohol and then annointing them with lanolin. After the use of corrosive sublimate solution the hands should be bathed in a solution of common salt 1 to 50, then washed with soap and water, and finally rubbed with lanolin.—

Pharmac. Contral.

To the Retail Druggists and Chemists of Canada.

GENTLEMEN:

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

The following Agents have thus far been appointed:

DRUGGISTS -- WHOLESALE.

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Lyman Bros. & Co.

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HALIFAX, NOVA SCOTIA.

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Forsythe, Sutcliffe & Co.

LONDON, ONT.

J. A. Kennedy & Co.

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HAMILTON, ONT.

J. Winer & Co.

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MONTREAL, QUE.

Lyman, Sons & Co.

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WINNIPEG, MAN,

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MY 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 supplied on application.

T. A. SLOCUM, N

186 West Adelaide Street, TORONTO, ONT.

Drug Review.

Business during the past month, particularly the early part of it, was not as good as the good crops and season of the year warranted. No doubt the unseasonable 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 trade 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 be termed fancy goods, but of late years have depended more on fancy bottles, perfumery, &c., and the change on the whole has proven very satisfactory, for these goods, even if not sold in the holiday season, do not spoil in keeping, but sell largely the year round, consequently the profits are not packed away until next season. Changes in prices during the year have been 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 a combination under consideration, but one firm would not agree to some of the terms, but from reports just received this firm is more tractable than before, and prospects of a combine are very bright, which, of course, would mean higher prices.

Cocaine has advanced 20 per cent.

Other drugs and chemicals are materially unchanged. For minor changes see price list.

Gums, assafeetida and scammony are somewhat higher.

Oil lemon advancing in price.

Fellows' 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 CANADIAN DRUG-UIST-A happy and prosperous New Year.

Art possesses a language which speaks to all eyes and is understood by all nations.

The Chinese, with a good deal of quiet sareasm, call ceremony the smoke of friendship.

You may glean knowledge by reading, but you must separate the wheat from the chaff by thinking.

Men of genius are often dull and inert in society; as the blazing meteor, when it descends to the earth is only a stone.

There is nothing like a fixed steady aim 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 gained by the wisdom of his friends, and by the folly of

his enemies, and that giant will often be left a pigmy.

Flips.

Physicians have announced that yellow fever can be carried by a mosquito's bill. The disease has not yet been named that is carried by a doctor's bill, but it is something like paralysis.—Annals of Hygiene.

Lawyer C. (entering the office of his friend Dr. M. and speaking in a hoarse whisper)—"Fred, I've got such a 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.—Washington Post.

FULLY EQUIPPED.—"As a 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 which. I wait for my patients."—
Fliegence Blatter.

"Aha! I catch you buying a porous plaster, do I'l 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 (incensed):
"Well, didn't I tell you there 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, received a bill for the amount of 28s. 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 bright idea flashed across his mind, and he said joyfully.

"Yes, I will send Beecham a box of his own pills—he says himself they are worth a guinea a box—and seven shillings

in cash."

This he did. In the course of a few days, great was the surprise of Mr. S—to find that Beecham had forwarded the receipt, attached to which were the words:

"Cash only in future. Thos. Beech-

To PREVENT IODISM.—Todism, it is said, may be prevented to those who are liable by 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 ORDERS.

Jas. A. Kennedy & Co.

WHOLESALE DRUGGISTS,
London, - Ontario.

New England Magazine ILLUSTRATED MONTHLY.

THE LITERARY MAGAZINE

OF BOSTON.

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A Few Articles for 1892 :

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Druggist Prices Current: Canadian

CORRECTED TO JANUARY 10th, 1892.

		CORRECTED TO JANUAR	1 100	ш, 108	.		
The quotations given represent average pr	rices	Castor, Fibre, 1b	7 50	S 00	Bleached, lb	45	50
for quantities usually purchased by Re	etail	CHALK, French, powdered, lb	10	12	Spruce, true, lb	30	35
Dealers. Larger parcels may be obtained		Precip., see Calcium, lb	iŏ	12	Tragacanth, flake, 1st, lb	1 00	1 10
lower figures, but quantities smaller t	than	Prepared, lb	5	· 6	Powdered, lb	1 10	i iš
those named will command an advance.		Chargoal, Animal, powd., lb	4	5	Sorts, lb	25	75
• · · · · · · · · · · · · · · · · · · ·	1.00	Willow voudonal lb	20	25	Thus, Ib	S	íö
	4 20	Willow, powdered, lb	25	30	HERB, Althea, lb	27	30
Methyl, gal 1 90	2 00	CLOVE, lb					
Auspice, lb	15	Powdered, lb	30	35 -	Bitterwort, lb	27	30
Powdered, lb	17	COCHINEAL, Honduras, lb	40	45	Burdock, lb	16	18
ALOIN, oz	45	Collobios, Ib	75	80	Boneset, ozs, lb	15	17
ANODYNE, Hoffman's bot., lbs 50	55	Cantharidal, Ib	2 50	2 75	Catnip, ozs, lb	17	20
Аккоwкоот, Bermuda, lb 45	50	Confection, Senna, lb	25	30	Chiretta, Ib	25	30
St. Vincent, lb 15	18	Creosote, Wood, lb	2 00	2 50	Coltsfoot, lb	20	38
Balsam, Fir, lb. 45	50	CUTTLEFISH BONE, Ib	35	40	Feverfew, ozs, lb	53	55
Copaiba, lb 75	1 00	DEXTRINE, lb	10	12	Grindelia robusta, lb	45	50
Peru, lb 2 50	2 75	Dover's Powder, lb	1 50	1 60	Hoarhound, ozs., lb	17	20
Tolu, can or less, lb	80	Ексот, Spanish, lb	1 00	1 10	Jaborandi, lb	45	50
BARK, Barberry, lb 22	25	Powdered, lb	1 15	1 30	Lemon Balm, lb	38	40
Bayberry, lb 15	18	ERGOTIN, Keith's, oz	$2\ 00$	2 10	Liverwort, German, 1b	38	40
Buckthorn, lb 15	17	Extract, Logwood, bulk, Ib	13	14	Lobelia, ozs., lb	1.5	20
Canella, lb	17	Pounds, lb	14	17	Motherwort, ozs., lb	20	22
Cascara Sagrada	35	Flowers, Arnica, lb	15	20	Mullein, German, lb	17	20
Cascarilla, select, lb	20	Calendula, lb	55	60	Pennyroyal, ozs., lb	17	20
Cassia, in mats, lb	20	Chamomile, Roman, lb	30	35	Peppermint, ozs., lb.	21	25
Cinchona, red, lb 60	65	German, lb	30	35	Rue, ozs., lb	30	35
Powdered, lb 65	70	Elder, lb	20	22	Sage, Ozs., lb	18	20
Yellow, lb	40	Lavender, lb	12	15	Spearmint, Ib	51	25
Pale, 1b 40	45	Rose, red, French, lb	1 60	2.00	Thyme, ozs., lb	18	20
Elm, selected, lb	18	Rosemary, Ib	25	30	Tansy, ozs., Ib	15	18
Ground, 1b	20	Saffron, American, lb	35	40	Wormword, oz	20	22
Powdered, lh 20	28	Spanish, Val'a, oz	1 00	1 25	Yerba Santa, lb	38	44
Hemlock, crushed, lb 18	20	GELATINE, Cooper's lb	1 20	1 25	Honey, lb	13	15
Oak, white, crushed, lb 15	17	French, white, lb		50	Hors, fresh, lb	30	35
Orange peel, bitter, lb 15	16	GLYCERINE, lb	18	20	Indico, Madras, Ib	7.5	80
Prickly ash, lb	40	GUARANA	3 00	3 25	INSECT POWDER, Ib	29	32
Sassafras, lb 15	16	Powdered, lb	3 25	3 50	Isinglass, Brazil, Ib	2 00	2 10
Soap (quillaya), lb 13	iš	Gum Alors, Cape. 1b	18	20	Russian, true, lb	6 00	6 50
Wild cherry, lb	15	Barbadoes, E	30	50	LEAF, Aconite, 1b	25	30
Beans, Calabar, lb	50	Socotrine, lb	65	70	Bay, lb	18	20
Tonka, 1b	2 75	Arsafætida, lb	23	25	Belladonna, lb	25	30
Vanilla, lb 6 00	9 00	Arabic, 1st, lb	1 00	1 10	Buchu, long, lb	40	45
	1 60	Powdered, lb	1 10	1 20	Short. Ib	15	18
	i šŏ	Sifted sorts, lb	75	Sŏ	Coca, lb	55	60
Juniper, lb 10	12	Sorts, lb	60	75	Digitalis, lb	25	30
Ground, lb. 12	iã	Benzoin, lb	50	1 00	Eucalyptus, lb.	18	20
Prickly ash, lb 40	45	Catechu, Black, lb	ğ	20	Hyorcyamus	25	3ŏ
Buns, Ikalın of Gilead, ib 55	60	Gamboge, powdered, lb	1 30	1.35	Matico, Ib	70	75
Cassia, lb	30	Guaiac, lb.	80	1 00	Senna, Alexandria, Ib	25	30
BUTTER, Cacao, lb	80	Powdered, lb	90	1 20	Tinnevelly, 1b.	15	25
Camphor, 1b. 65	70	Kino, true, lb	45	1 20	Stramonium, lb	20	27
	2 10	Myrrh, lb	45	48	Uva Ursi, Ib	เรื	าร
	2 20	Powdered, lb	55	60	Legens, Swedish, doz.	1 00	1 10
Carsicum, lb. 25			3 50	3 60	Licorice, Solazzi	45	
	30	Opium, lb					50
Powdered, lb	35	Powdered, lb		4 75	Pignatelli	35	40
CARBON, Bisulphide, lb	18	Scammony, pure Resin, lb		13 00	Grasso	30	35
CARMINE, No. 40, oz	50	Shellac, lb	35	40	Y & S-Sticks, 6 to 1 lb., per lb	27	30

						<u></u>		
Y & S-Purity, 100 sticks in box	. 75	75	Unicorn, lb	. 38	40	Subcarbonate, lb	2 75	3 00
" Parity, 200 sticks in box		1 50	Valerian, English, lb true	20	25	Subnitrate, 1b		2 60
" Acme Pellets, 5 lb. tim	3 2 00	2 00	Virginia Snake, 1b		45	Borax, lb		10
" Lozenges, 5 lb. tins		1.75	Yellow Dock, lb		18	Powdered, lb	. 10	11
" Tar, Licorice & Tolu, &			Rum, Bay, gal	2 25	2 50	BROMING, OZ	8	13
lb. tins		2 00 35	Essence, Ib	3 00	3 25	Canmium, Bromide, oz	20	25
Lurulin, oz		80	SEED, Anise, Italian, sifted, lb.	. 1 25 13	1 50 15	Indide, oz		50
Mace, lb		1 25	Star, The	. 35	40	Calcium, Hypophosphite, lb	. 1 50 95	1 60 1 00
Manna, lb		i 75	Burdock, lb		35	Phosphate, precip., lb	35	38
Moss, Iceland, lb		10	Canary, bag or less, lb	. 4	5	Sulphide, oz	5	"ີ 6
Lish, Ib		10	Caraway, 1b	. 10	13	CERIUM, Oxalate, oz		12
Musk, Tonquin, oz	46 00	50 00	Cardamom, Ib		1 50	CHINOIDINE, OZ		18
NUTGALLS, lb		25	Celery		35	CHLORAL, Hydrate, lb	75	85
Powdered, lb		30	Colchicum,	1 00	1 20	Croton, oz	75	80
Numer Value W		1 10 12	Coriander, Ib	10	12	Ситовоговм, 16		1 75
Nux Vonica, lb	10 22	25	Camin, Ib Fennel, Ib		20 17	Cinculonine, sulphate, oz	25	30
OAKUM, Ib	12		Fenugreek, powdered, lb		9	Cinchesionne, Sulph., oz	15	20 10 00
OINTMENT, Merc., lb 1 and 1		75	Flax, cleaned, lb	33		COCAINE, Mur., oz	7 50	10 00
Citrine, lb	45	50	Ground, 1b	4	5	Iodide, oz	65	70
PARALDEHYDE, OZ	15	18	Hemp, lb	Ü	63	Copperas, lb	ĭ	3
Perren, black, lb	22	25	Mustard, white, lb	. 9	12	ETHER, Acetic, lb	75	80
Powdered, lb		30	Powdered, Ib	15	20	Sulphuric, 1b	-45	50
Pircu, black, lb	3	4	Pumpkin,	25	30	EXALGINE, OZ	1 00	1 10
Bergundy, true, lbt	10	12	Quince, lb	មន្ត	70	HOSCYAMINE, Sulp., crystals, gr.	25	30
PLASTER, Calcined, bbl cash	2 25 12	3 25 13	Rape, Ib		9	IODINE, Resublimed, lb	5 00	5 50
Adhesive, yd		70	Strophanthus, oz		55 25	Toporory, lb	6 00	7 00
Galbanum Comp., lb	SO	85	Seidlitz Minture, lb		30	Inon, by Hydrogen	1 30 1 00	1 40 1 10
Lead, lb	25	30	Soar, Castile, Mottled, pure, lb		12	Carbonate, Precip., lb	15	16
Porpy Heads, per 100	85	90	White, Conti's, lb	15	16	Sacch., lb	35	40
Rosis, Common, lb	21/2	3	Powdered, lb	25	35	Chloride, Ib	45	55
White, lb	31	4	Green (Sapo Viridis), Ib	12	25	Sol., lb	13	16
RESORCIN, White, oz	25	30	Spermaceti, lb	55	60	Citrate, U. S. P., 1b	.90	1 00
ROCHELLE SALT, Ib	26 22	28 25	TURPENTINE, Chian, oz	75	80	And Ammon., lb	75	80
Root, Aconite, lb	30	35	Venice, lb	10 50	12 75	And Quinine, 1b	1 50	3 00
Belladona, lb	25	30	Yellow	40	43	Quin. and Stry, oz And Strychnine, oz	35 13	40 15
Blood, lb	15	16	Woop, Gnaiae, rasped	5	Ğ	Dialyzed, Solution, lb	50	55
Bitter, lb.	27	30	Quassia chips, lb	10	12	Ferrocyanide, lb	55	GÖ
Blackberry, Ib	15	18	Red Saunders, ground, lb	5	6	Hypophosphites, oz	20	25
Burdock, crushed, 1b	18	20	Santal, ground. lb	5	G	Iodide, oz	40	45
Calamus, sliced, white, lb	20	25	CHEMICALS.			Syrup, Ib	45	50
Canada Snake, Ib	30	35 20	Acro, Acetic, lb	12	13	Lactate, oz	.5	.6
Cohosh, Black, Ib	15 40	4.5	Glacial, 1b	45 20	50 25	Pernitrate, solution, lb	15	16
Columbo, 1b	20	22	German, oz	10	12	Phosphate scales, 1b Sulphate, pure, 1b	75 7	80 9
Powdered, lb	25	30	Boracie, lb	20	25	Exsicented, lb	8	10
Coltsfoot, Ib	38	40	Carbolic Crystals, lb	28	35	And Potass. Tar trate, Ib	80	85
Comfrey, crushed, lb	20	25	Calvert's No. 1, lb	2 10	2 15	And Ammon, Tartrate, lb	85	90
Curcuma, powdered, lb	13	14	No. 2, lb	1 35	1 40	LEAD, Acetate, white, lb	13	15
Dandelion, Ib	15	18	Citrie, lb	65	70	Carbonate, Ib	7	8
Elecampane, lb	15 15	-10	Gallie, oz.	10	12	Iodide, oz	35	40
Galangal, lb:	15 22	18 25	Hydrobromic, diluted, lb	30	35	Red, lb	7	9
(Sortian th	-5	ĩő	Hydrocyanic, diluted, oz. bot- tles doz	1 50	1 60	Lime, Chlorinated, bulk, lb	3 <u>1</u> 6	4
Ground, lb	.10	12	Lactic, concentrated, oz	22	25	LITHIUM, Bromide, oz	40	45
Powdered, lb	13	15	Muriatic, lb	-3	5	Carbonate, oz	30	35
Ginger, African, lb	11	12	Chem, pure, lb	18	20	Citrate, oz	25	30
Po., lb	13	15	Nitric, lb	101	13	Indide, oz	50	55
Jamaica, blehd., lb	25	28	Chem, pure, lb	25	30	Salicylate, oz	35	40
Po., 1b	28	30	Oleic, purified, lb	75	80	MAGNESIUM, Calc., Ib	55	60
Ginseng, lb	2 60	3 00	Oxalic, lb	12	13	Carbonate, Ib	18	20
Golden Seal, lb	75 90	80 95	Phosphoric, glacial, lb Dilute, lb	1 00 13	1 10 17	Citrate, gran., lb	40	45
Hellebore, White, powd., Ib	12	15	Pyrogallic, oz.	32	35	Sulph. (Epsom salt), lb Manganese, Black Oxide, lb	13 5	3 7
Indian Hemp	18	30	Salicylic, white, lb		2 65	MENTHOL, OZ.	25	30
Ipecae, Ib	2 90	3 00	Sulphuric, carboy, lb	21	23	MERCURY, Ib	90	95
Powdered, lb	3 10	3 20	Bottles, lb	2 <u>1</u> 5	Ğ	Ammon (White Precip.),	1 25	1 30
Jalap, lb	55	60.	Chem. pure, lb	18	.20	Chloride, Corrosive, lb	1 00	1-10
Powdered, lb	60	65	Tannic, Ib.	1 10	1 25	Caloinel, 1b	1 15	1 20
Kava Kava, Ib	40 12	90 15	Tartaric, powdered, Ib	45	50	With Chalk, lb	60	65
Licorice, lb	13	15	ACETANUAD, Ib	90	1 00	Iodide, Proto, oż	35	40
Mandrake, Ib	13	18	Aconitine, grain	4 13	5 3	Bin., oz Oxide, Red, lb	25	30
Masterwort, lb	16	40	Powdered, lb	3	4	Pill (Blue Mass), Ib	1 30 70	1 35 75
Orris, Florentine, lb	25	28	Ammonia, Lie : lb	12	15	Milk Stoar, powdered, lb	50	55
Powdered, lb	28	30	Ammonium, l ride, lb	65	75	MORPHINE, Acetate, oz	I. 60	1 65
Pareira Brava, true, lb	40	45	Carbonate,	12	13	Muriate, oz	1-60	1 65
Pink, Ib.	75	80	Iodide, oz.	35	40	Sulphate, oz	1.50	1 60
Parsley, lb	30	35	Nitrate, crystal b	40	45	PERSIN, Saccharated, oz	35	40
Pleurisy, lb	20 15	25	Muriate, lb	12	16	PHENACETINE, OZ	70	75
Poke, Ib	15 18	1S 20	Valerianate, or	55 16 -	60	PHOCARPINE, Muriate, grain	5	3 10
Rhatany, Ib	20	30	AMYL, Nitrite, o	16 1 00	1 10	Pherin, oz. Phosphorus, lb	100	1 10
Rhubarb, 1b	75	2.50	Aristol, oz	2 25	2 40	Potassa, Caustic, white, lb	-90 55	1 .10 60
Sarsaparilla, Hond, lb	40	45	Arsenic, Donova 's sol., lb	25	30	Porassium, Acetate, lb	35	-40
Cut, 15	50	-55	Fowler's, sol.,	13	ĭš	Bicarbonate, Ib	15.	17
Senega, lb	55	65	Iodide, oz	35	40	Bichromate, Ib	12	13
Squill, lb	13	72	White, lb	- 6	7	Bitrat (Cream Tart.), lb	28	30
Stillingia, lb	25 25	25	ATROPINE, Sulp., in 1 ozs., oz	7 00	8 00	Bromide, lb	37	40
Pandered, lb	ξū	27	Bismurii, Ammor in citrato, oz.	40	45	Garbanate, lb	jį	i 8

								
Old ode Burn He	18	20	VERATRINE, OZ	2 00	2.10	Lemongrass, Ib	1.50	1 60
Chlorate, Eng., lb	23	23	Zine, Acetate, lb	70	75	Mustard, Essential, oz	60	63
Powdered, lb		90	Carbonate, lb	25	30	Neroli, oz	4 25	4.50
Citrate, lb	75		Ottovila mandan or	13	15	Orange, th		5 00
Cyanide, fused, lb	40	55	Chloride, granular, oz	60	65	Sweet, lb	3 25	3 50
Hypophosphites, oz	10	12	lodide, oz			October 11	65	
Iodide, lb	3 60	3 75	Oxide, Ib	13	60	Origanum, 1b.		70
Nitrate, gran., lb	8	10	Sulphate, lb	9	11	Patchouli, oz	1 75	1 80
Permanganate, lb	50	55	Valerianate, oz	25	30	Pennyroyal, Ib.	2 00	2 10
	50	55	ESSENTIAL OILS	_		Peppermint, Ib.,	4.25	4.50
Prussiate, Red, lb	32	35		75	80	Pimento, lb	2 60	2 75
Yellow, lb		35	Oir, Almond, bitter, oz	50	60	Rhedium, oz	80	85
And Sod. Turtrate, lb	30	30	Sweet, Ib.			Rose, oz	00 0	7 00
Sulphuret, lb	25		Amber, crude, lb.	40	45	Rosemary, 1b	70	75
PROPYLAMINE, OZ	35	40	Rec't, Ib	65	70	Rue, oz	25	30
Quining, Sulph., bulk	25	28	Anise, lb	2 75	3 (0)	Sandalwood, lb		9 00
Ozs., oz	30	36	Bay, oz	50	60		5 50	
QUINIDINE, Sulphate, ozs., oz	16	20	Bergamot, lb	5 00	5 25	Sassafras, ib	65	70
Salicin, Ib	2 75	3 00	Cade, Ib	90	1 00	Savin, 1b	1 60	1 75
SANTONIN, 04	20	(2-2)	Cajuput, lb	1 80	1 90	Spearmint, lb	6 00	(1-25)
	95	1 00	Capsicum, oz	60	65	Spruce, lb	ชีวิ	70
Silver, Nitrate, cryst., oz	1 00	i 10		3 50	3 75	Tansy, lb	4 25	4 50
Fused, oz			Caraway, lb			Thyme, white, lb	1 80	1.90
Sonium, Acetate, lb	30	35	Cassin, lb	1.50	1 60	Wintergreen, lb		3 50
Bicarbonate, kgs., lb	2 75	3 00	Cinnamon, Ceylon, oz	1.50	1 60	Wormseed, lb	3 50	3 75
Bromide, lb	63	65	Citronelle, lb	70	75	Wormwood, Ib	6.50	6 75
Carbonate, Ib	3	6	Clove, lb	1 60	1 65	11 01 m 1000, 10	00	0.70
Hypophosphite, oz	10	12	Copaiba, lb	1 60	1 75	FIXED OILS.		
Hyposulphite, lb	3	6	Croton, Ib	1 50	1 75	Castor, lb	103	13
Iodide, oz	40	45	Cubeb, lb	18 00	20 00	Cop Laver, N. F., gal	1.00	1 25
Salicylate, lb	1 80	2 00	Camin, Ib	5 50	6 00	Norwegian, gal	i 25	i 50
Sancyate, 10	2	3	Erigerou, oz	20	25	Corrossian, gal	1 10	1 20
Sulphate, lb	10	12	Dan Lanton H.	2 00	2 10	COPIONALIA GIUTTA CALLA		
Sulphite, Jb			Encalyptus, lb			Lyro, gd	90	1 00
Spirit Nitre, 16	30	55	Fennel, Ib	1 60	1.75	Layserb, boiled, gal	7.5	78
STRONTIUM, Nitrate, lb	18	20	Geranium, oz	1 75	1 80	Raw, gal	73	7.5
STRYCHNINE, crystals, oz	1 10	1 20	Rose, Ib.	3 20	3.50	Neatsfoot, gal	1 (8)	1 10
SULFONAL, OZ	-10	45	Juniper berries (English), lb.,	4 50	5.00	Olive, gd	1 35	1 40
SULPHUR, Flowers of, lb	24	-1	Wood, lb	70	75	Salad, gal	2 25	2 40
Pure precipitated, lb	13	20	Lavender, Chiris. Fleur, lb		3 50	Palm, lb	12	iš
TARTAR EMETIC, Ib	50	55	Garden, lb	1 50	1 75	Srens, gal	1 60	1 75
THYMOL, (Thymic acid), oz	60	65	Lemon, lb	3 50	3 75			70
I HI MOD, (I Hymne actu), Oz	V.	047	120111011, 1177	., 00	., 70	Tureestine, gd	00	10

The Standard; Brands.

MILLIONS - OF - EACH - BRAND

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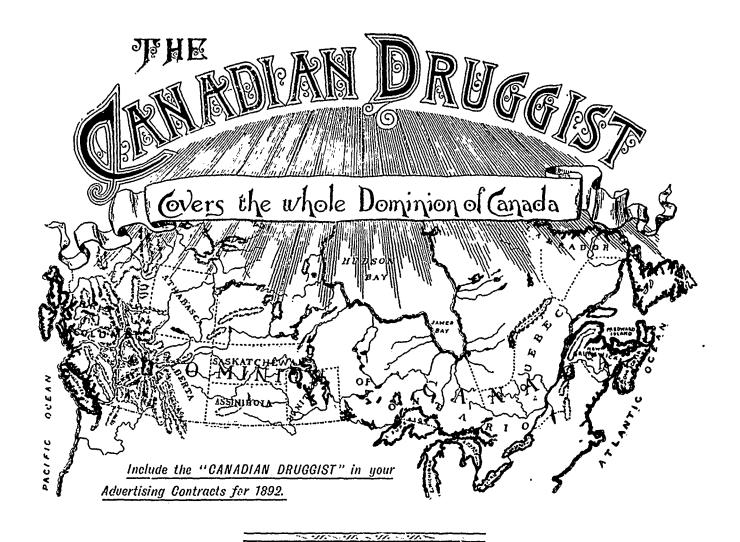
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