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CANADIAN DRUGGIST.

DEVOTED TO THE INTERESTS OF THE GENERAL DRUG TRADE AND TO THE ADVANCEMENT OF PHARMACY.

Vol. 6.

STRATHROY, JULE, 1894.

No. 6.

CANADIAN • DRUGGIST.

WILLIAM J. DYAS,

PUBLISHER.

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

The Canadian Druggist is issued on the 15th of each morth, and all matter for insertion should reach us by the 5th of the month.

New advertisements or changes to be addressed

CANADIAN DRUGGIST,

STRATHROY, ONTARIO.

ENGLISH OFFIE,

16 Trulock Road, Tottenham, LONDON, N

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What a College of Pharmacy Does for a Drug

Clerk.

Forgotten Remedies, Etc. Substitution.

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Oil of Golden Rod.

PHARMACY ABROAD.

FORMULARY. PROTOGRAPHIC NOTES. Rice in Mustard.

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Borax, Its Sources and Uses. BOOKS AND MAGAZINES.

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Popular Talks on Law. The Advance of Benzoic Acid.

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DRUG REPORTS.
The Number of Plants in the World.

The Gluttony of Crabs.

Society Discounts.

The prevalence of the custom of giving discounts to societies is now so general that it is difficult to know where and how to attack the habit without treading on the corns of some of our friends.

A consideration of the subject from any aspect which might be presented in its defence is sure to give unsatisfactory results. The practice is certain to engender bad feeling between competitors in trade because it is a catch bid for support that is manifestly unfair to a more scrupulous rival. It cannot be kept strictly private, and is thus sure to cause a general belief that the tradesman who practices it has two prices, and thereby to induce a demand from those not favored to be taken within the inner circle. In small towns, where the practice more generally prevails, it severs any degree of mutual confidence which may have existed between rivals as to maintenance of prices, and thus brings about a general condition of trade in all lines which is neither satisfactory nor profitable. Applying this custom to the business of the druggist whose reputation is largely his stock in trade, we fear that should this be blasted by the suspicious impression that when he favors one customer he makes another pay for it, his future prospects are not likely to be bright. Such a departure from sound business and ethical principles can find no excuse, at least from those who are supposed to have higher aims than to take undue advantage of their fellow-trades-

Judging the whole matter as generously and as fairly as we may, we can only come to this conclusion, that the practice is improper, unjust and subversive of the lofty aims which should dominate worthy societies and actuate conscientious business men in the conduction of their trade with the general public.

The P. P. A. of the Drug Trade.

The Provincial Pharmaceutical Asso ciation meeting is again approaching, and we hope the druggists of this Province are taking an interest in the matter. Past experience in this respect doesn't warrant great expectations, but we cannot help still entertaining the feeling that our .fellow-druggists are sufficiently emulous of other and neighboring countries to strive with them in raising the standing and

associate position of pharmacists on this continent.

Were we to say that the past history of pharmacy in Canada could be written in the single word, 'self,' we fear that the history would be as complete, as concise.

Such a lethargic condition is unworthy of us. We know that in our ranks we have many men of talent, and if but a tithe of these would but arouse themselves to a knowledge of how they could effec tively expend a portion of their abilities for the good of the pursuit they are engaged in, and actively expend them for a short period each year, we would have no cause for complaint.

We believe that the few who have labored willingly in the past have had but little encouragement to continue their efforts, and that although still willing they want and must have support.

We would like every druggist to answer to himself the following questions:

Is the success of the Provincial Association desirable?

Would its success be likely to be, immediately or in the future, beneficial to the drug trade and to me as a member of

Would I be likely to promote its prosperity by my presence, speech or influ-

Have I done my duty towards it in the past, and if not, can I afford to do so now?

If these questions can be answered by every druggist in the Province so that he need not attend such a gathering, then the sooner that the drug trade of the Province can assign any rights they possess to a professional or a semi-professional position, the better.

There is little use in attempting to crow from the housetop, if we are in reality behind the barn. WAKE UP!

United Action.

The druggists of Toronto came to the conclusion that if it paid proprietors of patent medicines, who had no special sympathetic connection with the drug trade to advertise generally over the whole Province, it would pay them to ad vertise specifically in Toronto such remedies as they were most likely to have a reasonable and natural demand for.

They held a meeting, decided to place advertising contracts with the local papers and established a monthly subscription fund. The amount raised in this way

was found to be ample to push matters strongly, and a competitive warfare with some of the cut-rate goods is the result.

The Toronto druggists are jubilant over the results achieved and are certain that their's is but an initial step for more general united action.

The feeling is becoming general that if the old patent remedies are to be sold at prices which mean a loss, some other avenue of trade than the drug trade must be the sufferer.

What the final outcome will be remains yet to be seen, but as the druggists feel that they are gaining ground every day on this line of action, they naturally conclude that the others must be losing somewhat. A few years ago it was a comparatively easy matter for patent medicine houses to induce druggists to distribute advertising matter over the counter for them, but to-day the advertiser is obliged to do his own distributing. Another feature of the matter which has been evolved by the cut in prices has been a growing lack of confidence on the part of the public in remedies which can be sold, presumably at a profit, at 65 cents instead of \$1.00.

They fear that after the first buyer gets his profit, and the proprietor his slice, their share in value is not likely to be very great. The result has been a much more frequent demand upon the knowledge of the druggist who, under present circumstances, is not likely to turn it to account in the interest of those who manufacture goods he is obliged to sell at a loss.

The Druggist's Back Shelf.

It is doubtful if any part of a druggist's premises is so likely to contain goods which lie unproductive of profit as the the back shelf. Here overplus stock is stored; small quantities of material left after filling stock bottles and drawers, articles infrequently asked for, and a general heterogenous commingly of all kinds and qualities of goods which it would take an encyclopædian mind to keep track of. An attempt at systematic arrangement is rarely thought of, and only when stock-taking times come round does the average druggist become aware of the fact that he has duplicate quantities of goods, and goods which he had forgotten were in stock at all.

We are satisfied that to a lack of systematic arrangement and failure to frequently overhaul stocks many druggists could properly ascribe their failure to conduct business profitably within the narrow scope which their means will allow. Goods which are absolutely dead stock are valueless to the druggist, and should be disposed of for whatever they We will suppose that a drugwill bring. gist has goods upon his shelf which cost him one hundred dollars, but which would not bring that amount but might possibly sell for twenty-five promptly, If he lets them lie his one hundred dollars is as good as some, but if he apports the smaller

amount the rapid turnover of good stock which it will purchase will soon recoup him for his loss.

The occasional careful scrutiny of our stocks will do us all good. But few of us have either money or goods which we can afford to have lying idle, and a little extra effort upon our part to dispose of stock which is apparently with us to stay will teach us that the back shelf deserves and and should receive due attention.

To Drug Clerks.

We invite all drug clerks to send in their names and addresses, giving also names of proprietors for whom they are working. These will be published monthly in our columns as a reference list in order that friends may keep track of their former associates, and also to encourage social and professional correspondence. All items of this nature will be placed in the "Drug Clerks' Column," and we trust that it will be fully taken advantage of.

Quebec Pharmaceutical Elections.

At the annual meeting of the Pharmaceutical Association of the Province of Quebec, held June 12th, in the lecture hall of Laval University, Quebec, the following gentlemen were duly elected as members of the new council for the term of two years, namely: Joseph Contant, Henry R. Gray, S. Luchance, David Watson, W. H. Chapman and W. A. Dyer. The election of officers of the Association will take place at the first meeting of the new council, to be held on July 3rd, next.

The O. C. P. Diploma.

A correspondent asks: "Where is the Diploma of the Ontario College of Phar-

macy recognized?"

The following State and County Boards of Pharmacy are believed to register our four year apprenticeship graduates:—Alabama, District of Columbia, Florida, Janesville, North Dakota, Wisconsin, City and County Boards of New York, New Jersey, Connecticut, Georgia, Missouri and Illinois.

International Congress of Hygiene.

The next International Congress of Hygiene and Demography will convene at Buda-Pesth, Hungary, in September. A feature of interest to pharmacists in this Congress is the circumstance that the Organizing Committee has created a special section for pharmacy, of which Dr. Julius Jarmay has been appointed president; and he has issued a circular asking for the hearty co-operation of pharmacists of all countries. The following list of topics have been thus far selected for discussion:

i,

- 1. International Pharmacoperia.
- 2. Qualifications of Pharmacists.

- 3. System of control for the free establishment and control of druggists' shops.
- 4. In what manner would it be possible to reduce the price of medicines so as to make them cheaper for the poorer classes, especially for the rural population?
- 5. Latest notes on the keeping and preserving of drugs.

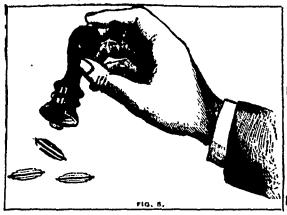
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- 1. The dispensing of drugs or medicines by physicians.
- 2. The proper regulation of State control over druggists' shops.
- 3. The sanitary evils arising from the sale of medicines the composition of which is kept secret.
- 4. The definition of herbs and the anatomical parts of herbs, as contained in the pharmacopæia.
- 5. The appropriate fitting up of the several parts of the pharmacist's premises.
- 6. The comparison of the quantitative analytical methods, as contained in the different pharmacopains.
- 7. The rational denomination of new drugs.
- 8. The drugs of ancient and of present times.
 - 9. Incompatible drugs.
- 10. Explosive combinations of medicines.
- 11. International unity for maximum doses.
- 12. Uniformity in the form of prescription
- 13. Permanganate of sodium as an antidote for phorphorus.
- 14. Should the pharmacist be an examiner of food, drinks, and other articles of consumption?
 - 15. Tokay wine as a remedy.
- 16. Preparations of quinine, and the quantitative determination of pure quinine in them.
- 17. The newest apparatus necessary for the examination of drugs,
- 18. Introduction and making known of Hungary's medicinal plants.
- 19. The limits of sensibility in the more important reactions as described in various pharmacopoias.
- 20. The determination of the active parts of the more important tinetures and extracts.
- 21. Color-blindness amongst Pharmacists.

BUSINESS FOR SALE.

SPLENDID OPPORTUNITY for a young druggist whose expenses will be light. For sale an old established drug business in a rising village in the County of Middlesex, on the main line of the G. T. R. Store and dwelling excellent. Stock all clean and well selected. Expenses light and business satisfactory. Practically all cash. Reason for selling, failing health and a desire for retirement. Present proprietor ownes both store and dwelling, and will make terms right to suitable person, For further information apply in W. Municipson, 1418 Queon 8th West, Toponto.

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OLIVE OIL

IN 1 IMP, GALL, TINS.

Duty has been raised 10%. We will give special quotations to parties not having tried this finest of all Oils yet.

It will stand any chemical test, Original Cases hold 10 and 1 Gall, Tins,

ALSO ANOTHER SHIPMENT OF UNIVERSAL ASTRINCENT PENCILS TO HAND.

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RUBBER AND COTTON GARDEN HOSE.

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FISHING PANTS____AND STOCKINGS.

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LePAGE'S "Syrup Hypophos. Comp."

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Per Winchester, - \$2,25 Per Dozen—Small - 3,50 Per Dozen—Large - 7,00

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Quality Guaranteed. Price Reasonable.
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C. W. LePAGE & CO.,

59 Bay Street, TORONTO.

Optical * Institute

OF CANADA

TORONTO, - - ONT.

The next Class will be held on the First Monday in July.

Among recent Students taught at the Institute were:

W. J. P. CURRY, Toronto, T. C. BINKLEY, Hamilton, FRID GLAUINGWI, Hamilton, I. R. L. MUNSHAW, Wingham, W. A. McASH, Detroit, FRED B. STEACY, Brockville, R. HEMSLEY, Montreal, H. POWELL, Stouffville, G. STREAMER, Toronto. T. L. Gurd, Montreal.
R. A. Dickson, Montreal.
N. Beaudier, Montreal.
J. W. Browett, Ingersol.
C. A. Olmsted, Ottawa.
E. H. Brows, Cornwall.
E. C. Mitchell. Kingston.
F. Shvester, Ringwood.
And many others.

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

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Size, Style, Finish.

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Write for Prices and Samples.



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Are you interested in

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or Lodge Paraphernalia of any kind?

If so, write for particulars and prices to

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76 York Street, TORONTO.

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78 LONG LANE. LONDON. E. C. ENGLAND.

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Anything used in the Sick-room, the Hospital, the Dispensary, by Medical Practitioner or Patient in anyway connected with Surgery or the Practice of Medicino.

WRITE FOR OUR LIST.

145 Wellington St., West, TORONTO.



ALWAYS READY, WITHOUT HEATING!



Good housekeepers have it always in the house. Packed in sizes from 1 oz. to 5 gallons.

SELLS ITSELF! Quality Guaranteed! Specify CHASE'S.

A2)" Order of your Johber or write for Sample and Price List to

GILMOUR & CO., Montreal.



IS THE FINEST

NORWEGIAN COD LIVER OIL.

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

WHOLESALE ONLY.

Direct correspondence to

JOH. RYE HOLMBOE.

TROMSO, NORWAY,

Cable address-"Rye." Sole Maker and Exporter.

NEW GOODS | Tree Lyman Bros. & Co.

Just Received.

10 Cases Giraud's Perfumes.

7 Cases Grossmith's Perfumes.

6 Cases Druggists' Sundries.

TOOTH BRUSHES in new patterns. HAIR BRUSHES, long bristles, very fine.

Sponges.

Our new importations are splendid value. . . .

J. PALMER & SON.

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1747 Notre Dame St., MONTREAL.

FOR INFANTS OVER 3 MONTHS,

INVALIDS & CONVALESCENTS.

MILK GRANULES WITH CEREALS

IS THE IDEAL FOOD.

ITS MERITS ARE:

PERFECTLY STERILIZED MILK-THE FINEST SELECTED BARLEY AND WHEAT-THE WHOLE PAR-TIALLY DIGESTED -- COMBINING MAKE AN EXCEEDINGLY PALATABLE AND NOURISHING FOOD.

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MONTREAL

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TORONTO. ONT.

Have just received another shipment of

Marachale's

Celebrated Extracts in 20 oz. stoppered bottles.

220 bottles. 5 bottlés, \$2.10

Crab Apple Blossom.

Jockey Club.

Maiglocckchen.

Peau de Espagne.

Stephanotis.

White Heliotrope.

White Lilac.

White Rose.

Wood Violet.

Bourgeois'

Triple Extracts in 8 ounce bottles.

Kashmere.

Heliotrope.

Jockey Club.

Lilas.

Violet de Parme.

. White Rose.

Baldwin's assorted

身 oz. Perfumes at - \$2.00 doz.

1 oz. Perfumes at - 4.00 doz.

Any one who has handled their bulk goods will appreciate these put up in same style of bottle.

Trade Notes.

J. H. Nasmyth has repurchased his old business in Stratford, Ont.

R. W. Knight, druggist, St. John, N. B., has assigned to J. O. Beatteay.

Geo. Thompson, druggist, of Edmonton, N. W. T., has made an assignment.

The drug stock of A. Jukes & Co., St. Catharines, Ont., is advertised for sale.

Dr. C. B. Coughlin and F. Smith have opened a new drug store at Arthur, Ont.

David Calder, at one time drug clerk in Galt, Ont., has been murdered in Idaho.

W. C. Sutherland, druggist, River John, N. S., has assigned to F. C. Simpson, Halifax.

Stewart Burns, of the drug firm of Stewart Burns & Co., Sydney, N. S., died last month.

Jackson & Co., of Winnipeg, Man., have opened a branch drug store at Port Francis, Ont.

Tyrrel II. Duncombe, druggist, St. Thomas, Ont., is building a grand operahouse in that city.

Harry Southcott, St. Catharines, Ont., has greatly improved his store with enlarged plate glass front.

W. Pennington has bought the stock of drugs, etc., of the estate of F. T. Carman, Mossomin, N. W. T.

Geo. A. Fear, Goderich, has assigned with assets, \$2,700, and liabilities over \$4,000, divided amongst over twenty creditors.

The drug stock of the estate of C. McCallum, London, Ont., was sold at 56 cents on the dollar to A. M. Smart, broker, of that city.

Arthur P. Tippit & Co., manufacturers' agents, have removed their head office from St. John, N. B., to 130 St. Francois Xavier St., Montreal.

A. Hamilton & Co., Hamilton, Ont., have greatly enlarged and improved their store by throwing the two into one, making a more modern store.

Andrew Rutherford, of Garland & Rutherford, Hamilton, Ont., has offered the city a handsome new fountain in the event of their enlarging Gore Park.

R. Davis, formerly with D. S. Sager, Brantford, Ont., has formed a partnership with J. H. Nasmyth, druggist, of the same city, under the style of Nasmyth & Davis.

A. W. Harrison, who was formerly in the drug business in St. Thomas, Ont., and went to California some time ago for his health, died at Hagersville, Ont., last month.

The partnership is registered of Chas. Baddely and F. W. Sergeant, as patent medicine manufacturers, under the name of "Red Lion Manufacturing Co." Place of business, Montreal, Que.

The drug stock assigned by Mr. Geo. A. Fear, of Goderich, was purchased at London on the 7th inst., by G. W. Berry, of Lucknow. We understand the price

paid did not much exceed lifty cents on the dollar.

Prince Edward Island Notes.

Preliminary meetings have been held by the druggists of Charlottetown with a view to organizing a Pharmaceutical Association. One druggist has so far declined to join the others, but it is more than likely that the project will be carried to a satisfactory conclusion. It is contemplated to invite the druggists in other parts of the Province to join with the originators, in which event the Associa tion will be styled the Prince Edward Island Pharmaceutical Association. Such an organization is much needed, especial ly in Charlottetown, and the druggists are to be congratulated in that, while former efforts in this direction have failed, the present preliminaries have advanced to such a satisfactory degree.

Mr. Davis, druggist, is contesting the honor of holding the long-distance chain pionship of P. E. I. in bicycle racing with a Mr. Moore, and the race is awaited with interest by the sporting community generally.

J. C. Milford has left the Island.

Mr. Manson, formerly of the Medical Hall, Charlottetown, has opened a drug store in Summerside. Summerside, like Souris, is now very fully supplied with druggists, Mr. Manson being the fourth.

Montroal College of Pharmacy.

The Montreal College of Pharmacy held its annual meeting last night, Mr. David Watson presiding. The Board deemed it advisable to offer an incentive to students, so as to induce a better attendance at the lectures. It was therefore decided to hold examinations at Christmas, and also at the end of the session. Prizes will be given to successful students. It was also decided that the diplomas issued by the College should be given only to those passing sessional examinations; the minimum number of points entitling a student to pass was fixed at fifty per cent, of the total number of marks. The last session was considered the most successful in the history of the college; the attendance of students was good and their conduct excellent. The number of students attending lectures during the year was 76. The number of members on the roll was 46. The college has a balance of \$567.83 on hand. The building fund has a balance of \$121.11. The reports were adopted. The prizes were presented to successful students by Mr. Watson and Mr. Lachance, Mr. J. H. Goulden won the second prize, Mr. H. W. Reynolds obtaining the first prize

First year chemistry—N. Langlois. Second year chemistry—W. Lyman.

First year materia medica—James Franckum.

Second year materia medica-W Lyman.

Special prizes were accorded Mr. Goulden and Mr. James Franckum. It was resolved that a committee of the college confer with the Pharmaceutical Association, in order to determine the desirability of inviting the American Pharmaceutical Association to hold the convention of 1895 in Montreal. The committee appointed consists of Messrs. J. E. Morrison, C. E. Scurff, W. H. Chapman, J. Jackson and S. Luchance. The election of officers resulted as follows.

President Mr. David Wat, m. Vice-president Mr. S. Lachance Treasurer Mr. A. Manson Secretary Mr. E. Muir.

Executive Board—Messrs, J. R. Parkin, W. H. Chapman, A. J. Laurence, L. E. Tremble, W. S. Kelly, C. J. Cavernton, J. E. Morrison, A. D. Mann and E. Guoux, p.

Ontarlo Pharmacists.

ANNUAL MEETING OF DISTRICT NO. 7.

Minutes of the accting of druggists of District No. 7, held at Fergus on Monday, May 8th, 1891.

Members present:—A. B. Petrie, W. G. Smith, Alex. Stewart, W. Herod and Chas. Law, Guelph. A. Turner and J. R. Dodds, Orangeville, R. H. Perry and R. Phillips, Fergus, T. P. Smith, Elora, J. R. Wood, Erin, A. Jamies m, Mount Forest, D. F. Kilgour, Arthur.

President A. Turner in the chair; R. Phillips, Secretary,

Minutes of last meeting were read and adopted.

Moved by Alex. Stewart, seconded by W.;G. Smith, that the name of Chas Law be added to the membership of this Association. Carried.

Moved by A. B. Petrie, seconded by J. R. Dodds, that Mr. Law be added to the Committee on Chemistry, Pharmacy and Legislation, and Mr. Herod to the Committee on Trade and Commerce. Carried,

Moved by A. Jamieson, seconded by A. B. Petrie, that Messrs. W. G. Smith, Dodds, Perry, Turner, and the mover, be a committee to strike Standing Committees for the year. Carried.

Moved by Chas. Law, seconded by A. Jamieson, that accounts for expenses to Elora and Drayton, and Secretary for circulars, &c., ≤4.96, be paid. Carried.

The auditor's report, stating that the books were found correct, and showing amount on hand \$62.24, was read, and on motion of Messrs. Dodds and Smith was adopted.

Your Committee on Chemistry, Pharmacy and Legislation beg to recommend the following to the Association.

"That this District recommend to the Ontario College of Pharmacy that this Dominion get up a Pharmacopaia of its own and separate from that of the British and United States.

"Also that this District appoint a committee consisting of the undermentioned members to assist the Council of the O.C. P. in obtaining from the Ontario Legislature at its next session the desired amendments to the Pharmacy Act as proposed by the Council :- Dr. Herod, Messrs. W. G. Smith, T. P. Smith, Perry, Woods, Dodds, Turner, Stevenson, Jamieson, Law, Stewart, McCollom, Phillips, Hodgson, Kilgour, with power to add to their hum-

The report was received and adopted.

A. B. Petrie then gave a full and satisfactory explanation of the amendments which the Council were endeavoring to obtain.

The Committee on Trade and Commerce brought in their report which gave an account of the trouble at Elora and Moorefield, and also at Guelph. The report contained a clause to the effect that this Association fix a price on baking powder and spices. Considerable discussion took place on this clause, and on a vote being taken, the report was thrown out.

The following officers and committees were elected on report of Committee:

President, R. II. Perry, Fergus; 1st Vice, T. P. Smith, Elora; 2nd Vice, A. Jamieson, Mt. Forest; 3rd Vice, J. R. Dodds, Orangeville; Secretary, Charles Law, Guelph; Treasurer, R. Phillips, Fergus.

Chemistry, Pharmacy and Legislation. -W. G. Smith, J. R. Dodds, A. Jamieson,

R. Hood, Chas. Law.

Trade and Commerce.—Messrs. Stevenson, Perry, Youmans, Stewart, Colcleugh. Grievances-T. P. Smith, A. Turner, R. Phillips, J. Kilgour, J. Kannawan.

Entertainment.—Dr. Herod, Dr. Hopkins, Messrs. Forrester, Brown, Morris.

The price book was then gone over and revised; and those articles dealt in by grocers and hardware merchants were marked G. P. (grocers' prices) and H. P. (hardware prices) as the case might be.

Moved by A. B. Petrie and seconded by Alex. Stewart, that we pledge ourselves to prepare a full line of clixirs, fluid extracts, syrups and tinctures according to the B. P., and as far as possible bring them under the notice of physicians

so that they may perscribe them. Carried.

After votes of thanks were given to the retiring officers, the druggists in Fergus, and the Town Council of Fergus for use of hall, Mr. Perry, the newly elected president, took the chair.

Moved by Mr. Dodds and seconded by Mr. Jamieson, that the next annual meeting of this Association be held at Elora. Carried.

As a past-time during the recent dull and wet period a town druggist amused himself trying his clerks at recognizing samples of every-day staples. Out of twelve they only got three. While away to dinner the clerks turned the tables and out of twenty he only recognized twelve.

Norice.-We have the largest stock of ACME WATER COLORS in the world. Send for prices and discounts to dealers. Address, Shakelford & Brinker, Logansport, Ind., U.S. A.

Our Graduates.

The result of the Council examination for certificates of competency is always awaited with eager and anxious expectancy by candidates and their friends. With nearly every young man the determination of the examination is a matter of very serious importance, as comparatively few can afford extra time, labor and expense in repeating the ordeal.

To those who have passed we tender our warmest congratulations, and to those who have put forth honest and carnest effort and have yet fallen short we extend an encouraging expression of hope that success may attend them at the fall examination, while to those young men who have spent a goodly portion of their time and their parents' money in frivolous amusement, we tender a note of warning that only those who work can win.

PRIZE LIST.

College Gold Medal - A. J. Wilkinson, Windsor.

College Silver Medal—L. B. Ashton, Toronto. Dispensing Medal—Theodore Sweet, Exeter. Chemistry Medal—T. A. Henderson, Ayr,

W. M. Woodbirn, Ottawa, (equal).
Pharmacy Medal—T. A. Henderson, Ayr.
Materia Medica Medal—A. J. Wilkinson,

Botany Medal-I., B. Ashton, Toronto.

HOSOR LIST. - (Names in order of merit.) *A. J. Wilkinson, *W. M. Woodburn, *R. H. Walton, *W. A. Coleberry, *H. Brillinger, *L. B. Ashton, *J. A. Jamieson, *E. B. Storey, *H. C. Thomas, *Geo. C. Bowers, *R. W. McClung, *F. J. Miller, *W. H. Watson, *E. F. Armstrong, *J. H. Seager,
*T. A. Henderson, *C. G. Mills, *H. P. Elder, *A. M. Daunsley, G. W. Marshall, *G. W. Mahood, *F. E. Marshall, *J. B. Hovey. O'De Long, *J. Broadway, *T. Sweet, *F. W. Niebans,

The following, in addition to those on the Honor List, passed in all subjects:

*McMaster, John *Nichol, W. T. Pirt, A. E. *Powell, W. H. *Abbott, W. R. *Annis, M. B. *Berry, J. F. *Bower, J. D. *Clements, J. H. *Fletcher, T. G. Heming, W. W. Hooper, F. *Radford, J. If. *Robinson, R. R. W. *Rogers, Geo. E. Small, G. A. *Johnston, John A.
*Keddie, W. G.
*Leslie, R. P. "Smith, J. A. *Smuck, Chas. Stevenson, E. B. Turquaud, B. D.

*Passed examination in Practical Chemistry,

PASSED IN FOUR SUBJECTS.

(Dispensing.)

Barnes, T. T. Jackson, A. D. Bleecker, D. G. Budgeon, B. R. Bunting, F. B. Ross, A. H. Thompson, J. A. Mitchell, H. W. Medley, W. H. Hill, Reuben

(Prescriptions.)

Barnes, T. T. Jackson, A. D. Bleecker, D. G. Budgeon, B. R. Dunn, S. L. Hill, Reuben Johnston, J. J. Ross, A. H. Mitchell, H. W. Medley, W. H.

(Pharmacy.)

Budgeon, B. R. Johnston, J. J. Bunting, F. B. Donn, S. L. Hill, Reuben Ross, A. H. Thompson, J. A. Mitchell, H. W. Medley, W. H. Jackson, A. D.

(Chemistry.)

Barnes, T. T. Bunting, F. B. Thompson, J. A. (Materia Medica.)

Barnes, T. T. Bleecker, D. G. Jackson, A. D. Johnston, J. J. Ross, A. H. Budgeon, B. R. Bunting, F. B. Dunn, S. L. Thompson, J. A. Mitchell, H. W. Medley, W. H.

(Botany.)

Hill, Reuben Bleecker, D. G. Johnston, J. J. Dunn, S. L.

PASSED IN TIVE SUBJECTS. Hanston, R. C. (all but Botany). Ward, R. C. (all but Pharmaey). McKinnon, A. (all but Pharmaey).

PASSED IN-PHARMACY,

Seigley, John. Eighty-eight candidates tried the examin-

Tifty-two passed in all subjects. Three passed in five subjects. Twelve passed in four subjects.

University Examinations.

The following gentlemen are entitled to receive the degree of Ph. M. B. from Toronto University: W. R. Abbott, M. B. Annis, T. B. Ashton, J. Broadway, C. G. Bowes, H. Brillinger, J. H. Clements, A. M. Dowsley, H. P. Elder, W. W. Henning, T. A. Henderson, J. A. Johnston, W. G. Kiddic, R. P. Leslie, J. D. McCann, R. W. McClung, J. McMaster, J. W. Mahood, F. E. Marshall, C. G. Melts, F. J. Miller, W. J. Nichol, F. W. Nichaus, T. H. Powell, T. Rowland, H. W. B. Scott, J. H. Seagers, J. A. Smith, C. Smuck, T. Sweet, H. C. Thomas, W. H. Watson, A. J. Wilkinson.

To take a supplemental examination in chemistry—G. W. Marshall and B. D. Turquand.

Movements of Graduates.

The recent graduates of the O. C. P. have already commenced to distribute themselves throughout the neighboring States and Provinces.

Wm. H. Watson, Phm. B., of Stayner, class 1894, having accepted a position in Bridgeport, Conn, as manager.

H. Brillinger, Phu. B, class 1894, has secured a first class position in Owego, N. Y., which he will enter on July 1st. Meantime he is relieving in a Syracuse pharmacy.

G. Marshall, class of 1894, has departed to North Dakota to assume charge of a store there.

E. B. Stevenson, class of 1894, the "out of sight" dispenser, has been engaged by a Port Arthur pharmacist, where he will dispense pills, suppositories, plasters and the like, of such a type of perfection as to make the doctors' eyes bulge.

R. W. McClung, Phm. B., class of 1894, will manage the pharmacy of Mr. Scarlett at Maniton, Man.

Howard F. Cant, Phm. B., class 1893, is employed in a prescription pharmacy in Brewsters, a suburban town of New York city.

At a recent examination by the Board of Pharmacy of the State of West

When You Want HAIR BRUSHES

Try what ARCHDALE WILSON & CO. can do for you.

We are Agents for one of the largest manufacturers, and have Brushes made specially to suit the Canadian Drug Trade.

We believe our Brushes are **VERY MUCH BETTER VALUE** than other makes. Please test this assertion for yourself.

TOOTH BRUSHES

Try what ARCHDALE WILSON & CO. can do for you.

As sole Canadian Agents for Messrs. Thomas Freres, France, we secure discounts not given to other buyers, and are therefore enabled to sell at very low prices.

SPONGES

Remember that all our prices have been reduced, and that our assortment is as large as ever.

WHITAKER & GROSSMITH'S

English Transparent Soaps. Ask for our reduced prices.

CHAMOIS SKINS

At exceedingly low prices. Comparison invited.

ENGLISH CONFECTIONERY

(Clarke, Nicholls & Coombs) in great variety.

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Wholesale Chemists and Druggists, - - HAMILTON, ONT.

FREDERICK STEARNS & CO.

MANUFACTURING PHARMACISTS,_

DETROIT, MICH.

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NEW YORK.

TX /E OFFER to the trade full lines of the following Standard Pharmaceutical Products of our own manufacture, as well as wy specialties not classified under any of the general heads, but fully described in our Puick Lists and Catalogues, vill be mailed, post-paid, on application.

ASSAYED FLUID EXTRACTS Standardized and of uniform and unvarying strength.

SOLID EXTRACTS - Prepared with great care at a low temperature to insure the resinous and solutile principles from injury in manufacture ELIXIRS, WINES, TINCTURES, OINTMENTS and CERATES.

PILLS.-SUGAR COATED, of all tints. GELATINE COATED, extremely soluble with continuous coating, no pin holes, (We have perfect facilities for turning out Pill work of all kinds, and solicit correspondence,)

CONCENTRATED LIQUORS; DIGESTIVE FERMENTS; Lozenges, Eff. Granular Preparations,

CASCARA SAGRADA In form of Fluid and Solid Extracts, Cordials, Pills, and Granules.

PERFUMES--Handkerchief Extracts, Toilet Waters, Sachet Powders,

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STEARNS' WINE OF COD LIVER OIL

An entirely new and original preparation which contains 25 percent, of pure Col Liver Oil, as represented by its active principles and alkaloids. Modern investigation has proven that the value of Col Liver Oil as a medicinal agent is not due simply to the fact of its being an oil, but to the valuable artise principles which it contains. Each fluid ounce of the Wine contains four grains of PEPTONATE OF IRON, a readily assimilated and valuable form of Iron, it being partially predigested and free from styptic properties. In pounds, \$8.00 perdosen.

STEARNS' CASCARA AROMATIC.

(THE ORIGINAL)

A fluid extract of prime and selected two-year-old flark, which is sweet in taste instead of being lister, as is the ordinary fluid extract, powerful yet an ideal laxative, prescribed by physicians everywhere. Price, \$1.20 per pound, not more in cost than ordinary bitter fluid extracts.

DIKE'S PEPSIN Is superior because of its high digestive power (13000 U.S. Ph. 1886). Its color is sweet and a holescome. It is soluble, and can be dispensed in prescriptions in solution. It retains its activity indefinitely. It is free from peptine and other bodies which attract moisture and make a pepsin gum up. On this account it can be combined safely with powders without stated because it.

a pepsin gum up, special precontion. To recapitulate: "If a reliable, colorless, sweet, beautiful, non-hygroscopic Pepsin in scales, which is reasonable in price, of full strength of the U.S. Ph., is wanted, Dikes will fill the bul, and is the only pure Pepsin that will meet all these requirements.

Price, 75 cents per ounce.

STEARNS' INSTANT HEADACHE CURE Is the best and most satisfac-tory preparation of the kind on the market. Sellson sight and makes customers wherever sold. \$1.50 per dozen. Kejd in stock by all leading wholesale houses.

We will be pleased to mail samples of our Specialties to any druggist or physician, on request.

the Extract of

Sold by all first-class Chemists and Druggists.

General Depot : PARIS, 21, Faulourg Montmarte, 21

This Wine of the Extract of Cod Liver, prepared by M. CHEVRIER, a first-class Chemist of Paris, possesses at the same time the active principles of Cod Liver Oil and the therapeutic properties of alcoholic preparations. It is valuable to persons whose stomach cannot retain fatty substances. Its effect, like that of Cod Liver Oil, is invaluable in Scrofula, Rickets, Anœmia, Chlorosis, Bronchitis and all diseases of the Chest.

the Extract of God Liver with

General Depot: PARIS, 21, Fanbourg Montmarte, 21

Sold by all first-class Chemists and Druggists,

The beech-tree Creosoto checks the destructive work of Pulmonary Consumption, as it diminishes expectoration, strengthens the appetite, reduces the fever and suppresses perspiration. Its effect, combined with Cod Liver Oil, makes the Wine of the Extract of Cod Liver with Creosote an excellent remedy against pronounced or threatened Consumption.

Pays Well, Sells Well, and Gives Satisfaction.

Retail, 10 and 25 cts.; Wholesale, 90c. and \$1.75 per doz., \$10.00 and \$20.00 per gross.

Place it on your list and order from your next wholesale representative.

"The Canadian Specialty Company, DOMINION AGENTS TORONTO, ONTARIO. Virginia, three of the O. C. P. 1893 boys headed the list.

C. E. Brennan, Phm. B., O. C. P., class 1893, is located in Brooklyn, N. Y., and is not obliged to work on Sunday.

J. M. Spencer, Phm. B., medallist O. C. P., class 1893, is preparing to enter the study of medicine during the coming winter.

Walter B. Scott, Phm. B., a recent graduate of O. C. P., will also study medicine. It is expected that he will make further investigations as to the correct chemical composition of CIII, and perhaps overthrow the theory advanced by no less an authority than Rowland, the noted analytical chemist and investigator of artificial foods.

N. T. McLean, Phys. B., of the class of 1893, is employed by the Bolton Drug Co., Brooklyn, N. Y., as head dispenser.

W. F. Farries, class of 1895, and recently of Kirby Bros., Ottawa, has secured a very desirable position in New York city. He writes: "They don't work me to death here either as I was lead to suppose they would."

J. W. Reed, Phm. B., medallist of class of 1893, who is also following his profession in New York city, thinks serious ly of beginning the study of medicine.

R. E. Strong, Phm. B., class of 1893, who has been in the emgloy of Dyer & Co., Montreal, ever since his graduation, has been visiting in this Province. He reports that eight of his classmates are employed in that city

V. Mundy, Phm. B., and R. S. McCuen, both of the class of 1893, are very much pleased with their recently acquired positions in New York city.

British Columbia Pharmaceutical Association.

The following circular has been issued by the Secretary Registrar of the B. C. Association:

VANCOUVER, B. C., May 26, 1891.

Dear Sia,—Enclosed you will find voting paper; the election is for three members to fill the vacancies caused by the retirement of D. S. Curtis, New Westminster, T. M. Henderson, Victoria, and T. E. Atkins, Vancouver. You will take notice that D. S. Curtis declines to stand for re-election, the members who do not retire this year are Thos. Shotbolt and John Cochrane, Victoria, H. McDowell, Vancouver.

The following, who were nominated, decline to stand for election. Messrs. Geo. Chadwick, D. E. Campbell, Jos. H. Emery, E. S. Hiscocks, J. A. Tepoorten, J. L. White, J. Andrews, E. Pimbury, Charles Nelson, H. Rogers, J. R. Seymour, J. M. Atkins, H. H. Watson, J. F. Jacek, H. Ryall, Geo. T. Burnott, S. A. Muir, and S. Clarke, M. D. It is very desirable that every member should vote, and without delay, and show they have some interest in the Association. Signipped envelopes are analoged for poply.

Employers should see that their elerks and apprentices remit their dues in time, (before May 31st.) See By-Law No. 3.

I would also notify those interested, that the Council have had a regulation poison book printed, in accordance with the Act, and that they may be had from the Registrar at one dollar each, post paid. Yours truly,

CHARLES NELSON, See, Registrar.

The Annual Meeting of the Association will be held in Victoria on the 14th of June

Notes from England.

(From our own Correspondent.)

LONDON, ENG., May 26, 1894.

It is satisfactory to record that the only gold medal awarded at the Medical Exhibition at the Congress at Rome was bestowed upon Messis. Oppenheimer & Co. for their palatinoids, I take some credit for the extraordinary increase in the popularity of these improved pharmacentreal preparations, since it was in these columns that I first pointed out the future that was before Messrs. Oppenheimer if they judiciously pushed these goods. 1 also directed the attention of the firm to the fact that they were neglecting their best friends the chemists by not introducing palatinoids solely through the or dinary channels. Since then they have carried this policy out thoroughly and have consequently met with almost unique success. The special feature about the latest award is that it was obtained practically in open competition with the sorld and particularly for the novel and bene ficial value of their invention. I under stand the American patent has been dis posed of to a well-known New York firm, so that Canadians will probably receive their supply through that source.

The death of Professor Romanes, F. R. S., which occurred suddenly early this week from apoplexy, is a sad blow to science. He was undoubtedly one of the most distinguished disciples which Darwin made, and, unlike Sir John Lubbock, T. R. S., who was also a pupil and friend of the great naturalist, he never deviated from the paths of science. His latest work was a defence of the natural election theory against some of the recent variations introduced by German theological and scientific writers, Professor Romanes was born at Kingston, Canada, in 1848, and took honors in the Natural Science tripos whilst at Cambridge in 1870. He was Croonian lecturer to the Royal Soci cty in 1875. In 1880 he was invited to accept the chair at Oxford University, and, whilst there, he founded a series of "Romanes lectures, the first of which was delivered by Mr. Gladstone, the second by Professor Huxley, and the latest by Professor Weismann.

Amongst the novelties introduced by chemists here which have "caught on" with the public are moulded figures of unphthaling. These are made in his sus-

pended and act as a disinfectant and antiseptic of some value. The cost of commercial naphthaline is very small, partieularly if bought by the cwt., and is very easily moulded into fanciful shapes. It is melted by heat and poured into these moulds into which copper wire, bent into a loop, is inserted. When cold it is used by merely being suspended in suitable places, and it slowly evaporates at ordinary atmospheric temperatures. In some instances, encalyptus oil has been added in just sufficient quantity to give a faint odor, and color can be added to render them attractive. The "sanitary slates" introduced by Beedzler & Co., are just plates of naphthaline enclosed in leather frames and form convenient and attrative disinfectant agents. Another form of disinfecting and antiseptic agent has recently come much into vogue. It is out old friend, permanganate of potassium, enclosed in a porus cell or special shaped bottle. If employed in a bottle the cork or stopper has to be arranged so that water can find its way in and percolate out, saturated with the salt. The cell or bottle is inserted in the house cistern and each time the flush is caused, a fresh quantity of permanganate passes automat ically into solution.

Disinfectants suggest detergent preparations. The principle of these is certainly the alcoholic solution of coal tar. In spite of the never-ceasing flow of new disinfectants, chiefly of coal far origin, the original preparation holds its own. As an application in skin diseases it is still popular and useful. The usual forms of preparing this article by means of an alcoholic tincture of quallata bark, is expensive and unnecessary. A strong decoction of the bark should be made by boiling and then concentrating. The crude coal tar, obtainable from any gas works is then added and the necessary amount of spirit. After macerating together for 48 hours it can be decanted from the undissolved tar.

One of the most useful articles that a chemist can introduce is a mouth wash, of an antiseptic and detergent nature. It should be colored and of a pleasant nature, whilst the introduction of quillaia is an advantage or a small quantity of soap may be used. The antiseptic should either be thymol or carbolic acid, and either myrth or rhatany should be an ingredient. Bottles should be provided with spankler tops and an effective label, especially designed. If the chemist deter mines to run it as a specialite he cannot do better than devise a name and register it. Fancy names are now as common as big gooseberries, but nevertheless they are very useful and effective for proprie tary preparations.

It is often remarked concerning druggists as a class that they miss innumer able opportunities, which, in other traders' hands, would be golden. As an illustration, it was pointed out that in spite of the formula for tineture of chloroform and morphine is, the British Pharmacopoia, a druggist will often sell a brand

where he could actually sell his own article. Perhaps the spirit of substitution is breathing under this. If so, let me say that that is not what is meant. In many instances customers would prefer the preparation made by the druggist himself, whose composition is exactly known to him, than an advertised article of which he can know only what the manufacturer cares to tell him. Indeed, it would appear as if our information concerning the much advertised brands of chlorodyne has been incorrect. We now have it on the statement of two of the leading manufacturers that there is no prussic acid in their specialty. Of course, the suggestion naturally arises, has the composition been altered since the difficulty arose about the the sale of chlorodyne and the poisons' regulations? If this supposition be correct it only confirms the helplessness of druggists in the matter of these proprietary preparations and should determine each to have something suitable for cases in which these articles are usefully employed. Then, it must be admitted that druggists rarely utilise their windows in the effective manner to command business that characterizes the dry goods store. Too often they ignore the influence of seasons upon their trade and local affairs are not utilized to their advantage. In my next letter I propose to give a few hints on general and particular forms of judicious advertising for the druggist, which have proved successful in this country. Our cousins in the States are too ready to sucer at the methods adopted by the pharmacists in England for building up trade, but, after all, some useful lessons may be learned from a country that has produced a Beecham, a Pears, and a Mellin.

Copying Inks.

The essential quality of copying ink is that it shall enable one or two copies of the written matter to be taken by applying dry or damped paper to its surface and applying a light or heavy pressure. A good kind of copying ink is obtained by mixing alum and logwood extract or decoction with the addition of some sugar, salts or glycerine, to enable it to be transferred in part to all copying paper. Inks of this kind have a violet tint, give a purple toned writing, and gradually become dark on the paper. The copies obtained are pale at first, but slowly darken.

RECIPES FOR COPYING INKS.

- 1. Ingredients:
- 23 lbs. extract of logwood.
- 10 ounces alum.
- 2) ounces sulphate of copper.
 2) ounces sulphate of iron (ferrous sulphate).
- onnees of brown sugar.
- 1 pint of water.

Boil all the above ingredients in the water until dissolved then filter it through a felt filter bag, and mix it with a solution of 21 ounces yellow chromate of potash dissolved in one pint of water, and mix this compound with a solution of 10 ounces sulphindigotic acid in 10 fluid ounces of

glycerine. The result is not a cheap ink, but a capital one.

2. The following ink is very fluid, which readily flows from the pen, and does not need a press to yield copies in black ink. Into one quart of distilled water put 5 ounces coarsely pounded extract of logwood and 11 ounces crystalized carbonate of soda, and heat the mixture in a porcelain evaporating dish, until all the extract is dissolved and the fluid becomes of a deep red color, then remove the vessel from the source of heat and stir into the mixture 5 ounces of glycerine of specific gravity 1.25, also 75 grains yellow chromate of potash (dissolved in a little water), and 11 ounces of gum arabic, reduced to powder, and dissolved in just sufficient water to form it into a thick mucilage. The ink is now ready for use.

3. Ingredients:

- 2 lbs. Aleppo galls, bruised. 2 gallons of water.
- 10 ounces sulphate of iron (ferrous sulphate). Sounces gum arabie.

Potassic permanganate solution. Extract of logwood q.s.

Boil the galls in one gallon of water for an hour, using a copper vessel, and replace the water loss by evaporation, strain the fluid, and again boil the galls with the second gallon of water for an hour, and strain, then mix the two quanties of strained fluid, and immediately put in the iron sulphate and the gum, and shake or stir the mixture until these solids are dissolved, then add a few drops of the solution of potassium permanganate, and strain the whole through a horsehair sieve, then put in the sugar in the proportion of half an ounce to the gallon of fluid and a little extract of logwood, to give the ink a blacker color when written with.

4. One authority prepares a copying ink thus:

A concentrated solution of logwood is treated first with one per cent. of alum and then with one per cent. of lime water, until a permanent precipitation is formed. A few drops of a weak solution of chloride of calcium are added, until a blueish black color is obtained, then hydrochloric acid is added, drop by drop, until the liquids turn red. - A little gum and about one per cent. of glycerine are then added, and the ink is ready for use.

In No. 1, the sulphindigotic acid is obtained by dissolving 21 ounces of indigo in 50 ounces of fuming sulphuric acid, and diluted with 200 ounces of water.

No. 2 can be made into a writing ink by leaving out the gum and glycerine and adding one ounce of logwood extract, dissolved in one pint of water, and adding 15 grains or more of sulphate of copper to increase the blackness of the compound.

- 5. The following is the formula of a blueish black copying ink:
 - 4) ounces Aleppo galls, free from insulbites, 1 drazhm cloves, pounded or pulverised. 40 ounces cold water.
 - la ounces purified sulphate of iron. 35 grains purified sulphuric acid.

d ounce of sulphindigotic acid, in the form of a thin paste, and either entirely neutral or nearly so.

This ink is prepared by putting the galls and cloves into a vessel capable of holding about four gallons. Pour the water on them, allow to digest for a few days, with frequent stirring, then filter off the fluid into a second vessel of the same size and add the iron salt, and when this has entirely dissolved the acid is added, and the whole quickly shoken. Finally the indigo is put in and mixed by shaking, and then the whole filtered for copying ink; 5½ ounces of galls are used.

6. A French formula for a copying ink consists of:

165 parts, by weight, of beer, gall nuts. : gum arabic. .1 calcined sulphate of 2 tormentil root (portentillatormentilla.) lampblack. 44 rock candy, white sugar. honey.

All of the solids are dissolved in the beer, and when the whole is of a homogeneous consistency it is ready for use.

7. Ingredients:

- 34 onnees of gall nuts in coarse powder.
- 31 onnes extract of logwood.
- 50 ounces tormentil root, bruised.
- 20 ounces vinegar.
- 50 onnees water.
- 18 onnees sulphate of iron.
- 3½ ounces alum.
- 25 ounces water.
- 6 grains indigo carmine. One-tenth ounce gum arabic. 100 grains white sugar.

Boil the logwood extract and the gall nuts and the tormentil root in the 50 ounces of vinegar and 50 ounces of water mixed for one hour, then strain the fluid, separately dissolve the iron salt and the alum in the 25 parts of water, and mix this with the strained logwood extract, and in the mixture dissolve the indigo carmine, the gum and white sugar.

S. A simpler formula consists in boiling 4 ounces of extract of logwood in a mixture of one gallon of water and one gallon of vinegar, with 3 ounces of sulphate of iron, 2 ounces of alum, 2 ounces of gum arabic, and 4 ounces of sugar.

9. Ingredients:

- S ounces Turkish gall ants in powder. 4 ounces sulphate of iron.
- 2 ounces gum arabic. 1 ounce alum.
- 1 ounce indigo. 12 onnees vinegar.
- 60 ounces beer.

Put all the solids into a stoneware or glass vessel, and pour the vinegar over them, and let the whole digest for twentyfour hours in a moderately warm place; then add the beer, and let the whole rest undisturbed for a few days or a week; then strain off for use. The vessel should be left uncovered, so that the air can get access to the contents, as it is the oxidizing effect of the air on the iron salt that increases its intensity of color.—American Stationer.

JOHNSON'S BELLADONNA PLASTER.

JOHNSON & JOHNSON-New York.

HAS BEEN ADOPTED BY OVER 400 HOSPITALS AND MANY THOUSANDS OF PHYSICIANS AS THE STANDARD OF EXCELLENCE — AS GIVING MORE IMMEDIATELY PRONOUNCED AND UNIFORM ACTION THAN ANY OTHER KNOWN.

Order of your wholesale house and specify

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"Impart a Delightful Odour to the Breath."

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FOR THE DESTRUCTION OF TICKS, LICE, MANGE, AND ALL INSECTS UPON SHEEP, HORSES, CATTLE, PIGS, DOGS, ETC.

Superior to Carbolic Acid for Ulcers, Wounds, Sores, &c.

Removes Scurf, Roughness and Irritation of the Skin. making the coat soft, glossy and healthy.

Removes the unpleasant smell from Dogs and other animals.

"Little's Sheep Dip and Cattle Wash" is used at the Dominion Experimental Farms, at Ottawa and Brandon; at the Ontario Industrial Farm, Guelph, and by all the principal Breeders in the Dominion and pronounced to be the cheapest and most effective remedy on the market.

257 17 Gold, Silver and other Prize Medals have been awarded to "Little's Sheep and Cattle Wash" in all parts of the world.

Sold in large Tins at **\$1.00.** Is wanted by every Farmer and Breeder in the Dominion.

ROBERT WICHTMAN, DRUCCIST, OWEN SOUND, ONT.

Sole Agent for the Dominion.

To be had from all Wholesale Druggists in Toronto, Hamilton & London.



CHEAP, HARMLESS AND EFFECTIVE.

A Highly Concentrated Fluid for Checking and Preventing Contagion from Infectious Diseases.

NON-POISONOUS AND NON-CORROSIVE.

In a test of Disinfectants undertaken on behalf of the American Government, "Little's Soluble Phenyle" was proved to be the best Disinfectant, being successfully active at 2 per cent., whilst that which ranked second required 7 per cent., and many Disinfectants at 50 per cent. proved worthless.

"Little's Soluble Phenyle" will destroy the infection of all Fevers and all Contagious and Infectious Diseases, and will neutralize any had smell whatever, not by disguising it, but by destroying it.

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

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

Sold by all Druggists in 25c, and 50c, Bottles, and \$1.00 Tins.

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

ROBERT WIGHTMAN, DRUGGIST, OWEN SOUND, ONT.

Sole Agent for the Dominion.

To be had from all Wholesale Druggists in Montreal, Toronto, Hamilton and London, Ont., and Winnipeg, Man.

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CARPETS, FURNITURE.

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Wholesale Agents for Canada.

The London Drug Co.

LONDON, ONTARIO.

Bole, Wynne & Co.

Wholesale Druggists.

--AND--

MANUFACTURING CHEMISTS

We would be glad to correspond with Druggists in Western Provinces when in the market.

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ONTARIO -VACCINE - FARM

Pure and Reliable Vaccine Matter always on hand. Orders by mail or otherwise promptly filled. 16 Ivory Points, \$1.00; 5 Ivory Points, 65 cts.; single Points, 20 cts. Discount to the trade.

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Magic Catarrh Snuff

GREGISTERED

This preparation has been proved to be a POSITIVE CURE for

Catarrh,
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Wholesale of Kerry, Watson & Co., Montreal, Lyman, Knox & Co., Montreal and Toronto. And all leading Druggists.



GRAY'S CASTOR-FLUID for the hair.

CRAY'S SAPONACEOUS DENTIFRICE, an excellent antiseptic dentifrice.

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

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

HENRY R. GRAY,

ESTADLISHED 1859.

Pharmaceutical Chemist

22 St. Lawrence Main Street,

(Corner of Lagauchetiere)

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Major's Cement.

ESTABLISHED 1876.

Universally acknowledged to be the Best and Strongest preparation ever offered to the public.

For repairing China, Glassware, Furniture, Meerschaum, Vases, Books, Leather Belting, Tipping Billiard Cues, etc.

Price, \$1.00 and \$1.50 per doz. 15 and 25 cents per bottle.

MAJOR'S LEATHER CEMENT for repairing all kinds of Leather Goods.

Price, 80c., \$1,00 and \$1.50 per doz. 10, 15 and 25 cents per bottle.

MAJOR'S RUBBER CEMENT for repairing Boots and Shoes and all kinds of Rubber Goods.

Price, \$1.00 per doz. ; 15c. per bottle.

The Leather and Rubber Cements are superior to any in the market, and can be used by any one, as the directions are given so explicitly. It is put up in two onnce bottles, one quart and one gallon cans.

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MANUFACTURER OF

ALCOHOL

PURE SPIRITS,

Rye and Malt Whiskies.

"OLD TIMES" & "WHITE WHEAT."

Final Examination, Department of Pharmacy, University of Toronto.

The following are the questions submitted at the recent examinations for the degree of Phm. B. at the final examination, Department of Pharmacy, University of Toronto:

PRACTICAL CHEMISTRY.

Ecaminer-John Munno, B. A.

- 1. Explain fully the meaning of the following equations:
 - (a) $211 \text{ MnO}_4 + 5SO_2 + 211_2O 311_2 \\ SO_4 + 2MnSO_4.$ (b) $211_2SO_4 + Cu = CuSO_1 + SO_2 + 2MnSO_2 + 2MnSO_3 + CuSO_4 + SO_2 + 2MnSO_3 + SO_3 +$
 - 2110.
- 2. "The hydrates of Tin have both acid and basic properties." Give equations for chemical reactions which illustrate this statement.
- 3. Write equations of methods for the separation of:
 - (a) Arsenic from Mercury.
 - (b) Copper from Cadmium.
 - (c) Aluminium from Chromium.
 - (d) Zinc from Manganese.
 - (c) Barium from Magnesium.
- 4. A solution is known to contain a Lead, a Silver or a Mercurous Salt. How would you determine which of these it contains?
- 5. Illustrate by equations the reactions of:
 - (a) Hot sulphuric acid with metallic Silver.
 - Lead sulphide with Nitric acid.
 - (c) Stannous chloride (in excess) with Mercuric chloride in solution.
 - (d) Copper sulphate with Potassium ferrocyanide in solution.
 - (c) Arsine (AsH3) with Silver nitrate in solution.
 - (f) Ammonium sulphide with Ammonium chloride in solution.
 - (y) Ferrous sulphate with Potassium permanganate and Sulphuric acid in solution.
 - (h) Alcohol with Potassium bichromate and Hydrochloric acid in solution.
- 6. One gramme of a Copper ore, when dissolved, is precipitated by Hydrogen sulphide, and the precipitate, Cupric sulphide, is found to weigh one gramme. Find the percentage of Copper in the ore, and the volume of Hydrogen sulphide, measured at 17° C. and 770 mm. Bar., required for the precipitation of the Copper in 10 grammes of such orc.

THEORETICAL CHEMISTRY.

Examiner-John Munno, B. A.

1. Define the laws illustrated by the compounds of Sulphur and Chlorine which have the following percentage composition:

Sulphur, 47.49%, 31.13%, 18.11%. Chlorine, 52.51%, 68.87%, 81.56%.

Give other illustrations of these laws.

2. Explain and illustrate the statement, that Chromium forms three series of compounds resembling those of Magnesium, Aluminium, and Salphur respectively.

- 3. Describe methods of preparation of fodine, Nitrie neid, Mercurous chloride, and Sodium bicarbonate. Give the physical and chemical properties, and the uses of these bodies.
- 4. Give an account of the preparation and properties of the principal Hydrides.
- 5. Mendelejell, in his classification of the elements, places Oxygen, Sulphur, Selenium, and Tellurium in the same group of elements. Assign reasons for this classification.
- 6. Write a short account of the chemistry of Copper, or of Arsenic.
- 7. Show how the Empirical formula, the Molecular formula, and the Structural formula of Acetic acid can be determined. Upon what assumptions are Structural formulæ based.
- 8. Write equations, illustrating the preparation of Ethane, Butyl alcohols, Propionie acid, Oxalic acid, Glycol, and
- 9. Compare the reactions of Alcohol with those of Phenol.
- 10. Give a brief account of the Amines and Amides or of the Mercaptans.

PRACTICAL PHARMACOGNOSY.

Examiner-J. T. Fotherisgham, B. A. M. B., M. D., C. M.

- 1. Identify and name the microscopic specimens marked 1, 2, 3 and 4.
- 2. Name the gross specimens marked A, B, C, D and E.
 - 3. Oral.

BOTANY.

Examiner-T. McChae, B. A.

- 1. Describe the minute structure of a typical leaf, and give the principal structural modification of leaves.
- 2. Give the histological structure of a typical vegetable cell, with the principal points in its development and reproduc-
- 3. What are the special characters of the natural orders, Leguminose, Liliaceae and Compositae?
- 4. Define the terms: (a) species, (b) fruit, (c) pollination, (d) phyllotaxy, (c) Write short descriptive notes on (a) styles, (b) stomata, (c) fibrovascular
- 5. Saprophytic and Parasitic Plants. Define, give examples of each, and describe their peculiarities.
- 6. Fertilization. Define and describe how brought about, with the various means which help "cross-fertilization."
- 7. Give an account of respiration as it exists in the vegetable kingdom.

MATERIA MEDICA, ETC.

Ecaminer -J. T. Forneningham, B. A., M. B., M. D., C. M.

1. Give source, natural order, habitat, chief constituent and medicinal use of Adeps Lance Hydrosus, Hydrastis Rhizoma, Jaborandi, Cascara Sagrada, Senna, Ecballii Fructus, Santonica, Manna, Digitalis Folia and Galla, .

- 2. Give mode of preparation of Camphora.
- 3. Describe Gentiana Radix and Caryophyllum.
- 4. Give at least one distinguishing mark of each of these leaves: Matico, Coca, Jaborandi.
- 5. Name preparations and doses of Scilla.
- 6. Give drugs and botanical sources from which the following principles are obtained. Emodin, eserine, cathartic acid emetine, -beberine, pelosine, arbutin, sparteine, bassorin, saponin.
- 7. Give a very brief account of the considerations governing dosage in any given patient.
- 8. Mention chief channels of climination of drugs from body.

PHARMACY.

Examiner Chas. F. Herbyer, Ph. G., Paw. B.

- 1. Pharmacentical Assaying: (a) Outline a practicable method for determination of alkaloid in a tineture or fluid extract of a plant-drug (assuming the native alkaloidal salt to be a tannate) fixed oil being also an extracted constituent. (b) State alkaloidal requirements for official Citrate of Iron and Quinine. (c) Give method of assay.
- 2. Alcohol · (a) Mention the official simple alcohols. (b) Explain difference between Absolute Alcohol, Rectified Spirit and Proof Spirit. (c) Given commercial alcohol, sp. gr. 0.820, containing 91 (absolute alcohol by weight; how much shall be used to make two Imperial pints of spiritus Tenuior, and how much water?
- 3. State the conditions governing the proper storing of the following, giving reasons in full: (a) Santoninum, (b) Syrupus Ferri Iodidi, (c) Spt. Ætheris Nitrosi, (d) Æther Purus, (e) Hydrargyrum cum Creta, (1) Liquor Chlori, (y) Oleum Amygdalæ Amaræ, (h) Potassii Permanganatis.
- 4. (a) Mention the properties of a model pill mass. (b) What are essential features to perfect manipulation in addition to the selection of a proper excipient? (e) On what grounds should pillvarnishing be condemned! (d) What is keratin, and why is it used in pill-coating? (e) Mention a superior coating, having the same object in view, and state method of application.
- 5. Describe methods of manipulation essential to the exhibition of each of the following in pill form: (a) Potassium Todide. (b) Creosote. (c) Camphor. (d) Silver Oxide. (e) Potassium Permangan-
- 6. Spiritus Etheris Nitrosi. (a) State method of preparation. (b) Give reasons for use of each ingredient. (c) Indicate the resulting reaction by equation. (d) State pharmacopecial requirements as to strength. () Outline method of testing its strength, indicating reactions. (f)Mention its incompatibles.

7. Give methods for determining presenco of: (a) Hard paraflin or earth wax in Cera Flava. (b) Alcohol in volatile oils. (c) Phosphorous Acid in Phosphoric Acid. (d) Ferrous salt in Liq. Ferri Perchloridi Fort. (e) lodate in Potassium Iodide.

Acetanilidum: (a) How prepare... (b) Chemical formula. What chemical test distinguishes it from (c) Phenacetin, (d) Phenazone? (c) Which of these three popular antipyretics is freely soluble in cold water? (/) Which is incompatible with spirit of nitrous other?

- 9. Give important medicinal constituent, strength and dose of each of the following: (a) Tinet. Nucis Vomice. (b) Opium. (c) Ext Cinchone Liq. (d) Tinct. Strophanthis. Tinct. Strophanthis. (c) Ether. (f) Pil. Saponis Co. (g) Syr. Ferri Iodidi. (h) Liq. Morphine Sulphatis.
- 10. State officinal or official names of (a) Pil. Ruti, (b) Lait Verginale, (c) Elixir Proprietatis, (d) Jesuit's Balsain, (e) Liver of Sulphur, (1) White Precipitate, (g) Brown Powder.

PRACTICAL PHARMACY.

Examiner—Chas. F. Heenser, Ph. G., Рим. В.

1. Prepare Ointment of Nitrate of Mercury in accordance with the following formula, submitting the product and the answers to the subjoined questions:

Unguentum Hydrargyri Nitratis. Mercury 2.00. Prepared Lard . . . 9.10. Nitrie Acid 42°..... 5.68. Olive Oil......14.19.

(Solids by weight, liquids by measure.)

Dissolve the mercury in the nitric acid using gentle heat. Fuse the lard in the olive oil, and while the mixture is at a temperature of about 70° C., add the above solution,-also at the same time temperature-mixing them well. If the mixture does not froth very soon after mixing increase the heat until it does. Stir well while cooling.

- (a) Write equation indicating reaction of nitric acid on mercury.
- (b) State reasons for employing heat in making this solution.
- (c) Why should excessive heating be avoided.
- (d) What change do the fats undergo while preparing the ointment.
- (e) Why should "frothing" be forced.
- (f) State necessity of stirring mixture well while cooling.
 - (9) What might result if the acid should happen to be under strength.
- 2. Ascertain the specific gravity of the powder submitted (showing all calculations) and report on the same as indicated below:
- (a) Number of powder....
- (b) Weight of powder taken
- (c) Weight of an equal volume of water. . .
- (d) Specific gravity of powder....

PRESCRIPTIONS.

Examiner--Chas. F. Herrner, Ph. G.

1. Give translation of the following, as nearly literal as possible:

R. Quinine disulphatis grana triginta, instilla e limone recente quantum sufficit succi ad quinam solvendam et adde Aquæ uncias decem, et strychninæ sesquigranum.

Signe. Misce fiat mistura cujus sumat cochleare unum maximum bis in die, circa horam undecimam matutinam et quartam horam pomeridianam.

2. Expand into full Latin and give literal translation:

R	Ferri carb
-	Rhei pulvgr. xxv.
	Ol. anthemgtt. x.
	Conf. rosaq. s.

M. et ft. mass. in pil. XL div. et. sig. sum. :eger iij octavis hor.

3. Write the following expressions without abbreviations and translate: (a) Cras noct. sumend, (b) Aq. astrict., (c) Har. pil. sum. iij., (d) M. et instilla gtt. iv auri p. r. n., (c) It. pulv. emetic. statim sumend, (f) Mitt. in vitro chart. nig. involuto, (y) Div. in part. duodec. quarum cap. i secund, vel tert, quaque hor., ex cyath. parv. lact. vaccini recent. absente febre, (h) Si. feb. adest., (i) In latus aut dext. aut

Translate the following prescriptions, criticise freely and state how you would meet any difficulties which might arise in dispensing:

Misce ft. solutio.

Sig. Gargarisma. More dictu sape utend. de die in diem,

5. R Ammonii chloridi....... 5 ij. Amnont enorma 3 9

Hydrargyri perchler gr. j.

Potassii iodidi 5 j.

Tinet, calumbre 15 j.

Tinet, zingiberis 15 jiss.

Morphine hydrochlor gr. iss.

Aqua q. s. ft 15 iv.

Misce ft. mistura.

Sig, Cochl. mod. ex cyathe aq. ter. quarterve die sumend.

ij.	R	Potassii iodidi	5 iss.
	•	Tinct. gent. comp	. f 5 iv.
		Spt wtheris nitrosi	.f 3 iii.
		Acidi nitromuriatici dil	.f 5 ii.
		Syr. aurantii	.f 5 iv.
		Aquam ad	

Misce ft. mist.

Sig. Capiat cochl. ex paululo aquie frigidae post cibos.

Misce ft. mist.

Sig. Coch. medium omni bihorio primo die deinde tertia quaque hora si tussis increbuerit.

Misce ft. solutio. Sig. Exhibe cochleare med. ex aqua cum nocturna vigilia premitur.

9. B Ferri et ammon, eitgr. lxxii.

Misce et ft. mist.

Sig. Cochl med. t. i. d. p. c. sum.

10. (a) Write dispensing notes on combinations of pepsin and bismuth in liquid mixtures. (b) Cite two instances wherea dispenser would be wholly justified in substitution.

PRACTICAL DISPENSING.

Examiner-Chas. F. Heebner, Ph. G.,

Note. -- Candidates will dispense the following preparations with neutness, accuracy and dispatch, labelling and finishing the medicines, as if designed for patients. The order and cleanliness in which each dispensing desk with its stock of utensils is left, will be rated.

Miss Fletcher, Carlton Street.

Ext. belladonna gr. xx. Hydrargyri oxidi rubii 9 jss. Axungia porcina ad 5 vj.

Misce s. a. et ft. ung.

Sig. Saepe ad humerum dexterum applicandum.

GEORGE G. MILLS, Esq. R Plumbi acetatisgr. ijss. Opii pulv.....gr. ss.

M. fac pilulam et dentur tales doses decem.

Sig. Cap. pil. ter quarterve die.

Miss Donge, Parkdale.

R	Olei jecoreis aselli f 3 is	s.
•	('reasoti	
	Olei menthe pipett.	٧.
	Pulv. acaciae (opt.)	•
	Aquam adf 3 iv	
		•

M. ft. emuls.

Sig. Exhibe cochl. parv. ij ex cyatho lactis post prandium et post conam quotidie.

Mn. Bolton, Ross Avenue.

R	Magnesii carb
•	Rhei pulv
	Tragacanthic pulvgr. x.
	Aquam ad f 3 iv.

M. ft. mist.

Sig. Coch, ex cyatho aque mane meridie et vesperi.

THOMAS W. ROWLAND, Esq., Yonge Street. Plumbi acet 0.099.

M. ft. suppos. et mitte tales quatuor. Sig. Statim utend. et repetend. p. r. n.

Pure Potassium Indide for triturating thiosulphates or acids is prepared by Groeger as follows: Dissolve 40.0 g. of pure potassium permanganate in 1000 cc. of hot water, add 20.0 g. of potassium iodide previously dissolved in a little water, heat for thirty minutes on a boiling waterbath, and then add drop for drop alcohol until the excess of potassium permanganate has been removed. Now filter, and to the alkaline liquid add acetic acid to produce a distinctly acid reaction, and evaporate to 50 cc. After cooling the separated crystals of potassium iodide are washed with strong alcohol.—Zeit.f. Ang.

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Put up your own Condition Powder, Bird Seed, etc. We will supply Containers.

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SIMPLE, BUT SURE!

SOMERVILLE'S M. F. COUGH CHEWING GUM.

FIVE CENTS PER BAR. TWENTY BARS ON A HANDSOME STANDING CARD.

THE WHOLESALE TRADE HAVE IT. PRICE 65c. PER CARD.

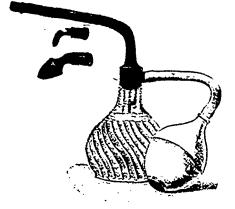
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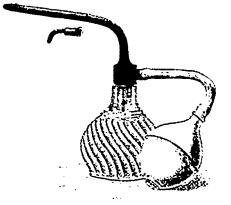
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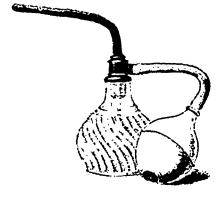
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The "BETA" With 3 Tips.



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THE "ALPHA" CONTINUOUS FLOW SYRINGES.

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We manufacture a full line of Rubber Goods for Druggists and Stationers.

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World Wide Popularity.

THE DELICIOUS "CRAB APPLE BLOSSOM" PERFUME

Put up in 1, 2, 3, 4 and 8 oz. Bottles.







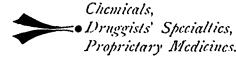
And the Celebrated CROWN LAVENDER SALTS.

No articles of the Toilet have ever been produced which have been received with the enthusiasm which has greeted the Grath Apple Blussom. Perfame and the Grath Apple Blussom Perfame and the Grath Apple Blussom two continents, and are as eagerly sought in New York and Paris as in London. Annual Sales, 600,000 Bottles,

THE CROWN PERFUMERY CO., 177 New Bond St., LONDON.

Wholesale of MESPRS, LYMAN, KNOX & CO., Montreal and Toronto, and all leading druggists.

WM. J. DYAS, Manufacturers' Agent.



WAREROOMS & LABORATORY:

Strathroy, Canada.

TORONTO OFFICE :-- !! RICHMOND ST. WEST.

To the Trade.

In all localities from which we have secured and published testimonials for our **Dodd's Kidney Pills**, the sale has been greatly increased, which resulted to the benefit of the druggist as well as ourselves.

We would therefore respectfully request all druggists to forward us the names of any of their customers who have been cared or benefited by our **Bodd's Kidney Pills**, and secure us the testimony for publication it possible. In return for which we will be pleased to give them the benefit of any advertising connected therewith if desired.

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

Respectfully,

THE DODDS MEDICINE CO., Limited.

Toronto, March 1, 1891.

The Montreal Optical & Jewellery Company

(LIMITED)

The only firm of Manufacturing Opticians in the Dominion.

Prescription Work a Specialty.

Country orders filled with care and promptitude.

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

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Drug = Mixer = and = Sifter.

For Druggists, Manufacturing Chemists, Perfumers, Etc.

Suitable for the manufacture of Baking Powder, Tooth Powder, Face Powder, Condition Powder, and for the Compound Powders of the Pharmacopæia.

THESE ARE MADE IN THREE SIZES;

SUITABLE TO MIX-5 lbs., 10 lbs. and 25 lbs.—at \$6, \$12 and \$18 Each.

Easily
Cleaned
and
no Wood
to Scent.



Dust
Proof
and
Changeable
Sieves.

Rubber Brush rubs all lumps out of powder before it is sifted.

These machines mix the powders thoroughly and then force them through sieves of the proper fineness for the intended powders. Two Sieves, 40 and 60 mesh, with each Mixer.

This Mixer and Sifter is handled by the prominent wholesale druggists of the United States and gives general satisfaction. Amongst those handling them are: Morrison & Phummer, Chicago; Bullock & Crenshaw, and Smith, Kline & Co., Philadelphia; W. H. Scheffelin & Co., and McKesson & Robbins, New York, and others.

The 10 lb. Mixer is specially adapted for the general requirements of the Retail Druggist,

WM. J. DYAS, Strathroy, Ontario, Sole Agent for Canada.

Why the Physician Should Not Dispense.

Various reasons are advanced from time to time in excuse for the medical man who dispenses his own medicines, but rarely, if ever, are the considerations which should weigh with the medical man commencing practice, as to whether he should or should not dispense. Among the various reasons which may be brought forward against his making up his own medicines may be mentioned the following as being most important:

1. The Loss of Valuable Time. The time of a medical man is valuable, since his charges vary from 1s. in the lowest districts to 5s, or even 10s. 6d. per visit. Of course, no account is taken in these figures of those medical men who are specialists since they charge specially high fees. A visit rarely lasts more than half an hour, most generally a few minutes only.

From these it is clear that the time spent in doing the dispensing can be more profitably spent in looking for patients; for by being at hand in an emergency, on the corner of a street where an accident has occurred, or among a crowd witnessing a football match, a case may be secured, which would have probably gone otherwise to a hospital or infirmary.

THE LARGE SUPPLY OF DRUGS AND OTHER REQUISITES NEEDED.—In order to supply all cases a considerable amount must be spent for drugs and accessories, such as measures, pill machines, &c. A time also must occur when medicine is urgently required, which may be out of stock. Again, care is required to prevent such medicines as are stocked from becoming deteriorated, either by age or a loose stopper or other causes.

- 3. THE EXTRA LABOR INVOLVED. When the physician has only a little practice it may not be irksome to do extra work but when a busy time comes, and, as is the case, after a hard day's work he has a dozen mixtures to make up it becomes a question of overwork. A physician, like other men, can only do a day's work without injury. Again, in order to make say 10s., it is wonderful what amount of toil on the part of the dispenser is required.
- 4. Loss Through Counten-Prescribing of the Pharmaoist.—In nearly all cases where this exists it is due entirely to the fact that the medical man dispenses his own drugs, and, since the chemist must live, he is obliged often to resort to this method of making a livelihood.
- 5. THE Loss of Status.—The doctor who does not dispense, and his brother who does, are quite distinct in point of respectability, for the former is looked up to as a physician, and is able to charge a larger fee than the other can do by giving his medicine in.
- 6. INFERIOR DRUGS AND SUBSTITUTION.

 The wholesalers cannot find such a fruitful field for passing off their inferior drugs and old stock as appendical

men. For even supposing they get time to dispense, there is still less time to analyse and detect adulterations, besides the want of chemical skill needed for such work.

- 7. The Necessary Skill.—Hitherto I have assumed that he possesses the required skill and training, but where has he got his experience! When one remembers that he goes through the farce of a three-months course at a dispensary, and that the subsequent teaching of anatomy and surgery drives out what fitted he has picked up in this way, it is obvious that he is ill fitted to encounter the difficulties which render dispensing an art requiring years of patient toil and mature experience, which the chemist alone possesses.
- 8. The Loss of the Pharmachers' Recommendation. The relations between the medical man and the chemist ought to be friendly, not hostile, since they are both of them engaged in a common object, one as the judge of ailments and the remedies, the other as the preparer and distributor of these remedies.

Now, their relations cannot be cordial when any of their common interests clash, as is certainly the case when the medical man, on the one hand, dispenses and the chemist, on the other hand, diagnoses and prescribes for those who visit his shop.

I am inclined to think that no chemist takes up counter-prescribing from choice, but from necessity, and would gladly yield it up if the doctor were to let him have his legitimate work—viz., dispensing.

A doctor who belongs to a club has often to find the medicine, but even in an extreme case like this it would certainly be an advantage to come to an arrangement with the chemist, who is usually anxious to meet the doctor with much reduced rates.

It is well known that the public have little faith in a club doctor; this may be due to the cheapness at which these clubs pay their medical men precluding them [the medical men] from giving what is proper, if expensive.

It is a matter of everyday occurrence for the chemist to be asked to name a medical man, and his recommendation has great weight

On account of this reason alone he can put in the way of the medical man more money in a month than he would gain in a year by doing his dispensing.—E. J. E. in Chemist and Druggist.

Castor Oil as an Adulterant.

L. Manpy describes a method of detecting easter oil in croton oil or copaiba, which is based on the reaction that occurs when easter oil is subjected to dry distribation in the presence of potash of soda, sebacic acid and caprylic alcohol then resulting from the decomposition of ricinol cic acid, thus:

$$\begin{array}{c} C_{18} H_{34} O_3 + 2 KO H = C_{10} H_{10} K_2 O_4 \\ + C_5 H_{18} O_4 H_2. \end{array}$$

The sebacic acid, obtained by treating

the alkaline sabacate with a mineral acid, is insoluble in cold, but soluble in boiling water. Oleic acid submitted to distillation also yields sebacic acid, but the latter is not produced from olive or poppy oil in presence of excess of alkali, and it is prob able that in this respect castor oil may be peculiar. In testing suspected copaiba ten grams of it are warmed gently in a silver capsule with as much dry caustic soda. When the effervescence subsides the odor of caprylic alcohol will indicate the presence of any castor oil. Subsequently, the product of the reaction is treated with about tifty grams of distilled water and warmed to assist solution, When cold the insotuble resin is filtered out, and the liquid treated in a porcelain cansule with excess of nitrie acid. It is then boiled and filtered while hot. On cooling, if eastor oil has been present, a white precipitate of sebacic acid forms, which is soluble in boiling water and precipitated from the solution by subacetate of lead as sebacate of lead. This process is said to detect as little as a few drops of castor oil in ten grams of copaiba. In the case of croton oil the procedure is the same, except that only five grams of oil should be treated and the other substances reduced in quantity by half. - Rocky Mountain Druggist.

Essential Oils.

Practically all of the essential oils of orange and lemon coming to this country are more or less adulterated, and curiously enough, these sophisticated essences are often preferred by buyers. One reason is that their perfume is more apt to be more agreeable when they are diluted. Oil of lemon, weakened by an admixture of nearly odorless turpentine, has a more pleasant smell than the genuine. A mixture of bergamot with lemon and sweet orange oils is more pleasing to the nose than the plain essence and besides this, it is claimed that the adulturated oils keep better. Ber gamot, the most costly, is adulterated with oil of sweet orange, turpentine, mineral oil, pitch and essence of peppermint. Pitch is employed for coloring, and stearin is added to increase bulk and weight. most important adulterant is turpentine, which is so nearly related chemically to the oil of lemon -both being terpenesthat its presence as an ingredient can hardly be detected by analysis. Considering that every year Canada imports \$66,110 worth of these oils, the fact that they are thus adulterated, becomes important. -- Journal of Commerce.

Notice. We have the largest stock of acue water colors in the world. Send for prices and discounts to dealers. Address, Shakelford & Brinker, Logansport, Ind., U. S. A.

RESIDIATION OF RESINIFIED ESSENTIAL Ones.—Equal parts of borax and animal charcoal are mixed with water, and the essential oil, well shaken with the mixture, then separated and filtered.—Jour. de Pharm. d'Anvers.

Canadian Druggist

WM. J. DYAS, EDITOR AND PUBLISHER.

JUNE 15TH, 1894.

BEGINNING with the fall term of 1895, the Philadelphia College of Pharmacy wili require all students who are candidates for her degree of Graduate in Pharmacy to enter for a three years' course, or coming from other colleges, and passing examinations for advanced standing, to take a corresponding portion of that time.

Angus Buchanan, Reeve of Kemptville, a prominent druggist, and formerly a member of the Council of the Ontario College of Pharmacy, has been nominated as the Reform candidate for the Local Legislature for Grenville. It is high time that we should have representation in Parliament, and we trust that before another general election takes place several others of our pharmaceutical confreres will be found willing to serve their province and their country in legislating for its welfare.

THE following amendments to the "Amended Tariff" are those which partieularly interest the drug trade :- Antiseptic surgical dressing, such as absorbent cottons, cotton wools, lint, hunb's wool, tow, jute, gauze and oakum, prepared and used as surgical dressings, plain or medicated, 20 per cent. Condensed milk-old tariff, 35 per cent. when not sweetened, 14 cents per pound when sweetened, and 35 per cent; as proposed, 30 per cent.; as adopted, 2 cents per pound. Castor oil-old tariff, 7 1 5 cents per gallon, as proposed 7 1-5 cents per gallon, as adopted 6 cents per gallon. The item, albumeniz ed and other papers chemically prepared for photographers' use, was reduced from thirty-five to thirty per cent, ad valorem, and was made to include "films."

We are in receipt of a table on "The Oils and Oleo-Resins of the United States Pharmacopaia, 1890," compiled by Albert N. Doerschuk, Ph. G., Kansas, Mo. This table will be found valuable to students, and may be relied upon as accurate in all its details. The official Latin and English names, as well as the origin, process of production, chemical composition, medical properties, doses, etc., are given in tabulated form and altogether it presents a useful reference sheet for pharmacists. A copy may be had by remitting 5 cents to the Editor, Meyers Brothers' Druggist, St. Louis, Mo.

A Correspondent of the Chemist and Druggist writes that "mucilage of acacia prepared with aqua camphore keeps excellently, and a leading Dublin house has long prepared it on this basis. This same house prepares the official waters in quite a unique way, which is worthy of incidental mention. No stock bottles of medicated waters are kept, the assistant preparing each and all of them by adding two drops of their respective essences to

the onnce of aqua fontana at the moment of dispensing. Peppermint, spearmint, dill, aniseed, caraway, cinnamon, and fee nel waters are all prepared in this secundum artem method, the spirit being used instead of an essence in the case of camphor water. Rose, elder-flower, cherry-laurel, and orange flower waters were the only distilled waters kept on the premises when I was an assistant there, about three years ago.

THE next meeting of the British Pharmaceutical Conference will be held at Oxford, Eng., commencing July 31st.

Things Well to Remember.

It pays to remember that customers are independent of your store.

It pays to remember that every permanent customer secured gains others for you.

It pays to remember that we all like to be pleased, and that if we do, our customers are apt to.

It pays to remember that our first duty is to please our customers according to their notions; our second, according to our own.

It pays to remember that an evident gradging response to a customer's request is apt to be noted to our discredit.

It pays to be kind and courteous always. It pays, and pays well, to be attentive to the wants of children.

It pays to remember that children early form likes and dislikes, that youthful impressions are lasting, and that where they like to deal their parents are most apt to.

It pays to remember that in business it is well to curb your own opinions when they conflict with your patron's.

It pays to remember that when you advise customers sarcastically to go elsewhere to get things cheaper, they are apt to do so to your loss.

It pays to respect yourself and to endeavor to win the respect of others.

It pays to have as many friends and as few enemies as possible.

It always pays to win; study how, why, when and where.

A Valuable Specialty.

Radlauer, of Berlin, is introducing a specialty, which, with the strong endorsation it has received from leading medical practitioners of Germany, must prove an attractive and satisfactory article in this country. "Antiseptic Mouth Pearls," as he calls this specialty, are a combination of valuable antiseptics which have proved efficacious in catarrhal affections of the mouth and mucous membrane of the pharynx, sore throat and quinsey, and are especially serviceable as a preventtive of diphtheric coating. As a corrective of foul and offensive breath and for the use of smokers, they are far ahead of anything we have yet met with. These

pearls are put up in handsome tin boxes, are convenient to carry in the pocket, and will be found a particularly good line for dealers.

The American Pharmaceutical Association.

The Committee on Membership desire to call attention to the following circular containing some extracts from the Constitution and By-Laws.

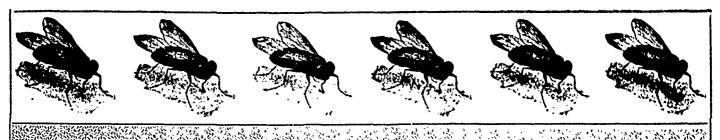
The aim of the Association is to unite the educated and reputable pharmacists and druggists of America in the following objects:

- 1. To improve and regulate the drug market, by preventing the importation of inferior, adulterated, or deteriorated drugs, and by detecting and exposing home adulteration.
- 2. To encourage proper relations between druggists, pharmaceutists, physicians, and the people at large, which shall promote the public welfare, and tend to mutual strength and advantage.
- 3. To improve the science and art of pharmacy by diffusing scientific knowledge among apothecaries and druggists, fostering pharmaceutical literature, developing talent, stimulating discovery and invention, and encouraging home production and manufacture in the several departments of the drug business.
- 4. To regulate the system of apprenticeship and employment, so as to prevent, as far as practicable, the ovils flowing from deficient training in the responsible duties of preparing, dispensing, and selling medicines.
- 5. To suppress empiricism, and to restrict the dispensing and sale of medicines to regularly educated druggists and Apothecaries.
- 6. To uphold standards of authority in the education, theory and practice of pharmacy.
- 7. To create and maintain a standard of professional honesty equal to the amount of our professional knowledge, with a view to the highest good and greatest protection to the public.

Every pharmacist and druggist of good moral and professional scanding, whether in business on his own account, retired from business, or employed by another, who, after duly considering the objects of the association and the obligations of the Constitution and By-Laws, is willing to subscribe to them, is eligible to membership.

The business of the Association, which is not of a scientific character, between the times of meeting is in charge of a Council composed of 17 members; the acts of said Council, however, are subject to revision by the Association.

The annual dues payable by each member are \$5.00, and this is the only expense connected with membership (initiation fee not being required) unless a certificate of membership is desired, which



BY HANDLING

TANGLEFOOT

--SEALED--

STICKY FLY PAPER

THE DRUGGIST AVOIDS

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Every Sheet Used Sells More.

PRICE REDUCED. PROFIT LARGER THAN EVER.



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Tanglefoot is spread upon paper made especially for the pur pose; designed to be strong, impervious to the sticky composition and practically air-tight, it perfectly fulfills its peculiar func-

Each double sheet is formed from two distinct and perfect single sheets, adding to its convenience and appreciated by the user.

Each box is provided with one Holder free for the dealer's own use or to be presented with a liberal purchase of Tanglefoot. It is the only device useful, practical or desirable.



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It must adhere closely to the paper yet separate readily at all temperatures.

It must not become soft at a high temperature and give away allowing the escape of the sticky composition.

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In fact the Border as well as the Sticky Material must retain its identity over a range of all climatic conditions from Manitoba to the Equator and as far South.

These qualities the Scaling Border of Tanglefoot embodies to perfection and is the only successful device yet invented for the purpose, giving universal satisfaction.

FOR SALE BY EVERY WHOLESALE DRUGGIST IN CANADA.

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IN 5 CASE LOTS

\$4.75 Per Case.

EACH BOX CONTAINS 25 DOUBLE SHEETS AND ONE TANGLEFOOT HOLDER.

EACH CASE CONTAINS 10 BOXES.

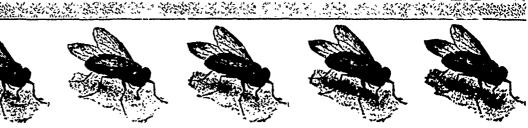












THE TWIN

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The most substantial sensitive
Thermometer ever offered to the Medical Profession.





PATENTED MARCH 25, 1800.

With the atmospheric register at 60, if "THE TWIN" be immersed in warm water of 105, the mercury will reach that degree in less than 20 Seconds.

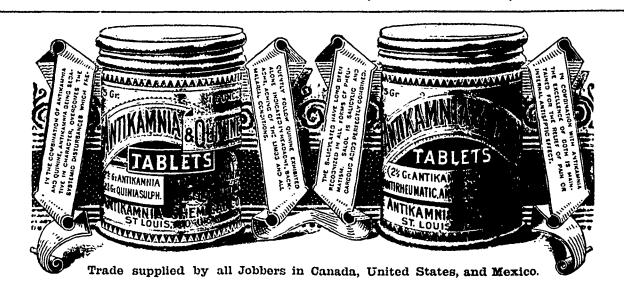
The welding the two bulbs into one without any intervening space renders. THE TWIN much stronger and less liable to break than any other heretofore offered.

It will also be found much more convenient to carry, requiring less room in a case or in the vest pocket. For these reasons, as well as for its Guaranteed Accuracy, "THE TWIN" is universally recommended by the medical profession.

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25% Discount to all Physicians and Dealers who mention the Canadian Dissigns. If in Gold Case with Chain and Pin, \$2.00 net.

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Radiauer's Somnal.

AETHYL-CHLORALURETHAN.

(REGISTERED)

THE NEWEST & MOST EFFICIENT SOPORIFIC REMEDY.

Taken in doses of 32 grains, or half a teaspoonful, in milk, ale or cognac, produces in half-an-hour a quiet refreshing sleep, lasting from six to eight hours, with no unpleasant after effects. The effects of SOMNAL are more pleasant than those of Chloral Hydrate and Morphia. Experiments made in the Town Hospitals, Moabit and Friedrichshain, Konigliche Charite and Konigliche Universitats Poliklinik, Berlin, have shown that SOMNAL does not accelerate the pulse and does not upset the stomach. SOMNAL is especially recommended for Kervous Insomnta, Neurasthenia, Spinal Complaints, Infectious Diseases, Paralysis, Melan cholia, Hysteria, Morphinisnus, and Diabetes. The low price of SOMNAL enables its use in the poor and workmen's practice and in hospitals.

Radlauer's Antinervin.

(SALICYLE BROMANILIDE) in the form of Powder, the most efficacious Antipyretic, Antineuralgic, and Antinervine.

Antinenvin replaces and surpasses Antipyrin, has no hurtful secondary effects, and is cheaper. Taken in doses of 8 grain four times a day, it is an excellent remedy for Feverish, Catarrhal and Rheumatic Pains.

Antinenvin is of especial service in cases of Influenza, Neuralgia, Asthma, Tuberculose, Yellow Fever, Malaria, Migraine, Gout, Rheumatism in the Joints, Diphtheritis, and other typical Fevers.

MANY GOLD MEDALS HAVE BEEN AWARDED.

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MUNN'S

GENTINE

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Is non-freezing and remains perfectly clear at 13° above zero.

Sold in 15 and 20 Gallon Kegs.

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MUNN'S

CELEBRATED NEWFOUNDLAND

Liquid Fish Glue

STRONGEST! BEST! CHEAPEST! Ever offered on the market.

1 and 2 oz. Bottles.

TINS—Gallon, Quart & Pint. Also in Bulk in Barrels & Kegs

SEND FOR SAMPLES.

STEWART MUNN & CO., = Board of Trade Building, = Montreal.

AGE TS FOR THE DOMINION.

can be procured from the treasurer upon payment of \$5.00.

Aside from the enjoyment of pleasant social features which form a part of the annual reunions of the Association, personal attendance at the meetings is amply repaid by the opportunity of participation in the discussions of the numerous scientific, commercial and legislative matters brought before the different sections.

Every member in good standing is en titled annually to receive gratuitously a bound volume of about 1,000 pages or more, containing a full account of the proceedings of the annual meeting, including the various papers read and discussed and also the Report on the Progress of Pharmacy, which latter is recognized as a most valuable addition, being a thorough digest of every thought and labor in the pharmacentical world. This volume, which is carefully compiled by the Permanent Secretary of the As sociation, is alone worth the amount of the annu I contribution, and in the course of years becomes a most important part of the pharmacist's library.

Organized in 1852 with 18 members, the Association now has a membership of over 1,600, but even this number represents only a small percentage of those actively engaged in the field of pharmacy. By special resolution, the annual meetings are held alternately in large cities and desirable country resorts, thus afford ing a most agreeable variety for recreation. During the past 40 years all sections of the country have been visited from Toronto to New Orleans, and from New York to San Francisco, This year the Association will meet during the month of September at that most delightful mountain resort, Asheville, North Carolina, so well and favorably known to all tourists. It is hoped that a large attendance of new members will be present.

Any member of the Committee will be glad to give additional information if desired.

All applications for membership must be accompanied by the amount of one year's dues (\$5.00) in advance, and should be so forwarded to the Secretary of the Committee on Membership, George W. Kennedy, Pottsville, Pa. If more convenient they may be sent through the Special Members of the Committee appointed for the respective States and Provinces.

COUNCIL COMMITTEE ON MEMBERSHIP.

Chas. Caspari, Jr.—Baltimore, Md. Chairman. Leo Eliel—Scuth Bend, Ind. Chas. M. Ford—Denver, Col. Wm. C. Alpers.—Bayonne, N. J. W. G. Smith, Asheville, N. C. Geo. W. Kennedy.—Pottsville, Pa., Scrietary.

Amongst those on the Special Auxiliary Committee are:

Ontario—John Lowden, Toronto, Quebec -- S. Luchance, Montreal, Nova Scotia, New Brunswick and Prince Edward's Island—F. C. Simson, Halifax.

Hydrocyanic acid is formed, according to Buris & Evans, in the manufacture of exalic acid from sugar and nitric acid.

Granular Efforvescent Proparations.

BY AUGUSTUS BRADLEY

This form of inedication is a most pleasing one for the exhibition of many nauscous and disagreeable medicines and those remedies where the assistance of the sedative action of carbonic acid is desired.

Not many years ago the effervescent draught was considered indispensable, but at present it has comparatively fallen into an unmerited oblivion.

It is, however, again making its appearance in such localities where it is extensively advertised.

Carbonic acid is very useful in therapeuties; and it promotes absorption, acting promptly as a cardiac or cerebral stimulant.

Dr. Frank Woodbury, of Philadelphia, says: "It is strange that modern works on thempenties so generally ignore the effects of certain carbon dioxide as a medical agent. The tissues are bathed with it, and the blood constantly contains a large proportion (twenty per cent. by sect).

"Experiments show that blood has nearly twice the affinity for carbonic acid that pure water possesses, and will absorb twice its volume. As carbonic acid is always present in the animal body it must play an inportant part in nutrition, though the point is bardly within the scope of my paper. We may say, however, that since it appears to be the normal stimulant to the pneumo gastric nerve at both of its extremities, it probably has other functions. At all events, the popular view that carbonic acid is purely and simply a waste product in animal organism is clearly erroneous. I believe myself that it exerts very important influence by retarding oxidation and preventing excessive combustion in the tissues of the body."

The efficacy of these preparations, as a class, depends principally upon the amount of available carbonic acid gas contained therein. The worthless (non effervescent) stock upon our shelves, in main, prompted me to devise a scheme whereby they could be supplied by the pharmacist fresh on a short notice.

I propose in this paper to relate a few experiments, with results, also giving methods and formulas, with an apparatus of my own get up, whereby the retail pharmacist can prepare his own granular effervescent preparations, and not be dependent upon the wholesale manufacturer as heretofore. These preparations are made by causing a mixture of powdered ingredients, consisting of sodium bicarbon ate, tartaric or citric acids, sometimes both, and the medicament to become sufficiently moistened as when in such pasty condition, rubbed through a coarse sieve and dried, granules are produced.

Each article should be separately powdered and dried before mixing, the citric acid to be added last and rubbed in quickly.

The drying apparatus should abo previously heated for the reception of the moist granules. The proper pasty consistence of the mixture is only ascertained through practice, some mixtures requiring more of the moistening agent than others.

The selection of a cheap moistening agent seems to me to be an item of great importance, especially when large quantities are to be made.

Samples are prepared with other, amylic alcohol, chloroform, live steam, syrup, carbon disulphide, etc., but with each too great a loss of carbon dioxide resulted during manipulation to encourage the use of any

Water or moisture being the prime cause of this loss, I concluded that if a liquid containing no water at all be used granules could be made without any loss of gas.

I was aware that absolute alcohol contained practically no water, but also that if it answered from this standpoint, its expensiveness would discourage its use. However, a small quantity of a mixture was tried, but owing to the hygroscopic properties of this alcohol the experiment proved a failure. In a few minutes after the granules had been removed to be dried, decomposition took place, resulting in an abherence and putting up of the granules, showing too great a loss of gas.

Parified benzia was next tried, but owing to the disagreeable taste, odor, and too easily crushed condition of the dried product, it was abandoned.

Benzin, with different percentages of absolute alcohol, resulted likewise.

After numerous experiments I found 95 per cent. (by vol.) ethylic alcohol, as recommended by the National Formulary, to be the best agent for general use.

I use four copper-wire sieves, Nos. 6, 20, 40 and 60, No. 6 to pass the pasty mass through the glass shelf, No, 20 to separate the dired granules from the dust (some manufacturers, to prevent any loss, do not separate it.) Nos. 40 and 60 are used for thoroughly mixing the different ingrodients.

I like the copper-wire sieves the best, owing to their less hability of being attacked by corrosive agents.

The temperature of the drying apparatus, with but a few exceptions, should always be constant, taking care not to allow it to go above 158 degrees F., for fear of converting the sodium of bicarbonate back into the carbonate, through the loss of earbon dioxide, and also the formation of caramel in those preparations containing sugar with tartaric acid.

The loss in weight encountered in drying the following articles, as found in commerce, are.

Citric acid, 8 to 10 per cent. Sodium bicarbonute, 2 to 3 per cent. Tartaric acid, 1-500 per cent.

The use of tartaric acid alone, as recommended by the National Formulary, leaves the granules too soft. An addition of citric acid will them firmness, and render their taste more acceptable to the majority of people.

There is no class of preparations that require such special care as these. The absence of moisture is absolutely essential, therefore the bottles should be thoroughly dried and hermetically scaled immediately after being filled. Those composed of iron, pepsin and their compounds should be stored in amber or blue glass bottles.

I will submit a few formulas, which I have compiled and am using, most of which, in course of preparation, require some special precautions, which will, however, present themselves to the operator upon his first attempt.

The samples that I have presented were prepared in the drying apparatus, which I will later on explain.

FORMULAS.

1-Granular Effervescent Casseine Citrate.
Caffeine citrate20 grains.
Sodium bicarbonate 600 grains.
Citric acid300 grains.
Tartaric acid240 grains.
Powdered sugar
2-Granular Effervescent Caffeine Citrate and Phenacetin.
Caffeine citrate 20 grains. Phenacetin
Phenacetin 100 grains.
Sodium bicarbonate (i00) grains.
Citric acid300 grains.
Tartarie acid 240 grains.
Powdered sugar
3-Granular Effervescent Potassium Bromide.
Potassium bromide1-2 troy oz.
Sodiuu bicarbonate 3 3 4 trov oz.
Tartaric acid 1-1-1 troy oz.
Citric acid 2 troy oz.
4-Granular Effervescent Caffeine Citrate
and Potassium Bromide.
Caffeine citrate 50 grains.
Potassium bromide 1.2 trov oz.
Sodium bicarbonate 334 troy oz.
Tartaric acid 11-4 trov oz.
Citric acid 2 troy oz.
5-Granular Effervescent Magnesium Sul-
phate.
•
Dried magnesium sulphate 400 grains. Tartaric acid
Citric acid
Powdered success 400 cmiles
Powdered sugar
This is regulable ideatical with the
Alexa to wanted and the advantage of and and

This is practically identical with the granular effervescent magnesium citrate on the market.

6-Granular Effervescent Vichy Salt.

Potassium bicarbonate	45 grains.
Sodium bicarbonate	5 trov oz.
Magacsium sulphate	45 grains
Sodium carbonate	. 5 tioy oz
Tartaric acid	1 1-2 troy oz
Citric acid	2 troy oz

7-Granular Effervescent Pepsin.

Pure powdered pepsin	50 grains
Citric acid	134 troy oz.
Tartaric acid	1 1.2 troy oz.
Powdered sugar	1-2 troy oz.
Salium bicarbonate	3 3-4 troy oz.

8-Granular Effervescent Pepsin and Bismuth.

Pare powdered pepsin	50 grains.
Rismuth & ammonium ci	trate 50 gra.
Citric acid	1 3-1 trov ez.
Tartaric acid	1 1-2 troy oz.
Powdered sugar	1.2 troy oz.
Sodium bicarbonate	.334 troy oz.

I am reliably informed that these preparations are not much used in the Southern States. This is no doubt due to the want of push and advertising by those houses making specialties of them.

By calling the physicians' attention to

them, and furnishing a few samples, I do not hesitate to say that this most pleasing form of medication will be revived.—

Proceedings of North Carolina Pharm.

Association.

Dead Stock in a Drug Store.

BY M. W. SEARBY.

The pharmacist is a professional man, the druggist is a storekeeper, and, presumably, a business man. Few men are so constituted either by nature or training as to combine both. Those very qualities which fit a person to become a pharmacist, seem, in the judgment of many, to be antagonistic to his ever becoming a successful trader. The nicety, the carefulness for minute detail, the exactness and slowness which become a habit to the chemist, conflict with the energy and dispatch necessary in husiness operations. The slow and thoughtful methods pursued in pharmacy, microscopy and other studies that now form a part of the pharmacist's education, induce a habit that is unfavorable to the successful prosecution of trade. You can push trade, but you can't push chemical and microscopical operations. Patience, watchfulness, caution and scrupulous exactness are needed in pharmacy, but in business you need promptness, energy, decision, with some degree of diplomacy. Is it any wonder then, that we rarely find all those qualities in any one man?

So well is the dual character of the apothecary of the 19th century understood in Great Britain, that he is there called a "chemist and druggist," the term chemist implying that he is a scientific man, while the word druggist indicating that he is a trader—a man who lives by buying and selling drugs.

On this side of the Atlantic we are no less traders than our brethren on the other side, but we are making far more strenuous efforts than they to be recognized as members of a profession. It is doubtrul if we are any more entitled than they to be so considered. Indeed, it will not be many years before we shall be less entitled than they, if our colleges do not insist upon a higher grade of general education before matriculation; already, both in Great Britain and Canada, they are becoming more exacting than we in this particular.

I am an advocate for a more liberal scientific education of pharmacists, believing that it is only as we are superior in attainments to the average storckeeper that we can retain our hold upon the public and claim from them the respect that is due to the profession of pharmacy; but at the same time I recognize the importance of a careful attention to the business end of the druggist's calling. fact that we deal in drugs, that is to say, in goods which have such a slow sale that their very name is indicative of unsaleableness; the mere fact, I say, that we deal in drugs, predisposes us to rest in undue content while we see the same old

Read at a Meeting of California Pharm. Society.

goods standing on our shelves from month to month, if not from year to year, with but little sale

but little sale. Had we been trained to handle other merchandise, we should chafe at the sight and take some steps to get rid of the dead stock which we now hold on to so complacently. My attention was brought to this matter a few days ago by the necessity of making arrangements to place a new line of goods in some convenient part of the store. The idea naturally suggested itself to me to remove some of the dead stock to a less convenient part of the store; and when about to select the goods in question, I looked around to see what line of goods had the smallest sale in proportion to the room they occupied. It will, I am sure, surprise some of our members when I tell them that the articles that could with the greatest convenience be placed in a back room, where they would only be called for a few times in each month, were some of our oldest and staunchest friends; those which we have looked upon from our boyhood as the main source of the druggist's profit, namely, the pharmaceuticals and the crude and powdered drugs. Herbs have already long since been relegated to the privacy of the closet or store room, but it seems almost a sacrilege to think that if a live business man should for a time take possession of a drug store, he might lay his unconsecrated hand upon the shop bottles containing powdered drugs, syrups, tinctures and fluid extracts, and consign them to a subordinate place. One of the first provisions we make in fitting up our stores is for a certain amount of widemouthed bottles containing powdered drugs and chemicals. Many of these chemicals retain their hold upon the profession and are still used with sufficient frequency to warrant their retention on the front shelves, but powdered drugs are very little used and could just as well be in the back room. As for syrups, a few are used at the prescription counter, but how many of them are sold at retail? Where is the sense, therefore, in allowing them to occupy a prominent place in the store? Why not keep them behind the prescription counter, where they properly belong? The same may be said of tinetures. Any druggist can count on his fingers the number of tinctures which he is called upon to sell with any frequency. The rest, like the syrups, belong to the prescription counter. But even for this purpose they have been almost entirely superseded by fluid extracts, which in turn are rapidly giving place to the alkaloidal and other active principles and the various forms in which concentration and convenience of dosage are provided.

Any pharmacist who will take the trouble to note the quantity of all the pharmaceutical preparations which he makes, with the date of their manufacture, will be surprised to find how seldom he makes such preparations as the tinctures of kine, columbo, cubeb, hyoscyamus, rhubarb, and twenty other tinetures that might be named. If he will note the

value of all the tinctures in his store, and also note the amount of he same which he sells each month, he will come to the conclusion that about the deadest stock in his whole establishment is found in his tineture bottles.

I have thought this matter of sufficient importance to invite the attention of our members to it, and more particularly of the younger ones. If the conclusion to which I have arrived be correct, it is manifest that most of our stores are arranged to suit the business that was carried on a generation ago, and that the modern drugstore should have fixtures and arrangements widely different. Indeed, were I to fit up a new store at the present time, it would be altogether unlike any drugstore I have ever seen, for I should make ample provision for many articles that are now crowded away in closets without sufficient room for convenient handling, and should reduce the space allotted to galenical preparations and powdered drugs to at least one half of what they now occupy.

The question may be asked, if these galenical preparations, crude and powdered drugs deserve to be assigned to such a subordinate position in a drugstore, what preparations should take their place? This question must be answered by each man according to the business which he is doing; but, in a general way, I would suggest that many of the goods which we sell are unduly crowded in our cases and closets, lacking proper display, and so meeting with smaller sales than they would have had if seen to better advantage. The newer pharmaceuticals, such as gelatine and sugar-coated pills, tablet triturates, hypodermic tablets, various forms of suppositories, bougies, etc., should be more conveniently placed and even displayed. Much more room should be given to the storing and displaying of atomizers, syringes, inhalers, and all the modern appli ances for medication. The pharmacist's own preparations-legitimate pharmaceuticals, not quack medicines-should be displayed so as to attract attention and secure sales.

It is not necessary that I should pursue this matter further. My intention in preparing this paper was simply to call attention to the fact that times are changing and in a certain sense we should change with them. Many remedies high ly esteemed thirty years ago are fast going out of use; new remedies, and new forms of administering old ones, have come into use, and if we would keep up the business end of our calling as other traders do, we should keep the new articles to the front, at least to a sufficient extent to show the public that we have new goods and that we are live business men. Having done this, I content myself with leaving this stray thought chiefly for the benefit of the younger members of our body.

Norick.-We have the largest stock of AGME WATER COLORS in the world. Send for prices and discounts to dealers. Addross, Sharkerord & Brinker, Logans port, Ind., V. S. A.

What a College of Pharmacy Does for a Drug Clerk.

Asbert H. Brundage, Ph. G., M. D., President of the Brooklyn College of Pharmacy

This title refers to the average Drug

Not to one of those extraordinary persons for whom nothing can be done.

But for the ambitious, enterprising, average Drug Clerk, a College of Pharm acy can do much, and the work and training it provides will be invaluable to him.

A young man who is confined to the routine of business life, and consequently looks at things more from a business than from an educational standpoint -as, owing to the conditions which maintain, a clerk in a drug store more or les doessoon finds study irksome, and is not inchied to extend his investigations beyond the apparent necessities of the business.

In the early part of his career in the drug business the work and service of the drug clerk are of a character that demand most of his time and afford him little opportunity for study, investigation or experimentation, even if he be so inclined.

What time he has to himself is as a rule too limited to permit of his making constant and extensive progress in study. Such inquiries as he is inclined to make, as to reasons, rules or purposes in pharmaceutical methods, often those about him are either too much engaged to answer or have long since forgotten the answers, if they ever knew them.

Such conditions as these will soon check and stitle any ambition to know more than the bare necessary facts of the business. Thus the young drug clerk fails to lay a good pharmaceutical foundation, his professional ability is dwarfed and future success restricted.

As he rises higher in position in the store the business makes a less pressing demand upon him for study, and consequently he studies less, depends on observation, previous experience and short cuts in Pharmacy more, rather than study out principles and details.

Thus he is induced to make his knowledge of the business more or less superficial, rather than extensive and fundamental.

He mitates, not originates, depends on practices rather than is guided by principles; is more thrifty than thorough, more sagacious than studious, more clever than capable.

What study he does engage in is apt to be irregular and disconnected rather than regular and systematic.

The Drug Clerk's remedy for all these most unsatisfactory circumstances and conditions lies in a good College of Pharmacy education.

In such an institution his environments and the influences brought to bear upon him, will be in many respects different, He will be taught how to study. His flagging energies will be stimulated. If possible, a deep interest will be awakened.

Road before the Kings County Pharmaceutical Society, Brooklyn, N. Y., April 10, 1891.

His attention will be directed to methods and measures calculated to bring about the best results in the shortest time and surest way. He will be taught and have carefully explained to him the fundamental principles and requirements of the art he is to practice. He will be guided, encouraged and stimulated in his efforts to make himself a thoroughly capable Pharmacist.

In studying pharmacy, chemistry, botany, materia medica, microscopy, etc., at a College of Pharmacy, a student is led along carefully, steadily and regularly from simple principles to advanced inves tigations and ripe conclusions.

He is under the guidance, instruction and discipline of men who have each made an extended study of the subject he teaches; and each makes it his profession to know more about that subject than the average pharmacist does or can.

By study, experience and training each teacher has qualified himself to most advantageously present his subject to the student, has learned what difficulties are usually met and how to overcome them, the advisability of dwelling upon certain points, and the unwisdom of doing so upon others.

The college student usually deals with a subject in four ways -- he reads it, hears a lecture upon it, is quizzed upon it and has laboratory practice in it.

By these means, he is thoroughly drilled in it.

By the dependent and sequent character of the college instruction, the student is taught to adopt orderly, thorough methods, and to employ deductive reasoning.

The right kind of help afforded him at the right time, as dictated by the experience, observation and knowledge of the teacher, begets in the student confidence, interest, energy and often oven enthusiasm in his study and work.

The association with other students ofttimes begets life-long and cherished friendships, and is sometimes a material aid toward a social position.

The examples afforded by the teachers, learned in their various branches of Pharmacy, often have a very salutary effect on the Drug Clerk's life and future.

While there is always room at the top, it is usually crowded at the bottom. What takes little or no effort, there are always many ready to seize. Human nature seeks a sinceure. Fliat which is the result of long, careful and special training is most likely to be at a premium. As a rule, the more extended and laborious the process the higher the pre-

The none thorough, capable and successful a man becomes in a given line of work, the more difficult to replace and invaluable he becomes in it, the nearer done he stands in it; is the master of its rewards, having mastered it.

But in order to secure such results he must avail himself of every opportunity and advan-tage, must find his deficiencies and remedy

tage, must find his deherencies and femely them; his weak points and strengthen them; his string points and increase their potency.

Therefore the intelligent, wise drug clerk turns to a College of Pharmacy as the means to secure all those desirable ends; as the place which can and does do all the foregoing good and great thing for its students for the land. and great things for its students -for the drug olork.

Forgotten Friends, or Good Remedies Out of Fashion Reintroduced to Pharmacy.

DR. J. R. BLACKHAM, IN BRITISH AND COL-ONIAL DRUGGIST.

(Continued from Page 139, May No., 1894.)

GAULTHERIA .-- The Gaultheria procumbens, natural order, Ericacca, popularly styled Winter Green, Partridge Berry, or Mountain Tea, is an old remedy for rheumatism recently re-introduced. It was formerly in repute as an aromatic stimulant, emmenagogue, and astringent, but its main utility seems to be in the treatment of acute rheumatism, as it contains natural salicylic acid, which many therapeutists maintain succeeds in cases where . the artificial acid wholly fails to give relief. Dr. Seelye says of the oil :- "It has all the valuable properties of salicylic acid to which it is closely allied. Its action is more prompt and efficient in obstinate cases; it has a more agreeable taste; relapses under its use are less frequent; the unpleasant effects of overdosing are no Cardiac greater, and it is less depressing. complications are no more frequent. It is important not to substitute oil of birch (which it resembles closely) or a diluted article for it. Large and frequent doses (10 minims in water and glycerine every two hours) are necessary to get the best effects. It is an excellent palliative in chronic and irregular forms of rheumatism, and a local anodyne to inflamed joints."

Geranium Maculatum.—The rootlets and rhizome of the spotted geranium or cranesbill, once highly prized in this country, are still valued in America as a mild unirritating astringent in infantile and puerile diarrheas. It is quite as useful as rhatany as a gargle in various forms of sore throat, is a good application to piles, and excels most vegetable astringents in the treatment of leucorrhea and gonorrhea. The dose of the infusion (1 in 20) is 1 to 3 ozs., of the tineture (1 in 10) 1 to 2 drs., and of the powdered root, 10 to 30 grs.

GEUM URBANUM.—The well known common avens or herb bennet, Geum urbanum, nat. ord., Rosacca, is in great favor among the rural herbalists of the Midlands as an anti-dyspeptic remedy. It is certainly a good bitter tonic, resembling dandelion.

GRANA PARADISA.—Few, if any, chemists are aware that the sale of the seeds of the Amomum melagneta, natural order, Zingiberacee, is governed by a special Act of Parliament, yet by 56 George III., cap. 58, it is enacted, "No brewer or dealer in beer shall have in his possession or use grains of paradise, under a penalty of £200; and no druggist shall sell it to a brower under a penalty of £500 for each offence." Like the levant nut, it is now rarely used for adulterating beer, but wholesale druggists will do well to bear in mind the above statute. Therapeutically the grains of paradise constitute a valuable carminative, largely used in

Africa by the natives, but seldom used in this country, except in cattle medicines.

Helleborus Niger.—This ranunculaceous plant, from the sub-Alpine regions of Europe, has long been considered a powerful ecbolic or abortive, and drastic purgative. It is a useful emmenagogue in those cases benefited by aloes and myrrh, when administered in doses of 5 to 10 grs. of the powdered rhizome, or 1 to 1 drachm of the tineture (1 in 8, proof spirit, percolate). Like colocynth it should be sold with caution to the general public.

HYDRANGEA ABORESCENS.—Seven barks is a popular remedy for gravel and stone in the bladder, among the poorer classes in the United States. It is taken either in 30 to 60 gr. doses of the powdered root, or onnee doses of a 1 in 20 decoction four times daily.

Hydrocoryle.-The pennywort (Hydrocatyle Asiatica) is a member of the Umbellifera, highly estremed by the native doctors in the East as a tonic and alterative in the treatment of the scourges of Oriental sensuality, syphilis and leprosy. Eight grains of the powdered leaves should be administered in milk thrice daily.

IGNATIUS AMARA.—The bean of St. Ignatius (Ignatis Amara, natural order, Loganiaecw), from the far-oft Philippine Islands, is a valuable bitter tonic and nervine stimulant, similar to nux vomica. Dose of the extract \(\frac{1}{2} \) to 1 gr.

Inula Campagna.—Elecampane long been used by the peasantry in Treland and on the Peninsula as a specific in consumption, whooping cough, and various enteric affections. Its active principle Helenin, has recently been advocated by the physicians of the General Hospital at Madrid in the treatment of tuberculosis. It is certainly a powerful non-irritating antiseptic, of great value for intrauterine injection, and for destroying the bacilli in ozena, anthrax, and all purulent discharges, It is used as an antiseptic as a 1 in 1,000 or 1 in 1,500 solution, and has no toxic properties. Ferran lauds its properties in destroying the comma bacillus of cholera and Baeza says it will cure infantile diarrhes in doses of 1/2 gr., and the summer diarrheea of adults in doses of 2 grs., quicker than any other remedy. Whitla says of this product, from one of our oldest friends, that "It promises from the Spanish accounts of its use to become one of our most valuable therapeutic weapons."

Inmo.—It is not generally known that indigo was formerly highly estremed in the treatment of epilepsy.

IPOMEA CERULA.—This valuable convolvulaceous plant is an excellent substitute for jalap. It acts similarly to this drug, except that it never gripes and has no unpleasant taste. The tincture of the seeds (1 in 5) is an inestimable addition to our vegetable cathartics, in doses of 2 drachms and upwards.

Ints.—Orris root, or rather rhizome

(Iris florentina, natural order, Iradacee), was formerly used as a purgative and emetic in large doses, but has now, with more or less wisdom, been handed over to the sole use of the perfumer.

IRIDIN.—The blue flag (Iris versicolor) is a member of this order, which is destined to hold a good position in British therapeutics. It has long been used as a liver stimulant, and anthelmintic in America, and a limited experience of its utility enables the author to advocate its administration in sluggish liver, and the group of symptoms conveniently labelled Biliousness.

JUGLANS CINEMEA.—The butternut (natural order, Juglandacae) is an excellent purgative, painless, rapid, non-osmotic and efficient. An extract is prepared from the inner bark, which may be administered in 10 gr. to 30 gr. doses.

Juggans Regar.—The walnut, another representative of the same order, introduced into this country from Persia, was at one time highly esteemed in the treatment of scrofula, but is now only used as a hair-dye.

LICOPERDON GIGANTEUM.—The puff-ball (natural order Trichogastres) has long been known to possess hemostatic properties, and ranked with cobwebs for stopping bleeding among the simple remedies of the Midland peasantry. It has been introduced as a surgical dressing and advocated in bleeding from the alimentary tract.

LYTHRUM.—The root and dried leaves of this beautiful wild flower, the purple loosestrife, a member of the Lythracce is largely used by the "herb doctors" in rural districts as an astringent bitter tonic, similar to chirata.

Manaca.—The root and stem of the Franciscea uniflora (natural order, Scrophulariacea) has been used by the North American Indians for immemorable ages in the treatment of the disease, to which they, of all nations, seem most susceptible, namely, syphilis. It is recommended in chronic rheumatism, and has undoubted diaretic and emmenagogue properties. The best method of administration is to prepare a fluid extract in the same manner as extract of cascara sagrada, and give teaspoonful doses thrice daily.

MARRUMUM.—Horehound (M. vulgare, natural order, Labiatae) a fine old English expectorant, has for some reason been expunged from British official remedies. In the writer's hands it has proved much more valuable than many of the much vaunted galenical expectorants.

MELISSA OFFICINALE.—Balm—a well-known member of the Labiatae—was formerly a favorite basis for nervine tonics, in the form of a 1-in-20 infusion.

MENTIA PULEGIUM.—Pennyroyal is an excellent enumenagogue and carminative, which, in spite of many slights from official authorities, holds, and will continue to hold, a secure position among the indigenous remedies of England.

(To be Continual)



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Each fluid drachm contains, 2 grain Structums, associated with the Hypophosphites of Lime, Soda, Potassium, Iron, Manganese and Quinne.

This combination, so long and favorably known to Physicians and Pharmacists as one without equal in the treatment of Phthlids (Consumption) Bronchitis, Amenda and General Bebillty, as manufactured by us, and offered at our present list price, will be found to overcome an existing difficulty, as heretolore it has been impossible to procure it in quantities of more than one plut, and, the price of the preparation being very high, has placed it beyond the reach of many who really require a medicine of this kind.

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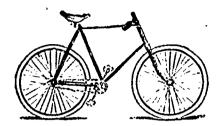
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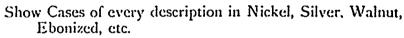


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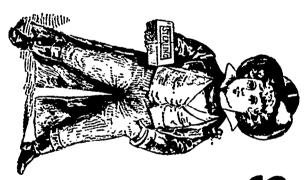
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Substitution.

Recent developments concerning certain practices in the retail drug trade afford ground for expressions of regret that they should obtain in any degree, and particularly to the extent it seems they do. We refer especially to substitution, in its most offensive and reprehensible form, and it is surprising that so many supposedly reputable druggists are found practising it. Not long ago it was shown that St. Louis and Chicago druggists, when the proprietary article Listering was called for, in more than half the cases would dispense some substitute, without any attempt to inform the customer that the imitation was given. For example's sake, the proprictors of the preparation made it very warm for some of the substitutors, and others promised over their signatures to sin no more. The condition of affairs prevailing in the cities named was found existent in many others, the extent of substitution being proven far greater than had been thought possible. Manufacturers of other proprietaries have been pursuing like investigations, with the same results, and we understand that offenders are to be brought to a full realization of their responsibility. There is a large class of proprietary medicines which are particularly subject to the attack of the substitutor. Not the ordinary, popular patent medicine, sold only in package form, but those which are exploited principally to the physician, and directed in prescriptions, being used by the dispenser in portions from the original container. Here is offered abundant chance for substituting an imitation for the genuine. Listerine, Antikamnia and many others are examples of this class. The substitutes vary wonderfully in physical and chemical characteristics, in some instances being such palpable frauds that sight alone will detect the imposture.

A few words to druggists anent substitution. There are two forms of substitution, one thoroughly reputable, honest and professional, the other a fraud and dishonest. The honorable variety is where the druggist, with no deception, no false representations, with the consent of physician or customer, brings into play his own professional knowledge and skill in opposition to the article called for. But, observe, there must be no deceit in this matter. It is perfectly legitimate to try and sell your own preparation, provided it be understood by the customer that it is yours. But the substitution complained of is not of this kind. It is dishonest and disreputable in every respect. The customer or patient has the right to get what he believes he is getting, and the druggist defrauds him if he doesn't supply it when he pretends to. An excuse frequently advanced for substitution is that physicians prescribe every new preparation called to their notice. They specify a certain make, when the druggist may have in stock his own or some other equally efficacious. A single prescription may be all that is received for that particular

make, and the remainder is a dead loss. Much sympathy is felt for the druggist in this unpleasant predictment, but strict honesty should lead him to procure the goods ordered or refuse to put up the prescription. The only incentive to substitution is the desire for greater prolit, but a business built up from dishonest practices is not a stable one. The arguments in fivor of substitution are fallacious, based upon unsound premises. To those who at times may feel tempted to replace the directed article by another, we would say, don't. Loss of immediate gain is amply compensated by ultimate success and a character for strictest probity in professional dealings.

Substitution, besides being a dishonest, is a dangerous practice. The exact composition of a proprietary article is seldom known, and to replace it with a guess mixture is a risky business. The substitution of cheap and inferior drugs for the pure and genuino is equally reprehensible.

We would not sermonize, and our views on this matter are, we believe, in sympathy with those of all conscientious pharmacists, but we could speak a word of warning to those whom nothing but a good fright will turn to better ways. Several producing chemists and pharmacists have become tired of the practices of the substitutors, and propose to bring them up with a round turn, and have inaugurated a searching inquiry in all the trade centres of the country. While we know of no concerted action, the investigation will be most thorough. If friendly, cautious and considerate treat ment do not avail, counsel has been retained to prosecute vigorously those who refuse more anniable methods. The manufacturers are right in this determination, and have the approval of the better class of pharmacists. Whatever be the nature of the proprietary article (good or bad) the druggist who secretly substitutes is guilty of theft. The infringement of trademark rights must not be overlooked. This is a serious legal offence, the penalty for which is of a heavily unpleasant character. We encourage the supplying of popular demand by medicines of your own compounding, every manner of inducing the physicians to employ your preparations rather than the proprietaries and semi-proprietaries, so long as this is all done openly and above board, but have no sympathy for the dishonest substitutor, and would see him get his deserts .-Phar. Era.

Ovules, Suppositories, Bougies and Intra-Uterine Crayons.

V. J. Pequart, pharmacist, of Verdunsur-Meuse, contributes the following to Uluion Pharmaceutique:

Glycerin, solidified by the addition of gelatin, renders great service in preparing this class of remedies. As an excipient it is easy to manipulate, and if certain precautions are taken it readily combines pharmacentically with such active medicaments as tannin, the extracts, iodoform,

salol, sublimate, etc. The price, withal, is very moderate, an item to be consulted in these hard times. As it is always important that the pharmacist should have a modus operandi that he can rely upon in all cases, I offer the following:

Leave in contact for two or three hours and then add -

Pureglycerin (30) 165 parts.

The medicament should be added to the glycerin before mixing. If it is insoluble in that medium it must be pulverized as finely as possible and suspended in it.

Melt in a water bath, and agitate to secure homogenicty. As soon as this is effected, let the mixture cool down to about half the original temperature, and then pour into moulds. This cooling is the more essential in those cases in which the remedy is merely suspended in the vehicle. The use of the water-bath is essential, from the fact that gelatin once superheated refuses to solidify. Preserve the product in lycopodium.

BOUGIES PORTE REMEDE.

The preparation of bougies in which an active remedial agent is contained (bangies porte remede) comprehends two operations, viz.: The preparation of the inert core, and the preparation of the active mass to cover the same.

Best white gelatin
Distilled water ... 10 parts.
Glycerin, pure ... 30 parts.

Let the gelatin and water remain in contact as before, add the glycerin and melt together in the water bath. When homogeneous pour out on a shallow tin tray, or on a perfectly flat sheet of tin slightly turned up around the edges (1% inch is sufficient), which has been well warmed, as this insures a sheet of gelatin of even thickness. The sheet should be about 1% inch (1.5 millimeter) in thickness.

When quite cold and solid, with a knife and straight-edge, cut the plaque into strips 1 16 inch wide and 6 inches long, put them in a dry, cool place and leave them for several days to dry out, and thus lose a part of their elasticity.

Preparation of the active mass, Take

If necessary, add sufficient water (never more than a few drops) to give a proper consistence. Mix and make a mass. Roll out this mass on a slab well dusted with lycopodium, as you would in making pastelles, to about the thickness of parchment paper. Then, with the knife and straight-edge, divide the thin leaf into the same number of strips as you have core-

rods, making each strip 6^{4}_{1} inches long. If you have carefully measured the thickness of the sheet, each strip will be about ${}_{1}^{4}_{6}$ inch wide.

When your strips are ready, place a core-rod on each one, and roll it up so that \(^3\) inch of the envelope will remain at one end. This serves as a means for properly pointing and rounding the bougie into an olive-shaped mass of active ingerdient. In order that the core and envelope shall adhere properly to each other it is necessary to wipe the lycopodium off the core and the envelope with a damp sponge passed over each at the moment of rolling. After the bougie is finished roll it in lycopodium again.

INTRA UTERINE CRAYONS.

Make a pill-mass with the fellowing ingredients:

Pulverized acacia 5	parts.
Milk sugar	parts.
Honey 1	
Glycerin, pute 11	parts.
Active ingredient, as prescribed.	•

Roll into crayons about 12 inch in diameter, and from 25 to 3 inches long. Let dry for a day or two, and then plunge each crayon into the inert mass directed for ovules and suppositories (first formula. above), heated so as to be sufficiently fluid for the purpose. Withdraw at once, let cool off, and preserve in glass tubes hermetically scaled at each end with plugs of parallin. The tubes should be thoroughly dried before putting the crayons in them.—Nat. Druggist.

Oil of Golden Rod.

The oil commonly known under this name is that obtained from the "Sweet-scented Golden Rod" (Solidayo odora, Aiton). There are, however, in the northern United States, east of the Rocky Mountains, no less than 42 species of Solidayo which have been botanically described, and all of which are known generically as Golden Rod. Many of these species possess to a greater or less extent aromatic properties, and some of them are so abundant in certain localities as to be regarded as common weeds.—Schimmel's Report.

EMULSION LIKE FEMMENT IN FUNGI.—A ferment analogous to emulsion has been discovered by E. Bourquelot (Jour. Phar.) to exist in fungi parasitic on trees. Since glucosides are generally present in the bark and cambium of trees, and seeing that parasitic fungi flourish more on trees of that description (willows and populars, for instance), the author is of opinion that this ferment enables them to obtain by its assistance the glucose necessary for their support.

Mr. Josef Wenner, a Bohemian glass manufacturer, has written to the Government asking for information as to the advisability of removing his factory to Canada. If he does, he will bring 500 families with him, the heads of which are employed in his works.

Pharmacy Abroad.

Women Pharmacists in Norway— Norway has just acquired its first womanpharmacist, in the person of Miss Helga Eide, who has passed her pharmaceutical qualifying examination in Christiania, and received her degree with the qualification "valde bene." At the same time Miss Helga Spanberg (also as the pioneer of her sex), acquired the medical degree.

* *

THE PHARMACEUTICAL SOCIETY OF NEW South Walks. - The annual meeting of this Society was held in Sydney on March 20. The Secretary read his report (the eighteenth) to a gathering of ten, Chairman included. The subscriptions, it was stated have been "cheerfully paid," and the Society is richer by 93t. 15s, than at the time of the publication of the previous balance-sheet. Its assets are now worth 5671. 14s. 9d. Twenty-one new members joined during the year, representing an increment, in numbers, of twenty. The President, Mr. Brothwood, in his address, congratulated the Society upon having passed through the financial crisis in the colony's affairs almost unscathed, but times are still so much out of joint that any social gathering or pharmaceutical dinner is out of the question at present. There is an unfortunate tendency among N. S. W. pharmacists to engage apprentices without much regard to their mental equipment or their suitability, in other respects, for a pharmaceutical career. As a result of this practice, the proportion of failures at the pharmaceutical examinations is exceedingly large. The long-delayed Pharmacy Bill still hangs fire. The Parliamentary bigwigs have been interviewed for the purpose of getting them to facilitate its passage, but all in vain. The Labor party are now to be called to the rescue. "We have reason to believe," said the President, "that the Labor section of the House will be favorable to the measure, and there is little doubt that if the Bill were taken in hand by the Government it would pass in a comparatively short time. We can only account for the delay in two ways-(1) That there must be some adverse influence at work, of which we know nothing, or (2) that the hands of the Government are so full that it is utterly impossible to have the Bill brought forward."-Chem. and Drug.

The New Roumanian Pharmacopolia.—The third edition of the Roumanian Pharmacopolia has been already referred to in these columns, but a more detailed notice is needed of it. Whilst the fact that the language is one of Latin origin renders the text easy to follow to foreigners, in sense, the literal meaning is, of course, not easy to make out. Hence it is regretable that—so our continental friends think—a Latin translation of the methods should not have been added. The Pharmacopolia is divided as follows:—Preface.

materia medica, chemical products, galenical products and veterinary preparations. A full series of tables is added. Alphabetical order is adopted in all the parts. Under the 170 substances described, each plant has the rules which should guide its gathering, selection, drying and age, appended. The microscopic and anatomical characters of the plants and starches are fully detailed. For the balsams, gums, resins, fatty bodies are given-in addition to the density, the point of fusion and solubility -a series of tests to determine their parity and to detect adulterations. The estimations of opium and cinchona are substantially the same as those of the French Codex. The following five plants, not in this latter, figure in the Roumanian Pharmacopaia: - Cascara sagrada, Hamamelis virginica, Hydrastis canadensis, Kola nuts and Strophanthus hispidus. The description of their preparations (wines, tinctures, syrups, &c.) are described here, instead of under the heading of galenical preparations, which would have been preferable. It is rather sur-prising to see included the following chemical preparations: White oxide of antimony, ferrous chloride, lactate of quinine and hypochlorite of sodium. Amongst "new" remedies, mostly synthethic, we may mention—acetanilide, antipyrin, kairine, cotoine, coumarin, exalgin, phenacetin, icthyol, iodol, saccharin, satol, soziodol, sulphonal and thallin.-B. and C. Druggist.

Some Reasons for Daily Exercise.— 1. Any man who does not take time for exercise will probably have to take time to be ill. 2. Body and mind are both gifts, and for the proper use of them our Maker will hold us responsible. 3. Exercise gradually increases the physical nowers, and leaves more strength to resist sickness. 4. Exercise will do for your body what intellectual training will do for your mind-educate and strengthen it. 5. Plato called a man lame because he exercised the mind while the body was allowed to suffer. 6. A sound body lies at the foundation of all that goes to make life a success. Exercise will help to give it. 7. Exercise will help a young man to lead a chasto life. S. Varied, light and brisk exercise, next to sleep, will rest tho tired brain better than anything else. 9. Metal will rust if not used, and the body will become diseased if not exercised. 10. A man "too husy" to take care of his health is like a workman too busy to sharpen his tools.—Glasgow Herald.

MIGRAININE.—A mixture, according to the Prager Rundschau, of antipyrin, citric acid and caffeine in definite proportions. It may be regarded as a citrate of antipyrin and caffeine, though it is doubtful whether it is a true chemical combination or not. Overlach states that he has employed it against migraine for over five years, with highly gratifying results. According to this author it is valuable in he daches of all descriptions and in influence, grippe; etc. The dose is 1 gm.

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Formulary.

COLORLESS IODINE OINTMENT.

Iodi									gr.	XX.
Potassii iedidi	٠			•			•		gr.	iv.
Sodii sulphitis								 	ğr,	sl.
Aquio									11. 8	3.

Rub the chemicals with the water until the solution becomes colorless. Then add:

Adipis benzoati 3 j.-M.

—Atlanta Clinic.

RUSSET-SHOE POLISH.

(1.)	Beeswax1 Oil of turpentine4	part parts
(2.)	Oil of turpentine20 Yellow wax 9	parts
	Soap 1 Boiling water 20	part

Dissolve the wax in the turpentine on a water-bath; dissolve the soap in the water; mix the two solutions. Stir until cold.

(3.) Annatto Gamboge	4 ounce.
Catechu 1	ounce.
Acacia	
Water q.s.ad,40	

Rub the annatte and gamboge with the whole of the acid and a portion of the water, and add this to the remainder of the water previously mixed with the catechu and acacia.—Bull. Pharmacy.

CELLULOID VARNISH.

Pyroxylin (soluble gun cotton)	
Ether	7 grains.
Camphor	3 grains.

Pour the other over the pyroxylin, add the alcohol and finally add the camphor.

This varnish may be colored by the addition of anilines. It is particularly adapted for covering paper labels.

GELATINA ZINCI CARBONATI.

(Zinc. Carbonate 6	elatin.—Deitemen.)
--------------------	--------------------

Zinc sulphate	3 ounces.
Sodium carbonate	3 ounces.
Glycerin	
Gelatine	. I ounce.
Distilled water, sufficient qua	intity.
	-

Dissolve the zinc sulphate to a clear. solution in 200 grammes-20 fl. ouncesof distilled water. Dissolve the sodium carbonate in 200 grammes-20 fl. ounces -of distilled water, filter each solution, mix and wash the resulting precipitate until free from sulphate. Place this in a cylindrical vessel, the bottom of which is covered by a linen cloth. Allow to drip and pour the glycerin upon the precipitate. Collect the liquid that drips off and use this to swell the gelatin. Now weigh the mixture of glycerin and precipitate, also weigh the gelatin solution, mix the latter with the precipitate, warming gently, and lastly add sufficient distilled water to make the whole weigh 100 grammes-10 ounces .- Amer. Druggist.

GLACIALIN.

(Milk preserving powder.)

Boric acid, powdered600 grains. Sodium bicarbonate......900 grains.

Add 1 gramme—15 grains—as much as would be held on the point of a small

table-knife, to one quart of milk, then boil the milk for at least a quarter of an hour.—Pharmaceutische Centralhalle.

REMEDY FOR PIMPLES.

M. Petrini, pharmacist of Galatz, recommends the following, which will prove an excellent seller as a cosmetic preparation against pimples:

Mix and dissolve.

Put the following directions on the bottle: "If there are any pimples containing pus-pustules— open them and press out the matter. Apply the preparation with a camels' hair pencil for three consecutive days, letting each layer remain in place while the succeeding one is applied. At the end of five or six days the covering will detach itself and fall, or may be pulled of. If the pimples still remain, repeat the operation a second, or even a third time." Three applications usually cure the worst case of pimply acne. Where the pimples are few and diffused each can be treated separately.

MEERSCHAUM CEMENT.

A cement that will join meerschaum may be prepared by dissolving casein in solution of sodium silicate—water glass—and stirring into this calcined magnesia. This must be used at once. The casein is prepared by allowing perfectly skimmed milk to curdle, filtering off the whey and washing the casein residue with water.

PASTE FOR CLEANING SHOW WINDOWS.

Cut up fine two parts eastile soap in three parts of boiling water and dissolve. To the solution add four parts of prepared chalk, three parts of Vienna chalk and two parts finest tripoli. Stir thoroughly homogeneous, put into molds and let set. Another formula is as follows: Three parts castile soap, four parts boiling water, two parts jewelers' rouge, five parts prepared chalk and three parts burned larts horn. Mix in a similar manner.

An Ionoform Emulsion for injection into tubercular fistules is prepared readily according to Lucy, as follows: 3 parts iodoform are triturated with 1 part powdered starch, 20 parts glycefin and 12 parts water added, and the mixture warmed slightly. This emulsion is perfect and permanent.

Insecticides.

FOR PLANT LICE AND SLUGS.

,			 	•	 •		
Staphisagria se	cd						 5,0
Quassia chips							 -25.0
							\$50.0

Boil down to three-fourths of the original volume. After cooling, strain and apply to the plants afflicted with lice and aphides by means of a syringe or watering pot.

KEROSENE INSECTICIDE.

(U. S. Dep. Agriculture.)

Kerosene	 67.0
Soap, common or whale of	33.0
Water	 33.0

Dissolve the soap in the water heated to boiling, and then add boiling hot to the kerosene. Make into an emul sion by churning by means of a force pump and spray nozzle for 5 to 10 minutes. Milk may be substituted for the soap solution. This insecticide acts by contact and is applicable to all nonmasticating insects, and also to many of the mandibulate insects when arsenites are not advisable. For scale insects, dilute with 9 parts of water; for most other insects, dilute with 15 parts. In the latter proportion this kerosene emulsion is also employed against underground insects and white grubs. It is washed down at frequent intervals for several days with large quantities of water.

BENZIN INSECTICIBE.

Ben	zin, deodorizel	.fl. oz.	16
Oil	cedar	II. oz.	1
Oil	wintergreen	.11. 04	. 1

This is certain destruction to cockroaches, bedbugs, fleas, ants, and other insects. This mixture is said to greatly resemble Kern's Insect Annihilator.

GRASSHOPPER EXTERMINATOR, (Landwirthsch, Versuchsstation.)

ı.	Soft soap 16
	- Ammonia
	Water
<u>?</u> .	Crude carboile acid
	Soft soap
	Kainite 10
	Water

Two liters of either mixture will suffice for each square meter of soil. The soil should subsequently be plowed in order to destroy the eggs of the locusts. Kainite is the impure Strassfurt potassium and magnesium sulphate.

GERMAN INSECTIFUCE.

Sodium borosalicylate	,					. 2.(
Decoction quassia						.98.0

This bitter solution, in Germany known as liquor insecta fugans, is claimed to be one of the very best applications to ward off biting insects of any kind.—Western Druggist.

MOISTURE ON THE COVER-GLASS.-The cause of a deposit of moisture on the under side of the cover glass must be sealing up before the object or the base on which it lies is thoroughly dry, or perhaps through the ring not being cemented properly on the glass stip, and so allowing the medium in which the finishing cement is dissolved to get through into the cavity in the cell in which the object lies, and condensing on the cover. The cure: With a sharp knife scrape off the ring of cement which lies on the surface of the cover-glass, also slightly down the side, about the thickness of the same; then warm the cover-glass slightly over a small spirit-lamp, moving it about to prevent cracking it, and it should be then easily removable with the knife without injury either to the glass or object; then, before replacing, take care that the object is thoroughly ary. If the ring springs off instead of the cover-glass only, dry thoroughly; then put just sufficient cement underneath to attrch to glass, and let dry thoroughly before finishing off. Microscope.

Photographic Notes

Mixtol.

Dr. Ch. Decaux, of Caen, has lately published a formula for a compound developer, which no doubt will meet with the approval of the most pronounced amateur.

Boiling water	1000 ccm,
Sulphite of soda	120 grams.
Hydrochinone	15 grams,
Eikonogen	
Red prussiate of potash	20 grams.
Carbonate of potash	75 grams.
Caustic potash	lő grams.
Bromide of potassium	l grain.
Glycerine	10 di ops.

For instantaneous exposures the above concentrated developer can be used with but a small addition of water. For time exposures 3 parts Mixtol to 2 parts water. Above solution keeps well, and according to the learned compounder can be used regardly. P. S.—A leading Philadelphia amateur, who dropped into our sanctum while we were translating the above states that in his experience with mixed developers, he would say that if 10 grams Metol (Andressen), 5 grams glycerine (Haufl), and 25 grams carbonate of soda (C. P.) were added to above it ought to be an ideal developer.—Am. Jl. Photo.

Living Photographs.

The latest sensitive plate for photography, is a film of living bacteria. At a recent lecture at the Royal Institution, Professor Marshall Ward showed a photograph taken on such a plate. It consisted of a bit of landscape, rather closed in with trees in the background, and with banks of grass and brushwood in front. It was a fair average photograph. The lights were formed where the bacteria had been killed by light during the exposure. The trouble, however, is that one cannot "fix" such a negative, because the living bacteria-which form the shadows-are most positive in their determination to live, and spread themselves over the gelatine occupied by the dead bacteria, the result being that the photograph grows more "fuzzy" day-by day .-- Chemist and Druggist.

Development.

The Eastman Company have been for some time at work upon the partial development process as applied to gelatino-chloride paper, for though the published formulae were applicable to Solio paper, the Company thought that something still better and simpler was possible. They now publish the result of their researches, which is given below, and in a letter accompanying the circular inform us that they consider the results even superior to those obtained by printing-out. The time may be from one-twentieth to one-fourth of that required for printing-out, and the developing instructions are:

DEVELOPER. -Dovelop until print shows all the detail and about half the strength required

in a finished print; this will take ten to thirty minutes

SOLUTION NO. 1.

Hydrochinon	oz, favd.) - 1 part.
Sulphite soda	
	l oz. (avd.) — - 2 parts.
	2 oz. (avd.) - 4 parts.
Water	4 oz. (<u>4 gal.)</u> 128 parts.
501.UT	on no. 2.

Caustic soda 1 oz. (avd.) 1 part. Water 10 oz. (1 pint) 64 parts. Solution no. 3.

Tamic acid . S grains 1 part, Water 1 ounce 60 parts, To develop 10 or 12 prints take

The print will, when first put in the developer, fade away to a pale yellow; then will slowly develop up to a point showing about as much detail and about one half the strength as a finished print, remaining yellow, however; if the developer works too fast dilute with water.

As fast as developed throw prints into a solution of Acetic Acid, 3 drams per gallon of water. Wash five minutes in frequent changes of running water; then tone in combined bath as usual. No extra fixing.

Increasing Contrasts in Photographs.

According to the Scientific American, if a negative is very weak, and it is desirable to increase the contrast, print until the shadows are darker than is desired in the finished picture. There is quite a little latitude in the printing, and experience will soon teach the right amount. Tone as usual, but bear in mind that under the following treatment the silver, not the gold, is dissolved, so that the finished print will have the appearance of having received further toning. If an absolutely black and white picture is desired, the toning should be carried tolerably far.

After toning, immerse in the following, which should be made up fresh for each batch of prints:

Leave in this from one to five minutes, according to the contrast needed. The time cannot be told accurately by the appearance of the prints, for they are reduced very little in this solution.

After removing, wash slightly and place in fixing bath, which is made as usual, and in the case of solio paper use the formula given by the makers. In the fixing bath the prints rapidly become lighter, and if they have remained long in the previous bath the contrast produced will be very great. Leave in the fixing bath perhaps a little longer than usual, to insure the removal of all the silver salt. When fixed, wash as thoroughly as usual.

If in the ferricyanide solution the nitric acid be omitted, the print may be left in the solution until it assumes the desired shade, and it will not be reduced any further in the fixing baths. The objections to omitting the acid are: The print is almost sure to be discolored, the grain of the paper is liable to show, the coating of the paper is sometimes eaten off in places, and it is more difficult to get the required contrast.

The action of the ferricyanide of potassium without the nitric acid present is to form with the silver a soluble double cyanide; but when the acid is present, it probably breaks this up, forming an insoluble cyanide, which afterwards dissolves in the hypo solution.

Either under or or over-exposed negatives can be made to yield quite presentable pictures by this method, and it would be of value whenever pictures with great contrasts are required, as for wood engravings.—Amer. Jour. Photography.

To Print in a Background.

Employ a light background in taking the print, so that when printed it appears on a plain and slightly toned paper. The figure is then painted over with some non-actinic water-color—gamboge, for example, so as to protect it from light in the second printing. When the color is dry, the print is exposed behind a landscape negative, care being taken that it is not deeply tinted. In washing the print prior to toning the color is removed, leaving the paper perfectly clean.

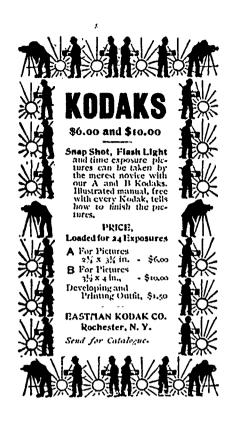
To Make Saturated Solution.

Get a glass funnel with fairly long stem, and a bottle provided with ring of cork and glass stopper [such as Rose's lime-juice cordial bottles]; pass the funnel through the ring, and fill the bottle with water until it touches the end of the stem of the funnel, then run the funnel down tight into the cork ring. Put in the neck of funnel a large crystal of the salt to be dissolved, and pile up crystals over it, then add just sufficient water to reach above the big crystal. The arrangement is then self-acting, only requiring crystals to be placed in the funnel as they are dissolved. For larger bottles, an india-rub-ber ring from a soda-water bottle round the stem of the funnel answers equally well—Pacific Coast Photographer.

Draining Racks.

Take a piece of board, say 20 by 6 inches, and, with a marking gauge set to to 1 inch, draw two lines along one surface of the wood 1 inch from each edge, then at intervals of about 1½ inches draw lines across the board; where the lines intersect drive in wire nails, leaving them sticking up about two inches. The negatives lean against one pair of nails and are prevented from slipping by the pair in front, which again support another negative. Of course, caro must be taken that the film side of the negative does not come in contact with the nails.

To preserve paste add to each liter, before boiling the starch, 0.1 gram of oxynaphthoic acid.



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Nurse Wilson's Soothing Syrup.

Clark Berby's Condition Powders.

Wright's Vermiling.

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Hunt's Hair Vitalizer.

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PRICE LISTS SENT ON APPLICATION.

Photographic Chemistry.

One of the leading exponents of photography said of it the other day that "as ordinarily practised it is an empirical art. Although it is founded upon, and intimately connected with, certain branches of chemistry and optics, very few photographers know anything of these sciences." We may go further and say that comparatively few of those who have such knowledge, and take up photography as a pastine, ever think of applying their science to the elucidation of the mysteries, or the improvement of the processes of photography. We think it appropriate, in publishing to day the report of our postcard photographic competition, to emphasise these statements, and to call the attention of pharmacists to the field of interesting chemical study which is open to them in photography, and the possibility there is of combining the pleasures of research with a profitable branch of business. Few chemists who take up the business in photographic materials do not at the same time dabble in the art themselves, and it is their experience in the dark room which should furnish them with much food for thought, problems for experiment, and special information for their customers. The dry plate is the first problem, and one worth a great deal of study. How few ever think what it is! Still fewer, if any, know what it is. The method of preparation is simple enough. A solution of gelatine and potassium bromide is made, and rendered faintly acid with hydrochloric acid, or this acidification may be omitted. Then a solution of silver nitrate, plain but sometimes ammonaical, is added and followed in some cases by an alkaline iodide, and by more gelatine. The mixture, or emulsion, as it is called, is brought to a boil, and upon the length of boiling depends the sensitiveness of the dry plate prepared from the emulsion. After the boiling the mixture is allowed to set for twenty-four hours, more or less; it is then sifted, and the shreds are washed with water to free it from soluble salts. Obviously, in the double decomposition of silver nitrate and potassium bromide, soluble potassium nitrate is formed, and how it is possible to remove this by washing a refractory and amorphous substance like gelatine is beyond the pharmacist's ken or anybody else's. The dry plate, then, is composed of gelatine, silver bromide, and maybe silver chloride and iodide, plus an indefinite amount of other chemicals introduced in the course of manufacture and not removed by Difficulties are continually washing. cropping up in the path of the amateur photographer, such as spotting, fogging, staining, &c., of the plate, which no external agency can explain, and which may be traceable to interactions of the substances composing the sensitive film. We are apt to forget that substances which are extremely prone to change under the influence of light are equally changeable-frequently more changeable

-under chemical contact; in fact, there is nothing more uncertain than the chemical molecule, and it is to its uncer tainty that AgBr owes its place in photography. Here, then, is the pharmaceutical chemist's first problem-how to introduce into the sensitive film silver bromide only, with gelatine and water as the mechanical agents for spreading the particles of the sensitive salt. It is a common notion that the sensitiveness of a plate depends upon the amount of silver in it-the more silver the more rapid the plate. On this point there has been quite a flutter in photographic circles lately, resulting from analyses of the more popular plates showing that the amounts of silver bromide present were variable and inconstant. The analytical data have been suppressed, and a flood of apologetic reasoning has been poured out in astification of the higher charges for the more rapid plates, It seems that we pay for the greater care required in the manufacture of the rapid brands. That is perfectly justifiable. But what are the chemical or physical conditions which determine greater rapidity? Mr. Chapman Jones says that, given certain physical conditions, "the plate with the smallest amount of silver would be the best," which view necessarily implies that the plate containing the smallest molecules of silver bromide is the best. How these may be produced is a problem which can best be solved by the study of such researches as those which Professor Ramsay communicated recently to the Chemical Society. It is remarkable that sensitiveness of the film is increased by boiling the emulsion, a circumstance which favors aggregation rather them disintegration; but does the presence of the gelatine alter the common rule? It is unnecessary to deal at any length with the change which occurs in the silver bromide on exposure to light further than to point out that the formation of a sub-bromide, Ag₂Br, is inconsistent with chemical theory, and that it is more probable that an oxysalt, AgoOBr, is formed. Here, again, there is room for research. Whatever the change may be, the action of the developing agent is to complete it as far as carrying reduction of the silver salt to the metallic stage. In this connection the matters of greatest practical importance to the photographic chemist are the preparation of stable developing solutions, and proper appreciation of the functions of the developer, the accelerator, the restrainer, and the solvent. These matters are fully treated in the popular books on photography, and a specially interesting article on the subject is contained in the "Dictionary of Applied Chemistry." We would call attention to the importance of the use of sulphites in developers, and point out that of the three, sulphite, bisulphite, and metasulphite (or anhydrosulphite, erroneously called metabisul phite), the last is far and away the best for photographic purposes. The sulphite is commonly used, but it is extremely unstable, and is often nothing else than a

mixture of sulphate and sulphite. These sulphites are used for preserving pyrogallol and other solutions, they have also a wonderful influence in preventing stain ing, both of the gelatine and the lingers, but the action of metasulphite, especially as a restrainer, does not appear to have had sufficient study, nor has its exact equivalent to good sulphite been experimentally worked out. Three grains are said to be equal to eight grains of sulphite (we refer now to the sodium (salts, but this statement is based on chemical equivalence. It is unquestionable that the preservation of developing solutions in the uncolored state is of first importance for development, and even when the solution gets into the dish it is desir able that it should be rejected as soon it becomes more than a pale brown color, So far we see that the study of the negative alone involves many interesting chemical problems, and when we begin to tone prints the variations of color and the empirical tricks used in producing them are even more fruitful for research. Chemist and Druggist.

Rise in Mustard.

The rise has not come yet, but it seems inevitable, says the N. E. Grocer. The great mustard seed growing section of this country is California. From that state comes our largest supply. Whatever it does not supply is largely supplied from Europe under ordinary conditions. The mustard seed sowing is done in February. This year there was no rain in California in that month. March passed, and now April is gone and still there has not been sufficient rain on the coast to give any encouragement that the mustard crop (which needs plenty of moisture) will be anywhere near its usual aggregate.

It is estimated that there are about 10,000 bags in California and about 3000 bags in eastern bands. In 1893 the European crop was a failure and the American crop was drawn on largely, and the demand from there still continues. If there should be a good crap there this year, in view of last year's shortage, it will go into home consumption. If the crop there should be a failure, the demand on the American crop would be even heavier than it was last year. With present prospects in California, the scarcity over the world will be very materially felt, and mustard seed will prove excellent property when the picking season opens up this summer and manufacturers find it necessary to cover their wants by heavy operations. - Exchange.

DIPHTHERICIDE IS the name given to a form of chewing gum (gutta percha and damar) contaming, in each tablet, 3, grain thymol, 3 grain sodium benzoate, and 4 grain saecharin. Three or four tablets are to be chewed during the day in all catarrhal affections of the throat, especially as a prophylactic against diphtheria.

Business Notices.

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

The attention of Druggists and others who may be interested in the articles advertised in this journal, is called to the STECIAL CONSIDERATION of the Business Notices,

Archdale Wilson & Co.

Read the special lines advertised by Archdale Wilson & Co. on their page this month.

Rubber Goods.

Three new atomizers have been placed before the trade, the "Beta," "Gamma," and "Delta," manufactured by the Alpha Rubber Co., of Montreal. This Company, who are the makers of the celebrated "Alpha" and "Omega" single and combination syringes, also manufacture a full line of rubber goods for the drug trade. Their goods are first class in material and finish and give general satisfaction wherever handled. See advertisement in this issue.

Hæmoferrum (Blood Iron).

Physicians who employ Iron in their practice should be greatly interested in a new Iron preparation recently introduced to the medical profession by Frederick Stearns & Co., Detroit, Mich., called Hemoferrum (Blood Iron). This is a natural proteid compound aseptically prepared from fresh bullock's blood, and put up in 3 grain pilloids (that pills), with a highly soluble coating. F. Stearns & Co. claim their Hæmoferrum to be free from all the objectionable features hitherto attending the administration of Iron in other forms, it being extremely soluble, pleasant to the taste, agreeable in odor, is readily and easily assimilated, and neutral in reaction. Furthermore it is non-constinating (a valuable characteristic), nonirritating and non-poisonous, even in large

Borax, Its Sources and Uses.

Borax has recently been applied with considerable success to the manufacture of optical glass at Jena. This glass has very high refractory properties, and has been very successfully applied to the manufacture of lenses for microscopes and for photography.

Borax is now used in glazing china and earthenware so extensively all over the world that the consumption in these industries at the present time exceeds any of the others. The principle adopted is to form a fusible glass of borax and other materials, and fuse it on to the baked earthenware. Many formulae have been published of the composition of this frit, but almost every large firm have their own formula.

In the manufacture of Parisian cement the borax is added for the purpose of enabling cement, when set and moulded, to take a polish-

In the chemical industries it is used in the manufacture of soap, colors, drysaltery, and cosmetics; also in photography and timber preserving. England has no borax fields or mines, and at present the material, either in the manufactured state or that from which it can be manufactured, comes from Thibet, Italy, Chili, California, and Asia Minor. Thibet is the most ancient source, and under the name of "tincal" borax is brought from the neighborhood of Yam-dokeho to Calcutta, from which port the source of origin is distant between 400 and 500 miles almost direct north. At the present time there is railroad communication as far as Darjeerling, or a distance of 300 miles.

There is also a borax refinery at Jagadhri, 37 miles south-east of Umballa, in Northern India—all the borax which is exported from India being brought from the Trans-Himalayan regions.

Various estimates have been made of the consumption of borax throughout the world, and one of the methods of ascertaining this is by referring to the productions of different countries and converting the different materials in their equivalent of borax. We thus find the production to be as follows:

Asta Minor		
Thibet	.2,000	4.6
Italy	.3.000	44
United States	G,(M)O	••
Chili and Bolivia	3,000	**

22,000 tons.

As the American and Asia Minor supply has been developed within the last twenty years, it will be seen that the uses of borax, to the extent of 14,000 tons per annum, have increased during that period, or nearly 300 per cent., and it may be taken for certain that its uses will still further extend.—For. and Col. Importer.

Armon, isomeric with betol, is a-naphthol-salicylic acid ester. Its preparation is similar to that of other salols, sodium salicylate, a-naphthol-sodium, and phosphorus oxychloride being heated together to 120° or 130° C., the resulting sodium chloride and sodium phosphate are removed by treating with water, and recrystallizing the residue of alphol from alcohol. It is given in doses of from 0.05 to 1.0 g. as a substitute for salol.

Antiphthisin is a patented scientific secret remedy discovered and named by Prof. Klebs.

Hydrocyanic acid is formed, according to Buris and Evans, in the manufactur of oxalic acid from sugar and nitric acid.

FOR SALE.

A WELL ESTABLISHED Drug Business in a prominent town in New Brunswick. Fishing, humbering and farming district. Best of reasons for wishing to dispose of business. Address "ARELIA," care Canadian Druggist, Strathroy, Ont.

A THREE BARRELED Zinc-lined Coal Oil Tank. Three separate compartments, and each fitted with an iron pump. Original cost \$50; will sell for \$20 each, F. O. B Guelph. Address—"Dauquest," Rex \$31; Guelph; Ont.

SITUATIONS WANTED.

SITUATION WANTED, as Assistant or Manager, by a young man with over seven years experience. Accurate dispenser and good stock keeper. Best references. Just graduated from the O. C. P. Address—Box 267, Tilsonburg, Ont.

SITUATION WANTED by young man with Sive years experience. Graduate O. C. P. Good references. Address—G. A. S., Box 95, Fergus, Ont.

OFFUATION WANTED by a non-graduate of five years experience. Have just lately arrived in this country from England. Has a pretty fair knowledge of all the different branches, as well as a knowledge of dentistry. Salary no object at present. Address—W. WHILE, Springvale, Out.

Law< Taught By Mail

It was the boy on the farm; the boy behind the counter; the boy in the mill; the boy in the lawyer's office; the boy in the bank—the ambitious boy, who first made this method of teaching lawa necessity. The outcome is found in the Sprague Correspondence School of Law,

an institution that gives a thorough legal education, by mail, and helps practicing lawyers to review. The tuition fee is small, the course complete, the examination thorough, the result perfect. Send 10c. for particulars.

J. COTNER, Jr., Secretary. No. 131 Telephone Bidg., Detroit, Mich.

HOW IS THIS?

Something unique even in these days of mainmoth premium-offers, is the latest effort of Stafferd's Magazine, a New York monthly of home and general reading.

The proposition is to send the Magazine one year for one dollar, the regular subscription price, and in addition to send each subscriber lifty-two complete novels during the twelve months; one each week.

Think of it. You receive a new and complete novel, by mail, post paid, every week for lifty-two weeks, and in addition you get the magazine once a month for twelve months; all for one dollar. It is an offer which the publishers can only afford to make in the confident expectation of getting a hundred thousand new subscribers. Among the authors in the coming series are Wilkie Collins, Walter Besant, Mrs. Oliphant, Mary Ceeil Hay, Florence Marryat, Anthony Trollope, A. Conau Boyle, Miss Braddon, Captain Marryat, Miss Thackerny and Jules Verne. If you wish to take advantage of this unusual opportunity, send one dollar for Stafford's Magazine, one year. Your first copy of the magazine, and your first number of the fifty-two movels (one each week) which you are to receive during the year will be sent you by return mail. Remit by P. O. Order, registered letter or express. Address—

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Excels any 25 cent Soap on the Market. Nets the Retailer a good

When sold at a very popular price it will not remain on your counters. Try a sample lot-

The quality of this scap is GUARANTEED. See that the name "BUTTERMILK" is printed as above "in green tronze," and the name "Cosmo Buttermilk Soap Company, Chicago," in dian ond on end of package. Heware of imitations.

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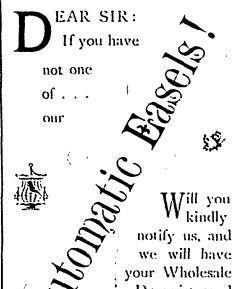
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AN IDEAL FAMILY MEDICINE. For Indigestion, illiousness, Headacke, Constitution, Had Complexion, Officials discussed and all disorders of the Stomach, Liverant flaues. no samples soldies in the Co., New York,



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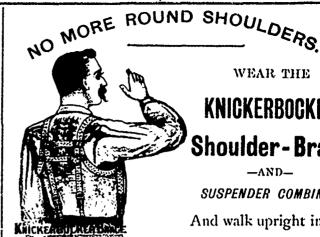
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And walk upright in life.

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Sold by Druggists, Send chest-measure around

Sold by Druggists, Send chest-measure around the body. Address,



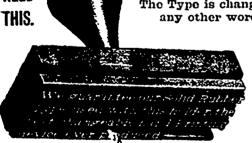
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ASE, OR DISCOUNT for Rurland's Old Pominion Cresent Brand CINNAMON PILLS. Shallow rect-angular metalic boxes scaled with crescent. Absolutely safe and reliable. Refuse all spurnous and harmful initiations, Upon receipt of Six Cents in stamps we will reply by return mail, giving full particulars in plain envelope. Address,

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CAN I OBTAIN A PATENT? prompt answer and an bound opinion, will N & CU., who have had nearly fitted experience in the patent business. Computer Street, confidential. A Handbook committee concerning Patents and how

Books & Magazines.

We are in receipt of the initial number of Monatsblatt des New Yorker Deutschen Apotheker Vereins, the latest Pharmaceutical exponent published at 794 Sixth Avenue, New York City.

The Delineator.

The July issue of *The Delineator*, which is called the "Midsummer Number," begins a new volume with a most attractive table of contents. The styles displayed are seasonable and, therefore, picturesque and graceful, and the fancy work will please the most fastidious Summer maid or matron.

The Canadian Magazine,

The Canadian Magazine.—This most excellent monthly in its June issue presents a most palatable bill of fare. The contributions are rich in variety, and full of interest to a wide range of readers both in the Dominion and abroad, and furnish entertainment and food for thought in regard to politics, commerce, domestic and social life, discovery, etc. Published by the Ontario Publishing Co., (Ltd.) Toronto. \$2.50 per annum.

Frank Leslie's Popular Monthly.

Frank Leslie's popular monthly for June is notably rich in matter of personal contemporaneous human interest, having a gossipy article upon "Characteristics of Congressmen," illustrated with no less than forty portrait sketches from life, by Gribayedoff and Clinedinst; and some delightfully intimate reminiscences of Gladstone, by Howard Paul, accompanied with eight progressive portraits of the "grand old" Commoner at marked periods of his life between 1852 and 1892.

Scribner's Magazine.

Scribner's Magazine for June contains an article by John Heard, jr., which, for the first time in accessible form in English, tells the tragical story of "Maximi lian and Mexico" in the light of many documents which have recently been published in France. This dramatic recital of an episode which the writer calls "one of Napoleon's Day-Dreams," gives, in that picturesque style which the author has shown in his stories, a perfectly clear account of the event from its conception to the execution of Maximilian.

A Summer Woman's Magazine.

The mother of America's favorite boy hero, "Little Lord Fauntleroy," Mrs. Frances Hodgson Burnett, writes to the mothers of the boys in the June issue of The Ladies' Home Journal upon "When He Decides," in which she points out to what extent mothers should influence their sons in regard to their choice of an occupation. Mrs. Amelia E. Barrsketches the mental implements of the modern women in an article on "Have Women Found New Weapons?" Frank Stockton takes the quaint "Pomona" through some ridiculously funny escapes in this installment of her "travels." Mr. Howells reaches the seventh installment of his literary autobiography, "My Literary Passions." Published by The Curtis Publishing Company, of Philadelphia, for Ten Cents per number, or One Dollar per year

Review of Roviews.

The Review of Reviews for June shows the usual flexibility of that keenly edited periodical in adapting itself to the topics of the month. In its department of Leading Articles it groups together a very remarkable series of digests of important recent essays on various topics perfaming to the political and social status of woman. Moreover, its always varied and curious collection of caricatures illustrating the history of the month is enlivened by a number of cartoons from New Zealand and Australia, some intended to culogize and others to satirize the enfranchisement of women in the New Zealand colony and the unsuccessful woman suffrage campaign in New South Wales. These articles and caricatures are submitted by the Review of Reviews apropos of the great pending discussion in the State of New York.

The Cyclopedic Review of Current History.

Current History for the 1st quarter of 1894 more than sustains the past reputation of this remarkable work as a comprehensive, able, and interesting resume of the world's doings. It contains 265 pages of reading matter, which convey the reader on a flying trip around the world, giving him in clear perspective a birds eye view of the important events of the day in all civilized countries, stopping long enough at points to enable him to get a thorough understanding of all the salient questions, and leaving him with the con-viction that he has been brought into closer touch than ever before with the great life of the world, and is better equipped to read even his daily paper and to form an intelligent estimate on the important topics on which every live citizen should be well posted. Buffalo, N.Y., Garretson, Cox & Co., publishers. \$1.50 a year; sample copies 25 cents, specimen pages sent on application.

Terms Worth Learning.

The younger followers of Pharmacy will find it well worth their while to ob tain a good, exhaustive list of the various classes of remedies and therapentic agents, carefully memorizing the meanings. The U.S. Dispensatory contains such a list, and it can likewise be found in some of the text books. Familiarity with terms like cholagogue, antizymotic, antiarthritic, analeptic, escharotic, hydragogue, siulago gue, and others, is commonly presupposed; but we have had several occasions to observe perplexity where there ought to be perfect conversance with this vocabulary. A little study of this glossary will be well invested. While such a vocabulary may be found complete elsewhere, we give below a few definitions:

Analeptics—Agents employed to restore strength after illness, such as tonics and nourishing foods.

Analysics -Medicines used to allay pain.

Antilithics - Remedies for the relief of calculous affections.

Antizymotics—Agents which destroy disease-germs.

Calefacients-Medicines applied externally to cause a sense of warmth.

Chologogues Purgative medicines which provoke a flow of bile.

Depilatories Substances used to re-move hair.

Detergents Medicines used to clean wounds, ulcers, etc.

Echolics -Substances used to produce abortion.

Errhines Medicines which promote the flow of the masal secretions

Escharotics Caustic substances which destroy the tissues, causing slongling and eschar

Homostitics arrest hamorrhage,

Hydragogues are purgatives which cause profuse watery discharges.

Mydriatics cause mydriasis or dilation of the pupil.

Myotics cause contraction of the pupil.

Oxytocics stimulate uterine contractions.

Revulsants are substances—which, by causing irritation, draw nervous force and blood from a distant diseased part. Bulletin of Pharmacy.

They Want Names.

Frank S. Taggart & Co., 89 King Street West, Toronto, Ontario, desire the names and addresses of a few people in every town who are interested in works of art, and to secure them they offer to send free "Cupid Guides the Boat," a superbly executed water color picture, size 10 x 13 inches, suitable for framing, and sixteen other pictures about same size, in colors, to any one sending them at once the names and addresses of ten persons (admirers of fine pictures) together with five three-cent stamps to cover extense of mailing, etc. The regular price of these pictures is \$1.00, but they can all be secared free by any person forwarding the names and stamps promptly.

Nors.—The editor of this paper has already received copies of above pictures and considers them really "Gems of Art."

Symphonon.—A generic name for the caffeine sulphates or sulpho-calleinates. Thus sodium sulpho calleinate is called sodium symphorol. Similar compounds are lithium symphorol, potassium symphorol, etc. These new remedies, especially sodium symphorol (formerly called nasrol), are employed as valuable diureties in dropsy and affections of the heart and kidney. Lithium symphorol has been used with good effect in rheumatism, calculous affections, and the uric acid diathesis, etc. The strontium salt seems useful in inflammatory conditions of the kidney.

Antikamnia Substitution.

That an unwarranted substitution of one remedy for another is occasionally practiced by some druggists there seems to be no question. That this is morally wrong, is equally true, but that it is frequently a crime in the eyes of the law and as such is punishable seems to have been lost sight of by some of those who may practice it.

But the fact that such have enjoyed immunity from prosecution is no guarantee that they can continue their speculation, even on a small scale, without detection and its consequences.

Frank A. Ruf, of the Antikamnia Chemical Company, has recently been in New York and Chicago, and states that ha has made arrangements for a thorough system of investigation throughout the country, and that counsel has been employed to prosecute, both civilly and criminally, all who persist in furnishing a substitute as and for antikamnia.

The Antikannia Company proposes doing this without vindictiveness, and indeed with none but the most friendly feeling to the druggist. Even where a druggist has allowed himself to be persuaded into the practice, their first step will be to confer with him in the interest of mutual protection. Following that, they propose, if necessary, notifying every physician in the city of the name and address of the offender, with the recom-

mendation to avoid him if honest goods are desired. The substitute obtained by the investigators, together with the name of the dispenser, will be shown to the physician, thus protecting the honest druggist. The more flagrant cases will be given to their attorney for proceedings in law.

Mr. Ruf said in regard to the matter: "We are simply determined that the honest druggist shall be protected; that the physician and patient shall be protected, and lastly, that our own interests shall not be trampled upon."—Druggists' Circular.

DIACETANILIDE.—Bistrzycki and Ulliers obtain this body by digesting monacetanilide (antifebrin) in closed flasks with acetic anhydride at 200°C. By digestion with ligroin, in which the mono-compound is but slightly soluble, the diacetanilide is separated from unaltered antifebrin, and by strong cooling the diacetocompound crystallises out in large cakes. The physiological action appears to be almost identical with that of acetanilide.

Something New.—It is announced in the German pharmaceutical journals as something quite new that a continental chemist has discovered that vermillion is adulterated with cosin. This is quite a well-known fact, and was brought out again in a paper on the subject by Parry and Estcourt in this journal. As a matter of fact, what is sold as vermillionette usually consists of zine white colored with cosin.

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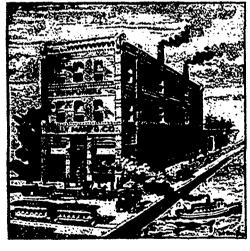
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Canadian Druggist Prices Current:

CORRECTED TO JUNE 10th, 1894.

			•	COLUMN TO COME	. 0 011,	1001.			
	The quotations given represent a	verage	prices	Castor, Fibre, lb	16 00	17 00	Bleached, 1b	45	50
	for quantities usually purchase			CHALK, French, powdered, lb	10	12	Spruce, true, th	30	35
	Dealers. Larger parcels may be			Precip., see Calcium, lb	10	12	Tragacanth, flake, 1st, lb	75	so
	lower figures, but quantities			Prepared, lb	5	6	Powdered, 1b	1 10	1 15
	those named will command an ac	dvance		CHARCOAL, Animal, powd., lb	4	5	Sorts, 1h	45	75
	Arconol, gal	S4 (15	\$4 25	Willow, powdered, lb	20	25	Thus, lb	S	10
	Methyl, gal	1 90	2 00	CLOVE, 1b	25	30	Hrun, Althea, lb.	27	30
	ALISPICE, Ib	13	15	Powdered, lb.	30	35	Bitterwort, lb	27	30
	Powdered, lb	15	17	Cochineal, Honduras, lb	40	45	Burdock, Ib	16	18
	Aloin, oz	40	45	Collopion, Ib	75	80	Boneset, ozs, lb	15	17
	Anodyne, Heliman's bot., lbs	50	55	Cantharidal, lb	2 50	2.75	Catnip, ozs, lb	17	20
	Arrewroot, Bermida, 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
	ALSAN, Fir, lb	45	50	Cuttlefish Bone, lb	35	40	Feverfew, ozs, 1b	53	55
	Copaiba, lb	65	75	DESTRINE, Ib	10	12	Grindelia robusta, lb	45	50
	Peru, lb	2.50	2 75	Dovin's Powden, lb	1 50	1 60	Hearhound, ozs., lb	17	20
	Tolu, can or less, lb	75	<u>\$0</u>	Ergot, Spanish, Ib	1 00	1 10	Jaborandt, lb	45	50
	BARK, Barberry, lb	22	25	Powdered, lb	1 15	1 30	Lemon Balm, He	38	40
	Bayberry, lb	15	18	Ergoris, Keith's, oz	3 00	2 10	Liverwort, German, 3b	38	40
	Buckthorn, lb	15	17	Extract, Logwood, bulk, lb	13	11	Lobelia, ozs., lb	15	20
	Canella, lb	15 25	17 30	Pounds, Ib	14 15	17 20	Motherwort, ozs., lb	20	22
	Cascara Sagrada	18	20	Flowers, Arnica, lb	10 33	60	Mullein, German, lb Pennyroyal, ozs., lb	17 18	20
	Cassia, in mats, lb	18	20	Chamomile, Roman, Ib	30	35		21	20 20
	Cinchona, red, lb	60	65	German, lb.	40	45	Rue, oze, th	30	35
	Powdered, lb.	65	70	Elder, lb	20	22		18	20
	Yellow, lb	35	40	Lavender, Ib.	12	15	Sage, Ozs., in Spearmint, lb	રો 'ડ	25
	Pale, Ib.	40	45	Rose, red, French, lb	1 60	2 00	Thyme, ozs., lb	18	20
	Elm, selected, lb	16	18	Rosemary, Ib	25	30	Tansy, ozs., lb.	iš	īš
	Ground, lb	17	20	Satiron, American, lb	75	80	Wormword, oz	20	22
	Powdered, lb	20	28	Spanielt, Val'a, oz	1 00	1 25		38	41
	Hemlock, crushed. lb	18	20	GELATINE, Cooper's lb	1 20	1 25	Yerba Santa, Ib HONEY, Ib HOUS, fresh, Ib INDIGO, Madras, Ib	13	15
	Oak, white, crushed, lb	15	17	French, white, lb	40	50	Hors, fresh, ib	20	25
	Orange peel, bitter, lb	15	16	Glycerise, lb	16	18		75	80
	Prickly ash, lb	3.5	40	GUARANA		3 25	Insect Powder, lb	25	28
	Sassafras, lb	15	16	Powdered, Ib.	3 25	3.50	Isiyotass, Brazil, lb	2 (0)	2 10
•	Soap (quillaya), lb	13	15	Guy Aloes, Cape, Th	18	20	Russian, true, Ib	6 (0)	6 50
	Wild cherry, lb	13	15	Barbadoes, lb.	30	50	LEGE, Aconite, 1b	25	30
	Brans, Calabar, Ib	45	50	Socotrine, lb	65	70	Bay, lb	18	20
	Tonka, lb	1 50	2 75	Assafetida, lb	25	28	Belladonna, Ib	25	30
	Vanilla, lb	7 50	8 50	Arabic, 1st, lb	65	70	Buchu, long, lb	50	55
	Berries, Cubch, sifted, lb	75	80	Powdered, lb	75	85	Short, Ib	22	2.7
	powdered, lb	S5	90 12	Sifted sorts, lb	40	4.5	Coca, lb Digitalis, lb.	55	60
	Juniper, lbGround, lb	10 12	14	Sorts, Ib	25	30		25	30
	Prickly ash, lb	40	45	Benzoin, Ib	50 9	1 00 20	Eucalyptus, ib	18 25	20
	Buns, Balm of Gilead, Ib	55	60	Gamboge, powdered, lb	1 30	1 35	Hyoseyamus	70	30 75
	Cassia, lb.	25	30	Guniae, Ib.	75	1 00	Matico, II. Senna, Alexandria, Ib	25	30
	BUTTER, Cacao, lb	73	sõ	Powdered, lb	95	1 20	Timevelly, 16	15	25
	CAMPROR, lb	60	65	Kino, true, lb.		0	Stranonium, Ib	20	23
	CANTHARIDES, Russian, lb	2 00	2 10	Myrrh, lb	15	48	Uva Ursi, lb	15	18
	Powdered, lb	2 10	2 20	Powdered, lb.	55	60	Lerems, Swelish, doz.	1 00	1 10
	CATSICUM, lb	25	ŠČ	Opium, Ib	4 75	5 00	Licoliter, Solazzi	45	50
	Powdered, lb	30	35	Powdered, lb	6 50		Pignatelli.	35	40
	CARBON, Bisulphide, lb	16	18	Scammony, pure Rosin, Ib	12 80	13 00	Grasso	30	33
	CARMINE, No. 40, oc	40	50	Shellac, lb	40	45	Y & S-Sticks, 6 to 1 lb., per lb	27	30
	•			•			•		

\$7.6.69 \$2			Hataan 11.	00	40	D A	***	4-
Y & S-Purity, 100 sticks in bor Purity, 200 sticks in bor		75 1 50	Unicorn, lb Valerian, English, lb true		40 25	Bismutii, Ammonia-citrate, oz Salicylate, oz	40 30	45 35
" Acme Pellets, 5 lb. tim		2 00	Virginia Snake, 1b		45	Subcarbonate, lb	2 75	3 00
4 Lozenges, 5 lb, tins		1 75	Yellow Dock, lb	15	18	Subnitrate, lb		2 60
" Tar, Licorice & Tolu, and the Lins	2 00	2 00	Rum, Bay, gal Essence, lb	2 25 3 00	2 50 3 25	Powdered, lb	9 10	10 11
LUPULIN, oz	. 30	35	SACCHARIN, 02		1 50	BROMINE, OZ		13
Lycoropium, lb		80	SEED, Anisc, Italian, sifted, lb		15	CADMIUM, Bromide, oz		25
Mace, lb		1 25 1 75	Star, 1b		40 35	Iodide, oz		03 00 1
Moss, Iceland, lb		1 10	Canary, hag or less, lb		6	Calcium, Hypophosphite, lb	95	1 00
Irish, lb	9	10	Caraway, Ib	10	13	Phosphate, precip., lb	35	38
Muse, Tonquin, oz		50 00	Cardamom, 1b		1 50 35	Sulphide, oz	5 10	6 12
Powdered, lb		· 25	Colchicum		80	Certum, Oxalate, oz	7.7	18
Nutmeds, lb	1 00	1 10	Coriander, lb	10	12	CHLORAL, Hydrate, 1b	1 00	1 10
Nux Vomica, lb	10	12	Cumin, lb		20	Croton, oz	75	80
Powdered, lb	25 12	27 15	Fennel, lb	15 7	17 9	GINOROFORM, Ib	65 25	2 00 30
OINTMENT, Merc., lb & and &		75	Flax, cleaned, lb	33		Ciscuosidine, Sulph., oz	15	20
Citrine, lb	45	50	Ground, lb		5	COCAINE, Mur., oz	7 00	8 50
Paraldenyde, oz		18 25	Hemp, lb		6 12	Correr, Sulph. (Blue Vitrol) lb. Iodide, oz	65	8 70
Powdered, ib	$\overline{25}$	30	Powdered, Ib	15	20	Corperas, Ib	ũ	š
Pircu, black, lb	.3	4	Pumpkin,	25	30	ETHER, Acetic, lb	75	80
Bergundy, true, lb	10 2 25	$\begin{array}{c} 12 \\ 3 \ 25 \end{array}$	Quince, lb	65 8	70 9	Sulphurie, Ib	40 1 00	50 1 10
PLASTER, Calcined, bbl cash Adhesive, yd	12	13	Strophanthus, oz	50	55	Exalgine, oz	25	30
Belladona, lb	65	70	Worm, lb	22	25	lodine, lb	5 00	5 50
Galbanum Comp., lb	80	85	Seidlatz Mixture, Ib	25	:30	Ioporoum, lb		7 00
Porry Heads, per 100	25 1 00	30 1 10	Soar, Castile, Mottled, pure, lb., White, Conti's, lb.,	10 15	12 16	Inpot, oz	1 30 1 00	1 40 1 10
Rosis, Common, Ib	23	3	Powdered, lb	25	35	Carbonate, Precip., Ib	15	16
White, lb	33		Green (Sapo Viridis), Ib	12	25	Saech., lb	35	40
RESORCIN, White, oz	25 25	30 28	Spermacetti, lb	50) 75	55 80	Chloride, lb	45 13	55 16
Roor, Aconite, lb	22	25	Venice, Ib	iö	12	Citrate, U. S. P., lb	90	1 00
Althea, cut, lb	30	35	WAX, White, lb	50	75	And Ammon., lb	75	SO
Belladona, lb	25 15	30 ° 16	Yellow	40 40	45 6	And Quinine, lb	1 50 18	3 00 30
Blood, lb	27	30	Quassia chips, lb	10	12	Quin. and Stry, oz And Strychnine, oz	13	15
Blackberry, ib	15	18	Red Saunders, ground, lb	5	6	Dialyzed, Solution, lb	50	55
Burdock, crushed, lb	18	20 25	Santal, ground, lb	5	6	Ferrocyanide, lb	55 90	60
Calamus, sliced, white, lb Canada Snake, lb	20 30	35	CHEMICALS. Acm, Acetic, 1b	12	13	Hypophosphites, oz	20 40	25 45
Cohosh, Black, Ib	15	20	Glacial, lb	45	50	Syrup, lb	40	45
Colchicum, Ib	40	45	Benzoie, English, oz	20	25	Lactate, oz	.5	.6
Columbo, 1b	20 25	22 30	German, oz Boracie, lb	10 20	12 25	Pernitrate, solution, lb Phosphate scales, lb	15 1 25	16 1.30
Coltsfoot. 1b	38	40	Carbolic Crystals, lb.	30	38	Sulphate, pure, lb	1 27	9
Comfroy, crushed, lb	20	25	Calvert's No. 1, lb.	2 10	2 15	Exsiccated, lb	8	10
Curcuma, powdered, lb Dandelion, lb	13 15	14 18	No. 2, lb	1 35 65	1 40 70	And Potass. Tartrate, lb And Ammon Tartrate, lb	80 85	85 90
Elecampane, lb	15	iŏ	Gallie, oz.	10	12	LEAD, Acetate, white, lb	13	15
Galangal, 1b	15	18	Hydrobromic, diluted, 1b	30	35	Carbonate, lb	7	٠ ٪
Gelsemium, lb Gentian or Genitan, lb	22 9	25 10	Hydrocyanic, diluted, oz. bot- tles doz	1 50	1 60	Iodide, oz Red, 1b	35	40
Ground, Ib	10	12	Lactic, concentrated, oz	22	25	Lime, Chlorinated, bulk, lh	1	.;; .j
Powdered, lb	13	15	Murjatic, lb	3	5	In packages, lb	6	7
Ginger, African, lb	18	20 22	Cliem, pure, 1b	18	20	Lititum, Bromide, oz	40	45
Po., lb	20 27	30	Nitrie, Ib Chem, pure, Ib	10 <u>3</u> 25	13 30	Carbonate, oz	30 25	35 30
Po., 1b	30	35	Oleic, purified, lb	75	sõ	Iodide, oz	50	55
Ginseng, lb	3 00	3 25	Oxalic, Ib	12	13	Salicylate, oz,	35	40
Golden Scal, lb	75 90	80 95	Phosphoric, glacial, lb	1 00	1 10 17	Magnesium, Cale., Ib	55 18	60 20
Hellehore, White, powd., lb	12	15	Pyrogallic, oz	35	38	Citrate, gran., lb	40	45
Indian Hemp	18	30	Salicylic, white, lb	1 80	2 (0)	Sulph. (Epsom salt), lb	18	3
Ipecac, lb	2 65 2 80	$\frac{2}{3} \frac{75}{00}$	Sulphuric, carboy, lb	2 <u>1</u> 5	2ş 6	Manganese, Black Oxide, lb Menthol, oz	5 45	7 50
Jalap, lb	55	60	Chem. pure, lb	18	20	Mercury, Ib.	90	95
Powdered, lb	60	65	Tannic, Ib	90	1 10	Ammon (White Precip.),	1 25	1 30
Kava Kava, lb	40	90 15	Tartaric, powdered, lb	40	45	Chloride, Corrosive, lb	1 00	1 10
Powdered, lb	12 13	15 15	ACETANILIO, Ib	90 -4	1 00	Calomel, lb	1 15 60	1 20 65
Mandrake, lb	13	18	ALUM, cryst., lb	13	3	Iodide, Proto, oz	35	40
Masterwort, lb	16	40	Powdered, lb	3	4	Bin., oz	25	30
Orris, Florentino, Ib Powdered, Ib	30 40	35 45	Ammonia, Liquor, 1b .880 Ammonium, Bromide, lb	8) 65	10 75	Oxide, Red, lb	1 30 70	1 35 75
Pareira Brava, true, lb	40	45	Carbonate, lb	12	13	Milk Sugar, powdered, lb	35	45
l'ink, lb	75	80	Iodide, oz	35	40	Monemine, Acetate, oz	2 00	2 10
Parsley, Ib	30 20	35 25	Nitrate, crystals, lb	40 12	45 16	Muriate, oz Sulphate, oz	2 00 2 00	$\frac{2}{2} \frac{10}{00}$
Poke, ib	15	18	Valerianate, oz	55	60	Persis, Saccharated, oz	35	40
Queen of the Meadow, lh	18	20	AMYL, Nitrite, oz	16	18	PHENACETINE, OZ	40	45
Rhatany, Ib	- 20 - 75	30 2 50	ANTINERVIN, OZ	1 00	1 10	Phocarpine, Muriate, grain	3 00	6 1 10
Rhubarb, 1b Sarsaparilla, Hond, 1b	40	2 50 45	ANTIPYRIN OZ	2 (0)	1 10 2 25	Physical Phy	1 00	1 10
Cut, lb	50	55	ARSKNIC, Donovan's sol., lb	25	30	Potassa, Caustic, white, Ib	55	60
Senega, lb	55 13	65 15	Fowler's, sol., lb	13	15	Potassium, Acetate, lb	35 15	40 17
Squill, lb Stillingia, lb	22	25	White, lb	35 6	40 7	Bicarbonate, lb	15 14	15
Powdered, ib	25	27	ATROPINE, Sulp., in & ozs., oz	7 00	8 00	Bitrat (Cream Tart.), lb	25	30

Popular Talks on Law.

BY WM. C. SPRAGUE.

Good-Will.

We frequently hear the term "goodwill" used as describing a benefit or advantage existing as a part of or in connection with a business. It is our purpose to discuss briefly the nature of this intangible asset as viewed in law.

It is defined in several cases as the advantage or benefit which is acquired by an establishment beyond the mere value of the capital, stock, funds or property employed therein, in consequence of the general public patronage and encouragement which it receives from constant or habitual customers on account of its local position or common celebrity or reputation for skill or affluence or punctuality or from other accidental circumstances or necessities, or even from ancient partialities or prejudices. This is a definition given by Story and followed in several cases.

Boiled down, this definition would seem to mean simply that the good-will of a business consists in the probability that customers will continue to come to the old place of business. At best, it is the sale of a mere chance, which vests in the purchaser nothing but the possibility that a preference which has usually been extended may continue.

Every sort of business does not of necessity possess a good-will that courts will protect. It has been asserted that good-will has no application to the professions of law, medicine and other learned professions, inasmuch as the business of a professional man has no local existence, and is entirely personal, depending upon the trust and confidence which persons may repose in his integrity and ability to conduct their legal affairs. However, of late sales of professional business have been held to conclude good-will, so that it may be said that the law now recognizes such business as possessing a good-will. Good-will itself, apart from the business, cannot be sold, it being a mere incident of other property, and only capable of being sold in connection with it.

As to its value, this depends entirely upon the circumstances of the case. It may be more or less valuable, according to location, personnel of its ownership, or special advantages in the proprietor's mode of conducting it. Not only may the good-will be sold as any other asset, but also it may be mortgaged or sold under proceedings of court in connection with the property of which it is an incident.

The name of a firm is a very important part of the good-will of a business carried on by the firm. Persons become accustomed to buying at certain houses, or houses in a certain locality or known by a certain name, and being so accustomed, will resort to such places, not with standing a change of awnership. The name itself becomes an intendible asset of more or less

value, according to circumstances. So in the case of trade-marks, which are an important part of the good-will of a business. In parting with the good-will of a business the seller means to part with all that good disposition which customers entertain toward the business identified by the name, trade mark, location, etc. It is because of this value of the name that very many firms exist which do not contain a single member of the individual name expressed in the tirm.

When one sells a business, he does not thereby agree not to engage in a similar business. Contrary to the general view, one in selling his business may agree not to engage in it again, provided there be a reasonable limit to the time and place within which he is not to so engage in the business. If there be no stipulation to the contrary, the vendor may lawfully establish a similar business next door to the one he has sold and invite everybody to come and purchase, although he must not hold out himself as the successor to the business of the old firm. It is generally understood that old customers may be solicited, although several of the older cases hold that they cannot be personally solicited. The tendency of the law, however, is to hold that in the absence of positive agreement the vendor may solicit trade from old and new customers alike either by indirect or direct means.

The sale of a good-will does not transfer to the purchaser any right to use the name where the name is the name of the vendor, unless there is an agreement to that effect. The buyer, can, however, advertise himself as the successor to his vendor.

Where the good will merely pertains to the place of business, a sale of it does not give the right to use the firm name without an agreement to that effect. Sometimes the good-will attaches more to the place than to the business itself, as in the case of the good-will of an inn. The reverse is, however, true in the case of the good-will of a newspaper, where the name makes up the principal part of the value of the good-will. Where the good-will is not mentioned in the agreement of sale of a business, it will be presumed to be included, unless the circumstances are such as to show that only the tangible assets of the business were included.

Formerly, where one member of a partnership died, the good will of the business went to the survivor, but it is now considered as a part of the general assets of a partnership for which the surviving partner must account. He may retain it upon payment of its full value, so held in a Nebraska case. Where several members of a partnership have sold out to one member, they may be restrained from carrying on a rival establishment under a name so similar to that of the first as to mislead and draw off business.

Returning to the matter of value, it may be said that the value of the good will is to be calculated by estimating every advantage to be secured by succeeding to the business without reference in the py-

elusion of any person from egaging in the same business. In one case the value was assessed at one year's average net profits.

The Odour of Benzoic Acid.

Passay, continuing his work on the limits of odonr of various bodies, has made some interesting experiments or benzoic acid and its allies. He finds, too, that in the normal series of fatty acids (Cn H₂nO₂) a regular periodicity obtains in this func tion. Every fourth term, after regular gradations in the preceding three, is inodorous. Stearie acid is one of these fourth terms, and he finds that not only is the acid free from odour, but also the aldehyde and alcohol, and even the ethyl and methyl esters. Benzoic acid, he finds, is also free from odour, whilst the aldehyde, alcohol and esters are very odourous. He prepared benzoic acid from four differ ent sources and by different methods such as the oxidation of toluene, or of natural benzoic aldebyde, and by extraction of gum benzoin and finds that when in the crystalline state the acid, if pure, is quite free from odour. The merest trace of aldehyde or alcohol, of course, will give it an odour .- Comptes Rendus.

Hypodermic Solutions.

An important contribution our knowledge of the properties and decompositions of these solutions has recently been published by Berlioz. In conjunction with Dutlocq, he had used yellow glass to store the experimental solutions in, so that decomposition due to the effects of light might be avoided; but the composition of the solution did not remain unaltered, and the change was different according to the composition of the glass used. A description of the experiments undertaken then follows, and the conclusions arrived at show that many varieties of glass, when in contact with solutions of morphine in fine crystals cause the deposition of pure morphine in fine crystals on the sides of the flask, and thus correspondingly weaken the strength of the solution. The author also insists that in sterilizing morphine solution 110 C. should be the highest temperature reached. - Repertoire de Pharmacie.

A Rapid Method of Detecting Iron in Commercial Copper Sulphate

On 5 cc. of a 20 per cent, solution of the suspected copper sulphate contained in a test tube carefully pour 5 cc. of a 10 per cent, etherial solution of salicylic acid. If iron is absent no coloration will be perceptible at the point of contact of the two liquids, while if iron is present the well known violet color will be observed, the intensity of which will vary with the extent of the contamination. Pharm. Centrh,

Tridia is a gluposido abigined from

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Bromide, Ib	55	60	TARTAR EMETIC, Ib	50	55	Lemon, lb	2 25	2 50
Carbonate, lb		16	THYMOL, (Thymic acid), oz	55	60	Lemongrass, 1b	1 50	1 60
Chiroato, Eng., lb.	25	30	VERATRINE OZ	2 00	2 10	Mustard, Essential, oz	60	85
Powdered, lb	30	33	Zixe, Acetate, lb	70	75	Neroli, oz	4 25	4 50
Clamas II.	75	90	Carbonate, ib	25	30	Openion III	3 75	5 00
Citrate, lb	40	55	Chloride, granular, oz	13	15	Orange, lb.	3 25	3 50
Cyanide, lb	10	12		60	65	Sweet, Ib		
Hypophosphites, oz		4 10	Iodide, oz	13	60	Origanum, lb	65	70
Iodide, Ib		10	Oxide, lb		11	Patchouli, oz	1 75	1 80
Nitrate, gran., 1b	8		Sulphate, lb	9 25	30	Pennyroyal, lb	3 00	3 25
Permanganate, Ib.	50 50	55	Valerianate, oz ESSENTIAL OILS	24)	1)U	Peppermint, Ib:	4 25	4 50
Prussiate, Red, lb	50	55			00	Pimento, lb	2 60	2 75
Yellow, lb	32	35	On, Almond, bitter, oz	75	80	Rhodium, oz	80	85
And Sod, Tartrate, 1b	30	35	Sweet, Ib	50	60	Rose, oz	7 50	10 00
Sulphuret, Ib	25	30	Amber, crude, lb	40	45	Rosemary, Ib	70	75
PROPYLAMISE, OZ.	35	40	Rec't, lb	65	70	Rue, oz.	25	30
QUININE, Sulph., bulk	30	32	Anise, lb	2 75	3 00	Sandalwood, Ib	5 50	9 00
Ozs., oz	35	38	Bay, oz	50	60	Sassafras, lb	75	80
QUINIDINE, Sulphate, ozs., oz	16	20	Bergamot, lb	4 00	4 25	Savin, Ib	1 60	1 75
Salicin, Ib	3 75	4 00	Cade, Ib	90	1 00	Spearmint, lb	6 00	6 25
SANTONIN, OZ	20	2.2	Cajuput, Ib	1 80	1 90	Spruce, Ib	65	70
Silver, Nitrate, cryst., oz	90	1 (8)	Capsicum, oz	60	65	Tansy, Ib	4 25	4 50
Fused, oz	1 00	1 10	Caraway, lb	3 50	3 75	Thyme, white, lb	1 80	1 90
Sonium, Acetate, 1b	30	35	Cassia, lb	1 40	1 50	Wintergreen, lb	3 00	3 50
Bicarbonate, kgs., lh	2.75	3 00	Cinnamon, Ccylon, oz	1 50	1 60	Wormseed, lb	3.50	3 75
Bromide, Ib	63	65	Citronelle, lb	70	75	Wormwood, lb	6 50	6 75
Carbonate, lb	3	6	Clove, lb	1 60	1 65	FIXED OILS.		
Hypophosphite, oz	10	12	Copaiba, lb	1 60	1 75	CASTOR, Ib	9	11
Hyposulphite, lb	3	6	Croton, Ib	1 50	1.75	Con Liven, N. F., gal	1 15	1 25
Iodide, oz	-40	45	Cubeb, Ib	5 00	6 00	Norwegian, gal	1 50	1 60
Salicylate, lb	1 80	2 00	Camin, 1b	5 50	6 00	COTTONSEED, gal	1 10	1 20
Sulphate, lb	2	3	Erigeron, oz	20	25	LARD, gal	90	1 00
Sulphite, 1b	10	12	Eucalyptus, lb	1 50	1 75	Lixsken, boiled, gal	65	67
Somnal, oz	85	00	Fennel, lb	1 60	1 75	Raw, gal	63	65
SPIRIT NITRE, Ib	30	60	Geranium, oz	1 75	1 80	NEATSFOOT, gal	1 00	1 10
STRONTIUM, Nitrate, Ib	18	20	Rose, Ib	3 20	3 50	Onive, gal.	1 20	1 35
STRYCHNINE, crystals, oz	1 00	1 10	Juniper berries (English), lb	4 50	5 00	Salad, gal	2 25	2 40
Sulfonal, oz	31	35	Wood, Ib	70	75	PALM, Ib	12	13
Sulphur, Flowers of, lb.	23	-4	Lavender, Chiris. Fleur, lb	3 00	3 50	SPERM, gal	1 75	1 80
Pure precipitated, lb	$1\tilde{3}^{2}$	20	Garden, Ib	1 50	1 75	Turrentine, gal	60	65
a are jaconjamient marrians	417			. 00	1 10	zom mitaro gat	U()	00

The Standard Brands.

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Drug Reports.

England.

London, May 26, 1894.

In spite of Board of Trade reports concerning imports and exports, the Drug Market is dull and inactive. On the whole, therefore, prices have given away somewhat.

During this week alone, Quinine, Opium, Salicylic Acid and Salicylates, Cocaine and Chlorate of Potash, are appreciably lower.

Tartaric and Citric Acids are also cheaper in the absence of demand.

The searcity of supplies accounts for higher prices in Jaborandi Leaves, and Pilocarpine is consequently dearer.

Menthol is still dear.

Cod Liver Oil firm at the recent advance.

It is hoped that tariff settlements in the States may lead to an early extension in business.

Canada.

Trade is quiet, but a good demand continues for drugs, mostly in small parcels.

Camphor easier.

Opium is weaker. Lower prices anticipated.

Canary and Hemp Seed lower. Some poor samples offered.

Insect Powder unchanged. The flowers are being grown experimentally in California.

Cream Tartar shows signs of advancing.

Menthol higher.

Saltpetre easier.

Cocaine easier.

Cocame caster.

Salicylic Acid easier.

Norway Cod Liver Oil very high. Crop very short.

Vanilla Beans firm at advance.

The Number of Plants in the World.

Nothing brings a greater realization of the recent progress of botany than the way in which the number of known species of plants has been increased in modern times. Four hundred years before Christ, says P. A. Saccardo (translated in *The American Naturalist*, Feb.) Hipparchus was able to enumerate only 234 different species. Even two centuries ago only 5,266 species, as catalogued by Bauhin, were known to the botanist, and a century afterwards, in 1771, the great

Montreal.

Linneus was able to recount but 8,551. At the present time, little more than a century later, there are known to botanists no less than 173,706 distinct species, 105,231 phanerogams and 68,475 cryptogams, of which latter 2,819 are ferns, 4,609 mosses, 5,600 lichens, 39,603 fungi, and 12,178 algae

The Gluttony of Crabs.

A writer in a foreign exchange tells the following story: Having from childhood lived on the seashere, and always hearing the crab held up as the type of gluttony, I determined to try an experiment. September 1, 1893, having captured 165 pairs of crabs, male and female, I built a little pen at the edge of a pool communicating with the sea, and put them in it. I fed them with fish, meat, and other things upon which I knew them to feed, and kept them in the pen until March 4 of this year, or six months. On that day I drained off the water from the pen, and found 207 crabs—165 great big fat males and 42 females, 113 of the latter failing to put in an appearance. I found their claws, shells (carapaces) and debris scattered around the bottom, how-The 42 females that remained were probably too tough for the bucks to