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Canadian Druggist

Devoted to the interests of the General Drug Trade and to the Advancement of Pharmacy.

VOL. VIII.

TORONTO, MAY, 1896.

No. 5

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 month, and all matter for insertion should reach us by the 5th of the month.

New advertisements or changes to be addressed

Canadian Druggist,

112 1/2 RICHMOND ST. WEST,

TORONTO, ONT.

EUROPEAN AGENCIES:

ENGLAND: Aldermay House, 60 Watling Street, London, E. C.

FRANCE: 5 Rue de la Bourse, Paris.

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Feeling the Pressure.

That the action taken by the newly formed Society of Ontario Druggists would make itself felt if promptness and energy were displayed was predicted in these columns, and results so far fully justify our predictions. Not only have a large majority of the offending members in the trade been brought into line, but those outside of it, viz., the departmental stores and general dealers, are experiencing what a joint and determined action of so numerous a body may accomplish in a short time. That these departmental stores especially have felt this is very evident from their frantic endeavors to gain the sympathy of the general public, and to belittle as much as possible the efforts which are being so well directed to bring about a more business like state of affairs. The "shoe pinches" hard; the worn-out, threadbare cries of "400 per cent." profit and "no monopoly" are being made to do duty, and the standard of "drugs at dry goods prices" is being flung to the breeze. In their desperate efforts to obtain supplies, they are using all kinds of subterfuges and adopting methods which, if they are those of the "dry goods," are certainly far removed from honorable business principles.

Foiled, as they have been, in their endeavor to obtain complete lines of patent they are now putting up lines of their own, with the combined idea of injuring the patent medicine manufacturers, some of whom too readily supplied them goods, and the druggist, whose legitimate business they covet.

In the Toronto dailies, not long ago, there appeared an advertisement of The T. Eaton Co. offering Young's Sarsaparilla, with T. Eaton & Co.'s name on it as manufacturers, and price one dollar, but which they were willing to sell to the "bargain"-loving public at 35 cents—in all probability, all, if not more than all, it was worth.

The fact that The T. Eaton Co.'s name

appears on the label does not seem to tally with the fact that they have made "a special purchase of five thousand bottles," nor does the statement afford much satisfaction to those manufacturers, who may have hitherto supplied them by the announcement that "the average Canadian will prefer to pay 35 cents when he knows this simpler and safer than most of the remedies that call themselves 'first class.'"

Many other "dry goods" lines of patents are also being foisted on an unsuspecting public in the same way.

In this there is also a lesson for the proprietary medicine manufacturer and others who have been in the habit of catering for the business of the departmental store. Many of them sought for this trade, and sold at prices which they have refused to grant to a wholesale druggist, under the impression, as some of them stated, that the departmental store would buy more in a month than any half dozen city stores would in a year. Granting this to be the case, they fail to look beyond this, and recognize the fact that in selling these "stores" they were antagonizing an army of druggists throughout the whole of Canada, who could, if they felt so disposed, do more to curtail their sales than any of "the stores" could do to increase them; also losing sight of another fact, that these same "stores" were only using them for their own purposes, and as soon as other lines presented themselves which could prove more profitable they would get the cold shoulder, and then where is the manufacturer, having lost the druggists' influence in the first place, now that of the "stores," what avenue has he left for the disposal of his goods? It is one of those cases where the boomerang is felt, and felt severely.

To Abolish the Department Stores.

A correspondent of the *National Retail Jeweler*, Philadelphia, in a recent number of that journal, suggests the

united action of all business houses in "forming an organization that shall have sufficient power to enact a law in each state" to do away with the great "octopus" which threatens the well-being of the community by the demoralization of business and the consequent ruin of the small dealers. He says:

"To my mind, the selling retail by wholesale houses pales into insignificance when we consider the inroads that the department stores are making into our business. I need not enlarge on that—it would be a waste of time and space. The question is—*What are we going to do about it?*"

"We can do nothing as a single trade; it is a gigantic evil, in that it has already caused and is still causing the ruin of thousands of storekeepers. It is an evil that needs to be met by extraordinary measures.

"Many will say: 'It's impossible to save ourselves—we are all doomed to ruin'; and at once they give up the thought of a struggle, accepting what they consider to be the inevitable. But we would remind them that many seeming impossibilities have been accomplished in the history of the world, and will be again."

"The evil is also a serious matter for wholesalers and manufacturers, whether in the jewelry, dry goods, furniture, or any other industry. As the operations of department stores increase, the wholesaler will be generally ignored, and dealings be made with the manufacturer direct. Many manufacturers will be crowded out, as purchases will then be centralized, as participants in the devastating ruin. We might include the owners of store properties. Many of them are now feeling the pinch."

"What is to be done? Shall we accept the conditions, and do nothing? No, decidedly not. I have a suggestion to make, which will, if acted upon, remedy the evil. Induce all the business houses affected throughout the country to combine, forming a strong organization that shall have sufficient power to enact a law in each state as follows: No person, firm, or corporation in any town or city of over two thousand inhabitants shall carry on a business which can be construed as a department store, that is, a place where different businesses are carried on under one head."

"In Philadelphia, last year (1895), over twenty thousand firms were assessed for mercantile tax. Twenty firms, or less, take the cream of the business. The small storekeepers pay the taxes—the department stores reap the benefit. What would be the estimate for the whole United States!"

The proposition that all business houses, wholesale and retail, should unite in order to secure legislation in this matter is one that deserves consideration, and the fact that the voting power is largely in favor of the small dealer is by no means a small factor in a struggle of this kind. The department store is certainly one of the worst "combines" with which we have to deal, and the individual or the government who will devise a plan to remedy the existent conditions may depend on a hearty support.

Ontario Society of Retail Druggists.

We are glad to be able to report continued progress, both in the interest taken by the retail drug trade and in the additions to the list of wholesale houses who have signed the agreement. The following names have been added to the "Friendly List":

The McDowell, Atkins, Watson Co., Vancouver, B.C.

Langley & Co., Victoria, B.C.

Scott & MacMillan, Toronto, Ont.

J. Stevens & Son (Ltd.), Toronto, Ont.

The Martin, Bole & Wynne Co., Winnipeg, Man.

Powell & Davis Co., Chatham, Ont.

Seabury & Johnson, New York, N.Y.

Canadian Drug Co. (Ltd.), St. John, N.B.

Amongst some of the replies received in answer to the secretary's call for money are the following, which show the appreciation of the trade generally throughout the province:

Evidently on the right track now.

Yours truly,

Rat Portage.

JOS. JOHNSON.

Trust your efforts will meet with the success they deserve.

Yours truly,

Chesley.

A. S. GOODEVE.

Enclosed find one dollar you call for to keep chariot rolling.

Yours truly,

Drumbo.

J. A. MITCHELL.

I have only one remark to make, and that is, keep on with the work, and do not hesitate to call upon me for any necessary funds to carry out the same.

Sincerely yours,

Tilsonburg.

WM. McDONALD.

Trusting that the work which you have undertaken may meet with success.

Truly yours,

Streetsville.

R. H. McCLUNG.

DEAR SIR,—The O.S.R.D. has made

many dollars for me since it started, and I cheerfully enclose \$1.

Yours truly,

Ileseronto.

W. J. MALLEY.

DEAR SIR,—I enclose you one dollar, in response to the call of the executive of the association. It is cheerfully contributed, with the hope you may be enabled to fight a winning battle.

Yours truly,

Guelph.

ALEX. STEWART.

A Pure Acid.

Office of A. R. PYNE, M.B. TOR. UNIV.,
M.C.P. AND S. ONT.,

Lecturer on Practical Chemistry, Woman's Medical College, Toronto; Analyst Medical Health Office, Toronto; Dominion Analyst by Examination.

"This is to certify that I took a sample of acid from a demijohn which they had sold as 80 per cent. acid and found it contained 81.2 per cent. of acetic acid (C₂H₄O₂)."

A. R. PYNE, M.B.,

Dominion Analyst.

This refers to the acetic acid manufactured by Peuchen & Co., Toronto and is a strong endorsement as to the strength and purity of this article.

"House Organs."

F. Stearns & Co., manufacturing pharmacists, of Detroit, define their position on the question of the "house organ" in a way that must commend itself to those who oppose "sailing under false colors," and are in sympathy with proper business methods. This is what they say of their *New Idea*:

"Most publications of manufacturing concerns which pretend to be independent journals are house organs pure and simple, yet by sailing under false colors secure second-class postage rates, and thereby defraud the government of hundreds of thousands of dollars annually. The *New Idea* is our house organ, and as such sails under its true colors, pays 1 cent postage for each copy mailed, and does not pretend to be an independent journal. It is both scientific and commercial, not too much of the one to be detrimental to the other. Forty to fifty thousand copies are mailed of each issue to our customers in the drug trade and to members of the medical profession; none are ever sent to the laity."

The Phenacetin Suit.

Re Phenacetin, regarding which a legal warning has been sent out to the druggists and doctors of Ontario, the case of the Farbenfabriken against Scott & MacMillan, Toronto, for an injunction to prevent the defendants selling this drug, came up before Judge Rose on May 14th, when the Chief Justice ruled to allow the defendants to sell until such time as the trial of the trade mark came up in court, refusing interim injunction which was asked for by the plaintiffs.

Protonuclein..

Tablets. (100 3-grain Tablets in bottle) per doz. \$9.00
 " (1000 3-grain Tablets in bottle) . each 6.75
 Powder. (1 oz. bottles) per doz. 5.00
 " (8 oz. in bottle) each 5.50

REED & CARNRICK,
 30 Wellington St. East, TORONTO.

Duncan, Flockhart & Co.'s

Blaud Pill Capsules

Are soft and flexible Never become hard
 Never become oxidized Never vary in strength

These Capsules are put up in 1, 2, and 3-pill sizes, with or without Arsenic, and can be supplied in boxes of 25 or 100 (each). They are prepared by a unique and original process, which entirely overcomes the tendency to hardening which is so common in the Blaud Pills.

R. L. GIBSON,
 30 Wellington St. East,
TORONTO.



SEASON 1896.

BILLINGS, CLAPP & CO.'S

**IDEAL
 LEMONADE
 and
 ROOT BEER
 TABLETS**

Put up in 10-Cent Bottles

Are the best Tablets we have handled, and have given general satisfaction.

They are to the front again this season.

Price: 85 Cents a dozen or \$10.00 a gross.

For the Soda Water Fountain.

French, Cave & Co.'s Crushed Violet, Red Orange Phosphate, also Tangerette, Lime Phosphiz, Mulford's Pure Grape Juice, Murchison's Acid Phosphate.

Fresh Stock of

Pepsin Chips and Fruit Chips, Tolu Sugar Plums, Sweet Wheat, After Dinner and Celery Pepsin Gums; Heide's Licorice Pastilles, Chapiereau's Cachets, etc.

Adam's Root Beer Extract

15 and 25 cent bottles.

CANADIAN SPECIALTY CO.

38 Front Street East, Toronto, Ont.

FORSALE: 1 Kingery Ice Breaker and Shaver combined for counter

Fruit Juices

H. B. & W.

QUART CHAMPAGNE BOTTLES.

- RED MESSINA ORANGE.
- CHERRY RIPE.
- IMPERIAL SICILY LEMON.
- PINEAPPLE.
- RASPBERRY.
- STRAWBERRY.
- CATAWBA GRAPE.
- BANANA.
- PEACH.
- CALISAYA PHOSPHATE.

CHOCOLATE in 1 lb. and 5 lb. cans.

Bryant's Root Beer

AS OFFERED LAST MONTH

\$9.00 per Gross with Sign.

National Formulary.

Excelsior Egg Preserver.

Vaccine in Sealed Glass Tubes.

Genuine St. Thomas Bay Rum.

Eff. Caffeine and Pot. Brom., 25 " E. & Co."

Syrup of Figs, 50c., " E. & Co."

Insect Powder in Shakers, 15c.

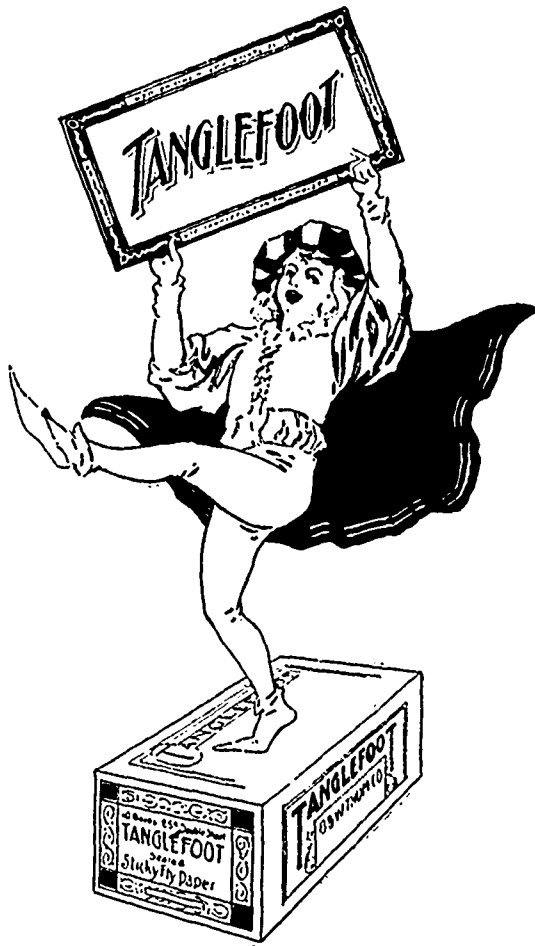
McLachlan's Boiled Sugars.

CORRESPONDENCE RESPECTFULLY SOLICITED.

Elliot & Co.,
 5 Front St. East, = Toronto.

PROFIT FROM
100 to 200
PER CENT.

EVERY JOBBER
SELLS
TANGLEFOOT.



REGULAR
ONE BOX, 45 cents.
ONE CASE, \$4.00.
(10 Boxes)
FIVE CASES, \$3.75.

"LITTLE"
ONE BOX, 18 cents.
ONE CASE, \$2.10.
(15 Boxes)
Size, 5 1/4 x 9 inches.

..TANGLEFOOT..

SEALED

STICKY FLY PAPER.

The Difference....

- Some Leaks at the Edges.
- Some Soaks Through the Paper.
- Some Dries After Short Exposure.
- Some Tears Easily in Opening.
- Some Spoils over Winter.
- Some Allows Flies to Escape.

**TANGLEFOOT
DOES NOT!**

HOLDERS are no longer packed with TANGLEFOOT, but are put up separately in boxes of fifty, which job for \$1.00.

Ontario College of Pharmacy.

SEMI-ANNUAL EXAMINATIONS, MAY,
1896.

DISPENSING.

Examiner—W. MURCHISON. Time allowed, three hours.

MRS. ELY.

R Emulsio Ol. Ricini..... 50%
Mitte..... 3ii.
Sig. cap. coch. magn. dimid. q. q. h

MR. BEGG.

R Emp. Bellad. (reniform) 1½ x 4 in.
Fiat emplastrum, super alutam extendum.
Applicetur regioni renum pro septem dies.

MISS FINN.

R Mitte Emp. Lyttæ pro dextro auris.
Usque ad vesicat bene appl.

J. DUFF.

R Plumbi Acetatis..... gr. iii.
Acidi Tannici..... gr. ii.
Ol. Theobrom. q. s. ut fiat, suppos.
Mitte tres.
Sig. unum statim utend.

MISS MOSS.

R Ferri et Quin. Cit..... ʒss.
P. Glycyrrhizæ rad..... gr. x.
Ft. massa et divide in pil. decem.
Sig. Cap. unam p. c. s. o. s.
Values—25, 20, 15, 20, 20.

CHEMISTRY.

Examiner—PAUL L. SCOTT. Time allowed, two hours.

1. Define the terms: Molecule, Isomeric, Isomorphous, Soap, Anhydride, Amalgam, Glycerol, Critical Temperature.

2. Describe, giving equation, the usual method of preparation of Mercuric Chloride. Give characters and tests for identity and purity of this salt, stating what is indicated by each test.

3. The following mixtures are exploded in a Eudiometer tube:

(a) One volume of Oxygen and one of Carbon Monoxide.

(b) One volume of Oxygen and two of Carbon Monoxide.

(c) One volume of Oxygen and three of Carbon Monoxide.

State, in each case, what gases and what volume of each, measured at the original temperature and pressure, will be contained in the Eudiometer after explosion.

4. Show by means of equations the action of

(a) Ferrous Sulphate upon Potassium Carbonate.

(b) Metallic Sodium upon Water.

(c) Iodine upon Caustic Potash in solution.

(d) Phosphorus upon boiling Milk of Lime.

(e) Nitric Acid and Steam upon Sulphur Dioxide.

(f) Hot Sulphuric Acid upon Charcoal.

5. What weight of a solution, containing 10% by weight of Ammonia Gas, will be required to precipitate all the Iron from 560 c.c. of a solution of Ferric Chloride, containing 200 gm. of Metallic Iron to the litre? Show work.

6. What are the Paraffins? Give general formula of the series, and state in

general terms in what respects the members differ chemically and physically from one another.

7. Explain briefly the principles upon which Spectrum Analysis is based. Under what circumstances will bright and dark lines respectively be produced?

8. Describe the preparation and purification of Chloroform or of Ether, explaining, with or without equations, the nature of the reactions which occur.

9 and 10. Recognition of specimens and oral examination.

Values—12, 10, 8, 12, 10, 8, 10, 10, 20.

PHARMACY.

Examiner—F. T. HARRISON. Time allowed, two hours.

1. Give practical notes on the preparation of three of the following: Wine of Ipecacuanha, Fowlers' Solution, Strong Solution of Acetate of Ammonium, Syrup of Iodide of Iron.

2. Enumerate the impurities or adulterants likely to be present in any three of the following, and state how same may be detected: "Solution of Potash, Spirit of nitrous Ether, Saccharated Carbonate of Iron, Light Magnesia.

3. Name the ingredients and proportion of more active ingredients in: Wine of Opium, Tincture of Rhubarb, Tincture of Kino, Spirit of Chloroform, Syrup of Chloral.

4. Ext. Nux Vom. Describe preparation and standardization. The menstruum used is four of Rectified Spirit to one of Water; would Rectified Spirit alone answer equally well? Give reason for your answer.

5. (a) State method of taking specific gravity of a substance insoluble in and lighter than water.

(b) A substance weighs in air 20 grams, and in Petroleum Ether (sp. gr. .685) 1 gram, what is the specific gravity of the substance?

6. How would you prepare Pure Ether from a sample of Ether containing a little alcohol?

7. What is an Elixir? How may an Elixir of Cinchona be prepared which will not be incompatible with Tincture of Iron?

8. State reasons for the use of: Chloride of Ammonium in Solution of Perchloride of Mercury. Hydrochloric Acid in Liquid Extract of Cinchona. Carbonate of Potassium in Ointment of Iodide of Potassium. Glycerine in Ointment of Iodine.

9 and 10. Oral and recognition of specimens.

Values—12, 12, 15, 12, 4, 4, 7, 6, 8, 20.

BOTANY.

Examiner—D. A. WHITE. Time allowed, two hours.

1. Name the parts and describe the structure and functions of a Leaf.

2. Name and give examples of the different forms of Underground Stems, and distinguish between these and roots.

3. Explain the movement of sap in plants.

4. Define the terms: Anthotaxy, Spathe, Polygamous, Endosperm, Involu-

cre, Hilum, Perigynous, Caryopsis, Caul-
escent, Medullary Rays.

5. Describe difference in structure and mode of growth of the stems of Monocotyledons and Dicotyledons.

6. Name the chief characteristic of the orders Compositæ and Umbelliferae

7. Do plants reproduce themselves in other ways than by seeds? If so, name different ways.

8, 9, 10. Oral; including questions in Cryptograms.

Values—10, 10, 8, 10, 10, 12, 10.

PRESCRIPTIONS.

Examiner—A. R. FRASER. Time allowed, two hours.

1. Translate into English, and describe very fully the manner of mixing, the following:

Recipe—

Oleum Morrhuæ uncias sex.
Creasote "Beechwood" drachmam unam.
Oleum Menthe Piperati drachmam semisse.
Pulveris Acaciæ quantum sufficit.
Aque Gaultheriæ ad uncias octo.

Misce fiat Emulsio pro leges artes de qua cochleare amplum, ex aquæ vel Vini Nerici uncias duas bis die post prandium et post cenam.

2. Translate and give manner of dispensing the following:

R (a) Emp: Bellad. partes tres.
Emp: Plumbi partes quinque.
Emp: Resinæ partes duas.
Morph: Mur. gr. x.

Misce. ft. Emp: super pannum linteum extendere. et. cuti affectæ applica. more dictu.

R (b) Iodoform..... 1 scr.
Sulphur Iodid..... ½ dr.
Cera Alb..... 1 "
Cerat Galeni..... 1 oz.

Misce. ft. Ung: et applicetur paululum auri affectæ omni nocte cum gossypio.

3. What quantity of the following will dissolve in a six-ounce bottle of water:

Codeine, Mag: Sulph: Soda Bicarb: Iodoform, Am: Carb: Acetanilid: Phosphorus: Pot: Iodid.

4. Give full Latin (if required) and English for the following:

Dosi pedetentim crescente, cochleat., pocillum, pugillus., manipulus., cujusl., col., dieb tert. frust. F. Venæ.

5. A prescription reads:

R Codeine..... ʒss gr.
Aq: Dist..... 1 dr.

Take at bedtime, mitte 8 oz.

You keep in stock a solution 1 gr. in 100. How much of the solution would you use, and what directions would you put on the bottle? Show work.

6. What are the regulations necessary to observe in the sale of spirituous liquors in a drug store, as required by law?

7. Give Latin name and dose of following:

Koussou, Nitrate of Copper.
Solution of Ferric Chloride.
Glauber Salts.
Salts of Sorrel, Menthol, Oxide of Zinc.
Hydrochlorate of Cocaine.

8-10. Oral Examination.

Values—10, 14, 8, 10, 10, 8, 10, 30.

MATERIA MEDICA.

Examiner—J. TOLBERT PAPER. Time allowed, two hours.

1. (a) What are Volatile Oils? (b) Of what two principles do Volatile Oils proximately consist? (c) What is the most characteristic feature of Volatile Oils? (d) Describe two methods by which Volatile Oils may be obtained, with an example of an oil obtained by each process. (e) How may the adulteration of Volatile Oils by a fixed oil be detected? (f) How may the presence of Alcohol be shown? (g) What is the chemical synonym for Oil of Wintergreen? (h) Give its official name, with the proper Latin terminations. (i) Give the botanical name of the plant yielding it. (j) From what other plant is much of the Oil of Wintergreen of commerce obtained? (k) What acid may be prepared from it? (l) To what are the colors of Volatile Oils due, and how may they in most cases be removed? (m) On exposure to the air, more particularly in the presence of light and moisture, Volatile Oils become darker and thicker: what would you do to retard or prevent these changes?

2. Give in one or two words the therapeutic action of Digitalis, Scilla, Ulmus, Cantharis, Lappa, Senega, Prunus Virginiana, Hamamelis, Eucalyptus, Uva Ursi.

3. What is the habitat of Cascara, Strophanthus, Rumex Crispus, Kola, Sarsaparilla, Camphora, Mastich, Chirata, Ipecacuanha, Canella?

4. What part or parts of the following drugs are used in medicine: Caryophyllus, Myristica, Amygdala, Mentha Piperata, Tamarindus, Catechu Pallidum, Santonica, Gossypium, Theobroma, Linum?

5. Give the Natural Order of Ergota, Belladonna, Cubeba, Buchu, Nux Vomica, Benzoinum, Senna, Asafetida, Chondrus, Cardamomum.

6. (a) What is the British Pharmacopoeial Latin name of Nut Gall? (b) How is it produced? (c) By what means? (d) On what plant? (e) In what country? (f) Name chief constituent, and give percentage. (g) Name some things which are incompatible with it. (h) For what is it used?

7. Give a general description, and the essential points in the minute structure and micro-chemistry of a starch grain.

8, 9, 10. Recognition of crude drugs and oral examination.

Values—*a*, 1; *b*, 2; *c*, 1; *d*, 4; *e*, 2; *f*, 1; *g*, 1; *h*, 1; *i*, 1; *j*, 2; *k*, 1; *l*, 1; *m*, 2; 10, 10, 10; *a*, 1; *b*, 1; *c*, 1; *d*, 1; *e*, 1; *f*, 1; *g*, 1; *h*, 1; 10, 20.

College of Pharmacy.

The annual meeting of the Montreal College of Pharmacy was held in the college building, 595 LaGauchetière street, on Thursday night at 8 o'clock.

David Watson, Esq., occupied the chair, calling upon the secretary, Mr. E. Muir, to read the minutes of the last meeting, also the annual report and finan-

cial statement for the year just closed, after which Mr. W. H. Chapman, seconded by Mr. A. J. Lawrence, moved the adoption of the report and statement as read. The president now delivered his retiring address, stating that, owing to the fullness of the report read by the secretary, there was little left for him to make any lengthened speech. He, however, made reference to his retiring from the office of president, a position he had occupied for the last eight years, thanking the members, and especially the boards with whom he had the pleasure of working, for the kindness they had always shown him. During the course of his remarks, the president referred to pending lawsuits, the mortgage on the college property, which had been considerably reduced, the changes in the curriculum, the appointment of new professors, and the approaching meeting of the American Pharmaceutical Association in this city on August 12th next. At the conclusion of his address, the president appointed Prof. T. D. Reed, M.D., and Prof. Jos. Bemrose as scrutineers to count the ballots for the new executive board, after which he presented the following prizes, namely, a gold medal to Mr. James A. Gillespie, donated by Mr. A. S. Holden (a former graduate of the college), as first prize for highest merit at the April major examinations of the Pharmaceutical Association; a copy of "Remington's Pharmacy" to Mr. R. J. Lunny, donated by Mr. A. J. Lawrence, druggist, of this city, he having won the minor prize as "certified clerk of the Pharmaceutical Association." To the students obtaining the college prizes, as follows: James A. Gillespie, botany prize; R. J. Lunny and W. Frothingham Roach, senior materia medica prizes; Henri St. Georges, junior materia medica prize; R. H. D. Benn and George H. Voss, junior chemistry prizes.

On motion, Mr. Watson left the chair, and Mr. W. H. Chapman, president elect, acted as chairman for the remainder of the meeting.

A vote of thanks was tendered to the retiring board for their valuable services during the past year.

The following motion was then presented: Moved by Mr. S. Lachance, seconded by Mr. R. W. Williams, "That the members of the Montreal College of Pharmacy desire to express to Mr. David Watson their sincere thanks for the able manner in which he has presided as the president of the college for the past eight years. They also desire to express their deep regret that he has felt it his duty to retire from the presidency, as they feel that losing him as their president will be a loss not easily replaced; and in parting with him as their president they would venture to express the hope that he will continue to take a lively interest in the affairs of the college." Carried by a rising vote.

Mr. Chapman, president-elect, on behalf of the members of the college, presented Mr. Watson with a very handsome

solid silver fountain pen, and also a very beautifully illuminated address, with the following inscription thereon:
To David Watson, Esquire:

DEAR SIR,—On the occasion of your retiring from the office of president of the Montreal College of Pharmacy, we, the members, wish herewith to record our appreciation of the valuable services rendered by you during the eight years of your presidency. From the foundation of the college until now, your wise counsel, so readily given, backed by the active work in which you have been indefatigable, we feel have done much in bringing this institution to the high place of usefulness and efficiency in which we are proud to see it to-day. Specially would we mention the part you took in the work of acquiring a permanent building, suitable and worthy of the Montreal College of Pharmacy. In expressing our thanks for past work in our midst, and our most sincere regret that you are leaving the position so long and honorably filled by you, we venture to hope that your interest in the college will not cease on your retiring from office, but that it may have the benefit of your advice for many years to come, and that you may, under Providence, be long spared to enjoy a happy and prosperous life.

Signed on behalf of the members,
W. H. CHAPMAN, President.
E. MUIR, Secretary.

Montreal, May 7th, 1896.

Mr. Watson, on rising to respond to the resolution and presentation of the address, expressed himself taken entirely by surprise, and its suddenness had completely overcome him. He, however, desired to return his sincere and grateful thanks to the members for their manifestation of their appreciation of his services as president, assuring the members that he would always look upon the beautiful illuminated address and the sentiments it contained with great pleasure, and treasure it during life, and when done with it in this world would hand it over to his eldest son.

The scrutineers now handed in their reports, declaring the following gentlemen having been elected as the executive board, namely: J. E. Tremble, A. J. Lawrence, C. J. Covernton, H. R. Lancot, C. E. Scarff, T. E. Barbeau, R. W. Williams, A. M. Macmillan, and A. Decary.

The chairman then announced that the board for the ensuing year would be as follows: W. H. Chapman, president; Alexander Manson, treasurer; together with the foregoing gentlemen elected to the executive board. No election having taken place for vice-president, that office would be filled at the first meeting of the new board.

Before adjourning, Mr. Watson desired to bear testimony to the very efficient services of their secretary, Mr. E. Muir, whom he had always found willing, even to step out of his ordinary duties, to further the interests of the college.

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WHOLESALE DRUGGISTS,

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Winchester (½ Imp. Gal.)..... 2 00 each.
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¼ Gross lots, and over.....\$60 00 per gross.
(Packed in One-Dozen Cases.)

We use a Pure Sherry Wine in the manufacture of this article, assuring a delicate flavor, and we guarantee the quality to be equal to any in the market.

We invite comparison with other manufacturers, and will cheerfully furnish samples for that purpose.

Your early orders and enquiries solicited through Wholesale Jobbers or direct from us.

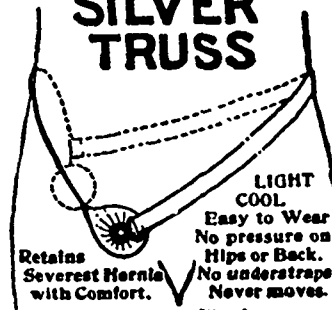
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- Druggists' Specialties,
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- Lints and Cottons,
- Abdominal Belts,
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Common Sense Exterminator
FOR ROACHES:

25c. each, \$1.75 doz.; 50c. each, \$3.75 doz.; \$1.00 each, \$8.00 doz.

Common Sense Exterminator
FOR RATS AND MICE:

25c. each, \$1.00 doz.; 50c. each, \$1.75 doz.; 50c. each, \$3.50 doz.; \$1.00 each, \$8.00 doz.

Only infallible remedy known. No smell from Dead Vermin. Not Poisonous to man or beast. Once used always recommended. Sold by Wholesalers at

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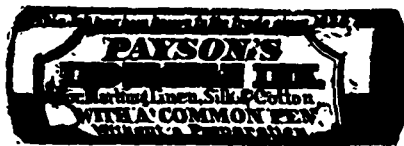
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- SICILY LEMON
- PEACH
- CHOCOLATE

Trade Notes.

The Greenwood Drug Co. have opened a drug store at Greenwood, B.C.

Dr. Henry's drug store, Ainsworth, B.C., has been destroyed by fire.

John Gayfer, druggist, Ingersoll, Ont., died May 8th, after an illness of only a few days.

Dagg's drug store at Rathwell, near Winnipeg, Man., was destroyed by fire last month.

J. F. Donaldson has purchased the drug business of J. W. Edwards, Three Forks, B.C.

E. L. Nash & Co., druggists, Lunenburg, N.S., are offering to compromise with their creditors.

C. T. Wilmot, druggist, has removed to 700 Yonge street, corner St. Mary street, Toronto, Ont.

Mr. Kendall has purchased the drug business of H. Sherris, Queen street west and Esther street, Toronto, Ont.

N. Lauder has purchased the drug business of W. R. Read, known as the Johnston Drug Store, Toronto, Ont.

George Dale has purchased the branch drug store of Mitchell & McLean, corner Shuter and George streets, Toronto, Ont.

Josiah Green, druggist, corner of Euclid avenue and Queen street, has made an assignment. He had branch stores also at Lambton and Cooksville, Ont.

The Alpha Rubber Co., Montreal, have removed their factory to Hochelaga, and opened a business office and sample room at 335 St. Paul street, Montreal.

J. C. Gray & Co., druggists, Queen street west, Toronto, have removed to a much more convenient and better stand, corner of Queen street west and O'Hara avenue.

G. E. Gibbard, of the Ontario Society of Retail Druggists, has, we understand, secured an interest in the *Canadian Pharmaceutical Journal*, and will combine journalistic work with that of organizer.

O. S. Botsford, druggist, 1094 Queen street west, Toronto, Ont., committed suicide by shooting himself through the head while temporarily insane, May 10th. Deceased was thirty-seven years old, a widower, and leaves one son.

Amongst those present at the O.C.P. last week were Prof. F. J. Harrison, of London, Ont.; Mr. J. T. Pepper, secretary treasurer of the Ontario Society of Retail Druggists, Woodstock, Ont.; and Paul Scott, of Paris, Ont. They are examiners at the college.

W. E. Thistle, Hartland, N.B., has moved into his new drug store in Taylor's building, and has now one of the nicest and most complete stores in the county. It has been handsomely fitted throughout, has an attractive plate glass front, and is well lighted and heated.

A. L. Griggen, a farmer of Moosomin, N.W.T., claims to have invented a bottle which can only be used once. He has had the invention patented in England, and has gone there to see about placing it on the market. The idea is to have a bottle which cannot be filled a second time and palmed off for the original article.

The Toronto Pharmacal Co. have opened an office and wareroom at 136 Bay street, Toronto, where they will carry on business as manufacturers and agents. They represent a number of Canadian and English proprietary medicines. The promoters are Messrs. W. Murchison, H. Sherris, and C. D. Daniel.

In our April issue, it was stated that W. A. Griffiths Co., Vancouver, B.C., were about to remove their drug business to the store occupied by Wetherell & Co. Our informant, we find, was in error, as the firm named intend occupying the premises formerly occupied by the Hudson Bay Co. on Cordova street. This store is being specially refitted, and, when complete, will be the largest retail drug store in the city and in the finest locality.

The new early closing by-law passed last October by the city council of Montreal came into force May 1st. It provides that all shops during the whole year shall be closed at 8 p.m., except on Saturdays, Mondays, and the eve of holidays. Section 2 provides that nothing contained in the present by-law shall, during the time shops are to remain closed, prevent the sale or delivery of merchandise which may be required in cases of death, sickness, or accident; nor, in drug stores, the sale or delivery of medicine or surgical instruments or apparatus.

Montreal Notes.

Mr. W. H. Griffith, of Sherbrooke, was married some few weeks ago to Miss Murray, of the same place. The happy couple left on their wedding tour immediately after the ceremony. Mr. Griffith is well known in Montreal, and his pharmaceutical friends wish him every success.

The early closing municipal by-law, based on the Provincial Act, came into force on May 1st. Dry goods, grocery stores, *et hoc*, consider it a great boon, and there seems to be no valid reason why it should not work well. Workingmen have had their innings, and now it is about time that shop clerks should have theirs.

Druggists, under the law, are permitted to sell medicine and sick room appliances, but not ordinary merchandise. The hour for general closing is 8 p.m., except on Mondays and Saturdays. The probability is that druggists will put down their window lights at that hour, leaving their shop lights burning, with a clerk or two on duty for prescriptions, etc. The difficulty is that certain druggists in Montreal

seem to endeavor to make life in a drug store not worth living. They are not content with keeping open quite unnecessarily all day on Sunday, but on Sunday evenings they illuminate their windows to attract custom. Fortunately for the good of morality they do not succeed, as an occasional walk round will satisfy anyone that the business done amounts to very little, perhaps with the exception of those who sell soda water and cigars and general merchandise.

There is some talk of Laval University establishing a pharmacy course, and that the university will apply for an act obliging the Pharmaceutical Association to accept their certificates of examination. The association, as their charter now stands, is obliged to accept such certificates, providing the curriculum of study is, in the opinion of the council, equivalent to that required by the association. This talk about Laval is always trotted out after an examination. It does not amount to much. It is something like the tall talk indulged in every time the law falls foul of some notorious sinner against the Pharmacy Act.

Business continues very dull amongst pharmacists, owing probably to the number of pharmacies being ahead of the requirements of the public. There are always numbers of stores trying to sell out, and one would think it wiser to buy out an established business, be it ever so small, than to risk a new venture. Your article of last month just hit the mark on the multiplication of drug stores.

Mr. Watson is retiring from the presidency of the College of Pharmacy this year, and an address will be presented to him on the occasion. Mr. Chapman is to succeed him, and there is no doubt he is peculiarly fitted for the position.

Mr. Jules Hertz, late with Mr. Costant, is busy fitting up his new pharmacy at the corner of Place d'Armes Hill and Craig street, and expects to shortly open.

On *dit* that Mr. Barbeau, pharmacist of St. Catherine street, recently won a large sum of money in a St. Lawrence street lottery. It is placarded up in the lottery people's window as a good advertisement.

Mr. Dyer, who recently opened again on St. Catherine street, has been obliged to close up, owing to circumstances beyond his control.

A meeting of the Council of the Pharmaceutical Association was held yesterday, when it was decided to pay half the expenses of the reception of the American Pharmaceutical Association, providing the College of Pharmacy pay the other half.

The members of the Executive Committee, who are looking after the entertainment of the visitors who will be present at the approaching annual convention of the American Pharmaceutical Association, are working hard, and have made very satisfactory arrangements with the Windsor Hotel. Collectors are a

work taking down the amount of subscriptions druggists are willing to give.

The *Witness* states that Mr. H. H. Curtis, druggist, Bleury street, has assigned to Messrs. Lyman, Knox & Co., of this city.

Manitoba Notes.

The drug trade throughout the province has been keeping pace with that of former years, notwithstanding the tardiness of spring, and, later, the almost impassable condition of the roads caused by the recent heavy rains which have been pretty general throughout the west. Within the next ten days, however, seeding will be going on at many points, after which trade may be expected to improve.

A meeting of the Council of the Pharmaceutical Association of Manitoba was held at the Clarendon Hotel, Winnipeg, on the 10th of April. The following members were present: W. R. Bartlett, Brandon; E. D. Martin, J. F. Howard, J. C. Gordon, W. Pulford, C. Flexon, and A. E. Kelly, Winnipeg. The principal business transacted was the reception of the report of the spring examinations by the Board of Examiners. The report showed that 22 students appeared before the examiners at this sitting, 5 for the major and 17 for the minor examination. Of this number, 11 were successful, 3 in the major and 8 in the minor. Following is a list of successful candidates in the order named:

Major Examination.—1, J. Giles, Portage la Prairie; 2, W. Brooking, Winnipeg; 3, John Love, Minnedosa.

Minor Examination.—1, G. Deyre, Brandon; 2, Miss Simpson, Brandon; 3, J. H. McVicar, Winnipeg; 4, W. J. Robertson, Winnipeg; 5, J. P. Leveque, Winnipeg; 6, C. E. Haggard, Winnipeg; 7, G. H. Carmau, Winnipeg; 8, J. G. Coates, Winnipeg.

Examiners: L. W. Leithhead and B. M. Canniff.

Copies of examination papers will be found elsewhere in this issue.

"Important Proposition" is the title of a circular just issued to the retail druggists of Western Canada, creating not a little merriment throughout the province. A certain western druggist offers to buy on a commission of 5 per cent. such supplies as may be required from time to time by the trade, providing the druggists will unite with a reasonable unanimity "for their mutual benefit." A reason given is that, during the last quarter of a century, profits in the drug line have been steadily decreasing; and to support the proposed remedy the druggists of Manitoba and the West are invited to wheel into line, and endeavor to sustain a high grade of profit by buying upon a basis outlined, and thereby ensure the safety of the drug trade. A feature of the proposed scheme is "spot cash" for all purchases.

Dr. R. Wheeler, proprietor of the Birtle drug store, was in Winnipeg last week.

Mr. H. E. Butcher, of Flexon & Co., druggists, Winnipeg, has returned to his position after a serious illness of eight weeks duration. His friends are pleased to see him about again.

Messrs. Dixon & Keely have purchased the drug business formerly conducted by Mr. E. S. Knowlton, Winnipeg. Both of these gentlemen are well and favorably known in Winnipeg, and their many friends wish them every success in their new venture.

Dr. C. M. Vanstone, of Wawanesa, is purchasing the drug business of Messrs. Arkell & Co. and Fleming & Sons, of that place, and will continue the same in future under one roof.

Dr. L. A. Knight is opening a drug store at Ninga. He left for Winnipeg last week to purchase a stock.

British Columbia Notes.

Affairs in Vancouver are by no means brighter than they were at the last writing. For a time the druggists thought that an amicable arrangement could be arrived at, but the cheap-rate drug store, presided over by a gentleman who has just recently attained his majority, is making things decidedly disagreeable for everybody. Victoria has decided to be more cautious, and expressed a desire to join the Retail Druggists' Association. It is not likely, however, that Victoria will ever have such trouble as is now visiting Vancouver.

Death of A. J. Langley.

Alfred John Langley, one of Victoria's pioneer and most successful druggists, died April 9th, at the ripe old age of 75 years. Deceased, who in his younger days led an active life, has for several years been a sufferer from paralysis of the muscles, which had kept him confined to the house since last November, and which finally caused his death. He was conscious up to the last, retaining that brightness of intellect which had characterized his life. Mr. Langley was born in Lichfield, Staffordshire, England, on October 15th, 1820. When quite a young man he crossed the Atlantic to make his home in America. After a short residence in Digby, N.S., he moved to New York, where he spent seven years. Full of energy and ambition to make a success of life, he, in 1849, joined in the rush for California. Unlike most of the gold-seekers, however, he did not lose his head over the reports of fabulous finds on the Sacramento, but settled down to business in San Francisco, establishing the drug firm which now bears the name of Langley & Michaels Company, which is one of the largest in San Francisco, and the senior member of which is his sister-in-law. After building up this firm on a solid foundation, Mr. Langley, in 1858, came to Victoria and established the firm of Langley & Co., which is now known in every nook and corner in British Colum-

bia, and which has branches in other cities of the province. In the fall of 1886, having admitted Messrs. J. N. and T. M. Henderson into partnership, Mr. Langley ceased from taking an active part in the business.

Although he had not recently taken an active part in public affairs, Mr. Langley had always taken a lively interest in the welfare of his adopted city and province. His name is closely connected with the early history of Victoria and British Columbia, he having taken his share with the other pioneers in making it what it is. He was a member of the Legislative Council of the colony under Sir James Douglas, and was appointed commissioner from the colony to the great exhibition in London in 1862. The Pacific colony was at that time attracting a great deal of attention in Great Britain, and Mr. Langley took advantage of this to make known its attractions as a home. For his valuable services to his country he was offered a knighthood, which he refused.

A family of three sons, Dr. Langley, W. H. Langley, barrister, and A. G. Langley, and two daughters survive him. — *Victoria Times*.

Manitoba College of Pharmacy—Minor and Major Examinations, April, 1896.

MINOR EXAMINATION.

Examiner—B. M. Canniff. Time allowed, two hours.

MATERIA MEDICA.

1. (a) Give names of seeds official in the B.P.; (b) Source, natural order, and habitat.
2. Calumba: (a) Give source; (b) Natural order; (c) Habitat and part used; (d) Medicinal properties, use, and dose.
3. (a) What is Camphor? and give its source; (b) Give a short description of how it is obtained.
- (c) Name the different varieties and form.
- (d) Medicinal properties and dose.
3. (a) What is the source of Phenol?
- (b) Give chief adulterant; (c) How many varieties and names? (d) Give medicinal properties and uses.
6. Rhubarb: (a) Give source; (b) Natural order; (c) Habitat.
- (d) Name different varieties.
- (e) State how you would select good from inferior.
- (f) Give its medicinal properties.
6. Give source of quinine, strychnine, morphine, citric acid, tartaric acid, gallic acid.
7. What are syrup decoctions, infusions, ointments, and tinctures?
8. Give common names for cinchona cortex, glycyrrhiza, hæmatoxyl lignum, caryophyllum, capsicum, faratracum, digitalis.
- 9 and 10. Oral

PRESCRIPTIONS.

Examiner—L. W. LEITHHEAD. Time allowed, two hours.

1. How would you prepare the following prescriptions?



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It contains illustrations and descriptions of all kinds of

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LETTERS,

Block, Roman, Ornamental, Fancy, Script, etc.

ALSO OF...

GLASS
LETTERS,

Plain and Embossed Gold, shaded in colors.

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PAINTED BOARD ADVERTISING SIGNS.
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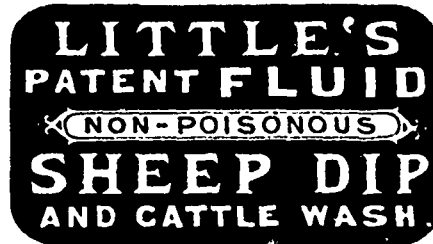


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Correspondence Solicited.

Estimates Furnished.



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, etc.

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 is pronounced to be the cheapest and most effective remedy on the market.

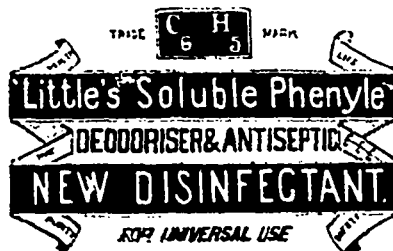
27 17 Gold, Silver, and other Prize Medals have been awarded to "Little's Sheep and Cattle Wash" in all parts of the world.

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

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Sole Agent for the Dominion.

To be had from all wholesale druggists in Toronto, Hamilton, and 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 bad smell whatever, not by disguising it, but by destroying it.

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

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

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

A 25c. bottle will make four gallons 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.

ELLIOT'S "B" PARCHMENT PAPER

is one of the articles to be considered in the practice of "elegant pharmacy," as it furnishes the finest transparent wrappers for bottles, packages, etc. It must be seen and tried to be appreciated. We send samples.

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are the best for hygroscopic powders and all other powders. The following prices show they are the cheapest:— Put up in Neat Boxes of 500 Sheets.

No.	Rst.	No.	Rst.
22 For Magnesia and general use, White, 6 x 8	\$0.65	31 Large Seidlitz, Blue, 6 x 6	\$0.50
28 Regular Seidlitz, White, 4 1/2 x 5 1/2	40	41 Powder " " 3 x 4 1/2	20
29 Regular " Blue, 4 1/2 x 5 1/2	40	42 Powder " " 2 1/2 x 3 1/2	25
30 Large " White, 6 x 6	50	43 Powder " " 3 1/2 x 4 1/2	25

SEND FOR SAMPLES. Elliot's Parchments are for sale by the leading jobbers. We also make heavy Parchment for Sticky Fly Paper, and Druggists Pure Tin Foil.

A. G. ELLIOT & CO., PHILADELPHIA.

If you want to sell the best, handle

MAJORS CEMENT

CHEAP, QUICK, AND CERTAIN.

Repairs China, Glassware, Meerschaum, Etric-a-Brac, to put on cloth, corn and bunion plasters; to hold a bandage on a wound or sore finger. 15c., 25c.

Major's Rubber Cement, 2-oz. bottle, or in collapsible tubes, for repairing rubber boots and shoes, bicycle tires, rubber garments, silk umbrellas, etc. 15c.

Major's Leather Cement repairs boots and shoes, garments and umbrellas of all kinds of material except rubber, applied same as on leather goods. 15c.

Major's Liquid Glue repairs furniture, hooks. 10c.

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Sole agents for the Dominion. MONTREAL, Canada

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Hair and Cloth

Tooth and Nail

TEN CASES NEW GOODS JUST IN
WRITE US FOR SAMPLES AND PRICES

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Brush Manufacturers

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**Sovereign . .
Lime Fruit Juice**

Is the Strongest, Purest, and of Finest Flavor

We are the largest refiners of LIME JUICE
in America, and solicit enquiries.

For Sale in Barrels, Demijohns, and twenty-four ounce Bottles
by wholesale in

TORONTO, HAMILTON, KINGSTON, AND WINNIPEG

SIMSON BROS. & CO., Wholesale Druggists

HALIFAX, N.S.



Sick Men Smile

after trying the one great sure-to-help, pleasant, and sustaining strengthener.

Wilson's Invalids' Port

The big bracing tonic.

Physicians swear by it—Sick men recover by it.

For Sale Everywhere.

750. PER QUART BOTTLE

AGENTS FOR CANADA:

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30 Hospital Street, Montreal.

Genuine Antikamnia Preparations

ANTIKAMNIA POWDERED.

ANTIKAMNIA TABLETS,

(1 gr., 2 gr., 3 gr., 5 gr. or 10 gr. each.)

ANTIKAMNIA and CODEINE TABLETS.

(4 1/2 gr. Antikamnia, 1/4 gr. Sulph. Codeine.)

ANTIKAMNIA and QUININE TABLETS;

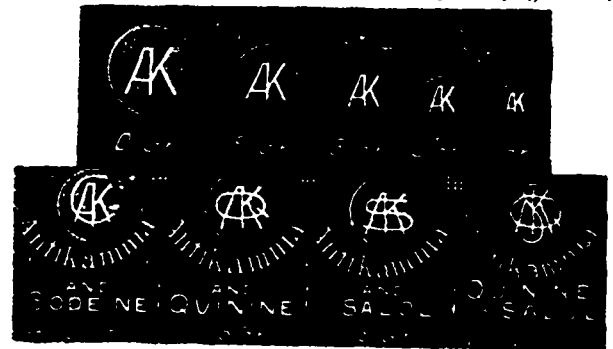
(2 1/2 gr. Antikamnia, 2 1/2 gr. Sulph. Quinine.)

ANTIKAMNIA and SALOL TABLETS,

(2 1/2 gr. Antikamnia, 2 1/2 gr. Salol.)

ANTIKAMNIA, QUININE and SALOL TABLETS,

(2 gr. Antikamnia, 2 gr. Sulph. Quinine, 1 gr. Salol.)



Without above Monograms None are Genuine.

These preparations are made solely by us and are put up in 1-oz. packages only.

NEVER IN BULK.

Trade supplied by all jobbing houses in the United States, Canada, Mexico, South and Central America.

British & Colonial Depot, 46 Holborn Viaduct, London, E. C., Eng.

The Antikamnia Chemical Company,

Price List on Application.

ST. LOUIS, MO., U. S. A.

- (c) Name adulterations, and how detected.
- (d) What part of the fruit yields the largest per cent. of volatile oil?
- (e) What part of the fruit yields the largest per cent. of fixed oil?
2. Name the official drugs of the Nat. Order Compositae.
Name four non-official drugs of same order indigenous to Canada, and frequently used in medicine.
3. Copaiba: (a) Definition; (b) Nat. ord.; (c) Source; (d) Habitat; (e) How obtained; (f) Varieties in order of value; (g) Properties; (h) Adulterations, and mode of detection.
4. Give in tabular form, source, nat. order, habitat, part used and medicinal properties of: Aconite, Senega, Cascara Sagrada, Belladonna, Buchu, Digitalis, Ergot, Catechu, Cantharis, and Oleum Morrhuæ.
5. Give in two or three words the medical properties of the following: Nux Vomica, Gentian, Hyoscyamus, Creasotum, Elaterium, Valerian, Strophanthus, Cannabis Indica, Ipecac, and Camphora.
6. Define the following Therapeutical terms and give two examples of each: Expectorants, Diuretics, Antiperiodics, Antipyretics, Pustulants.
7. From what are the following obtained, giving dose: Codeine, Eserine, Pilocarpine, Atropine, Thymol, Spartine, Menthol, Veratrine, and Emetine.
- 8, 9, and 10. Oral.

PHARMACY.

Examiner—L. W. LEITHHEAD. Time allowed, two hours.

1. (a) Spts. Aetheris Nitrosi is a spiritous solution containing what? (b) Give process for preparing it, with chemical equation. (c) Give specific gravity and tests, incompatibles. (d) Medicinal properties and dose.
2. What weight of Acid Sulphuric, Liq. Plumbi Subacet., Spts. Tenuior and syrup, might be put into a bottle which holds exactly the imperial pint of water at standard temperature and pressure?
3. Write a formula for an imperial pint of Tinct. Nucis Vomica B.P., using an equivalent quantity of commercial alcohol 95 per cent. instead of the spirit ordered.
4. Name the liquids employed in exhausting the solid materials in the manufacture of the following extracts: Ext. Aloes Barbadosis, Ext. Ergotæ Liquidum, Ext. Nucis Vomica, Ext. Opii, Ext. Rhei.
5. Give the proportions of Ergot to each of its official preparations, and state the best mode of preventing the deterioration of the crude drug.
6. Name the ingredients in Emplastrum Menthol, Mistura, Olei Ricini, Pulvis Jalapæ Compositus, Pilula Colocynthidis Composita, Pilula Phosphori, Tinctura Chloroformi et Morphinae.
7. Give characteristics and maximum dose of the following substances: Acetanilidum, Homatropinas, Hydrobromas, Paraldehydum, Phenacetium, Phenazolum, Picrotoxinum, Sulphonal.

BOTANY.

Examiner—L. W. LEITHHEAD. Time allowed, two hours.

1. Describe the structure of a Maple Seed; name its parts.
2. Name three principal kinds of roots, and three of subterranean stems or branches; giving instances of each from indigenous plants.
3. Give the growing parts of an exogenous tree. What is the Cambium layer? How does Heartwood differ from Sapwood?
4. Describe a Rhizome Tuber bulb, and say, if they belong to the root or stem, which are Rheum, Jalapæ, Sweet Potato, Onion.
5. Name the parts of a flower. What office is performed by the ovule? Name two kinds of ovules.
6. What do plants feed on?
7. Trace the growth of an annual plant from the sowing of the seed to the ripening of the fruit.
8. Give examples of the plants belonging to the following natural orders: Liliacea, Leguminosæ, Renunculaceæ. Give the characters of these orders.

CHEMISTRY.

Examiner—L. W. LEITHHEAD. Time allowed, two hours.

1. How much Lithium Carbonate is required to neutralize one drachm Salicylic Acid?
2. How much B.P. Hydrocyanic Acid can be made from one kilogram of Potassium Ferrocyanide? Show work.
3. How would you detect Perchloride of Mercury in Calomel; and the Red Iodide in mercurous Iodides; how could salts so contaminated be purified?
4. In what state does Glycerine exist in fats and oils. How is it obtained? State its properties and pharmaceutical uses.
5. What would be the effect of adding Liquor Potassia in excess to aqueous solution of the following salts: (a) Sulphate of Iron; (b) Perchloride of Iron; (c) Corrosive Sublimite; (d) Sulphate of Copper; (e) Nitrate of Silver.
6. State the composition of Bleaching powder. Describe the mode of manufacture.

Peau D'Espagne.

Peau D'Espagne, or Spanish skin, is nothing more than highly perfumed leather. Good and sound pieces of wash leather are steeped in a mixture of ottos, in which are dissolved some odoriferous gum resins. Thus: Otto of neroli, rose, sandal, of each one-half an ounce; otto of lavender, verberna, bergamot, of each one-quarter ounce; otto of cloves and cinnamon, of each two drachms; with any others thought fit. In this mixture dissolve about two ounces of benzoin; now place the skin to steep in it for a day or so, then hang it over a line to dry. A paste is now to be made by rubbing in a mortar one drachm of civet with one drachm of grain musk, and enough solu-

tion of gum acacia or tragacanth to give it a spreading consistence; a little of any of the ottos that may be left from the steep stirred in with the civet, etc., greatly assists in making the whole of an equal body; the skin, being cut up into pieces of about four inches square, is then to be spread over plaster fashion with the last-named compost; two pieces, being put together, having the civet plaster inside them, are then to be placed between sheets of paper, weighted or pressed, and left to dry thus for a week; finally each double skin, now called Peau D'Espagne, is to be enveloped in some pretty silk or satin, and finished off to the taste of the vendor. Skin or leather thus prepared will evolve a pleasant odor for years.

When first introduced this skin used to be sold for what would now be thought fabulous prices.

The New System.

The following druggists have been prompt in adopting the newest and best method of encouraging a cash trade in their stores. Each cash customer receives a printed rebate check issued by the latest National Cash Register. The check is dated, the amount of the purchase printed on it, with a request like this: "Return \$5 in checks and get 25 cents in trade." The register prints a detailed list of the sales as well as giving the day's total sales. Also keeps accurate account of all charges, collections, and disbursements, and so prevents many mistakes. When may we add your name to the list?

H. F. McCarthy, Ottawa.
C. H. Couen, Toronto.
D. M. Waters, Belleville.
W. S. Detlor, Napanee.
R. S. Shillington, Ottawa.
Dickson Drug Co., Jas. Findlay, Pembroke.
John T. Wait, Arnprior.
Jos. Clark, H. H. Hough, Renfrew.
W. H. Medley, Kingston.
M. Patterson, Almonte.
W. G. Smith, Guelph.
R. B. W. Robinson, Ottawa.

Quick Method of Making Mercurial Ointment.

Ettore Barbi gives in *Il Farmacista Italiano* a formula by which he says a 1 in 2 ointment of mercury can soon be made. A few grammes of decoction of saponaria root are put into a strong jar or bottle, 500 grammes of mercury are added, and the whole shaken until globules of the metal are no longer visible. The emulsified mercury is poured into a mortar containing 400 grammes of lard and 100 grammes of white wax melted together, and on triturating the metal is soon taken up, and a smooth and perfect ointment results.—*Pharmaceutical Journal*.

Hippocrates wrote his principal medical treatises on the theory of disease B.C. 422.

Pill and Powder BOXES

We are the headquarters in Canada for every line of Druggists' Boxes, Labelled or Unlabelled.

Paper Boxes

Wooden Boxes

Tin Boxes

Our Impervious Paper Boxes are the best on the market.

LAWSON & JONES
LONDON, CANADA.

Have You

Somerville's Pepsin Gum?

It is the Gum the others are selling.

It is admitted to be the best Pepsin Gum made in Canada.

Our Carving Set Premium Packages are having a great sale.

C. R. SOMERVILLE

LONDON, ONT.

Highest Grade

Digestive Ferments.

We offer a line of High Grade Digestive Ferments of our own manufacture, which we believe is superior to any similar line of goods now on the market. The prices given are net without discount.

PEPSIN AND PREPARATIONS.

Dike's Pepsin, 1-3000, U.S. Ph.—The advantages of this over all other Pepsins are sufficiently well known to make further comment unnecessary. 50c. per oz., \$7.20 per lb.

Dike's Essence of Pepsin. This preparation will be found very much stronger in both digestive and milk curdling properties than any similar preparation on the market. In 8-oz. bottles at \$5 per dozen.

Saccharated Pepsin, 1-300, U.S. Ph. Much of the Saccharated Pepsin sold corresponds to the test of the *old* U.S. Ph. of 1880. Ours will be found to be exactly one-tenth the strength of Dike's Pepsin, and to conform in all respects to the present U.S. Ph. standard of 1890. \$1.00 per pound.

Glycerole of Pepsin.—A 10% glycerine solution of pure Pepsin. Very active and convenient for the dispenser and manufacturer. Each minim represents one grain of Saccharated Pepsin and will digest 300 grains of coagulated albumen. \$1.00 per lb.

Lactinated Pepsin. A compound powder containing in proper proportions all the digestive ferments of the alimentary canal, including Pepsin (proteolytic); Pancreatic Diastase (starch converting); Steapsin (emulsifying and fat splitting); and Trypsin (proteolytic); combined with small proportions of hydrochloric and lactic acids. 25c. per oz., \$3.50 lb.

Elixir of Lactinated Pepsin. \$7.00 per dozen lbs., \$3.60 per gallon.

PANCREATIN AND PREPARATIONS.

Pancreatin (Stearns').—A very high grade Pancreatic extract containing the essential digestive ferments, Trypsin, Diastase (pancreatic), Steapsin, and the milk curdling ferment. It, therefore, has the power of digesting proteins, converting starch into maltose, isomaltose, and dextrose; emulsifying and splitting up fats, and curdling and digesting milk. 50c. per oz., \$7.20 per lb.

Stearns' Essence of Pancreatin. This preparation represents in a high degree all the properties of fresh Pancreatic juice. \$5.00 per dozen 8-oz. bottles.

Saccharated Pancreatin (25% pure Pancreatin).—20c. per oz., \$2.00 per pound.

Glycerole Pancreatin (10% pure Pancreatin).—Per lb., \$1.00.

DIASTASE.

Diastase-Stearns (Pancreatic Diastase).—The isolated amylolytic ferment of the Pancreatic juice. Sir William Roberts, M.D., F.R.S., the most eminent living authority on digestive ferments, in his book on "Digestion and Diet," accords Pancreatic Diastase the highest rank among the amylolytic ferments, whether of animal or vegetable origin. \$6.00 per dozen flasks, each containing 40 pills of 2½ grains.

Essence Diastase-Stearns.—A delicious cordial containing in each teaspoonful two grains of "Diastase-Stearns." For the treatment of amyloseous dyspepsia, in which bread, cake, pancakes, as well as potatoes, peas, beans, and other substances containing starch, readily ferment in the alimentary canal. In 8-oz. vials at \$5.00 per dozen.

RENNIN.

Rennin. The isolated milk curdling ferment. A most concentrated product, each grain curdling 32 fluid ounces of milk. Useful for manufacturing Liquid Rennet for making junket, whey, etc. 50c. per oz., \$7.20 per lb.

FREDERICK STEARNS & CO.

Manufacturing Pharmacists,

DETROIT, MICH. LONDON, ENG.
NEW YORK CITY.

WINDSOR, ONT.

Wine of the Extract of Cod Liver

Sold by all first-class
Chemists and Druggists

CHEVRIER

General Depot:—PARIS,
21, Faubourg Montmartre, 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, Anæmia, Chlorosis, Bronchitis, and all diseases of the Chest.

Wine of the Extract of Cod Liver with Creosote

General Depot:—PARIS,
21, Faubourg Montmartre, 21

CHEVRIER

Sold by all first-class
Chemists and Druggists

The beech-tree Creosote 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.

Radlauer's Somnal

AETHYL-CHLORALURETHAN
(REGISTERED)

THE NEWEST AND 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, Königliche Charité and Königliche Universitäts Poliklinik, Berlin, have shown that SOMNAL does not accelerate the pulse and does not upset the stomach. SOMNAL is especially recommended for Nervous Insomnia, Neurasthenia, Spinal Complaints, Infectious Diseases, Paralysis, Melancholia, Hysteria, Morphinismus, 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

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

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

MANY GOLD MEDALS HAVE BEEN AWARDED

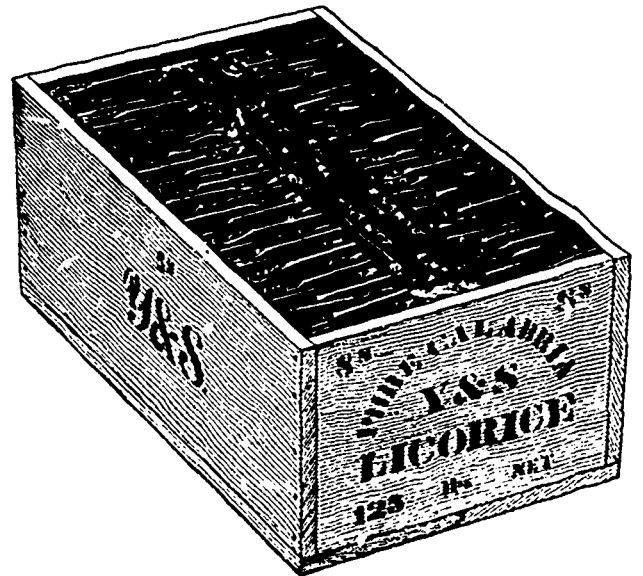
S. RADLAUER, Kronen Apotheke, FRIEDRICHSTRASSE, 160 BERLIN, W.

W. J. DYAS, Toronto, Ontario

Wholesale Agent for Canada

Retail Druggist

© WE put up our Y & S Licorice in cases of 125, 50 and 25 lbs. bulk (loose, in leaves), 4's, 6's, 8's, 12's, and 16's to pound. Will sell rapidly if displayed prominently in your show windows, and will insure you large profits.



WE ARE ALSO MANUFACTURERS OF

Acme Licorice Pellets

Y & S Licorice Lozenges

Tar Licorice and Tolu Wafers ..and..

Pure Penny Stick

If you cannot get the above at your jobbers, please address us as below :

YOUNG & SMYLLIE

Brooklyn, N.Y., U.S.A.

Correspondence.

The Editor does not hold himself responsible for the opinions of correspondents. Correspondents must in all cases send name and address, not necessarily for publication.

Alcohol—\$3.60 a Gallon.

Editor CANADIAN DRUGGIST:

Fellow-druggists, do you want it?

How much would it save you in a year?

Why don't you have it?

These are three important questions which are worthy of every druggist's consideration.

To the first there is but one answer

The second: If you use two barrels a year, and pay \$4.20 for it, you would save \$48 each year on the cost. If it were all retained in tinctures and similar lines the whole \$48 would be net profit, as the prices of these articles would not alter; but at the worst you would probably clear \$25 a year extra.

The third point—why don't you have it?

Because our jobbers pay \$1.15 for their alcohol, and \$2.50 1/2 duty net cash. Now there is no doubt that the government needs this money, and perhaps they might as well get it on alcohol as anything else. But our jobbers can buy the same alcohol in the United States for 35 cents, and the reason they don't do it is that the import duty is \$2.25 a proof gallon, equal to \$3.71 1/4 per gallon on alcohol such as you buy. The difference between the two rates of duty is 90 3/4 cents, or over 259 per cent. on the cost in the United States. This 259 per cent. is the rate of protection that we wealthy druggists pay to support our poverty-stricken distillers.

Is this fair to us?

Is it right?

Has the government any right to impose such a tax on one class of citizens for the benefit of another class?

Are you going to stand it without protest?

Can you invest an hour, or a whole day, to better advantage than in securing for yourself \$25 a year net profit?

If the government would impose an import duty equal to the excise duty of \$2.80 1/2 per gallon and 25 per cent. *ad valorem*, you could buy alcohol the following week for \$3.60 a gallon, and begin to save that \$25 at once.

Under this system the government would secure not one cent less in revenue than at present, and if the alcohol were actually imported they would get the 25 per cent. additional.

This brings us to another point not in our original list of queries.

Who constitute the government?

How do they get there?

Now you see our point. If every druggist in Canada would spend an hour in writing to or interviewing his favored candidate, we would have in our next session of parliament a majority of members pledged to give the druggists justice,

and we would get it. Nay, more, if half or even a third of the druggists in Ontario alone would take this step, the end would be attained. Is this to be despised in these days of cut rates and departmental stores?

If not, will you do it?

It won't do for you to read this letter and say to yourself, "Yes, that's so; it is an outrage, and must be stopped," and then lay your paper down and do nothing. You will never see that \$25 again unless you work for it. See your member-elect, or write him, and get him pledged to support the movement in the House, no matter which side it emanates from. If we can get enough members in the House pledged to support us, the government will take it up, and there will not be the least trouble about it.

Will you spend your hour at this?

If so, do it now, and success is assured.

Fraternally yours,

ANDERSON & NELLES.

London, Ont.

Quebec Pharmaceutical Association.

The semi-annual examinations of the Pharmaceutical Association of the Province of Quebec for major and minor candidates were held in the College of Pharmacy, Montreal, commencing on Tuesday, April 14th, and closing on Friday, the 18th. Twenty-five candidates presented themselves for the major examination and twenty-three for the minor. Of these the following, named in order of merit, passed: As "Licentiates of Pharmacy," W. A. Smallwood, Jas. A. Gillespie, E. A. Ranson, J. Victor Levesque, A. Brillon, J. T. Gaudet, C. M. Dutay, J. L. Roberge, Joseph Bontin, J. J. Power, P. Emile Chevalier, J. A. Labranche, J. A. F. Bertrand, A. Veilleux, and A. C. Roy. As "Certified Clerks," Willie Bernard, R. J. Lunny, James Franckum, C. S. Webb, and E. Jolicour. Owing to Messrs. Smallwood and Bernard being ineligible to compete for the gold medal and minor prize respectively, Mr. Jas. A. Gillespie obtains the gold medal and Mr. R. J. Lunny the minor prize.

The candidates were subjected to a severe written and oral examination in materia medica, chemistry, botany, practical dispensing, reading of prescriptions, and weights and measures.

The examiners were Messrs. S. Lachance, A. E. DuBerger, R. W. Williams, W. H. Chapman, and J. R. Parkin.

The next examination will be held in Laval University, Quebec, about the middle of October.

ACOKANTHERIN.—Aglucoside obtained from the *Acokanthera Schimperii*, forming colorless crystals, melting at 186° C., slowly soluble in cold, but readily in hot water. The therapeutic properties of this glucoside are said to be similar to those of strophanthin.—*Phar. Post.*

The Acorns of Business.

In every line of business, no matter whether conducted on a large or small scale, it is the little things that count. The little expenses, the little wages, the little economies, are the ones that turn the balance of accounts, either for profit or loss, and it is these things that need the closest attention. The larger, more important details of every business are carefully looked after; there is very little chance for neglect, carelessness, or oversight.

The workman who spoils a costly piece of machinery, or causes a loss of any considerable amount, is held responsible, and is generally very careful in this respect, but in the little things he is not as prompt in exercising care and economy, and these little things are looked upon as of no consequence, and as having no real value.

We have it asserted by a man who, beginning on barely nothing, succeeded in building up a large and profitable business, and retiring with a considerable fortune, when asked how he had managed, what was the secret of his success, replied:

"By saving what other people wasted. Looking after the small things and seeing that nothing was thrown away or cast aside as being too small or insignificant to be of any value. A few cents here and a few cents there made up quite a sum in the course of the year, and it was by paying careful attention to the little details, by looking after the cents, that I made my dollars."

Camphor.

In connection with the increased demand and increased prices asked for camphor, the *British North Borneo Herald* states that nearly twenty years ago Formosa camphor was quoted at \$20 per picul, but from various causes, chiefly owing to the invention of smokeless gunpowder, in the manufacture of which it is largely used, the price has now risen to \$70. Inquiries were made by the director of Kew Gardens of Sir Frederick Abel respecting the truth of this statement, and the reply is printed in the *Kew Gardens Bulletin*. Sir Frederick Abel wrote: "Any increase of demand, involving a rise in the price of camphor, is not due to its application as a constituent of smokeless powder. That material was used in the earliest days of the manufacture of a successful smokeless powder for artillery and small arms; but its employment was soon demonstrated to be attended with serious practical disadvantages, and its application for this purpose can, therefore, not be said to have been other than experimental, and of no great importance even at that time, as affecting the market value of camphor. This substance has, however, been used extensively for many years past, and no doubt in continually increasing quantities, for the conversion of collodion cotton into the material known as celluloid."—*Oil and Colorman Journal.*

Canadian Druggist

WILLIAM J. DYAS, Editor and Publisher.

MAY 15TH, 1896.

A Grievance.

The agreement entered into by the executive committee of the Wholesale Druggists and Patent Medicine Manufacturers' Association, and that of the Ontario Society of Retail Druggists, is, we believe, being carried out in good faith, with every indication of a successful issue. Where distrust at one time existed confidence now reigns, and a cordial and fraternal spirit pervades the trade generally. The wholesale dealers fully recognize the advantage gained in the larger volume of goods distributed by them, the patent medicine manufacturer has fewer accounts and decreased expenses, while the retailer feels that he has the co-operation and good will of the wholesale trade. While, however, everything is going on quite as satisfactorily as could be expected, with any organization which has been so short a time in operation, yet it must be borne in mind by all parties that grievances or apparent grievances will arise which require consideration and remedy.

The retailer, on his part, should remember that in the handling of patent medicines, or goods of a similar nature, the wholesaler should not be held responsible for any promises or inducements held out by too-pushing salesmen of these goods. If a salesman, in order to increase his sales, makes promises or holds out inducements which upon reflection it will be seen cannot be carried out by the wholesale house through whom the goods are shipped, that salesman or the firm employing him should alone be held responsible for his actions. But we find frequently that the retail druggist, not always being able to dispose of the stock purchased, endeavors to place the responsibility on the house through which the goods were placed, basing his claim, it may be, on the unfulfilled promises of the selling agent, or on the plea that the goods did not turn out as represented. This is both unreasonable and unbusiness-like. The retailer, when purchasing, certainly should understand that any transaction between himself and the house represented could have no binding effect on the third party through whom the goods were shipped, except those speci-

fied in black and white, or any order turned over to them, and any wholesale house is quite justified in refusing to take back or exchange any goods which have been sold in this way.

Editorial Notes.

THE Philadelphia College of Pharmacy celebrated its seventy-fifth anniversary by a banquet on April 22nd.

THE death is announced of Dr. Charles O. Curtman, of St. Louis, Mo., a prominent member of the American Pharmaceutical Association, and an able and frequent contributor to the pharmaceutical journals.

THE Board of Customs has decided that the duty on filter paper, whether cut or uncut, is 25 per cent., overruling the department decision, that when imported in sheet it should be 25 per cent., and when cut to shape at 35 per cent.

THE United States Customs officers at St. Albans, Vt., have arrested two men, W. E. Hugh, of St. Johns, Que., and H. Backus, of Bedford, Que., on a charge of smuggling phenacetine across the border. When caught Hugh had about two pounds of the drug on his person, and Backus twenty-five pounds. They were both released under bonds.

THE decision of the lower court in the case of the California Fig Syrup Company vs. Frederick Stearns & Co. has been affirmed by Judge Taft in the New York courts, holding that the term Syrup of Figs is a descriptive one, when applied to a medicine, and indicates the active medicinal quality of the fig, and that therefore no one can acquire the exclusive right to use the same as a trade mark to designate such medicine.

THE manufacture of cocoanut oil is to be one of the new Australian staple industries. Messrs. Lever Bros., of Sunlight Soap fame, have now under construction the first cocoanut oil mill in Australia. The establishment is to be one of a very complete and extensive character, capable of turning out several thousand tons of oil and oil cake per annum. Mr. Lever has selected New South Wales for his operations because Sydney is the principal port for the South Seas, whence the oil mainly comes in the form of cocoanuts.

Prosecution Under the Pharmacy Act.

A case which is likely to involve a lengthy legal fight, of great interest to the drug trade, was initiated by the lodging of an information by F. S. Warner on behalf of the Ontario College of Pharmacy against Robert Simpson, proprietor of a departmental store at the corner of Yonge and Queen streets, Toronto, charging him with unlawfully keeping open shop for retailing, dispensing, and compounding poison in contravention of the Pharmacy Act. The College of Pharmacy was represented by its solicitor, Mr. E. T. Malone, the defendant by Mr. C. H. Ritchie, Q.C.

The case was tried before Police Magistrate Denison, at the police court, April 14th. The informant produced three bottles of medicine which were dispensed by Charles P. Lusk, who is in charge of the drug department. The following were the prescriptions:

Mrs. Warner.
 R. Liq. Strychnie..... ʒij
 Tinct. Strophanthi..... iv
 Tinct. Cinchona Co..... ʒiss
 Syr. Aurantii..... ʒiss
 Aquam Ad..... ʒvi
 Sig. Two drachms in water every five hours.
 E.C.

Mrs. Warner.
 R. Lin. Aconiti.
 Lin. Saponis, aa ʒj.
 Sig. Apply to face three or four times a day.
 G.B.S.

Mrs. Warner.
 Lin. Aconiti.
 Lin. Belladonnae.
 Lin. Chloroformi.
 Tinct. Saponis Co. aa ʒj.
 M. Sig. Apply as directed.

A quantity of carbolic acid was also purchased, the amount of the bill was paid to Mr. Lusk, and the money forwarded by him to the cash receiver's desk. The bottle was labelled "R. Simpson," and across the label was the name "Charles P. Lusk, druggist," done with a rubber stamp. The case was in the first place adjourned until the 21st, and again until the 23rd, when it was argued by the respective counsel. The case now goes over until some day next week, when a stated case will be prepared for the High Court, to which it will ultimately be appealed. We have deemed it wiser to refrain from making any extended remarks until after its hearing next week, and will in next issue give the points at issue.

Hemicranin is (*Pharm Zeit.*) a mixture of 5 parts of phenacetine, 1 part of caffeine, and 2 parts citric acid.

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DIRECTIONS.
Place one of the Feltz upon a dish or plate; keep wet with water. Use only enough water to soak the Feltz. Flies will drink the poisoned water off it & die immediately.
Place on de one Feltz sur une assiette ou un plat en assiette; tenez-le toujours avec de l'eau. Les mouches boivent l'eau poeuee tempree de l'acide. Les mouches boivent l'eau empoisonnee, meurent de l'acide et meurent immediatement.

CAUTION.—Should the liquid be swallowed by accident at once administer in large doses, Lime Water, Flaxseed Tea, or Iron Root, followed by an emetic and drinks of Milk or Flour and Water.

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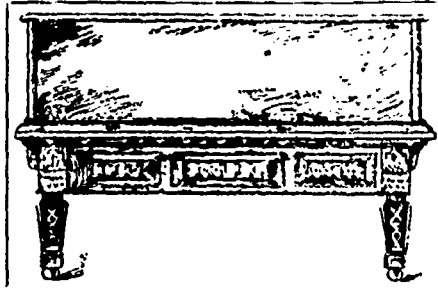
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WINNIPEG.

Roentgen Skiagraphy.*

By EDWARD E. KING, M.D. TOR., L.R.C.P. LOND.,
Surgeon to St. Michael's Hospital; Physician to House
of Providence and Home for Incurables; Pathologist,
Toronto General Hospital.

When the announcement of Herr Doctor Roentgen's wonderful discovery was made in December last, a new scientific epoch was begun. His first communication was made to the Wurzburg Physical and Medical Society, in a paper entitled "A New Kind of Rays." He had taken time to settle many important questions, and was sure of his ground before making any public announcement. He first took his professional colleagues into his confidence, and did not rush into the public press as many of his predecessors in great discoveries had done — he fully satisfied himself that he had a discovery before making it known. Its importance was too great to be long retained by the savants of Wurzburg, however, and within a few days the whole world knew that a hitherto unknown scientist had made a discovery that will revolutionize many ideas scientific. Ever since that time the press, both public and scientific, has been replete with the wonders of the unknown rays. For some time the discovery was looked upon as something too unreal to be seriously thought of; but as the full details became known, and as other investigators began to report their confirmation of the experiments announced, the incredulous had to abandon their position and admit that there really was something new under the sun. To-day all doubts have vanished, and all are pushing forward to increase the applicability of the new ray.

To us, as medical men, it has opened up a great field by perfecting our ability of diagnosis in obscure bone lesions, in the locating of foreign bodies in the limbs, a possibility of making certain of the presence of kidney calculi, in joint lesions, and many other conditions that I cannot mention. We must not expect too much, or we are bound to be disappointed.

The result obtained by the "X" ray is not a sharply defined photograph, but is a shadow picture skiagraph. We all know that shadows are more clearly defined by the nearness with which the object is placed to the screen on which

the shadow is projected. More or less space must intervene between the object and the photographic plate in all of these cases, and that must be at the expense of sharpness of definition. Time of exposure is, at present, a very serious drawback to the use of these rays in medical diagnosis, but this is being materially reduced from day to day. The tube becomes heated so rapidly with the current from a coil giving a sufficient spark to produce good results that a much longer time of rest is required before the current can be again turned on. The tube used to produce the results here presented was heated

at the School of Practical Science here of using a bell jar has not proved as useful in medical subjects as it did for other objects, the refraction of the rays during the outline of the part. I have found that by surrounding the upper part of the tube with a tunnel-shaped piece of tea lead the rays can be concentrated without the dimming effect on the border line.

Though the results attained by these rays are familiar to everyone, the means used are possibly not so well known. An article by Prof. H. Schubert, in *The Monist*, deals very nicely with the previous history of this new physical agent:

In the year 1789 the electric current was discovered by Galvani, of Bologna, but it was not until several years later that its most important properties, at least as distinguished from frictional electricity, were disclosed by Volta. Although galvanic batteries, as a means of producing electric currents, were studied and perfected in the next few decades, three great discoveries had yet to be made in the province of electricity before the new agent could attain the importance in civilized life which it to-day occupies, and before theoretical physics could investigate more closely its nature and character. These three discoveries were as follows:

(1) In 1820 Oerstedt, of Copenhagen, discovered that an electric current flowing round a magnetic needle deflects the same, and that a magnetic needle rendered insusceptible to the influences of terrestrial magnetism, and free to rotate in any direction, will place itself at right angles to the plane of an electric current surrounding it.

(2) In 1825, Arago, of Paris, discovered that a piece of soft iron, about which a wire connected with a battery has been wound in spirals, is trans-

formed into a magnet and continues in the magnetic condition as long as the circuit remains closed, but is again unmagnetized when the circuit is broken.

(3) In 1831, Faraday, of London, discovered the so-called "induced currents" of electricity. If, he reasoned, the current was a source of magnetizing action, as Arago had discovered, it was possible conversely that a magnet should be the source of a current-producing action. But Faraday found no confirmation of his conjecture. Twenty years later it could

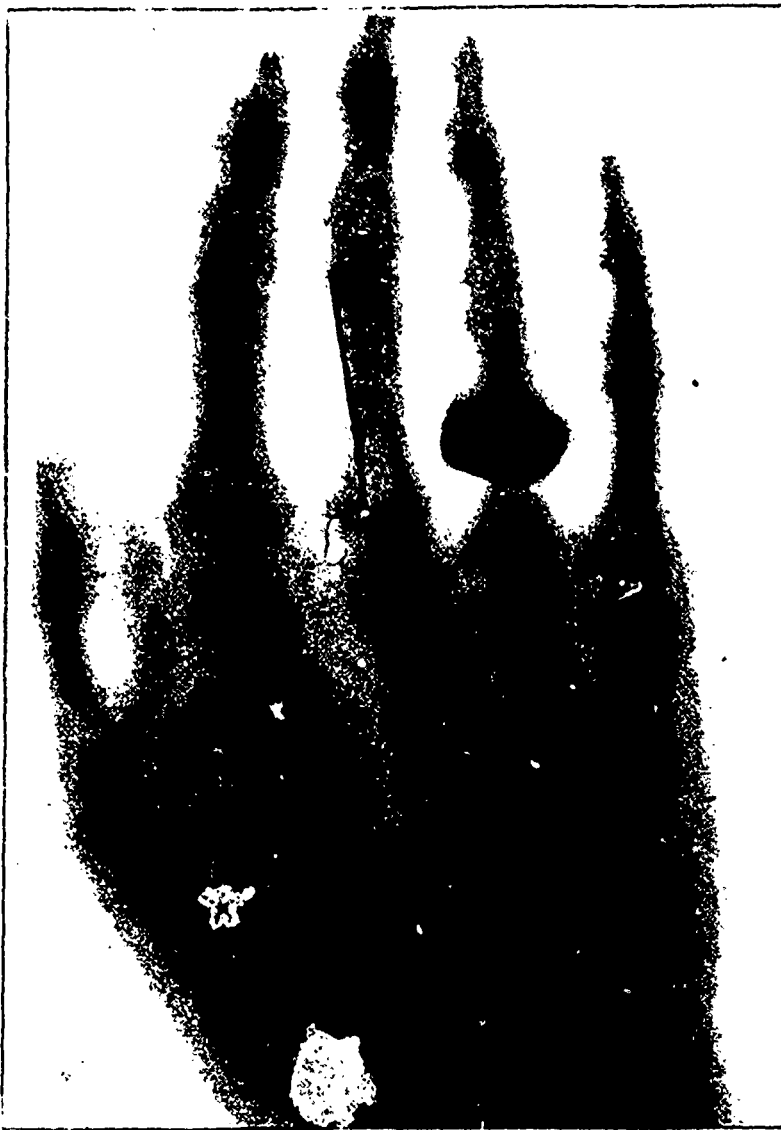


FIG. 1.

in ten seconds to such an extent that it required twenty seconds to cool. The time of keeping the part under exposure is really, therefore, three times that of the actual exposure, but this will be overcome by some form of water jacket surrounding the tube, made of celluloid or aluminium. It would be easily done now if a glass cone could be utilized, but it cannot, as the rays will not pass through glass. Edison has announced a celluloid cup, but the results are not yet known.

The method adopted by the workers

*Read before the Toronto Clinical Society, and reprinted from *The Canadian Practitioner*.

have been decided *à priori*, without experiment, that a magnet *at rest* could not give rise to a current. For that would have violated the law of the conservation of energy, agreeably to which work can be done only provided a like quantity of work has been previously expended in some way. Yet Faraday discovered the law, harmonizing perfectly with the principle of the conservation of energy, that if a magnet be *approached* to a closed spiral circuit it will evoke in the circuit a sudden current lasting only for the moment of approach, but that when the magnet is *drawn away* from the spiral a current in the opposite direction to the first will be momentarily set up therein. Instead of a magnet, a closed circuit carrying a current may be approached and removed, or, instead of the latter, the current in the circuit may be made alternately to appear and disappear, or its strength may be alternately increased and diminished.

Currents thus produced are called "currents of induction," and apparatus designed to generate induced currents, rapidly alternating in direction, by means of common currents, are called "induction-coils." An induction-coil consists (1) of a soft iron core, (2) of a primary wire spiral or helix enveloping the same and receiving an ordinary electric current, and (3) of a secondary wire spiral of thin wire and many turns, enveloping the first. The current sent through the primary spiral magnetizes the iron core (compare the first discovery). The magnetized core then attracts a little iron hammer which is placed before it and regulated by a spring. This movement of the hammer breaks the metallic connection with the primary spiral so that the current is interrupted and the iron core again unmagnetized. The hammer immediately jumps back from the iron core, the current is again set going, and the action described is repeated anew. By this apparatus, thus, we are enabled to make the current in the primary spiral repeatedly and alternately appear and disappear. According to Faraday's laws, now, every appearance of the main current in the primary coil must produce in the secondary coil an induced or "closing current," as it is called, flowing in the opposite

direction, and lasting but for a moment; whilst conversely every disappearance of the current must evoke an induced current flowing in the same direction with the main current, and called the "opening current." Thus are produced in the secondary spiral in quick succession currents which flow in alternately opposite directions. These induced currents are of brief duration, but of enormous tension. Their powerful physiological action on the human body is familiar to every reader.

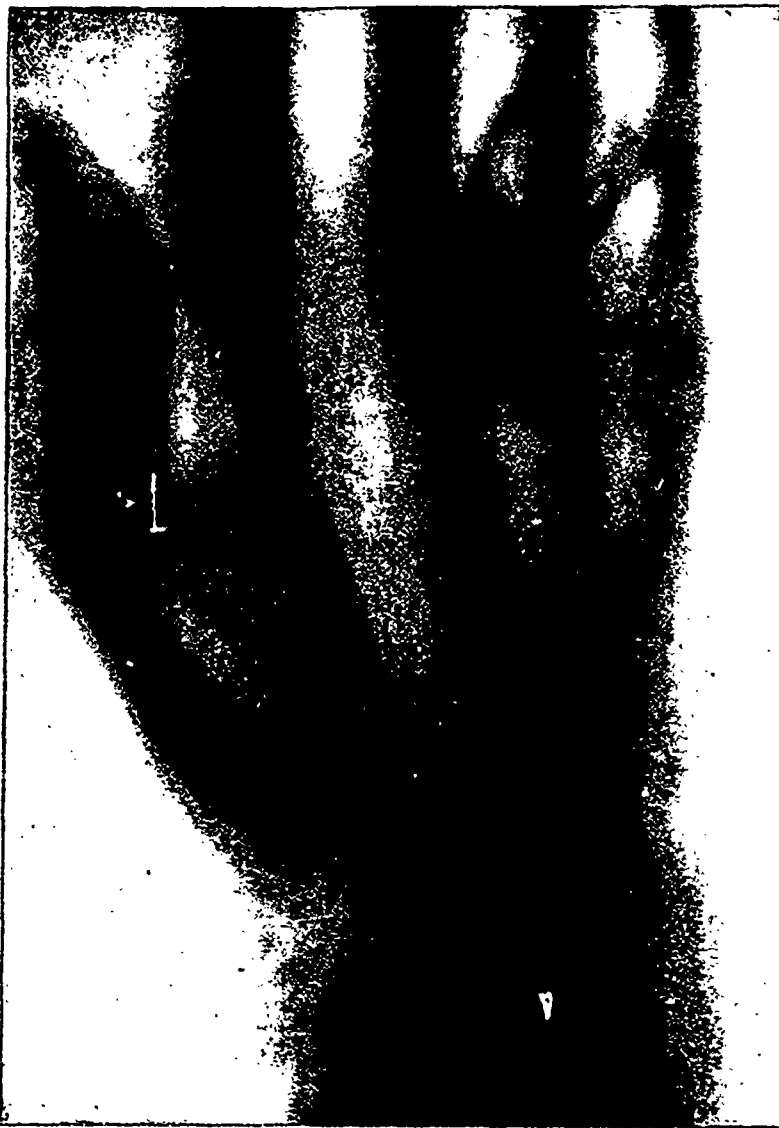


FIG. 2.

It is to these induction currents, discovered by Faraday in 1831, that we owe all the recent magnificent development of electro-technics. For not only is the art of telephoning based upon induction effects, but the performances of large dynamos, or machines designed to produce, by mechanical work, electrical currents of great intensity and high tension are primarily rendered possible by induction effects.

So much for the induction current which is produced from the Rhumkorff

coil. The coil must be agitated by an electric current, and the voltage must not be too high; twelve volts, passing through a Rhumkorff coil, will produce a voltage of, possibly, 100,000, but of very high potential. This current, on passing through tubes that are exhausted to a greater or less extent, produces phenomena characteristic to the degree of exhaustion. The tubes that were first exhausted, and on which experiments were conducted, were made by Geissler, of Bonn, and named after him. The degree of exhaustion was about 1-400 of an atmosphere. In the two ends of these tubes are soldered platinum terminals called electrodes. On connecting these electrodes with an induction current the enclosed gas, through which the current must pass, is set in a vivid state of incandescence. The point at which the current enters is the positive, or *anode*, and the other the negative, or *cathode*. A bright, narrow fringe is observed at the cathode, and, subsequently, a relatively dark-bluish light, the *glow-light*, or *cathode-light*: whilst at the anode, as also in the largest part of the space intervening between the two electrodes, striae of bright and reddish-yellow light are distinctly visible.

Hittorf, in 1869, carried the degree of rarefaction in these tubes to a more minute degree of density, and substituted platinum plate in place of the platinum wire electrode. The bluish glow-light of the cathode spread, in this greater rarefaction, until it nearly filled the tube.

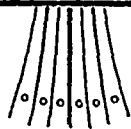
Crookes carried the rarefaction still further up to one-millionth of an atmosphere, and these tubes are called Crookes tubes, and from these the "X" rays of Roentgen are produced.

It, therefore, gives me a great deal of pleasure in presenting to you, to-night, some negatives I have succeeded in making by these "X" rays.

We all must appreciate very highly the work done at Toronto University and the School of Practical Science in the early part of the year; yet none of it had any particular bearing on the application of the discovery to medical or surgical investigation. They reduced the time of exposure, and demonstrated the reflection of the rays, etc., which are of great aid

to the discovery of the rays, etc., which are of great aid

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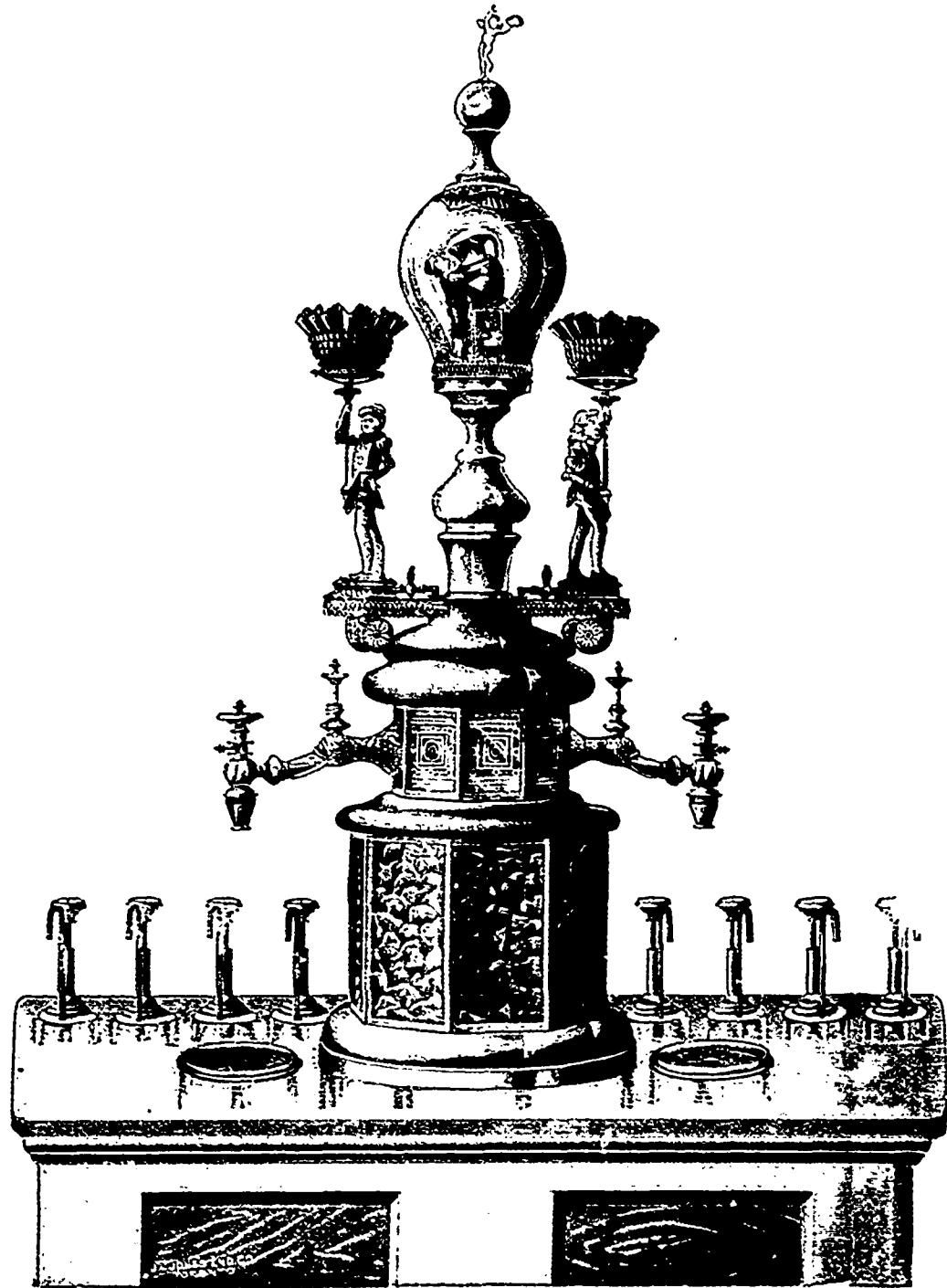
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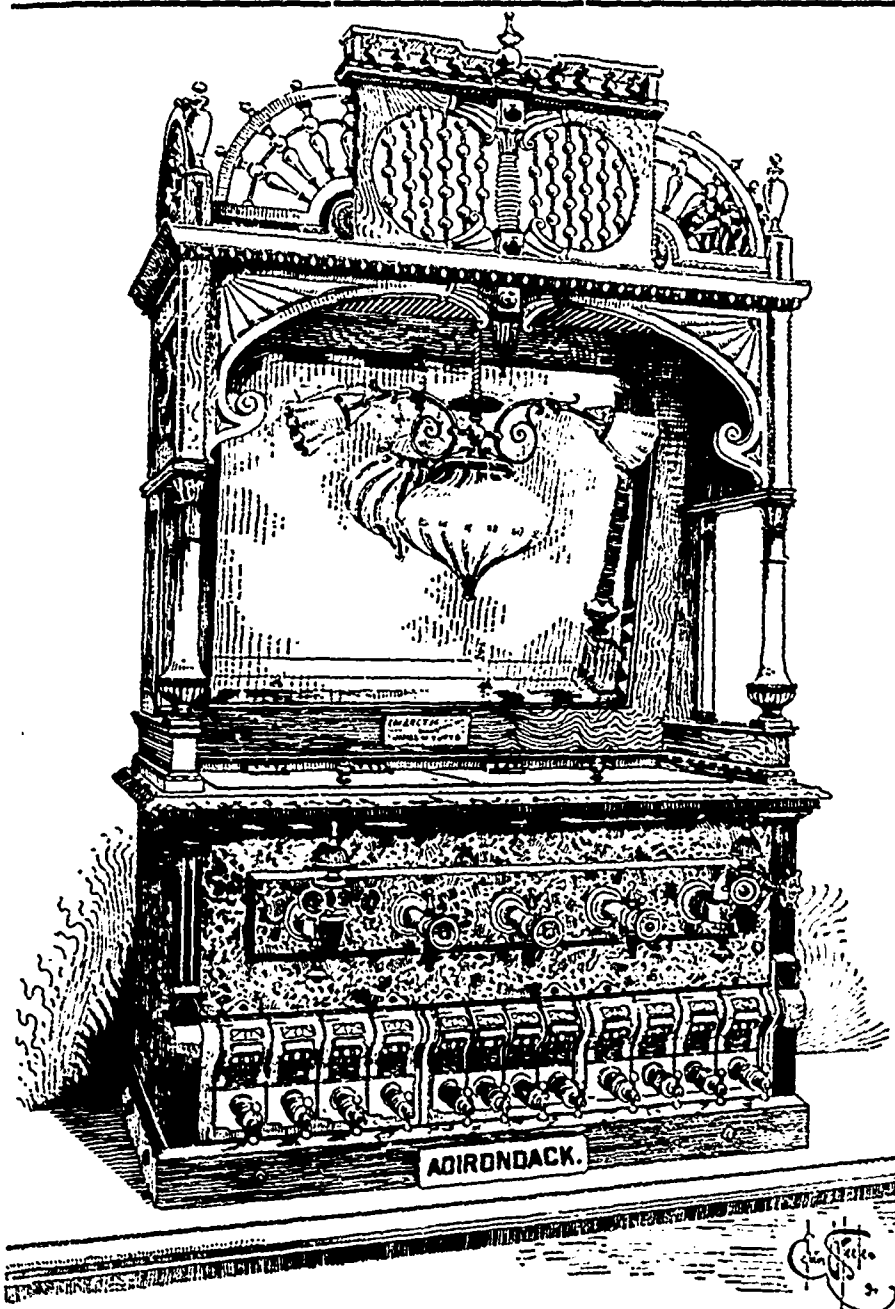
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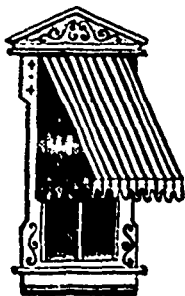
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- Dr. Howard's Quinine Wine
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- Dr. Howard's Cod Liver Oil Emulsion

in our present investigations; yet the negatives are the first produced in Ontario of medical subjects. Delay has been caused by an entire absence of Crookes tubes suitable for skiagraphic purposes. During this interval I got my battery constructed, and secured a Rhunkorf coil capable of producing a spark six inches long. As soon as the tubes arrived from Germany I was ready for work.

A patient with a foreign body in the limb not being at hand to be skiagraphed, I resorted to the next best expedient, and that was of skiagraphing foreign bodies through the hand and arm. As you will see by the skiagraph of the hand (Fig. 1), that it shows a needle under the middle finger — the needle was placed under the finger and nearer to the photographic plate — while under the proximal end of the first phalanx of the index finger I placed a piece of glass, and a much smaller particle at the inner side of the proximal end and radial side of the terminal phalanx of the little finger; under the knuckle joint of the second finger a piece of lead was placed. All of these objects show with great distinctness, and most of them through bone. It appears that these foreign objects present a very much greater obstruction to the "X" rays than the bone, which is to an extent penetrable, as seen by the shadow shown of the thicker and thinner portions of the phalanges and metacarpals. The needle under the wrist (Fig. 2) shows the same result through a much thicker portion of the anatomy than the hand. The sharpness with which these objects are shown is due to their being closer to the plate. If they were embedded in the flesh they would show well enough, but not as sharply, the distance from the plate allowing some light to pass below them. The attention will have to be much more closely drawn to the next skiagraph (Fig. 3), as the foreign object here is one that is within the tissues, and is a source of annoyance. It is situated at the ulnar side of the distal end of the first phalanx of the middle finger. It is a mere speck, and if you overlook it I will not be surprised; at any rate I cut down on the part to-day and removed a minute speck of metal. The bone was also roughened at the situation.

The history of the case is that some ten months ago, the young lady thinks, a part of a needle broke off in her finger. She consulted the doctor, and says a piece of needle was removed, but does not think all came away. The skiagraph showed this spot, and at the operation I found a speck of steel. I shall hope for a recovery from the pain and inflammation which was causing her great annoyance.

I hope that by our next meeting I will be able to present some further examples of the usefulness of this process in locat-



FIG. 1.

ing foreign bodies, as several subjects are now awaiting to be skiagraphed.

MONTREAL COLLEGE OF PHARMACY.

SESSIONAL EXAMINATION, MARCH, 1896.

SENIOR MATERIA MEDICA CLASS.

Examiner—Prof. T. D. REED, M.D.

The following are the questions submitted at this examination:

1. Name some of the products of de-

structive distillation of (a) wood, (b) coal. What is fractional distillation? What are its objects?

2. Explain the terms (a) chemical incompatibility, (b) pharmaceutical incompatibility, (c) therapeutic incompatibility. Give illustrations with official drugs. Criticize the following: R hydr. chlor. muris gr x potass bromid gr xx tere bene et div., in ch. i j.

3. Explain briefly the changes which result from the action of strong nitric acid on (a) cotton, (b) glycerine, (c) tin, (d) copper.

4. Give composition of colcothar, colophony, turpeth mineral, argols, Athrops mineral.

5. Give in outline a process for obtaining quinine. How may it be distinguished from cinchonine and quinidine?

6. Gentian. B.O. habit at. part used. Name three official preparations, with strength. Name three principles which have been found in it.

7. Give a botanical description of ergot, and give the B.P. process for liquid extract of it.

8. How may phosphate of iron be made? How is the syr. fer. phos. B.P. made? What is ferri phosphas solubilis U.S.P.?

9. What are cellulose, maltose, saccharose, glucose?

10. What cinchonas are official? If a pharmacist had half a pound each of three kinds of bark, containing respectively 3, 4, and 7 per cent. of alkaloid, and a sufficiency of other ingredients, could he make ten pints of tinct. cinchon. co. B.P.? If yes, how?

MATERIA MEDICA - MINOR COURSE.

Examiner—Prof. J. E. W. LEWIS.

1. In what cases (a) is it indispensable to use white filtering paper for filtering? (b) How may solutions of nitrate of silver and permanganate of potassium be filtered?

2. Is animal charcoal a suitable agent for decolorizing quinine wine? If not, why?

3. What is precipitation? Give examples.

4. (a) How is infus. digital. B.P. prepared? (b) Is the use of extracts to be commended for making infusions? If not, why?

5. What do you understand by percola-

tion, or method of displacement?

6. What precautions are to be taken when such substances as squill or gentian are to be dealt with?

7. Give the tests for the examination of aqua distillata B.P.

8. In the preparation of extracts of belladonna and conium B.P., what is the purpose of heating the juice to 200° F.?

9. What kinds of incompatibility are there? Give illustrations.

10. Must a pharmacist always refuse to put up a prescription which contains incompatible ingredients? Comment on this.

CHEMISTRY—SECOND YEAR.

Examiner—PROF. C. A. PEISTER.

1. How do monatomic alcohols form their aldehydes and acids?

2. Is the formation of ether, or ordinary sulphuric ether (so called), a simple phenomenon of dehydration of two molecules of alcohol?

3. Give the theory of the production of chloral.

4. What is the action of alkalis on chloral? What are the products?

5. What is a natural fat? A soap?

6. How may we ascertain the alcoholic strength of a complex liquid such as wine, beer, etc.?

7. Having an alcohol of 94 per cent. and $\Delta .8201$, how is it to be diluted to make a spirit of 40 per cent. $\Delta .9519$, pure alcohol having $\Delta .7946$?

8. Explain the terms alkaloid, amine, phosphine, arsine, leucomaine, ptomaine. Give the formula of iodide of diethylpropylbutylammonium.

9. What weight of absolute alcohol will be produced by 100 parts by weight of glucose?

10. When may a ray of light be said to be polarized? Explain the terms levogyre, dextrogyre.

JUNIOR CHEMISTRY CLASS.

Examiner—PROF. JON. BEMROSE, F.C.S.

1. What results when sulphuric acid and oxalic acid are heated together? How would you separate the products?

2. Give two methods by which acetic acid may be obtained; how would you detect SO_2 in it?

3. Describe the "Spectroscope"; of what use is it to the chemist?

4. Give the formula of the two chromates, and of the two manganates of potassium.

5. Also calculate their molecular weight.

6. Finish the following equations, $3\text{Hg} + 8\text{HNO}_3 =$ and $3\text{Cu}_2\text{O} + 14\text{HNO}_3 =$.

7. Name the following compounds: H_3AsO_4 , H_3As , PCl_3 , and POCl_3 .

8. What is "Phosphine"? How would you make it? And what are its properties?

9. Given an aqueous solution containing KCN and K_2SO_4 , how would you prove their presence in it?

10. How much ammonium nitrate would you require to make twenty litres of nitrous oxide?

SESSIONAL BOTANY EXAMINATION.

Examiners—PROF. BEMROSE, F.C.S., AND PROF. MORRISON, F.C.S., F.R.M.S.

1. Name the most important elements used in the nutrition of plants, and the forms in which they are taken up.

2. Draw a figure of the transverse section of an anther, marking the parts.

3. Describe the growth of an ovule up to the formation of the embryo sac.

4. Define the terms mycelium, ligule, gametophyte, scape, and versatile.

5. What is meant by cross and self-fertilization? Mention natural orders where each occurs.

6. Give diagnosis of the natural order liliacea, and show how it differs from the order iridaceae.

7. What is the prothallium of a fern?

8. How do the three forms of dehiscence—loculicidal, septicidal, and septifragal differ?

9. What do you understand by hermaphrodite, monoecious, and dioecious flowers?

10. Name three examples of each of the following forms of fruit: follicle, achene, and capsule.

Curing Cracked Emulsions.

Benj. Shoemaker, in a note in the alumni report (*Phil. Coll. Phar.*), writes on the subject of "cracked" emulsions as follows: "I have always understood that when an emulsion of cod-liver oil 'cracked,' nothing further could be done but begin over and make another. I made an emulsion recently in my usual way (*i.e.*, take 1 troy ounce of powdered gum arabic to a pint, adding first 1 fluid ounce of the oil, and then 2 fluid ounces of water, all at once, and afterwards oil and water, until finished). I was in a hurry and added a little too much oil, and the emulsion 'cracked.' There was some alcohol to be used in the preparation, so I thought I would see whether that would restore the emulsion, and add about 1 fluid dram of it. It brought back the emulsion to its proper condition. I have tried this experiment again lately, with repeated success. Never having heard before of any remedy for a 'cracked' emulsion, and thinking that the matter might be of interest to some of your readers, I send the above note."

Mentho-Phenol as an Antiseptic.

By mixing 1 part of phenol with 3 parts of menthol and melting the mixture, a transparent fluid with an aromatic odor and taste is obtained; the sp. gr. is 0.973, the fluid is nearly insoluble in water and in glycerin, but dissolves readily in alcohol, chloroform, and in oils. It dissolves iodine, iodoform, and aristol. Schaefer finds that this body has strong antiseptic and analgesic properties. It may be used preparatory to cauterizing chancroidal sores and curing necrotic surfaces. As a mouth wash 2 drops mixed with an ounce of aqueous menstruum may be ad-

vantageously employed. A case of abscess under the finger nail was painlessly lanced under a warm 5 per cent. aqueous solution of mentho-phenol, and rapidly healed when dressed with gauze containing 2 per cent. of the antiseptic. Equally good results were obtained in painful suppurating otitis media et interna. Wounds washed with warm 2 per cent. solution of mentho-phenol rapidly heal. In dental practice it is also useful, acting as a disinfectant and anodyne anæsthetic.—(*Boston Medical and Surgical Journal; Pharmaceutical Journal.*)

The Protoplast Cell.

You have caught me at last and caged me, and think you can make me reveal
The secret of life's creation, of which I am sign and seal.

Ho, gauge me by lineal inches, scarce seen in your microscope;

I have clothed the earth with her beauty, plain, valley, and mountain slope.

When the world from incandescent gases congealed into form, I was there,

And the sea was without a tenant, the land was lifeless and bare;

But I bore the infinite promise of verdure, and flower, and tree,

I covered the living myriads that people air, earth, and sea.

I, the all-bearing mother, transmitter to all of life, have yet suffered no diminution, unailing through stress and strife;

Protophyte even as mammoth, and each as the other complete,

In me finds its primal parent, in me all divergents meet!

You stand against increase of matter! Why not against increase of mind?

Since nothing is made out of nothing, can the higher growth be defined?

Or of life? Can life be created, or spring forth where none has been?

The word made flesh, if you trace it, comes only through me, I ween.

So you fail to perceive a radiant where higher and lower swerve!

You say that no sense of vision preceded an optic nerve.

In your wild unrest with the future, while trembling upon its brink,

You hesitate whether 'tis better to know or only to think.

And still I go on increasing the visible forms of life,

Fulfilling my primal function wherewith all creation is rife.

Still unchanged amid all time's changes, which carry an upward sway,

An impulse from simple to complex my offspring must all obey.

I know not a higher or lower throughout the length of the line,

Macro- or micro-cosm no nearer is to the Divine. Protozoan, animal, vegetal, linked by unchangeable law,

Are equally interdependent for the vital breath which they draw.

From the inorganic is fashioned all living, how varied or fair!

What, though, it is only the garment which for a brief season they wear?

And even your leaders in science, who marshal life's orders up,

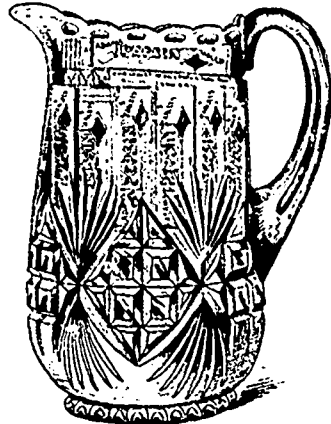
Make the summit and crown of the ages the child and the buttercup.

—Alexander Laing, Glasgow, in *Pharmaceutical Journal.*

CLEMATIS ERRECTA IN ORCHITIS.—Clematis, known also as virgin's bower, like rhododendron, acts upon the testicles, and relieves orchitis, even of gonorrhœal origin.

A Clear Crystal Glass

PITCHER FREE



Capacity : One-Half Gallon.

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Canadian Pharmaceutical Organizations.

We propose giving short sketches of the various pharmaceutical organizations of Canada—each province having a distinct society or college of its own, with laws established by the provincial legislatures. The acts establishing these societies are so very similar that, were the standards of examination more nearly alike, a universal pharmacy act might easily be put into operation. With the object of giving publicity to the basis of each organization, and showing how closely allied they are one to the other, and the further idea of bringing about a Dominion Pharmaceutical Association, will, we think, fully justify our giving up space to these articles.

NOVA SCOTIA.

The Nova Scotia Pharmaceutical Society was incorporated April 4th, 1876, the following being the promoters:

Thomas A. Brown, John K. Bent, Alexander Forsyth, Robert G. Fraser, William H. Simson, Henry A. Taylor, Thomas Walsh, William H. Webb, Henry L. Aitkins, James W. Jackson, Frederick W. Fraser, and John W. Webb.

The council consists of twelve members, whose term of office extends over two years, six members retiring at each annual meeting held in June, and their places filled by others chosen at that meeting.

The board of examiners consists of five persons, three of whom are appointed by the council and two by the provincial government. Every examiner is appointed for three years, and, in event of any vacancy occurring, his place is filled by the election of another, who serves three years from the date of appointment. The examinations are held at least once a year, notice being given in the newspapers of the city of Halifax. The examination fee is five dollars, but anyone failing to pass the examination may present himself again, but not until a lapse of six months, without further payment. A further sum of five dollars is to be paid when the diploma is granted. Every member of the society, who must be a registered chemist and druggist under the act, pays an annual fee of four dollars into the funds of the society. All druggists doing business in the province must be registered, and anyone not complying is subject to incur a penalty not exceeding twenty-five dollars and costs for the first offence, and for every subsequent offence fifty dollars and costs of prosecution.

Registered legal practitioners are exempt, but every drug store must be in charge of a member of the Nova Scotia Pharmaceutical Society, or a registered physician, so that branch stores must have a qualified manager.

The officers of the society consist of a president, vice-president, treasurer, secretary, and a registrar appointed by the council.

Schedule A enumerates the list of

poisons which registered druggists alone are authorized to sell or dispense.

SCHEDULE A.

Acids: Carbolic, muriatic, nitric, oxalic, hydrocyanic or prussic; aconite and its preparations; aconitia; antimony, tartarized, or tartar emetic; arsenic and its compounds and preparations; atropia and its salts; belladonna, and its preparations; cantharides and its tincture; chloroform; chloral hydrate and croton chloral hydrate; chloride of zinc; conium and its preparations; conia; colchicum and its preparations; creosote, croton seeds and their oil; cyanide of potassium, and all other cyanides; digitalis, and its preparations; digitaline; elaterium; ergot and its preparations; essential oils of bitter almonds, cedar, rue, savin, and tansy; ether; euphorbium; Goulard's extract of lead; henbane and its preparations; hellebore, black, white, green, and their preparations; Indian hemp and its preparations; iodine and its preparations; mercury, all poisonous compounds of, including corrosive sublimate, red and white precipitates, and iodides of mercury; morphia and its salts and preparations; nux vomica and its preparations; opium and its preparations; except paregoric; pink root; phosphorus; podophyllin; savin and its preparations; santonine; scammony; St. Ignatius' beans; stramonium and its preparations; strychnia and its salts and preparations; veratria and all poisonous vegetable alkaloids and their salts.

The subjects of the examination are as follows:

1. *General*.—The candidate must write a fair and legible hand, and must spell correctly. He must possess a knowledge of English grammar, the first four rules of arithmetic, vulgar and decimal fractions, and the rudiments of the Latin language.

2. *Materia Medica*.—The candidate must recognize specimens of drugs (as roots, barks, leaves, gums, fruits, etc.) used in medicine, and must be able to judge correctly of their quality. He must know their sources, habitat, and commercial history; their medical properties, uses, doses, and incompatibles; must name the officinal properties into which they enter, and the antidotes to be administered in cases of emergency for the more ordinarily occurring poisons.

3. *Chemistry*.—The candidate must possess a knowledge of the laws of chemical combination—the nature and properties of chemical compound elements and their compounds, recognize the acids, oxides, salts, and other definite chemical bodies of the Pharmacopœia, judge of their quality, describe the process by which they are produced, and explain the decompositions that occur in their production and admixture. He must be acquainted with the methods of taking specific gravities, and of testing the purity of the chemicals used in medicine and pharmacy.

4. *Practical Pharmacy*.—The candidate must possess a thorough knowledge of

pharmaceutical processes, recognize the galenic preparations of the Pharmacopœia (as extracts, tinctures, powders, etc.), describe the method of their preparation, and the composition of such as are compounded, and state the proportion of their active ingredients. He must be acquainted with the injuries to which drugs are liable, by age or otherwise, affecting their quality, and the proper means and precautions for preventing their deterioration. He must possess a familiar knowledge of the weights and measures in use in the British, American, and French Pharmacopœias, and the differences between their preparations and those of similar names in the United States Pharmacopœia.

5. *Dispensing*.—The candidate must read written prescriptions, translate them into English, write out at full length all abbreviated words in a neat and distinct hand, and detect incompatibles and unusual or dangerous doses. He must weigh, measure, and compound medicines, and finish and properly direct each package.

6. *Botany*.—The candidate must have a knowledge of the parts of a plant, of how plants grow from the seed, and of their growth from year to year. Also be able to describe the different forms or kinds of roots, stems, and leaves. The propagation of plants from buds and seeds. Flowers, their arrangement, sorts, etc. Fruits and seeds. The uses of plants, and how they are classified. He must also be able to name and describe those natural orders which contain the principal medicinal plants.

The following are the presidents since the formation of the society:

1875-1876, Henry A. Taylor, 1877, Alex. Forsyth; 1878-1882, Henry A. Taylor; 1883-1887, Wm. H. Webb; 1888-1889, Wm. H. Simson, 1890, Jas. H. Angwin, 1891-1892, Avery F. Buckley, 1893-1894, Jas. B. Hattie, 1895, F. C. Simson.

The officers for the present year are:

President, F. C. Simson, vice president, W. F. O'Dell; treasurer, L. J. Mylno, secretary, A. H. Buckley, registrar, W. H. Hamilton.

The society is in a flourishing condition financially, and its members work most harmoniously.

LENTANIN.—An alkaloid from the *Lentana brasiliensis*, forming a white, odorless, very bitter powder, which is almost insoluble in water, but soluble in alcohol. Recommended by Bueza as an energetic antiseptic in dose of 1 gram. *Phar. Post.*

BOROGLYCERIN TOILET CREAM.—Lanolin 125 grams, and vaselin 350 grams, are fused together, then adding 175 grams of glycerin and 50 grams of a 50 per cent. solution of boro-glyceride, finally 100 grams of a perfumed water are combined, adding a few drops of otto of rose or some other perfume extract. *Wien. Drog. Ztg.*

The Science of Optics.

BY LIONEL LAURANCE,
Principal of the Optical Institute of Canada.

[Entered according to Act of Parliament of Canada, in the year 1896, by Lionel Laurance, at the Department of Agriculture.]

Elementary Anatomy of the Eye.

A convex lens increases in strength when held further away from the eye, but a concave decreases; so that although a positive and a negative lens of the same curvature will neutralize each other when placed close together, they will not do so if separated a few inches. If you take a No. 5 convex and a No. 5 concave, and separate them, holding the former further away, the light passing through the two is converged considerably, because the convex lens acts as one that is stronger than No. 5. If the concave is placed further away it acts as one that is somewhat weaker than No. 5, so that the light passing through the two is converged slightly. The difference when the lenses are held together is slight; but, as the one or the other must of necessity be further away, it is sufficient to prevent an absolute neutralization.

If a convex lens, say, No. 10, and a concave of the same number be held in front of the eye, they act practically as a plain glass. If the concave be gradually moved further out, the convex being left in its original position, the concave neutralizes less of the convex power, until, if it be removed to a certain distance, the former has no influence on the latter, as practically all the rays of light diverged by the concave pass to the outside of the convex lens.

To learn whether a convex or a concave sphere is properly centred, look through it at the cross on the analyzing card. If it be centred, the junction of the two lines will be exactly in the centre of the lens, while, if it be decentred, the junction of the two lines will be seen somewhere not in the exact centre of the lens. To complete the test the lens must be rotated on its axis while being looked through, and the cross should not move if it be a properly centred spherical.

The optical centre lies in the thickest part of a convex, and the thinnest part of a concave lens.

The geometrical centre of a lens is that which is midway between the edges—that is, the middle point of the glass.

A lens is said to be centred when the optical and geometrical centres coincide, and is said to be decentred when they do not.

The test of noting whether the cross moves when the lens is rotated on its geometrical centre is also that which is used for distinguishing between spherical and cylindrical lenses.

A meridian is any line encircling a globe and passing through the two poles. It is, therefore, as regards lenses, any line across it passing through the centre.

Spherical lenses, being segments of or hollowed out on spheres, have the same

curvature, and, therefore, the same refractive power in every meridian.

Cylindrical lenses are segments of or hollows made on a cylinder or column which is perfectly straight in one direction, that is the axis, and has a varying degree of curvature in each meridian, the greatest being in that direction which is at right angles to the axis. A convex cylindrical lens is a segment of a cylinder on one side, and is flat on the other. A concave cylindrical lens is a hollow curved out by a cylinder on one side and is flat on the other. As a cylindrical lens has no curvature in the line of its axis, it has there no refractive power; the greatest amount of refractive power is in the meridian of greatest curvature at right angles to the axis, and on the curvature of this meridian of greatest refraction depends the number of the lens.

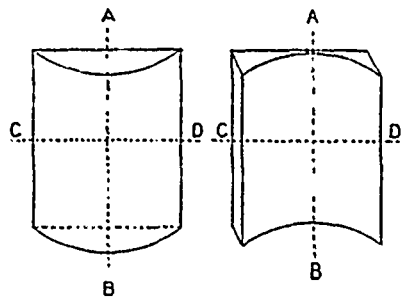


FIG. 23.

FIG. 24.

Fig. 23 represents a convex cylinder, and Fig. 24 a concave cylinder. The line AB in either shows the axis where there is no refractive power, and CD in either shows the meridian at right angles to the axis, where there is the most curvature, and therefore the greatest refracting power.

In discussing or fitting cylinder lenses it is necessary to consider only these two principal meridians, the axis and the meridian at right angles to it.

We always talk of a cylinder as being with its axis in a certain direction, and it is well to grasp the fact that the defect which the cylinder has to correct is at right angles to the axis of the lens; that is to say, it is in the same direction as the meridian of greatest curvature. I consider it a pity that the position of a cylinder should be marked by its axis. It would be far more rational to mark it by the meridian of greatest power, but such is the custom.

Vertical is that direction running straight up and down, perpendicular to the horizon. Horizontal is that direction running straight across, parallel to the horizon.

Two cylinders of the same number, both convex or both concave, placed together with their axes crossing one another, make a spherical lens of the same

number. For example, a +4D cylinder axis vertical and a +4D cylinder axis horizontal are together exactly the same as a +4D sphere. The greatest power of the one coincides with the axis of the other, and *vice versa*, and at the intermediate meridians what is wanting in curvature to make a +4D in the one lens is supplied in the other, so that there is a refractive power of 4D in every meridian, and this constitutes a 4D spherical.

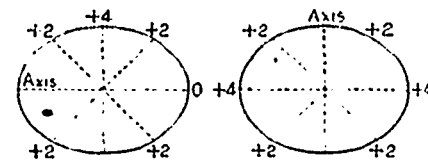


FIG. 25.

In Fig. 25, if the lens A be placed over the lens B it will be seen that the total refracting power of the two lenses is 4D in every meridian.

A 2D cylinder may therefore be considered as a lens that has half the refractive of a 2D sphere, not half of its refractive power in every meridian, that would constitute a 1D sphere, but one that has the full amount of refractive power in one meridian and none at all in the opposite meridian, the intermediate ones having a curvature that gradually descends from that of 2D to *nil*.

If two cylinders, say, +1.50D, be placed with their axes parallel, they make a +3D cylinder; if the axes are at right angles to each other, they make a +1.50 sphere. At any intermediate position they make a certain compound cylindrical lens, the same as a sphere and a cylinder.

As rays of light passing through a cylinder suffer refraction to a different in every meridian and none in that of the axis, it is not possible to get a complete image of a luminous object on a screen with such a lens. If, however, a convex cylinder be held in front of a screen at the focal distance of the meridian of greatest curvature, with the axis either horizontal or vertical, certain bright lines will be seen. For instance, if a +4D cylinder be held with its axis horizontal at 10 in. distance from a screen and facing a bright light, some lines will be seen on the screen running horizontally, so that a number of a simple convex cylinder might be learnt in this way, although it is not very certain or satisfactory.

It should be noticed that if the axis be held vertical the bright lines are vertical; the greatest power of the lens being horizontal the rays of light are refracted in that meridian, and brought to a focus point by point, so that they form lines that run vertically.

When a cylinder is combined with a sphere the cylindrical power is ground on one side, the spherical power on the other, and it is called a compound cylindrical lens. The refraction of such a lens is very complicated. There is refractive power in every meridian, the least being in the meridian of the axis of the cylinder, and the greatest in the meridian at right

BOOKS FOR DRUGGISTS

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angles to the axis. If you focus light on to a screen by a compound cylindrical lens, say, a +4D spherical combined with (sign \ominus) a +4D cylinder, you will find two distances at which you will get bright lines sharply defined. If the axis be horizontal you will find at 10 in. certain bright vertical lines; this is the focal distance of the spherical power only. At 5 inches you will find certain bright horizontal lines; this is the focal distance of the combined cylinder and spherical powers (the stronger the lens, the shorter the focal distance). When the lens is held anywhere between the two focal distances, there will be found on the screen round and oval shadows which are called circles of diffusion. The distance between the two focal points is called the interval of Sturm. The number of an unknown cylinder is, however, to be found properly only by neutralizing.

If you look through a cylindrical lens at the analyzing card, you will find that the square card appears oblong. A convex cylinder will make the card appear larger in the direction of the meridian of greatest refraction, while a concave cylinder will make it appear smaller. In Fig. 26 A is the card, B is as it appears through a convex cylinder, C is as it appears through a concave cylinder, both cylinders being held axis vertical. If the lenses be placed one over the other, axes corresponding, the card is seen square again if the two lenses be of the same number.

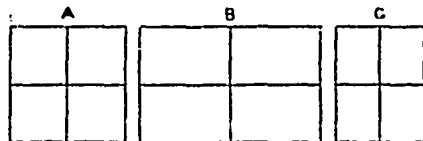


FIG. 26.

To distinguish between a lens that has only spherical power and one that has cylindrical power, look through it at the analyzing card, and turn the lens around its centre. If the lens be spherical, the lines remain unmoved; if the lens be cylindrical, the lines become twisted, as in Fig. 27.

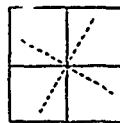


FIG. 27.

There are two positions of the lens where the cross-bars are seen in their proper positions perfectly straight, one is when the axis is parallel to the vertical bar, and the other when parallel to the horizontal bar. When the bars are in their natural position, you can find the axis of a simple cylinder by moving the lens downwards and also sideways. In one direction there will be no movement of the figure, as the lens, being moved in the direction of its axis, acts as plain glass, and so by this test you can locate the axis of the cylinder. If the lens be a compound cylinder, then there will be movement in both directions; but where

it is less marked indicates the direction of the axis, and where it is greater shows the meridian of greatest power. If the former, there is movement caused by the spherical only; in the latter that of the combined cylinder and spherical.

As with spherical so with cylindrical lenses. The movement of an object seen through a lens when it is moved is with the lens, if it be concave, and against the lens, if it be convex.

As the number of an unknown cylinder can only be found by neutralizing, the first thing to do is to locate the axis. This having been done move the power lens contrary to the axis, and note if it be convex or concave. Then proceed to find the cylinder of opposite refraction, that placed over the unknown lens will completely neutralize the movement in the meridian of greatest refraction. The lenses during the working out of this must be kept exactly parallel to one of the bars, the vertical one for preference, and care must be taken that the axis of the neutralizing lens be placed and held with the greatest exactitude just over the axis of the other lens. To do this with ease it is, perhaps, better to mark with ink the axis of the unknown lens; those with which the neutralizing is done will have the axis marked if they be from a test case.

Neutralizing compound cylindrical lenses is sufficiently difficult. First locate the axis of the cylinder and mark it with ink, and holding the lens axis vertical move it vertically; note the direction of the movement, and find that spherical lens of opposite refraction that will cause no movement of the horizontal bar when the two lenses together are moved vertically. This spherical lens, neutralizing the movement of the spherical of the unknown lens, denotes the power of the latter. Now, holding the two lenses—the compound cylinder and the neutralizing spherical—together, with the ink-marked axis still vertical, move them horizontally and note the direction of the movement of the vertical bar, and find that cylinder of opposite refraction that will neutralize the horizontal movement; the axis of the neutralizing cylinder must be put on exactly over the axis of the unknown lens which you will have marked with ink.

To simplify the above note that when the lens is moved vertically you must regard the direction taken by the horizontal bar, and *vice versa*. It requires considerable practice to neutralize properly and quickly strong compound lenses. The best way to learn this work is to practise with lenses of known refraction, such as are in a test case, taking note of the movement of the bars seen through various simple and compound cylinders, and how these movements are nullified by lenses of opposite refraction.

A combination of a + cylinder and a - cylinder with the axis of the one at right angles to that of the other (they cannot, in practice, under any circumstances, be otherwise than at right angles) is called

a cross cylinder. Such a lens is, however, little used to day, as it is much more difficult and costly to make, and also because it is not so good for optical purposes as when reduced to a mixed cylinder. I apply the term mixed cylinder to a combination of spherical and cylindrical, in which the cylindrical is of opposite refraction to the spherical, and also of a higher number, its refraction being in the one direction, and in the other. The movement of the bars on moving a cross or mixed cylinder, with the lens in the one direction, and against the lens in the opposite direction.

For the reduction and transposing of cylindrical lenses, see chapter on that subject.

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CANADIAN DRUGGIST, Toronto.

Glycosolvol is, according to the *Pharmaceutische Centralhalle*, a new remedy for diabetes mellitus which has been introduced recently, but so far no information is forthcoming as to its composition.

Pharmacy in England.

(By Our Own Correspondent.)

Professor Dunstan, F.R.S., of the Research Laboratory of the Pharmaceutical Society, has resigned this post in order to accept the directorship of the Research department of the Imperial Institute. Those who read between the lines of this bald announcement will easily guess that this is the latest, and probably last, outcome of the unfortunate aconitine controversy that was raging this time last year. Professor Dunstan did not come out of the affair with flying colors, as his friends thought he would, and even the whitewashing of his own committee has failed to accomplish its object. It is not surprising, therefore, that at the first available opportunity Professor Dunstan should sever a connection that was uncongenial. It is a curious fact that although Professor Dunstan is not a pharmacist, and has little in common with pharmacists, yet he has been unable to dissociate himself from pharmacy in the eyes of the scientific world, no matter how he tried. Of course this was because his education was chiefly obtained in the society's laboratory, and his rise in the world entirely due to the pharmaceutical backing he obtained. Since then most of his work has been on pharmaceutical lines, or, at all events, relating to drugs. This is just what is wanted at the Imperial Institute, where a museum of drugs has accumulated for investigation, and the laboratory staff has had no one with pharmaceutical training or special knowledge of drugs attached to it. Professor Dunstan intends increasing this staff, and probably will take one or two men with him from Bloomsbury Square, as soon as he severs his connection with the society.

Close on the Professor's resignation comes the news that Mr. Michael Carteigh does not intend to accept re-election as president of the Pharmaceutical Society. I have had this from the best source, but so far it has not leaked out in England. For several years he has threatened that he would not accept re-election, but when the time came he has yielded to persuasion. But this time he says he has made up his mind and nothing will alter it. It is intended, by those who ardently support him, to place Mr. Walter Hills, F.C.S., in the presidential chair. It is assumed by some that Mr. Hills' will be the velvet glove containing the Carteighian iron hand. If this is so, I think they will be much surprised by events, as Mr. Hills is a very able man, and not at all likely to play the puppet. He is the sole proprietor of the old established business of John Bell & Co., of New Oxford street, London. Jacob Bell is the bright and shining light of the past generation of the pharmacists, and Mr. Walter Hills is the son of Jacob Bell's nephew. He is a good speaker and hard worker, and would devote a good deal of his time to the work of the society, in spite of the impression that he is rather a *dilettante*. He has made rather a bad start by opposing the

Shop Hours' Regulation Bill, which is Sir John Lubbock's method of obtaining early closing by means of local option. As this measure is supported by the majority of the craft, it is rather unfortunate that Mr. Hills should have spoken so decidedly against it; more especially as, from the point of view of practical politics, the bill is threatened by being smothered with the too attentive amendments of its own supporters.

Messrs. Gibson & Son, of London and Manchester, have introduced a new feature in the packing of their well-known boiled sweets that cannot fail to be appreciated by their export customers. Hitherto their goods have only been supplied in glass bottles, which have not always survived the long journey to which, in many cases, they are subjected. Now they are putting them up in tins, from one pound net weight and upwards, and as these are not charged the change is decidedly beneficial. Of course, from the chemist's point of view, glass packages are better for showing off this class of goods, but tins are much better for keeping the stock in than bottles in hot climates. This style of packing might be much more largely employed than is now the case, and nothing would be lost in appearances if enamelled tins were employed. Thus, antiseptic dressings and plasters have for some time been put up in sealed tins by several American houses, such as Seabury & Johnson, Johnson & Johnson, etc. Powdered drugs, too, keep better in tins than bottles, as the latter have always to be washed first, and too often the drug is placed in a carelessly dried bottle, with the result that it soon deteriorates. Compressed tablets and some capsules are also better stored in tins than bottles or boxes, but some concession to artistic taste should be made by only employing decorated tins. Tooth paste or powder is distinctly more convenient in round tins than the old dispensing ointment pots too often employed, or wooden boxes. The latter have an irritating way, after a time, of the lid disagreeing with the lower portion and refusing to fit on nicely again. In all damp, hot climates the superiority of tins as containers is widely recognized, and yet not always carried out by exporters.

Slowly the Association of Proprietary Dealers is making headway in its efforts to enlist the co-operation of chemists with its scheme. Meetings of the members of the craft have been held in the metropolis and several of the large provincial towns, and the support received so far appears encouraging. A curious suggestion has emanated as the result of these meetings which is not what the originators intended. Someone has gravely suggested that a central institution should be founded where all proprietary preparations, and also the ordinary galenicals, should be manufactured and supplied to the shareholders at cost price. Only those who refused to cut prices should be allowed to take shares, and the suggestion is plainly

made that this would enable the non-cutter to wipe out the cutter when necessary by fighting him with his own weapons for a time, and then, having secured the desired result, prices might go up again. We have heard of this scheme before, but somehow it has never worked. Wholesale druggists exist in larger numbers to-day than ever before, although their number does not increase in anything like the proportion that is found in the retail. That combination, even for the purpose of buying cheaply, is useful is well known to a number of pharmacists, who do not hesitate to combine their orders so as to obtain the best prices and terms. Even in the west end of London I know of three pharmacists who are excellent neighbors, and whenever they can manage it they combine their orders, and thus make a considerable saving. There is little doubt, if only the capital were subscribed, and good management secured, that such a central institution would pay well. But in the present temper of the craft, especially in provincial towns, where they love each other too often like poison, the mere notion of uniting for any trade purposes is scouted.

Progress is being made with the new photography, and both the leading medical journals, the *Lancet* and the *British Medical Journal*, have devoted laboratories to experimenting with it. Messrs. Brady & Martin, of Newcastle-on-Tyne, and Messrs. Reynolds, Branson & Co., of Leeds, are also supplying the apparatus to medical men and hospitals, but London druggists have not gone in for it. The latest development is the discovery in the *Lancet* laboratory that, placing the dark slide facing downwards upon powdered fluor-spar, the exposure necessary is reduced to a few seconds. It is quite evident that we are only at the beginning of the developments in the subject.

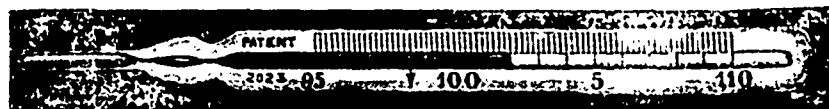
The Price of Alcohol.

The letter of Messrs. Anderson & Nelles, which appears in our correspondence columns, is one worthy of consideration. It appeals to the pocket as well as to the love of justice of each individual member of the drug trade, and there could be no more opportune time than the present, when candidates are soliciting votes, to secure from them pledges to assist in a movement which aims at the reduction of price in an article so universally used in the preparation of medicine. We would like to hear from others of our readers in reference to this proposition.

Triphenin is the name given by J. Von Mering to a homologue of phenacetine which is obtained by heating paraphenetidine with propionic acid. It melts at 120°C., and is soluble in 2,000 parts of cold water. In doses of 0.5 to 0.6 gm. (7 to 9 grains) it lowers the temperature of the body from 2 to 3 degrees.

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wood to be stained—a laboratory table top, for instance, is given a coating of the first solution, and after it is absorbed one of the second solution. Let dry, and repeat the operation. Three coats of each will be sufficient for any wood. After the last coat has become quite dry, go over the wood with good boiled linseed oil and rub well. Better still is a mixture of linseed oil 5 parts, wax 5 parts, and oil of turpentine sufficient to make a pasty mass. This preparation gives a deep and everlasting black that most closely resembles, on hard wood, a good article of ebony, and it gives druggists who want to finish up their fixtures in ebony a splendid medium with which to do it.—*National Druggist*.

Photographic Notes

Photography for Chemists.

BLACK AND WHITE.

One or two queries that have been sent by correspondents, on the subject of failures in successfully reproducing black and white subjects, such as line diagrams or printed matter, either as prints or lantern slides, suggest that primarily the cause of failure lies in the making of the negative, and that this point is deserving of treatment at some length.

First, as to the lens. Almost any lens may be used, even a single or landscape lens, because, as a rule, we do not use the whole of the field, merely the centre, and there distortion of marginal lines does not become apparent; on the other hand, a doublet is preferable, and undoubtedly the newer lenses, such as the Concentric, Collinear, Zeiss, Goerz, or Cooke, give superior results, because of their flatter fields and greater freedom from astigmatism. The focus of the lens is immaterial, provided always it is not so long that it will not allow of a sharp image being obtained when copying full size, or nearly so; because it must be remembered that the nearer you get to your object, so the focal length for the time increases, and, if you have two or more lenses, the necessary distances should be calculated out so that you do not get into a difficulty by using a lens of too long focus, or one too short. The rule to find these distances is, divide the longer base of original by longer base of plate, add one, and multiply by the focus of lens; for copying, this gives the distance between lens and object. To find the distance between lens and sensitive plate, divide the distance between lens and object by the number expressing the ratio of image to object. We want to copy a diagram or page of a book measuring 9x5 ins. so that we can make a lantern slide by contact; the lantern plate measures $3\frac{3}{4} \times 3\frac{3}{4}$ ins.; $\therefore 9 \div 3\frac{3}{4} =$ the amount of reduction, or ratio of image to object. Using an 8-inch focus lens, we have a very simple sum:

$$[(9 \div 3\frac{3}{4}) + 1] \times 8 = 4\frac{8}{11} \times 8 = 30\frac{8}{11} \text{ ins.}$$

This is the distance from lens to object; then:

$$30\frac{8}{11} \div [9 \div 3\frac{3}{4}] = 10\frac{8}{11} \text{ ins.,}$$

which is the distance between lens and plate. It may be added that in doublet lenses these distances should practically be measured from the diaphragm slot, and with single lenses from the front surface of the lens. There is one important point which must not be forgotten; taking the above case, we find that the focus is increased to 11 ins. practically, but our diaphragms or stops, which have an important bearing on exposure, are calculated out on a basis of 8 in. facts. The result will be that they are reduced in value, and, therefore, the exposure should be proportionately lengthened; for instance, the diameter of F/8 with an 8-in. lens is obviously 1 in.; therefore, with 11 in. focus it is no longer F/8, but F/11; and as the exposures with these two apertures are as $8^2 : 11^2$, or practically as 1 : 2, it is obvious we must take this into consideration.

Now for the treatment of the object. Suppose we have a page of a book, a diagram, or engraving to copy, and it is impossible to tear it out of the book, what is the best way to go to work? As a rule, one does not care to tear up one's own books, though we may not be so careful of other people's; but even they would object, probably, to have, perhaps, a valuable book mutilated merely because you want to copy something. Obtain two pieces of plate glass, or even old negative glasses will do, so long as they are quite clean, some stout india-rubber bands or American wooden clips. Place your book flat on the table, open at the particular leaf. Hold this leaf up straight, place one glass behind it and one in front, slip two india-rubber bands over the glasses and leaf, one near the centre of the book, the other at the edge of page, and you will have a perfectly flat surface, and only need place a box or pile of books behind to keep this upright and in a position for copying.

The next point is, where is it to be opened? Naturally, we have a totally different subject to a living subject. We want no half-tones, no modelling, no thing but black and white, consequently as flat and even a lighting as possible. This does not seem a very difficult thing to obtain; but it is far more difficult than one would suppose. Placing the book exactly opposite the window of the room is satisfactory as long as too short a focus lens is not used, or else the camera casts a shadow, and photography is far more sensitive to varying lighting than our eyes. If it is not possible to do this or to copy the book out of doors, then place it as nearly as possible at an angle of 45° with the window; and, to equalize matters, use a good-sized bedroom mirror to reflect the light on to the side further from the window. Now set up your camera approximately at the distance found by above rule, and focus sharply with full aperture of the lens. And now

look out for reflections; if you can on the ground glass see the slightest reflection you may be quite sure that it will appear in the negative and spoil your results. If you cannot get rid of them in any other way—and it will be found that it generally is possible to do it by a slight shifting of the book and camera—then you must erect a framework of tissue paper all round the book, for this breaks up the light, so that no distinct reflections are visible.

Before leaving the question of the subject, it must be distinctly understood that the camera must be parallel to the object, or parallel lines in a diagram will appear to be convergent. This is particularly important when making negatives for lantern slide work.

One of the principal advantages of rapid plates is their power of reproducing correctly the varying tones or gradations which exist in nature, but in copying black and white this very power is a great drawback, because we want no tones, no gradations, merely black and white; and, therefore, rapid plates possess a quality we do not want. The only plates to use for this work are the so-called photo-mechanical or process plates, which are specially made for the purpose, and have but little or no scale of gradation, but merely two tones.

With regard to exposure, but little help can be given. The only thing to do is to make a trial as follows: Pull out the shutter of your dark slide, and uncap the lens for thirty seconds, cap the lens, push sliding shutter in about one-fourth, give fifteen seconds more; repeat this operation till the whole plate has been exposed in strips with thirty, forty-five, sixty, and seventy-five seconds exposure; on development, a good guide will be obtained as to something like the correct exposure. Practical trial alone can teach this.

The particular method of development is not of much moment—pyro, hydroquinone, glycine, or even metol and hydroquinone.

A very good pyro formula is:

Pyro.....	4 grains.
Metabisulphite of potash.....	4 "
Potassium bromide.....	4 "
Distilled water.....	1 oz.
Sodium tribasic phosphate.....	40 grs.

or hydroquinone—

Hydroquinone.....	4 grs.
Metabisulphite.....	4 "
Bromide.....	2 "
Citric acid.....	2 "
Distilled water.....	1 oz.
Sodium tribasic phosphate.....	40 grs.

Glycine may be used instead of the hydroquinone in the last formula, and equally good results obtained. For beginners pyro should be avoided.

In developing, the main point to be observed is clear lines; density is quite of secondary importance, though if the two can be obtained in one operation, so much the better. Continue development as long as you can, but on the slightest sign of the lines veiling wash and fix. When thoroughly fixed, rinse and take

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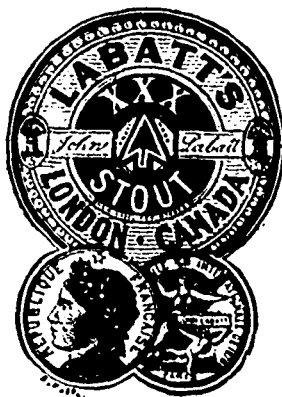
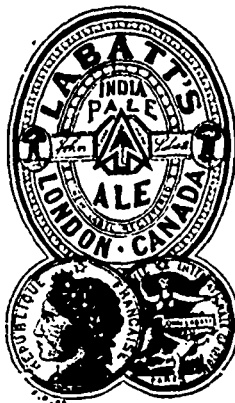
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**TEN GOLD, SILVER and
BRONZE MEDALS.**
HIGHEST AWARDS on this
Continent wherever exhibited.

MONTREAL—P. L. N. Beaudry, 127 De-
Lorimier Avenue.

TORONTO—J. Good & Co., Yonge Street.

ST. JOHN, N.B.—F. Smith, 24 Water Street



Royal Oil Co.

Toronto

Offer the following special lines
to the Drug Trade.

- XX Petrolatum, in 50 lb. tubs, 7c. per lb.
- “ in 25 lb. tubs, 7½c. “
- White Petrolatum, in 25 lb. and 50 lb. tubs
13c. pr lb.
- Benzine, 5 gal. tins, 20c per gal.
- Extra Gasoline, 5 gal. tins, 25c. per gal.
- Sewing Machine Oil, 5 gal. tins, 60c. per gal.
- Sewing Machine Oil, in 2 oz. bottles, \$5.00
per gross.
- Royal Hoof Ointment, in 1 lb. tins, 24 tins
to case, \$3.50 per case.
- Raw Linseed Oil, by the barrel, 55c. per
gal. delivered.
- Raw Linseed Oil, in 5 gal. tins, 58c. per
gal. f.o.b. Toronto.
- Boiled Linseed Oil, by the barrel, 58c. per
gal. delivered.
- Boiled Linseed Oil, in 5 gal. tins, 61c. per
gal. f.o.b. Toronto.
- ure Neatsfoot Oil, in 5 gal. tins, 90c. per
gal.
- Olive Oil, Union Salad, 5 gal. tins, 90c.
per gal.
- Olive Oil, for table, Pure Italian, \$2.00
per gal.
- Sperm Oil, pure, in 5 gal. tins, \$2 per gal
- Castor Oil, Calcutta, cases, 6½c. per lb.
- “ “ 5 gal. tins, 7c. per lb.
- “ French, 5 gal. tins, 7½c. per lb.
- Sperm Candles, 36 lbs. to case, 10½c. per lb.
- ar affine “ “ “ 11½c. per lb.
- Spirits Turpentine, pure, by the barrel, 46c.
per gal. delivered.
- Spirits Turpentine, pure, in 5 gallon tins,
49c. per gal. f.o.b. Toronto.
- Wood Jacket, 5 gal. cans, 50c. each.

We Pay Special Attention

TO THE
MAKING OF

Toilet Papers

SEVERE TESTS HAVE SHOWN THE SUPERIORITY OF
OUR TOILETS.

We have one machine running continually
on Tissues—and it makes good Tissue.

WE WOULD LIKE TO SEND YOU SAMPLES.

THE E. B. EDDY CO. LTD.
HULL MONTREAL TORONTO

A \$5 BOOK

Charles Austin Bates's new 700-page book, "Good Advertising," contains 175 chapters, and is intended for business men who want more business. It is of especial value to those advertisers who are not getting good returns from their advertising.

It is largely a book of facts. It tells how. It suggests. It advises. It gives experiences. It treats upon every phase of advertising. It tells all about type, borders, display, size of space to use, amount of money to spend, mediums to use. Ideas stick out of every page. The price is \$5 by prepaid express.

FOR 50 CTS.

We have taken 12 chapters of general interest from "Good Advertising," and made up a 96-page book, nicely bound in paper. The pages are exactly the size of the complete book, and the printing is from the same plates, in both instances. You can get a good idea of what "Good Advertising" is by reading this 96-page book. The price for it is 50 cents.

Each book contains a coupon good for 50 cents. If you like the 12 chapters and want the other 163, you can send us \$4.50 and the coupon, which will be accepted for 50 cents, and we will send you a handsomely bound volume of "Good Advertising." Thus, if you don't want the complete book, it will have cost you only 50 cents to find it out.

HOLMES PUBLISHING CO., 15 & 17 Beekman St., NEW YORK

Terms: 30 days. No Discount.

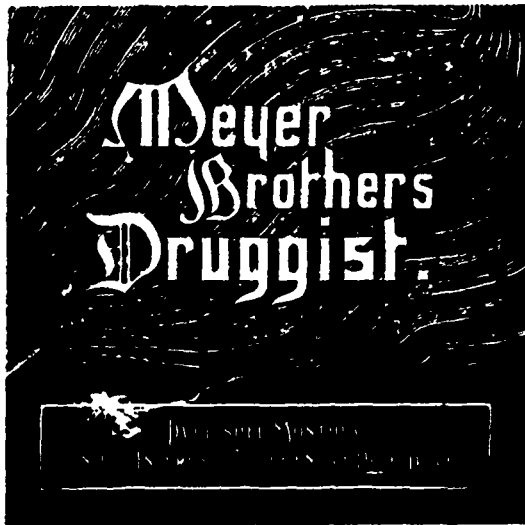
**WE GUARANTEE PURE GOODS
WE GUARANTEE PROMPT SHIPMENT
WE GUARANTEE PERFECT SATIS-
FACTION**

We are the largest producers and manufac-
turers of Canadian oil, and the largest im-
porters of American oil in Canada.

Your orders will be appreciated.

ROYAL OIL COMPANY
Toronto
GEO. ANDERSON *Manager*

MONEY For Canadian Druggists!



Subscription \$1.00 per year. Sample Copy Free.

— ADDRESS —

MEYER BROTHERS DRUGGIST,

428 CLARK AVENUE. ST. LOUIS, MO., U. S. A.

Attend the A. Ph. A. Convention at Montreal, August 12

**RADLAUER'S
ANTISEPTIC PERLES**

Of Pleasant Taste and Fragrance.

Non-Poisonous and strongly Antiseptic.

These Perles closely resemble the sublimate and carbolic acid in their antiseptic action. A preventive of diphtheric infection.

For the rational cleansing and disinfection of the mouth, teeth, pharynx, and especially of the tonsils, and for immediately removing disagreeable odors emanating from the mouth and nose.

A perfect substitute for mouth and teeth washes and gargles. Radlauer's Antiseptic Perles take special effect where swallowing is difficult in inflammation of the throat and tonsils, catarrh of the gums, peristomatitis, stomatitis mercurialis, salivation, angina, and thrush.

A few of the "Perles" placed in the mouth dissolve into a strongly antiseptic fluid of agreeable taste, cleanse the mouth and mucous membrane of the pharynx, and immediately remove the fungi, germs, and putrid substance accumulating about the tonsils, thereby preventing any further injury to the teeth.

METHOD OF APPLICATION:

Take 2-4 Perles, let them dissolve slowly in the mouth, and then swallow. Being packed in small and handy tins, Radlauer's Antiseptic Perles can always be carried in the pocket.

MANUFACTURED BY

**S. RADLAUER - Pharmaceutical Chemist
BERLIN W., GERMANY**

W. J. DYAS, Toronto, Ont., Wholesale Agent for Canada.

- EXCELSIOR -

Drug Mixer and Sifter

IMPROVED AND PERFECTED

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 Pharmacopœia.

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, Toronto, Ont., Sole Agent for Canada.

out into the light and examine. If the lines, when the negative is laid on white paper, do not show as absolutely bare glass, flood the negative with Belitski's potassium ferric oxalate reducer till the lines are cleared, and then well wash. Treat the negative to an acid and alum bath, or one of anthion, and again wash. If the ground is not dense enough, intensification must be resorted to. A very little experience will tell the operator this; in fact, after making, say, a couple of negatives and printing from them, he will know about how dense the negative should be.

There are two methods of intensification which are very suitable—the one bleaching with mercuric chloride, thorough washing and blackening with Monckhoven's potassium-silver-cyanide solution; the other mercuric chloride, followed after thorough washing with a five per cent. solution of Schlippe's salt, sulphantimonite of soda. The latter is to be preferred because the resultant image is bright red; and, therefore, of an extremely non-actinic color.

Attention to details and a little care is all that is required to enable anyone to make negatives on dry plates fully up to the standard of those turned out by the old wet collodion process, which is the process always used by professionals for this work, and, till last year, was used exclusively by the writer for this work.

Now a note as to printing such results; for paper prints, bromide or platinotype paper must be used. It is hopeless to expect to get satisfactory results on any silver printing-out paper. For lantern slides, slow plates specially made for black tones must be used.

Particular stress has been laid upon those points in which the beginner in copying is likely to fail; but it is hoped readers have not been impressed with an idea that there are enormous or insuperable difficulties. By constant practice some have become so perfect in this process—and anyone else may do the same—that in preference to copying long extracts, particularly if accompanied by diagrams from books or papers, they now photograph them and make a print in a few minutes on bromide paper, with considerable saving of time and labor.—*Pharmaceutical Journal.*

Advertising.

Practical Hints on Advertising.

Copyrighted, 1896, by CHARLES AUSTIN BATES, New York.

It is always quite fatiguing to me to hear some presumably bright business man complain that his competitors are frightful liars in their advertising, and that, therefore, he cannot compete with them. If there ever was arrant nonsense it is this. The American people are not fools, and this, I think, is particularly true of the women. I do not think that very

many women are fooled on bargain sales. Women, generally, know pretty well about how to judge the quality of a thing which they have occasion to buy. I do not believe that they are deluded very often. By the time they have been cheated once or twice in a certain store they will make up their minds not to go there again.

People very soon find out whether or not an advertiser tells the truth in his ads. If it is discovered that he puts things into his ads that are not in the store, he will find himself losing trade very rapidly.

There is not anything in advertising that pays quite so well as absolute truthfulness. The trouble with some of the business men who think that their competitors lie is that they are not sufficiently progressive to see the advantage of offering startling bargains, even at a loss.

A man told me the other day that he knew Wanamaker lied in his shoe advertising, because he knew he could not sell a certain shoe at the price he asked for it without losing money. He seemed to think that this was conclusive evidence; but it was not. If it costs ten dollars to advertise a certain lot of shoes, and you lose ten dollars on the shoes, the advertisement has cost twenty dollars. That's all there is of it. Charge the loss on the goods to the advertising account, and there you are. You can pretty soon tell whether it pays enough

Tell the truth by all means; but if you can't find some reason why the goods you sell are honestly better than the goods Jones sells, you'd better make a change or go out of business. There's always some point to be made. You can say that there are many good dealers, but that none of them have the advantages you are talking about. When you talk to customers you always find some reason why they ought to buy your goods rather than any others. Put that into the ad.

There are many thousands of men and women who can write beautiful English, and yet who cannot write effective advertising.

The lack of information is what makes a great deal of advertising worthless. An advertisement is published primarily for the purpose of furnishing information about some place or thing. The more explicit that information is, the better the advertisement. An advertisement that doesn't tell anybody anything is no good, no matter how beautiful or well displayed it may be.

There isn't anything remarkable about good advertising, except its common sense. It is remarkable that common

sense should be remarkable, but it is so just the same.

It isn't at all necessary that it shall be finely written. What you say is more than how you say it. Some of the prettiest ads that I ever saw didn't sell goods, and some of the ugliest did. It isn't a question of appearance so much as it is a question of sense. To be sure, a sensible ad is all the better for being pretty. There is no reason why advertising should not be both handsome and sensible, but that kind of advertising is the most notable exception.

There is a better thing than a catalogue, and that is a small book, printed in good, readable type, on small pages, telling about all articles you handle, about terms, and about business methods, in a plain, common sense sort of way. That is a thing which every house in the country should have to hand to customers, and to send out by mail, either by itself or in conjunction with a catalogue.

Above all things, avoid the "spread eagle" style, and do not tell people how many square feet of floor space, how many showcases, and how many gas jets there are in the room. A New York merchant recently said to me: "Everybody knows that we have counters, and showcases, and clerks, and goods in the store. What we want is something different from that—something interesting about the goods themselves."

There is no use publishing an ad that is so small nobody will see it. At the same time, I would rather have an ad of reasonable size, in a fixed and desirable position, properly illustrated and well constructed, than to have a great, big, overgrown space mixed up with a lot of other big, overgrown spaces. I would rather have a small, "swell" store on the principal corner of the town than have a ten-story warehouse in an alley.

Sometimes a business will get along very nicely with the use of only a few inches of space. At other times, when things are a little bit slow and dull, they need stirring up. That means increased space, and increased advertising effort. The total amount of space should be used just like the balance in a bank. It should be drawn on only when it is needed. When all space is bought and used in this way I believe that advertising generally will be more profitable.

The difference between a good ad and a poor one may rest in a very few words—a very slight change. The barb on a hook is a small thing, but it is what holds the fish. One may improve his advertising only a little, and still make all the difference between success and failure. "A chain is as strong as

its weakest link." Strength isn't in the kaleidoscopic tumbling together of words. Verbal pyrotechnics are all right in their place, but common sense and plain English will sell more goods. What you say is more than how you say it, though both are vital.

People are walking around the streets with money sticking out of their pockets. They cannot find places enough to spend it. The man who reaches out with his advertisements and pulls them into his store is the one who is going to get the money. His less aggressive brethren will get what he leaves. Some of them may get left entirely.

BENZOL SULPHUR SOLUTION FOR ACNE.—A new and efficacious method of using sulphur for the treatment of pimples is described in *Gazette des Hopiteaux*. Dissolve sulphur in benzol, adding the sulphur in excess, and paint the diseased parts three or four times a day. The pustules are claimed to pale in two days, while after six days nothing but a faint pink spot remains

Action of the "X" Rays Upon Precious Stones.

Abel Buguet and Albert Gascard state that the transparence of aluminium for the "X" rays led them to think that its compounds might retain some of this property. Crystallized alumina, which, next to diamond, constitutes—under the names of corundum, ruby, sapphire, emerald, topaz, and cat's-eye—the majority of the most valuable stones, distinguishes the latter and its imitations from the above-mentioned stones. Torquoise (aluminium phosphate) is also thus certainly distinguished from its imitations. Natural aluminium mellate (mellite) is always as transparent as carbor. Fine pearls of small size are less opaque than false ones, and may be clearly distinguished by the "X" rays. For large pearls the distinction is not certain. —*Chem. News.*

PARTIES DESIRING A DRUG BUSINESS IN Southern California will do well to correspond with T. W. Low, Druggists' Broker, 131 North Union Ave., Los Angeles, California. References: All Wholesale Druggists, Citizens Bank, Broadway Bank, Los Angeles, California, and the California Board of Pharmacy.

Until B.C. 432, the Greeks began the year at the winter solstice; after that, at the summer.

WANTS, FOR SALE, ETC.

Advertisements under the head of Business Wanted, Situations Wanted, Situations Vacant, Business for Sale, etc, will be inserted once free of charge. Answers must not be sent in care of this office unless postage stamps are forwarded to re-mail replies.

SITUATIONS WANTED.

SITUATION REQUIRED. TWO (2) YOUNG MEN, four and five years' experience. Good dispensers. Graduates (Honor) Junior Term O.C.P. Sound telegraph operators. Strictly temperate. Open for engagement about June 1st. Now at college. State wages, to J. M. Hargreaves, Paisley.

SITUATIONS VACANT.

APPRENTICE WANTED TO LEARN THE DRUG business, about sixteen years of age. Must come well recommended. Box 97, Brantford.

FOR SALE.

DRUG BUSINESS IN MANITOBA FOR SALE. A profitable drug and stationery business doing about five thousand a year, in lively town, twelve hundred population, stock twenty-five hundred. Terms \$1,000 cash; balance six and twelve months secured. Dispensing done for three physicians. Prices have never been cut. Hon-a-fide purchaser may make application to the undersigned, but no communications will be considered unless \$1,000 cash is forthcoming. Address, THE MARTIN, BOLE & WYNNE Co., Wholesale Druggists, Winnipeg.

NELSON'S SODA FOUNTAINS AND SUPPLIES

458 PARLIAMENT STREET, TORONTO.

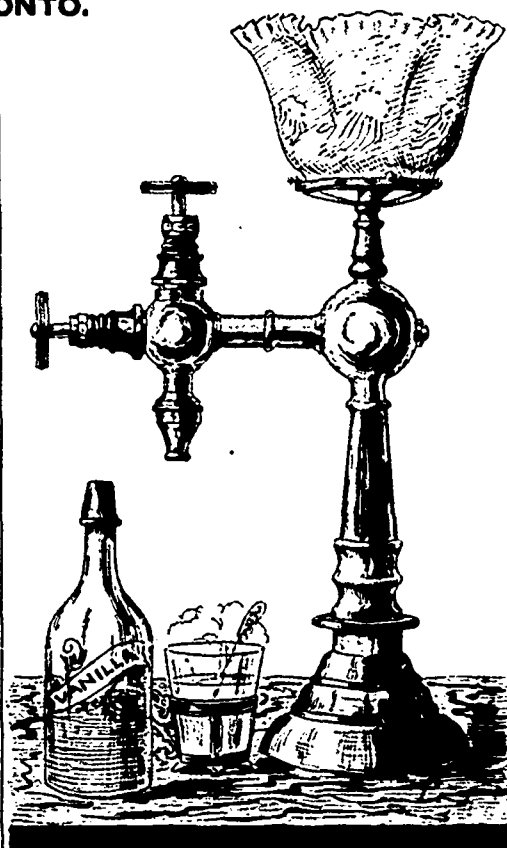


THE QUEEN PORTABLE FOUNT.

Patented May 29nd, 1894.

MR. TOOGOOD, of Prince Albert, writes: "As I have closed the season for the Fount, I thought I would write you a few lines and let you know how I panned out. My cash sales were \$263.00. The cost of my Fount and materials to run the drinks from it, \$160.00; therefore, I made Fount clear and \$103.00 over and above all costs, or otherwise sixty-five per cent. on my investment, or, in other words, \$103 and the Fount."

TORONTO, March 5th, 1896.
 MR. NELSON: The Fountain I bought from you last year proved itself to be one of the best I have ever seen of its kind, gave the best of satisfaction, and I am sorry for one thing, which is that I did not buy one from you sooner. I can recommend your fountain to any one desiring such an article. I think your drawer system much better than the bottles. I am, yours respectfully,
 JOHN MCKAY,
 Chemist and Druggist,
 395 YONGE STREET, TORONTO.



CHEAP WINTER FOUNT

WITH GAS ATTACHMENTS

MR. S. L. HOWE, Chemist, Thornbury, Ontario, says: "I have the Fountain running in FIRST-CLASS ORDER, and doing well. The Generator works satisfactorily. I may say that everything is WORKING WELL and MOST SATISFACTORILY. I hope you may do well, and sell lots of fountains"

Ave Maria

The latest Aristocratic, Fascinating Perfume is creating a furore in the hearts of American Society.

Up-to-date Ideas in Perfumes Pay

SEND IN YOUR ORDER. EASILY SOLD.
SATISFACTION GUARANTEED.

One Oz. Glass Str. Bottle, 2 in Box, \$4.80
" " Screw Top " 1 " " 5.00
Two " " " " 1 " " 8.00

NOT SOLD IN BULK

Send for Catalogue

Seely Manufacturing Co.

DETROIT, MICH.

WINDSOR, ONT.

CANADIAN DRUGGIST PRICES CURRENT

Corrected to May 10th, 1896.

The quotations given represent average prices for quantities usually purchased by Retail Dealers. Larger parcels may be obtained at lower figures, but quantities smaller than those named will command an advance.

ALCOHOL, gal.	\$4 37	\$4 65
Methyl	1 90	2 00
ALLSPICE, lb.	13	15
Powdered, lb.	15	17
ALON OZ.	40	45
ANODYNE, Hoffman's bot., lbs.	50	55
ARROWROOT, Bermuda, lb.	50	55
St. Vincent, lb.	15	18
BALM, Fir, lb.	40	45
Copaiba, lb.	65	75
Peru, lb.	3 75	4 00
Tolu, can or less, lb.	95	1 00
BARK, Barberrry, lb.	22	25
Bayberry, lb.	15	18
Buckthorn, lb.	15	17
Canella, lb.	15	17
Cascara, Sagrada	25	30
Cascarilla, select, lb.	18	20
Cassia, in mats, lb.	18	20
Cincho, red, lb.	60	65
Powdered, lb.	65	70
Yellow, lb.	35	40
Pale, lb.	40	45
Elm, selected, lb.	18	20
Ground, lb.	17	20
Powdered, lb.	20	28
Hemlock, crushed, lb.	18	20
Oak, white, crushed lb.	15	17
Orange peel, bitter, lb.	15	16
Prickly ash, lb.	35	40
Sassafras, lb.	15	16
Soap (quillaya), lb.	13	15
Wild cherry lb.	13	15
BEANS, Calabar, lb.	45	50
Tonka, lb.	1 50	2 75
Vanilla, lb.	8 50	8 50
BERRIES, Cubeb, sifted, lb.	30	35
powdered, lb.	35	40
Juniper, lb.	7	10
Ground, lb.	12	14
Prickly ash, lb.	40	45
BUDS, Balm of Gilead, lb.	55	60
Cassia, lb.	25	30
BUTTER, Cacao, lb.	75	80
CAMPHOR, lb.	75	80
CANTHARIDES, Russian, lb.	1 40	1 50
Powdered, lb.	1 50	1 60
CAPSICUM, lb.	25	30

Powdered, lb.	\$ 30	35
CARBON, Bisulphide, lb.	17	18
CARMINE, No. 40, oz.	40	50
CASTOR, Fibre, lb.	20 00	20 00
CHALK, French, powdered, lb.	10	12
Precip., see Calcium, lb.	10	12
Prepared, lb.	5	6
CHARCOAL, Animal, powd., lb.	4	5
Willow, powdered, lb.	20	25
CLOVE, lb.	16	17
Powdered, lb.	17	18
COCHINEAL, S.G., lb.	40	45
COLLONION, lb.	75	80
Cantharidal, lb.	2 50	2 75
CONFECTION, Senna, lb.	40	45
Creosote, Wood, lb.	2 00	2 50
CUTTLEFISH BONE, lb.	25	30
DENTRINE, lb.	10	12
DOVER'S POWDER, lb.	1 50	1 60
ERGOT, Spanish, lb.	75	80
Powdered, lb.	90	1 00
Ergotin, Keith's, oz.	2 00	2 10
EXTRACT, Logwood, bulk, lb.	13	14
ounds, lb.	14	17
FLOWERS, Arnica, lb.	15	20
Calendula, lb.	55	60
Chamomile, Roman, lb.	25	30
German, lb.	40	45
Elder, lb.	20	22
Lavender, lb.	12	15
Rose, red, French, lb.	1 60	2 00
Rosemary, lb.	25	30
Saffron, American, lb.	65	70
Spanish, Val'a, oz.	1 00	1 25
GELATINE, Cooper's, lb.	75	80
French, white, lb.	35	40
GLYCERINE, lb.	22	25
GUARANA	200	2 25
Powdered, lb.	2 25	2 50
GUM ALOES, Cape, lb.	18	20
Barbadoes, lb.	30	50
Socotrine, lb.	65	70
Asafetida, lb.	40	45
Arabic, 1st, lb.	70	75
Powdered, lb.	80	95
Sifted sorts, lb.	45	50
Sorts, lb.	30	35
Benzoin, lb.	50	1 00
Catechu, Black, lb.	9	20
Gamboge, powdered, lb.	1 20	1 25
Guaiaac, lb.	50	1 00
Powdered, lb.	90	95
Kino, true, lb.	2 00	2 25

Myrrh, lb.	\$ 45	\$ 48
Powdered, lb.	55	60
Opium, lb.	3 80	00
Powdered, lb.	5 50	5 75
Scammony, pure Resin, lb.	12 80	13 00
Shellac, lb.	40	45
Bleached, lb.	45	50
Spruce, true, lb.	30	35
Tragacanth, flake, 1st, lb.	85	90
Powdered, lb.	1 10	1 20
Sorts, lb.	55	75
Thus, lb.	8	10
HERB, Althea, lb.	27	30
Bitterwort, lb.	36	40
Burdock, lb.	16	18
Boneset, ozs, lb.	15	17
Catnip, ozs, lb.	17	20
Chiretta, lb.	25	30
Coltsfoot, lb.	20	38
Feverfew, ozs, lb.	53	55
Gründelia: robusta, lb.	45	50
Horehound, ozs, lb.	18	20
Jaborandi, lb.	45	50
Lemon Balm, lb.	38	40
Liverwort, German, lb.	38	40
Lobelia, ozs, lb.	15	20
Motherwort, ozs, lb.	20	22
Mullein, German, lb.	17	20
Pennyroyal, ozs, lb.	18	20
Peppermint, ozs, lb.	21	22
Rue, ozs, lb.	30	35
Sage, ozs, lb.	18	20
Spearmint, lb.	21	25
Thyme, ozs, lb.	18	20
Tansy, ozs, lb.	15	18
Wormwood, oz.	20	22
Yerba Santa, lb.	38	44
HONEY, lb.	13	15
Hops, fresh, lb.	20	25
INDIGO, Madras, lb.	75	80
INSECT POWDER, lb.	30	32
ISINGLASS, Brazil, lb.	2 00	2 10
Russian, true, lb.	6 00	6 50
LEAF, Aconite, lb.	25	30
Bay, lb.	18	20
Belladonna, lb.	25	30
Buchu, long, lb.	50	55
Short, lb.	25	27
Coca, lb.	35	40
Digitalis, lb.	15	20
Eucalyptus, lb.	18	20
Hyoscyamus	20	25
Matico, lb.	70	75

Senna, Alexandria, lb.....	\$ 25	\$ 30	Queen of the Meadow, lb.....	\$ 18	\$ 20	Valerianate, oz.....	\$ 55	\$ 60
Tinnevely, lb.....	15	25	Rhatany, lb.....	20	30	AMYL, Nitrite, oz.....	16	18
Stramonium, lb.....	20	25	Rhubarb, lb.....	75	2 50	ANTINERVINE, oz.....	55	60
Uva Urzi, lb.....	15	18	Sarsaparilla, Hond, lb.....	40	45	ANTIKAMINIA.....	1 30	1 35
LRECHES, Swedish, doz.....	1 00	1 10	Cut, lb.....	50	55	ANTIPYRIN, oz.....	1 10	1 20
LICORICE, Solaziz.....	45	50	Senega, lb.....	55	65	ARISTOL, oz.....	1 85	2 00
Pignatelli.....	35	40	Squill, lb.....	13	15	ARSENIC, Donovan's sol., lb.....	25	30
Grasso.....	30	35	Stillingia, lb.....	22	25	Fowler's sol., lb.....	10	13
Y & S—Sticks, 6 to 1 lb., per lb.	27	30	Powdered, lb.....	25	27	Iodide, oz.....	50	55
“ Purity, 100 sticks in box	75	75	Unicorn, lb.....	38	40	White, lb.....	6	7
“ Purity, 200 sticks in box	1 50	1 50	Valerian, English, lb. true.....	20	25	ATROPINE, Sulp. in $\frac{1}{2}$ ozs. 8oc.,		
“ Acme Pellets, 5 lb. tins	2 00	2 00	Virginia, Snake, lb.....	40	45	oz.....	6 00	6 25
“ Lozenges, 5 lb. tins...	2 00	2 00	Yellow Dock, lb.....	15	18	BISMUTH, Ammonia-citrate, oz.	35	40
“ Tar, Licorice, and Tolu,			RUM, Bay, gal.....	2 50	2 75	Iodide, oz.....	50	55
5 lb. tins.....	2 00	2 00	Essence, lb.....	3 00	3 25	Salicylate, oz.....	20	25
LUPULIN, oz.....	30	35	SACCHARIN, oz.....	1 25	1 50	Subcarbonate, lb.....	1 80	2 00
LYCOPOLIUM, lb.....	70	80	SEED, Anise, Italian, sifted, lb...	13	15	Subnitrate, lb.....	1 50	1 60
MACR, lb.....	1 20	1 25	Star, lb.....	35	40	BORAX, lb.....	7	8
MANNA, lb.....	1 60	1 75	Burdock, lb.....	30	35	Powdered, lb.....	8	9
Moss, Iceland, lb.....	9	10	Canary, bag or less, lb.....	5	6	BROMINE, oz.....	8	13
Irish, lb.....	12	13	Caraway, lb.....	10	13	CADMIUM, Bromide, oz.....	20	25
MUSK, Tonquin, oz.....	46 00	50 00	Cardamom, lb.....	1 25	1 50	Iodide, oz.....	45	50
NUTGALLS, lb.....	21	25	Celery.....	25	30	CAFFEINE, oz.....	55	60
Powdered, lb.....	25	30	Colchicum.....	50	60	Citrate, oz.....	50	55
NUTMEGS, lb.....	1 00	1 10	Coriander, lb.....	10	12	CALCIUM, Hypophosphite, lb....	1 50	1 60
NUX VOMICA, lb.....	10	12	Cumin, lb.....	15	20	Iodide, oz.....	95	1 00
Powdered, lb.....	25	27	Fennel, lb.....	15	17	Phosphate, precip., lb.....	35	38
OAKUM, lb.....	12	15	Fenugreek, powdered, lb.....	7	9	Sulphide, oz.....	5	6
OINTMENT, Merc., lb. $\frac{1}{2}$ and $\frac{1}{2}$.	70	75	Flax, cleaned, lb.....	3 $\frac{1}{2}$	4	CERIUM, Oxalate, oz.....	10	12
Citrine, lb.....	45	50	Ground, lb.....	4	5	CHINOIDINE, oz.....	15	18
PARALDEHYDE, oz.....	20	22	Hemp, lb.....	5	6	CHLORAL, Hydrate, lb.....	1 25	1 30
PEPPER, black, lb.....	12	13	Mustard, white, lb.....	11	12	Croton, oz.....	75	80
Powdered, lb.....	15	16	Powdered, lb.....	15	20	CHLOROFORM, lb.....	60	1 00
PITCH, black, lb.....	3	4	Pumpkin.....	25	30	CINCHONINE, sulphate, oz.....	25	30
Bergundy, true, lb.....	10	12	Quince, lb.....	65	70	CINCHONINE, Sulph., oz.....	15	20
PLASTER, Calcined, bbl. cash....	- 25	3 25	Rape, lb.....	8	9	COCAINE, Mur., oz.....	5 50	6 50
Adhesive, yd.....	12	13	Strophanthus, oz.....	50	55	COBALT, $\frac{1}{2}$ oz.....	70	75
Belladonna, lb.....	65	70	Worm, lb.....	22	25	COLLODION, lb.....	65	70
Galbanum Comp., lb.....	80	85	SEIDLITZ MIXTURE, lb.....	25	30	COPPER, Sulph., (Blue Vitriol) lb.	6	7
Lead, lb.....	25	30	SOAP, Castile, Mottled, pure, lb..	10	12	Iodide, oz.....	65	70
POPPY HEADS, per 100.....	1 00	1 10	White, Conti's, lb.....	15	16	COPPERAS, lb.....	1	3
ROSIN, Common, lb.....	2 $\frac{1}{2}$	3	Powdered, lb.....	25	40	DIURETIN, oz.....	1 60	1 65
White, lb.....	3 $\frac{1}{2}$	4	Green (Sapo Viridis), lb.....	25	25	ETHER, Acetic, lb.....	75	80
RESORCIN, white, oz.....	25	30	SPERMACEIN, lb.....	65	70	Sulphuric, lb.....	40	50
ROCHELLE SALT, lb.....	28	30	TURPENTINE, Chian, oz.....	75	80	EXALGINE, oz.....	1 00	1 10
ROOT, Aconite, lb.....	22	25	Venice, lb.....	10	12	HYOSCYAMINE, Sulp., crystals, gr.	25	30
Althea, cut, lb.....	30	35	WAX, White, lb.....	50	75	IODINE, lb.....	4 75	5 50
Belladonna, lb.....	25	30	Yellow.....	40	45	IODOFORM, lb.....	6 00	7 00
Blood, lb.....	15	16	WOOD, Guaiac, rasped.....	5	6	IODOL, oz.....	1 40	1 50
Bitter, lb.....	27	30	Quassa chips, lb.....	10	12	IRON, by Hydrogen.....	80	85
Blackberry, lb.....	15	18	Red Saunders, ground, lb.....	5	6	Carbonate, Precip., lb.....	15	16
Burdock, crushed, lb.....	18	20	Santal, ground, lb.....	5	6	Sacch., lb.....	30	35
Calamus, sliced, white, lb.....	20	25			Chloride, lb.....	45	55	
Canada Snake, lb.....	30	35			Sol., lb.....	13	16	
Cohosh, black, lb.....	15	20			Citrate, U.S.P., lb.....	90	1 00	
Colchicum, lb.....	40	45			And Ammon., lb.....	70	75	
Columbo, lb.....	20	22			And Quinine, lb.....	1 50	3 00	
Powdered, lb.....	25	30			Quin. and Stry., oz.....	18	30	
Coltsfoot, lb.....	38	40			And Strychnine, oz.....	13	15	
Comfrey, crushed, lb.....	20	25			Dialyzed, Solution, lb.....	50	55	
Curcuma, powdered, lb.....	13	14			Ferrocyanide, lb.....	55	60	
Dandelion, lb.....	15	18			Hypophosphites, oz.....	25	30	
Elecampane, lb.....	15	20			Iodide, oz.....	40	45	
Galangal, lb.....	15	18			Syrup, lb.....	40	45	
Gelsemium, lb.....	22	25			Lactate, oz.....	5	6	
Gentian or Genitan, lb.....	9	10			Pernitrate, solution, lb.....	15	16	
Ground, lb.....	10	12			Phosphate scales, lb.....	1 25	1 30	
Powdered, lb.....	13	15			Sulphate, pure, lb.....	7	9	
Ginger, African, lb.....	18	20			Exsiccated, lb.....	8	10	
Po., lb.....	20	22			And Potass. Tartrate, lb....	80	85	
Jamaica, blehd., lb.....	27	30			And Ammon Tartrate, lb....	80	85	
Po., lb.....	30	35			LEAD, Acetate, white, lb.....	13	15	
Ginseng, lb.....	4 50	4 75			Carbonate, lb.....	7	8	
Golden Seal, lb.....	75	80			Iodide, oz.....	35	40	
Gold Thread, lb.....	90	95			Red, lb.....	7	9	
Hellebore, white, powd., lb....	12	15			LIME, Chlorinated, bulk, lb....	4	5	
Indian Hemp.....	18	20			In packages, lb.....	6	7	
Ipecac, lb.....	1 75	2 00			LITHIUM, Bromide, oz.....	30	35	
Powdered, lb.....	2 00	2 25			Carbonate, oz.....	30	35	
Jalap, lb.....	55	60			Citrate, oz.....	25	30	
Powdered, lb.....	60	65			Iodide, oz.....	50	55	
Kava Kava, lb.....	40	90			Salic ate, oz.....	35	40	
Licorice, lb.....	12	15			MAGNESIUM, Calc., lb.....	55	60	
Powdered, lb.....	13	15			Carbonate, lb.....	18	20	
Mandrake, lb.....	13	18			Citrate, gran., lb.....	35	40	
Masterwort, lb.....	16	40			Sulph. (Epsom salt), lb.....	1 $\frac{1}{2}$	3	
Orris, Florentine, lb.....	30	35			MANGANESE, Black Oxide, lb....	5	7	
Powdered, lb.....	40	45			MENTHOL, oz.....	55	66	
Pareira Brava, true, lb.....	40	45			MERCURY, lb.....	75	80	
Pink, lb.....	40	45			Ammon (White Precip.)....	1 25	1 30	
Parsley, lb.....	30	35			Chloride, Corrosive, lb.....	85	90	
Pleurisy, lb.....	20	25			Calomel, lb.....	1 00	1 10	
Poke, lb.....	15	18			With Chalk, lb.....	60	65	
			ACID, Acetic, lb.....	12	13			
			Glacial, lb.....	45	50			
			Benzoic, English, oz.....	20	25			
			German, oz.....	10	12			
			Beracic, lb.....	13	14			
			Carbolic Crystals, lb.....	28	30			
			Calvert's No. 1, lb.....	2 10	2 15			
			No. 2, lb.....	1 35	1 40			
			Citric, lb.....	45	50			
			Gallic, oz.....	10	12			
			Hydrobromic, diluted, lb.....	30	35			
			Hydrocyanic, diluted, oz. bottles	1 50	1 60			
			doz.....	22	25			
			Lactic, concentrated, oz.....	22	25			
			Muriatic, lb.....	3	5			
			Chem. pure, lb.....	18	20			
			Nitric, lb.....	10 $\frac{1}{2}$	13			
			Chem. pure, lb.....	25	30			
			Oleic, purified, lb.....	75	80			
			Oxalic, lb.....	12	13			
			Phosphoric, glacial, lb.....	1 00	1 10			
			Dilute, lb.....	13	17			
			Pyrogallic, oz.....	30	35			
			Salicylic, white, lb.....	1 00	1 10			
			Sulphuric, carboy, lb.....	2 $\frac{1}{2}$	2 $\frac{1}{2}$			
			Bottles, lb.....	5	6			
			Chem. pure, lb.....	18	20			
			Tannic, lb.....	80	85			
			Tartaric, powdered, lb.....	38	40			
			ACETANILID, lb.....	75	80			
			ACONITINE, grain.....	4	5			
			ALUM, cryst., lb.....	1 $\frac{1}{2}$	3			
			Powdered, lb.....	3	4			
			AMMONIA, Liquor, lb., .88o.....	10	12			
			AMMONIUM, Bromide, lb.....	80	85			
			Carbonate, lb.....	14	15			
			Iodide, oz.....	35	40			
			Nitrate, crystals, lb.....	40	45			
			Muriate, lb.....	12	16			

Cod-Liver Oil Report.

From JOH. RYK HOLMBOEK, Tromsø, Norway.

April 13th, 1896.

Summary of official statistics:

	1888	1889	1890	1891	1892	1893	1894	1895
Fish	1833	1839	1830	1831	1832	1833	1834	1835
thousands	58761	57422	63306	44236	57644	68319	64226	65583
Cod liver	18327	25186	29807	26087	22319	33876	23226	19392
oil								

Aver. prod. cod liver oil 1888-1894 (i.e., the seven "fat" years) 27,004 htl.
 Aver. prod. cod liver oil, 1888-1895 26,052 "
 Production, 1896 up till to-day 13,438 "
 Deficiency to be filled by Finmarken 12,684 "
 Average production at Finmarken, 1893-1895 2,426 "

There has been very little done in cod-liver oil this month. Quotations have been ranging from 225 down to 215 sh., 210 sh. representing the average cost price of good Lofoten oil. There is hardly any chance of prices coming below that figure, even if Finmarken should turn out a fair quantity.

April 22nd, 1896.

Lofoten fishery will be officially closed one of these days, and I then shall give the exact final figures for all fisheries.

Finmarken: Last week's fishing has been very poor, partly owing to bad weather, but principally on account of scarcity of fish.

Production of cod-liver oil now aggregates 14482 hectl. crude oil, equal to about 10,000 barrels refined.

Market unchanged. Demand has been rather dull lately, but holders are all disinclined to yield to lower prices, and seem to be determined to stock their oil till autumn rather than selling at losing figures now.

Quotations ranging from 210 to 215 sh. for best non-freezing Lofoten oil. Finmarken oil may be had considerably cheaper.

Ammonia in Cork Stoppers.

Dr. P. Liechti having suggested that the ammonia present in cork stoppers may lead to fallacious results in water examinations, Van Ledden Hulsebosch criticizes the doctor's experiments and conclusions and shows that:

(1) Cork may contain a trace of ammonia, especially if the quality be poor.

(2) The fact that the aqueous extract of the cork yields a color with Nessler's reagent does not justify concluding that ammonia is present.

(3) In bottling a specimen of drinking water for analysis, we may continue to use cork stoppers without misgiving, as the slight contact of the water with the stopper will not materially modify the proportion of ammonia in the water.—*Bulletin of Pharmacy.*

Double flowers are generally the result of cultivation, and always an abnormal growth.

Business Notices.

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

The attention of Druggists and others who may be interested in the articles advertised in this Journal is called to the special consideration of the Business Notices.

In his palmy days John Bright was fond of expatiating on the wonderful growth of the United States in material resources, and of demonstrating that its wealth was multiplying by leaps and bounds. We are reminded of the orator's favorite theme by the announcement that Parke, Davis & Co. have opened two new branch houses to satisfy the rapidly growing demand for their preparations—one in New Orleans and another in Baltimore—and by the receipt of their '96 price list, comprising over six thousand items and twenty nine distinct lines of preparations! It is amazing how this house has grown within the past fifteen years. It has been erecting laboratories by the acre, multiplying its branches and agencies, and increasing its output of pharmaceutical preparations by the ton!

The ground for this amazing prosperity is not hard to find—scrupulous integrity, dignified, honorable business methods, and a strenuous desire to treat professional men in accordance with professional methods. All the world knows that the label of this firm is a warrant of purity, activity, and precision in the contents of the container, and the physician realizes that in his grim battle with disease he can depend upon Parke, Davis & Co.'s preparations every time!

Some Big Figures.

On one of the cold, blustery days this winter, when business was quiet at the Tanglefoot office, one of the assistants of a mathematical turn of mind figured out that the output of Tanglefoot for 1895 was capable of catching twenty-seven thousand million flies, which, if placed end to end, would reach around the earth at the equator fifteen times, or from the earth to the moon and three-quarters of the way back.

Parchment Powder Papers.

A. G. Elliot & Co., Philadelphia, advertise in this issue an article which is indispensable in the dispensing department of any drug store. We refer to their superior parchment paper, which is the only suitable wrapper for hygroscopic powders, and is also adapted for all wrapping purposes where neatness is desired. Read the advertisement carefully.

Druggists' Boxes, etc.

Attention is called to the advertisement of the Toronto Box Co. in this issue. They are manufacturers of boxes, cartons,

etc., specially adapted to the drug trade, and solicit your custom.

Show Cases and Fittings.

The Toronto Show Case Co. are offering a splendid assortment of show cases and wall fittings, finished in wood or metal and of the latest designs. Write them if in want of anything in their line.

Bird Seed.

To secure and retain good customers, you must sell only the best. In no case is this more essential than in bird seeds. Some of that offered is totally unfit to use, but not so with Brock's, which is guaranteed pure and of the best quality only. See advt.

Scales.

C. Wilson & Sons are offering to the drug trade a full line of platform and other scales, show cases, etc., at close figures. See their advt. on page

Balm Medicine Co.

This firm, which are "pushers," in the sense known to patent medicine dealers, are advertising their goods largely, and have created a demand which ensures the continuance of a sale of their goods. Write them as to their methods of advertising, and mention THE DRUGGIST.

Books

A COURSE OF HOME STUDY FOR PHARMACISTS. First Lessons in the Study of Pharmacy. By Oscar Oldberg, Phar. D., Professor of Pharmacy and Director of the Pharmaceutical Laboratories in the School of Pharmacy of Northwestern University. Second edition, revised and enlarged, 150 illustrations. Publishers, The W. T. Keever Company, Chicago. To those students in pharmacy who have not the time during business hours to settle down to the study of the regular text-books, this work will be found very valuable in furnishing for home reading a course of first lessons in pharmacy, pharmaceutical physics, chemistry, and materia medica. It is essentially a *first book* for young pharmacists, written by one who thoroughly understands his subject, and also how to impart the instruction required. We believe it is the only book of the kind published, and it certainly furnishes a *desideratum* which every student in pharmacy must appreciate. Its 550 pages are divided into four parts, consisting in all of ninety chapters, treating in a full and comprehensive way on all the subjects with which the pharmaceutical student must make himself familiar. The work is published at \$3 net, and will besent post paid by the publishers on receipt of price.

Iodide, Proto, oz.....	\$ 35	\$ 40	Iodide, oz.....	\$ 40	\$ 43	Geranium, oz.....	\$1 75	\$1 80
Bin., oz.....	25	30	Salicylate, lb.....	1 00	1 10	Rose, lb.....	3 20	3 50
Oxide, Red, lb.....	1 15	1 20	Sulphate, lb.....	2	5	Juniper berries (English), lb...	4 50	5 00
Pill (Blue Mass), lb.....	70	75	Sulphite, lb.....	8	10	Wood, lb.....	70	75
MILK SUGAR, powdered, lb....	30	35	SOMNOL, oz.....	85	00	Lavender, Chiris. Fleur, lb....	3 00	3 50
MORPHINE, Acetate, oz.....	1 75	1 80	SPIRIT NITRE, lb.....	35	65	Garden, lb.....	1 50	1 75
Muriate, oz.....	1 75	1 80	STRONTIUM, Nitrate, lb.....	18	20	Lemon, lb.....	1 90	2 00
Sulphate, oz.....	1 80	1 85	STRYCHNINE, crystals, oz....	80	85	Lemongrass, lb.....	1 50	1 60
PERVIN, Saccharated, oz.....	35	40	SULFONAL, oz.....	40	42	Mustard, Essential, oz.....	60	65
PHENACETINE, oz.....	40	42	SULPHUR, Flowers of, lb.....	2 1/2	4	Neroli, oz.....	4 25	4 50
PILOCARPINE, Muriate, grain...	35	38	Pure precipitated, lb.....	13	20	Orange, lb.....	2 75	3 00
PIPERIN, oz.....	1 00	1 10	TARTAR EMEIC, lb.....	50	55	Sweet, lb.....	2 75	3 00
PHOSPHORUS, lb.....	90	1 10	THYMOL (Thymic acid), oz.....	55	60	Origanum, lb.....	65	70
POTASSA, Caustic, white, lb....	60	65	VERATRINE, oz.....	2 00	2 10	Patchouli, oz.....	80	85
POTASSIUM, Acetate, lb.....	35	40	ZINC, Acetate, lb.....	70	75	Pennyroyal, lb.....	2 50	2 75
Bicarbonate, lb.....	15	17	Carbonate lb.....	25	30	Peppermint, lb.....	3 00	3 25
Bichromate, lb.....	14	15	Chloride, granular, oz.....	13	15	Pimento, lb.....	2 60	2 75
Bitrat (Cream Tart.), lb.....	29	30	Iodide, oz.....	60	65	Rhodium, oz.....	80	85
Bromide, lb.....	65	70	Oxide, lb.....	13	60	Rose, oz.....	7 50	11 00
Carbonate, lb.....	12	13	Sulphate, lb.....	9	11	Rosemary, lb.....	70	75
Chlorate, Eng., lb.....	18	20	Valerianate, oz.....	25	30	Rue, oz.....	25	30
Powdered, lb.....	20	22	ESSENTIAL OILS.					
Citrate, lb.....	70	75	OIL, Almond, bitter, oz.....	75	80	Sandalwood, lb.....	5 50	7 50
Cyanide, lb.....	40	50	Sweet, lb.....	50	60	Sassafras, lb.....	75	80
Hypophosphites, oz.....	10	12	Amber, crude, lb.....	40	45	Savin, lb.....	1 60	1 75
Iodide, lb.....	4 00	4 10	Rec't, lb.....	60	65	Spearmint, lb.....	3 75	4 00
Nitrate, gran, lb.....	8	10	Anise, lb.....	3 75	3 90	Spruce, lb.....	65	70
Permanganate, lb.....	40	45	Bay, oz.....	50	60	Tansy, lb.....	4 25	4 50
Prussiate, Red, lb.....	50	55	Bergamot, lb.....	3 75	4 00	Thyme, white, lb.....	1 80	1 90
Yellow, lb.....	32	35	Cade, lb.....	90	1 00	Wintergreen, lb.....	2 75	3 00
And Sod. Tartrate, lb.....	25	30	Cajuput, lb.....	1 60	1 70	Wormseed, lb.....	3 50	3 75
Sulphuret, lb.....	25	30	Capsicum, oz.....	60	65	Wormwood, lb.....	4 25	4 50
PROPLYLAMINE, oz.....	35	46	Caraway, lb.....	2 75	3 00	FIXED OILS.		
QUININE, Sulph, bulk.....	35	38	Cassia, lb.....	3 30	3 50	CASTOR, lb.....	8	10
Oz., oz.....	38	42	Cedar.....	55	85	COD LIVER, N.F., gal.....	2 00	2 10
QUINIDINE, Sulphate, ozs., oz..	16	20	Cinnamon, Ceylon, oz.....	2 75	3 00	Norwegian, gal.....	3 00	3 25
SALICIN, lb.....	75	4 00	Citronelle, lb.....	80	85	COTTONSEED, gal.....	1 10	1 20
SANTONIN, oz.....	20	22	Cloye, lb.....	1 10	1 20	LARD, gal.....	90	1 00
SILVER, Nitrate, cryst, oz.....	90	1 00	Copaiba, lb.....	1 75	2 00	LINSEED, boiled, gal.....	62	65
Fused, oz.....	1 00	1 10	Croton, lb.....	1 50	1 75	Raw, gal.....	60	62
SODIUM, Acetate, lb.....	30	35	Cubeb, lb.....	2 50	3 00	NEATSFOOT, gal.....	1 20	1 30
Bicarbonate, kgs., lb.....	2 75	3 00	Cumin, lb.....	5 50	6 00	OLIVE, gal.....	1 20	1 25
Bromide, lb.....	65	70	Erigeron, oz.....	20	25	Salad, gal.....	2 50	2 60
Carbonate, lb.....	3	6	Eucalyptus, lb.....	1 50	1 75	PALM, lb.....	12	13
Hypophosphite, oz.....	10	12	Fenne, lb.....	1 60	1 75	SPERM, gal.....	1 35	1 40
Hyposulphite, lb.....	3	6						

Magazines.

The publishers of *Frank Leslie's Popular Monthly* have brought out a most excellent portrait in colors of General Robert E. Lee, which serves as a frontispiece to the May number of that magazine. The portrait is pronounced by the friends of General Lee to be the best likeness ever published. It is issued in connection with the great Lee series of articles now running in *Frank Leslie's Popular Monthly*, and which are attracting such widespread attention.

Twenty pages of *The Housekeeper* present an abundance of good reading, classified under appropriate headings, in the several departments of Literary, Fashions, Fancy Work, Home Talks, Mothers' Council, Home Remedies, Floriculture, Money Making for Women, Our Young Folks, Household Helps, Our Door Yard, Miscellany, etc., etc. The paper is issued twice a month, consists of twenty large pages, and has been published for twenty years at Minneapolis, Minn. It is the only "domestic" semi-monthly published in America. The subscription price is \$1 per year. It is devoted to the home and home-making.

Drug Reports.

Canada.

The general report of last month's business has been as satisfactory as usual at this season of the year, when farmers are busy with seeding and city people with house-cleaning. There are no marked changes in value to note. Hellebore is in small demand. Blue vitriol is more brisk at advanced prices. Paris green is not much called for yet; and, with prices firm at advance, and future uncertain, very little is changing hands. Moth camphor balls good demand, we notice by Brantford papers. This article is being retailed at 5c. a lb. (There is a lesson in this for those indifferent members of the Retail Association.) There are also several substitutes for camphor having a good sale, which may have had the effect of camphor weakening in price. Gum tragacanth and arabics are higher on account of trouble in Egypt.

Cream tartar dropped a little during the month, but has again resumed high price.

Quinine, pot. bromide, pot. iodide, unchanged.

England.

London, April 27th, 1896.

There has not been much demand in either chemical or drug market, and prices have consequently given way slightly in many instances. Cod-liver oil appears to have reached its limit in the upward direction at last, and in the absence of demand is slipping backward. Oil of cassia is easier, and lower rates are quoted for oil of aniseed, balsam of tolu, Canada balsam, etc. Copaiba balsam, however, is firmer, and sassafras oil dearer. Higher prices are also asked for permanganate of potassium. Camphor is falling, and glycerine is easier. Quinine and cocaine are dull, the latter being threatened by a new anesthetic called "eucaine," which is claimed to be superior in effect at half the cost.

SODIUM CHLORIDE FOR RINGWORM.—Reilly states (*Brit. Med. Journ.*) that for the past seven years he has used concentrated solution of common salt for treating ringworm. He applies the solution in the evening and washes the spot next morning with boric acid soap. In all cases the tinea is cured in less than four weeks.